Blood, Heat + Dust: Second Edition

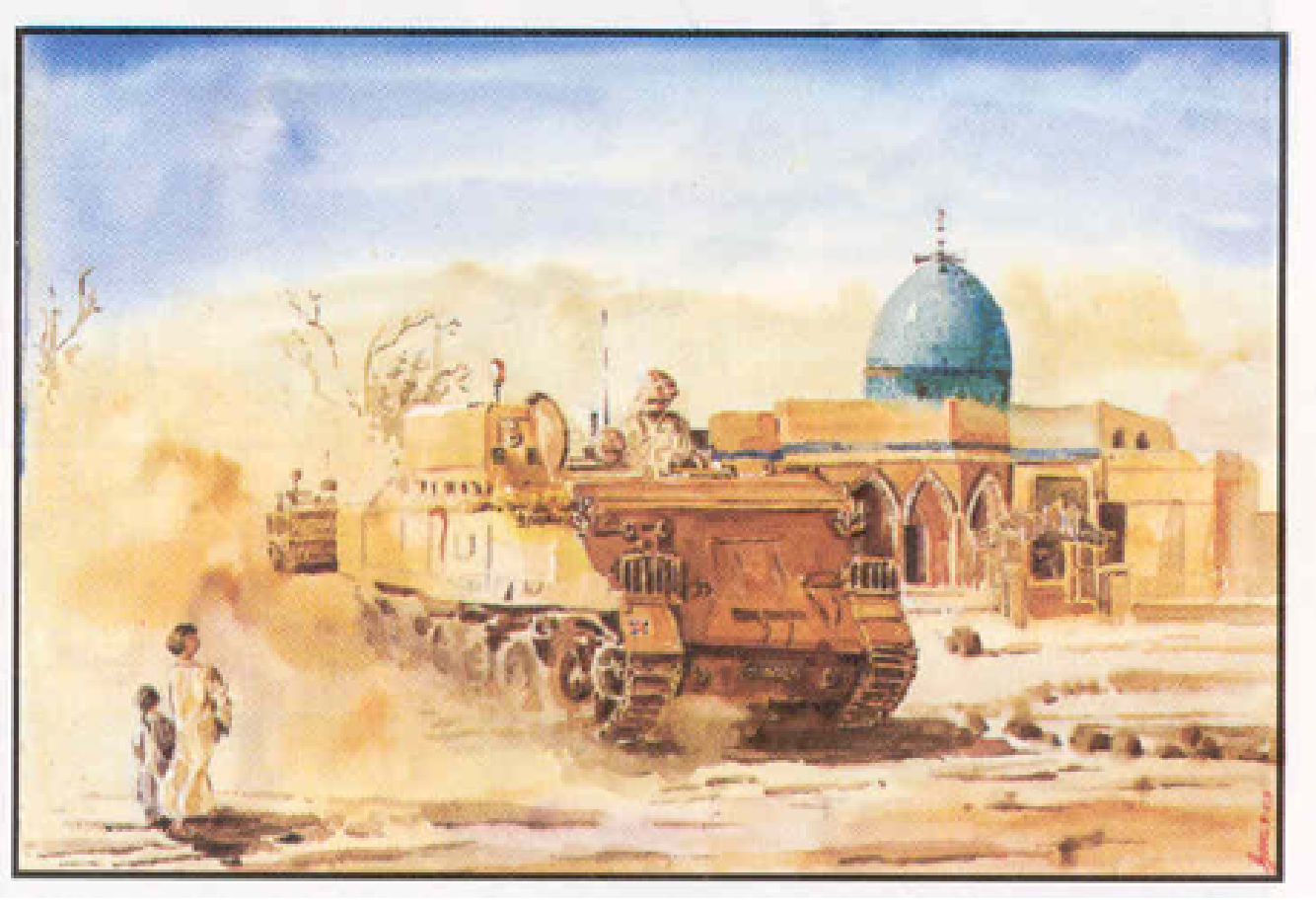
Operation Telic and the British Medical Deployment to the Gulf 2003 -2009

Author and Compiler

Colonel David Rew L/RAMC

With paintings by

Gora Pathak and David Rowlands



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January 2005



Foreword to the First Edition
by the Surgeon General
Vice Admiral Ian Jenkins

It is with great pleasure that the Defence Medical Services Department supports the production and distribution of this CD, "Blood, Heat and Dust" to a wide professional and military audience. The electronic book which it contains has been compiled and written entirely on a voluntary basis on the initiative of the senior author, and I commend those of all ranks who have contributed written and photographic material and vignettes to bring the book to life. The CD highlights a wide range of talents and energies within the Service.

I am particularly pleased that the project stands both as a historical record of a major operation, and as an educational and training resource for members of the Defence Medical Services of all ranks, and for those yet to serve. The book describes the full spectrum of medical and supporting operations on Op Telic through to July 2003, in the context of modern UK military doctrine and training. Of course, many Defence Medical Services personnel have served with credit in very demanding circumstances in Iraq since then, alongside military and civilian professionals from many other nations, and I hope that their story will be recorded in due course.

The Defence Medical Services were set a very exacting task on Op Telic, and it is a credit to all members of the Regular and Reserve Forces that the job was done to such high standards, with such good humour, at such short notice, at such a distance and in such environmental conditions. Of course there were difficulties, and many lessons were learned, as is always the case with such operations. Various of the contributors have discussed their experiences in a thoughtful and constructive way, and I am pleased to note the number of papers which have since been published in the peer reviewed professional literature, and highlighted in this book.

No two military operations are the same, but there are many common themes and universal truths which underpin the effectiveness of our work and preparedness for future operations. I hope that you will find time to read this book and to pass it around as widely as possible. I also hope that it will serve as a model for the recording of future operations, so that we build a library of experience using the wonders of modern digital technology to enhance and disseminate our history.



Foreword to the Second Edition of Blood, Heat and Dust
Lt General Louis Lillywhite, CB L/RMAMC
Surgeon General 2006-2009

It is a great pleasure to be asked to write a forward to this Second Edition of Blood Heat and Dust, which records the history of British military involvement in the Iraq Campaign of 2003 to 2009 (Operation Telic) from the perspective of members of the Defence Medical Services. The book has been prepared as a unique record of a difficult operation in challenging circumstances from publicly resourced material and from the personal recollections and images of individuals who served throughout the breadth and duration of the Campaign. It provides clear context for an episode in British military history which catalysed a sea change in the organisation and provision of military medical and surgical care to the casualties of war.

I am aware that the book has been compiled and produced by a consultant general surgeon in full time NHS practice as a labour of love to maintain the historical record and have followed him in this immense effort - future generations will owe him a significant debt of gratitude. This edition represents a major rewrite and update of the First Edition, which was published in 2005 with the blessing of my predecessor, the late Admiral Ian Jenkins, and which covered only the first phase of the Operation: Operation Telic 1. Operation Telic eventually extended to thirteen phases over seven years, and its conclusion in May 2009 provided the impetus to re-visit and complete the historical record contemporaneously.

I am also pleased to take up the author's kind offer to add some reflections of my own on the circumstances and conduct of the campaign, which has kept me busy during Phase 1 of my retirement with evidence to the Chilcott Inquiry, which has reviewed the circumstances and conduct of the Iraq Campaign; and to the Baha Musa Inquiry, which has examined in detail one particularly distressing element of the Campaign.

As I write this Forward in October 2011, the UK Defence Medical Services are on a journey of rapid adaption and development that is not yet complete, and operations in Afghanistan (Operation Herrick) continue. The Baha Musa Inquiry[1] has reported (more of that later) but the Chilcott Inquiry[2], which includes significant medical evidence, has not. The rapid clinical developments that commenced towards the end of the Iraq campaign have only started to mature in the Afghanistan campaign. The pace of continuous operational deployment has not yet permitted the time to assess the implications of the Medical Services experience for the future organisation and functioning of the Armed Forces.

From looking at the story of the Defence Medical Services since World War 2 we can now see a single thread, and this is one of a medical service migrating from one that is concerned primarily with quantity to one concerned primarily with quality. The Battle Attrition Study of 1980[3] estimated that a war in NW Europe would result in 92,000 Army and 8,000 RAF casualties over 8 days, requiring 30,000 to be evacuated to the UK, almost all by ambulance, coach, train, ferry and train. It was the impetus for major enhancements to and a reorganisation of the field medical services in 1984 - 1987[4] even at a time that the Army was contracting as a result of studies such as 'Lean Look'. Hospitals, hitherto of 200, 300, 600 and 1,200 beds were reorganised into the new 'Kirby Hospitals' (named after their main designer, the then Major-General Norman Kirby the Director of Army Surgery) of six 400 bed Field Hospitals, eleven 800 bed General Hospitals and two 400 bed Evacuation Hospitals, a total of 12,000 beds, along with two RAF hospitals.

It was from these hospitals that the land medical ORBAT for the first Gulf War was drawn, although hastily re-organized into smaller sizes. Operation Granby saw the deployment of two 600 bed General Hospitals, two 200 bed Field Hospitals and one 100 bed RAF hospital, a total of 1,700 beds[5]. For Operation Telic 1, the land medical ORBAT was 600 beds. This downsizing reflected a trend in falling casualty numbers, with 765 deaths in Korea, 340 in the Malaysian campaign, and 255 during the Falkland Islands campaign and less than 50 on Operation Granby.

Perhaps the starkest illustration in the change from quantity to quality is seen in the staff that meet an arriving casualty which in the Kirby Hospitals was a single General Duty Medical Officer and a number of Medical Assistants whilst the number reported in the recent Journal of the RAMC[6] includes 16 medical specialists alone! For the individual casualty and his family, the redesigned and re-equipped RAF aeromedical evacuation service has played a critical role in the safe, early and rapid transfer of critically injured and even ventilated patients from Theatre Hospitals to the UK. This is a major change from previous operations when casualties would be retained for many days or even weeks in the Theatre of operations during their convalescence.

1. The Baha Musa Public Inquiry, HC1452-I accessed at http://www.bahamousainquiry.org/report/index.htm
2. http://www.iraqinquiry.org.uk/faq.aspx
3. D/DMO/43/IL/(MO)Studies) dated 31 Jan 80
4. Army Board Paper ECAB/P(84)26 dated 23 August 1984
5. Gulf Logistics, Blackadder's War, Editor Maj-Gen Martin White, Chapter 5 Medical Support
6. J R Army Med Corps 157(3 Supp 1):S267-S272 Sep 11

This move from quantity to quality was in my view facilitated by a number of other factors. The integration of secondary care into the NHS provided the scope for a number of younger Regular Consultants to develop their clinical practice in a more challenging clinical environment than could be offered by the old Service Hospitals. We were also fortunate that a number of the younger Consultants reached clinical maturity at just the right moment and were enthusiastic, qualified and experienced to lead on developing the deployed clinical environment, working in field conditions with a small number of Regular and TA Consultants, including the author of this book, who had sustained the military clinical ethos after the lean years following the Defence Cost Study that closed the Service Hospitals. The third factor was the extension of the culture of 'Clinical Governance' (or Quality Assurance as I prefer to call it) into the field environment - both the clinical environment and the wider military environment. Military commanders 'got it', as indeed did Ministers.

Another key factor was the discovery of the military and political will to implement a raft of clinical and equipment initiatives. I would also like to highlight the contribution of the US Medical Services, who freely exchanged data with us, even where it was sensitive. This exchange exposed problem areas as well as successes of which we were able to jointly address and take advantage. At all levels, from the political level to individuals in deployed medical unit, our American colleagues proved willing and generous partners. The outcome has been increased survivability for our seriously injured casualties, with many of the lessons transferable into the civilian sector. This process is still in evolution. The outcome has also been to raise the status of the Defence Medical Services and, for example, has facilitated the raft of new Joint Professorial appointments with a number of the Royal Colleges.

The transition has not been without its problems. The recommendations of the Defence Cost Study 15[7] were in my view appropriate, although not always for the reasons given. However, they were implemented in a timeframe that was insensitive and in respect of the closure of hospitals were imposed without meaningful engagement of those affected. The DGAMS of the time warned that the resulting loss of experienced personnel would not be made up before 2012, a prediction that is almost spot on and we were lucky that we were not severely tested clinically before the subsequent phases of Operation Telic.

The loss of military hospital management experience is to an extent being substituted via our deployed reserve and regular hospital command teams. Once major operations cease in Afghanistan in or around 2015 and we return to our home base, we do not yet have a way of giving our future military hospital managers hands-on experience of operational command. The combination of bespoke military training and placement within the NHS provides a superior training environment for medical specialists, but there remain unresolved issues of how best to train military nurses and allied health professionals for their clinical role in the operational environment. We also have to persuade our military and political masters that we need to address issues around

7. Defence Cost Study 15, the Defence Medical and Dental Services, Final report march 1994

resource provision for the treatment of civilian and allied casualties in operational theatres, which have not previously figured in our planning or funding.

The evolution of the Role 4 facility (the NHS receiving hospital in Birmingham) is also an area worthy of record and future study. The Royal Centre for Defence Medicine (RCDM) was never intended to play a part in the reception of battle casualties. As in previous wars and as was planned for a war in NW Europe and the Gulf Wars, the primary responsibility for receiving land casualties from a major conflict lay with the civilian medical services, which de facto was the NHS after 1948. It is serendipity that the Department of Health chose the West Midlands Strategic Health Authority (SHA) to be the primary recipient of land casualties; that the SHA chose Birmingham NHS Trust to be the lead hospital; and that the Birmingham NHS Trust won the competition to host the RCDM.

When Birmingham started to receive battle casualties during Operation Telic, the lack of social, cultural, and welfare arrangements and resource allocation took time to be appreciated by the civilian management of the hospital while the wider Armed Forces took time to assume the responsibilities that fell to them as a consequence of retaining 'Full Command' of in-patients. The RCDM was clearly a uniformed medical establishment and as a consequence it took much flak, mostly undeserved and inaccurate, from a national media which was hostile to the Government and which wasted no opportunity to publicise alleged shortcomings in the medical care of the injured soldier. The House of Commons Defence Committee reported that "It seems clear that there has been much inaccurate and irresponsible reporting surrounding care for injured Service personnel at Birmingham, and that some stories were printed without being verified or, in some cases, after the Trust had said that they were untrue. We condemn this completely[8]". With the exception of the Birmingham Post, no newspaper included this quote in its coverage of the Report!

There is one area in which we were certainly found wanting. This was in the area of medical care to civilian detainees, the subject of a report[9] following the death of Baha Musa in British custody in 2003. Problems in the care of civilian detainees arose during operations in Aden in the 1960s and in Northern Ireland in the early 1970s. In the 1970s and 1980s there was a well developed policy supported by mandatory training on the medical approach to and care of civilian detainees in military custody.

When responsibility for detained civilians transferred from the Army to the then Royal Ulster Constabulary, the Army no longer had any responsibility for or experience of detainees in a conflict setting and with time the medical policies in place in the 1980s and the teaching lapsed. It was not until events in the US area of operations prompted me as the newly appointed DGAMS to enquire into UK policy that the lack of an appropriate UK policy was identified. I was familiar with the previous policy, as I had taught it when an instructor at the RAMC Training Centre, was re-articulated.

8. HCDC Seventh Report of Session 200708 Medical care for the Armed Forces HC327 5 Feb 2008
9. http://www.bahamousainquiry.org/report/ accessed 22 Cot 2011

Medical staff in Iraq had been left in a policy vacuum and any alleged failure by individual medical personnel (as I write this still the subject of further consideration) must be assessed against such a policy failure. The general lessons are perhaps that greater care needs to be taken when allowing training or policy to lapse, and that our Corporate Knowledge still relies too heavily on the memory of individual officers.

Set against this corporate failure are the external reports by the House of Commons Defence Committee[8]; by the Healthcare Commission[10]; and by the National Audit Office[11] which praise the clinical care of our injured servicemen. Indeed, the Royal Society published a Theme issue for its Philosophical Transactions[12]. The final external, independent verdict on the totality of the Iraq Campaign has yet to be delivered by the Chilcott Inquiry[13]. Of particular note is The Healthcare Commission's view of 'exemplary' practice in the management of injures in areas of conflict and in war zones.

The members of the Defence Medical Services and those who have supported them through Operation Telic can take great pride in what they have achieved, and this work should not be forgotten. I commend the second edition of "Blood Heat and Dust" to you as a worthy record of the collective achievements of the DMS in the first decade of the 21st century, which should resonate down the ages in the history of the care of man at war.

10. Healthcare Commission, A review of the clinical governance of the Defence Medical Services in the UK and overseas Mar 2009 ISBN 978-1-84562-218-3
11. National Audit Office: Treating Injury & Illness arising on Military Operations HC 294 Session 2009 – 10 dated 10 Feb 10
12. Military Medicine int eh 21st Century: pushing the boundaries of combat casualty care, Ed Mahoney PF, Evans GW, Kirkman E and Lillywhite L, Philospical Transactions of the Royal Society 27 Jan 11
13. http://www.iraqinquiry.org.uk/ accessed 23 Oct 2011

Author's introduction to the First Edition (2003)

Blood Heat and Dust



Tent H2: Gora Pathak 2003

Operation Telic was a major British military deployment to the Middle East in 2003. It culminated in the invasion of Iraq and the overthrow of the Ba'athist regime of Sadaam Hussein in conjunction with US *Operation Iraqi Freedom*. The operation was conducted in difficult political circumstances. History has yet to judge whether the decision to invade a complex sovereign country to overthrow an unsavoury regime, and the opprobrium which the decision attracted, was justified by the results.

Modern weaponry and alien creeds are empowering, and liberally distributed. They put new and unpleasant capabilities into the hands of individuals, militias and states whom we would prefer to be without them, and they create new dilemmas for our politicians, diplomats and planners. They bring injury and death to the young people charged with sorting out the mess. They bring new patterns of wounding and new paths to death. Our young men and women, sons and daughters, husbands and wives find themselves in uniform and in harm's way for many tangential causes.

All conflicts create dislocation of health, hospital and medical services from peacetime norms, which add to the suffering of civilians and combatants. The Defence Medical Services play a key role in minimising the morbidity of war and in helping set the conditions for peace thereafter.

War is waged by people. Human behaviour and human emotions shape the conduct and outcome of wars. Wars are always transient and have an end, even if they last for

100 years. It is thus necessary for combatants to look beyond the exigencies of the immediate conflict and to set the conditions for peace and goodwill thereafter. The military medical services have an important role to play in this regard. Warfare does not absolve the participants from civilized behaviour, from the preservation and respect for life, and from obligations under international treaties such as the Geneva Convention.

The *Operation Telic* campaign saw the movement of 45,000 personnel and the massed equipment of an armoured division, air force and naval task force over 4,000 miles in under three months; the achievement of all campaign objectives in fierce environmental conditions in less than a month, and the return of most of the force within six months for the cost of thirty lives by July 2003. The experiences of this to complex operation are likely to find applications for many years to come in military operations elsewhere.

The 2003 Gulf War saw a major British medical deployment to the Middle East in a very short time, and the conduct of a short, sharp, disciplined and highly effective military campaign to overthrow the Iraqi Ba'athist regime. The deployment included a substantial mobilisation of medical reservists, and the call up of staff from many places of employment, including civil hospitals and other healthcare organisations.

The material for this CD grew out of a study day which we organised on a hot May day in 2003 in Kuwait, following the somewhat premature and optimistic declaration of the end of hostilities by President Bush. History is made up of the written, oral and photographic contemporary evidence of events, and we wished to ensure that the considerable collective achievements and lessons of the medical deployment of Operation Telic would not be forgotten and would be made available to a wide military audience and members of the public. Our initial aspiration was to produce a glossy 'coffee table' book of the campaign. However, the benefits of digital format in making available a large volume of source material and imagery for future use and instructional purposes, persuaded us of the merits of publishing this material initially on a CD. We are grateful for the generous encouragement and support of the Defence Medical Services Department. We hope that this will stimulate those with access to this unique record to make further use of the images for personal and educational use.

We have thus sought to draw together informally the experiences of the many unit medical officers whose collective experiences provided a fly on the wall view of the totality of the British military campaign in southern Iraq in the Spring and early summer of 2003. It became clear that there was a worthy story to tell. In a well conducted military campaign, humanitarian considerations, discipline and restraint allowed an expeditionary British force in alliance with US forces to remove the Ba'athist Regime and its military and security forces from power in southern Iraq, with a minimum of civilian casualties and while setting the conditions for the restitution of peace and civil power in the area

There has been considerable public ambivalence to the political circumstances of this operation and its political presentation. Many thoughtful servicemen and women will have reflected on the indications for war and the limitations in the use of military power

in the world. However, those who entered Basra province in 2003 during this campaign, and who witnessed the squalor, poverty and palpable fear brought about by the Iraqi regime among the Shia population, may justifiably feel that the right and decent thing was done in creating the conditions for religious, political and economic self determination in Iraq, which its peoples may now either choose to grasp or to squander.

British veterans of forward combat operations in the First Gulf War in 1991were not a little bemused to find themselves within a few miles of the finishing point of the war in February 1991, at the start of operations in northern Kuwait in February 2003. There were nevertheless considerable differences between the circumstances of war in 1991 at the operational level. The 1991 campaign ranged free and fast across open and empty desert. The 2003 took place in populated country, through and around villages, towns, large cities and amid the detritus and ruin of people's real lives. In 2003, there was also the ever present risk of violent death from insurgent forces, ambushes and suicide bombers.

In the difficult political circumstances of this operation, many of the achievements and details of the work of British service personnel have been overlooked amid the chorus of criticism of the strategic decisions and in the subsequent outturn of events. We feel that there was a story to be told through the eyes of the medical teams of an honourable, disciplined and highly professional campaign, and of the processes and systems by which such results are achieved. In difficult circumstances, British service personnel, Iraqi combatants, civilians and children received a high standard of care in the difficult, testing and dislocating circumstances of a complex battle zone.

There have been many developments in military thinking, doctrine, systems and equipment which have changed the boundaries of clinical practice in war. The medical care of British servicemen and women whose lives and wellbeing are at risk on major operational deployments is also the responsibility of the national civilian health sector, and not just a challenge for the Defence Medical Services. We have thus sought to use the detail of *Operation Telic* to illustrate the broader issues of delivery of medical care and support to people in war and conflict, and to study the many complex issues and decisions which have to be addressed in planning for such operations.

We thus hope that this book in electronic format will help to inform a much wider public and professional audience on the processes of military healthcare delivery, which find a much broader application in the complex world of decision making in healthcare organisations. For example, mass trauma can affect communities quite out of the blue, through deliberate violence and by acts of nature. This has frequently been the case with the increasing scale of terrorist atrocities in recent years, and has graphically been illustrated by the Boxing Day Tsunami in the Indian Ocean in 2004. Moreover, as the weapons and means of waging war change, so all health care professionals should be aware of the particular characteristics and circumstances of conflict trauma. We may be involved inadvertently as civilians caught up in such events, or intentionally as members of medical teams within voluntary and non-governmental organisations (NGOs), or within armed services, in the middle and on both sides of any conflict. The

morbidity of mass trauma can be minimised through anticipation, foresight and understanding of the art of the possible, practical and pragmatic in places and circumstances where there is significant disruption to the normal civil health services, and in the informed application of imagination, discipline and leadership to its problems.

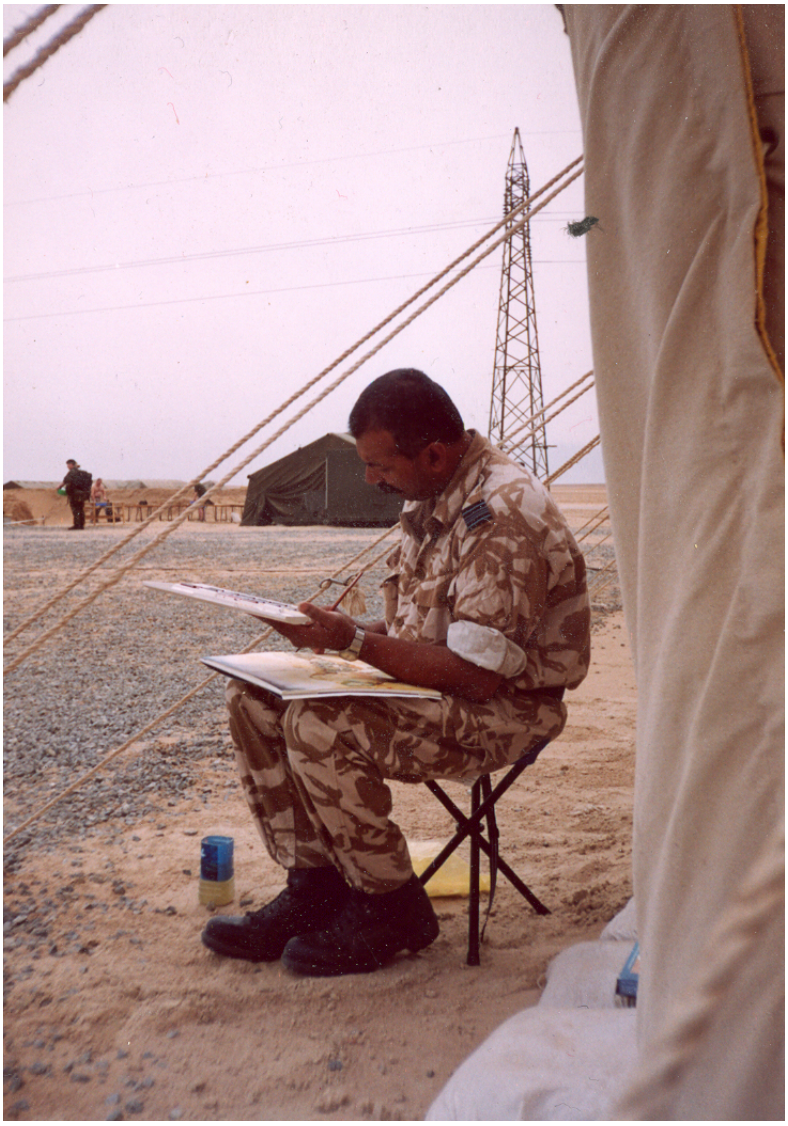
It is no coincidence that the armed forces can place such a diverse collection of individuals, professional and part time service personnel in difficult and testing circumstances and effect such extraordinary collective achievements to a tight time scale, and in difficult logistic and environmental circumstances. This book covers the deeds and accomplishments of men and women with a wide range of professional skills in medicine, nursing, disciplines allied to medicine, support functions and general duties. For simplicity, these are all referred to in the book under the 'medical' banner.

There are also more general lessons to be learnt about the motivation and leadership of people from this experience. Families, friends, the public in general and the local and national media help condition the moral component of the fighting power of the armed forces. The extensive use in 2003 of active reservists from hospitals, civic organisations and businesses throughout the country ensured that few communities were unaffected by the forthcoming war.

Much of what happened and much of what was achieved during the Gulf deployment of 2003 was kept from public view for operational reasons. We seek to shed some light on those events through the eyes of the medical teams who took part. In doing so, we also seek to inform and educate readers on the challenges, complexities and problems met by the men and women of the Defence Medical Services on operations.

The medical services recruit individuals with a wide range of talents, some discovered and others undiscovered. War helps reveal these talents. We are thus delighted to be able to reproduce the work of Miss Wanda Machnicka, RGN, and particularly of RAF orthopaedic surgeon Wing Commander Gora Pathak, who exercised his considerable watercolour talents as an unofficial war artist during spare moments at 34 Field Hospital.

I am most grateful to many other new and old friends, colleagues, senior officers and public officials who have given their support to this project. In order to draw together threads of a story which has many themes and participants and in which no one individual could have an immediate overview, I have drawn upon as many official, internet and personal sources as possible. Sins of omission and commission are entirely my own. I hope that all those with vignettes, recollections or material which we may have missed in our first trawl through the participants in the medical operations of Operation Telic, including those of the casualties themselves, will still feel encouraged to contribute and to help update this imperfect effort.



left:
Gora Pathak painting at 34 Field Hospital, March 2003

below:
The Author. Lt Col Rew, attached to 202 Fd Hosp, Shaibah, Airfield, May 2003



Blood Heat and Dust
The Defence Medical Services and Operation Telic, 2003 - 2009

Introduction to the Second Edition

David A Rew TD MA MB MChir FRCS
Consultant Surgeon to Southampton University Hospitals
Colonel L/RAMC, CVHQ Defence Medical Services

February 2011

In 2003, I set out to record for posterity the experiences of the UK's Defence Medical Services during Operation Telic 1, the UK's contribution to the US Operation Iraqi Freedom. The resulting collaborative book, Blood Heat and Dust, was published on CD as an e-book in 2005 with generous support form the Defence Medical Services Department under the direction of the late Admiral Ian Jenkins and Lt General Sir Kevin Donoghue, then Deputy Chief of the Defence Staff (Health). It can now be freely downloaded in its entirety at www.pangrafix.com/bhd

At that time, it was not clear whether Operation Telic would be short lived and soon forgotten, and many of those involved in the operation were too close professionally or emotionally to record their experiences in full. The book nevertheless produced a valuable documentary and photographic record of the "state of the art" in deployed military medical capability and thinking at the outset of the 21st Century, and a "trial run" for the recording of operational experiences through the eyes of those participating using the flexibility and capacity of the new digital publishing medium.

In fact, Operation Telic was to drag on for a further six years.

In his foreword to the Operation Telic 2-5 General Staff Analysis, Major General W R Rollo, Assistant Chief of the General Staff wrote in 2005:

> *"Operation Telic has posed complex challenges to the Armies of the Coalition in Iraq. The complexity comes from the need to deter and if necessary fight armed groups opposed to our presence, as well as to help enable (and sometimes lead) the humanitarian, reconstruction and nation-building activities in support of distinctly fragile or non-existent governance structures. There is every sign that the British Army will become engaged in similar 'complex' operations in other theatres, and some broad similarities are already apparent in operations in Southern Afghanistan. The style of asymmetric conflict in failing or fragile states is also now available for global trouble-makers to copy. It cannot be 'disinvented', and is likely to be with us for some time. Moreover, our enemies are analysing our strengths and weaknesses as an Army in order to achieve their ends.*
>
> *"The analysis of Operation Telic in the period May 2003 to 31 January 2005, when the first Iraqi elections were held, offers a number of insights for study and action. There are positive comments, notably about Service people. Work is needed, however, on cross-Government*

campaign planning (the 'Comprehensive Approach') and its execution (including funding and SSR) on optimising the Army's counter insurgency response, including its intelligence and logistic capability, and on developing our training to ensure that we are fit for all three blocks of the 'Three-Block War'.

"This analysis pays tribute to the contributions of the very many British Servicemen and women who served in Iraq during this period, and to those who gave their lives or who were injured in the course of this demanding operation. We must learn from the insights in this Analysis, always remembering that, as with doctrine, judgement is needed in the application of lessons from one campaign to what may be a very different situation in another place at another time.

And on Page 9 of his report he wrote:

"Some of the Analysis of the UK contribution, set out in this internal Army Report, may look critical when set against the achievements. Professionally, however, the Army has a duty, enshrined in doctrine, to learn from experience so that it can maintain and build on its success. The Army's doctrine and development staff should identify pointers to the future, something our opponents and others are also doing. There are concerns over the planning of Phase IV, the post-combat operations phase, and issues arising in several functional areas of the Army, and the overall UK effort in Iraq which need to be addressed".

The final withdrawal of UK forces from Southern Iraq at the end of Operation Telic 13 in the Spring of 2009 brought closure to an Operation which lasted for as long as the Second World War, and which had its fair share of political controversy and public ambivalence.

This prompted me to look again at the conclusions of "BHD I" and to consider whether they were still valid. My initial thinking was to write a follow on volume, but it soon became apparent that the objective of an overview of our experience in Iraq and the lessons that we had learned, as seen primarily but not exclusively through the eyes of the members of the Defence Medical Services, would be better served by a comprehensive rewrite of the First Edition with the extensive publicly sourced material that was now available.

This book is much more a compendium of published resources than an original text, compiled as it has been as a labour of love and sense of duty of professional governance. With such a high turnover of personnel on Operation Telic, few individuals among those deployed, let alone in the wider public, including the cohorts of friends and families of serving personnel, will have a clear recollection or overview of what actually happened.

There are many in public life who would wish to close the door on Op Telic as quickly as possible and bury the files in Corporate Memory (Erasing Of). The Baha Mousa Inquiry and Chilcot Inquiry have investigated many aspects of the Deployment, but have yet to report at the time of writing this introduction.

I have taken the view that if we do not provide a contemporaneous record now our fate will be either:

- to see the sacrificial effort of many good people expunged from the historical record by default;
- or for historians many years hence to try to compile a story from incomplete records and faded memories.

I am most grateful to all those who have shared this vision and have helped me with this task.

The contents of this book

This book is primarily about the work and achievements of the Defence Medical Services, I have structured the subsequent sections logically to tell the stories of the Front Line medics; the close and general support medical units, which each became the nucleus of the UK Med Group after Op Telic 1; the Field Hospitals, and the RAF tactical aircrews whose work in recovering and transporting casualties was vital throughout the Campaign. While the Royal Navy has necessarily had a limited role in the provision of physical healthcare infrastructure in Iraq, other than for the use of HMS Argus during Op Telic 1, its personnel have been fully integrated and involved in all aspects of healthcare delivery during the Operation and at higher command level.

We then move back to the UK across the Strategic Air Bridge, and address the work of the academic military medical teams and clinical teams in Selly Oak, Headley Court and elsewhere, where there have been major developments in the care of casualties under considerable media scrutiny.

The Defence Medical Services is as nothing without its people serving as regulars and Reservists, and drawn from all professional disciplines, geographic locations and interest groups. The continual service requirement in two concurrent wars, in Iraq and Afghanistan, each as long as or longer than the Second World War, and conducted against a background of peacetime life in the UK, has produced a natural selection process for exceptional people. Their recruitment, retention, training, morale, immediate and long term welfare place considerable planning and operational demands upon the organisation.

The management of such a complex organisation of the DMS and its performance under intense political and media scrutiny in an open and transparent environment where a digital photograph can dictate the world news agenda is instructive. I am grateful to Lt General Lillywhite for his help in compiling Chapter 30.

The voluntary and charitable sector continues to play an important role in the long term care of service personnel, and it is a pleasure to have an opportunity to record the efforts of so many unsung people and organisations in fundraising and delivering their “help for heroes”.

Health professionals, like all military personnel, are thinking and informed people, who work for the Armed Forces on a voluntary basis, and who have the same access to news, opinion and social media as everyone else.

Just as the freedom of action of individual clinicians is constrained by professional ethics and by legislation, so the actions of generals and of individual soldiers are constrained by humanity, morality, by law, and by the visual record. We are entitled to ask "what the hell were they thinking" of the perpetrators of the events in Abu Ghraib prison and of the death of Abu Mousa. We must also ask how could and would we have behaved differently in similar circumstances, and what institutional changes must we now effect to prevent their recurrence. To a very considerable degree, the medics are de facto the eyes, ears and moral conscience of Armies at War.

Many soldiers and their families will also ask whether Op Telic "was worth it". In Chapter 33, I reproduce a range of informed and erudite, "inside" and "outside" opinion on various aspects of the campaign.

Death and acts of heroism are inescapable adjuncts of war for the participants, and I conclude the book with selected stories of heroism with a medical bent, and a respectful In Memoriam Chapter dedicated to those who lost their lives.

Asymmetric warfare in Iraq and the transformation of the British Army

In early 2003, Operation Telic 1 was planned and executed as a conventional military campaign against a conventional military opposition, the Iraqi Armed Forces. However, well before the outbreak of hostilities, the Iraqi regime had made public in the Iraqi press their plans for an insurgency, based around organisations such as the Fedayin militia. We underplayed these intentions to our considerable cost.

Operation Telic was the first asymmetric war of the 21st Century. It was fought as a conventional campaign, continuing from the starting point where Operation Granby, the recapture of Kuwait, and colloquially known as Operation Desert Storm, ended in northern Kuwait astride the Basra Highway in the Spring of 1991

Updated western military technology, tactics and firepower led to the rapid collapse of the conventional Iraqi Army and the dispersal of many of its personnel and light weapons into a latent underground insurgency. The planning assumption that there would be a natural transition to low level counterinsurgency peacekeeping, along the lines of the Army's experience of Northern Island, and with an opposition playing to reasonable rules of politics and human behaviour, was grossly misplaced.

The worst nightmares of counterinsurgency planners, tacticians and forward thinkers were rapidly realised as the insurgents in Iraq broke every rule in the book of "civilised", Geneva convention directed warfare; It saw the liberal use of suicide bombers on foot and in vehicles, including women and children: the mass murder of civilians to provoke civil war; and in the use of advanced technology and ambush tactics to conduct a technical war of attrition against coalition troops and vehicles. This led to the deaths of some 5,000 coalition and associated personnel over the six years of the war

from 2003 to 2009, including almost 200 UK personnel, along with huge numbers of Iraqi and foreign combatants, and civilians.

The military story

It is not possible to understand the situation in which UK troops and their medical attendants found themselves in Iraq, nor the context of the immediate, short and long term medical consequences, nor the lessons to be learned, without a clear view of the history of events between 2003 and 2009. I have found a wealth of information in researching the material for the book primarily using public internet resources. These chapters cannot be intended to be a definitive history of the politics behind Operation Telic, and my choice of material is necessarily highly selective to produce a coherent narrative which addresses the human failings and successes.

I have sampled the historical material broadly along the timelines of the operation, to highlight and place chronologically events which received prominent media coverage and which were particularly important or influential to UK tactics and strategy. Far more authoritative works will emerge in due course, and divisional, brigade and regimental logs will contain far more information. These chapters are simply a device to provide interim structure to the recollections of those involved and those on the outside looking in.

In each chapter, I have drawn upon the rich resource of media and independent resources and reports to provide context for the work of the UK Medical Services. I have focused on that material which is particularly relevant to the UK experience of operations in the South, while including some contextual and briefing material to help explain the bigger tactical, strategic and political picture as it influenced the UK forces and their influence on the medical activities.

Through mid and late 2003 and into 2004, the insurgency took more and more effective and ruthless form, and the occupying Multinational Force in Iraq, MNF-I, was drawn into a brutal insurgency. Elements of the insurgency proved to be an intelligent, technologically capable and utterly ruthless opposition, introducing new and sophisticated ambush weaponry, and deploying the hellishly crude but effective man, woman or child suicide bombers in large numbers. Such tactics forced a modification of coalition tactics and equipment, and at high cost in personnel and materiel. The process of refocussing strategic minds from conventional war fighting to the needs of countering technically highly sophisticated 21st century insurgencies in Iraq, Afghanistan and elsewhere continues apace.

For too long, equipments and vehicles which were unsuited or vulnerable to insurgency tactics were kept in use in Iraq, and the flow of dead and seriously injured UK casualties continued through the medical chain. Extraordinary heroism among the troops on the ground was often insufficient to compensate for the technical deficiencies of equipment and vehicles designed for other endeavours. These were addressed with a wide range of ad hoc technical solutions to defend existing vehicles and tactics, which were eventually and belatedly corrected with the introduction of the better designed and

more appropriate equipment, including heavily armoured and bomb-resistant trucks such as Mastiff.

The physical and economic reconstruction is now well under way under a sovereign government, but low level insurgency and bombings continue at the time of writing (July 2010) and the long term political future of Iraq remains uncertain. Much more water must pass under the bridges of the Shatt Al Arab waterway, and many more dust devils must blow across the dry wastes of Basra province before historians give their final judgement on our interventions. Nevertheless, if the blood and sweat of many thousands of British Armed Forces personnel and our international allies and partners is not to become wholly buried in the sands of time, or hard won lessons are not soon to be forgotten, then we have an obligation to the present and to the future to record these lessons and experiences.

Medical operations and clinical experience

War always brings innovation along with bitter experience, and no more so for the Defence Medical Services. Since early 2003, the DMS has been stretched both intellectually, in its professionalism and in its use of resources to support concurrent medium scale (more than Brigade sized) operations in Iraq and Southern Afghanistan simultaneously. At all points in the casualty's journey, from the point of wounding to final rehabilitation, there has been a sea change in the way that the DMS does its business, trains its personnel and secures the best possible outcomes for combatant and civilian casualties.

The Medical perspective allows us to record sympathetically and globally the experiences of the soldiery in Iraq, be it through the eyes of the front line medics, who have had their fair share of the hell of combat and tests of courage; the aid post and the hospital staff who have seen the brutal consequences of insurgency warfare at first hand; and the medical teams who have moved casualties around the battlefield and back to the UK.

Much of the modern experience of the Defence Medical Services is a work in progress, with lessons learned in Iraq translating into procedures and practices in Afghanistan, and vice versa. The story of our work in the badlands of Afghanistan during Operation Herrick is still to be told, and can wait for a later date. In seeking to bring closure to our time and experience in our most recent of a long historical line of occupations of Iraq, we recognise that this documentary will be an imperfect effort, and that more stories will be told by those involved and those with greater oversight of the historical record in due course.

We can but hope that this book proves to be of some use and interest to future generations and planners, in its efforts to assess and project the good that was done among the chaos and horrors of savage insurgency warfare following the overthrow of the Baathist regime of Saddam Hussein.

The experience of the casualties

I have also sought to capture individual stories and experiences wherever possible, to bring life and substance to otherwise dry narrative. The medical story is the story of human lives, and the physical and mental consequences of war and trauma. My research across the breadth of the publicly posted material revealed the extent of the tensions between the official provision of health care resources and the adequate protection of combat troops, and the expectations of the voting public. These were highlighted in a number of media stories and press campaigns, which highlighted a lack of preparedness in a number of areas of force protection and medical provision in 2003.

Time and again, public exposure of problems by the fourth estate of the media produced a cycle of distress for families and individuals, followed by establishment embarrassment, internal and parliamentary enquiry, and finally by sensible and effective corrective action, which produced overall improvements and better protection and care.

For example, the number and complexity of physical and psychological casualties returning from Iraq and Afghanistan from mid 2003 onwards caught us on ill prepared in mainland hospital provision, after a phase of integration of military medical units into NHS hospitals through the 1990s. Thus, we have the Selly Oak Hospital story, where inadequate provision for wounded combatants was highlighted by outrage both internally at the highest levels of the General Staff, and externally by the distressing stories emerging from families and friends.

We record the rehabilitation story, where investment in people, resources and equipment has led to superlative improvements in the prospects of single, double and even triple amputees and better facilities at Headley Court and elsewhere. We record the process of recognition of the protective inadequacies of a generation of vehicles from Land Rovers to Challenger II Tanks against modern mines and ambush. We outline the coming of age of a military mental health service and academic base which seeks to understand, anticipate and moderate the pernicious long term effects of operational mental stress, from the front line trauma debriefings to long term care.

Facing up to the problems

While it is the self-evident purpose of the official media to present the best possible face on all situations, not least for the imperative to maintain operational morale and confidence among the fighting troops, it is also self evident that denial and concealment serve no useful long term purpose. Open acknowledgement and honesty brings the best results, as Harrison Ford's Jack Ryan advises the fictional President of the USA in "Clear and Present Danger".

To this end, the then Surgeon General Louis Lillywhite's brave decision to open up the DMS to external appraisal and validation by the civil Health Care Commission and its successors in 2008-2009 was both sensible and creditable. The overall message of the past decade is that as battle- and media hardened health care professionals, we must sustain and develop a process of open and constructive enquiry and embrace the cycle

of creative destruction in all aspects of our work, if we are to carry the public with us and do our medical best for the soldiery.
For the relatively small British military contingent in Southern Iraq, from 2004 onwards the challenge of containing a massively complex civil and criminal insurgency with a political ceiling of less than 10,000 troops and unsuitable transport equipment which progressively constrained our freedom of manoeuvre and increased the casualty flow was insurmountable. Operation Telic became an exercise in damage and casualty limitation to the point of final dignified withdrawal.

The story and perceptions of Operation Telic will change with time as new material becomes available and new opinions are expressed. I hope that much of the material which has been written contemporaneously and collated in this book, often sourced from the ephemeral Internet, will stand the test of time and analysis. In the short term, the Operation may well be judged ill-advised, ill-planned and ill-thought through at a political and strategic level. In the longer term, the tides of history in the Middle East may run more strongly in a more democratic direction.

General Acknowledgements in the Preparation of this book

I am pleased to have been able to secure a wide range of supporting documents which the medium of the e-book allows me to provide with permission as resource material. I have sought to acknowledge and reference all material in the relevant chapters, and to secure primary permissions. I can but apologise to any authors or photographers who feel that their work has not been properly acknowledged.

The concept and execution of this book has been a personal exercise in education and exploration around my "day job". It is necessarily more of a compilation of the works of others than a historical essay of my own, and I have reproduced considerable quantities of text from public sources, and in particular from brave and articulate journalists whose eye witness accounts of events deserve to be widely read as a key element of the historic record. I have sought to reference the source articles in each chapter, with minor editorial amendments in places to aid the flow of the story or to avoid needless duplication.

In order to compile and complete the book in a timely fashion, and to secure as wide a witness base as possible, I have therefore drawn heavily on a variety internet resources, including MoD official information, and in particular upon press and Wikipedia articles. This has allowed me to flesh out the historical time lines and to provide continuity and broad context to the key events which hit the headlines. The sequence of events will most certainly have already become confused in most memories, as they were in mine.

This temporal framework of the Campaign provides structure for the understanding the medical deployment, strategy and modernisation of tactics. The detail of the overall military campaign will undoubtedly emerge from many other sources in due course.

Almost all of the material collated here is in the public domain, and I have sought to produce a coherent narrative from the mainstream press to extend the official press

releases of the MoD. I am also grateful to members of the Blogosphere, and particularly to those stalwart loyalists such as Colonel Richard North behind the "Defence of the Realm" and "EUReferendum" Blogs. His vigorous writings on vehicle protection and other matters, while uncomfortable reading for officialdom and politicians at times, have nevertheless led the way to a huge modernisation programme of the military vehicle fleet, they also provide stimulating material for many other aspects of strategic in the application and design of land, sea and air power to modern conflict.

I am thus indebted to the authors and compilers of many and various websites on the Internet for the source material. There is no right or wrong interpretation of modern history, but there exists a very wide range of viewpoints. I have selected from sources regarded as reasonably reliable, objective and robust and broadly sympathetic to the UK position. However, a student of history of insurgency and of propaganda would do well to visit the many sites and sources of Arab and Iraqi web postings, to understand how events can be turned around and represented in an entirely different light by those with the inclination to do so.

I am grateful to the various professional contributors to Wikipedia, to the BBC, CNN, Independent and Guardian newspaper columnists, and to organisations such as Human Rights Watch, from whose fresh articles much of the information has been cited verbatim as referenced, to supplement core information from UK official MOD Websites; from the Journal of the Royal Army Medical Corps and from the Corps Magazine. This book is largely about the British experience in Iraq, and most of the articles are drawn from UK observers and journalists from a broad political spectrum of published material in the national and international press. However the lessons of the insurgency fell most heavily upon Iraqi citizens and more heavily upon US forces and civilian organisations than upon UK forces. The horrors reported in these pages may be visited upon us at any time in future, and we must learn the lessons of adapting military trauma care to the needs of advanced counterinsurgency tactics under relentless media scrutiny.

I have no doubt that much more will come to light as private accounts and withheld documents and evidence are published in future years. However, the ubiquity of electronic imagery, mobile phones, and internet resources such as YouTube and the digital media allows us to compile a reasonably authoritative contemporaneous account.

It may seem delusional to claim that much good has come out of Op Telic. For those who have served with the Defence Medical Services through this difficult period, the transformation in casualty care which has been forced upon us by events will be a source of influence and pride for generations to come. This book is a modest effort to preserve the record of their contribution through turbulent times. Regardless of the harsher or kinder judgements of History, this book stands in dedication to those service personnel and their wider communities of friends and family who served in Iraq, and to the personnel of the Defence Medical Services who observed and learned so much from their experiences



Storm over Camp Fox
Gora Pathak 2003

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Source: http://file.sunshinepress.org:54445/uk-stbility-operations-in-iraq-2006.pdf accessed May 2009

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This edition is dedicated to the late Mr Michael Ross, of Clapton in Gordano, Bristol, and publisher; and to the late Admiral Ian Jenkins; without both of whose kindness, energy and guidance the First Edition of this book would have been unlikely to see the light of day.

The Operation Telic Medical Deployment, January to July 2003
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The Paintings and Illustrations in Blood Heat and Dust Second Edition

This book has been immensely enhanced by the talents and generosity of two artists in particular, and by contributions from a number of other individuals.

The first edition was enhanced principally by reproductions of the watercolour works of my orthopaedic surgical colleague Gora Pathak, whose pictures now take place of pride on many a wall in many an illustrious building around the UK. I was also grateful for permission to reproduce a particular favorite by Wanda Machnika from 202 Field Hospital, "Wanda doesn't want to play today", based upon Edward Munch's "The Scream".

I am delighted to be able to retain these illustrations for the second edition.

During my researches I rediscovered the oil on canvas works of David Rowlands, who is much in demand as a Regimental Artist, and whose large series of paintings of incidents and events recorded during a series of visits to Iraq during Op Telic tell their own story of the Campaign. I am most grateful to David for permission to reproduce his paintings.

I am also grateful to Stuart Brown of Skipper Press for permission to reproduce his portrait of Michelle Norris.

The Paintings of Gora Pathak

The first and current editions of the book include 27 paintings by Wing Commander Gora Pathak RAF, Consultant Orthopaedic Surgeon. These paintings were created during the deployment of 34 Field Hospital from March to May 2003 in the Gulf. They help bring to life some of the images of war in a very personal way. They also serve to illustrate the wealth and depth of talent to be found among service personnel.

Wing Commander Pathak wrote for the first edition:

> *"As a Defence Medical Services Surgeon, I work both for the National Health Service and for the Armed Forces. I have deployed to the Balkans and to the Gulf several times, but the most memorable of these deployments was Operation Telic in 2003.*
>
> *My training to become a surgeon has taken place on three continents. I started off doing my basic medical training in India. I then came to England and finished my training in Australia.*
>
> *I have painted since my childhood. It is an international language and on deployments can help to bridge language and nationality barriers.*
>
> *The Gulf War of 2003 gave me the opportunity to record in my paintings the journey and experiences of 34 Field Hospital.. I sought to capture the colours, the sand, and the gritty emotions of our soldiers in my paintings amongst the shallow trenches and on the hard derelict runway at Shaibah. I was fortunate to be there. Each painting is a part of my life on Op Telic and has a story to tell. I believe that a painting can capture the atmosphere of war far better than many photographs.*

I painted the day to day life of the field hospital from the outset of the deployment. Included amongst the subjects are NBC drills and Challenger 2 tanks. My paintings multiplied as I moved from the operating theatre to the wards and into the long corridor. I used my broken bits of pastels to bring out the colours. I painted tired and anguished faces. I also painted the joy and the sense of achievement of providing care to our own people and to Iraqis. The bandsmen have taken a special place in my painting. I'll never forget their hard work and sense of humour. When the ground war started I operated continuously for 48 hours without rest. This intensity gave me rich experience in war surgery. The following fortnight was busy but I managed to produce a few sketches in my few precious moments of rest. The fact that my paintings gave pride and pleasure to my friends and colleagues kept me going. There were times when the sight of a two-year-old with 80% burns or the tired whimpering of an orphaned baby penetrated my emotional armour. Painting and operating were my ways of dealing with the reality of war."

Availability of Gora Pathak's Prints

All 27 pictures are each available for purchase as Limited Edition prints for £10-00 + £2-50 Postage and Packing. If you would like to acquire one or more prints, please email, write or phone for a brochure or to place an order to:

Mrs Kate Vautier
Church Barn, Sisland, Norfolk NR14 6EE

Telephone (01508) 521 132

email kate.vautier@btopenworld.com

The Paintings of David Rowland

Availability of David Rowland's Prints

These can be obtained through his website www.davidrowlands.co.uk

Many of David's paintings of the British Army in Iraq have been published as prints and are available for you to buy. Search paintings by Regiment or Campaign: on the right or on the Gallery page. To commission a painting follow the Commission link.

They can also be purchased by writing directly to him at:

6 Saville Place, Clifton, Bristol BS8 4EJ

Availability of Stuart Brown's Prints

These can be obtained through his website www.skipperpress.com

Glossary of terms and abbreviations

There are many Arabic variants on spellings of names and places. No effort has been made in this compendium to standardise these names in the many different eyewitness accounts.

Op Telic:	Used interchangeably with Operation Telic, the British title for military operations in Iraq, 2003-2009
AASG:	Air Assault Surgical Group
ADMEM :	Academic department of military emergency medicine
ADS:	Advanced Dressing Station
A+E:	Accident and Emergency
AELO:	Air Evacuation Liaison Officer
AES:	Air Evacuation Squadron
AFP:	Global News Agency
AIDS:	AutoImmune Deficiency Syndrome
AIF:	Aimed Indirect Fire
AIS:	Abbreviated Injury Scale
AK 47:	Kalshnikov assault rifle
AMS:	Army Medical Services
AMSTC:	Army Medical Services Training Centre, Strensall, York
AO:	Administrative Officer or Area of Operations
AOR:	Area of Responsibility
APC:	Armoured Personnel Carrier
APOD:	Air Port of Delivery (Airhead)
AQ:	Al Qaeda
Armd Bde/Div:	Armoured Brigade/Division
ASCOT:	A Severity Characterisation of Trauma (Scoring system),
ATLS:	Advanced Trauma Life Support
BARTS:	Battlefield Advanced Resuscitation and Trauma Skills
BATLS:	Battlefield Advanced Trauma Life Support
Blackadder:	A famous national strategist and source of much revered British military doctrine: see BBC
BLESMA:	British Limbless Ex Servicemen's Association
BBC:	British Broadcasting Corporation

Berm:	A sand and rubble wall built with a bulldozer for force protection
"Blue on blue":	An own goal: friendly fire: casualties caused by an own side strike on a vehicle or position
BAOR:	British Army of the Rhine
BG:	Battle Group
BLESMA:	British Limbless Ex Servicemen's Association
BMH:	British Military Hospital
BFA:	Battlefield Ambulance (Landrover)
BRF:	Brigade Reconnaissance Force
BSA:	Body Surface Area (a measure of burns injury)
Bulldog:	FV432 Series upgraded tracked armoured ambulance variant
C17:	Boeing GlobeMaster four engined jet powered Freighter Aircraft
CAM:	Chemical Agent Monitor
Cas:	Casualties
CASH (MASH):	(US) Combat (Mobile) Army Support Hospital
Casevac:	Casualty Evacuation
CBA:	Combat Body Armour
CCAST:	Critical Care in the Air Support Team (RAF)
CCS:	Casualty Clearing Station
CD:	Compact Disc
CEG:	Career Employment Group
CES:	Casualty Evacuation Squadron (RAF)
CSFG:	Commando Forward Surgical Group
CIMIC:	Civil-Military Co-operation
CMT:	Combat Medical Technician
CNN:	US TV News Network
CO:	Commanding Officer
Coalition:	refers to "Allied" forces, ie US, UK, Australian, Polish and other nations working alongside US and UK forces
COB:	Contingent Operating Base (Basra Airfield)
Coin:	Counter Insurgency

Colpro:	Collective Protection (against chemical warfare agents)
CONDO:	Contractors on Deployed Operations
CONLOG:	Civilian Logistic Staff under Contract
CP:	Command Post
CPA:	Coalition Provincial Authority
CSMR:	Close Support Medical Regiment
CT:	Computerised Tomography, a form of Xray scanning
CVRT:	Combat Vehicle Reconnaissance Tracked
DASA:	Defence Analytical Services and Advice
DC IPT:	Defence Clothing Implementation Project Team
DCS:	Damage Control Surgery (Deputy Chief of Staff)
DFID:	UK Government Department for International Development
DLO:	Defence Logistics Organisation
DLoDs:	Defence Lines of Development
DOBMC:	Deployed Operating Base Medical Centre (RAF)
DMETA:	Defence Medical education and Training Agency
DMRC:	Defence Medical Rehabilitation Centre (Headley Court)
DMS:	Defence Medical Services
DMSD	Defence Medical Services Department
DMSTC:	Defence Medical Services Training Centre
DMWS:	Defence Medical Welfare Service
DNBI:	Disease and Non Battle Injured
DROPS:	Demountable Rack Operated Pickup System (UK Army Load carrying trucks)
DS:	Dressing Station
DSC:	Defence Select Committee
DSCA:	The Defence Secondary Care Agency
DSCOM:	Defence Supply Chain Operations and Movements
DSTL:	Defence Science and Technology Laboratories
DTL:	Deep Trench Latrine, home of the Iraqi fly
D & V:	Diarrhoea and Vomiting (see DTL)
DVD:	Digital Video Disc

DWR:	Duke of Wellington's Regiment
EFI:	Expeditionary Forces Institute (mobile shop): The tuckshop!
EFP:	Explosively Formed Penetrator/Projectile
EH (O):	Environmental Health (Officer)
EOD:	Explosive Ordnance Disposal (Bomb disposal)
EPW:	Enemy Prisoner of War
Factor VII:	A blood clotting component
FAO:	Field Administration Office
Fd Hosp (Amb):	Field Hospital (Ambulance)
FHM:	See GQ and Heat (Boys Mags)
FMA:	Force (logistic) Maintenance Area
FFMA:	Forward Force (logistic) Maintenance Area
FMed:	Form , Medical (numbered), or Field Medical . . .
FMHT:	Field Mental Health Team
FRE:	Former Regime Elements
FSG:	Forward Surgical Group (Royal Marines)
GDMO:	General Duties Medical Officer
GOC:	General Officer Commanding
GOSP:	Gas Oil Separation Plant
G +:	Go Day plus number of days, as in D Day, H Hour
GSMR:	General Support Medical Regiment
GSW:	Gun shot wound
HCR:	Household Cavalry Regiment
HDU:	High Dependency Unit
HLS:	Helicopter Landing Site
HMC:	Hospital Management Cell
HMS:	Her Majesty's Ship
Hospex:	Hospital Exercise (held at Strensall DMSTC)
ICDC:	Iraqi Civil Defence Corps
ICRC:	International Committee of the Red Cross
IC(T)U:	Intensive Care (Therapy) Unit
IDF:	Indirect Fire (Mortars, rockets and artillery)

IED:	Improvised Explosive Device
IPE:	Individual Protective Equipment (against chemical warfare agents)
IRT:	Incident Response Team
ISF:	Iraqi Security Forces
ISO:	Standard international steel freight container
ISS:	Injury Severity Score
JDAM:	Joint Direct Attack Munition (Air delivered bomb)
JDP:	Joint Doctrine Publication
JFLogC:	Joint Force Logistic Component, the UK Logistic Command in Theatre
JRAMC:	Journal of the Royal Army Medical Corps
JRRF:	Joint Rapid Reaction Forces
JTCCC:	Joint Theatre Clinical Case Conferences
JTFHQ:	Joint Task Force Headquarters
JTTR:	Joint Theatre Trauma Registry
KCMHR:	King's Centre for Military Health Research
KCIA:	Kuwait City International Airport
KFC:	Kentucky Fried Chicken
KFS:	Knife Fork and Spoon
KIA:	Killed in action
LAND:	UK Land Forces Command (Based at Wilton, Salisbury)
Log Bde:	Logistics Brigade
LOS:	Length of stay (hospital admissions)
Lt (Lt Col):	Lieutenant (Lieutenant Colonel)
LSD:	Lysergic Acid, a hallucinogenic drug
MACE:	Major Trauma Audit for Clinical Effectiveness
MAOT:	Mobile Air Operations Team
MASCAL:	Mass Casualty
MATTs:	Military Annual Training Tests
MBLU:	Mobile Bath and Laundry Unit
MBT:	Main Battle Tank (Challenger II (UK), Abrams (US))

MDHU:	Ministry of Defence Hospital Unit
Media Ops:	The team that looks after the journalists
MEF (U):	(US) Marine Expeditionary Force (Unit)
MERT:	Medical Emergency Response Team
MiTT:	Military Training Team
MLRS:	Multiple Launch Rocket System
MND (SE):	Multi National Division (South East) (The UK Divisional Area)
MNF-I:	the Multi National Force in Iraq
MND-SE:	Multi National Division (South East)
MO:	Medical Officer
MOAB:	Massive Ordnance Air Burst (fuel-air blast bomb)
MoD:	(UK) Ministry of Defence
MOET:	a teaching Model for Obstetric Emergencies and Trauma
MoH:	Ministry of Health (Iraqi)
MP:	Member of Parliament or Military Police
MRE:	Meal Ready to Eat: a US prepacked culinary delight on every occasion
MSS:	Medical Supply Squadron
MT:	Motor Transport
MTLB:	A Russian designed Armoured Personnel Carrier
MTSF:	Mobile Transportable Surgical Facility
NAO:	National Audit Office
NAPS:	Nerve Agent Protection medication (pyridostigmine)
NATO:	North Atlantic Treaty Organisation
NATS:	Navy Afloat Trauma System
NBC:	Nuclear, Biological and Chemical (warfare)
NCO:	Non-Commissioned Officer
NGO:	Non-Governmental Organisation
NHS:	(UK) National Health Service
NISS:	New Injury Severity Score
NVQ:	National Vocational Qualification
O Group:	Orders Group

Op:	Operation
OpEDAR:	The Operational Emergency Department Attendance Register
OPCON:	(under) operational control
OPTAG:	Operational Training and Advisory Group (an element of Predeployment Training, PDT)
Orbat:	Order of Battle (the list of subunits in an armed force)
ORHA:	Office of Reconstruction and Humanitarian Assistance
PAR:	The Population at Risk
PCRF:	Primary Care Rehabilitation Facilities
PCRS (F):	Primary Casualty receiving Ship (Facility) (RFA Argus)
PEEP:	Positive End Expiratory Pressure
PHEC:	Pre-Hospital Emergency Care
PJCC:	Provincial Joint Coordination Centre
PJHQ:	(UK) Permanent Joint Headquarters (Northwood, Middlesex)
PMRAFNS:	Princess Mary's Royal Air Force Nursing Service
PoW or PW:	Prisoner of War
Pte:	Private (rank)
PTSD:	Post Traumatic Stress Disorder
PX:	US EFI
RAMC:	Royal Army Medical Corps
RAMP:	Reception Arrangements for Military Patients
RAuxAF:	Royal Auxiliary Air Force
RAP:	Regimental Aid Post
RCDM:	The Royal Centre for Defence Medicine (in Birmingham, UK)
RDMC:	Royal Defence Medical College
RFA:	Royal Fleet Auxiliary (Reserve Forces Act)
RHQ:	Regimental Headquarters
RMP:	Royal Military Police
R & R:	Rest and Recuperation; holiday leave (see Media Ops)
ROC Drill:	Rehearsal of Concept Drills/Exercises
Ro-Ro:	Roll On - Roll Off (shipping)
RPG:	Rocket Propelled Grenade (Russian design)

RRUs:	Regional Rehabilitation Units
RSDG:	Royal Scots Dragoon Guards
RSM:	Regimental Sergeant Major, the senior NCO in a major unit
RMTC:	Reserve Mounting and Training Centre, Chilwell, Notts
RSOI:	Reception Staging Onward Integration (A phase of immediate training for troops arriving in Theatre)
RTA:	Road Traffic Accident
RTU:	Return to Unit
QARANC:	Queen Alexandra's Royal Army Nursing Corps
QARNNS:	Queen Alexandra's Royal Naval Nursing Service
QDG:	Queens Dragoon Guards
QRF:	Quick Reaction Force:
RCDM:	Royal Centre for Defence Medicine
REME:	Royal Electrical and Mechanical Engineers
RGN:	(state) Registered General Nurse
RLC:	Royal Logistics Corps
RM:	Royal Marines
RMO:	Regimental Medical Officer
RN:	Royal Navy
RPG (7):	Rocket Propelled Grenade, a Russian designed anti-vehicle weapon
RRF:	Royal Regiment of Fusiliers
RTA:	Road Traffic Accident
SAAH:	Shatt al Arab Hotel
SAS:	Special Air Service
S & M:	A pastime
SBS:	Special Boat Squadron
SCIRI:	Supreme Council for the Islamic Revolution in Iraq
SCUD:	An Russian made Surface to Surface Ballistic Missile (SSBM)
SDR:	Strategic Defence Review
SLB:	Shaibah Logistic Base
SNCO:	Senior NCO
SO:	Staff Officer (grade/rank) (as in SO1, SO2, SO3, SO4)

SPOD:	Sea Port of Delivery
Sqn:	Squadron
SSAFA:	Soldiers, Sailors, Airmen and Families Association, a UK Service Chaarity
SSM:	Surface to Surface Missile (see SCUD) or Staff Sergeant Major
STD:	Sexually Transmitted Disease
TA(VR):	Territorial Army (Volunteer Reserve)
TMW:	Tactical Medical Wing
TNC:	Trauma Nurse Coordinator
TNT:	Trinitrotoluene, an explosive
TRISS:	Trauma Injury Severity Score
TTPs:	Tactics, Techniques and Procedures
UHBFT:	University Hospitals of Birmingham Foundation Trust
UK Med Group:	UK Medical Group
UN:	United Nations
UNHCR:	UN High Commission for Referees
UNICEF:	United Nations Children's Fund
UNSCOM:	UN Security Commission
UNSCR:	UN Security Council Resolution
UOR:	Urgent Operational Requirement
USACE:	US Army Corps of Engineers
USAF:	United States Air Force
USMC:	US Marine Corps
US(N)S:	United States (Naval) Ship
(V):	Volunteers, eg TA
VA:	Veterans Administration or Department of Veterans Affairs (US Healthcare system for military veterans)
VBIED:	Vehicle Borne Improvised Explosive Device
VCP:	Vehicle Check Point
Warrior:	Tracked armoured infantry combat vehicle
WHO:	World Health Organisation
WMD (E):	Weapon(s) of Mass Destruction (Effect)

Blood, Heat + Dust: Second Edition

Operation Telic and the British Medical Deployment to the Gulf 2003 -2009

Chapter 1:

The historical context of *Operation Telic*

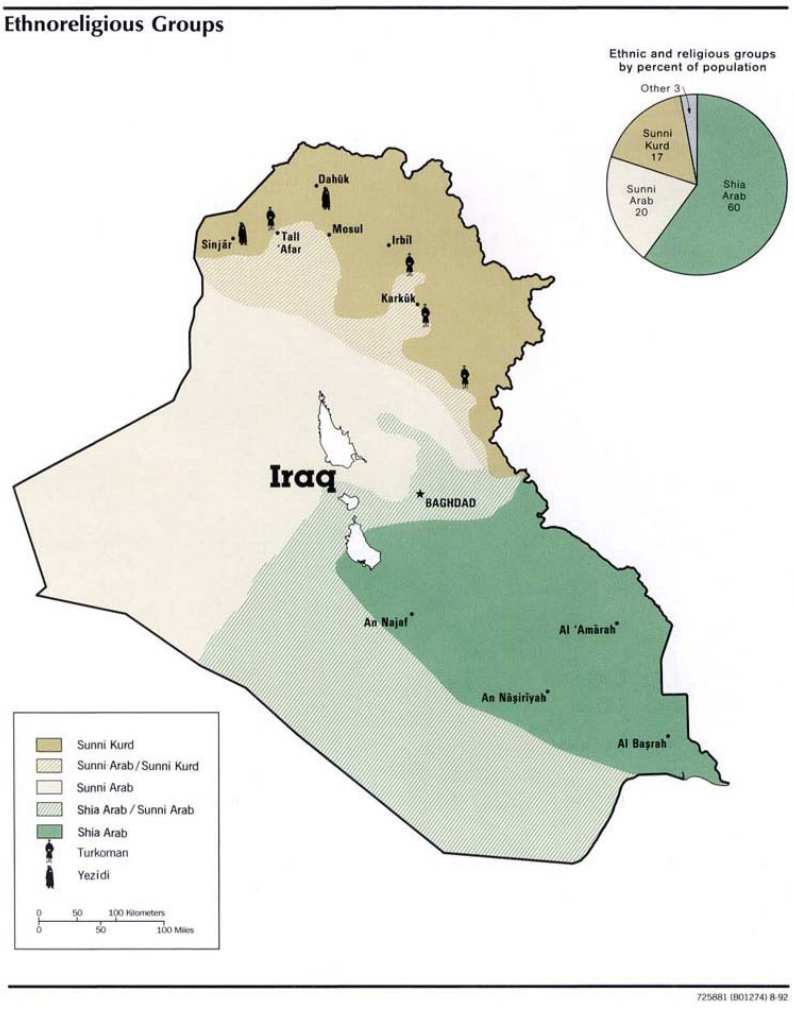


The mosque at Shaibah: (Photo Wanda Machnicka 2003)

Iraq and its peoples

Iraq is a complex state which defies simplistic assessment and understanding. Iraq was founded as a modern state in 1919 by the British in Mesopotamia, the lands between the Tigris and the Euphrates rivers. Mesopotamia had been previously tenanted by the ancient civilisations of Sumeria, Babylon and Nineveh. The capital, Baghdad, was founded by the Arab Abbasid dynasty in the 8th century AD, destroyed in 1258 by the Mongols and taken in 1534 by the Ottomans.

Iraq then comprised three provinces. The province of Baghdad formed the centre and looked west to Syria and east to Persia. The province of Mosul in the north looked towards Turkish Anatolia. Basra province in the south and at the head of the Persian Gulf looked seaward towards India. Modern Iraq comprises a complex mix of peoples, including some 79% Arabs, of whom about 60% are Shia, mainly Southern Arabs with strong cultural links to Iran. Most of the remainder are Sunni Arabs in central Iraq. 17% of the population are Iraqi Kurds, with links to Kurdish communities in Syria, Iran and Turkey. Iraq also includes significant populations of Jews, Christians, Turkumen and other minority groups. This was a state diverse in culture, religion, education, wealth and outlook, and it is perhaps in itself an achievement that despite the



The principal ethnic mix in Iraq, 1990s

(www.uwgb.edu/Iraq_ethnoreligious_1992.jpg)

price paid in blood and torment, a unitary state had been forged in which most Iraqis enjoyed a great sense of nationhood and pride.

This sense of statehood plays a powerful part in the narrative of events in Iraq since early 2003, and helps explain the ambivalence to the overthrow of the Ba'athist regime by external powers.

A brief history of Britain in Iraq

Travellers, explorers and armies have long ranged across the baked wastes of Western Asia, and Mesopotamia has been a basin of civilisation for centuries. The region achieved an altogether greater significance for European peoples in the 20th century with the discovery and commercialisation of its oil reserves. Britain has a long history of engagement in Iraq over the past 100 years, and knowledge of this history helps to place recent events in the context of a long, intimate and complex relationship between the two countries. However, this knowledge is not sufficient in itself. T E Lawrence, one of the great unconventional British officers and Arabists of the 20th century, believed that we cannot understand the Arab mindset without close acquaintance with the people themselves. Lawrence went to enormous lengths to live among the Arabs, to gain their trust and to build alliances with and among them, and we do well to learn from his experiences.

In the 19th century, the British began to explore, survey and trade in Mesopotamia. On 11th November 1914, at the outset of the First World War, Britain declared war on the Ottoman Empire, which entered the war on the side of Germany and Austria-Hungary. An Anglo-Indian army landed in Basra in November 1914 and advanced towards Baghdad. The Turkish (Ottoman) Army trapped them in a siege at Kut al-Amara on the Tigris, forcing surrender in April 1916. Many British soldiers died in prisoner-of-war camps.

In May 1916, the then secret Sykes-Picot Agreement anticipated the partition of the Ottoman Empire into British and French spheres of influence, with Basra and Baghdad going to Britain, and Mosul and Syria to France. This division never came about, but events of that time may help to explain modern French differences with Britain over Iraq.

Historical Note by Col Paul Parker:
The Mesopotamian Campaign "In search of Victor Horsley"

"The war in Europe had become a stalemate. A new front was needed. Emboldened by earlier successes, the Allies had conceived a plan to capture Baghdad, where the main concentration of Turkish forces was, via the Tigris River. The British had occupied the area around Basra in November 1914.This was to protect the major British oil refineries just offshore on Abadan Island. General Charles Townshend was chosen to command the force. He built up a supply base at Basra but rapidly outstripped it. He

fought his way north through an area *'infected with fleas, mosquitoes, sand flies and filthy dogs; notorious for its mud and searing sun; and plagued by jaundice, malaria, yellow fever and cholera'*.

His men had to exist on a bottle of water, four dry biscuits and a tin of bully beef a day. Forty miles from Baghdad, his campaign was halted at the battle of Cstesiphon. Neither side could manage an outright victory. Supply problems forced Townshend into a humiliating retreat south to Kut-al-Amarah. Here, after five months of siege, he surrendered in April 1916.

During the siege 23,000 soldiers died. 8000 were captured and half of these were to die in Turkish forced labour camps. General Maude replaced Townshend – who survived the war.

Kut was retaken in February 1917. New British forces arrived in Basra, and captured Baghdad on March 11th. The Turkish Army surrendered in October and the British entered Mosul on November 14th 1918. Over 92,000 men had been lost in the Mesopotamia campaign, 23,000 at the Siege of Kut alone, mostly of heatstroke, disease and poor medical care. Although our own medical care was perhaps better in Iraq in 2003, disease and non-battle injuries still markedly outweighed those directly injured by the war.

If we are not finally convinced that history often repeats itself, then we should perhaps compare General Maude's Baghdad Proclamation of 1917 – *"Our armies do no come to into your cities and lands as conquerors or enemies but as liberators"*, with that of Colonel Tim Collins' in 2003 – *"We go to liberate, not to conquer; we are entering Iraq to free a people"."*



A skeletal Indian soldier after the siege of Kut

On 10th January 1919, the modern state of Iraq was created from the three provinces, a birth in which Britain was closely involved. Under pressure from the United States, the League of Nations established the British Mandate over Iraq in April 1920. In August 1921 the Kingdom of Iraq was established as a British Protectorate under the Hashimite King Faisal, whose family originated from the Hajaz region of Arabia.

The new Iraq was a complex mix of ethnic, geographic and religious groups, from the Kurds in the north, the Sunnis in the centre and the Shias in the south. In 1920 an Arab revolt throughout Iraq was put down with great difficulty using air power by the British under General Sir Aylmer Haldane. This sowed the seeds of future rebellion and civic unrest, and set a historic precedent for more recent events in Iraq.

Iraq was also cut off from the waters of the Gulf by the territories of modern Kuwait, a continuing source of resentment. In October 1922, the Treaty of Anglo-Iraq alliance supplanted the British Mandate, and in 1927 a British treaty recognised Iraqi independence.

There was a formal award of independence in 1930, but Iraq remained a de facto client state of Britain for the next three decades. The 1930 treaty allowed the retention of British military bases and training of the Iraqi army for another twenty-five years. In 1932, Iraq was admitted to the League of Nations.

In the north, the Treaty of Lausanne in July 1923 ended the war with Turkey, but left the status of Mosul unresolved. There was a Kurdish revolt from 1924 to 1927. In 1926, Britain and Turkey awarded Mosul to Iraq, but fears of Turkey's designs on Mosul persisted into the 21st century. In 1927, oil was discovered near Kirkuk.



The British War Cemetery at Amara, southern Iraq.

Courtesy of Col Paul Parker RAMC, April 2003

After the death of King Faisal in 1933, the country was controlled by army officers who saw themselves as the future leaders of Iraq. 1936 saw the first military coup by General Bakr Sidqi, which set the stage for further military interventions in politics. In 1939 King Ghazi sought to annex Kuwait but died before it could happen.

The accession of the pro-German premiership of Rashid Ali in March 1940 led to the British invasion in 1941. Britain occupied Iraq to prevent control and access to oil by Germany. The British put down a pro-Nazi coup amongst the army officers during which some 3,000 Iraqi troops were killed, and 3,000 nationalist officers were purged.



British history in Iraq: A beautifully preserved War Memorial near Basra to the British dead of the operations in Iraq from 1914 to 1921

(Photo Wanda Machnicka - 2003)

In 1945, Iraq joined the United Nations and the Arab League. The British occupation ended in October 1947, with the exception of two RAF bases at Habbaniyah and at Shaibah. Shaibah was later to play a central role as the main operating base for land forces in the British presence in Southern Iraq in 2003.

In 1948, the Treaty of Portsmouth called for a continued British role in Iraq's defence, but it was not ratified. In 1955, Iraq and Turkey signed the Baghdad Pact for mutual defence against the Soviet Union. Britain, Iran, Pakistan and the USA joined the pact, when British base rights were terminated and British forces were withdrawn.

The British remained to support the monarchy, and a pro-British prime minister, Nuri al-Said, was in place until 1958. The monarch and politicians were overthrown in a revolt of young Army Officers in July1958: the king was assassinated, the monarchy abolished, a republic was established and the Arab Union dissolved.

In 1959, Iraq withdrew from the Baghdad Pact, which became the Central Treaty Organisation. In 1961, the Iraqi leader, General Kassem, claimed the newly independent Kuwait as an integral part of Iraq and prepared to invade. Britain dispatched troops to the Gulf. A coup in Baghdad, allegedly with the help of the United States, overthrew Kassem. The Ba'ath Arab Socialist Party took power temporarily for nine months.

A further coup in July 1968 returned the Ba'ath Party to power with Ahmed Hasan al-Bakr as president and chairman of the Revolutionary Command



Council (RCC). This began a phase of military adventurism which was to have tragic consequences for the people of Iraq over the next 30 years. In 1973, Iraq joined Syria and Egypt in the Yom Kippur war against Israel. In the Algiers Agreement of March 1975, Iraq recognised the boundary with Iran at the midpoint of Shatt el-Arab. It dropped all claims to Khuzestan and to the islands at the foot of the Gulf. In return, Iran, the U.S. and other countries sealed the Kurdish border, causing another Kurdish revolt to collapse.

In July 1979, Vice-President Saddam Hussein succeeded al-Bakr as President, and consolidated power through purges and terror. In September 1980, Iraq declared the 1975 Algiers Agreement null and void, and invaded Iran with the aim of annexing Khuzestan. After almost one million deaths, in August1988 a cease-fire ended the Iran-Iraq war with both countries at a stalemate.

The lead up to the First Gulf War

During the 20th century, the superimposition of borders, boundaries and statehood on the complex tribal, religious and social anatomy of Israel, Palestine, the Lebanon, Syria, Iraq, Iran, Kuwait and Saudi Arabia laid the foundations for political autocracy in the Arab world. The outcome for Iraq was the emergence by the late 1970s of the dominant, murderous Sunni-centric, Tikriti Ba'athist regime under Saddam Hussein.

Saddam Hussein's notoriety was fuelled by the growing death toll of internal dissenters, ethnic opposition, and the destructive stalemate of the Iran-Iraq War of 1980-1988. The war produced tens of billions of dollars of debt and looming bankruptcy as military expenditure and economic mismanagement outstripped oil revenues. By 1990 the scene was set for the Iraqi invasion of Kuwait to annex its oil wealth and improve Iraq's access to the Northern Gulf beyond the immediate reach of Iran across the Shatt al Arab waterway.

The arming of Iraq by the international community in the 1970s & 80s gave progressive impetus to Saddam Hussein's further ambitions to become a dominant force in the politics of the region. Many countries were complicit in the excessive arming of Iraq. There were massive sales from Western and Eastern European countries of conventional equipment to build up an army of 3000 tanks, a modern air force and several hundred jets, and a force of modified and enhanced Scud derivative ballistic missiles. There were also the less well publicised and ambivalent sales of machine tools, 'know how', nuclear and unconventional technology, and chemical and biological feed stocks.

British involvement in the arms transfer market was brought to public attention in scandalous revelations during the late 1980s. We became aware of the transfer of ballistic and engineering skills to build the Iraqi Superguns, under the direction of the maverick artillery expert Dr Gerard Bull who was murdered in



General Map of Iraq

Source: United Nations Map no. 3636 December 2002

Paris, and through the collapsed trial of executives of the Matrix Churchill Company supplying precision engineering technology to Iraq.

The risks and extent of the success of the Iraqi strategy of weapons acquisition were highlighted as early as 1980, when the Israeli air force attacked the Osiraq prototype nuclear reactor. By 1990, Iraq possessed a large stock of chemical weapons, which had been used domestically against the Kurds in the town of Hallabjah in 1988, and on the Faw Peninsula against the Iranian Army. The



Memorial to the Iran Iraq War, near Basra;

Photo 202 Fd Hosp

extent of Iraq's biological (germ warfare) stockpile could not be fully assessed, but was sufficiently alarming for British troops to be vaccinated on deployment to the Gulf in 1990 against a range of weaponised infectious diseases, which included Anthrax and the Bubonic Plague.

The First Gulf War and its significance

On the 2nd August 1990 Iraq invaded Kuwait, on the pretext of oil resource violations. Iraq was in a state of financial crisis after the ruinous costs of the Iran-Iraq war. There were considerable political differences between the international community's response to the events of 1990, and to the circumstances leading up to the events of 2003. In 1990, there was a clear casus belli in that a demonstrably aggressive, expansionary state invaded a small sovereign neighbour for economic gain. It posed a clear and immediate threat to international economic interests, particularly in respect of the oilfields of Saudi Arabia, and to its other neighbours. There was a clear consensus of view in the international community and a large military coalition was formed, including a number of Arab states.

The history of the First Gulf War campaign of 1990-91 has been reported in detail elsewhere. For the British Armed Forces, it represented the first deployment of a modern, armoured division-sized force since the Korean campaign of the early 1950s, and the rediscovery of the desert warfighting skills which loom large in the national collective memory from the desert campaigns of 1940-43, the ethos of the Desert Rats, of Tobruk, of El Alamein and General Bernard Montgomery. The British ground forces were soon committed to the Gulf, progressively reinforced and expanded from a Brigade- to a Division-sized force over the six months between August 1990 and February 1991.

Operation Desert Shield was the US led defence of Eastern Saudi Arabia. The first phase of the operation involved the rapid deployment of light forces to defend the east coast of Saudi Arabia, its oilfields and industrial and processing facilities from further advance southwards by the Iraqis. As the numbers of US and allied troops increased, so the posture and planning changed from a defensive to an offensive position which now aimed to remove the Iraqis from Kuwait and restore the status quo ante.

Logistic Challenges during the First Gulf War

Following the initial US deployment, 7th (UK) Armoured Brigade, the Desert Rats, deployed from Germany with supporting units, some 13,000 men and 5,000 vehicles, under the operational control (OPCON) of 1 Marine Expeditionary Force (1 MEF) of the US Marine Corps. Men and equipment from Germany began to arrive in Saudi Arabia in mid-October, and British forces were declared operational in theatre on 16th November 1990. The British force was expanded to division size for offensive operations by bringing in HQ 1 (UK) Division, 4th Armoured Brigade and other units from the British Army of the Rhine (BAOR) in Germany. Units were also deployed from the UK, including a large force of medical reserves. A Force Maintenance Area (FMA) was established to provide logistic and combat service support to British forces at Corps level. This brought the deployed force to some 28,000 personnel and 15,000 vehicles, including 2600 armoured vehicles, with 221 Challenger 1 Main Battle Tanks and 316 Warrior Infantry Fighting Vehicles.

The distances in this operation were considerable. There was a major airhead and evacuation hospital at King Khalid International Airport in Riyadh in the centre of Saudi Arabia. The principal port was at Al Jubail on the east coast, where another UK field hospital was sited. The border of Saudi Arabia with Kuwait was several hundred kilometres further north, and another two UK field hospitals were sited in the divisional assembly area just south of the Kuwaiti border.

The size of the British force and the great distances in theatre created a large daily logistic demand of some 400,000 litres of water, 500,000 litres of fuel and 5 tonnes of rations. The logistic transport vehicles travelled some 650 km every day, on a loop along a single main supply route delivering stores from Al Jubail to the north.

Combat operations in the First Gulf War

1st (UK) Armoured Division - with 4th and 7th Armoured Brigades together under command - was now well configured for a war of manoeuvre in open desert. It was placed under the overall command of the US VII (Armoured) Corps.

The defensive *Operation Desert Shield* gradually transformed into the capability for the offensive *Operation Desert Storm*, the UK component of which was designated *Operation Granby*. The final coalition plan involved the US XVIII (Airborne) Corps and the French 6th Light Armoured Division advancing rapidly to the Euphrates River valley using ground and heliborne forces. This would block enemy reinforcements and prevent the escape of Iraqi forces from Kuwait.

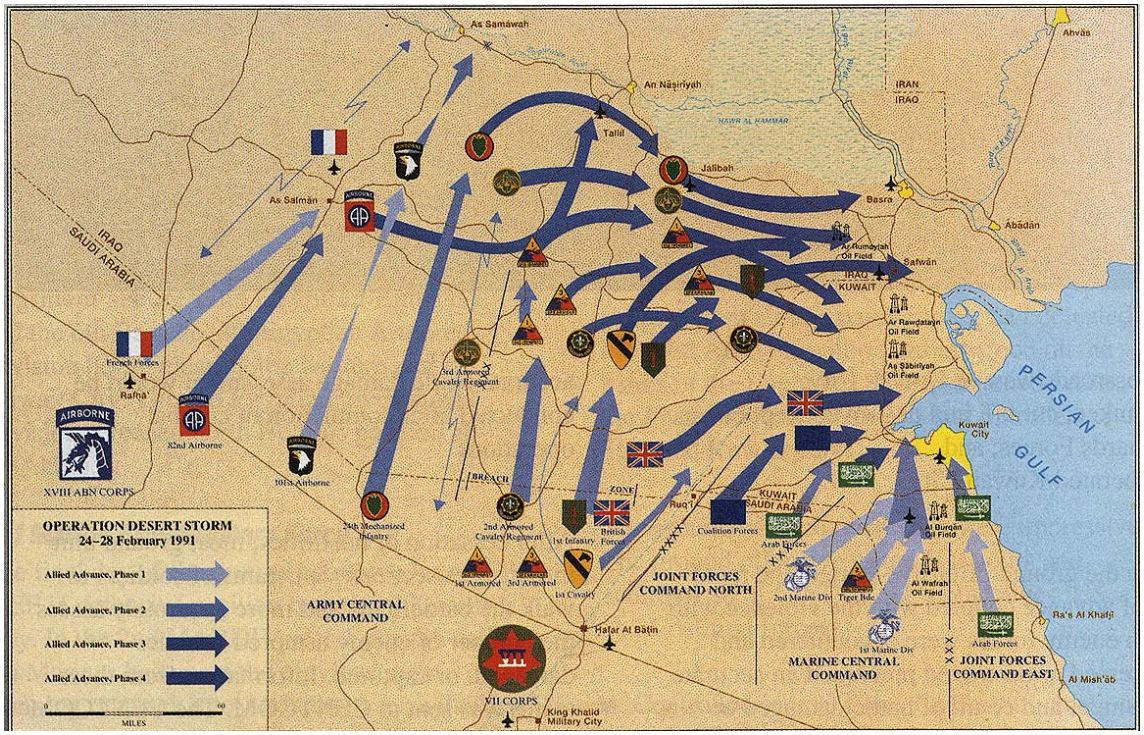
To the east under Saudi command, the US Marine Corps, Saudi and Egyptian units with a Syrian division in reserve, were to advance directly into Kuwait from Saudi Arabia. VIIth US Corps to the west of Kuwait was to act as the armoured hammer, to fix and destroy the Iraqi forces as they were forced to retreat from Kuwait. VII Corps would cross the Saudi border into Iraq, and then turn right into the Iraqi army in Kuwait. 1st (UK) Division was the easternmost unit in the VII Corps sector, and would act as the hinge on which the corps manoeuvre swung. The 1st UK Division mission was "to attack through the 1st (US) Infantry Division (Mechanized) to defeat the Iraqi tactical reserves in order to protect the right flank of the US VII Corps."

The British contact battle was fought in leapfrog fashion by 4th and 7th Brigades which were organised into task-specific battle groups, each of which had an integral close support field ambulance with surgical teams in support. Poor weather and visibility impeded close air support and attack helicopter operations.

The 1st UK Division advanced nearly 350 km in 100 hours of continuous fighting and driving. In a series of short, sharp engagements, the division destroyed the Iraqi 46 Mechanised Brigade, 52 Armoured Brigade and the manoeuvre elements of at least three Iraqi infantry divisions from the Iraqi 7th Corps. It took some 7,000 prisoners and destroyed or captured some 200 tanks as well as many other armoured vehicles, artillery pieces, light vehicles and trucks.

By the time allied operations were ended at 0500 GMT on 28th February, 7th Armoured Brigade was astride the main road leading north from Kuwait city to Basra, with 4th Armoured Brigade further to the west. Units reported 95% combat availability for their Challengers at this time, and commanders reported the capability and will to continue to Basra if called upon to do so.

Nineteen British soldiers lost their lives in action during the campaign. Nine were killed on 26th of February in a tragic 'friendly fire' - or 'blue-on-blue' - incident, when two USAF A-10 Warthog aircraft destroyed two Warrior armoured fighting vehicles (AFVs) belonging to C Company, 3 Royal Regiment of Fusiliers.



Map of the First Gulf War ground campaign, Feb 23-28 1991

(US Dept of Defence)

The Medical Deployment of the First Gulf War

The operational plan for the British component of *Operation Desert Storm* required highly mobile medical support over long distances, with the possibility of high casualty rates in close contact with the large Iraqi Army. The solution was the deployment of an armoured field ambulance and field dressing station with surgical teams to each Armoured Brigade. There were two field hospitals deployed near the northern Saudi border at Al Qasuma, 22 and 32 Field Hospitals, with 22 Field Hospital mobile and prepared to move further north. There was a further field hospital (33 Field Hospital) at the main logistic area near Al Jubail port on the Eastern Coast of Saudi Arabia, and a Territorial Army Evacuation Hospital (205 General Hospital (V)) at King Khalid International Airport in Riyadh.

Battlefield evacuation was by armoured FV 432 series ambulance to the dressing station, and then by helicopter to 32 and 22 Field Hospitals. Divisional CASEVAC assets also included wheeled transport in buses and Land Rover ambulances provided by 54 Ambulance Squadron of the Royal Corps of Transport. The armoured field ambulances and dressing stations were staffed by elements of 1st, 3rd, 5th Divisional and 24th Airmobile Field Ambulances and by a large number of reservists.

In the Force Maintenance (Logistic) Area, casualty transport was provided by 28 Gurkha Transport Regiment, logistic support by 84 Field Medical Equipment Depot, and air evacuation support by 1st Air Evacuation Squadron RAF. 60 & 61 Field Psychiatric Teams were also deployed. A Swedish field hospital provided care for injured and captured Iraqi prisoners of war (PoWs).

In the event, casualty flows were very light and the medical system was never fully stretched, but the concept of a mobile medical system with a mixed force of regular and reserve personnel was judged to have worked well within the general plan.

The political consequences for Iraq of the First Gulf War

The dramatic success of the four-day ground campaign of late February 1991 - following a long air campaign - disguised the consequence of the political decision not to complete the explicit battle orders to ensure the destruction of the Iraqi Army's six Republican Guard Divisions. The early termination of the campaign on the authority of President George Bush Senior allowed the escape of one Iraqi Republican Guard Division. This was later turned loose on the Shia citizenry of Basra province without coalition intervention.

British military ground forces were rapidly scaled down in March, while the massive oilfield fires were extinguished and the 175,000 Iraqi Army PoWs were repatriated. A reserve capability was developed in Kuwait, with the prepositioning and warehousing of military equipment for a rapid UK and US reinforcement of Kuwait if required.

The immediate aims of the first Gulf War Campaign - the restoration of the Kuwaiti ruling family and government to an autonomous state - were achieved, but the Iraq centre of power was never broken. The brutal response of the Iraqi regime to the Shia uprising secured the immediate survival of its power base in the south. The failure of the victorious coalition force to support the Shia Iraqi uprising in 1991, or to prevent the forced flight of the Kurds in the north, set the political tone for the events of the following decade. The survival of the regime ensured the repression, massacre and impoverishment of the Shia Arabs in Southern Iraq, the persecution of the Marsh Arabs and the drainage of their homeland, and the concentration of remaining wealth and power in the Sunni heartlands of central Iraq.

United Nations Sanctions and Weapons Inspections

The untidy peace settlement signed at Safwan in March 1991 led to the opening up of Iraq to inspection, dismantling and destruction of its unconventional weapons programmes. It appears with the benefit of hindsight that these interventions were broadly successful as early as 1991, but the Iraqi regime sought to maintain the illusion that stockpiles of unconventional weapons were still in existence. This created a causus belli for the coalition powers after September 2001.

The combined effect of economic sanctions, weapons inspections, and the air exclusion zone was to create an untidy political stalemate throughout the 1990's,

wherein the Ba'athist regime focused on remaining in power, and saving face in the Arab world while becoming progressively weaker; the national infrastructure gradually deteriorated, and the international community wavered and argued over the benefits of the strategy, encouraged as we now know by bribery and corruption in the circumvention of the intent of economic sanctions.

The air exclusion zones over Iraq

The need for a degree of protection of the southern Shias and northern Kurds after the 1991 war led to the imposition of air exclusion zones over northern and southern Iraq by the Western powers. This allowed a sustained military presence, combat air patrols and air surveillance over Iraq throughout this period. The cat-and-mouse game played out between the Iraqi air force, the Iraqi air defence missile command, and the allied air forces maintained a tension which was regularly interspersed with attacks on Iraqi installations with occasional escalations. The US and coalition air forces and aircrews gained detailed operational experience of the area, contributing to their capability to establish immediate air supremacy during the operations of 2003.

Repression in southern Iraq

By early 2003, the general infrastructure of southern Iraq was in a very poor state. Much of this was due to deliberate neglect and underinvestment in the region by the Baghdad regime after the 1991 Shia insurrection. This was compounded by severe corruption, economic hardship and war damage from the First Gulf War. Economic sanctions had been imposed against the Ba'ath regime in an effort to enforce compliance with UN mandates over the regime's non-conventional weapons programmes. Despite the good intentions of the UN Food-for-Aid programme to mitigate the effects of sanctions and the behaviour of the regime, it proved very easy for propagandists and apologists to claim that all of Iraq's hardships were due to the sanctions themselves, rather than the behaviour and policies of the leadership.

A major economic dislocation had been brought about by the policy of draining the marshes and the displacement of some two million Marsh Arabs in southern Iraq. The extent of this manmade humanitarian catastrophe is illustrated in a compilation report of the Internally Displaced Persons Project in 2003.

> "People in the Marsh area had to submit to compulsory resettlement within Iraq, leave the country, or remain in the drained marshlands, without their water-based means of livelihood. Some half a million Marsh Arabs were displaced with a 5000-year old culture that had flourished since Sumerian times. Most had to submit to compulsory resettlement or leave the country as refugees."
>
> The Iraqi government had long been openly hostile to the Marsh Arabs, in the marshlands between the Tigris and Euphrates rivers. This is a triangular-shaped region bounded by

Amarah, Basra, and Nasiriyah. Following the 1991 Shia uprising in southern Iraq, many people fled to the marshes. The Iraqi government intensified a pacification campaign it had been directing toward the Marsh Arabs since 1989.

Between 1991 and 2003, the Iraqi government forces burned and shelled villages, and built dams, dams and canals to divert water from the marshes to depopulate the area. Massive drainage works in southern Iraq in the late 1980s and early 1990s - together with the effects of major upstream damming - led to an overall loss of some 90% of the wetlands. For example, the Saddam dyke in Missan Governorate north of Basra ran for some 400 km around the marshes. The central and Al Hammar marshlands had up to 97% of their cover transformed into bare land and salt crusts.

Iraqi government actions included the murder of thousands of civilians following the abortive March 1991 uprising. This was achieved inter alia through summary execution and the indiscriminate bombardment and shelling of residential areas in towns and villages in the vicinity of Basra, al-Nasiriyah, al-'Amarah and across the marshes region; There was arbitrary and prolonged imprisonment, torture and disappearance of thousands of Marsh Arabs and other civilians in the succeeding years, as evidenced by the many mass graves and instruments of torture in police stations and warehouses which were uncovered after the fall of the Regime.



Water and drainage systems in Southern Iraq, as mapped in 1994.

(Image from http://geography.about.com/library/maps/Iraq_marshes_1994.jpg)

The Impact of September 11th 2001

Much has been written about the notorious events of September 11th 2001, wherein four hijacked US airliners were deliberately crashed by suicidal terrorists, causing massive loss of life and the spectacular collapse of the twin towers of the World Trade Centre in New York and damage to the Pentagon in Washington. Public attention was focussed on the tragic human consequences of the events, but it soon became clear how dramatically the events had provoked the American political leadership to a much wider response.

The initial US response was practical and effective. US and allied operations in Afghanistan caused major disruption to the infrastructure of terrorist operations in the country and in the North West Frontier areas of Pakistan, put to flight the Taliban regime and forced the dispersal of the Al Qaeda network in Afghanistan in late 2001 and early 2002.

By the end of 2001, there was a clear intention on the part of the United States government to bring about the overthrow of the Iraqi regime. The justifications for 'regime change' in Iraq could be argued through grand social democratic political strategy, through security of the oil supply, through removal of Iraq's assumed non-conventional weapons stockpiles, and by abhorrence of a brutal regime. Indeed, these arguments were all made at different times, and the plans were to be pushed through in the face of considerable domestic and international political opposition.

Preparations for the Second Gulf War

From early 2002, contingency planning for military options in Iraq gathered pace in headquarters on both sides of the Atlantic. Overt and covert preparations were made, such that politicians would have a range of options during the complex rounds of diplomacy and of persuasion of sceptical public opinion. Air activity and air defence suppression increased over Iraq, and in early September 2002 a major but little publicised air raid on facilities in western Iraq heralded a shift in policy towards military intervention.

From the outset British armed forces were heavily committed in support of US strategy in the Middle East, for historic and pragmatic political reasons. British military culture, ethos and doctrine is distinctive, is influenced by a long colonial and post-colonial history, and by a complex network of alliances, treaties, interests and trading partnerships, such as the European Union, NATO, and the Commonwealth.

Nevertheless, in grand strategy, the United States has been our principal partner in the hot and cold wars of the 20th century, and has given critical assistance in our own smaller wars, such as the Falklands campaign of 1982. It has co-operated in deterrence, such as through provision of the Polaris and Trident



Preparation for the Gulf War

(Image: www.Iraq_airraidmap4)

systems, in intelligence, and in the continual exchange of personnel, ideas and moral support. Having been heavily committed in the First Gulf War and throughout the subsequent decade of containment of Iraq, it was thus highly likely that Britain would be closely involved in any further military operations in the region, and that these bonds of loyalty and vested political interests would survive the widespread opposition to war expressed by many protestors on both sides of the Atlantic.

Governments and military planners develop contingency plans for a variety of scenarios, and we may assume that a range of options for interventions in Iraq were kept under review. Throughout the 1990s, British military attention was largely focused on the distressing events surrounding the break-up of the former Republic of Yugoslavia and Kosovo, culminating in the forcible removal of the Serbian Milosevic regime from power in 1999. However, concurrent contingency planning for the Middle East culminated in a large-scale long-range deployment exercise undertaken by UK forces to Oman in the summer and autumn of 2001, codenamed *Exercise Saif Sareea II*.

Exercise Saif Sareea II in Oman, 2001

Ex Saif Sareea II involved the movement of some 20,000 UK service personnel to a joint exercise with the Sultan of Oman's forces. The climate and terrain of the central Omani plain is remarkably similar to that of Iraq. The exercise was a logistical success, but it also highlighted technical shortcomings such as inadequate provision of dust protection filters for armoured vehicles. Importantly, Ex Saif Sareea II provided a number of major benefits which were subsequently to become apparent. It provided a springboard for the immediate transfer of selected and acclimatized components of the force, including Royal Marines, naval vessels and air assets, to operations in Afghanistan in late 2001.



Ex Saif Sareea II: Forward medical and surgical facility for the support of long range logistic operations under trial in central Oman, June-October 2003

(MoD)

More generally, it provided operational experience of adaptation to desert conditions for a large number of troops, including a substantial body of medical reservists, a refresher course for veterans of the 1st Gulf War, and evidence of correctable equipment deficiencies. This was to prove invaluable in the rapid deployment and transition to war in early 2003.

Exercise Log Viper, 2002

A further exercise was held in the UK in the Autumn of 2002. This mobilized large numbers of logistic troops for an exercise ranging from a mounting base at Marchwood Port, Southampton, to eastern and central England. Ex Log Viper tested many operational logistic concepts across distances similar to those to be covered in southern Iraq. Procedures included were the mobility of field medical units and the redeployment of field hospitals over long distances. Towards the end of this exercise - with a deployment to the Gulf imminent - logistic units of 102 Logistics Brigade were switched to ferries for transportation to the Gulf.

Final Preparations for War

By late 2002, military preparations and the necessary forward planning, ship charters and equipment pre-positioning were well in progress. One well developed plan was for UK forces to approach northern Iraq and Kurdistan through a long land route across Turkey from Turkish ports of disembarkation. This had to be revised in late December 2002 when the Turkish political outlook changed, and the focus of British planning and logistic effort switched to Kuwait and southern Iraq. This entailed an additional long sea journey for stores and equipment in transit from the UK through the Suez Canal, the Red Sea, around the Arabian Peninsula and up the Gulf.

By early January 2003, it was becoming clear that war was likely, as diplomatic manoeuvring and the movement of forces towards the Middle East continued. UK Forces were allocated the role of taking control of South Eastern Iraq, Basra province and its capital, and protecting the US Army's southern flank as it drove northwards.

Footnote by Colonel Paul Parker:

In early 2003, as part of the war-fighting phase of Operation Telic, I travelled with 23 Air Assault Surgical Group, part of 16 Close Support Medical Regiment, from Kuwait, across the Euphrates river and along the banks of the Tigris river, to Al- Amarah in the Maysan province of south central Iraq. My unit was supporting the Royal Irish and Parachute Regiment battle groups of 16 Air Assault Brigade as they moved up-country.

In May of 2003, when the operation was generally quiet, by chance, I was given a book entitled 'Surgery on Trestles' by R. Campbell Begg MC MD. This autobiographical account of the campaign, by a Regimental Medical Officer was written just after the war in 1919, but was not submitted for publication until the late sixties. The lifespan of an RMO up-country at that time was six weeks. As I was living somewhat roughly myself in Al-Amarah at the time, it was both apposite and entertaining. Colonel Victor Horsley's arrival was eloquently portrayed in one of the chapters.

'A lifelong teetotaller who refused to wear a hat, even in the blinding sun and believed alcohol to be root of all evil'.

His death, when it came was also described.

'He came in with heatstroke and one of those temperatures that was so high it was unrecordable; we buried him in Al-Amarah'.

This led to some discussions with the Padre - Captain Mark Christian RAChD and a local area map. We left the base together, very early one morning. As we drove over the Tigris River, the sun was just coming up. A lone felucca drifted slowly down the wide river, a scene unchanged since Horsley's time. We found the cemetery, with its high walls, off a side-road in the town. We rang the bell and were admitted by the grave keeper. His family had maintained the cemetery for three generations since the war. He had not been paid since 1991! He showed us the grave papers and register of graves. Of the headstones, there was no sign: They had been taken to Baghdad in 1937.

The wall plinths were pristine. The grass in the cemetery, although tired and brown, was cut short and the grounds, even in the centre of this small Iraqi town, were well kept. We found Colonel Horsley's grave-plinth - one of many. We lingered for while, took some photographs, thanked the gardener and left. The same journey, in 2006, it is fair to say, would be somewhat more problematic.

Chapter 1 references and Resources

A Brief History of Britain in Iraq
There are many useful resources on the World Wide Web.
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Operation Telic and the British Medical Deployment to the Gulf 2003 -2009

Chapter 2:

Military and Medical Planning for Operation Telic 1



Painting: *'Zero Alpha - Airstrip Secure'*

Artist: David Rowlands recounts Medium: Oil on Canvas

Regarding the painting 'Zero Alpha - Airstrip Secure' on the previous page, *artist David Rowlands recounts;*

> *"A fire-team of four gunners and air defence assets at an airstrip in the desert. The fire-team leader (a corporal) operating the radio is from 2 Squadron RAF Regiment.*
>
> *The hardened aircraft shelters (HAS) in the background are distinctive of Ali Al Salem, Kuwait. (They were all damaged by Allied bombers in 1991, and remain unused by aircraft).*
>
> *I was invited to Buckingham Palace on 14th November 2003, and accompanied Air Chief Marshal Sir Peter Squire, Chief of the Air Staff, who presented this painting as a gift to HM The Queen on the occasion of the 60th anniversary of the Royal Air Force Regiment. The Queen, who is Colonel-in-Chief of the Regiment, has subsequently loaned the painting to the Regiment".*

Introduction

The origins of the war of 2003 lay in the first Gulf War, and in particular in the decision not to prosecute strategic success to remove the Ba'ath regime at that time. In many ways, the events around, within and over Iraq during 1990-2004 may be seen as one continuous campaign. Military operations in open desert 1991 set the conditions and defined the strategies, tactics and equipment requirements which were applied to the invasion of Iraq in 2003.

The Iraqi Defence Forces in 2003

The conventional Iraqi Armed Forces were in a poor state in early 2003, after a decade of sanctions and economic hardship. Saddam Hussein's failure to find an accommodation with the United States - or to read US intentions clearly - led directly to his downfall. As it was, neither the US nor the Iraqi Administration appear to have entered each other's mindset, and the stage was set, accidentally or deliberately, for confrontation.

In August 2002, the Iraqi government set out public plans to defeat a US invasion by avoiding direct military engagements in the open where material defeat was inevitable, and to concentrate the Iraqi resistance in major cities. The logical strategy was to draw US forces into Baghdad and other urban areas, thus reducing the impact of American air power. Here, attrition and international political approval would bring about the strategic defeat of US objectives and survival of an enhanced Iraqi Ba'ath regime, as had been the case in 1991. Prudent civil defence measures were being reported from Baghdad, including defences against air assault landings, pre-dug positions for mechanised infantry around the city, and the dispersal of heavy military equipment.

It was also reported that militias of the ruling Ba'ath party and the force known as 'Saddam Commandos' were stockpiling food and fuel. The Iraqi authorities issued guns and rocket-propelled grenades (RPGs) to supporters. It was later revealed that the Iraqi leadership had overestimated the effectiveness of this strategy and the willingness of ordinary Iraqis to face destruction of their city and properties in defence of the regime.

Such misguided thinking is a common problem for dictatorial regimes, whose advisers tell them what they want to hear out of fear, rather than declare the reality.

In October 2002, Iraq's war cabinet held a meeting chaired by Saddam Hussein to prepare for a US attack. Among the topics discussed were 'street fighting' and urban warfare. This anticipated the strategy of resistance adopted by Iraqi fighting elements throughout 2003 and early 2004.

The Iraqi Armed Forces in the south

Iraq's ground forces were only about a third the size of what they were before the 1991 Gulf War, and post-war sanctions further eroded the combat readiness of equipment. There were an estimated 430,000 soldiers and another 400,000 personnel in paramilitary units and security services available to the Iraqi government, but their morale and loyalty to the regime, while difficult to access accurately, was clearly poor. Nevertheless, loyalties to tribe and state were strong. Troops were organised into the Special Republican Guard (SRG), based near Baghdad; the Republican Guard (RG), the Regular Army, Special Units and an irregular militia, including foreign 'tourist' militias and insurgents.

The Republican Guard divisions had been highly regarded for their performance during the Iran-Iraq war, but had been largely dismembered in the south by allied operations in 1991. During 2003, only small Republican Guard sub-units were deployed to Basra province to bolster resistance. The IIIrd Corps of the Iraqi Regular Army guarded southern Iraq. Units included 6th Armoured Division, the 51st Mechanised Division and the 15th Infantry Division.

The Fedayin Militia

In the context of developments in Iraq after the end of conventional warfighting, and the threat to British forces in southern Iraq, a force of highly motivated irregular militia - the Fedayin - has particular significance. Fedayin (Fedayeen) is roughly translated as 'those who sacrifice themselves'. It was a paramilitary militia with a strength of 30- 40,000 men, was established in 1995 by Saddam's eldest son Uday to maintain internal security, and was known for its brutality rather than fighting prowess. Nevertheless, it was to have particular significance in post-war resistance.

The US Operational Plan and its consequences for Medical Support

The medical plan for any military operation is determined on a case-by-case basis from the overall strategic plan. The US 'Rapid Dominance' plan which was finally adopted, combined the use of air power with a medium sized land force, supported by carrier-based aircraft. It involved targeting Saddam's institutional power base, including presidential palaces, military and security police facilities and bases, and his home town of Tikrit. In his book *American Soldier*, serialised in the *Sunday Times* in August 2004, General Tommy Franks, the coalition supreme military commander in the Gulf,

described how the ground campaign comprised special forces and deception operations in western and northern Iraq, while the main force would advance from Kuwait towards Baghdad through the desert which covers western and much of southern Iraq.

The main plan foresaw the use of three US Divisions - two of which were heavy divisions of 16,000 troops each - and one lighter division, along with a Marine Expeditionary Force. The 1st Cavalry Division (Ft. Hood, Texas), the 3rd Infantry Division (Ft. Stewart, GA) and the 101st Airborne Division (Ft. Campbell, Kentucky) were allocated to the campaign. The 4th Infantry Division would also be tasked in reserve. As plans developed, forces earmarked for Turkey were re-routed around the Saudi peninsula to the Gulf. This added significant delays to the deployment, such that the materiel of the US 4th Infantry Division - the US strategic reserve - was still at sea when the campaign began in March.

The Home Front: Preparations and planning in the UK

The planning of a major expeditionary operation such as Operation Telic emerges from a complex series of decisions and processes within Government, within the military machinery and in industry. The media and public opinion also have a powerful influence upon strategy. Long range planning and the experience of previous operations produce structures and systems in peacetime which ease the transition to wartime operations. Command and control systems and experience are thus continually updated, and there is a regular flow of professionals with operational experience throughout the military organisation.



Risk analysis: The Nation's finest apply themselves to Grand Strategy at Camp Coyote

The rapid development of digital information and communications technology has transformed the organisation and capabilities of military command and control systems in recent times. Huge volumes of technical information are gathered through satellite, remote sensor and air reconnaissance across the electromagnetic spectrum; signals intelligence; mobile communications; data management and distribution; internet-enabled information systems and distributed computer technology. These offer new ways of conducting of military tasks.

Major military operations thus take place in a continually changing and testing environment where time and resources are never sufficient to perfect the plan, where public opinion and consistent political direction cannot be taken for granted, and where international circumstances are in continual flux. New weapon systems and tactics produce new patterns of injury. These pressures also profoundly influence medical planning, where every death, injury and equipment deficiency may come under intense public, media and political scrutiny at a later date.

Government direction of military operations

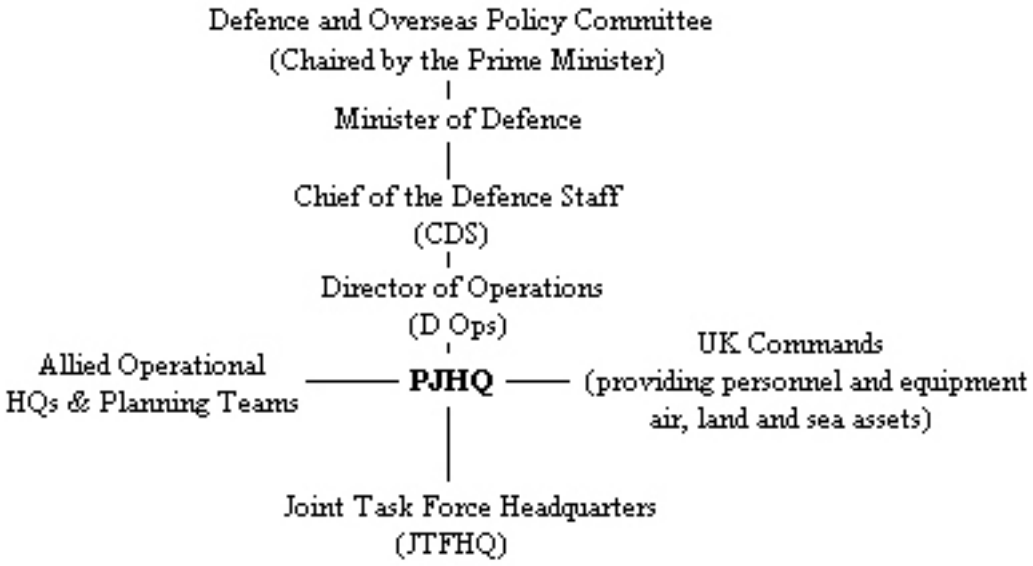
National and international policy is ultimately decided by the Prime Minister, working through the Cabinet Defence and Overseas Policy Committee, and by the Minister of Defence to the Chief of the Defence Staff. Decisions are influenced by the personalities and decisions of the senior politicians concerned, but also by public opinion, primarily as expressed on a day to day basis through the media. Democratic government produces a complex interaction of events, institutions, systems and personalities which defy simple organisational models. In a mature democracy, there are checks and balances within the political decision making process. The armed forces are subservient to Parliament and Government, but also inform and advise politicians on capabilities and what is possible.

The UK military command structure

British expeditionary military operations are organised by the Permanent Joint Headquarters (PJHQ) at Northwood in North West London. PJHQ plans and executes operations involving joint land, naval and air forces, and multi-national operations. It functions under the direction the Chief of the Defence Staff (CDS), and directs, deploys, sustains and recovers forces on operations, including medical forces. PJHQ also provides military advice and contingency plans for political use. Its communication systems allow regular conferencing with other agencies. The headquarters includes intelligence, planning, operational and logistics staffs.

The UK chain of national decision making for expeditionary warfare in 2003

(MoD)



The Joint Rapid Reaction Forces (JRRF) are also under the command of the Joint Task Force HQ (JTFHQ). JTFHQ was at short notice to move on national or multi-national contingency operations up to medium scale warfighting, for NATO or other international organisations. It can call upon a range of military units and assets.

The UK military medical command structure

British military medical planning was conducted primarily by teams at PJHQ and at the Defence Medical Services Department, DMSD. DMSD was responsible for the overall welfare of personnel in the UK armed forces at that time. Each armed service also had a medical command structure, and was at the centre of medical planning for *Operation Telic*. As reported to the Commons Defence Committee (CDC) by Lt Gen Kevin O'Donoghue, Deputy Chief of Defence Staff for Health, medical planning started towards the end of 2002. It had to address the feasibility of the medical operation in terms of manpower and equipment.

Concurrently, the Senior Medical Planner at PJHQ, Colonel Steve Howe and his team were conducting a detailed health intelligence assessment to guide the medical plan. This had to pull together a wide range of different issues and competing interests. The planning included a process known as *Rock Drill*, or computer-based war gaming, in which the plans and estimates were modelled on computers to test assumptions and options. The plan had to retain maximum flexibility at all times. Many preparatory and planning activities had to take place concurrently, as different military units were integrated into the strategic plan and developed their own plans at the military operational and tactical level.

.

He who plans early, plans twice (But the second time is much quicker).

Until Christmas Day 2002, all medical planning was directed at the 'Turkish option', supporting the deployment of a large British force over long supply lines from the Turkish Mediterranean coast to Kurdistan, a cold mountainous region. The distances over which medical care would be needed on an approach to Baghdad from the north were such that a number of airstrips would need to be built to secure casualty transfer in realistic timelines.

Once planning switched to the 'southern option' through Kuwait to Basra and beyond, planning considerations within theatre were substantially simplified over shorter distances on land from the ports and airheads in Kuwait. The mobilised components of the force could be switched to the Gulf. However, shiploads of British military equipment which were already en route to Turkey with stores - including medical resources - had to be redirected via the Suez Canal, Red Sea and around the Arabian Sea to the Gulf via the Straits of Hormuz. This had major implications for the timings and arrival of stores in the Kuwaiti ports of disembarkation, and shortened the planning time available. Problems were also met at ports of embarkation in the UK, where, for example, the Greenpeace movement delayed the departure of stores vessels – again including medical supplies - from the port of Marchwood near Southampton.

The British plan also increased the planning need for the maritime force of some 9,000 personnel afloat, a large brigade-sized amphibious operation, mine clearance in the Umm Qsar channel, and for a medical reserve afloat. The land component of the plan required medical support for 1 UK Armoured Division, comprising two further



Thinking through the planning process!

Col Steve Howe

Brigades (16 Air Assault and 7th Armoured), for 102 Logistic Brigade - some 28,000 personnel; and for the deployed aviation personnel at the air bases – about 8,000 personnel; and for a further 1,000 at Headquarters in Qatar and elsewhere.

Historic casualty data allows estimates for planning purposes of likely maximum own force casualty rates according to the types of units engaged, the nature of the warfare, weapons employed and environmental factors. These estimates, or templates, are applied to provide a best guess framework for the allocation of medical assets in war.

They address the numbers, type and geographical distribution of casualties in line with the expected areas and phases of combat; and contingency plans for substantial increases in casualties, as might arise from the use of chemical or biological weapons, or from unexpectedly intense fighting. These templates indicated that plans should be laid to deal with up to 250 British casualties during the initial campaign.

Allied Casualty Estimates and Wargaming (Medical Operational Analysis)

Casualty Estimates are necessary, but they can also be highly sensitive politically. For example, Brigadier Patrick Cordingley, Commander 7th Armoured Brigade in 1991, caused much public stir when he indicated concerns that the casualty template accounted for up to 5000 casualties. The fact that British combatant casualties were ultimately remarkably few in the 1991 and 2003 campaigns does not invalidate the Estimates process.

Wargaming and simulation as tools of planning and preparation

Wargaming in professional terms is the process of exercising plans and options using experienced commanders' and realistic opposing force inputs to assess process and outcomes. It allows a large number of different options to be examined with care, and for the processes by which the outcomes are reached to be optimised. Wargaming has been a tool of commanders for generations, but computer technology hugely advances the process, by allowing large numbers of variables and options to be tested against a range of assumptions in real time. Wargaming can be exercised at the strategic level, at the tactical and operational level, and separately for components of the force, including the medical plan. The effectiveness of the process depends on the questions posed and the realism of the inputs and scenarios anticipated. An example of the strategic applications of wargames is seen in the US Army's *Vigilant Warrior* series of wargames, published on the World Wide Web.

Simulation in military planning is a related process which draws heavily upon computing skills. It is now possible to create three-dimensional landscapes of the theatre of operations - or of specific targets - and to exercise options on the models, familiarisng commanders with the ground, with likely hazards, routes and defensive positions.

Modern wargaming is a sophisticated process, combining game strategies with computer models. The games can be played out on computer-generated landscapes of the battlefield. Medical wargaming allows a number of plans to be tested rapidly

against a range of scenarios, and quantitative weaknesses such as bed capacity and evacuation rates to be assessed.

The planning of logistic processes is a mathematical function which lends itself well to wargaming. Medical operations must also be modelled at the strategic and at the local operational level to determine choke points, likely problems and deficiencies. For example, an ambulance matrix modelled on a map of the theatre operations will help determine the best siting of assets.

Modern computers allow much more powerful sequential and time variable gaming of "What if . . . ?" questions, so that a wide range of options and possible courses of action can be rapidly analysed. They also allow the collation of massive amounts of data and intelligence, which in turn permits unexpected patterns and options to be explored in depth. High capacity data links and ultra fast computer systems allow field commanders to test their plans on headquarters systems with minimal delay.

At the lower level, wargaming helps predict casualty numbers and their dispersal in any one operation, from which the planners can build a detailed plan, test it against general planning assumptions, and amend it accordingly. Computers allow this process to be conducted rapidly and in very great detail.

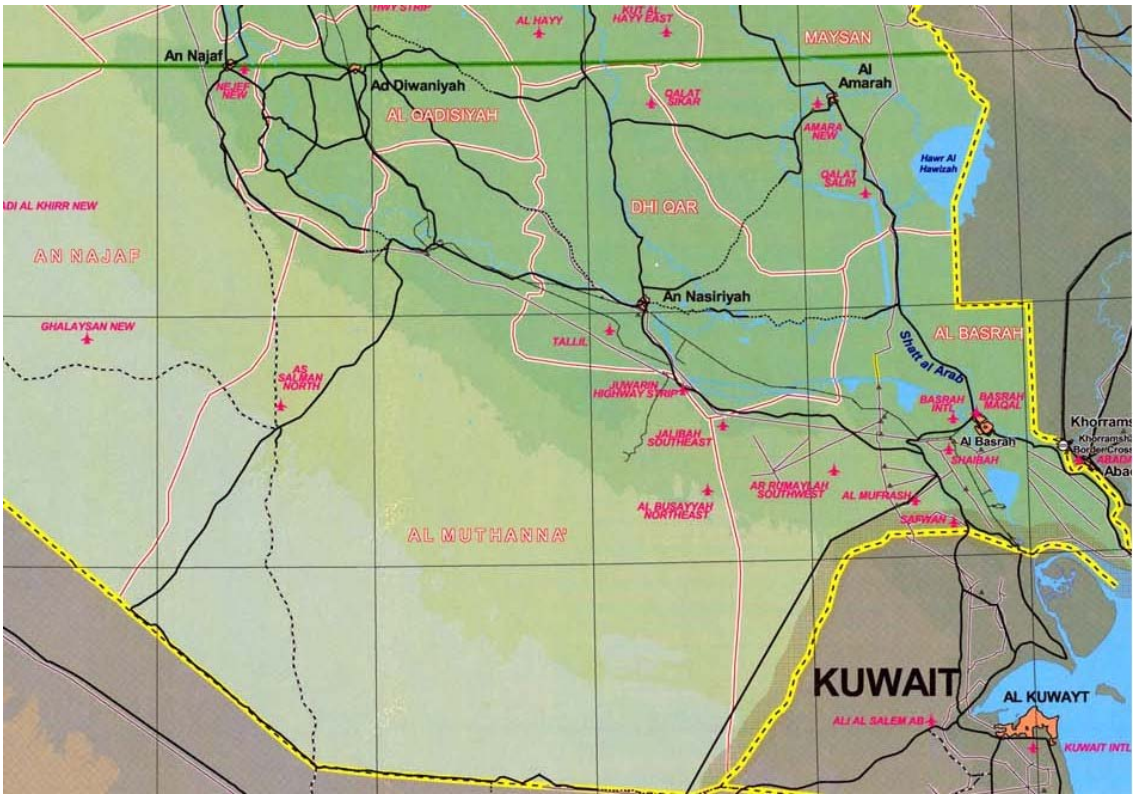
The great unknown in this process was the number of Iraqi combatant and civilian casualties. Another factor which was not fully foreseen was the volume of Iraqi civilian non-combatant cases who came under British medical care by virtue of the dislocation of the local health services and the forward movement of the armed forces during the campaign.

Op Telic Casualty estimates from standard templates and wargaming

Admission to Role 3	Best Case	Worst case	Reality
UK battle casualties	157 (31 KIA)	241 (48 KIA)	81 (26 KIA)
Disease Non Battle Injury (DNBI)	45 daily	45 daily	31 daily
Aeromedical evac	55 weekly	55 weekly	90 weekly
Chemical warfare	152		Nil
Biological warfare	Unknown	Unknown	Nil
Iraqi battle casualties	4000 (800 KIA)	4000 (800 KIA)	Unknown
Iraqi civilians	650 (150 deaths)	>2000 estimate	unknown



Meshing the cogs: Col Steve Howe. The plan required coordination between a large number of constantly moving organisational components



The UK 1st Armoured Division area of operations, *Operation Telic*

(Duncan Gray)

The Final Military Plan of the Op Telic military campaign

Operation Telic was the randomly selected name given to the British component of operations to achieve the war aims set for the Iraq campaign. Subsequent post-war deployments of security and peacekeeping forces to Iraq are also referred to sequentially as Operation Telic 2, 3, 4 and so on.

Military operations are divided into phases, each of which defines a logical group of related events. Completion of one phase is necessary before the next phase can take place. The phases may be defined by geographic features - real or virtual - in which case they are known as phase lines; by time; or by other markers of activity. Thus, the overall campaign plan required a predeployment and assembly phase; the warfighting phase; the peace restoration phase; and the phase of force redeployment to home bases.

The final plan saw the deployment of some 46,150 UK service personnel out of a total coalition force of 467,000 men and women. Some 32,000 of these troops were deployed to Kuwait. The forces included 28,000 land, 9,050 maritime, and 8,100 aviation personnel. 1,000 personnel were deployed to the national contingent headquarters in Qatar and elsewhere. The force included 19 warships, 14 fleet auxiliary vessels, 15,000 vehicles, 115 fixed wing aircraft and 100 helicopters. The UK also provided a significant proportion of the combat power on the ground, including a third of the main battle tanks available to the land commanders.

The first phase of land war operations was to be the seizure of the Al Faw peninsula, to secure the southern oil fields and the port of Um Qasr. This was a combined commando operation, in which key units were 3 Commando Brigade Royal Marines and the US 15th Marine Expeditionary Unit.

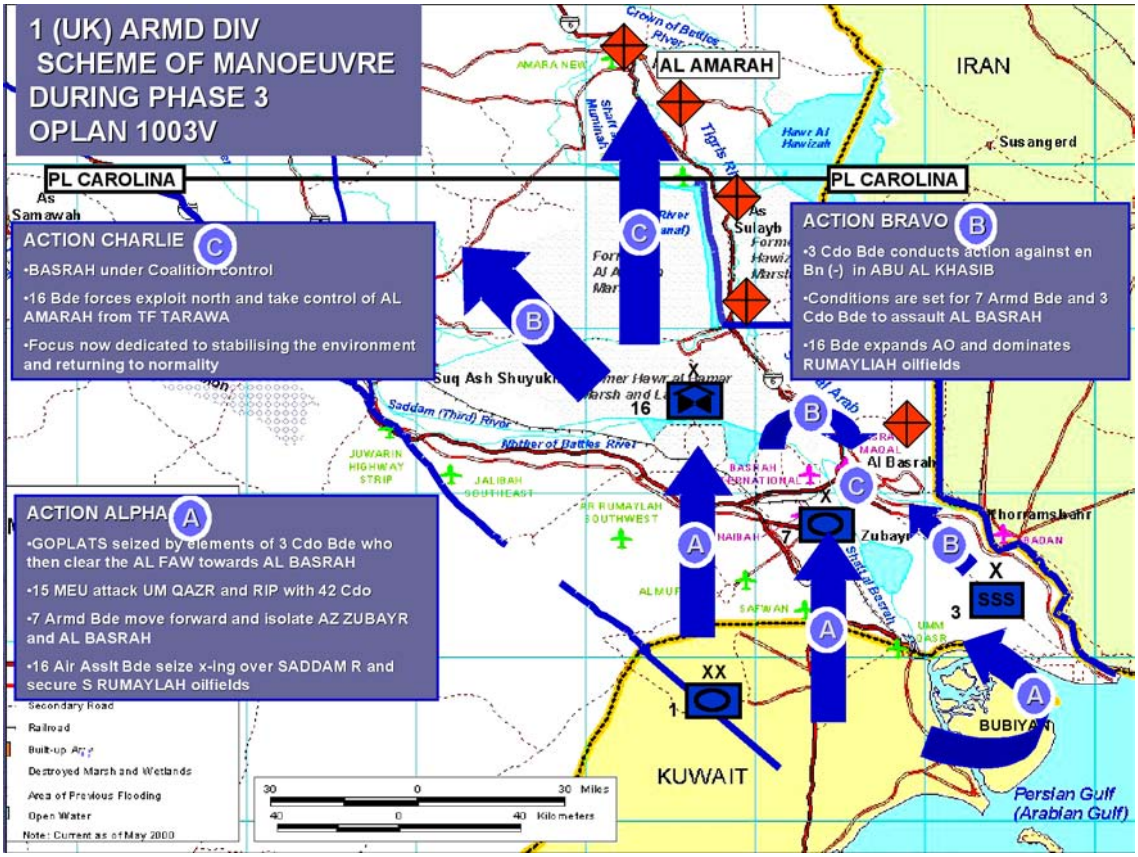
In the second phase of land operations, the UK 1st Armoured Division, comprising the light mobile force of 16 Air Assault Brigade and the heavily equipped 7th Armoured Brigade (The Desert Rats), were to head north east for Basra and beyond, while the US forces moved north west from Kuwait to Baghdad. The southern Iraqi towns of As Zubayr and Basra were to be taken with minimal loss of life. Other British forces were to secure the oilfields and routes north of Basra and east to the Iranian border.

In the third phase, when the province was judged safe for non-military organisations to take over humanitarian work from military units, the army was to support the process of rebuilding civil structures.

In the fourth phase, the UK fighting force was to be reduced in size from a Division- to a Brigade-sized command of around 11,000 ground personnel with the arrival of 19 (UK) Brigade. This would involve a complex process of demobilisation and of troop and equipment recovery. This phase included the early redeployment and rehabilitation of demobilised personnel, including the return of reservists to their civilian employments.

Map of Phase 3 land operations

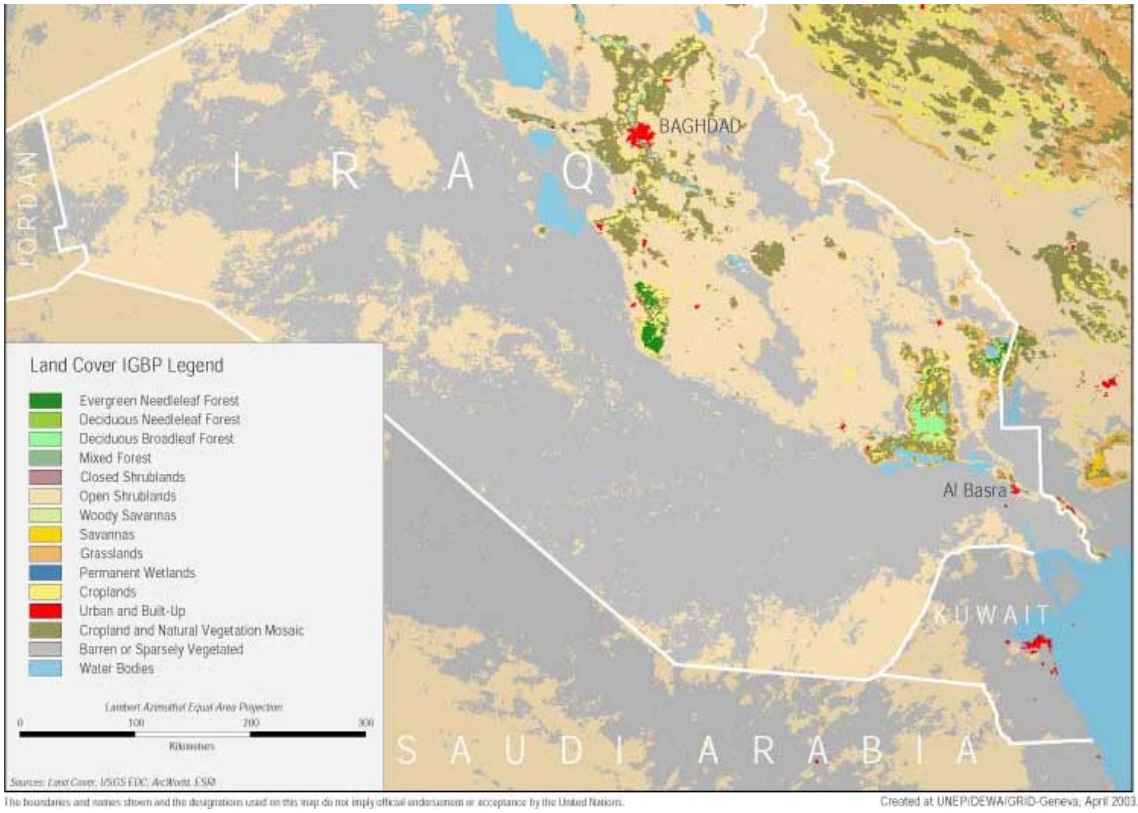
(source: Col Steve Howe)



The British Medical Plan for *Operation Telic*

The southern Iraqi plan required the deployment of medical assets to support 3 Royal Marine Commando Brigade, 16 Air Assault Brigade and 7th Armoured Brigade, the brigade-sized Joint Force Logistic Component (JFLogC), as well as naval and air task forces. It covered warfighting and peacemaking operations, health care and force protection across the large logistic area which was dispersed across much of Kuwait in the preparatory phase, and across much of southern Iraq during the operational phase. It also had to account for special and dispersed operations and unforeseen eventualities - with local and strategic reserves - and the means by which serious casualties could safely be moved around the theatre of operations and returned safely to the UK and to civilian hospitals. It had to take into account the concurrency of operations with US coalition partners and the likely changes in circumstances after warfighting, including humanitarian aid and establishment of civilian medical services in southern Iraq. It had to consider all the political and religious sensitivities around medical care of working in the Arab world, including host nation attitudes in the countries surrounding Iraq.

Creation of the medical plan is not an exact science and there is a limitation to the role of the tools for the conduct of the estimate. Planners must make assumptions of risks and balance likely casualty estimates with available resources and a range of contingency plans. Planning was additionally complicated by the deployment of 19,000 troops - including a significant number of medical specialists - in aid of the civil power at home in the UK in civil protection and fire defence during the 2002-03 public service firemen's strike.



Map: Iraq terrain and vegetation

(www.grid.unep.ch)

Phases of planning for medical support operations in Iraq

The duration of a deployment as complex as Operation Telic cannot be predicted in detail at the outset. Colonel John Graham, the Medical Commander of 1st UK Armoured Division, described the four conceptual phases of the medical operation as being "the Preparation for War; the support for Warfighting; Post Conflict Operations; and Post Deployment Health Issues".

Geography and climate have a huge influence on military medical planning. The flat, rolling, gravel desert of northern Arabia, which permitted the unrestrained movement of armoured warfare in the 1991 campaign, rapidly gives way to a much more broken landscape on crossing into southern Iraq. The convergence of the waters of the Tigris and Euphrates rivers, the drained marshlands north of Basra, and the complex networks of canals, tributaries, dykes, reed beds and salt flats provide a much greater impediment for free movement of armies without adequate bridging and engineering assets. The semi-desert landscape is further broken up by the extent of human habitation and agriculture, with houses and huts, ditches, walls, and bulldozed earthen barriers - or berms. The landscape is also scattered with the detritus and waste of human habitation and industrial waste in a particularly poor and neglected region.



The environment of Southern Iraq: the wetlands and water hazard to military operations

(Photo MoD)



The environment: typical semiarid landscape around Basra, also highlighting the general spoil, decrepit infrastructure and risk of disease

(Photo MoD)

The climate is dry, hot and dusty, with infrequent short lived rainstorms, and unpredictable but often dense and prolonged sandstorms lasting for days. Mini-tornados and whirling dust devils are a frequent occurrence in the hot evenings. Midday temperatures range from the low 20s centigrade in the early spring to the high 50s in mid- summer. Fortunately, the dry heat allows the acclimatised human body to tolerate much higher ambient temperatures than would be possible in wet heat. There are no major endemic diseases. Malaria poses a small risk, but the lack of sewage and sanitation prior to 2003 raised the risk of cholera outbreaks among the civil population.



Challenger outside Basra, illustrating the common terrain in the Basra area

(Photo MoD)



Typical dwellings in Southern Iraq

The flat, unbroken desert of northern Arabia also rolls up into western Iraq, providing open country for the rapid armoured thrusts which were a feature of the US advance on Baghdad in early 2003. Western Iraq is sparsely populated, but there are a number of towns along the main rivers and at the main crossing points. Central Iraq is much more luxuriant, with dense vegetation in the river basins, and dense centres of population, including Baghdad. Northern Iraq offers a much more European climate and topography, with the land becoming increasingly hilly, mountainous and verdant into Kurdistan.



Armour in Basra: vulnerable to ambush in urban areas

(Photo MoD)

Demand and Distance

The 'population at risk' in the war zone determines the medical plan. For *Operation Telic*, this population included all coalition troops in the area of responsibility, and the Iraqi military and civilian population in areas coming under coalition control. Health provision had to take full account particularly of the challenges of working in rising desert temperatures throughout the campaign, and the provision of refrigeration and cooling systems for medical stores and treatment centres.

The distances to be covered in mobile warfare provided a particular challenge for medical planners. These distances included.

- The distance from the UK base to the forward mounting bases in Kuwait and elsewhere (3,500 miles)
- The distances to move around Kuwait during logistic operations and casualty transfer (some 200 miles)
- Distances within southern Iraq during operational manoeuvre (250 miles)
- Distances covered in support of overt and covert operations by personnel elsewhere in the region, for example the western desert and northern hills (up to 1000 miles).

Capability, Capacity and Convenience of the medical plan

The plan had to cover the whole range of medical preparations for deployment, including vaccinations and dental health; of preventive and force protection measures against heat stroke and endemic diseases, and other non-battle injuries; and of dealing with combat injuries for our own personnel. A capability was also needed to deal with PoWs, Iraqi civilians, including women and children in need of treatment not immediately available in Iraqi civilian hospitals.

Capacity describes the numbers and position of assets, for example ambulances and hospital beds. It describes the resources available, including casualty holding and transfer capacity and must include a reserve for contingencies. Capacity changes continuously with time as new assets arrive or as established assets are removed through loss or damage.

On *Operation Telic*, medical capacity was created by the deployment of two close support medical regiments, 1CSMR and 16CSMR, augmented by mobile surgical and trauma teams; by the deployment of two general support medical regiments, 4GSMR and 5GSMR; and by the deployment of three 200 bedded field hospitals, 33, 34 and 202 Field Hospital. These units were all supplemented by large numbers of specialist reserve health care professionals with a broad range of technical experience, or capability.

The land army units were to be supported at sea by the Royal Fleet Auxiliary *Argus* in the northern Gulf, acting as a casualty treatment ship; and by the 1000-bedded hospital ship USNS *Comfort*, also in the Gulf. There were a number of smaller medical teams deployed in support of Special Forces and dispersed operations. Underpinning all of this forward deployment was the huge and unmobilised resource of the British National Health Service.

The plan made maximum use of established assets, systems and doctrine, including modern roads, ports, airheads and the logistic infrastructure in Kuwait. This produced a robust deployment plan, which ensured prompt access across the region to medical care by a variety of UK and US casualty transport systems, including a fleet of US Black Hawk casualty transport helicopters; RAF Chinook and Puma helicopters; wheeled and tracked ambulances; and a chartered fleet of air conditioned coaches. US hospital assets were particularly light on the ground in the initial phases of the operation, with one major MASH unit and reliance on air evacuation to the USNS *Comfort*.

Continuity of medical care for combatant and non-combatant personnel

Continuity of care and casualty flow was ensured by cooperation between the close support medical units, the general casualty transport units, and the field and maritime hospital units at casualty transfer and exchange points. This interconnectivity was further improved by the deployment of specialist casualty transfer teams and aeromedical evacuation teams to ensure safe transport of casualties by air and land rearward of the field hospitals. This included transfer to ships, to the airheads at Kuwait City and Ali Al Salem Air Force Base in Kuwait, and to Cyprus and the UK on RAF and chartered commercial jets.

Specific health risks in the Gulf

Heat Injury

Heat injury was a particular threat for European troops, as temperatures rose from the mid 20s in March to the high 50s centigrade in July. This affected the work load capacity, protection and clothing needs of the operational soldier, particularly during the heat of the day.

The human body tolerates the dry heat of the Arabian Peninsula far better than it does the wet heat of humid parts of the world. Fluid loss by evaporation and heat loss by convection in moving air both help control body temperature at 36.8°C, even when the ambient temperature is above 50°C. At these temperatures, activity must be minimised to reduce internal heat production, and the available body surface areas must be maximised. Thus, lying down is particularly uncomfortable during midday heat, because the body surface area for evaporation is effectively halved.

Acclimatisation is the process by which the body adapts to heat and becomes more efficient at handling and dispersing it. This can take up to two weeks, before the body is again at peak functional efficiency in the new conditions. It is helped by a gradual and progressive programme of exercise and strenuous activity. It is essential for deploying troops during the hot spring and summer months.

Heat illness was a challenge even during the early phases of *Operation Telic*, when troops were obliged to remain in NBC kit for dangerously long periods. The armed forces centre for heat injury at the Institute of Naval Medicine recorded 135 significant heat injury cases between March and October 2003, of whom 133 required aeromedical evacuation, 12 were graded as serious, of whom eight needed mechanical ventilation and ten had body core temperatures recorded at over 40°C. Factors contributing to heat injury included lack of acclimatisation, insufficient fluid replacement, previous heat illness, sleep deprivation, dehydrating illness (vomiting and diarrhoea), medication, and general lack of physical fitness.

Ballistic missiles

The Iraqi armed forces were capable of deep strike operations well into the 2003 campaign. They used surface-to-surface missiles, including the Scud tactical missile with a range of 1000km or more, and a variety of anti-ship missiles used in surface-to-surface mode at up to 300km. These are much less accurate than Western weapons, as they lack the terminal guidance systems provided by Global Positioning Satellites (GPS) and advanced computer guidance. These weapons nevertheless posed a serious risk to logistic troops and civilians throughout Kuwait during the initial warfighting phase. The explosive warheads carried on these missiles are relatively small, but their kinetic energy of momentum - particularly of the ballistic missiles which reach more than 2,000mph on re-entry - makes them very dangerous.

The dangers of such weapons were illustrated in the German V2 campaign against London during World War II, and the deaths of 28 US service personnel in a base camp in Dhahran, Saudi Arabia, at the end of the first Gulf War in 1991. However, these

dangers should not be exaggerated, as the fear and response can produce more trouble than the weapons themselves. Not one person was killed by the 13 Scud missiles fired at Israel during the First Gulf War, but a number of deaths were reported from suffocation through the misuse of respirators.

Modern ballistic missile and artillery technology and the range of modern weapon systems thus pose a risk of casualties throughout the depth of the region of conflict, even when the threat of air attack has been neutralised. The tempo, mobility and flexibility of modern warfare blur the boundaries between 'combat' and 'rear zone' troops. In a complex war zone such as in the Gulf, logistics troops, truck and ambulance drivers are readily and frequently exposed to risk during movements.

Collecting the people

The first challenge was the formation of the 1st UK Divisional Medical Group to oversee the detailed planning process. This included the need to identify units and individuals to provide headquarters personnel, to man at wartime strength the medical regiments and the regimental aid posts, and to ensure the provision of sufficient and adequately trained unit level combat medics, capable of life saving interventions on the battlefield.

In peacetime, many military medical units exist as skeleton organisations or cadres, to be fleshed out during the transition to war by regular personnel from elsewhere in the service, and subsequently by reservists. Many individuals are thus 'double-hatted' to peacetime and wartime units and roles, according to the prevailing circumstances. Key personnel and units were located around the world, but primarily in the UK and Germany, where the British armed forces still retain a sizable division of some 25,000 troops in support of NATO and the Joint Rapid Reaction Force (JRRF).

The operational plan required an increase from 400 to 2000 personnel over 40 days, to be conducted in stages. Regular personnel had to be recalled from their widely dispersed peacetime occupations to wartime concentration, often to acquire or reacquire the skills needed to fulfil their allocated wartime roles. Meanwhile, the scale of requirements for reservists had to be identified, and the mobilisation process set in motion. All personnel needed to be fully trained, medically fit, and up to date in immunisations. Staff from essential posts in peacetime units had to be replaced or backfilled by others.

Allocation of medical units to the operational plan

In the final plan, the UK 3rd Commando Brigade was linked to the US 1st Marine Expeditionary Force (MEF), with their own commando medical assets. 16 Air Assault Brigade was paired with 16 Close Support Medical Regiment, and 1st UK Armoured Division was paired with 1 Close Support Medical Regiment. The forward support medical units were supplemented with mobile surgical teams charged with undertaking life saving surgery. The light infantry brigade medical units were allocated 350 medical personnel, with 700 allocated to the armoured division medical unit. In all, 2,800 regular and 760 reserve medical personnel were allocated to the land plan.

The key medical units were:

RFA *Argus*, 100 bedded primary casualty receiving ship, PCRS

The Commando Medical Squadron (Cdo Med Sqn)

Three field hospitals (Fd Hosps)

1 Close Support Medical Regiment (1CS Med Regt) (or CSMR)

16 Close Support Medical Regiment (16CS Med Regt)

4 General Support Medical Regiment (4GS Med Regt)

5 General Support Medical Regiment (5GS Med Regt)

84 Medical Supply Squadron (84 Med Sup Sqn or MSS)

The Princess Mary Hospital, Akrotiri

1 and 2 Air Evacuation Squadrons (AES)

3 Casualty Evacuation Squadrons (CES)

612 and 4626 AES, Royal Auxiliary Air Force

9 Deployed Operating Base Medical Centres (DOBMC)

Demands on the medical deployment plan

The medical plan required a build-up in parallel with the operational deployment to provide care for troops in the pre-war phase at maximum levels during and immediately after the warfighting phase. This would be followed by a phased reduction after the transfer of care for the local population to civilian and Iraqi agencies, and a sustainment phase for the troops remaining in theatre on post-war operations.

The medical operational plans called for the establishment of a medical matrix - or distributed medical effort - for the collection, treatment and disposal of casualties across the theatre of operations. Efficient, timely, safe and effective casualty collection and transfer from the point of wounding to the most appropriate accessible medical care facility is a major challenge for medical planners and commanders. Failures test and expose the ingenuity, flexibility and durability of the plan very brutally, and adequate reserve capacity and flexibility is essential to the safe conduct of the plan. The plan included.

Combat Medical Support in the warfighting zone

Modern wars rarely have a simple front line, from which casualties can be transported in a 'linear' direction. Modern warfare is conducted in depth across the battlefield. In coalition terms, the air superiority and air supremacy, which the USAF and RAF work to achieve early in a campaign, allow bombing and missile attacks at any place of time and choosing across the battle space, including both tactical and strategic targets. On the ground, the speed of movement, the bypassing of opponent forces and deep penetration movements into opposition territory, blur and complicate the lines of communication. Medical assets must be adapted to these circumstances.

16 Close Support Medical Regiment and 1 Close Support Medical Regiment were tasked with a range of responsibilities. These included primary care for the fighting troops and casualty collection and transfer from RAPs to Role 2 care. These units provide such care in dressing stations, which may either be set up in buildings or in tents. These have basic casualty resuscitation and treatment facilities manned both by paramedics and by specialist surgeons and anaesthetists, with a small operating theatre and limited holding capacity for casualties. Casualties are then transferred at the earliest safe moment by helicopter or by ambulances of the general support medical regiments to field hospital care, or returned to the fighting units. 5 General Support Medical Regiment (5GSMR) was allocated to the armoured division area of operations to provide a flexible casualty movement resource from the forward dressing stations to the field hospitals.

Medical Support in the logistic zone

The framework of the casualty collection plan across the logistic zone is known as the *Blue Light Matrix*, after the civilian ambulance equivalent. It seeks continually to distribute ambulance assets in the most efficient way possible, often over long distances and in an unsafe and continually changing environment, with the constant risk of hostile action and ambush. To develop these matrices, 4 General Support Medical Regiment (4GSMR) was allocated to the large logistic area - in effect the whole of Kuwait between the Airports of Disembarkation (APODs) at Kuwait City and Prince Ali Salem Air Base nearby, and the forward mounting area (FMA).

The Field Hospitals

Field hospitals provide the main resource of deployed medical care on operations. They are usually placed well within the logistic zone in areas of relative safety for staff and patients. However, as we shall see later, even this boundary becomes blurred in the speed of operations in modern warfare. British field hospitals are large, self-contained units of some 650 personnel, supporting four or more surgical teams and 200 beds. The general concept of operations hinged upon a field hospital set up in northern Kuwait at the outbreak of hostilities to take the initial casualties. In January and February, personnel from 22 Field Hospital, one of three regular army hospitals fully staffed and rapidly deployable, set up the initial components of the field hospital at Camp Coyote, a large purpose built logistic complex in open desert in northern Kuwait near the main Kuwait-Baghdad highway. It was some 30 miles south of the Iraqi border. The hospital was developed by 33 Field Hospital staff into a 200 bedded unit, and was handed over to personnel of 202 Field Hospital TA in the week before warfighting began.

Another field hospital, 34 Field Hospital, was held ready to move immediately into Iraq as the advance progressed. A hybrid unit of regular and reserve personnel, 34 Field Hospital played an important role in the latter phase of the warfighting campaign. It moved into Iraq at the end of March and occupied the former RAF airfield at Shaibah, south west of Basra, while combat operations were still underway within its perimeter, and well within range of Iraqi mortars.

The staff of 33 Field Hospital were retained at Camp Coyote during the war to provide a strategic reserve and additional support to either 202 or 34 Field Hospital, or to redeploy independently wherever needed. As operations developed with few casualties, 33 Field Hospital was not further used, and personnel returned early to the UK for extended leave, before redeployment to Shaibah in July 2003.

Fleet medical support ships

Royal Marine activities and sea launched operations were an important component of the overall battle plan. RFA *Argus* is a Helicopter Carrier which is fitted out to high specifications with a hospital in its lower decks. It was deployed in the northern Gulf as an additional hospital asset, and played a significant supporting role to 3 Commando Brigade in particular. In order to allow it to operate flexibly and without the constraints of the Geneva Convention – which would oblige it to declare its position and to take no part in military operations - RFA Argus is designated a Primary Casualty Receiving Ship (PCRS), rather than a hospital ship.

USNS *Comfort* was also an important element of the medical plan. *Comfort* is a large US Navy hospital ship, a converted fleet tanker equipped to the best modern standards with 1000 beds, diagnostic and treatment facilities. Although not a UK asset, USNS *Comfort* was used for the continuing care of Iraqi POWs to relieve pressure on UK field hospitals. A number of capital ships in the US Fleet were also equipped with surgical facilities.

Aeromedical Evacuation

There are two components to aeromedical evacuation: the Tactical component within the Theatre of Operations, using helicopters and turboprop aircraft; and the Strategic component, moving casualties back from Iraq to the UK by jet transport.

The evacuation of stabilised British casualties to definitive care in the UK and elsewhere by air was a key element of the plan. Royal Air Force specialist teams and coordinators were allocated to the field hospitals to control rearward casualty flow within the Kuwait theatre, and the aeromedical evacuation squadrons moving between Kuwait and base hospitals in Cyprus and the UK.

Host Nation Support

There was continuous liaison with medical facilities in Kuwait during early phases of the Operation for the provision of specialist care and equipment..

Summary Table

Principal UK Military medical resources in the Kuwait/Iraq Theatre, March 2003

Medical Assets in Theatre,	Operation Telic	March-April 2003
Role 1	CMTs and RMOs	
	Regimental aid posts	
Role 2	1 Close Support Med Regt	
Close Support	16 Close Support Med Regt	
	Commando Med Regt	
Role 2		
General Support	4 Gen Support Med Regt	
	5 Gen Support Med Regt	
Role 3	202 Field Hospital	Camp Coyote, Kuwait
	34 Field Hospital, Shaibah	After 1st April
	33 Field Hospital	In reserve, Kuwait
	RFA Argus	Upper Gulf
	USNS Comfort	Gulf
Evacuation Assets	CCAST teams	
	RAF medical squadrons	
Role 4	RAF Akrotiri	Cyprus
	NHS Hospitals	Air evacuation to the UK

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Operation Telic and the British Medical Deployment to the Gulf 2003 -2009

Chapter 3:

Medical Mobilisation and Logistics for Operation Telic 1



Painting: *2 CS Regiment RLC re-supplies 7th Armoured Brigade during the Battle for Basra*

Artist: David Rowlands Medium: Oil on Canvas

Regarding the painting '2 CS Regiment RLC re-supplies 7th Armoured Brigade during the Battle for Basra':

> *14 February - 11 July 2003: The artist painted this from sketches he made on the spot. Vehicles are bringing supplies of ammunition, fuel and rations into Camp Breadbasket on the outskirts of Basra. Captain Herbie Cameron RLC, the commander I.R.G. (Immediate Replenishment Group) has dismounted from his Land Rover at the head of the convoy. One of the oil trench fires is burning in the background.*

Introduction to Logistics

The success of military operations depends entirely upon the effectiveness of the logistic system. Logistics is the art and science of the delivery of people and equipment at the right time and the right place in the most efficient manner to secure the mobilisation, conduct, sustainment and demobilisation of a campaign, and so as to maximise the combat effectiveness of the force.

Logistic planning is a highly technical, scientific and mathematical process, and its implementation demands considerable skills and resourcefulness at all levels in the supply chain. Logistics must take into account the scale of operations, the distance and the time available. It is a continuously evolving process and is rarely free of problems, as was the case on *Operation Telic*. It is also susceptible to disruption at all points in the chain, whether through civilian protest at the ports of embarkation by protest organisations such as *Greenpeace*, through confusion and the fog of war, or through deliberate hostile action. Indeed, a key element of modern military operations is the disruption of the logistic chain and re-supply of opposing forces.

The logistic system must thus work well throughout the life cycle of the operation, from initial planning, through force deployment, the operational and immediate post-war phase, and through the return of troops and equipment to the UK at the end of the operation. The logistic activities of one operation are also conducted as a part of a continuum of peacetime military activity, so that forces are restored to operational readiness as quickly as possible against future contingencies.

Logistics involves conceptual and physical resources, which range from one man and a mule to the largest freighters and commercial passenger aircraft, and from a tin can to a freight container. Modern military logistics involves the application to the operational plan of brainpower and precise calculations; the use of computer systems to identify, track and coordinate the delivery of resources; and the use of a range of plant and equipment to deliver the resources by land, sea and air to their point of use in the most efficient, timely, safe and economic way.

In 2009, The National Audit Office conducted a major review of Logistic support to Operation Telic in its report on "Support to High Intensity Operations" in Iraq and Afghanistan. The report addressed Equipment; Logistics; predeployment training and Support for Personnel, which included a review of the medical support infrastructure. The lessons of 2003 led to a major review of logistic organisation, both in deploying people and equipments to Theatre, and in the drawdown at the end of Op Telic.

The NAO describes how the MoD now provides logistic support to United Kingdom forces through the Joint Supply Chain within the Defence Equipment and Support organisation. It is responsible for supply chain operations from the United Kingdom to operational theatres; the storage and distribution of equipment, spares and other materiel within the United Kingdom; and the eventual disposal of equipment and materiel.

The end to end supply chain stretches from the requirements of operational commanders to industry. In-theatre commanders control logistics assets in operational theatres. The Joint Supply Chain organisation controls the operation of the strategic link between the United Kingdom and operational theatres through which all materiel, personnel and equipment flow, known as "the coupling bridge". It also provides input to Integrated Project Teams who liaise with industry. The co-ordination of day-to-day logistic supply and support to operations, including the reverse supply chain, is provided by Defence Supply Chain Operations and Movements (DSCOM).

The MoD has made a number of important changes since the end of major combat operations in Iraq in 2003, including: the establishment of a single process owner for end-to-end logistics activity, single ownership of the coupling bridge by the Chief of Joint Operations, and improving the performance of the United Kingdom-based stores and distribution processes.

The movement of medical equipment

Military medical logistics involve the movement of people; of lightweight, high value and perishable stores, such as drugs and blood; and of lightweight, rapid entry and man portable equipment, all of which can be transported by air. They include containerised stores, such as tents, bed, laboratory and operating equipment, which can be containerised and palletised for rail, road and sea portability; and heavy duty equipment, such as container movements, vehicles and trucks, which must be moved in quantity by sea. A standard 200 bed tented field hospital occupies 60+ steel containers, which in turn require a fleet of vehicles to move them from the port of entry to the point of use.

Military medical logistics have been transformed in recent decades by containerisation and palletisation of stores, using standard and adapted commercial systems. The steel iso-containers themselves provide physical protection for the stores from the point of loading at the base depot to the point of delivery, and can subsequently be used as robust accommodation. During the First Gulf War, the Iraqi army dug large numbers of freight containers looted from Kuwaiti stocks deep into the desert as underground bunkers, demonstrating their versatility and utility.

Military medical logistics has been modernised using lessons from complex civilian and commercial logistic systems. *Operation Telic* was the UK's first large-scale operational test of the Defence Logistics Organisation (DLO), formed in April 1999. The Operation Telic challenge was to provide logistic lift over 3400 miles by air and 5000 miles by sea to the Gulf. A deployment of roughly the same size as in the Gulf conflict of 1991 was needed in half the time, against a limited planning timescale.

For example, the Urgent Operational Requirement (UOR) process for the 'just in time' manufacture and provision of specialist stores was announced in November 2002. Continuing changes to the overall campaign plan in the later stages of preparation provided additional challenges and identified shortcomings. Better systems and modern technologies which allow the identification, location and precise contents of every container and item throughout the battle space - such as the use of microchip radio tags or similarly enabled devices and automatic computer tracking - had not been implemented by the time of this deployment.

Once the contents of the containers and pallets were dispersed, and the contents transported to individual units, this visibility ended. As a consequence, large quantities of equipment, stores and supplies were difficult to track down in theatre. This also made it more difficult to target high priority equipment for rapid onward distribution, a problem which was highlighted by the difficulties with the timely delivery of combat body armour plates to forward troops.

Transport by Sea

Field medical units are demanding of logistic resources. The 60+ iso-containers needed to deliver its tents, beds and stores include a number of specialised containers such as refrigeration units. It also requires engineer equipment and resources to prepare the site, and fuel, water, power and waste disposal when working. Field ambulance units hold large numbers of vehicles, including wheeled and tracked ambulances and trucks. Field medical depots must receive, hold and distribute stores.

Light airborne medical teams and commando medical units are configured for rapid deployment by aircraft and helicopter, but this limits their clinical capabilities without re-supply. The heavy equipment of all other medical units must be deployed by sea, and the preferred method is by fast Roll On-Roll Off (RoRo) ferry from the mounting ports of Marchwood (Southampton) in the UK and Emden in northern Germany, where the 1st UK Division is stationed in peacetime.

Purpose built container ships and Ro-Ro ferries - including the UK MoD's four new Ro-Ro vessels - allow the rapid delivery of stores and vehicles over long distances to



RFA Sea Crusader, one of a new class of purpose built strategic lift roll on roll off ships for the delivery of vehicles and stores (photo shipsphotos.co.uk)



Warrior on RoRo Ferry at Embden (MoD)



Loading vehicles of 1st UK Armoured Division onto Ro-Ro ferries at Embden in early 2003 (MoD)



Greenpeace demonstration a Marchwood military port, March 2003

(MoD)

prepared and semi-prepared ports of disembarkation. 90% of the freight, including the medical containers and vehicles, were thus deployed by ship.

The Royal Navy task force also delivered a significant number of marines and other combat personnel, including helicopter crews. Royal Navy equipment also played an important logistic role. The use of amphibious capabilities such as helicopters, mexeflotes (motorised pontoons) and landing craft to land equipment and supplies over beaches independent of commercial ports provided additional operational capacity.

Transport by Air

Air transport allows the rapid delivery of personnel and high value, low volume and perishable stores. A whole battalion or field hospital staff can be delivered around the world on two flights of a jumbo jet. Large freight loads can be delivered by aircraft such as the Lockheed Galaxy, Antonov and Lockheed C17 military freighters.



RAF strategic airlift: a C17 Globemaster at a Gulf airfield

(MoD photo)



Chartered strategic airlift: An Antonov freighter unloading in Kuwait

(MoD Photo)



The NAO reported that since the end of Operation Telic 1, the MoD has transported personnel to Iraq using a commercial charter flight from Royal Air Force Brize Norton to Qatar then on to Iraq using the Department's C130 Hercules aircraft. The commercial charter provides a good level of service. From February 2007 to October 2008, the Department chartered 799 aircraft at a cost of £102.3 million to support Iraq.



Air freighted medical supplies for "just in time" delivery arriving at the Kuwaiti air freight centre for *Operation Telic* 1

(MoD)

Medical Logistic Deployment and Support in the Operation Telic Theatre

On land, individual drivers can now deliver and dismount loads directly to the field hospitals from the ports, using the DROPS system of truck dismountable pallets and containers. Thus, a single transport driver can deliver and unload in minutes tonnes of stores in protective containers which would have taken large gangs of men hours to unload in earlier times, with consequent huge gains in efficiency. Such techniques continue to evolve, as new commercial methods of 'just-in-time' delivery - and particularly of stores identification and computerized tracking - are developed, soldier-proofed and introduced operationally.







top left: One man lifting: Container transfer at 202 Field Hospital: Photo: The author

top right: One man delivery: A DROPS Container truck arrives at 202 Field Hospital

left: DROPS trucks delivering containerised stores, 202 Field Hospital

The increase in productivity and the reduction in numbers of logistic troops produces a virtuous circle of efficiency gains as the movers themselves consume stores and supplies, accommodation and food.

A medical deployment of the scale of that on *Operation Telic* makes substantial demands on the logistic system, for both perishable and non-perishable stores. Perishable stores include drugs and blood products; non-perishable include tents, accommodation, hospital equipment and vehicles. The Logistics Operation Centre (DLOC) coordinated the movement of all stocks to theatre. The Joint Force Logistic Component (JFLogC) managed the deployment in theatre. JFLogC was based around an Army Logistics Brigade, but its task was to support all three services throughout the Gulf.

84 Field Medical Equipment Depot (84 FMED)

84 Field Medical Equipment Depot (84 FMED) coordinated the delivery of medical supplies in Theatre.







Panoramic views and photographs of 84 FMED





The Army Blood Supply Depot at 84 FMED





Work at 84 FMED in a container converted at hoc to a storeroom, and delivery of a refrigerated isocontainer by DROPS

The medical logistic process spans the planning, acquisition and storage of supplies during peacetime in the UK, and of perishable and urgent operational requirements in the transition to war; the passage of supplies by ship and aircraft to the air and sea ports of delivery (APOD and SPOD) in the theatre of operations; their collection, identification, storage, sorting and reorganisation by a medical logistics agency in the force maintenance area (FMA); and the appropriate and timely distribution to recipients thereafter. Other stores may be acquired by local purchase.

Timely and efficient medical logistics must acquire, track and deliver a wide range of perishable and non-perishable stores to all deployed medical units, including close and general support units, field hospitals, and specialist medical sub-units. Many items of medical stores are temperature and environmentally sensitive, and so they must be protected in transit. Standard and specialised refrigerated iso-containers find a wide range of applications in the transport and storage of perishable commodities, and a secondary but very important role in field hospitals as mobile mortuaries.

The medical logistics system has no significant transport capacity. Heavy lift capacity is provided as required by Royal Logistic Corps (RLC) transport vehicles. Delivery of



A logistic challenge:
A unit fire officer cooling oxygen cylinders to prevent explosions

equipment within theatre was largely the responsibility of 6 Supply Regt RLC. Smaller and perishable stores are distributed by light truck and ambulance. As the advance continues, so the logistic chain may need to establish forward medical logistic re-supply at the forward force maintenance area, or FFMA. This was established early in the operation at Shaibah in Iraq.

We have seen how the containerisation of field hospitals has led to a substantial improvement in their deployability and mobility. This process may be further developed. Standard freight containers are very versatile for the delivery and retention of standard and refrigerated stores, for which they provide physical protection at readiness for further movement. They are also very versatile. When emptied of stores, they can be used as additional work and office space, or as protective boundaries to encampments. They can also be dug into the ground as shelters, a technique used to good effect by the Iraqi army in 1991. Heavy duty container handling equipment allows containers to be moved around the logistic area at will.

Such facilities have encouraged the application of the container principle to the development of a large number of special purpose medical applications, including blood banks and operating theatres.

Containerisation also poses administrative problems which have yet to be overcome with the application of new technology. Stores inside containers are hidden from direct vision, and the end opening design of most containers can make the discovery of missing stores very challenging. The introduction of radio tagged, computerised stores, bar-coding and tracking of all stock throughout the logistic chain should greatly improve the efficiency of distribution of supplies. The construction of side opening containers should allow much better access to their contents, and increase their versatility as empty units.

The National Audit office Report to Parliament, December 2003

This comprehensive report analysed the Logistic Effort in support of Op Telic 1 and its contribution to the initial military success of the operation. It observed that similar quantities of personnel and material had been moved to the Gulf in 10 weeks in 2003 (32,000 people, 15,000 vehicles and 7,000 containers) as had been moved in 22 weeks in 1990-1991, and despite very short full operational planning lead times.

It also identified shortfalls in the location and delivery of some key items, including body armour and medical supplies. The matter of body armour in particular was highlighted in the national press in respect of the death and subsequent Board of Inquiry of Sgt Steven Roberts of 2nd Royal Tank Regiment, who died of a bullet wound when unprotected by body armour during forward operations in Az Zubayr on the night of 23-24th March 2003.

The report also addressed personnel issues, which included training, manning and recruitment in specialist areas, including medical skills; the use of reservists and ways in which the mobilisation and compensation of reservists could be improved.

It also considered the arrangements for the post warfighting phase of operations in Iraq in 2003, and the issues of resources and interagency coordination with civilian bodies to maintain order and administration, and to expedite reconstruction.

The Medical Supplies Agency (MSA)

This was founded as a Business Unit within the Defence Supply Chain (DSC) of the Defence Logistics Organisation (DLO).

The aim of the MSA is to ensure the cost-effective and timely provision of medical, dental and veterinary materiel, blood and blood products, technical and medical logistic support and trained personnel to the UK Armed Forces worldwide in War, Operations Other Than War, and Peace.

The Agency encompasses the MSA Headquarters and the Blood Supply Depot (BSD) at Ludgershall and 14 Medical Distribution Centres (MDCs) located throughout the UK and Overseas.

The Agency's average number of staff during the year was 26 military and 279 civilian personnel. The professional skills mix within the Agency includes Logisticians, Financiers, Commercial Officers, Pharmacists, Laboratory, Medical Supply and Combat Medical Technicians.

The Agency has responsibility for the provision of medical materiel to nearly 2,000 individual locations worldwide with approaching 400,000 issues per annum being made from a live inventory of nearly 30,000 items. This range includes items as diverse as a simple remedy for a minor illness to complex equipment such as a portable intensive care system used in aeromed evacuation. The BSD received 20,965 blood samples for Mass Grouping and distributed 4,100 units of blood and 198 units of fresh frozen plasma in 04/05. In addition, the Agency responds to emergency situations by maintaining around-the-clock capability to provide lifesaving products and technical support.

The mission of the MSA is to deliver medical materiel in order to sustain UK military capability.

The movement of Medical Personnel on Op Telic 1

The movement of the many individual regular and reserve Defence Medical Services personnel required a carefully planned and choreographed operation over several months, using RAF and civilian aircraft to ensure that all human resources were in place for the commencement of operations. Key staff of RFA Argus were flown out to join her in transit to the Gulf, while a 'just-in-time' mobilisation process for reserves minimised deployment times and logistic demands in theatre. The timing, organisation and administration of mobilisation has been carefully scrutinised since the war by the armed forces themselves and by the UK House of Commons Defence Committee.



Members of 202 Fd Hosp at the departure lounge, South Cerney, mid March 2003



Night flight: a chartered 747 at RAF Brize Norton to move 202 field hospital to the Gulf, March 2003

The lessons of this aspect of the operation are central to the future planning of manpower structures for the armed services and to the speed and scale on which expeditionary operations can be mounted. Operation Telic was the first major test of modern mobilisation systems and practices since the 1990-91 Gulf War, and the experience of the mobilisation process thus merits further study.

The mobilisation of UK reserves for *Op Telic*

Mobilisation is the formal process by which reservists are taken into military service for a fixed period of time and under the specified terms and conditions of the Reserve Forces Act of 1996. Mobilisation creates legal and employment safeguards for reservists, for civilian employers and for the MoD.

Some 3,500 reservists were compulsorily mobilised for the initial phase of *Operation Telic* in the Gulf from January to July 2003. Many more have subsequently been called out in a rolling programme to support post-war peacekeeping and rebuilding programmes in Iraq. In practice, reservists were rapidly delivered from peacetime life to frontline operations without significant operational problems, (albeit sometimes at considerable personal disruption) culminating in the transforming deployment of 202 Field Hospital from the UK to a fully operational war hospital within seven days in March 2003.

'Just-in-time' Delivery of People

The 'just-in-time' delivery system used by manufacturing companies was employed to interesting effect in the delivery of people into the Gulf in 2003. Reserves were mobilised in weekly blocks in a process known as 'rolling mobilisation' to fit the deployment, training and flight plan. This kept individuals in productive civilian employment until the latest possible date. This process minimises the demands of logistic support in the field. From this perspective, the system worked well, with reservists being delivered to the Gulf within days and even hours of the onset of hostilities. The downside was the limited time allowed for acclimatisation, collective unit training and problem solving in the short lead time to war. It is a tribute to the flexibility of individuals and to the effectiveness of individual training and selection that so few significant operational problems resulted, particularly as it had long been held that reserve units would need a considerable amount of time - perhaps up to one month - to become operational after mobilisation.

The 'just-in-time' mobilisation nevertheless caused significant problems for individuals, as mobilisation orders were often issued with only 14 days notice, and not least because of the public and political uncertainties over the likelihood and timing of war. While many reservists made contingency plans with families and employers, and some were able to find out their place in the deployment Orbat, many others were caught unawares by their call-out notices, and some had as little as three days notice if they were away on holiday. Longer lead in and notification times would have helped many individuals, and this lesson has now been learned.

The experience of mobilisation for *Op Telic*

On receipt of mobilisation papers, each reservist was obliged to make arrangements with his or her employer, business associates and family for departure on a specified date. Many specialist reservists listened to the jungle drum and anticipated the call-out, so made prior plans in their civilian departure. However, many others assumed that as they had not received call-out papers by mid-February, they would not be required, and

their actual receipt of the papers thus caused considerable surprise as well as professional and personal disruption.

The rolling British mobilisation process for *Operation Telic* followed a common path through the Reserve Mobilisation Centre at Chilwell near Nottingham throughout February and March. Over 48 hours, each batch of reservists received initial briefings, a medical and dental check up, formal documentation and financial terms, equipment issue - including combat body armour - and voluntary vaccination briefings, particularly for smallpox and anthrax.

Reservists then moved to camps in Lincolnshire for five days of individual training, including NBC drills, and pre-deployment briefings on the theatre of operations, and actions and responsibilities as a PoW.

Medical mobilisees were then sent to the collective training centre near York for further NBC training, before deployment to the air mounting centre at South Cerney and the airhead at Brize Norton for the flight to Kuwait City. Thus, within 10 days of mobilisation, most reservists accepted into service were processed, retrained and deployed into theatre, or returned to civilian life if medically unfit.

The mobilisation process

Daily Boeing 747 flights from Brize Norton delivered personnel to the reception centre at Kuwait International Airport, before bus transfer to the force mounting area. Thus, within a few weeks 33, 34 and 202 Field Hospitals were transformed from units which existed largely on paper to functional organisations. Each comprised some 650 individual reservists and regular personnel, transformed and transported from families, jobs and the certainties of home and the wet, bitterly cold weather of central England to the balmy warmth of the northern Kuwaiti desert.



Mobilisation of medical reservists: Grantham, March 2003



Arrival at Camp Coyote: Medical staff arriving at the site of 202 Field Hospital, a few days before war began



Water deliveries to 202 Field Hospital. Photo: The author

The logistics of the living and working environment

Desert operations are very demanding of the logistic system for all the commodities and necessities of human life away from the comforts of the towns and cities. Kuwait is an affluent and well developed state, with all of the commercial infrastructure to provide food, fuel and water to the visiting armies, but the area of operations in northern Kuwait was devoid of all facilities for habitation, and these had to be put in place from scratch. Water was delivered by road from Kuwaiti desalination plants, and water supply to the field hospitals secured by regular tanker delivery to large storage tanks, and then distributed around the site by pipe. All drinking water was purchased in bottles from local contractors.



Protective sunscreen flysheets for standard tentage: these were not available in the early stages of the campaign.

Accommodation for Field Hospitals and Field Medical Units

Where adequate clean, spacious buildings are available, they may be fitted out as field hospitals, or used for protection by other field medical units on a transitory basis. For example, large warehouses provide excellent overhead cover. 33 Field Hospital was deployed in a Firestone Tyre warehouse at Al Jubail in 1991. More frequently, standard issue aluminium-framed olive canvas tents are used to produce a modular system which is easily erected, robust in use and versatile in construction and layout. However, these tents provide little thermal protection or significant defence against the incursion of dust and sand in the particular conditions of the Gulf in late spring and summer. They are also vulnerable in strong winds, and several were blown down by the mini-tornadoes which race unannounced across the desert dust bowl.

In such open systems, air conditioning equipment is hard put to reduce temperatures significantly. A system of piped, cool air from commercially sourced generators helped maintain just tolerable working temperatures in the low 40s°C on hot days.

Following the end of combat operations, a new generation of tentage, Temporary Deployed Accommodation (TDA) was provided in southern Iraq. The TDA system is a set of modular tents containing bed-spaces, a cookhouse, recreational facilities and washhouse tents. Standard modules accommodate 125, 250 and 500 personnel. The tents are air-conditioned and also equipped with heaters for Iraqi winter conditions. TDA supplements the more solid 'Corimec' structures which are assembled in semi-permanent locations, such as in the Balkans.



Tented theatre at 202 Fd Hosp, with the tried and tested McVicar Operating Table, which takes a standard stretcher. All equipment has been covered with plastic sheeting to minimise the dust contamination between operations. Picture: Author



Logistic effort and the design of Medical Equipment

The armed forces have persisted with a design philosophy of robust, simple electromechanical devices for medical use over many generations of equipment, and despite the deceptive appeal of more modern systems. One enduring example of this philosophy is the collapsible, portable, tubular-framed McVicar operating table, which takes a stretcher and casualty. This table limits the flexible positioning of operative patients, and hence the limited access which it provides to relatively inaccessible parts of the body; but it has outlived generations of surgeons because of its robustness, low maintenance, portability and adaptability.

Similar design constraints affect the design and uptake of anaesthetic delivery and monitoring equipment. Sophisticated modern monitors are rapidly degraded in heat and dust. The design and rigorous trialling of newer equipment has addressed this problem to some extent - particularly acute in the diagnostic pathology and radiology departments, where devices must be rigorously maintained and protected if they are to remain useable.

Overly technical design can thus have serious limitations in operational environments and in everyday use. One example of this problem was found with the fully containerised Mobile Transportable Surgical Facility (MTSF) operating theatres. The design of these units replicated the functionality of a civilian hospital theatre in miniature, but the constraints of space and the technical failings of components and systems restricted their use primarily to neurosurgical cases.





Data transmission from 202 Fd Hosp. Contrast this mobile system and the advances in technology with the scale of the two large dishes at Camp Coyote which were relics of the First Gulf War.

Photos: Author

Complexity in the equipment of the MTSF









Working space inside the MTSF Theatre Complex

Medical Information systems in the theatre of war

Information may be regarded as a logistic element. The flow of accurate and timely information between units and logistic centres maximises the efficiency of distribution of people, casualties and resources. New technologies and computer systems provide opportunities for substantial efficiency gains. However, equipment needs to be particularly robust in the desert, with both thermal and dust-proof protection.

Operation Telic saw the trial of distributed computing systems throughout 202 Field Hospital, using a large central server linked to a satellite communications dish, and with cable distributed terminals in the wards and management cells. Computing systems offered significant day-to-day utility to the work of the hospital, but the complexity of the network and the environmental problems were limiting factors. New wireless systems and lightweight machines may help reduce the complexity of the set-up and

improve ease of access and use of the system. Fast internet access over robust and secure systems will be a boon, as it will allow access to wider information resources and advice, and permit a wider range of professional work during deployment.

Logistics, provision and the individual soldier

Uniform Clothing

Military uniform undergoes a continuous process of research and development as new materials and risks emerge. Modern military uniform is a huge advance over the coarse battledress of the early 20th century, both in quality and in environmental and ballistic protection. It is designed to optimise functionality over a range of environmental conditions.

Uniform clothing is designed on a layered principle with maximum flexibility and interchangeability according to climatic conditions. Multiple thin layers of permeable clothing trap heat but release sweat. The standard British European camouflage pattern uniform permits comfortable working from temperatures below freezing to warm environments of up to 39oC, using the minimum lightweight shirt and trousers. In practice, the customized cotton T-shirt - customised with a unit or operational emblem over the left breast - has become the universal informal working dress on operations. It provides a cheap and effective way of developing unit cohesion among personnel drawn together from many different units. The armed forces have developed a pragmatic acceptance of flexibility and personalisation of uniform by individuals in operational conditions, consistent with combat effectiveness and clear identification.

Uniform must also provide a degree of protection against fire and thermal shock; against liquid chemical weapons; and against thermal imaging equipment.

Desert Uniform

'Desert' issue comprises a cotton jacket and trousers in light, sand coloured camouflage pattern and sunhat. Desert combat uniforms are significantly cooler and more comfortable in hot weather. Light, white and sand coloured T-shirts are also far less absorbent of solar heat than standard north European camouflage uniform, and were widely worn in the desert. Sand goggles or wrap-around sunglasses are essential to reduce eye damage in the presence of blowing dust, and particularly in sandstorms.

Well designed military boots are important to the fighting effectiveness of combat troops, and design inadequacies can lead to problems such as frostbite and trench foot in cold and wet weather operations, as occurred in the 1982 Falklands campaign. There is no one design of operational footwear which satisfies all soldiers, and the Army takes a relaxed view of personal choice on operations. Lightweight, robust and heat resistant boots are designed specifically for desert and hot dry weather operations, and are particularly prized by all personnel in desert conditions.



Kevlar helmets and combat body armour being put to use during a missile attack alert, Camp Coyote, 2003.

Photo 202 Fd Hosp archives

Personal Protection equipment

There are a number of items of modern equipment which enhance personal protection. The lightweight Kevlar helmet provides considerable ballistic protection to the skull and brain, but is somewhat clumsy to wear. The regimental beret continues to be used wherever possible during non-combat operations, as it reduces the aggressive posture of troops in dealing with civilians, and British doctrine perceives that this provides better overall force protection.



Telic issue Combat body armour with the ceramic plates designed as inserts to the kevlr waistcoat to provide enhanced local protection

Combat body armour (CBA)

Combat body armour is potent equipment for reducing penetrating injury to the chest and upper abdomen, which can be the most rapidly fatal forms of wounding. It provides two levels of protection. CBA is worn over the standard combat uniform: it comprises a jacket or waistcoat containing flexible Kevlar-based material. This is designed to be proof against a hit from a 4.5mm flechette as well as most normal shrapnel outside the immediate blast radius of shells and mortars. Modern shells produce a hail of metal fragments which are individually unlikely to kill but which collectively cause extensive patterns of wounding.

Various forms of basic CBA have been issued on general deployment for several decades, notably for troops on patrol in Northern Ireland. However, the development of a ceramic armour heavy plate insert (into the left breast pocket and over the upper spine at the back) has been a significant advance in ballistic protection. These provide considerable extra protection to the heart and spine against high velocity bullets and fragments. However, the CBA is bulky and heavy, particularly with the plate inserts. Its psychological impact on deployed troops has been substantial in the confidence which the enhanced protection offers. Although detailed information on strikes is not available, it is noteworthy that no significant chest wounds from survivable injury were seen among British casualties issued with enhanced CBA, whereas multiple (non-fatal) penetrating chest wounds were frequently seen among Iraqis lacking body armour.

Problems with the timely distribution of CBA to fighting troops was an item of considerable news focus after the war, and the success and demand for this item of equipment seems likely to make it a standard personal issue item in future.

Personal Chemical Protection Equipment

NBC kit, as described in detail in Chapter 4, is an important component of personal protection. While the actual risk of a significant chemical strike was small on *Operation Telic*, the psychological support of fully functional NBC kit cannot be underestimated. It was thus with considerable concern that a number of medical reservists found themselves with incomplete or ill-fitting NBC protection and respirators in the early phase of operations, when incoming missile alerts were frequent.

Vaccinations

Vaccination is an important aspect of personal protection against biological agents. There are a number of agents which have been 'weaponised'. They include anthrax, whose spores can cause fatal lung infections; bubonic plague, and smallpox. These latter diseases are a particular concern for their ability to spread rapidly in unprotected populations. Military vaccination programmes exist for each of these agents.

Military vaccination policies have drawn much attention since the Gulf War of 1990-91. However, unlike the circumstances of 1990, the preparation of troops no longer involves compulsory vaccination with large numbers of vaccines simultaneously. Vaccination is now on a voluntary and informed basis. However, medical personnel are at particularly high risk of infection in the casualty evacuation chain and high take-up rates of vaccination are encouraged. Nevertheless, individuals are allowed to make their own judgement. The side effects of some vaccines are troublesome and cause force degradation in their own right. This is particularly true of the smallpox vaccination, and the search continues for better vaccines. Late vaccination for a rapid campaign such as *Operation Telic* may make little practical contribution to military effectiveness. The immunity generation period of many of these vaccines is such that operations may be over before full immunity is achieved.





The mail tent at 202 Fd Hosp: The fulcrum of morale in the unit



Lifeline: cold drinks supply at the Expeditionary Forces Institute (EFI) field store

Personal comforts, Mail and Parcels

Each serviceman and woman has a different view on what constitutes personal comfort, and each customises his or her personal kit accordingly. The desert is a convivial environment for personal health and hygiene in adapted and acclimatised troops, when compared with the rigours of cold wet weather in northern Europe, or of hot humid conditions of the African or Asian jungles. The desert places minimal demands on personal kit maintenance. Clothing can be rapidly washed and dried, so only limited quantities are needed. Spring and winter evenings and nights can be cold, but the challenge thereafter is how to keep cool as nighttime temperatures reach the 30s. Thus, a lightweight sleeping bag, sheet or even just a fly/mosquito net suffice in the early summer. The latter is essential to minimise the disturbance from flies during rest periods.



Postbox at Shaibah Hospital

Personal cleanliness and hygiene are also simple to sustain for disciplined troops. The solar water bag will heat water for washing and showering, while enforcing economy in the use of water.

Mail and parcels make a hugely important contribution to morale. Their timely delivery and distribution rapidly becomes a focal point in the working day. The introduction of freepost for parcels up to 2kg into theatre during Operation Telic brought a tidal wave of sweets and toiletries, much of which was in excess of need and was liberally distributed to locals and their children.

Much time on operations is spent in waiting. It is essential that all units and individuals anticipate the challenges of boredom in advance of deployment, and make appropriate provision. Modern technology has come to the aid of the soldier in the field to a considerable degree. Miniature electronic entertainment devices and the portable computer in particular are a great asset. Computers aid the preparation of lectures, reports and the pursuit of personal work, hobbies and interests during quiet periods. The facility to view DVDs for training and entertainment is a great step forward. It remains the author's view that the MASH television series remains the best man management training aid ever designed for commanders of field medical units, while the Blackadder BBC television series provides some of the best insights into the design of British Grand Strategy and the mindset of the British Army.



The One man 24 hour ration pack, 2003 Vintage. The packing of main meals into flexible packets is a great help to stowage in webbing and rucksacks, and disposal of waste compared with the cans of earlier times (Picture Duncan Gray).



Feeding the desert rats: The Pringle manoeuvre:

Photo and enticements:
The author

Food and rations

The provision of good and fresh food wherever possible is a key component in the maintenance of morale. Pre-packed rations are held back in reserve wherever possible. Military catering crews are the unsung heroes and heroines of military deployments, and make it a point of professional pride to be first in, up and running. Temperatures in tented cookhouses were frequently intolerable, and camouflage netting provides the coolest and best ventilated shading for mess tents.

Most foodstuffs and bottled drinks were sourced from local suppliers in Kuwait. Large central catering facilities on the convoy routes allowed logistic crews and personnel in transit to be well sustained. The provision of appropriate meals for the PoWs and Iraqi civilian casualties further tested the logistic system, and the provision of culturally appropriate supplies and foodstuffs for casualties and PoWs is a planning factor which may need to be taken into account in future operations.



Sewage disposal at 202 Field Hospital, Camp Coyote (aroma not included)

Sewage and waste disposal

Environmental health is a major challenge for deployed units, as was repeatedly demonstrated in respect of the norovirus outbreak. The production of sewage is an inevitable consequence of human habitation, and a profound risk to health. There was a marked contrast between the freedom from illness enjoyed by troops in Coyote camp - which was serviced by commercially sourced chemical toilets emptied daily by contractors with tankers - and the circumstances in Iraq.

At Shaibah, conventional deep trench latrines provided an insoluble source of re-infection of norovirus until replaced by chemical toilets. The clear lesson is that chemical toilets and their infrastructure are fundamental to the security of deployed troops in static locations, and that investment in their provision is essential. Deep trench latrines do not remove the source of infection in the presence of a significant fly population, which they also support. The old environmental health texts need to be reconsidered.

Logistic lessons

Modern logistic systems and the efficient use of additional civilian ships and aircraft allow the delivery of powerful forces over strategic distances in much shorter times than were achievable even a decade ago. Containerisation, streamlining of resources and 'just- in-time' delivery of stores creates greater efficiencies and a reduced logistic footprint in the theatre of operations.

There is still much work to be done on tracking assets in the logistic chain, such that each and every person, vehicle and item of equipment is accessible in the right place and at the right time. Modern commercial technologies based on microchip and radio chip tracking will hugely improve the efficiency, reducing the likelihood that stores such as combat body armour and medical supplies will be mislaid.

Logistics continues to be a major focus for improvement and technological change. Modern commercial distribution, storage and tracking systems will find applications in military operations, such that in time commanders should be able to track the whereabouts of every individual and every significant piece of equipment, improving efficiency of delivery to the point of use.

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Blood, Heat + Dust: Second Edition

Operation Telic and the British Medical Deployment to the Gulf 2003 -2009

Chapter 4 Part I:

The Entry Phase of Operation Telic 1 March and April 2003



Painting: *B Squadron, The Queen's Royal Lancers 2003: 'The Vehicle Check Point (VCP) action', Basra, 2003*

Artist David Rowlands Medium: Oil on Canvas

Outline of The Military (Entry) Campaign, March 19th 2003 Onwards

The combined operations of US (Op Iraqi Freedom), British (Op Telic 1) and other contingents of coalition forces took place in three geographic sectors, the overall effect of which was to advance on Baghdad as the centre of the Ba'ath Regime's power from three directions.

In the western desert of Iraq, a relatively small force of special operations troops and supporting forces conducted a highly mobile operation to capture all of the western Iraqi airfields and military facilities with very few casualties.

US Operations in Northern Iraq

In the north, Special Forces with the US 173rd Air Assault Brigade secured airfields and conducted operations in Kurdistan, moving gradually south to the cities of Mosul and Kirkuk with Kurdish forces. This operation was noteworthy for including an operational Brigade parachute assault. Wikipedia reports that:

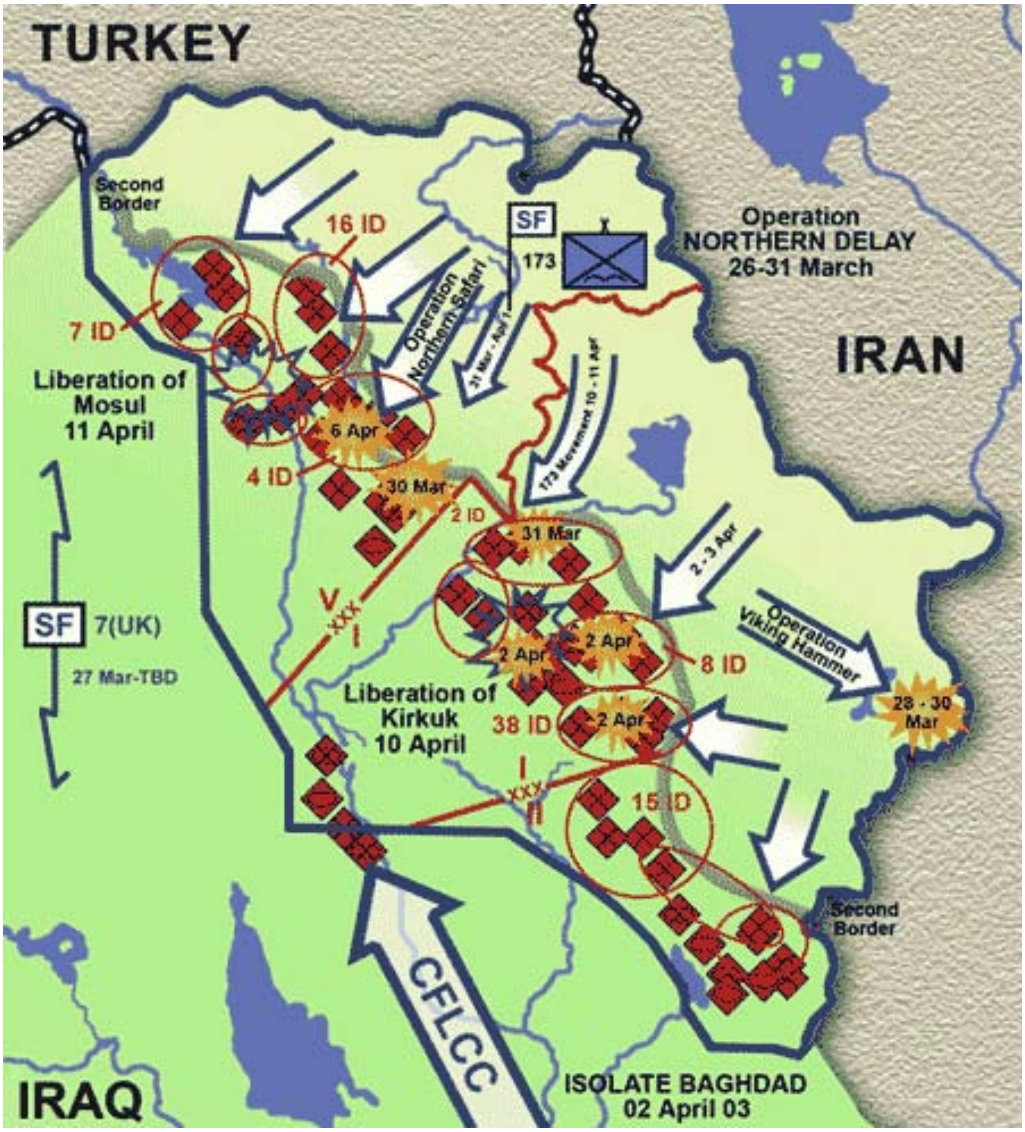
On March 26, 2003, almost soldiers of the 173rd Airborne Brigade, commanded by Colonel William C. Mayville, conducted a combat jump from C-130 and C-17 aircraft onto Bashur Airfield in Northern Iraq, in an assault known as Operation Northern Delay. The total jump took a minute, although 32 paratroopers were unable to jump because they would have landed too far from the rest of the force. The force had been strung out over a 10,000-yard drop zone, and it took 15 hours before it was completely assembled. The paratroopers secured the airfield, allowing the C-17s to land and bring in the heavy armour and the 1-63rd Armour contingents. Over the next 96 hours, the Wing landed in the remaining 1,200 soldiers of the brigade and their vehicles. By March 29th the entire brigade was in Iraq and ready to conduct offensive operations. The invasion force was also supported by some 70,000 Iraqi Kurdish militia.

While events in Northern Iraq are not central to the predominantly UK-centric narrative in this book, they were nevertheless important to the shaping of the overall campaign.

Operations in the South

In the south, a more conventional war of rapid manoeuvre of armoured forces was conducted. This was also the core area of British operations, and the US campaign in this region is thus described in greater detail here, for its significance and relevance to the UK experience.

Overt hostilities in the South started with an unsuccessful air attack on a site believed to be occupied by Saddam Hussein on March 19, 2003. This was the first of a number of such attempted 'decapitation' or assassination attacks, which if successful might have brought about earlier capitulation of the regime.



Outline of US and UK Operations in Northern and Kurdish Iraq, April and May 2003

ID + Iraqi Division; CFLCC = Coalition Forces Land Component Command;
SF = Special Forces: Source: Wikipedia article on Operation Iraqi Freedom (April 2010)

US and Coalition Air Operations

As with the Gulf War of 1990-91, the land operations of Operation Iraqi Freedom/Telic took place under an umbrella of Air and Space Supremacy which gave unparalleled freedom of movement, surveillance, communication and interdiction to coalition forces. A fascinating and unclassified report on the full extent of US air operations alone is provided as an appendix to this chapter.

The Kuwait Entry Force, March 2003

This comprised some 248,000 soldiers from the United States, 45,000 British soldiers, 2,000 Australian soldiers and 200 Polish Special Forces. U.S. Central Command reported that as of April 30, 2003, there were 470,000 U.S. personnel deployed, including 55,000 USAF personnel; 2,000 USAF Reserves; 7000+ Air National Guardsmen; 75,000 US

Marines Corpsmen; and, 9,500 USMC Reservists; 63,000 members of the U.S Navy, Coast Guard and USN Reserve; and some 250,000 US Army, Army Reserve, and Army National Guardsmen.

US Land Operations in the South

The main body of US ground forces entered Iraq in strength on 20th March, through a number of crossing points engineered at the Kuwaiti border. In a rapid and ineffectively challenged advance, US army units moved northwest through al Nassiriyah on the route of the main Baghdad highway and reached An Najaf, 60 miles south of Baghdad in four days. US marine units moved northeast towards Al Kut.

The U.S. 1st Marine Division fought through the Rumaila oil fields, and moved north to Nasiriyah – a moderate-sized, Shi'ite dominated city with important strategic significance as a major road junction and its proximity to nearby Talil Airfield. It was also situated near a number of strategically important bridges over the Euphrates River. The US Army 3rd Infantry Division defeated Iraqi forces entrenched in and around the airfield and bypassed the city to the west.

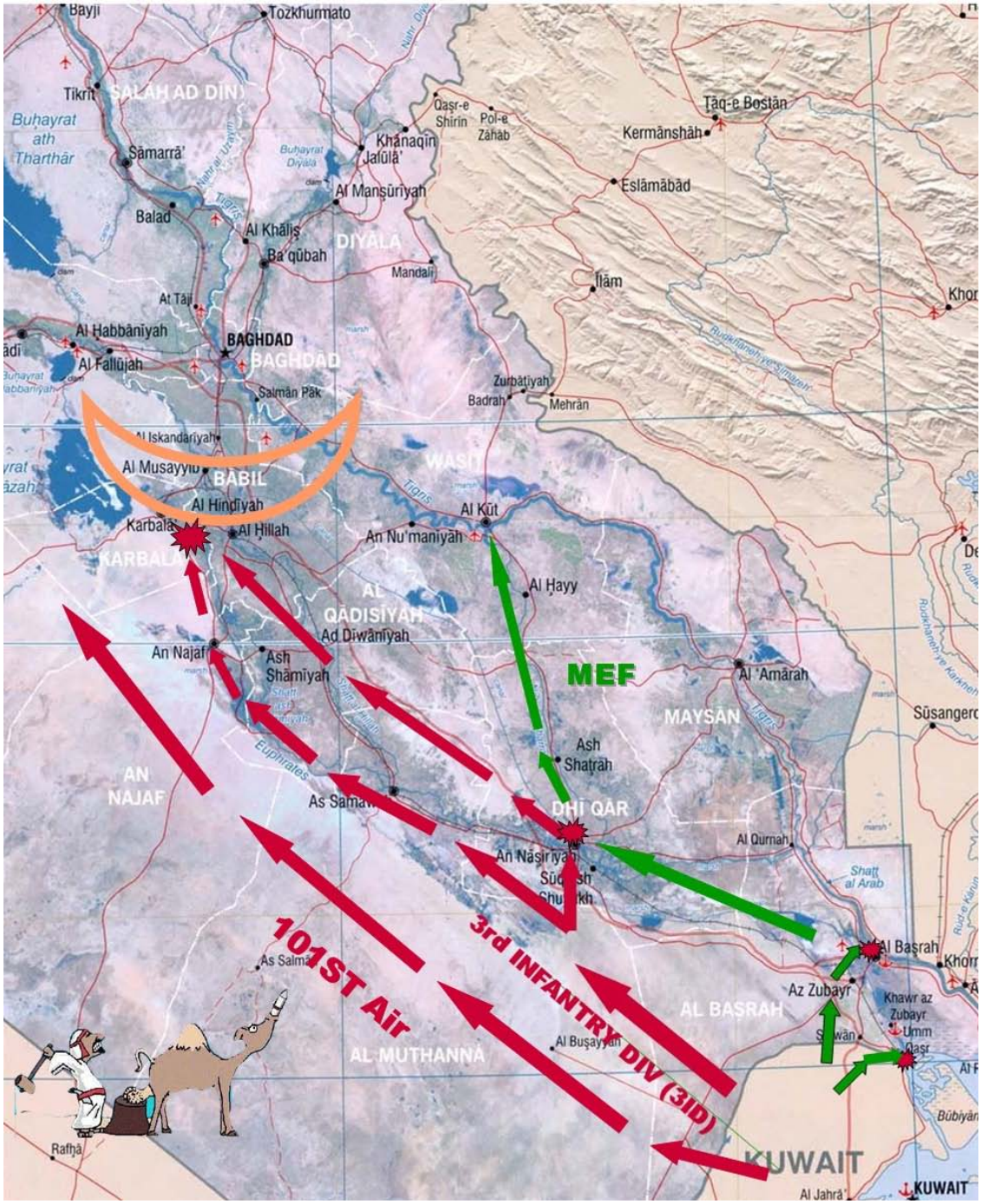
With the Nasiriyah and Talil Airfields secured, Coalition forces gained an important logistic base some 10 miles (16 km) outside of Nasiriyah. Additional troops and supplies were soon brought through this forward operating base. The 101st Airborne Division continued its attack north in support of the 3rd Infantry Division.

By March 28th, a severe sand storm slowed the Coalition advance as the 3rd Infantry Division halted its northward drive half way between Najaf and Karbala. Heavy rains and a sand storm impeded air operations and helicopters with reinforcements from the 101st Airborne, were blocked for three days. There was particularly heavy fighting in and around the bridge near the town of Kufl.

Another fierce battle was at Najaf, where American Airborne and Armoured units with British air support fought a fierce battle in Najaf with Iraqi Regulars, Republican Guard units, and paramilitary forces. The battle lasted from March 24th to April 4th.

US army units then passed through the Karbala Gap southeast of Baghdad and destroyed the Medina Division of the Iraqi Republican Guard before taking Baghdad International airport by 4th April. American military planners anticipated that Iraqi army regulars would employ effective delaying and disruptive tactics, including the blowing of all of the bridges across the Tigris and Euphrates and an effective stand around the town of Karbala, where there was a choke point to armoured manoeuvre between a large lake and the town itself.

Armed incursions known as 'thunder runs' were made into Baghdad along the main highway routes from the south against relatively uncoordinated opposition, and troops entered the central Baghdad palaces on 8th April. On 9th April, the iconic removal of the statue of Saddam Hussein in Baghdad's central square heralded the effective capture of the city, and the northern cities of Mosul, Tikrit and Kirkuk were secured over the next few days. President Bush announced the formal end of major combat operations against the Ba'ath regime and its remnants on 1st May.



Map: General diagram of the approach of US Forces to Baghdad

(Centcom, MapIraqBattle voy.com 32229)

UK Land Operations

There are many excellent detailed accounts of military actions on Op Telic 1, and it is not the purpose of this book to rehearse them. However, an outline briefing is essential to understand the configuration and experiences of those employed in the Medical Role.

The oil paintings of David Rowlands have provided an excellent opportunity to update the core historical material with a pictorial history of UK Land Component Operations seen through his eyes on the ground.

In brief, the UK 1st Armoured Division, comprising three Brigades was launched from Northern Kuwait and from a naval task force in the northern Gulf on 20th March against Basra and the Southern oil fields, as described in the following sections.

- The Royal Marine 3rd Commando Brigade launched its assault across the Al Faw Peninsula.
- The 7th Armoured Brigade launched North towards Basra
- 16 Air Assault Brigade launched to secure the Rumaylah Oilfields.

Meanwhile, Special Forces undertook a range of operations elsewhere, including Western and Northern Iraq. Some of this work has been reported in Mark Urban's 2010 book "Task Force Black".

Long Range Reconnaissance Operations

Modern operational planning places a high premium on long range reconnaissance and interdiction forces for deep target acquisition and observation, and for specific actions against strategic targets. The Long Range Desert Group established a formidable reputation for such operations in the north African desert during the Second World War, and its successors are known to have undertaken a similar role against ballistic missile targets, communications stations and airfields in western Iraq during the First Gulf War, when a number of operations were popularised in mass market books and media coverage; and in the most recent Gulf War, as widely reported in the press and on Internet sites.

In general terms, long range reconnaissance units comprise small numbers of personnel, but they pose specific problems of medical support, because operations take place at a distance from conventional medical facilities, with high mobility and under conditions of security and secrecy.

These risks are minimised by training individual soldiers to a high standard of first aid, and including specialists with advanced training in each subunit or patrol. Recovery of seriously injured soldiers, where possible, requires exfiltration, usually by helicopter, to the nearest suitable treatment facility, which may or may not have been specially established for the duration of the operation using field medical subunits.

Medium range reconnaissance

Mobile medium reconnaissance forces are deployed ahead of conventional forces in the advance to detect opposing forces, to reconnoitre safe routes of movement, and to mark medium range targets for aircraft and artillery.

These operations place the crews of reconnaissance vehicles at particular risk on injury, because their vehicles are lightly armoured for mobility, and because they may stray into 'free fire' zones, making them vulnerable to air attack and to 'blue-on-blue' incidents, as has happened in both Gulf Wars. These risks are further increased by



'Break contact' 30th March 2003: Task Force 7 in the north-western desert of Iraq.

Artist David Rowlands Medium: Oil on Canvas Owner: Special Boat Service



Medium reconnaissance: A patrol of 1 Para and the Household Cavalry in Southern Iraq (MoD)

difficulties with rapid helicopter evacuation by virtue of their forward position. Such exposure has on occasion given rise to extraordinary heroism in the care of casualties, as in the case of Trooper Christopher Finney (See chapter 35 on heroism under fire).

Operations of the British 3 Commando Brigade on the Al Faw Peninsula



Capturing the Manifold Metering Station on the AC Faw Peninsula

Artist David Rowlands Medium: Oil on Canvas

David Rowlands wrote:

> *"During Operation Telic, the liberation of Iraq, on the night of 20th March 2003, 40 Commando Royal Marines, under the command of Lt Col G K Messenger OBE, mounted an amphibious helicopter assault to seize key Iraqi oil infrastructure on the Al Faw peninsula. It took around five hours from H hour until the area was deemed secure, and this painting shows the scene at first light on 21st March.*
>
> *As the first conventional troops on the ground, the strategic significance of the operation was immense. The Commando Group's role in the success of the coalition operation in Iraq was pivotal and profound. In a two-week period of intense operations, it secured vital oil installations, cleared a large expanse of Iraqi held terrain, and defeated a major Iraqi stronghold on the outskirts of Basra".*

The brigade missions were to seize intact the oil infrastructure on Iraq's Al Faw peninsula; to secure the Al Faw peninsula to provide land flank protection to the Mine Counter Measures Task group as it conducted mine clearance operations in the Khawr Abd Allah waterway in order to open the sea route to Umm Qasr; and to seize Um Qasr, Iraq's only deep-water port.

The Iraqi oil distribution system was of particular strategic interest. On the Al Faw peninsula, crude oil passed through a distribution station and four large pipelines that emerge briefly on the beach before running along the seabed to feed gas/oil tanker loading platforms 25 miles offshore.



The Queen's Dragoon Guards: C Squadron, Al Faw

Artist David Rowlands Medium: Oil on Canvas

The marine assault was a joint operation between the sea, land and air commanders, and with the United States Marine Corps (USMC) placing its 15th Marine Expeditionary Unit (MEU) under command of 3 Commando Brigade (3 Commando Brigade) for operations on the Al Faw Peninsula

40 Commando Group sailed to the northern Gulf as part of the Royal Navy's Amphibious Task Group with helicopters embarked and the logistics necessary to support the brigade ashore. Time was set aside en route for amphibious training exercises on Cyprus. The remainder of 3 Commando Brigade moved by air direct to Kuwait, and established in concentration areas in the desert to train, plan and rehearse. 3 Commando Brigade HQ, 40 and 42 Commandos, along with 29 Commando Regiment Royal Artillery, 59 and 131 Commando Engineer Squadrons and other brigade signals, medical and logistics troops were all committed to the operation.

The Al Faw operation was designed as an amphibious and helicopter commando assault at night. On the night of 20th March, the men of 3 Commando Brigade waited in Kuwait and on ships in the Gulf, ready to embark in over 80 helicopters. Days of bad weather, with low cloud and blown sand, meant that weather and light conditions were unsatisfactory. The operation was preceded by a short and intense air bombardment onto Iraqi positions by US FA-18s and AC-130 Spectre gunships.

40 Commando and US forces landed as planned on their three strategic objectives, and captured some 230 prisoners for no loss. Simultaneous landings from air and sea were made by Polish Special Forces onto the gas/oil platforms out to sea.

A second aviation assault by 42 Commando in USMC helicopters, with Cobra helicopter gunships providing fire support, was planned to launch an hour after 40 Commando's

landing. 42 Commando was to land just north of the town of Al Faw, to destroy Iraqi artillery and to secure 40 Commando's flank. The landing sites were bombarded by artillery and naval gunfire from four coalition artillery batteries positioned on the eastern edge of Bubiyan Island, and from four warships off the coast.

42 Commando's insertion started badly in poor visibility, in blowing sand and smoke from fires started the previous day. The US CH-46 Sea Knight helicopter carrying the headquarters of the Brigade Reconnaissance Force crashed as the assault formation started their run in over the sea, and a number of experienced men were tragically killed. The weather was deteriorating and the insertion was aborted. 42 Commando launched a new assault at dawn, using RAF Chinook and Puma helicopters. The landing took place six hours late, onto insecure landing sites - and in some cases miles away from those originally intended - but all objectives were secured without further loss.

That morning, 15 MEU also crossed the Kuwaiti border into Iraq. It bypassed Umm Qasr to seize the port, and then moved north up the western side of the Khawr Abd Allah waterway. It met some stiff resistance during the advance, particularly from the Saddam Fedayin, but achieved all critical objectives ahead of time and to plan.

Following these initial operations, 3 Commando Brigade was involved in a series of engagements which included an assault by 40 Commando on the Abu Al Khasib suburb in southeast Basra (population 100,000). In some areas the brigade met very stiff resistance and was engaged in protracted firefights including hand to hand combat over the period 30th March to 3rd April before the area was secured.

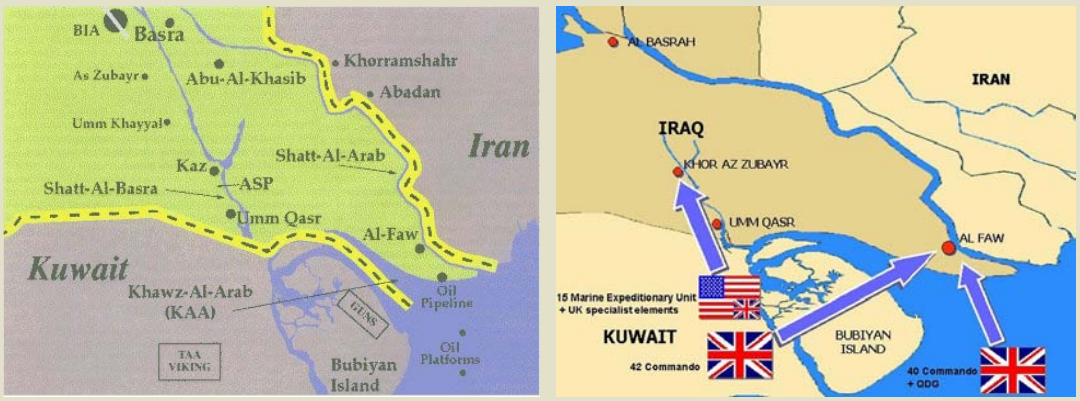


42 Commando helicopter assault on the Al Faw Peninsula

An Abridged Diary of Royal Marine Entry Operations in Iraq

The following report was compiled by Lt Col David King RM and reported in Globe and Laurel, the Royal Marine Corps Journal.

"This synopsis of operations conducted by 3 Commando Brigade during the first two weeks of the war summarised from the reports emanating from various Headquarters and the media, in chronological order. It is by no means an exhaustive list of actions.



Sketch Maps: Directions of early Royal Marine operations in Southern Iraq , 2003 (MoD website)

"Preparations

On arrival in theatre, operational control of the Brigade was transferred from the Commander-in-Chief FLEET to that of Commander 1st (UK) Armoured Division. 3 Commando Brigade took two additional elements under command: the USMC's 15th Marine Expeditionary Unit (15 MEU) and a Squadron of Scorpion light tanks from the Queens Dragoon Guards (QDG).

Following an extensive training package in Kuwait, the Brigade moved forward to Assembly Areas in the final days before 20 March 2003.

40 Commando flew ashore from the Amphibious Task Group in the days preceding the assault, leaving D Coy aboard HMS Ark Royal in reserve.

The initial plan was to offload the QDG by USMC Hovercraft on the Al Faw Peninsula. The QDG remained at sea aboard the USS Rushmore during the initial stages.

In the immediate lead up to the assault, 7 and 8 Batteries of 29 Commando Regiment Royal Artillery were joined by a Battery of AS90 Self-Propelled Guns to form an Offensive Support Group. They moved from mainland Kuwait to Bubiyan Island on 18th March to establish gun lines in support of 3 Commando Brigade objectives in the southern part of the Al Faw Peninsula.

The contribution of the Commando Logistic Regiment must also be noted. It sustained most UK Land Headquarters, Units and Formations through the early stages of the deployment, and ensured that all Brigade Combat and Combat

Supporting Units were fully equipped for operations.

Thursday 20 – Friday 21 March 2003

At approximately 2000hrs, 40 Commando landed by helicopter assault in the area of an oil pipeline south of Al Faw town to secure the oil facilities. The unit encountered light opposition from Iraqi irregular forces.

In the early hours of 21st March, 42 Commando also landed by helicopter on the Al Faw Peninsula to the north-west of 40 Commando, establishing a 'blocking' position. Simultaneously, I 5 MEU crossed the Kuwait-Iraq border into Umm Qasr, to secure the area and to enable humanitarian aid to be landed in the port as quickly as possible.

The Brigade Reconnaissance Force (BRF) also landed by aviation assault on the Al Faw Peninsula alongside 42 Commando. During the course of that move, a USMC CH-46 Sea Knight helicopter crashed just short of the Kuwait—Iraq border, killing all on board, including Major Jason Ward, Capt Phil Guy. WO2 Mark Stratford. CSgt John Cecil, Marine Sholto Hedenskog, Sgt Les Hehir, L/Bdr Llewelyn Evans and OM(C)l Ian Seymour.

"Throughout the assault, indirect fire support was provided from Bubiyan Island and from a naval gun line comprising HMS Chatham, HMS Richmond, HMS Marlborough and HMAS Anzac. Their fire was coordinated by officers of 29 Commando Regt RA.



42 Commando advancing on the Al Faw Peninsula

Saturday 22 March – Day Three

40 Commando continued the clearance of the southern tip of the Peninsular, including the town of Al Faw. The unit continued to meet and defeat Light opposition throughout. Of particular note. A Coy conducted a night assault against a defended building in Al Faw town during which two Marines received burns. Neither injury proved life-threatening.

42 Commando then began moving west, clearing the northern bank of the Khawz-AI¬-Arab waterway aiming to link up with the light tanks of the QDG who had by now crossed the border on land. The aim was to clear the bank of Iraqis to enable mine—clearing of the Khawz-AI¬-Arab, in turn to enable the movement of humanitarian aid into Umm Qasr. 15 MEU continued to quell pockets of Iraqi resistance in the town and port areas of Umm Qasr.

Following the initial landings, the additional Battery of AS9Os returned to the command of 1st (UK) Armoured Division to contribute to the advance of 7 Armoured and 16 Air Assault Brigades. The Batteries of 29 Commando Regt RA moved from Bubiyan Island to the mainland and then by land to the Al Faw Peninsular.

Scattered fighting persisted from Saddam Fedayin militia around Umm Qasr. Royal Navy and US Navy mine hunters continued clearance operations in the southern waterways. Two Royal Navy Sea King Mk 7 Airborne Early Warning helicopters collided over the northern Arabian Gulf, killing the six British and one US personnel aboard.

Sunday 23 March – Day Four

Having completed the clearance of Al Faw town, 40 Commando moved north-west, clearing the southern bank of the Shatt Al Arab waterway which forms the international border between Iraq and Iran. Reaching their established limits in the north of the Brigade Area of Operations, 40 Commando joined the BRF (now incorporating the QDGJ in establishing a 'blocking' position across access routes to the Al Faw Peninsular to prevent Iraqi incursion from Basra. 3 Commando Brigade now held critical oil infrastructure at Al Faw and the port of Umm Qasr. Fighting continued around Basra, and Iraqi forces launched Ababil-100s surface-to-surface missiles into Kuwait.

That position was established by last light. Meanwhile 42 Commando continued to occupy the northern bank of the waterway, providing security for the Royal Navy's mine-hunters.

Meanwhile, there was fierce fighting outside Basra. An RAF GR4 Tornado aircraft returning from an operational mission was shot down near the Kuwaiti border by a Patriot missile battery. Both airmen were killed.

Monday 24 March – Day Five

By March 24th mine clearance operations in the southern waterways were making good progress, with half the route to Umm Qasr made safe. Basra airport was secured.

An Iraqi Armoured Battalion, comprising some 50 T-55 Main Battle Tanks advanced south from Basra into 3 Commando Brigade's Area of Operations. 40 Commando and the BRF, now supported by 29 Commando Regt RA, was tasked with a variety of air and aviation assets in joint attacks against that force. The action resulted in over 20 Iraqi tanks being destroyed, forcing the remainder to withdraw into Basra.

Simultaneously at 0200 Hours 15 MEU commenced a move north along the Shatt-AI-Basra to secure the town of Kaz. This was the final 3 Commando Brigade objective for the initial assault. It was secured on 25 March. Boats of 539 Assault Squadron Royal Marines (ASRM) with support from 42 Commando, began clearing the waterways north of Umm Qasr.

Tuesday 25 March – Day Six

The Brigade Commander moved his Headquarters into Southern Iraq on 25 March. 42 Commando and the BRF continued to maintain their 'Blocking' position in the north to prevent incursions of Iraqi forces onto the Al Faw Peninsular.

After clearing Kaz, 15 MEU was detached from 3 Commando Brigade to move further north. They were relieved in Umm Qasr by 42 Commando, who began an aggressive search and patrol routine across Umm Qasr that provoked a number of minor contacts with the Iraqis. These were prosecuted without loss.

Wednesday 26 March – Day 7

On 26 March 14 Challenger II tanks from 'C' Squadron of the Royal Scots Dragoon Guards were attached to 40 Commando to assist with maintaining the security of the Al Faw Peninsula. They maintained the blocking position, effectively preventing Iraqi forces from moving south from Basra.

42 Commando continued to aggressively patrol Umm Qasr, maintaining the security of both port and town to enable the safe docking of the RFA Sir Galahad. Sir Galahad was delayed by some 24 hours by further Iraqi mines in the waterway.

Thursday 27 March – Day 8

In the north of the Brigade area, the Iraqi forces launched another armoured attack from Basra with 14 T-55 tanks against 40 Commando's position. The Challenger 2s of C Squadron RSDG destroyed all 14 tanks without loss.

South of 40 Commando. 42 Commando conducted a number of complex tasks:

- The unit provided support to 539 Assault Squadron RM (ASRM) in a pre-planned clearance of known Iraqi locations in the area of Umm Khayyal.

- It launched a Company attack against a position of some 30 Iraqis, 10 kms north of Umm Qasr. That assault was successful and conducted without loss.
- The Unit also began humanitarian support by delivering water to villages outside Umm Qasr.
- Within Umm Qasr, '42' also supported the Deputy Brigade Commander in coordinating the delivery of humanitarian aid.

Friday 28 March – Day 9

28th March was a relatively quiet day.

Saturday 29 March – Day 10

The offload of humanitarian aid from RFA Sir Galahad in Umm Qasr was completed. Aid convoys from Kuwait were escorted into Umm Qasr, Al Zubayr and Safwan.

The bodies of those personnel lost with the CH-46 accident on the night of 20/21 March were returned to the UK at RAE Brize Norton. The Corps was represented by Commandant General RM, by Pallbearers from Parent Units and a Royal Marine Band.



'Thrown Tracks'

Artist David Rowlands Medium: Oil on Canvas

David Rowlands records that:

"Between 27 March and 4 April 2003, C Squadron The Royal Scots Dragoon Guards was attached to 40 Commando Royal Marines on the Al Faw peninsula. Corporal Justin Simons was the squadron's recovery mechanic. Corporal James Garrett was the commander of the squadron's Challenger Armoured Repair and Recovery Vehicle (CRARRV), and the technician was Corporal Rick Parker.

At dusk on 29 March the squadron was committed to Operation JAMES, a 40 Commando clearance operation around Abu Al Khasib. During the late afternoon of 30 March, 2nd Troop C Squadron was providing support to a Royal Marines company clearance operation. A Challenger 2 tank became decisively engaged by the Iraqis, armed with rocket-propelled grenades, machine guns and mortars. Both its tracks were thrown and it was disabled to the side of a narrow causeway, attracting more concentrated fire. A CRARRV commanded by Corporal John Morgan was initially tasked to recover the tank. After hours of intense Iraqi attacks whilst preparing and connecting to the Challenger, its winch became inoperable and it had to withdraw. After safely evacuating two members of the stricken tank and his own crew, Corporal Morgan then joined the squadron CRARRV commanded by Corporal Garrett, who was now tasked to complete the recovery.

As darkness fell and under attacks from rocket-propelled grenades, small arms and mortar fire, Cpl Simons and Cpl Morgan took charge of the recovery operation. They both dismounted, and Cpl Garrett provided close protection by operating the General Purpose Machine Gun (GPMG) from his turret, while the Iraqis mounted numerous attacks. This is the period depicted in the painting.

The CRARRV and the Challengers discharged their smoke to cover the operation. Major Biggart, the Squadron leader, requested 29 Commando Regiment Royal Artillery to fire smoke rounds onto the position.

The tank was successfully winched onto the road, but due to the poor light, Iraqi action and confusing situation, the tank slipped down the other side of the embankment and became stranded in an even more difficult position from which to recover it. For the next six hours, in complete darkness, Cpl Simons struggled to break both tracks conventionally before finally resorting to arc-welding equipment, a brave decision, as the light given off highlighted his position. This was unsuccessful, and it was decided to try the unorthodox by organising a CRARRV on CRARRV recovery, which succeeded in dragging the tank back to safety, nine hours after it had become disabled.

Corporal Garrett and Corporal Simons were both Mentioned in Despatches for their leadership, calmness and disregard of their own safety.

I visited the scene shortly after this action with Major Biggart. The track marks in the crumbling earthen banks on the slope of the causeway and the marshy ground at the bottom clearly showed where 'Two One' had been extricated from its predicament. While we stood here I was able to make a sketch of the terrain. When I was in bivouac with the Royal Scots Dragoon Guards, Cpls Simons and Garrett explained the recovery process and showed me their CRARRV. Contrary to orders, the REME flag was flying from an antenna throughout the action".

Sunday 30 March – Day 11

In the early hours, 40 Commando, supported by L Coy from 42 Commando, commenced an assault on an Iraqi Battalion to its north in the town of Abu Al Khasib, some 10 kms south-east of Basra. Codenamed Operation James, the aim was to close access routes to the Al Faw Peninsular while further degrading Iraqi forces. A 15-hour battle ensued during which 40 Commando took over 200 Iraqi prisoners of war and a number of Iraqi senior officers. It sustained a number of injuries from vehicle accidents and indirect fire, but there were no deaths.

The remainder of 42 Commando continued to patrol Umm Qasr and the waterways of the interior, hunting down Surface to Surface Missile launch sites, using the boats of 539 ASRM and 9 ASRM (from HMS Ocean) and assisted by Z Coy, 45 Commando. During that clearance, a Landing Craft (LCVP 5) from 9 ASRM was hit by a rocket propelled grenade that caused five casualties. Marine Chris Maddison died of his wounds.

Maj Steve Ballard of the UK Landing Force Command Support Group (UKLF CSG) collapsed suddenly and died on 30 March.

Monday 31 March – Day 12

In comparison to recent events, this was a relatively quiet day across the Brigade Area of Operations although two Surface to Surface Missiles (SSMs) landed in the Brigade area. 40 Commando concluded Operation James. 42 Commando continued to patrol Umm Qasr, finding a cache of 23 Iraqi sea mines in containers. 539 ASRM, supported by Z Coy, 45 Commando. continued to patrol and secure the waterways to the north of Umm Qasr, finding a number of small boats, some of which contained weapons.

Tuesday 1 April – Day 13

This was a relatively quiet 24 hours. 40 Commando secured their gains in the Abu Al Khasib area. 42 Commando continued to patrol Umm Qasr and the waterways and marshes to the north, looking for the launch sites of Iraqi Surface to Surface Missiles. In Umm Qasr, the Deputy Brigade Commander and a small staff continued to coordinate the distribution of humanitarian aid to the local population. 29 Commando Regt RA engaged a number of Iraqi mortar positions with Counter-Battery fire overnight.

In less exposed areas, units now patrolled in berets to defuse tension. It was hoped that this would encourage the local population to interact more readily.

Wednesday 2 April – Day 14

The Brigade commenced a rolling 'refurbishment' programme. Units withdrew personnel to the Commando Logistic Regt where weapons, vehicles and equipment were serviced and individuals were able to receive centralised feeding and a period of uninterrupted rest.

40 Commando remained 'firm' in securing their most recent gains.

42 Commando continued to patrol aggressively to isolate and destroy any remnants of resistance. The unit captured 7 Ba'ath Party activists in a raid. At the northern end of Umm Qasr, a crowd of some 400 looters was dispersed by Royal Marines.

7 and 8 Batteries of 29 Commando Regt RA remained alert in providing surveillance assets and indirect fire support.

With Z Coy, 45 Commando, '539' patrolled waterways across the Brigade area of operations.

Thursday 3 April – Day 15

C Sqn QDG were rested and replenished. The Brigade Commander issued every member of the QDGs with the 3 Commando Brigade 'flash' in recognition of the Squadron's outstanding support over the previous 14 days.

40 Commando remained 'firm' in the north of the Brigade area of operations. 42 Commando continued to patrol robustly and successfully prosecuted a small number of contacts with irregular Iraqi forces. 539 ASRM continued to patrol waterways within the Brigade area.

The Brigade seized every opportunity to defuse tension and began to establish links with the population, wearing berets rather than helmets; distributing humanitarian aid; providing engineering support and medical assistance to civic services; and playing two football matches against local teams. J Coy 42 Commando were defeated 9-3 by the Az Zubahir team and the also Corps lost 7-3 to the local Umm Khayyal side. CO 42 Commando demanded a re-match.

Friday 4 April – Day 16

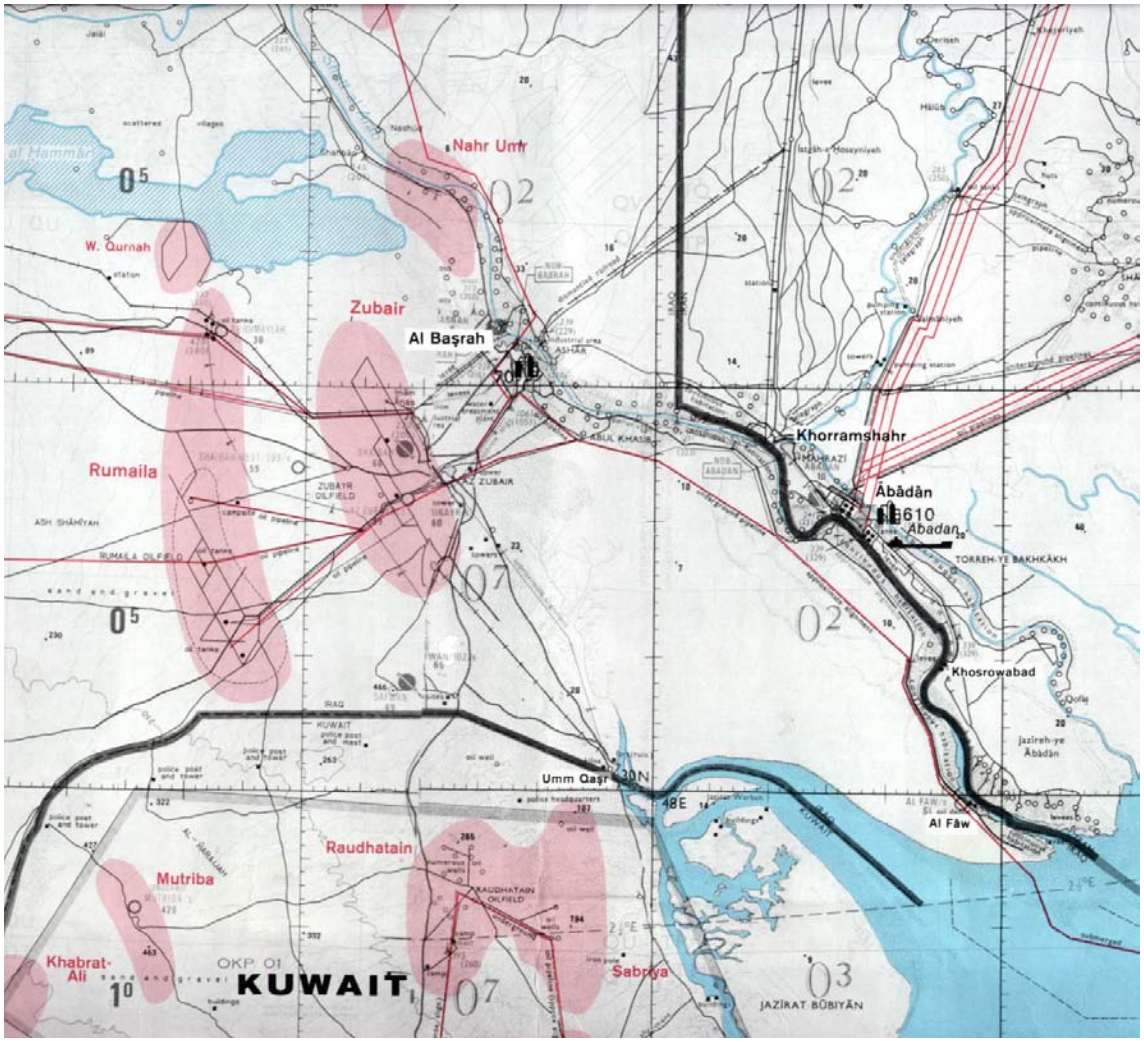
Temperatures rose significantly across the area of operations, in excess of 38 Deg C.

At Brigade HQ, time was spent de-conflicting and coordinating with the other formations within 1 (UK) Armoured Division. Challenger 2s of the Falcon Squadron of the Royal Dragoon Guards (RDG) relieved those of C Sqn Scots Dragoon Guards (SCOTS DG), under the tactical command of 3 Commando Brigade.

All Brigade units conducted extensive patrol programmes to dominate the area, prevent activity by Ba'ath Party activists and to establish links with the locals to restore civic normality as quickly as possible. Every effort was being made to respect the sanctity of Moslem Holy sites. 539 ASRM established links with local Iraqi fishermen on the waterways during the course of patrols. C Coy, 40 Commando spent 24 hours at the Commando Logistic Regiment's 'refurbishment' centre.

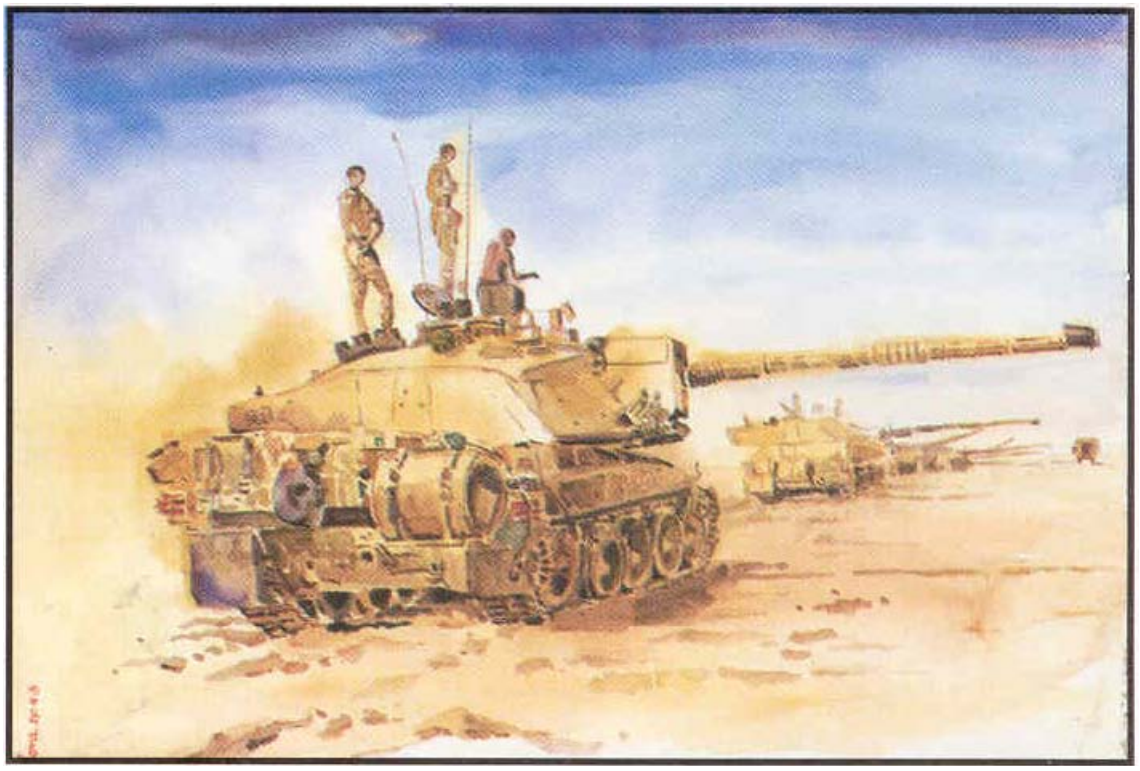
The Brigade settled into a more routine programme of patrolling and assisting in the distribution of aid. There was a shift of emphasis from warfighting to the establishment of 'normality'. Units built relationships with the local population to defuse tension and inspire trust. The Brigade was nevertheless operating in a volatile and fluid environment in which the possibility of contact with an irregular Iraqi remained a constant threat.

Abridged from the Globe & Laurel May June Edition 2003



Key geographic features and the layout of the oilfields in Southern Iraq, 1st UK Armoured Division area of operations, Op Telic, 2003

1st UK Armoured Division Operations



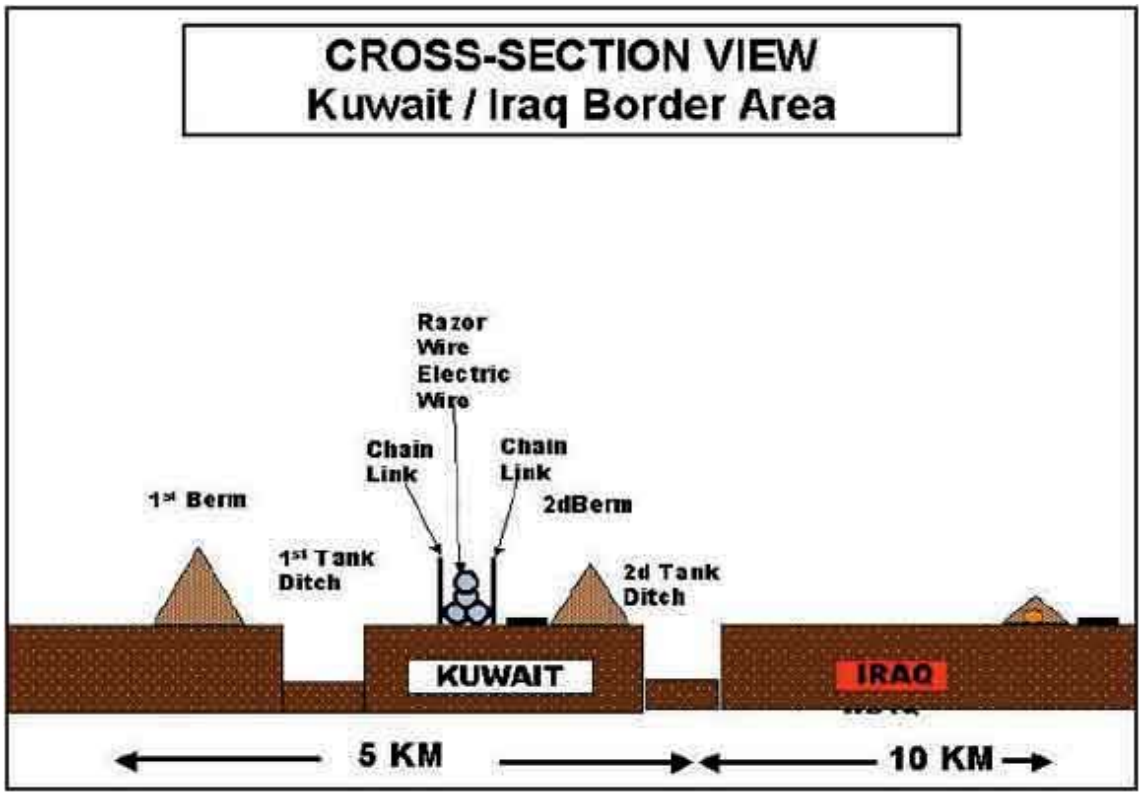
Cyclops

Gora Pathak 2003

The Division had a number of objectives. The Iraqi armed and irregular forces had to be rendered unable to interfere with coalition operations; the southern oilfield infrastructure had to be seized intact and defended; the port of Umm Qasr captured and opened for use; the Ba'ath regime had to be removed from control of urban areas (primarily from Basra); and ground had to be held in order to protect the right flank of the US advance on Baghdad.

7th Armoured Brigade was tasked to seize the critical oil infrastructure in southeast Iraq, particularly the Az Zubayr pumping station. They were then to secure Basrah International Airport prior to securing Basrah, through a complex operation coordinated with the other Brigades.

16 Air Assault Brigade were to secure critical oil infrastructure in the Rumalyah oilfields, including gas and oil separation plants and pumping stations. They were to provide a security screen on the northern boundary of the Divisional area of responsibility.



Schematic of the Kuwaiti border defence barrier

(Source /en.citizendium.org/wiki/Image:Iraq2003_border_drawing.jpg)

Entry Operations

20th March 2003

In the south, attacks against Iraqi artillery, missile and air defence systems began on 19th March, and the ground invasion was launched on 20th March. In retaliation, the Iraqis launched a number of surface-to-surface missiles into Kuwait, placing coalition forces on a high state of alert for unconventional weapons attack.

The main operation of the "shaping the battlefield" phase began with breaking through a 10km wide Iraqi defensive line, on March 20, by US and UK units, including 7 Armoured Brigade and 16 Air Assault Brigade from forming up positions and holding areas south of the border in Kuwait, where the motorway standard of roads excellent freedom of movement were. This phase lasted until March 23.

The major units were positioned along the Kuwait-Iraqi border so as to “cross the "berm" and break out onto the major highways and entry routes into Southern Iraq . The berms were earthen walls that made up part of the physical barriers at the border. Much of the barrier was in Kuwaiti territory.

Breaching the berms included the creation of lanes through the defensive line, which was done by combined arms and engineer units, as illustrated in David Rowlands’ following paintings.



Quo Fata Vocant

Artist David Rowlands Medium: Oil on Canvas

21 March 2003: First Fusiliers Battlegroup leading 7th Armoured Brigade into Iraq. The meaning of the regimental motto is 'Wherever the fates call.'



Crossing Triangle 2A

Artist David Rowlands Medium: Oil on Canvas

21st March 2003: 39 Armoured Engineer Squadron

21st March 2003:

David Rowlands recalls that;

"26 Armoured Engineer Squadron was the lead element of 15th (US) Marine Expeditionary Unit. After a reconnaissance of the Iraqi side of the bund by the reconnaissance sergeant (Staff Sgt McLean), an Armoured Vehicle Royal Engineers (AVRE) made an 8 metre-wide gap with its dozer blade, while Field Sections defiled the approach route. An Armoured Vehicle Launching Bridge (AVLB) drove through the breach and laid its No.10 Bridge across the anti-tank ditch, to allow the vanguard of 2/1 Battalion Landing Team to advance into Iraqi territory at 0254 hours on 21st March, 2003. The breach was known as Breach Point 3.

The Warrior of the squadron commander (Major Jonathan Acornley RE) still bears the painted letters 'KFOR' on its armoured sides, a legacy of its service in the NATO-led Kosovo Force. The AVRE (call sign 31A) was fitted with a dozer blade called a Bulk Earth Moving Attachment (BEMA), and was painted desert yellow and green. It was commanded by Corporal Harris, driven by Sapper Thomas, with Lance Corporal Jameson on the radios and Sapper Grafton as crewman.

The AVLB (call sign 31D) was painted desert yellow and green, and was commanded by Corporal Johnson, driven by Sapper Bardsly with Sapper Nichol at the radios. A US Marine Corps Surveillance and Target Acquisition Team with snipers has deployed from a High Mobility Motorized Vehicle ('Humvee') to the bund. They wear US woodland camouflage NBC suits and body armour".



"C Squadron, The Queen's Royal Lancers at Bridge 3 Shatt al Basrah Waterway on the evening of 22 March 2003"

Artist David Rowlands Medium: Oil on Canvas

7th UK Armoured Brigade Operations

By the fourth day, 7th Armoured Brigade held the bridges over the Shatt-Al-Basrah waterway to the west of Basra, while under constant attack from Iraqi conventional and irregular forces. Other elements of 7th Armoured Brigade were under heavy fire from Iraqi irregulars operating in and around the town of Az Zubayr (population 100,000). It maintained the initiative through intelligence-led precision strikes and raids on regime activists, while building links to the civilian community. Checkpoints around Az Zubayr controlled movement and provided a point of contact for local people to talk and pass intelligence to coalition forces.



'Zulu !'

Artist David Rowlands Medium: Oil on Canvas

David Rowlands records that:

> *"Zulu Company of the First Fusiliers Battle Group in the attack on Bridge 4, Basra, on the evening of 22nd March 2003. I travelled to this spot in Sgt Jason Wellard's Warrior, and sketched the soldiers as they took up position here. Jason, the 12 platoon sergeant, carrying a 350 radio on his back, controls the fire support group. He is kneeling with his SA80 rifle in hand, giving target indications to the soldier beside him who is firing illumination rounds from the 51mm mortar. Beyond them the platoon commander, Lt Chris Rees-Gay (with radio pack) and three section commanders are planning the attack. Firing its chain gun and flying the red and white pennant is 'Zero Bravo', the command Warrior of the Z Company commander, Major McSporran. The four Warriors of 10 Platoon are crossing the bridge; the commanders of the two leading Warriors fire Schermuly flares to illuminate the ground in front of them".*



Howay the Lads

Artist David Rowlands Medium: Oil on Canvas

23rd March 2003: Y Coy 1st Fusiliers BG assault Bridge 2 over the Shatt al Basrah waterway



"Corporal CJG ('Fred') Comber MC and Crew in Action on 24 March 2003: Corps of Royal Electrical and Mechanical Engineers at Bridge 4 over the Shatt al Basrah waterway, Iraq".

Artist David Rowlands Medium: Oil on Canvas

March 24th – Day Five

Two British soldiers were killed an attack on UK military vehicles in southern Iraq, and another was killed in action at Al Zubayr.

March 26th – Day Seven

An Iraqi regular brigade of some 2000 troops and 1000 paramilitaries continued to hold Basra, while British forces conducted raids and artillery fire missions. In the evening, a column of more than 70 Iraqi tanks and armoured vehicles attempted to break out of Basra under cover of darkness and poor weather. A running battle ensued, in which UK air and ground forces contained the breakout.

Over a week of operations, 7th Armoured Brigade gradually built up battle group-sized lodgements which then expanded.



"Light Infantry in Iraq"

A and D Companies of 1st Bn The Light Infantry were deployed on Operation TELIC 1. The artist drew soldiers of the Light Infantry rapidly dismounting and attacking from Warrior armoured personnel carriers, and painted this scene from sketches he made on the spot in Az Zubayr.

Artist David Rowlands Medium: Oil on Canvas

March 27th – Day Eight

14 Challenger 2 MBTs of the Royal Scots Dragoon Guards encountered a similar force of T-55s and destroyed 14 of the Iraqi tanks without loss. The next day, Iraqi forces attacked Basra International Airport, now in UK hands. The attack was repelled.

By March 27th, 7th Armoured Brigade maintained a loose encirclement of Basra.

At Umm Qasr, Royal Australian Navy divers and US Navy forces continued to clear mines from the shipping channel.

March 28th – Day Nine

Forces captured the Basra oil refinery and RFA Sir Galahad docked at Umm Qasr with relief supplies.

As early as 1st April, there was thus a complex mix of operations taking place in the UK sector, with warfighting in forward positions against Iraqi regular and irregular forces, and peacekeeping operations in rear areas.

Jeanette Oldham reported in The Scotsman on 2nd April 2003 that:

Press report: Basra's last-stand militia using five-year-olds as human shields

"Pro-Saddam Hussein militia in Basra are using children as young as five as human shields and threatening men with death if they do not fight for them, British troops revealed yesterday.

Sergeant David Baird, a tank commander, told Martin Bentham, a journalist with the Sunday Telegraph newspaper, that he had seen at least four or five children, aged between five and eight, being grabbed by the scruff of the neck and held by Iraqi fighters as they crossed a road in front of his tank. He said he was "sickened" by the tactic adopted by the Iraqis who moments earlier had been firing rocket-propelled grenades at him.

Sgt Baird, 32, from Kilwinning, Ayrshire, who commands a Challenger 2 tank from C Squadron of the Royal Scots Dragoon Guards battle group, said he was forced to halt any retaliatory fire because of the danger of killing the children.

"They [the militia] were crossing the road to try and outflank us on the left and as they crossed, four or five of them grabbed kids by the scruff of their necks and dragged them across with them," he said. "They were using them as human shields so that I had to stop firing." The children were only five to eight years old. There were lots of women and children there. It was a busy crossroads, but they didn't seem to care. I am married with a son of nine months and I just felt disgusted. In this part of the world, it seems that life is not held in the same way as we regard it. It was terrible."

The incident happened during a battle on Sunday fought by Royal Marines and tanks from the Royal Scots Dragoon Guards to the south of Basra which resulted in the capture of two Iraqi villages.

British forces are learning of the desperate situation inside Basra from the hundreds of civilians fleeing the city. Young men told how the ruling Baath Party militia has rounded up an entire generation of male residents in the city and ordered them to fight the British and Americans. Anyone refusing is shot. Two men in their 30s, who escaped and asked for asylum, told how they fled because they feared their families would be killed if they were found hiding in their homes.

Captain Ken Jolley, a British Army officer, said the two men had begged to speak to military officials at a vehicle checkpoint on a road out of the city. "The government is trying to round up all able-bodied males to fight with weapons," he says they told him. "Anyone not doing it is being executed."

He said the men were two of several giving information to the army in return for food, water or protection from their own leaders. They were taken away to be interviewed. British Army officers said that they would probably be treated as displaced persons.

British military officials have suspected for several days that Iraqi fighters were being coerced into war, either by bribery or death threats against them and their families. But Abdul-Baqi Saadoun, the second-highest ranking Baath Party official in the region, claimed at the weekend that "holy warriors are rushing to die or be martyred".

Stories of atrocities are also starting to emerge. One mother told British medics that her 12-year-old son was among dozens of children gunned down by death squads. He was shot in the liver and several times in the stomach in Az Zubayr, just outside Basra, and was being treated aboard the British hospital ship, RFA Argus.

Lieutenant Commander Nigel Bassett, the ship's interpreter, said: "His mother says he was definitely shot by Iraqis and there were another group of children in the same place who were all gunned down by Iraqis. "It seems there was an area of the town where people were leaving or going to get food to assist the coalition and there was a group of tearaways who came in and started indiscriminately shooting, trying to teach people not to co-operate."

A correspondent for al-Jazeera, the Qatar-based satellite channel, reported that schools and administrative offices in Basra were closed yesterday, by order of the Iraqis, to avoid mounting civilian casualties caused by the fighting.

Tamara Rafai, a spokeswoman for the International Red Cross, in Kuwait, said medical supplies in Basra were beginning to run low and fresh stocks were urgently needed. Ms Rafai said everyone in the city now had access to at least some clean water at some point during the day. But she warned: "We are very concerned. Our teams are visiting hospitals where the injured and dead have been taken and they need medical and surgical materials - urgently. The hospitals are dealing with more wounded people, a lot of people every day, a lot of civilians."

Meanwhile, the 7th Armoured Brigade - the Desert Rats - who surround Basra from the north-west down to the south-east, continued to man checkpoints across the bridges that span the canal to the west of the city. They allowed civilians to come and go and tried to glean fresh intelligence on the situation inside the city. For almost a week, the soldiers have exchanged artillery fire with the irregular forces still inside the city.

They have already made gains in the outskirts of the city, including through a major operation involving 600 Royal Marines from 40 Commando. Earlier this week, the coalition managed to mount lightning raids into the city centre to discomfit and demoralise the Iraqi militia.

"Officials from the United States and Britain have acknowledged the expected uprising against the Iraqi leader by Shiite residents of Basra and other southern towns in support of coalition troops has not materialised to any large degree. But members of 40 Commando who are on the streets of the suburb of Abu al-Khasib, yesterday said local people were pleased to see them. Securing the area is a key part of the coalition plans to prevent Iraqi forces escaping from Basra and halting aid convoys.

16 Air Assault Brigade Operations

Four days into the campaign the Iraqi 51st Division had been removed from its defence of the oilfields. 16 Air Assault Brigade held the vital oilfield at Rumaylah and threatened Iraq's 6th Armoured Division to the north of Basra to such an extent that it could not interfere with coalition operations.



"Crossing the North Rumaylah Bridge, Iraq, 25-26 March 2003: 3rd Bn The Parachute Regiment Battle Group"

Artist David Rowlands Medium: Oil on Canvas

By March 27th 16th Air Assault Brigade was securing the Ramaila oil complex.

David Rowlands records that:

> *"The Iraqi Army had tried to demolish this strategically important bridge with explosives, but only succeeded in dropping one of the spans. On 23rd March, 200 kgs of explosives that failed to detonate were cleared from a pier of the bridge. 9 Parachute Sqn RE started constructing a Medium Girder Over Bridge (MGOB). This was followed by a 38 meter un-tensioned BR Long Span (LS) General Support Bridge (GSB), built across the dropped span by 64 HQ Sqn, 28 Engineer Regiment. This was the first operational deployment of the LS GSB, which is built using the Automated Bridge Launching Equipment (ABLE).*
>
> *On 31 March (D+12), 23 Amphibious Engineer Sqn provided an M3 ferry crossing at North Rumaylah in support of 16 Air Assault Brigade's expansion north. This allowed AS90 self-propelled guns and support vehicles of D Battery 3 RHA to cross the Hawr al Hammar Canal. The AS90s were too heavy to cross the General Support Bridge.*
>
> *The M3 Amphibious Bridge is a Close Support Bridge consisting of units (known as 'Rigs') which can drive on land, have good cross-country ability and can float to form ferries, or link together to form floating bridges. The first operational deployment of M3 ferry rigs had*



"1st Bn The Royal Irish Regt in the Rumaylah oilfields"

Artist David Rowlands Medium: Oil on Canvas



"The North Rumaylah Crossing, March 2003"

Artist David Rowlands Medium: Oil on Canvas

occurred on the Shatt al Basrah canal at Crossing Point ANNA. It was provided by a troop of 23 Amph Engr Sqn, 28 Engineer Regt, supported by 59 Independent Commando Sqn RE and 131 Indep Commando Sqn RE (V).

I crossed this bridge in a Land Rover with the OC and CSM of A Company 3 PARA. We stopped on the North bank beside the bridge so that I could have a good look around it. At bottom right I have painted Major David Moreton, OC 23 Amphibious Engineer Squadron; Troop Staff Sergeant Roger Smith; and Squadron Sergeant Major Quinn. 28 Engineer Regiment was commanded by Lt Col C N R Skeat."



"Cyclops Squadron of the 2nd Royal Tank Regiment Raiding into Az Zubayr, Iraq, at midday on 26 March 2003"

Artist David Rowlands Medium: Oil on Canvas



"The North Rumaylah Crossing, March 2003"

Artist David Rowlands Medium: Oil on Canvas

David Rowlands records that:

> *"During Operation TELIC 1, C Squadron of The Royal Scots Dragoon Guards was re-grouped from 7th Armoured Brigade (which was then south of Basra city) to 3 Commando Brigade on the Al Faw peninsula. Following a night amphibious river crossing and advance to contact across the Al Faw marshes, the lead tanks of the Squadron assaulted the first objective, code-named TAKU. In the early morning mist, after passing a huge column of black smoke from a burning oil pipeline damaged by artillery, they engaged Iraqi armour whilst coming under fire from the groves of date palms to their left flank.*
>
> *I spent some time with the Regiment in the desert, and travelled with the C Squadron Leader (Major Jonathan Biggart) to Objective TAKU, where I sketched the scene of the action, the check-point and the destroyed Iraqi tanks".*

The story of 16 Air Assault Brigade's advance is told pictorially in Dr Duncan Gray's photoessay of the action of 16 Close Support Regt.

Consolidation around Basra

Patrols beyond Basra resulted in the seizure of a cache of 56 surface-to-surface, short-range ballistic missiles, and four missile launchers in the vicinity of Al Zubayr. By 1st April the Brigade held Az Zubayr, where the irregulars had been killed, captured or had fled. Similar actions around Basra at company, squadron, platoon and troop level were combined with precision attacks against regime targets by air, aviation and artillery. This weakened the Iraqi military resistance. There was no formal siege of Basra, but the disruption and piecemeal destruction of the regime within the city strengthened the resolve of local Iraqi civilians to complete the process. Raids on 4/5th April significantly weakened the Ba'ath leadership in the city. The conditions were set for full entry into Basra on 6th April - Day Eighteen. The limited resistance was quickly overcome. The protection of the Challenger tanks and Warrior armoured infantry fighting vehicles kept casualties to a minimum, although in some places irregulars fought fanatically. Three British soldiers were killed in action.

The BBC News reported on Sunday, 6 April, 2003 that:

> **UK troops storm Basra:**
>
> "British troops have bombarded the headquarters of Iraq's Baath party as the massive coalition assault moves into the centre of Basra.
>
> The thrust into the southern Iraq city on Sunday will deliver the "liberation of Basra", British forces say. Television reports put troops from the Royal Scots Dragoon Guards and the Black Watch at the heart of Iraq's second city.
>
> In the south west of the city, Royal Marine Commandos spearheaded a second wave of attacks on Sunday afternoon. The elite forces began their arm of the pincer movement with heavy shelling at about 1530 local time (1330 BST).

"This is the liberation of Basra we've been planning for," British forces spokesman Group Captain Al Lockwood told BBC News Online.

The first major assault began at dawn. The 7th Armoured Brigade, the Desert Rats, stormed the city with several thousand troops and hundreds of tanks in a bid to take control.

Three units, the Royal Scots Dragoon Guards, Royal Fusiliers and the Black Watch, advanced into the city, meeting only "isolated pockets" of resistance, correspondents say. The airport has been secured.

The dramatic push follows days of caution while the mood of Iraq's second biggest city and its defences were assessed. It remains unclear how many Iraqi militia remain in Basra. British troops say they are being welcomed by civilians waving, cheering and sounding the horns of their cars. But Iraqis wearing civilian clothes have also thrown a bomb into a building where marines were taking cover.

Captain Roger McMillan of the Royal Scots Dragoon Guards told BBC News no casualties had been suffered and added this was a vindication of the British policy of "advancing slowly and softly as opposed to hitting the door from day one".

The situation was becoming "increasingly benign", he added. "We have pushed on the door of Basra and it opened. "We are going to be staying."

Heavy fighting erupted as the sun rose at 0200 GMT. British tanks and American Cobra helicopter gunships repeatedly pounded a factory complex as Iraqi militiamen responded with machinegun and sniper fire. While the fighting raged, looters descended on the building to steal whatever they could lay their hands on.

Then, just after dawn, RAF Chinook helicopters flew in reinforcements of Royal Marines. Group Capt Lockwood said the resistance encountered had been "generally disorganised, with no real command and control". And it appeared Basra's Baath party leadership had been eliminated or fled, he added.

A suspected suicide bomber handed himself over to British troops in the suburbs the city. The man, who was in his late 40s or early 50s, walked up to gates of a Royal Marines' base carrying five hand grenades. He claimed to have been behind at least two attacks on the base in recent days but had had enough, an officer said.

One of several people leaving Basra told BBC News there had been very little resistance to the British advance. "A lot of fighters have run away. "There was a little bit of shell fire - but now it is quiet."

The troops have been ordered not to destroy or desecrate Iraqi flags or war memorials. Only symbols of the Iraqi regime are deemed justifiable targets.

On Sunday US Central Command spokesman Jim Wilkinson said the bodies of bodyguards had been found after British forces attacked a Ba'ath party building in which Ali Hassan al-Majid, was believed to be hiding. Thousands of people reportedly cheered when the building was destroyed".



"The North Rumaylah Crossing, March 2003"

Artist David Rowlands Medium: Oil on Canvas

David Rowlands records that:

"On 6th April 2003: After the port of Umm Qasr was secured by the Royal Marines and US Marines, the main US forces sped north, leaving 1st (UK) Armoured Division to shadow the American forces and deal with the city of Basra. At first, taking the city itself was not part of the plan, but in order to overcome Iraqi military resistance, and provide a secure environment whereby normal life and civil liberty could return as quickly as possible, it became clear that the city would have to fall if the coalition was to achieve its objectives.

My painting shows Challenger 2 tanks of 2nd Royal Tank Regiment advancing along one of Basra's dual carriageways. Snipers dismount from a Warrior of 1st Bn The Black Watch, to take up positions on rooftops and balconies. Like the other Platoons in Support Company, they are a Battle Group asset so they are directly tasked by the Battlegroup Commander. Their job is to harass the Iraqi by taking long-range shots at key targets. In Basra, I sketched Lance Corporal 'Pedro' Laing (with the moustache), a Black Watch sniper. He was later awarded the Military Cross for his action in Az Zubayr.

Sanctions against Saddam Hussein's Iraq meant that 'Pepsi' and '7 Up' did not trade there, but that didn't prevent resourceful shopkeepers from advertising their own products as such!"



Challengers of 1st Armoured Division outside Basra

1st Armoured Division, commanded by Major General Brims, gradually dominated the terrain around Basra without entering the city. Basra International Airport, west of the city, was seized. The town of Az Zubayr was cleared. Several operations using close air support hit precise targets in Basra.

16 Air Assault Brigade guarded the northern approaches to Basra, while the Royal Marines cleared the southern suburbs. Access to Basra from the west was governed by the bridges over the Shatt al Basra waterway. Bridge Two and Bridge Four were seized, allowing the battle groups of 7th Armoured Brigade to launch raids of limited duration using Warriors and Challenger 2s, charging deep into the city, then withdrawing over the secured bridges to the west. Their armour plates were able to resist the plentiful RPGs, mortars and small arms fire from the local militia.

The raids confirmed the growing British dominance of Basra, and early on 6th April the Divisional Commander ordered a three-pronged attack on the city. As darkness fell after a day of fighting, the raiders stayed put, while the Iraqi attacked them out of the gloom. On 7th April, 3 PARA advanced on foot into the narrow streets of the old town of Basra, which was secured without a shot being fired. Cheering crowds greeted the British, and Basra was taken.



"No.1 Company, 1st Battalion Irish Guards on Objective ELYSIUM, Basra"

Artist David Rowlands Medium: Oil on Canvas

David Rowlands also records that:

"On 6th April 2003 the Irish Guards Battlegroup attacked Objective ELYSIUM (Basrah College of Literature). In the afternoon, No 1 Company was tasked to clear and secure the Objective, and encountered numerous Iraqi who were firing small arms and rocket-propelled grenades. Large numbers of the Iraqi were cleared from buildings.

By last light, it was believed that all of the Fedayeen had been cleared from the complex. A night-time defensive posture was adopted but, nonetheless, Piper Muzvuru and Lance Corporal Malone were killed by Fedayeen hiding in the buildings. I have depicted these two soldiers and their comrades dismounting from their Warrior (call sign 'One Three').

Some of the soldiers have affixed green fabric shamrocks, (made by the children of the British School at the Battalion's base in Munster), to their helmets. The men's Bergen rucksacks are strapped to the side of the Warrior.

While I was with the Irish Guards, I sketched the vehicles and these buildings on the spot. The large sky-blue dome of a nearby mosque was a distinctive feature. Loose pages of students' manuscript books were scattered over the ground; as I picked some up it was poignant to read their compositions and grammar exercises in well-written English".

By 7th April, Basra with its population of 1.25 million people, was released from control by the Ba'ath regime. CNN Press reported on Monday, April 7th, 2003 that:

British 'take control' of Basra

"British forces have made their largest incursion into Basra, setting up a base inside Iraq's second-largest city.

The British military reported three of its soldiers were killed as forces moved to secure the strategic city of Basra in an early morning raid on Sunday. British officials stressed their forces had not taken full control of the southern Iraqi city -- they were meeting pockets of resistance throughout the area -- but said they were "making good progress."

Troops entered the city from the south and west, with forces deciding to stay in Basra to begin securing the city for a humanitarian program, according to CNN's Diana Muriel.

Air strikes two nights earlier killed a number of Ba'ath Party officials, and left the resistance in disarray, turning Sunday's probe into a big push, British military sources told Muriel. One of the raids was on the home of "Chemical Ali," a cousin of Saddam Hussein who reportedly ordered the use of chemical weapons against Kurds in northern Iraq in 1988, killing about 5,000 people.

British troops, with the support of coalition air power, have been pushing steadily into Basra since shortly after the start of the war, facing fierce resistance from Iraqi regular and irregular troops.

British Defence Secretary Geoff Hoon said Monday that British troops are in Basra to stay and will remain there as long as necessary. The minister was "extraordinarily encouraged" by reports that local Iraqis were welcoming the British forces, and the Army would work towards increasing aid to the area. But Hoon warned coalition forces "may well face a difficult and dangerous period" from resistance by remnants of pro-Saddam forces. "There is still a great deal of work to do and that will continue."

Earlier Sunday, British military spokesman Col. Chris Vernon in Kuwait City said three battle groups had set out for the centre of Basra. British Royal Commandos encircled its southern parts, and overnight Saturday the 7th Armoured Brigade went into and secured a "chunk of central Basra," military officials told David Bowden, a British reporter embedded in the area. Bowden accompanied the Queen's Dragoons Guards as they pushed within a couple of miles of the city's centre Saturday. The city's outskirts "appeared to be a ghost town," and the few people left were leaving.

Over the weekend, British forces conducted raids on homes of people believed to be members of Saddam's Ba'ath Party and the paramilitary Fedayeen Saddam. These people, coalition officials said, are behind much of the brutality and corruption that has kept residents under Saddam's control. Vernon said once Ba'ath

Party officials are removed, his troops will begin "playing to the hearts and minds of the civilian population," and take on a humanitarian role.

Basra residents are somewhat reluctant to embrace the coalition. In 1991, the heavily Shiite population of the city staged an uprising against the Saddam's regime, but without coalition support, the regime crushed the uprising, killing thousands. But some Iraqis in Basra cheered as British forces worked to secure the city.

On April 10th - Day Twenty-Two - the 1st Armoured Division moved north to effect a linkup with the 1st US Marine Expeditionary Force.

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Early urban operations in Basra

(MoD/Beaton)

Blood, Heat + Dust: Second Edition

Operation Telic and the British Medical Deployment to the Gulf 2003 -2009

Appendix to Chapter 4 Part I:

Front Line Ops Operation Telic 1
QDG Battle Group Operations
Op Telic 1



It also rains in Iraq

I am grateful for the permission of members of the Queens Dragoon Guards for permission to reproduce material from their web site on regimental operations in support of 1st Armoured Division. qdg.org.uk

QDG Diary of Events on Op Telic 1

- **January 2003**

  24-31 January: 'C' Squadron arrives in Kuwait.

- **February 2003**

  21-28th: 'A' Squadron arrives in Kuwait.

- **March 2003**

  5th HQ Squadron arrives in Kuwait.

  6th March 'B' Squadron arrives in Kuwait.

  19th March 'A' conducts a relief in Place with 6 Kuwaiti Brigade.

  20th March First hostile act: Cruise Missiles launched against Baghdad. Two Iraqi missiles fired in retaliation, second landing at HQ squadron's location.

  21st March Ground War starts. Battle Group HQ Recce Party crosses International Border into Iraq due West of Umm Qasr.

  22nd March 'A', 'B', and 'C' Squadrons cross into Iraq.

  23rd March 'C' Squadron land on Al Faw peninsula.

  30th March 'C' Squadron fighting in the battle for Adu Al Kasib.

  31st March 'A' Squadron raid on the Shatt Al Arab, destroying the barracks.

- **April 2003**

  1st April: 'A' Squadron moves to the North of Basrah, crossing the Qumast Ali canal and destroys a militia compound.

  8th April: Battle Group HQ relieved of the Prisoner of War Holding task and assumes responsibility for the Divisional rear area and takes 'B' Squadron under command

  9th April: 'A' Squadron cross the Shatt Al Arab and exploit to the Iranian border.

  30th April: 'C' Squadron released by 3 Commando Brigade back to command QDG.

- **May 2003**

  15th May: Regiment re-grouped, taken off task and into refurbishment.



Nuclear, Biological, Chemical Warfare Training

Headquarters Squadron QDG

Operational Analysis predicted that within the Division's area of operations, we could expect 14,000 PW. This was based on the assumption that 50% would be killed or desert and that the remainder would surrender. Therefore the Regimental Echelon was required to source 14,000 man's worth of food, water, tent-age, lighting, sanitation, medical facilities, blankets and building materials ranging from shower facilities to military dog compounds, whilst the rest of the Division was properly focused on the receipt of personnel, vehicles and ammunition. Gaining support across the Division for PW stores was a hard fought battle against the competing demands of the Fighting Echelon and required utterly and sometimes ruthless determination by the Quartermasters.

From the onset it was obvious that we required a large number of troops to complete this task. General Brims, the General Officer Commanding the Division, was faced with the difficult choice of deciding which of his combat assets he could afford to take off the front line to give to this mundane but vital task. In the end an enlarged air defence battery from 12 Regiment Royal Artillery, comprising 270 men, was taken from theatre troops to provide the escort force and 1st Battalion The Duke of Wellington's Regiment were flown in from Germany to meet the internal and external security requirement at the very last minute and without most of their equipment. A large number of specialist troops had also been attached; medical, engineer, dogs, Military Police Service, 69 Ghurkha Engineer Squadron, a processing unit to register the PW, environmental health specialists and a team of lawyers to interpret the Geneva Conventions.

The Prisoner of War Handling Organisation, as we became known, totalled nearly 1,200 soldiers and required a convoy of 270 vehicles to move the men and the material to location. And no sooner had they all been brought together, the war started with the first Iraqi missile landing at the front gate of our camp narrowly missing a startled QDG quartermaster, Captain Baker. It transpired the missile was a Seersucker shore to ship missile.

From the onset it had been planned to deploy forward into Iraq as early as possible and under the skirts of the US forces, so to quickly relieve combat troops from the burden of PW. The proposed location for the collection point was a disused television antennae site to the north of Umm Qasr, some ten kilometres across the Kuwaiti Border.

An American Marine unit was tasked with clearing the town, which took five days of heavy fighting to complete. They used a stand off approach utilising air and artillery to neutralise the area before committing ground troops. Nonetheless the Prisoner of War recce party deployed into Iraq less than 12 hours after the start of the ground war, skirting around heavy contact, weaving it way through the town and navigating through unmarked minefields and areas littered with Coalition Force cluster bombs. A highlight of this phase of the war was the section attack led by the Operations Officer, Captain Hurley and his crew, including one of the orderly room clerks. Many rounds later and two more Iraqi soldiers were added to the inmates.

To cap this action the Second in Command, Major Pitman, was dispatched to facilitate the movement of the convoy through the town and wound up directing the fire of an American USMC company attack to speed matters along. But all this pales into the mundane by the surreal experience of the Adjutant, Captain Roberts and Cpl Rees. They had waited all day for clearance from the Americans to move through the border. Finally ordered by a frustrated Commanding Officer to 'get on with it', he faced down the resolute US Sergeant blocking the border. Progress was made but soon halted by a series of Iraqi obstacles and a vicious firefight that developed around them. The only way out of the firefight was for the Adjutant to task Cpl Rees to unload one of the bulldozers and remove the obstacles. And here the surreal scene unfolded when a Royal Logistics Officer demanded to see Cpl Rees' license to drive a bulldozer, as tracer bullets arced overhead. The reply, understandably, was short and to the point and Cpl Rees completed his task in quick time.

Having originally planned not to accept prisoners for the first 48 hrs it became clear that we would have to accept responsibility for the 500 Iraqi soldiers captured in town. Little provision had been made for them elsewhere and many were seriously injured. CASEVAC was called to fly them to the role 3 hospital ships HMS Argus and USS Comfort. The remainder were placed in a hastily erected cage whilst the inload of stores and men continued.





Prisoners Of War

Within 48 hours, the first six 500-men compounds were built, the echelon established, security cordons deployed and the facility open for business. Then using a fleet of 25 civilian coaches, escorted by soldiers from the Battery, the collection of POW's from the Brigades began. The Brigade cages at this stage were full to capacity and it took two days to collect the backlog. In total the Regiment held 500 POW's in the facility, considerably less than predicted but still a handful to guard, feed and administer. As a rule the PoW were compliant, but there were still a number of escape attempts that were vigorously pursued and invariably caught by the War Dog section and the quick reaction force from the Dukes.

An interim report has been received from the International Committee of the Red Cross, which praises the Regiment for its efforts. The few recommendations made by them were implemented immediately, but we will have to wait for almost a year for the full report to be delivered to the Government. The American 800th Military Police Brigade took over responsibility for the camp on the 8th April and collected PW whilst continuing to assemble the Theatre Interment Facility, which was to house up to 24,000 POW's for the duration of the conflict. Of note is that the Facility is now the only detention centre for the country and houses the PW and a motley crew of murderers and the like.

Battle Group Headquarters then moved north to take up residence in 'Chemical Ali's' summer residence, a place that had been comprehensively looted and took B Squadron and 12 Air Defence Regiment complete under command. The remainder of the Regiment returned to us on the 30th April when, as part of the Divisional reorganisation, QDG Group as we became known, was subordinated to 7th Armoured Brigade. Initially our task was to takeover the rear area security across the Division, a task that expanded to include the Western Desert and all the oil infrastructure running from the Kuwaiti border to the North West of Al Basrah and running as far west as Al Nasiriyah.

Inexorably operations transitioned from security to Peace Support Operations and followed three focuses; force protection, intelligence gathering and humanitarian



Basrah Palace

assistance to the population. Force protection was achieved through domination of the area, both through covert and overt methods. Troops mounted vehicle check points to hinder the movement of arms, observation posts on suspected 'irregular' force locations and routine framework patrols. The majority of the area was benign, with only the occasional snipe at coalition vehicles moving along the supply routes and limited arms movement, so the concentration switched to restarting the Iraqi infrastructure and civic society.

This was and remains no small matter. The applicable law remains in doubt and there is no functioning system of authority. No prisons exits, no courts are open and the leaders of every utility and state controlled business are missing or slow to return to work. The infrastructure needs much work and water de4livery was a daily task to most communities. Across the Division great effort is being made to identify Iraqi nationals to form interim councils. However, in the power vacuum created by the invasion, historic feudal claims to ascendance and the emergence of Islamic law are hindering the identification of any true people's representative. Finally, there remains the ongoing task of clearing away the battlefield debris and unexploded ordnance. It remains to be seen how things will turn out and there are hopeful signs or recovery. But Iraq has a way to go before it can be called a functioning society, let alone one that is at peace with itself.

'A' Squadron Attached To 7-Armoured Brigade

The vehicles arrived in Kuwait City before the soldiers and were moved up country by Squadron Headquarters and 'C' squadron who had arrived with the Commandos. Attached to 7-Armoured Brigade, the squadron moved into concentration area "Jerboa" in the Northern Kuwait desert. Battle preparation started immediately with a small range package followed by a limited exercise, allowing for adjustment, both tactically and practically to life in the desert.

Unfortunately, even before crossing the line of departure, the squadron suffered its first casualty when one of the guided missile commanders broke his ribs in a fall. As the logistic build up continued, the plan was honed to the point that the troops could be fully briefed and conducted their battle preparation in earnest. It was at this stage that we learned that we would be attached to the Royal Regiment of Fusiliers Battle Group. A case of history repeating itself as 'A' Squadron had been awarded the honour of flying the Fusiliers hackle on its antennae after working together in Aden in 1966.

The call came to move earlier than expected and the Squadron deployed before the ground invasion to conduct a relief with 6 Kuwaiti Brigade. Observation posts were mounted along the berm on the International border and whilst conducting this operation the Squadron experienced its first artillery bombardment, witnessing a Kuwaiti M1A1 main battle tank being destroyed by this fire.

Once the Squadron moved into Iraq they first occupied the southern Iraq border around the town of Safwan then moved at speed to insert a reconnaissance screen along the Shatt Al Basra River, to the north west of the city of Al Basra. Here we were to experience our first friendly fire incident when a friendly unit brought artillery fire down onto our location and only quick action by our Forward Observation Officer averted an unpleasant incident. The screen was then collapsed and orders were received to exploit north and west across the river. However after twenty-four hours across the river it was decided that 7-Armoured Brigade had temporarily reached their limit of exploitation and the Scots Dragoon Guards relieved the squadron deploying along the river to the North of Basra. To the satisfaction of the Squadron, the armoured battle group under heavy contact subsequently withdrew from an area that had been held by our lighter and less well protected CVR (T) for 24 hours before them.

After coming back of the line the squadron was employed on rear security tasks as the Brigade lines of Communication were both stretched and under attack from irregular forces. Almost immediately the Squadron came into contact, with the call sign 32, clearing a large group of militia. An aggressive follow up by Support Troop secured a militia compound, a category B prisoner and much enemy ammunition. It subsequently transpired that the building was the Regional Ba'ath Party Headquarters and that the Fusiliers had planned a Battle Group attack later that afternoon. As the Squadron consolidated, the headquarters moved into a vast a



Battle Group HQ set up at Chemical Ali's Palace

palace once occupied by the Iraqi Southern Region Commander, the infamous "Chemical Ali".

After three days spent on area security tasks the squadron was then ordered to conduct a raid and seize a Bridge 1 leading into Basra. Taken successfully, a nighttime exchange of fire across the river became commonplace, until orders were received to conduct an advance to contact towards Basra. The armoured dash was t 'A' Squadron firstly destroy a Republican Guard/Militia compound with a combination of direct 30mm fire and indirect artillery 150mm rounds. While call signs 11 and 13 found and destroyed a second militia compound. 30mm HE rounds were used to scatter the militia, 6 were killed and a large number injured and captured.

Then deployed on the outskirts of Basra, the Squadrons intelligence gathering campaign proved successful, gaining information on the locations of missile systems and T-55 tanks in the area. The subsequent clearance conducted by the squadron allowed an aid convoy to come through with food and water for the malnourished locals. Sadly this happy task was marred when the Iraqi forces mortared the village in retaliation for them taking food.

As 7-Armoured Brigade made its triumphant and unopposed dash into Basrah, the Squadron deployed a screen along highway 6 to ensure no reinforcements entered the city. As the security situation settled 'A' squadron was deployed to the Northeast of Al Basrah, bounded by the Shatt Al Arab and Basrah rivers to the West and South and the Iranian border to the north. The Squadron became involved in humanitarian ass assistance, framework security and building up the intelligence picture in the absence of any coherent policing. Numerous arrest were made, most notably two couriers who had an interesting concept of how the southern area was to be controlled once the Coalition Forces had drawn down to manageable level.

Whilst the Majority of locals were keen to rebuild their lives and take control, a number of individuals exploited the lawless situation.

B Squadron Attached To 1 (UK) Armoured Division

B Squadron completed its first month in Iraq under many guises: Divisional Defence Group, part of Duke of Wellington's Regiment Battle Group, part of 1 Royal Military Police Battle Group, and finally returning at last to QDG. The Squadron spent its first week in Kuwait waiting for the arrival of its Land Rovers. These eventually turned up at Shuyba port on the 12th of March and were transferred to Camp Rhino despite the innovative driving skills of Trooper Williams 981 who decided to shorten the convoy spacing by driving into the back of the Motor Transport Officer.

The next day the Troops dispersed to their signals outposts to offer them much needed protection once they entered Iraq. 1st Troop and Squadron HQ accompanied the US 1st Marine Division forward on its lighting advance through southern Iraq, tearing through burning oilfields and destroyed Iraqi armour. 2nd Troop moved with 7-Armoured Brigade into the badlands around Basrah. Cpl Cook was shelled on his first night whilst digging his sentry position and there followed a familiar tirade against the "drop shorts". It was prudently decided not to inform him he had just been standing 50 metres from the receiving end of an Iraqi Missile battery.

Due to the increasing threat in and around Basrah, the signals outposts were brigaded at the airport rendering us largely redundant. The squadron overcame its unemployed status by seeking work wherever it could be found. A night of assistance to 'A' Squadron resulted in an evening of high excitement at one of the



Basra Palace

bridges over Shat al Arab and by morning four enemy armoured personnel carriers had been destroyed by air, with 1st Troop having to hitch a lift from 'A' Squadron's recce vehicles to avoid the fire zone of the attacking American tank busters.

'B' Squadron then, for the following ten days, was involved in securing the divisional rear area. Its tasks were to combat terrorist and militia activity and provide escorts for vulnerable convoys within Iraq. The Squadron was integral to many arrest operations and notable arms finds. Cpl Jones 011 took part in a 500m 'look, feel and prod' exercise to extract a 432 armoured personnel carrier from a mine strike - a drill last practised in the freezing snow on North Yorkshire!

The Squadron came back under the command of the Regiment in the first week of April and was given the southern half of the Battle Group's area. Although predominately rural, the area included the border town of Safwan where the Squadron concentrated its efforts. The town had suffered limited collateral damage from the war, but the infrastructure had collapsed through lack of maintenance during the conflict and subsequent looting. The Squadron assumed responsibility for a myriad of public services; critically including the distribution of food and water to the population. As the NGOs started to make an appearance into Iraq, we gradually encouraged them to take on these critical tasks and worked closely with UNICEF, the Kuwaiti Red Crescent Society and the International Organisation for Migration. In addition, 'B' Squadron soldiers recruited and trained the police force, providing logistic support to the hospital and have facilitated the re-connection of the telephone exchange and the electricity supply.

The Officer Commanding colloquially referred to as "Major Henry" or his call sign Zero 'Ahmed', worked tirelessly to implement an interim civilian administration and was involved in countless meetings with village elders, Shia and Sunni representatives. Progress was made. The locals were determined to govern themselves and were keen for the coalition to leave as soon as possible, once a benign and self-sustaining environment had been achieved. As the Squadron prepared to leave its area and tasks, the only question was whether Major Henry would ever leave his people and whether the people of Safwan could bear the loss of the great white saviour "Zero Ahmed".

'C' Squadron attached to 3 Commando Brigade

The Squadron deployed in the last week of January with 3 Commando Brigade and conducted a series of work up exercises and live fire practices. In this we benefited from their expeditionary experience being well looked after. After coalition intelligence assets identified the possibility of Iraqi Forces moving in to sabotage the oil wells and Gas and Separation Plants on the Al FAW peninsula, H hour was moved forward. US Navy Seals (Special Services) were put on 30 minutes notice to move and sieze the Al Faw pipelines and 'C' squadron deployed from the Tactical Assembly Area to "Green" beach to load onto US Navy "LCAC HEAVY" hovercrafts ready to land at "Red" Beach close to the town of AL FAW itself.



Disembarking

However there was only room for 12 of the vehicles, which were then moved to USS Mount Rushmore, whilst the remainder of the squadron stayed on "Green " Beach. Unfortunately when the US Navy Seals got ashore on "Red" Beach they designated it unsuitable for landing due to the heavy mining left over from the Iran/Iraq war, so the 12 vehicles returned to "Green" Beach and the squadron complete moved to a holding area just South of the border near UMM QASR.

The Squadron crossed the border into Iraq at 0400Z on the 22nd March and circuited around the town of Umm Qasr to the embarkation point 'MILLER'. Here the squadron was loaded onto Loading Craft and shuttled across the river onto the AL FAW peninsula at disembarkation point "BUB". A number of the vehicles bogged in at the landing point to an unfortunate appreciation of the tide state, including one of the command vehicles, which were carrying the ANGLICO team. The crew learnt new evacuation drills escaping through the commander's hatch when the vehicle sank in an uncharted channel. Those of the squadron ashore on dry land then advanced along Route STONEHOUSE, which hand railed the Southern coastline and joined up with 40 Commando. To complicate matters further as the tide went out the crews of the bogged vehicles realised that the landing point was in fact a prepared minefield and anti-tank mines surrounded OE. Sgt McDonnell and the Engineer recce Sgt's cleared a safe lane through the mud, allowing the crew of OE to leave their stranded vehicle.

As the squadron advanced East along Route STONEHOUSE, GW troop and Lynx missile helicopters working with the Squadron, destroyed unoccupied but intact bunkers, artillery and anti-aircraft positions along the way. A very close shave was had by Corporal Armstrong who was patrolling on foot near his vehicle when he felt a trip wire around his neck. His operator cut the wire and traced it back to an anti-personnel mine.



Sergeant McDonnell with target observation equipment

In the early hours of the 24th March the Squadron's lead troops linked up with 40 Commandos forward positions. After a night of uncertainty, as the Commandos were unclear a show to use reconnaissance troops, the Squadron moved north into an observation post screen, while 2nd Troop advanced along Highway 6 with the Commando Brigade Recce Force, mounted in cut down land-rovers. The Squadron firm in their observation posts, picked up numerous enemy 4x4 trucks ferrying what appeared to be troops up and down Route 6.There was however, insufficient evidence proving their combatant status to engage.

At dawn the next morning (24th) the observation posts picked up a large amount of enemy activity as troops wee driven to an extensively prepared defensive position. 1st Troop in the East near objectives GAZALA and CORIANO, reported numerous T-55's an dug in infantry along a line of date palms to the north of Route 6. Initial attempts to call in Close Air Support were unsuccessful for two reasons- the pilots were unable to identify targets and once identified were unwilling to drop due to fears of collateral damage. However in the west 3rd Troop was busy dealing with a T55, which engaged the troop Cpl, narrowly missing his head. The Troop further identified defensive positions supported by armoured vehicles and dug in infantry so a vehicle from Guided Weapons Troop was tasked in support, receiving artillery and mortar fire along the way. The GW vehicle then pulled over and preceded to destroy a T55, bunker system and a watchtower before withdrawing to reload. Returning to 3rd Troop the GW vehicle was contacted by Iraqi soldiers mounted in a civilian vehicle and when the vehicles machine gun failed, 3rd Troop were called to assist subsequently destroying the vehicle with 30mm High Explosive rounds.

During the night, 1st Troop reported hearing tank engines and as day broke they identified a company of T55's moving East to West from objectives CORIANO and GAZALA. A supporting aviation patrol (Lynx and Gazelles form the Commando Helicopter Force) drew enemy small arms fire and as the light improved the enemy started to engage the Troop with main armament. These rounds initially fell short,



Battle for Umm Qasr

but became progressively more accurate. The Troop withdrew to a prominent hill where one of the Squadron's Forward Air Controllers joined them and brought in two A10 Warthogs aircraft that destroyed all the enemy tanks.

Sgt McDonnell, the FAC and the Officer Commanding the US ANGLICO team proceeded to control back-to-back close air support (F18's and A10's) accurately into enemy armour, transport, bunkers, and infantry for the remainder of the day. Until the air kill box closed several days later, they continued to coordinate sustained aviation fire and reconnaissance in the area, pausing only to eat and shave (Sgt McDonnell even took control of 2x A10's mid shave). The Squadron secondary FAC was pushed to the west to support 3rd Troop as they began to identify large packets of enemy armour and fortified positions. This FAC also brought in air that put an early halt to several threatening Iraqi counterattacks from the south east of Basra.

Over the next few nights' imagery taken from satellites and air born radar highlighted the possibility of enemy armour behind the Squadron screen. These reports were subsequently identified as 'ghosts' caused by our own CVR (T) movement, and although without sleep for over 48 hours, the Squadron was stood to move to deal with a potential concerted counterattack.

On the 30th March at 0200Z, the Squadron took part in 'Operation James' under the command of 40 Commando Group, to clear the town of Adu Al Kasib. 2nd Troop was attached to the Brigade Reconnaissance Force to help secure a key bridge at H-1hour. 3rd Troop maintained the screen to the west and north along Highway 6. In the meantime 1st and Support Troops had secured the Commando line of departure and subsequently provided fire support and controlled attack helicopter fire from the South. Operation James lasted two days, with numerous contacts.



Firing an Anti Tank Weapon

Of note was Corporal Armstrong's action when his vehicle was hit by a RPG whilst crossing the bridge and threw a track. The crew dismounted to fix the track whilst still under small arms fire, completing the task in a record 30 minutes. Support Troop vehicles pushed deep into the palm dates to assist 1st Troop and conducted anti-tank stalks with LAW until their vehicle, Sgt Smiths, was hit by a RPG front centre, causing a mobility kill. The crew dismounted and disobeying an order from the Squadron Leader to withdraw, moved into cover, laying down mortar fire onto the enemy's location, until they could recover their vehicle, which was subsequently repaired and put back into the line.

AS 7 Armoured Brigade units crossed the Shatt Al Basra river and pushed north towards Basra, 3rd Troop which was less that a kilometre from the boundary had its own taste of friendly fire, by being engaged by both Warrior armoured infantry vehicles and artillery fire, necessitating red smoke to be fired and a hasty withdrawal to the East. Nonetheless the screen around Basra was maintained until 2nd April before the Squadron was withdrawn from the line for a 36-hour refurbishment period. On its conclusion, the Squadron was tasked with screening the Shatt al Arab River to the East of Basra encountering only minor enemy resistance.

The total kills credited to the Squadron (through direct fire and indirect assets) stand at confirmed 12 T55 main battle tanks, 15 MTLB Infantry vehicles, 20 bunker/ammo compounds, numerous dismounted infantry, 1 fuel truck and a number of Murals of the Iraqi leader.

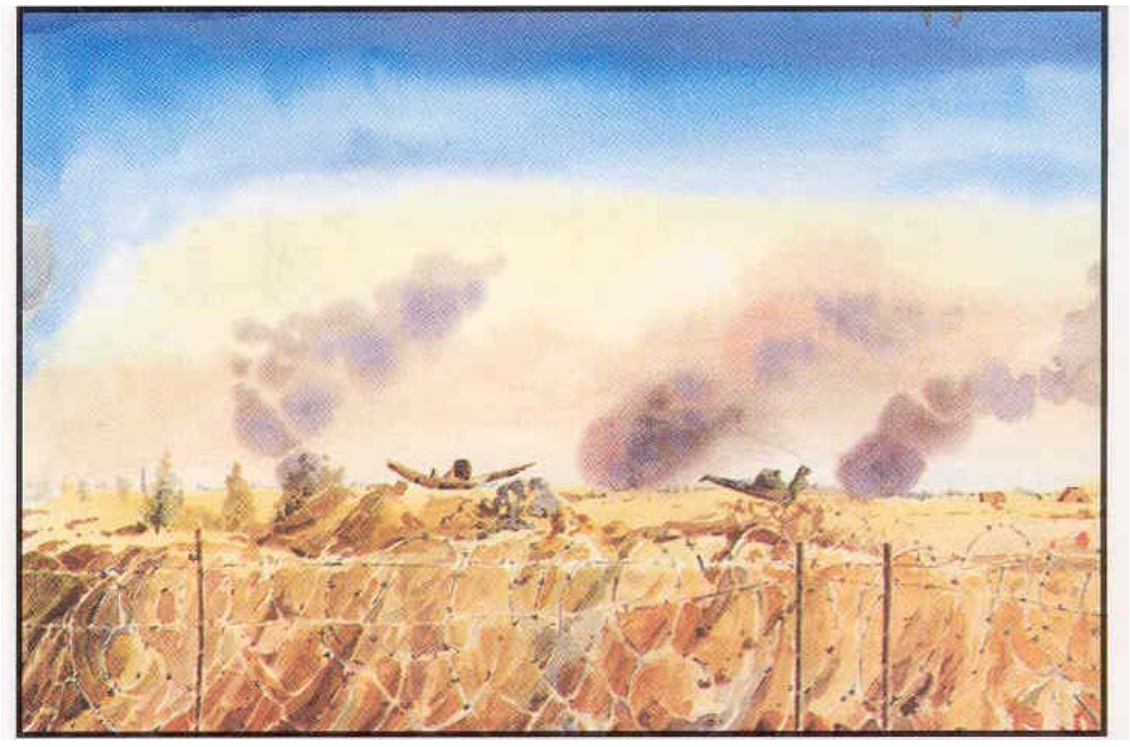
'C' Squadron remained attached to 3 Commando Brigade until 30th April when it was returned to the QDG Group. They were predominantly employed on key point defence tasks throughout the oilfields of West Al Basra. Troops were responsible for individual Gas and Oil Separation Plants and took the opportunity to draw breath once the combat phase was finished as well as hone up on some long range desert patrols in the Western Desert.

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Operation Telic and the British Medical Deployment to the Gulf 2003 -2009

Appendix to Chapter 4 Part I:

16 Close Support Medical Regiment on Op Telic: a Photoessay



Picture: *old warplanes at RAF Shaibah, Iraq*

Gora Pathak 2003

Major Duncan Gray

Duncan Gray is a consultant in Accident and Emergency Medicine in the NHS at the Royal Alexander Hospital in Glasgow. He serves in the TA with 144 Parachute Squadron of 16 Close Support Medical Regiment, with which unit he was mobilised during Op Telic. His photographic collection captures in rich detail the experience and challenges of the Unit during the preparation for operations, the advance into Iraq and the subsequent clinical activities.



NBC casualty decontamination rehearsal at Concentration Area Eagle in Northern Kuwait
26.2.03



Practicing the final moves for crossing the border on 27.2.03



Packing kit on 7.3.03: All tentage and equipment for the AASG must be packed into a small number of vehicles and trailers. Prepacking of medical supplies in robust, numbered aluminium boxes and the use of lightweight collapsible tables, beds and furniture allows the unit to set up, take down and move on quickly, even at night.



The 16 CSMR AASG and vehicles set up on 17.3.03 with DRASH lightweight, double skinned, folding tentage assembled and ready for use as an operating theatre and treatment facility.



Rubberised Collective Protection (Colpro) Tentage set up within a conventional aluminium framed tent on 12.3.03. Colpro provides cramped working space and becomes extremely hot, so is rarely used in practice by teams in the field. It nevertheless provides a reserve refuge in a chemical weapons environment, such as British troops have not experienced since the First World War.



A 10 Tonne DROPS container lorry providing rugged heavy lift mobility to the surgical team. The container can be dismounted for practical use and access, and to free up the vehicle for other uses. We put sandbags on the floor for protection against mine blast. With travelling in such a large, slow and heavy vehicle the driver and I felt very vulnerable.



Setting up the Drash collapsible tentage in rehearsal on 17.3.03. The tentage is based on a folding tubular frame which concertinas for folding and erection. As medical officers we tried our best to help with the Drash erection, but we usually just got in the way, so we learnt to leave the soldiers to get on with it.



Setting up in Drash on 17.3.03: Hanging prepacked equipment pouches by the resuscitation bays. These packs can be quickly opened up and stowed. The trestles support standard stretchers and minimise the transfer of casualties. Each of the junior medics had their own casualty bay and prided themselves in being the quickest to set up, the best organised, or the tidiest.



Ambulances in convoy moving up in the advance on 22.3.03. The berm marking the Kuwait Iraq border can be seen just in front of the ambulances. Only a few hours before the tanks and engineers had pushed their way through.



The move of the AASG into Iraq along Main Supply Route (MSR) Dallas, on 22.3.03. The smoke of the opening battles, just a few hours before, still hung in the air.



A plume of burning oil escaping from a sabotaged pipe, a few hundred meters from our first set up location on 22.3.03. While providing us with light at night, it also illuminated us for any enemy looking for targets. The heat from the burn off could be felt on your face even from this distance and a low pitched roar filled the air.



Sunday Service, Southern Iraq. Our first set up location.on 23.3.03



The “intensive care” section of the AASG: Four folding beds and equipment, ready to receive post operative or post resuscitation casualties on 23.3.03, at our first set up location: This was about 29 kms inside the border.



Our first casualties on 23.3.03 : Iraqi POWs from the opening battles of the previous day.



Iraqi child and father. We were very suspicious of the reason for attending, as the child was well. The father appeared to take an unhealthy interest in what was going on in our encampment. (23.3.03, at the first set up location)



Setting up in a dust storm on 23.3.03, at the first set up location.



Camouflaged Encampment, Southern Iraq. The driver and I made ourselves a small covered dug out at the back of the DROPS vehicle, giving us the protection of a trench should we come under attack, and the relative luxury of our private billet. (27.3.03, about 50 kms north of the border)



Treating Iraqi and British casualties concurrently in DRASH. These casualties had been firing at each other shortly before, in an ambush on British soldiers. (28.3..03, location about 50 kms north of the border).



The resuscitation team at work on 28.3.03. We were suddenly flooded with badly injured casualties, brought in by helicopter from a nearby battle. Fortunately our sister AASG was parked up nearby, waiting for the next move forward, so we called for the help of their doctors and medics.



Busy time on 28.3.03. With the resuscitation area filled with badly injured casualties, and with the additional doctors and medics, the confined space was buzzing with activity, heat, stress and pain.



Order across the blood brain barrier After the initial rush of the resuscitation, calm settled and surgery began, to stop internal bleeding of the highest priority casualty.



Laparotomy in DRASH on 28.3.03.



Use of the FAST ultrasound scanner on 28.3.03 in the assessment of intra-abdominal injury and specifically in the identification of free gas or fluid, including blood. This proved a vital quick investigation for many casualties who had been peppered with shrapnel.



Mobile X ray in use on 28.3 03. A small portable X ray machine placed on a piece of flat wood to enable it to move about on its small wheels, gave amazingly good results. Mostly we did X rays to locate shrapnel or bullets or to see broken or shattered bones.



Puma helicopter casevac date 29.3.03, about 50 kms north of the border. After a night of resuscitation and surgery, we had hurriedly finished the last case in time to load onto the evacuation helicopters which arrived at dawn.



Casualty transfer to PUMA helicopter.



Moving into the oilfields on 30.3.03, about 60 Kms north of the border, With our sister AASG set up and received the incoming casualties nearby, we stopped and rested at what appeared to be the safest location around. This oil processing plant was surrounded by a huge berm, upon which we placed sentries to guard our perimeter.



Inside the oil production control room on 30.3.03. We signed the guest book.



Soldiers are adept at making themselves comfortable in testing conditions. We improvised with whatever was available, and spent a few days having a well deserved rest although with the temperature rising to well over 40 deg centigrade on 02.04.03 at the oil refinery, sleeping was difficult.



The AASG was set up in a building on 07.04.03, just north of the Hammer canal. We were camped with the paras in an oil refinery looted by locals, and surrounded with weaponry, so we felt fairly safe.



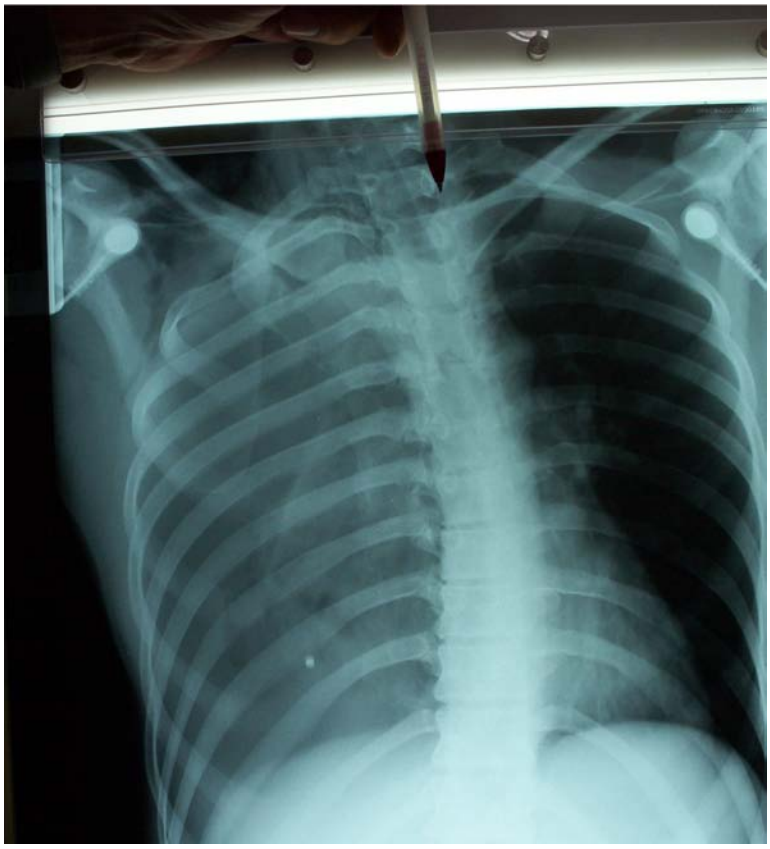
Iraqi casualty transfer on 07.04.03, at the looted oil refinery. When the ambulances arrived and we opened the back door, we were often faced with severe injuries, pain, bleeding, shock, steamy heat and the ambulance medic in “tatters”.



A little girl in an ambulance on 07.04.03, at the oil refinery. This little girl had lost her leg the previous day when an RPG had hit their home, and had received only basic first aid with no analgesia. The rest of her family had also been injured. Her father had lost his leg and one arm. This was a most distressing story.



Iraqi child with mother under ambulant treatment on 07.04.04. They were the mother and little brother of the girl seen in the previous picture. The mother seemed strangely calm.



Chest X-ray of right sided haemothorax with penetrating fragment on 07.04.03. Although he appeared surprisingly well, and there was only a small entry wound to his chest just below his collar bone on the left, this Iraqi man had lost a lot of blood into his chest.



Arrival of a young man after an ordnance accident on 07.04.04 He arrived by civilian vehicle. The patient had lost his right hand and had severe shrapnel wounds as a result of the explosion of a device he was holding.



Same patient on 07.04.03 This proved to be a common pattern of injury. We were not to find out what he had been doing at the time of the injury. He may have been throwing it, playing with it or trying to dispose of it.



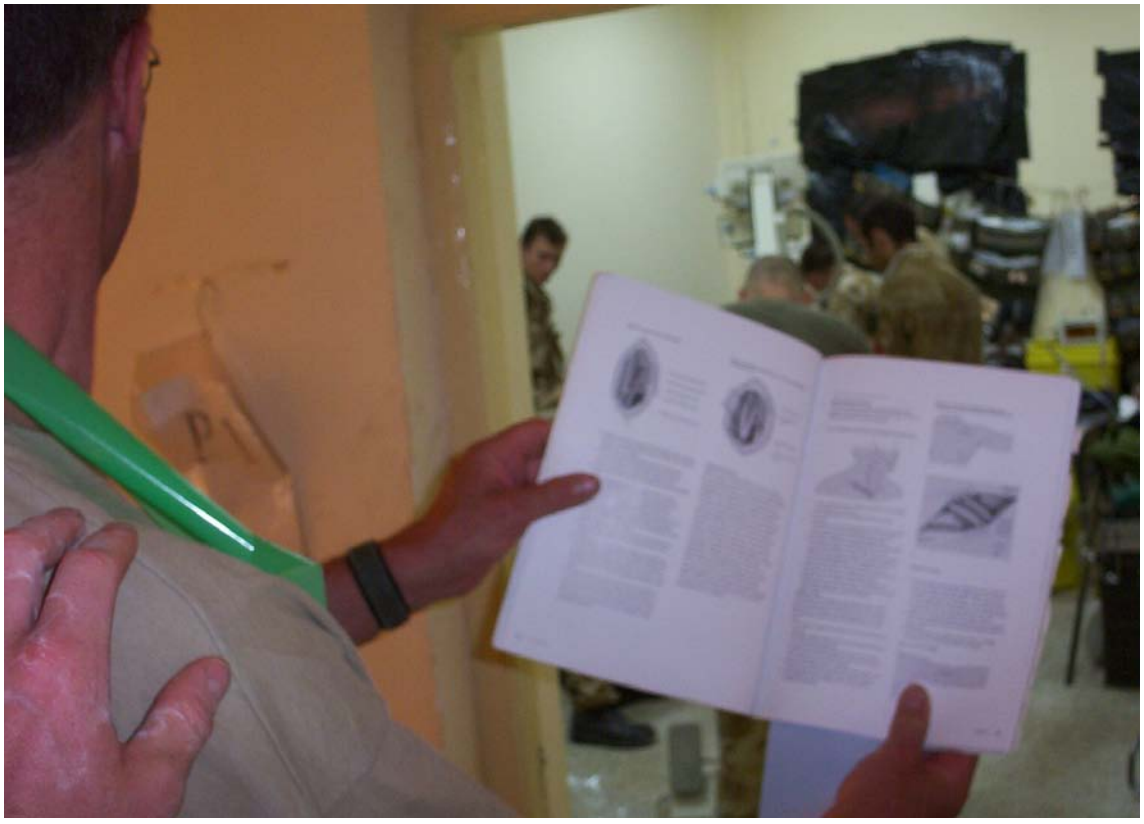
X-ray of same patient: right hand blown off. The explosion had caused such extensive injuries that we had to amputate up to his mid forearm.



This father had brought his son with a severe hand injury on 08.04.03, again due to an ordnance accident. He had already received some treatment at one of the local hospitals.



An Iraqi casualty with a GSW to the front of his shoulder on 08.04.03. Although he looked fairly well at this point, he collapsed soon after. He had an exit wound to the back of his chest and required emergency surgery to repair a major artery. He was subsequently transferred to 202 Field Hospital.



Doing the knowledge: never too old to learn; Our general surgeon, much more familiar with the contents of the abdomen, looked up the procedure before repairing his right axillary artery, thus saving the man's arm.



Casevac on 08.04.03, from the refinery base.



18 month baby under anaesthetic on 08.04.03. This child had accidentally been exposed to petrol fumes, and initially looked quite well, but his respiratory rate soon increased dramatically, necessitating intubation. Communicating the seriousness of the situation to the parents proved almost impossible with no common language. In spite of all our efforts, including a night helicopter evacuation of the child and parents to a US hospital ship in the gulf, the child died a few days later.



Moving into the oilfields on 30.3.03, about 60 Kms north of the border, With our sister AASG set up and received the incoming casualties nearby, we stopped and rested at what appeared to be the safest location around. This oil processing plant was surrounded buy a huge berm, upon which we placed sentries to guard our perimeter.



Village passage on 14.04.03, on the road north towards the Euphrates bridge. After the main war fighting over we headed north. Most of the civilians waved. However, our vehicles were sometimes stoned and shot at.



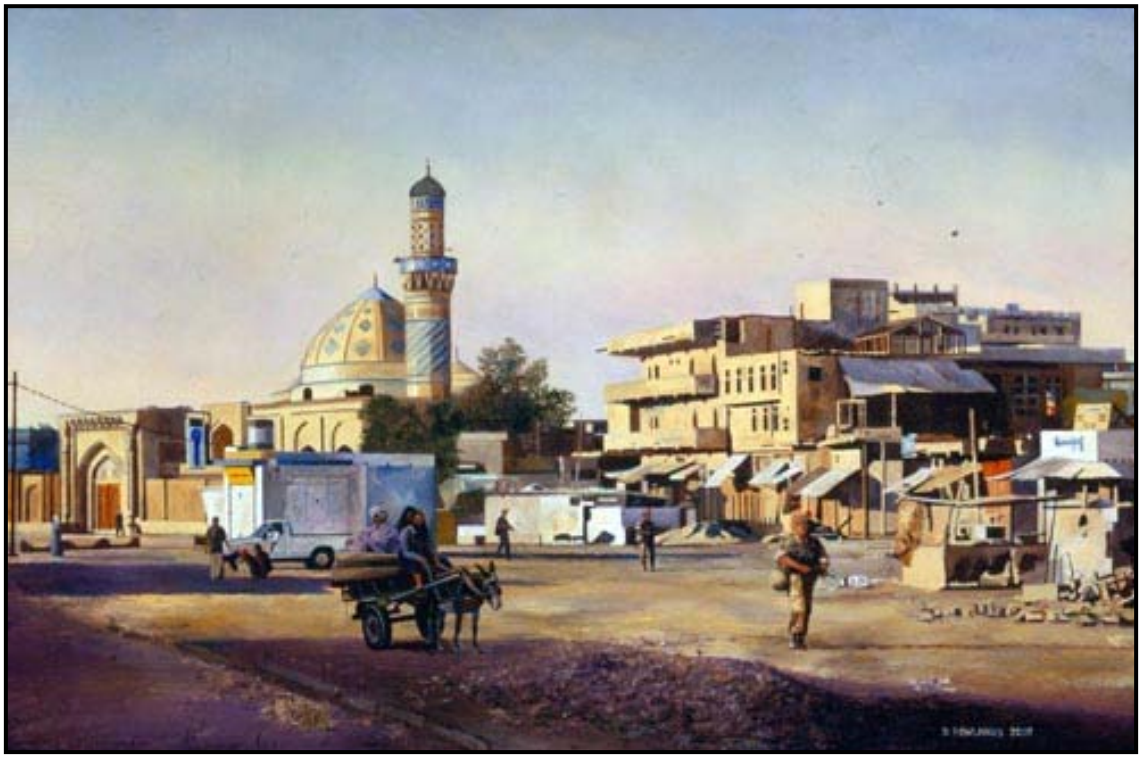
Assume nothing: Rainstorm on 22.04.03, when we were on an old airbase near Al Amara By this time the flow of casualties had nearly stopped, and the fighting had tailed off. The local hospitals had started to function again. All we had to contend with was the heat, flies and wild dogs, and then a surprise downpour.

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Operation Telic and the British Medical Deployment to the Gulf 2003 -2009

Chapter 4 Part II:

The Post Entry Phase of Operation Telic 1, May to June 2003



Painting: *Basrah 2003*

Artist David Rowlands Medium: Oil on Canvas

Regarding the painting 'Basrah 2003' on the previous page, David Rowlands recalls that;

> *"In central Basra, 1st Battalion The Black Watch occupied the Ba'ath Party Headquarters buildings which had been bombed. When I was with the battalion, a soldier invited me to accompany him to the roof of a tall, badly damaged building to admire the view. We walked up many flights of stairs, then onto the flat roof. We could see the old British military cemetery down below. I was then shown the hole in the roof through which a 500kg satellite-guided JDAM bomb had been dropped by a US plane. The bomb was lodged (still unexploded) at the base of the building. I was very relieved when we finally walked gingerly down the rubble-strewn staircase again and out of the building! That night, in a bare, concrete room nearby, with no electric light, I lay in my sleeping bag on the dirty floor amongst the debris and shattered glass.*
>
> *Very early next morning, I accompanied the Commanding Officer (Lt Col Bullock-Webster), with his bodyguard and driver, in a patrol of Land Rovers around the old centre of Basra. This painting is a result of that tour, and shows a foot patrol of 'Jocks' in the early morning light".*

Introduction: A personal recollection: Col David Rew

As we drove south down the Baghdad to Kuwait highway from Shaibah in the late afternoon of 13th May 2003 on our way to demobilisation, the highway north was choked with the traffic of the US 4th infantry division. We were perplexed that so much military hardware was pouring into Iraq when the conventional campaign was seemingly over, and felt rather sorry for the US troops that they had turned up too late for the action, having been diverted from the Mediterranean to the Gulf at short notice. Little did any of us realise at that time what was to come.

The conclusion of the Entry Phase of Operation Telic 1

British forces rapidly concluded the envelopment of Basra and took control of the four southern Iraqi provinces. Key strategic acquisitions included:

The northwest – southeast running highway from Baghdad to Kuwait, which was the main supply route for US forces from Kuwait;

- The oilfields of Basra province
- The Shatt – Al Arab waterway and the port of Umm Qsar
- The Iraq-Iran border
- The city of Basra

For the British, the focus in May and June was on downsizing the 1st Armoured divisional presence to a Brigade sized occupation force charged primarily with helping and mentoring the rebuilding of Southern Iraq and its civic administration. There was a general assumption that this would not be an unduly demanding military task, and

indeed the first few weeks were relatively untroubled in military terms. With a focus on reconstruction, the UK Commander Medical, Colonel John Graham and his staff were focussed on primary health issues, including the reopening of hospitals and pressing public health issues relating tom poor sanitation, lack of clean piped drinking water and a sewerage system in severe disrepair, as illustrated in the following report:

Changes in the post-occupation UK Force structure

The number of UK military personnel deployed in Iraq changed significantly over time, reflecting the changing political priorities, from the peak of during Major Combat Operations (March/April 2003) of 46,000 personnel, including those stationed outside of Iraq in support of the operation. At the end of May 2003 there were 18,000 troops in theatre, and by the end of May 2004 there were only 8,600 troops. This figure then reduced more gradually, such that by the end of May 2008 there were only 4,100 UK troops remaining in southern Iraq. Some 37 countries also contributed personnel in smaller numbers to augment MNF-I, the Multi National Force in Iraq, at various times.

Most UK personnel in Iraq were based in southern Iraq, with a small number based in Baghdad and elsewhere, but primarily within and around the city of Basra itself.

The post war environment was initially deceptively benign for UK forces around Basra. However, the breakdown of civil order was almost complete, and there was widespread looting along with the evaporation of all civil structures of control.

This led to the UK forces' first set of major embarrassments, in respect of photographs of inappropriate non-lethal means of punishment and restraint at camp Breadbasket, which were released to the world's media.

In this chapter, we pick up on the key events in Southern Iraq immediately following the capitulation of the Ba'ath Regime and the flight into hiding of President Saddam Hussein, as these were to determine the conditions for the next six years of the British Forces contingent in Iraq.

From April 2003 onwards, the size of the UK contingent imposed critical constraints upon the freedom of action and operational planning of the UK commanders. In effect, less than 10,000 men and women acquired the responsibility for security for a population of more than two million Iraqis. This followed the effective dissolution of the Iraqi security institutions immediately after the occupation began, and in a progressively more challenging environment as the huge quantities of Iraqi Army munitions became readily available to the insurgents. The military response and the consequences for the military medical services must thus be judged in this context.



"Patrol in Az Zubayr, Iraq, April 2003: 1st Battalion The Duke of Wellington's Regiment"
Artist David Rowlands Medium: Oil on Canvas

The following news reports give some indication of the difficult challenges faced by troops in and around Basrah in a complex operation conducted within and around a large population centre. This phase of operations concluded with the tragic and ominous killing of six military policemen in Al Majar Al Kabir in late June 2003:

BBC News reported on Saturday April 26th 2003 that:

Basra could soon rebel, warns British Army

"The population of Basra could turn against British forces if quality of life does not improve, a UK military commander has warned. Brigadier Graham Binns, commanding officer of the 7th Armoured Brigade, the Desert Rats, spoke as doctors warned of a potential cholera outbreak in the southern Iraqi city. As British engineers continued to struggle to restore water and basic services to the city's 1.2 million people, he said his biggest fear was failing to deliver improvements to infrastructure.

"There are people who do not wish a long-term coalition or Western presence in Iraq, and they see it as an army of occupation. There is no evidence of them resorting to arms, but there is the possibility, in the longer term, of the use of arms to persuade us to leave rather quicker than we would wish.

"We are keen to enter the political process in order to reduce the military presence. They are expecting us to deliver. We have just come through the honeymoon period and are in the first flush of marriage. "We're not at the seven-year itch yet. People

are still waving on the streets and we haven't got to the point yet where people are ignoring us."

He identified four areas which need urgent improvement: electricity supply, water, schools and the political structure. Electricity remains at only 45% capacity, and people who had power before the war now have it only two or three hours a day.

Dirty water: The Red Cross said the water supply was still only about 60% to 70% operational, leaving tens of thousands without running water. Huge amounts of water in tankers are being delivered by the military and aid agencies, but demand is far outstripping supply.

Red Cross spokesman Andres Kruesi said he thought sabotage - possibly by Ba'ath loyalists - could be the reason for the slow return of normal services. "Who would steal elements of a transformer station in the core of the infrastructure?" he told the news agency AFP. Mr Kruesi added that Basra had been relatively unscathed by the bombing, and that the infrastructure remained "fairly intact". "Looters caused more damage to the water and electricity infrastructure than the bombing," he said.

We have a very bad system now, and if we have one patient with cholera there will be an outbreak, said Dr Ahmed Abdul Hassan, of Basra Teaching Hospital. Reporters have described crowds of hundreds in Basra having to fill containers of dirty water from broken pipes or straight from the murky Shatt Al-Arab waterway.

Brigadier Binns said the situation was improving and engineers were working flat out on an "incredibly tricky system". Rumblings of discontent do indeed appear to be coming from the Basra population. In a small town north of Basra a local teacher told reporters: "Things are much worse now than they ever were before, people don't have electricity or water. "The English and the American forces and Saddam Hussein have joined together in killing us. They are the same."

One Basra doctor said the medical infrastructure had been damaged to such an extent, one case of cholera could lead to an outbreak. Dr Ahmed Abdul Hassan, of the Basra Teaching Hospital surgical department, said his hospital, which has up to 150 doctors, was running out of medicine and the situation was worse than before the war.

The after-effects of the war, coupled with the accumulated poverty from years of Saddam Hussein's rule, have made the city's people desperate. Dr Hassan and the rest of the hospital staff had not been paid for two months. "If it doesn't happen soon people will quit their jobs," he said.

Colonel John Graham, Commander Medical of the 1st UK Division, warned that cholera was indeed becoming a "danger" in the city. "The water supply is still very patchy and mid-April is the start of the cholera season," he said".

CNN reported on Thursday, May 8th, 2003 that Cholera was spreading in Basra.

The risk of Cholera

"The World Health Organisation has confirmed four cases of cholera in this southern Iraqi city, and the group says dozens more may have the potentially fatal illness.

The lack of clean water and security combined with economic troubles are allowing cholera to spread rapidly, WHO spokesman Ian Simpson said Thursday. "Cholera has a fatality rate of more than 50 percent if it is not treated," he said. "This is probably the most serious health concern in Iraq right now."

Cholera is an acute diarrheal illness caused by infection of the intestine. In severe cases, it can lead to dehydration and shock, according to the Centers for Disease Control and Prevention. The illness can easily be prevented and treated -- but the World Health Organization said Thursday that conditions in Basra make it difficult to do either.

Basra still does not have clean water, so many people cannot follow basic hygiene procedures such as thoroughly cleaning their hands before cooking or after using the bathroom. The illness could also be transmitted through the water itself if it is contaminated, Simpson said.

The lack of security makes it difficult for some doctors and nurses to come to work, and some vital materials are missing or have been stolen. Also, there is not enough money to keep facilities running and pay staff, the WHO said.

Retired Lt. Gen. Jay Garner, the U.S. civil administrator for Iraq, said Thursday the bulk of the coalition's rebuilding effort will focus on the south because the region is "a victim of three wars, a rebellion, and absolutely torturous treatment by Saddam Hussein over 30 years. ... Everything in the south is broken."

However, the complete collapse of civic administration, the looting, the general criminality and the collapse of the authority of the structures of the Ba'ath Party in the south led to a state of virtual anarchy, soon began to test to the limits the considerable civic order skills of the limited numbers of UK forces available.

A report on the state of Basra by Human Rights Watch, June 2003

The New York Based independent charitable organisation Human Rights Watch published the following informative report on the state of Basra on June 2nd 2003.

"The city of Basra, with population of 1.5 million, is Iraq's main seaport and second largest city. It is situated some 550 kilometers south-east of Baghdad along the western shore of Shatt-al Arab, at the confluence of the Tigris and Euphrates rivers, 130 kilometers from the Persian Gulf.

Basra suffered tremendously during Saddam Hussein's rule. The vast majority of the city's population are Shi`a Muslim Arabs. Shi`a Muslims comprise an estimated 55 percent of Iraq's population. Despite their numbers, Shi`a Muslims have been historically disempowered and oppressed in Iraq. As one of the chief population centers of Iraq's Shi`a Muslims, the city was a center of opposition to the Ba'ath government. Basra's Shi`a residents rose up against Saddam Hussein after the rout of Iraqi forces in 1991, spurred in part by then-U.S. President George H. Bush's call to the Iraqi people to "take matters into their own hands to force Saddam Hussein, the dictator, to step aside.

The uprising began in Basra and quickly spread to other major Shi`a areas in southern Iraq (as well as to the predominantly Kurdish areas in northern Iraq). Throughout the south, vengeance killings took place as the population vented its anger against anyone associated with the Ba'ath government, killing hundreds of Ba'ath party officials, local bureaucrats, and intelligence agents. However, the Iraqi government managed to maintain its control over the country and launched a brutal campaign of reprisal when the United States failed to support the uprising. In the ensuing retaliation, thousands of civilians from Basra were killed and thousands more imprisoned or "disappeared."

Ongoing opposition to the Iraqi government provoked numerous campaigns of oppression throughout the 1990s. The most serious crackdown occurred in March and April of 1999 after the assassination of Ayatollah Sadiq al-Sadr, a Shi`a Muslim religious leader, who was killed in Najaf while driving home on the evening of February 19, 1999, along with his two sons. Following the murder, Basra was rocked by heavy clashes between protesters and security forces, including attacks on members of the Ba'ath party. The government response was swift and severe: according to research by Human Rights Watch, at least 150 Shi`a protesters were extrajudicially executed and thousands were imprisoned, had their houses razed, and were banned from holding many jobs.

Basra was relegated by the government of Saddam Hussein to secondary status in terms of economic development. Therefore, with the imposition of international sanctions on Iraq in 1990 after Iraq's invasion of Kuwait, Basra was particularly vulnerable and its population was further impoverished. Basra was heavily bombed during the 1980-1988 war with neighboring Iran, and targeted again during the 1991 Gulf War and the fighting in March and April 2003.

Southern Iraq and Basra's strategic seaport, Umm Qasr, were among the first targets of U.S.-led coalition forces in March 2003. British forces headed the drive to secure the seaport and occupy Basra. The city was encircled after intense air and artillery bombardment. By March 27, British troops effectively controlled the city's suburbs and all access to the city, and faced resistance only from Iraqi militia and irregular troops belonging to the so-called Saddam's Fedayeen units. As a result of the fighting, Basra's infrastructure suffered significant damage, aggravating its already degraded pre-war conditions, with the city's water system breaking down completely.

This was the condition of the city on April 5th, 2003, when British troops, as part of the U.S.-led coalition, first drove into the city center and, as the occupying power, assumed primary responsibility for the security of civilians and humanitarian groups trying to assist them. As of this writing, the population of Basra feels very insecure, due partly to the week of frenzied looting that immediately followed the British occupation, and continuing as a result of the lower intensity but steady crime wave (including daily killings, looting of private property, and car-jackings) now engulfing Basra like many other cities in Iraq. This report is based on four weeks of field research by Human Rights Watch researchers in southern Iraq. It shows that more than six weeks after the fall of Basra, the security situation remained poorly addressed by coalition forces. Despite efforts by the British military to deploy their relatively small number of troops to improve security conditions in the city, the population continued to live in fear of violent crimes and with growing concerns about the failure of the coalition forces to provide them with greater security.

The security situation immediately after the fall of Basra

The British entry into Basra's city centre in the first week of April immediately set off uncontrolled looting that continued at a diminished level six weeks later. The extent of the looting in the first week, and British failure to respond to it, convinced many residents of Basra that their security was not a priority for British forces. As conditions gradually calmed down, the ongoing lack of a strong British security presence on the streets and the complete absence of any police force further cemented this conviction.

The lawlessness that followed the fall of the city was created by roving gangs of looters. Some were well-organized, others apparently opportunistic. As in several other cities in Iraq, the looters focused on banks, government buildings, and other major state and commercial institutions. Western journalists entering the city in the wake of British forces reported thousands of looters carrying on in plain view of British troops.

In response to press inquiries as to why the British forces stood by and allowed the looting, Brigadier Graham Binns, Commander of the British Seventh Armored Brigade responsible for taking the city, explained that he lacked sufficient troops to

protect the city, and had to focus on protecting vital infrastructure, such as oil facilities and food warehouses. Other British troops at the time offered a less benign explanation: that coalition troops tolerated, and even encouraged, the looting of government buildings as the population's cathartic reaction to the fall of Saddam Hussein's government. While this may explain British inaction in the face of attacks on government buildings, it does little to explain why coalition forces stood by as other important civilian and commercial locations were looted.

Certainly, government institutions were a favored target of the looters. Looters ransacked government security buildings, such as the General Security Directorate and the General Intelligence Directorate building, for several days on end. Documents and records were either destroyed or taken away. Human Rights Watch researchers witnessed looters with unhindered access to these buildings as late as April 28. Not all the looters were interested in the substance of these institution's operations. Nearly all furniture, office equipment, and even transportable building material like ceiling tiles, electrical fixtures, and cables were stripped from many government buildings in Basra.

More troubling, Basra's central suq (market) and old commercial district, al-Ashar, was also abandoned to looters for nearly a week as British forces stood by. Mutlaq Kitab Hamud, a fifty-two-year-old cloth merchant with a shop in al-Ashar market, described the chaos of the first two days after British forces entered the city.

I was in my shop because I was trying to protect it. The first day that the British came to central Basra, their forces stopped at the Ashar River [which bisects central Basra from West to East]. They were stopped on the other side of the river before noon. Their tanks were just waiting there. Then an hour or so after noon, they crossed the river and went through the streets of the center. At that time, there were two or three hundred people waiting in groups behind them. It was a big mob. Some of them had acetylene torches and welding masks, and they headed straight for the Rafidain Bank [a branch of one of Iraq's largest banking groups]. The British tanks were standing right in front, but they didn't do a thing to stop the criminals. They were even encouraging them, saying "Go in Ali Baba, go in."

Human Rights Watch interviews with nearly a dozen shop owners from al-Ashar market area substantially supported this account of British inactivity in the face of widespread looting. Muhammad Akhdar 'Abbud, a forty-year-old tailor in al-Ashar market, described the scene thus:

On the first two days after the British entered the city, the looters were everywhere. I think many of them looked like criminals newly released from prison; they had tattoos. They were using welding equipment to get into the Rafidain and Rashid banks [in the center of al-Ashar market]. There were maybe two hundred looters there. A British tank was in front of the Rafidain bank but it did not do anything. After a while, the tank just left. We asked the British to stay because there was looting going on, to protect us, but they just left.

British troops only interfered in the looting in the city center when looters fired their guns. An extended gunfight on April 8 between two groups of looters fighting over access to the banks prompted a rapid British response. In the ensuing firefight, several looters were killed; the bodies of four looters shot and killed while attempting to escape in a Toyota remained in an intersection for several days thereafter. Apparently, even this grim reminder did not deter looters from continuing their work - armed only with clubs and knives.

Basra's hospitals, already taxed to the breaking point by casualties related to the conflict, also faced persistent problems with looting and lack of security. Immediately after British forces entered the city, they provided security only to the city's largest hospital, the al-Jumhuri General Hospital. Other hospitals were initially left to fend for themselves with medical and support staff taking up primitive weapons and standing guard around the clock to deter looters. Some relief came from the local mosques within the week, with clerics organizing small groups of men to act as unarmed guards for the hospitals.

Physicians at the other three major hospitals in Basra, al-Ta'limi (Teaching) Hospital, al-Tahrir Hospital, and Ibn Ghazwan Maternity and Paediatrics Hospital, told Human Rights Watch that they had to specifically ask British troops for protection in the first days of the occupation. British troops did provide some security to these hospitals, but this protection was sporadic and looters continued to threaten staff and supplies.

Dr. As'ad 'Issa, director of the Ibn Ghazwan hospital, told Human Rights Watch that he and his staff had organized twenty-four-hour patrols, armed with makeshift weapons like wooden clubs, to protect the hospital immediately after the occupation began, saying they did not receive adequate protection from British troops despite numerous requests.

On the first day, two physicians from the hospital went to ask for protection from the British. That night, a British tank did a circuit around the hospital, but then it left. The second day, I went to the ICRC [International Committee of the Red Cross] to get help from anyone, and they directed us again to the British. That night, they sent two tanks to go around the hospital, but they left after a while, and we stayed up all night because we could see gangs of looters outside the gates. Looters had already totally gone through the electrical supply building behind the hospital, and they were after the propane tanks we store behind the hospital. We were scared that they would set off an explosion if they tried to take the tanks.

The third night, we had no protection at all. We were too busy dealing with patients to go ask for it. At about 4:30 a.m., we found a group of three looters in the hospital, one of them armed with an AK-47, trying to steal our air conditioning unit. We confronted them in a group, and they finally just ran away. The following nights, we asked for protection from the British again, and they promised us some troops, but they only sent a tank to do a round. So ultimately we asked for protection from committees organized by the mosques, who sent us young men

with wooden clubs. They help us, but it's only an emergency measure.

Other institutions also were under siege. Businesses and institutions around Basra had begun relying on their own employees for protection due to the lack of response from British forces. The Iraqi Tankers Oil Company, a major petroleum distribution facility located on Sa'ad Square, one of Basra's most important crossroads, was severely looted in the first week of April. Akid Muhammad Jamil, a thirty-six-year old employee of the company, was asked by his supervisor to report to the company in order to help protect it after the initial wave of looting had already resulted in the loss of much of the company's belongings_not just fuel, but also office equipment, instruments, air conditioning units, office furniture, cabinets, and even electrical and telephone cables.

Five days after the British came, some looters came to the warehouse at midday. They had no guns, but they threatened us_they said they would beat us up, and if we opposed them they would return at night with guns. There were four British tanks on Sa'ad Square, so we went to the British to ask them to help us. We said there are looters inside the building, threatening us. We even had to lie to tell them that they had guns, so that maybe the British would come. But they didn't. So we returned to the building and saw that the looters were taking some stuff, and we eventually managed to chase them off. But they returned at 4:30 p.m., the same group. By then we got ourselves a gun, and this time we held them off. We were afraid to shoot because we knew that would attract the British and that they would shoot us. When the looters left, they said they would return at night with guns. At 9:30 p.m., some other looters came by, in a stolen sanitation company car, and demanded fuel. They had a gun with them, so we were afraid. But we had no fuel left, so we eventually argued them out of it. All the time, four British tanks were just sitting in the street.

On the other side of Sa'ad Square, Basra University was looted and gutted in plain view of British troops during the first few days after British forces entered the city. The initial wave of looting burned down the library, estimated to hold some one million volumes, including important manuscripts about the history of the Persian Gulf. Looters also completely tore apart the university's planetarium, whose blue dome is a Basra landmark. Looters essentially emptied the university's several faculties of books, school supplies, and furniture.

After being attacked by Iraqi militia hiding in the university and the adjacent faculty residences, British forces entered the university on April 6 and established a camp in the College of Arts. The following day, as mobs of looters swarmed the university, British forces decided to leave the university to the looters.

Professor Kadhim K. 'Ali, who teaches English translation at the Faculty of Arts, returned to the university on April 7 to find hundreds of looters rampaging around the university while British troops were camped in the arts faculty, where he teaches. "I saw groups of looters just taking everything, all over the university, while the British were just standing there. The only building intact was the arts faculty, where the British were," he told Human Rights Watch.

I went to a British major who was standing with his troops on the main street of the campus. I told him I am a professor and I would like to remove the furniture and property from the arts faculty building to protect it. A group of other professors, including the chair of the history department, tried to talk to the British troops to get them to do something to protect the arts faculty. But the British said they couldn't let them in because it was too unsafe. So that faculty was ultimately looted also.

Ramadhan M. Sa'adkhan, an assistant professor at the arts faculty, returned to the university on April 8. By that time, the arts faculty had been looted. "I saw the looters just running wild. It wasn't even looting. I saw them set books on fire, loot books that were of no use to them. We had a major library collection relating to the historical heritage of Basra, it was completely ransacked."

Prof. Sa'adkhan also expressed astonishment that British forces, who by his reckoning had four armored vehicles parked immediately outside the university, did nothing to stop the rampant looting. "When I asked the U.K. forces to stop the looters, they said 'We can bring back better books and equipment.' But when is that going to happen? We have no idea. It would have been easier to just stop the looters then."

By mid-May British forces had instituted some measures to improve security such as beginning to reconstitute a police service and a judicial system. But crime levels were still noticeably higher than the pre-war period: hospitals reported six or seven violent homicides daily and an equal number of injuries attributed to gunshot wounds; carjacking and violent home invasions occurred at the rate of one or two daily. The people's anxiety about lack of security was further compounded by a sense of confusion about what, if anything was being done to protect them.

In this security vacuum, Iraqis have increasingly looked to the former government's police forces as possible protectors, despite very serious misgivings about that police force's history of brutality and corruption. Although British patrols became more visible around the city center, and at least four police stations reopened with some five hundred active Iraqi police officers, this police presence was completely inadequate for meeting the security needs of a city the size of Basra, particularly in the climate of heightened lawlessness following the fall of Saddam Hussein's government.

British military forces were aware of this problem, and were actively casting about for solutions. Senior British and U.S. military officers repeatedly told Human Rights Watch that they had been given an impossible task in converting their small combat units into a force sufficient for the task of providing security to civilians. As a result, British officials, like U.S. military officials from other Iraqi cities interviewed by Human Rights Watch, appeared to be improvising different responses in each city they controlled. These efforts have been hampered by inadequate manpower and insufficient support and direction at a national level.

The lack of a centralised system for gathering information about crimes and communicating information about any prosecutions has further aggravated the sense of insecurity felt by ordinary Iraqis interviewed by Human Rights Watch. In large part, this is due to the failure of ORHA (Office of Reconstruction and Humanitarian Assistance, effectively the coalition's civilian administration in Iraq, which has been subsumed under the Coalition Provisional Authority since early May) to take on responsibilities for coordination and direction at the national level.

During the first six weeks after the occupation of Iraq, Human Rights Watch researchers found no centralized system for law enforcement; no system for gathering or tabulating national or local data relating to criminal incidents; no coordination between coalition security and police forces in different sectors of the country; very little coordination between U.S. and U.K. zones, and very little coordination in terms of how to treat, investigate, and prosecute criminal suspects.

Human Rights Watch spoke to coalition forces responsible for security in the three main southern cities: Basra, al-`Amara, and al-Nasiriyya. British forces occupy the first two; the last is occupied by U.S. troops. While coordination did exist between Basra and al-'Amara, there was little communication between the British and U.S. zones, and military officials in all three cities stated they had received little, if any, direction from ORHA.

The failure of the U.S. and British to prepare for fulfilling their obligations after occupying Iraq is all the more glaring in light of two relevant factors: first, coalition forces should have expected an outbreak of looting and other crimes given of the experience of severe lawlessness following the first Gulf War in 1991, the economic hardships facing the Iraqi population, the release of thousands of prisoners convicted for criminal offences from Iraqi jails in October, 2002, and the wide availability of firearms among the population.

Second, in addition to these Iraq-specific conditions, general experience with peacekeeping operations in post-conflict situations in Bosnia, Kosovo, and East Timor all demonstrate the importance of providing security immediately after the end of military conflict. For instance, in Kosovo, as in Iraq, U.S. and British forces controlled territory essentially without any government structure, prey to rampant criminality, and requiring investigation of large numbers of past and ongoing human rights abuses. Given the presence in Iraq of many military officers who had served in Kosovo (especially among British forces), one would have expected coalition troops to apply the lessons learned from Kosovo in Iraq. Human Rights Watch's research in southern Iraq showed this not to be the case. As is set out in more detail below, coalition forces committed several grave errors in the first weeks of occupation that aggravated the current climate of insecurity in southern Iraq. Chief among these avoidable errors were:

- Failure to adequately prepare for the predictable breakdown in law and order following military operations and the fall of the civilian administration;
- Reliance on combat troops for police and security duties;

- Late and insufficient deployment of military police;
- Failure to deploy international civilian police;
- Failure to deploy international legal and judicial personnel;
- Failure to train adequately coalition forces on local law and customs;
- Failure to provide adequate protection for victims and witnesses regarding past and current crimes;
- Failure to secure evidence for investigations of past and current crimes;
- Failure to communicate with the local population on security issues."

Human Rights Watch Report: Continuing Criminality in Basra

Six weeks after the British forces took over the city, Basra continued to suffer from lack of security and a serious crime wave. The city's streets showed some visible signs of improved security: traffic was heavy, apparently almost back to pre-war levels, and the shops on the main thoroughfares remained open until 10 p.m. But gunfire was still a nightly occurrence, averaging about thirty incidents of single or multiple gunshot incidents every night. Basra's hospitals reported some three to five gunshot homicides daily, with another five to seven cases of injuries attributed to gunshots. Physicians told Human Rights Watch that gunshot wounds before the war, limited to one or two a month at each hospital, were mostly of an accidental nature, while after the war intentional gunshot wounds predominated.

The frenzy of the first week of looting of money and furnishings in government buildings gave way to more systematic stripping down of public buildings, including the university, and violent thefts of private property and of individuals. In addition, reports of reprisal killings were on the increase in some areas of southern Iraq.

The overall scale of the security problems was (and remains) difficult to fully assess in the absence of reporting by local media and without a centralized system of data gathering about criminal activity. In such circumstances the rumor mill turned a single criminal incident into a whole series of crimes. As an example, one widespread rumor about criminality concerned a rash of carjackings purportedly taking place in the Basra region in the first week of May. Human Rights Watch researchers contacted mosques, hospitals, and other community centers to gather information, and found that in some instances, the same incident was recounted several times as separate incidents, falsely inflating the sense of insecurity. Nevertheless, it was obvious that violent carjackings were taking place throughout the Basra region at a high rate, rendering traffic on secondary roads in the city, and major roads outside the city, vulnerable to attack. Human Rights Watch documented five incidents between May 1 and May 4 alone, targeting pickup trucks, sports utility vehicles, and microbuses.

On May 3, six men with handguns surrounded a house in Basra's al-Jenina quarter and stole the family's car by holding the owner's eight-year-old son at gunpoint. Walid Hamid Kadhim, thirty years old, is the car owner's brother-in-law:

We were inside the house after lunch, when the looters lured the children outside [the house] by offers of money. When my brother-in-law [Nasir 'Abdul Hussein] went out to see what was going on, the looters held his son and put a handgun to his head. They said we want your pickup truck. Nasir tried to reason with them, but they quarreled and the looters threatened his child. So he said leave my child and take the car. They said if you tell the British about this we will come back and kill your child.

Karim Salem Khiwan, 42, manager of the oil company in al-'Amara, was shot during a carjacking on the road between al-'Amara and Basra on May 4th.

I was accompanying four company tanker trucks from al-'Amara to Basra. I was seated in a pickup truck at the end of the convoy, next to the driver, with two passengers on the back seats. Suddenly, a land cruiser [generic reference to sports utility vehicles] and three pickup trucks full of armed people drove up and surrounded our vehicle. The driver stopped the vehicle and I asked the armed people what they wanted. Without any warning, they started shooting at close range. I was hit in the back. I was nevertheless able to leave the car with the other passengers. Karim Salem was hospitalised in al-Ta'limi hospital in Basra.

Another series of incidents plagued a single family in rapid succession, raising the possibility that the family was somehow targeted for its wealth and position with the former Iraqi government.

On the night of May 1, 'Ali Rahim Muhammad, a thirty-year-old policeman, was riding in his vehicle alone when five men in another car armed with Kalashnikov guns attacked and forced him to pull out. As 'Ali Muhammad explained, "One of the assailants put a gun against my head and a rope around my neck. The same attacker dragged me to the sidewalk while another one got into the car. Someone then shouted: 'Let's kill him,' but I then heard someone else ordering the others to let me go. The men left the place quickly with the car, a Honda microbus."

The next day, someone came to 'Ali Muhammad's family's house and claimed to know where the car was. This person was able to recount precisely all the details of the carjacking and said that the vehicle could be found in al-Qurna district, 60 kilometers north of Basra. 'Ali Muhammad's older brother, Tahseen Rahim Muhammad, thirty-five years old, decided to go to Qurna and the informer introduced him to another person who agreed to take him there.

Tahseen went to Qurna with several friends and, through a chain of contacts, was able to meet a group of armed people in possession of the car. According to Tahseen, the armed group belonged to the same tribe as the carjackers. Tahseen negotiated with them and paid a sum of one million Iraqi dinars [then equivalent to about U.S. $500] to retrieve the vehicle.

On May 2, when 'Ali's sixty-year-old father, Ibrahim Muhammad Sindal, a senior manager with a maritime commercial firm in Baghdad, received word that his son had been attacked and his vehicle stolen, he decided to go from his home in al-'Amara to Basra to help his family. A few miles before al-'Uzayr, 100 kilometers north of Basra, Ibrahim Muhammad realized that another car was following his Mercedes. After entering the village of al-'Uzayr, Ibrahim Muhamaed stopped his car in a crowded area in order to discourage the attackers. Nevertheless the attackers drove next to him and scared the crowd off with their guns. They threatened Ibrahim Muhammad, who was forced to pay his assailants the equivalent of US$200. Once the money was paid, the attackers quickly left the area.

Two other brothers of the family, Qusay Rahim Muhammad, twenty-five years old, and Muhammad Rahim Muhammad, a thirty-two-year old driver, left Baghdad by car for Basra at 3 p.m. on May 2 with three other people in their car to help their father and their family. At around 6 p.m., while they were approaching al-'Aizar village, the road was blocked by another car and they were forced to stop. They realized too late that a fake accident had been set up and that six men carrying Kalashnikovs were waiting for them. Without any warning, the gang started shooting at them. Muhammad was hit in the back but managed to pass the assailants' car and sped away. Qusay was also hit by a bullet in his right arm. The three other passengers were unharmed. They informed the British army in the next village, 80 kilometers from Basra. The British provided first aid, and then convoyed them with two cars to the main road. The two brothers decided to return to al-'Amara to spend the night there. They eventually stayed one night at al-'Amara's hospital. The next morning, they came to Basra's al-Ta'limi hospital, where Human Rights Watch interviewed them.

Homicides and Possible Reprisal Killings

The targeted attack on the Rahim Muhammad family raised the possibility that the family may have been targeted for its wealth or possible links to the former government of Iraq. This latter motive holds troubling implications, given the history of severe political reprisals that occurred in Basra after the 1991 Gulf War. According to information provided by hospital staff, Basra witnessed a nearly thirty-fold increase in gunshot homicides and injuries in the first month after British forces entered the city, but because of the absence of any police investigative capability, it was very difficult to ascertain what motivated these homicides.

Western journalists who arrived in Basra immediately after British troops reported seeing dozens of corpses around the cities, reportedly belonging to Ba'th Party members and military officials. However, such open targeting of officials of the former government clearly subsided after the first week of British control. After the initial period of violence Human Rights Watch received unconfirmed reports of nearly a dozen such attacks in Basra during the last week of April and the first two weeks of May, but could only gather detailed information about three possible reprisal attacks in the Basra region. Of these, Human Rights Watch could not

confirm the nature of two of the incidents due to the reluctance of the families of the victims to speak publicly and thus to identify themselves as having had positions with the Ba'th Party or the former Iraqi government. An other incident, however, seems clearly to have been an instance of reprisal killing.

In that instance, Human Rights Watch spoke to the family of twenty-six-year-old 'Abdullah Sa'dun, who was killed on April 22 by a masked gunman who stepped out of a car, shot him, and then drove off. 'Abdullah owned a compact disc distributing business, but there was no suggestion that his commercial activities had made him a potential target of violence. The Sa'dun family has been powerful in Basra for many decades, cooperating with successive Iraqi governments since the Second World War, including that of Saddam Hussein. Twenty-one year old Ahmad Turki Za'abi, a close friend of 'Abdullah, witnessed his murder.

At about 11 p.m. we were at the end of this street in front of some shops. There were five or six of us, just standing around. A Toyota pickup truck drove up. It looked like a government car, but it was probably stolen. There were two people inside. They stopped next to us. The passenger left the car with a handgun. He had his face covered. When 'Abdullah saw him he said 'God save me.' The man shot 'Abdullah once in the abdomen and once in his chest. The shooter was about five meters away from 'Abdullah.

'Abdullah's father, 'Abdul Majid al-Sa'dun, denied that his son's murder was motivated by the family's previous activities, although he could not explain why his son would be targeted in public, without any attempts to attack his companions or to rob him. Other family members indicated that they viewed the attack as an attack on the family, and not just 'Abdullah. Walid Sabri Sa'dun, forty, was 'Abdullah's cousin and brother-in-law. He stated that after 'Abdullah's murder, he was concerned for the security of the rest of the family, and that he had asked British forces to protect the family from any further attacks. "If they don't do it, then they should let us do it," he said. "We have guns and we can protect ourselves."

As more and more gravesites around Iraq are exhumed and bodies are identified, Human Rights Watch is concerned that this may inflame the desire for reprisal and further violence targeting officials of the former government of Iraq, members of the Ba'th Party, and their families.

For instance, the city of al-'Amara, 185 kilometers north of Basra, with a population of about 350,000, reported five homicides related to attacks on Ba'th party members and their families and several incidents of arson against their residences. According to British and Iraqi law enforcement officials, these incidents, all of which occurred since the last week of April and the beginning of May, reflect the settling of scores based on the availability of once-secret documents from the Iraqi government that identify government agents and collaborators.

British and local Iraqi police officers independently confirmed for Human Rights Watch the account of the first widely reported instance of reprisal and counter reprisal in al-`Amara: Salam Ghanim Batul discovered that his brother, Rahim, missing since 1991, was among the bodies found in a grave site near Baghdad after the fall of the Iraqi government. Salam Batul apparently identified the person responsible for naming his brother to the government through documents found after the ransacking of the offices of security and intelligence forces. Since this person was already dead, Salam Batoul sought out his son, Najim Abboud Araby, and killed him in public at 11 a.m. on April 22. That afternoon, members of the Araby family attacked Salam Batul's residence, killed Salam, and burned his house.

In another case, forty-five year old Mahmood Dawood Menni was killed in his shop, apparently in retaliation for the role played by his brother, Karim Dawood Menni, a local senior Ba'th Party member, in the death of several opponents of the Iraqi government. British and local officials stated that Mahmood was not in any way active with the Ba'th Party or the government, but that the customs of blood-feuds and retaliation made him a target for revenge by his brother's possible victims.

Human Rights Watch was also told by local officials of several attacks on family members of Ba'th Party members, including one shooting of a wife of a Ba'th Party member, and at least two cases of arson directed at residences of families of Ba'th Party members. Local law enforcement officials, with British assistance, have positioned extra patrols around the residential quarters of Ba'th Party members, in part to protect them from reprisals, and in part to monitor their activities.

Lack of Security and Humanitarian and Medical Operations

International humanitarian law as embodied in the Geneva Conventions explicitly obliges the occupying power to ensure the safety of humanitarian and medical personnel in carrying out their operations. Six weeks after the fall of Basra, lack of security and criminal activity were among the most serious problems facing humanitarian groups and hospitals. Large areas of the city remained off-limits to U.N. agencies and aid groups. At least one medical NGO faced an attempted forced entry by armed men. Hospitals and major institutions also complained about ongoing problems with looters and criminals.

In the first two weeks of May, armed carjackers stole two vehicles from the Ibn Ghazwan Pediatric Hospital. According to the hospital's director, the hospital's minibus, used for transporting staff to and from work, was carjacked in broad daylight on a major thoroughfare and its driver was pistol-whipped. A week later, a Land Rover belonging to the hospital was stolen on May 14 when its driver was threatened with a gun held to his head. Dr. 'Issa, the hospital's director, was concerned that his staff, particularly women, would refuse to report to duty unless security improved.

Inside the hospitals, on several occasions, patients or their relatives have brandished weapons and threatened physicians with bodily harm. Human Rights Watch was told that at least one such incident occurred daily at the city's three main hospitals. As recently as May 25, the United Nations reported that a patient was murdered inside the al-Ta'limi hospital, while intimidation of hospital staff by armed members of patients' families was routine.

One of the most highly publicized and troubling incidents of this sort occurred on May 7 at al-Ta'limi Hospital, when aggressive visitors to the hospital brandishing weapons threatened the hospital's director, Dr. Akram Hamudi because they insisted he provide a different course of treatment to save the life of their family member. Dr. Hamudi, a very highly regarded member of Basra's medical community and the teacher of many of the physicians with whom Human Rights Watch spoke, lost ten members of his own family as a result of coalition bombing on April 5. After he was threatened in this way, he felt unable to continue working at the hospital.

Some of these problems have occurred despite the presence of British troops ostensibly to provide security at the hospitals. Human Rights Watch researchers discovered very little coordination between hospital staff and British security forces, often simply because they did not or could not speak to each other. British military personnel provided Basra's main hospitals with a contact telephone number in case of emergencies, but physicians expressed dissatisfaction about this arrangement, saying that emergencies often were too sudden and too chaotic to enable physicians to call for British assistance. The physicians complained of inattentiveness by British soldiers, who in turn complained that they were frequently not told about security problems until long after they had been resolved.

Medical staff, particularly women, expressed strong concerns about their working conditions and the insecurity of their commute to and from work. At al-Ta'limi hospital, the administration requested that all staff, particularly women, travel in groups; the hospital uses ambulances to transport some staff who live in particularly dangerous neighborhoods. Female staff are also particularly vulnerable while at work. Dr. Uruba Mazhar Hassan explained that she and her colleagues regularly face threatening situations at the hospital because of the large number of criminal suspects brought in for treatment. Dr. Hassan also repeated the concern voiced by several other physicians about the inability to protect medical staff from distraught or hostile family members of patients. While these concerns, and their impact on medical staff, are very real, Human Rights Watch researchers could not confirm any serious incidents of attacks on female hospital medical staff.

Problems Particular to Women and Children

In situations of extreme lack of security, women may be targeted for sexual harassment and assaults, and Human Rights Watch received several reports about kidnappings and rapes in Basra. Due to the sensitive nature of such crimes and the

conservative religious atmosphere of Basra, it is extremely difficult to document attacks which include elements of sexual violence. Human Rights Watch therefore could not confirm a pattern of attacks targeting women. However, based on discussions with medical personnel, Human Rights Watch confirmed three incidents of abduction of girls or women, possibly involving sexual violence. One incident, occurring on the week of May 11, involved the daytime abduction of a young woman from a city street; the woman's body was found three days later in a field outside the city. Two others incidents, both of which occurred in the first week of May, apparently involved family disputes. Human Rights Watch could not establish whether there were further such incidents during this time period, nor could Human Rights Watch ascertain the incidence of sexual violence in Basra before British occupation in order to provide a basis for comparison.

The general fear of attacks on women and girls also affected students, particularly girls at schools and university. Female students at Basra University expressed their worry about going back to the university or attending classes while looters and scavengers still freely roamed the university. Younger students had similar worries. While most parents with whom Human Rights Watch spoke generally welcomed the reopening of schools, they also expressed their concern about the security of their children. Parents looked to British forces to ensure the security of children on their way to and from school. Another major source of concern for parents was the widespread presence of unused ammunition and unexploded ordinance in many schools. Human Rights Watch documented several instances of children maiming or killing themselves while playing with ammunition or explosives.

Tragedy at the end of Op Telic 1

Towards the end of Op Telic 1, the complacency surrounding the development of the peace keeping operation was shattered by the tragic murder of six military policemen near Al Amarah, which has subsequently been the subject of a widely read book.

"'Run or you will die.' The soldiers did not go and they died..."

"There is little to mark where the soldiers died, only a mound of shattered glass, holes gouged in a peeling plaster wall and a rusty smear of dried blood along a filthy corridor floor. Nor is it clear how they died. The rear of the police station is still burning. The front wall, below the small turret where a torn Iraqi flag is flying, is covered in bullet scars.

Two of the six-strong detachment of British Royal Military Police killed in this scruffy, sun-baked town on Tuesday morning tried to hold off their attackers from the roof of the police station. The rest took up positions in three rooms on the ground floor, facing a broad dirt road, a wall and a secondary school.

Their attackers came at around 11am and the firefight lasted at least an hour and a half. When a frontal assault failed, the crowd, armed with light and heavy machine guns and rocket-propelled grenades, withdrew. A little later an attack across the wasteground on the south side was successful. But whether the attackers had rushed the building under fire is unclear. Some witnesses said the British had run out of ammunition.

After 10 minutes of the firefight the soldiers had a chance to escape. Fifteen local policemen, recruited by the new power in Iraq, were in the station when the attack started. They pleaded with the British soldiers, led by the man they knew as Mr Tim, to flee with them through a back window.

"We said we would protect them and that they should come with us," Abbas Bairphy, 25, told the Guardian yesterday. "We knew that we would be killed too because the people thought we were collaborators. But they refused to come with us."

Mr Bairphy said that Mr Tim told him that his mission was to stay at the police station and asked for a radio. "He said his own radio had been burned when their vehicle had been set on fire. But I had no radio. I felt bad that they would not come with us. I said, you must come or you will die." The soldiers did not go and they died.

They were not the only ones to lose their lives that day. A few hundred metres from the police station is the bazaar, where battered trucks were yesterday unloading produce. There are no bullet scars here, but 24 hours earlier a disastrous incident led to claims that five Iraqi men died under British gunfire and sparked the later firefight at the police station.

Majar al-Kabir is a Shia city, and it suffered badly under Saddam Hussein. Here the British and American forces were welcomed as liberators. The problems appear to have started with a British drive to collect weapons. On Monday morning, residents say, British troops started aggressive searches of homes. As in most of Iraq, almost everybody in Majar al-Kabir is armed, and bearing arms is seen as a fundamental part of life. With security poor, many feel the need for protection.

The raids on Monday morning provoked a protest outside the police station. Bearing placards saying "Our town is safe. Stop the searches", around 100 locals gathered. After two hours, locals say, a British military policeman walked out to talk to them. He told them to disperse or helicopters would come and kill them, they said. The protest broke up and a few hours later four British Warrior armoured personnel carriers took up a position outside the building.

Community leaders then sat down with British officers to broker a deal. The local deputation was led by Talal Abid Ahmed Zubaida, a local prayer leader. After lengthy discussions he and a British officer signed an agreement.

"There is no necessity that the coalition and its agents come to the city. The process of securing weapons in al-Majar district will be supervised by the local security committee," it reads. "After a period of a week for informing people, heavy weapons, including Dushka [a Soviet-made heavy machine gun], mortars and anti-aircraft guns will be handed in. We want to see results within one month."

It was signed by Mr Zubaida and a Captain Chris. "We thought we had an agreement," said Mr Zubaida yesterday.

But early on Tuesday patrols - or searches and raids - started again. Parachute regiment soldiers moved through the dusty streets. The locals were incensed and came out of their homes to argue with the British soldiers.

Many stories are now circulating about the behaviour of the British soldiers, few of which can be confirmed. Some say they shot dogs, others allege that the troops stole money and harassed women.

What is certain is that the claims are similar to those made in those cities further north where US troops have adopted an aggressive search policy and routinely seize all money "to prevent it being used for buying weapons".

They also search women's rooms, if not the women themselves. This is a violation of local traditions. "They don't respect the people and the women. It is very bad according to our Islam," said Ahmed Younis, 32.

Mr Zubeida said he tried to broker a deal. "I argued with the British for a long time. In the end we agreed that they would stay in their vehicles and stop the searches," he said.

But, according to locals, the searches did not stop and it appears that, within hours of the discussion, British soldiers dismounted to search more houses. This sparked violence. At least one of the British vehicles was torched and some kind of firefight followed. A Chinook helicopter coming to support the soldiers was hit by a rocket propelled grenade. Local people then dragged off a British vehicle and burned it.

Then events began to move more swiftly. By about 10am an angry crowd had gathered in the bazaar. What happened next is unclear. Several witnesses said British soldiers moved through the bazaar after searching houses. The witnesses claim they treated local people roughly. "One threatened a child with his gun," one said. Another said people started throwing stones at the troops.

As more people gathered, tensions rose. Some say that the soldiers fired rubber bullets to disperse the crowds, though this is unlikely. Most agree that a local man, possibly a former Ba'ath party official, started shooting with a handgun. The British then opened fire.

"It was about 10.15 and the market was very crowded,' said Mr Younis. "I threw myself on the ground and shouted to everybody to run away or get down. The

shooting lasted for about five minutes but there were bullets going everywhere. They were firing on automatic."

Mr Younis, who was jailed by Saddam for nine years and says he welcomed the British when they arrived in his town, said that there were around 15 soldiers in two vehicles. "I couldn't believe it when they started shooting," he said.

At least 17 people were hit. They included a 13-year-old girl caught by a ricochet in the shoulder and a nine-year-old boy. Several other casualties have spinal injuries and multiple fractures.

In all, five men have died from their wounds. Three, with head wounds, died almost instantly, according to Dr Hassan Jabar, the assistant director of Majar al-Kabir's hospital who treated the casualties. A fourth died in an ambulance on the way to Basra. Dr Jabar said he believed the high proportion of head and chest wounds showed the shooting had been carefully targeted.

The fifth to die was Ghazi Musa Hassan, 50, the ambulance driver at the main hospital. A single bullet hit him in the heart. Though he was alive when brought to Dr Jabar he died within minutes. Musa, who had six children, had just finished an overnight shift. He then went home to have breakfast, went back to the hospital to check his vehicle's engine and then, fatefully, walked through the bazaar on his way home. "He was a simple poor man," Dr Jabar said.

As the wounded lay in the bazaar the British soldiers drove away. One local said they retreated to an outlying village. The crowd, however, were incensed. Many returned home to get their weapons - the very arms that the British soldiers had been trying to collect hours earlier. They headed towards the police station where they knew the British army had a presence.

The six MPs at the police station were well known. For a few weeks they had been coming to the station to liaise with and train the hastily recruited local police force. They had faced no animosity before, except the protest a day earlier. It is unclear whether they knew of events elsewhere as attackers burned their vehicle, where their radio was kept.

The armed crowd was hundreds strong and set on revenge. A siege began. No one in Majar al-Kabir would admit to being among the attackers yesterday so details of the battle are sketchy. By 1pm at the latest, the MPs were dead and though a British army Chinook, dropping thunderflashes and possibly firing, had arrived, it was too late.

According to hospital staff, four Iraqis were injured in the police station attack. The figure could well be higher. Yesterday Majar al-Kabir was tense but calm. There was also a sense of shock. In a tent Ghazi Musa's family were welcoming people who had come to pay their respects to the dead ambulance driver. Khaled Obeid, his cousin, was bewildered by events.

"We did nothing to them. First we welcomed them but now they hurt us. We were thankful to them for getting rid of Saddam but now I do not know."

There is no evidence that the events are part of a concerted or organised resistance movement. No one here speaks of fedayeen or diehard Ba'athist loyalists. Instead they talk of the violation of honour and tradition and a lack of respect. There is sympathy for the dead British MPs as well as the locals. "I am sad and very unhappy for both the Iraqis and the British," said Dr Jabar. "I am very sorry. And I am afraid from the future."

Major General Peter Wall responded to the incident as follows in an MoD Official Statement on 26th June 2003:

Incidents in al Majar al Kabir on Tuesday 24 June 2003

I would like to begin by offering my sincere condolences to the families of the soldiers who lost their lives in the incident which took place on 24 June in Al Majar Al Kabir. Also, to reassure the families, friends and colleagues of those injured that they are in the very best of hands, and receiving the most expert cfare here in theatre.

In the wake of those events, we have been building a more detailed picture of what took place, and working in conjunction with local leaders. We have received excellent cooperation from members of the Al Amarah authorities and the town council of Al Majar, who met with our local commanders yesterday morning.

A number of them went to the town on the day itself to try to restore order, and we have valued their support. They have expressed their confidence in our forces and the continuing strength of the cooperation between the people of Maysan province and the Coalition. We will continue to cooperate with them closely on the way ahead.

I am aware of different versions of events leading up to the deaths of the Royal Military Police personnel which have been reported in the media. The fact that there were no British survivors makes this particularly difficult.

A six-man RMP patrol left 1 PARA's base location in Al Amarah bound for Al Uzayr. On the way there, the patrol intended to drop in on a number of the local police stations in order to liaise with the local police force. The route that they planned to take was initially to Majar Al Kabir, where they intended to stay until approximately 1100, and then onwards to Qalat Salih. Their purpose was to advise the local police force on policing matters and monitor their progress. This was part of the excellent work the RMP has been doing, and continues to do, across the UK area of operations to reestablish the Iraqi police force.

Following the incident which resulted their deaths, members of the local Maysan Province Guard Service placed the bodies of the six into local ambulances which were subsequently driven to the 1 PARA Incident Control Point which had been set up close in response to the ongoing incidents.

On the other incident involving the platoon from 1 PARA, I would like to take this opportunity to offer my praise for the professionalism and courage displayed by all those involved. They had intended to conduct a routine joint patrol in the town working with the local militia. When the crowd turned against them, they fought a determined and protracted action to extricate themselves from a precarious situation. I would also like to pay particular tribute to the helicopter pilot and crew of the Chinook sent to provide reinforcements and ammunition, and to the medical team on board. Their actions undoubtedly prevented further loss of life and involved considerable risk to themselves.

The crowd violence appears to have stemmed from a misunderstanding. The townspeople expected searches for weapons to be conducted by our patrols. That was not our intent, and this had been explained to the town council at a formal meeting earlier in the week, when the strength of their resentment to weapons searches had become clear.

The situation in Basrah province and throughout the rest of Maysan province remains calm today. We continue our important work to support the reconstruction of Iraq".

UK forces were preoccupied at that stage with the draw down of 1st UK Armoured Division and its relief in place by 10th July 2003 by 3rd UK Mechanised Division, with the latter forming the headquarters of the new Multi-National Division (South-East) . Patrolling in and around the provinces was low key and largely "soft-hatted"."

The scene was now set for the bruising and brutal experiences that were to follow during the latter phases of Op Telic.

The work of the Medical Units in the latter phase of Op Telic 1

Key medical units involved were the three Close Support Medical Regiments attached to the Combat Brigades; the two General Support Medical Regiments providing primary care and a "blue light matrix" to the theatre; 34 Field Hospital and 202 Field Hospitals, with 33 Field Hospital initially in reserve. These units were supported by a range of other medical units, providing logistic support, and linked by the tactical and strategic helicopter and aircraft casualty evacuation assets and teams of the Royal Air Force, with RFA Argus in support on behalf of the Royal Navy in the northern Gulf.

In general terms, casualty volumes were limited, and much of the work of the medical

units involved provision of specialist care that was otherwise unavailable to the indigenous population, such as in the treatment of burns at 202 Fd Hosp, and in dealing with major public health challenges, primarily a norovirus gastroenteritis epidemic. There was minimal fighting in April and May, and the focus rapidly turned to downsizing and reordering 1st Armoured Division in preparation for its replacement by 19th Infantry Brigade on Op Telic 2.

By early May, all objectives had been secured with minimal loss of life or damage to property. By mid May, the personnel of 34 Field Hospital had been withdrawn, to be replaced by 202 Field Hospital at Shaibah Logistics base (formerly the RAF Shaibah of the UK presence in Iraq during the 1950s).

4 GS Medical Regiment reported in the RAMC magazine that "as the Land Campaign began our role was expanded to include…evacuation from the field hospital to the APOD. …The Regiment's focus lay with getting E (13) Sqn up north. They set up a detachment in the delightful little seaside town of Umm Qasr. This was very much the status quo until A (11) Sqn gt a short notice task to send one battlefield ambulance to go with a convoy to reopen the UK Embassy in Baghdad. This would be the furthest into Iraq any major UK medical unit had been into Iraq at this stage of the conflict. The five day trip passed eventfully with a night in one of Saddam's presidential palaces.

A Sqn handed over all of its tasks and some volunteers to E Sqn and prepared to redeploy with RHQ to the UK. This took a little time as the roulement/outload plan was ever changing. We waited in 50 degrees centigrade heat to be processed out of theatre at the APOD. The flight home went quickly as almost all slept in the air conditioned cool. We touched down at Brize Norton on a surprisingly chilly May morning.

A composite subunit of 4GS was formed from the TA elements, B and C Sqns, and deployed on Op Telic 2 under the command of 3 Close Support Medical Regt."

16 Close Support Medical Regient similarly reported its deployment, beginning with "frantic preparations" leading up to the move to Kuwait on 17th February 2003, along with most of the TA subunit 144 Parachute Medical Sqn (V), where they formed up in Concentration Area Eagle in support of 16 Air Assault Brigade. On crossing the border, 19 and 23 Air Assault Medical Squadrons leapfrogged north with the Brigade's rapid advance through the Rumaylah oilfields and Al-Qurnah, reaching their final locations around Al-Amarah, dealing with a number of seriously wounded casualties and the large outbreak of gastroenteritis. Most returned to the UK by mid June.

1 Close Support Medical Regt deployed with 7 Armoured Brigade, after training in subzero temperatures in Northern Germany. Just a few days into hostilities, A (29) Close support medical squadron, also designated as Dressing Station 1 Alpha (DS1A) was treating its first casualties on the outskirts of Basrah. DS1B, the regiment's second dressing station, supported by 3 CS MR, also treated a flow of British and Iraqi casualties. Once Basrah was under British control, DS1A moved to Allsop lines to support Brigade operations around the city.

As threat levels decreased around the city, DS1A moved up north to relieve 16 CSMR at Al Amarah. They left behind the luxury of palm trees and marbled buildings for te dust

and sand in temperatures of 50 deg C. With news that Al Amarah was to be a permanent location, they set about creating air conditioned wards and an operating theatre.

Just before the unit was due to return, it was involved in the Majar Al Kabir incident, which left one of the DS doctors with a gunshot wound, from which he has since made a full recovery.

B (30) Sqn undertook its pre-Telic training with the Black Watch, Scots dragoon Guards, 1RTR and 1RRF battle Groups at Hohne in Northern Germany, and exercising the new forward medical command vehicle concept. On deployment to Kuwait, B Sqn were widely dispersed in the evacuation and treatment chain. With the war over, the biggest health threat was the heat and the flies, and the unit was promptly returned to the UK in the expectation of redeploying to Iraq in April 2004.

C (31) Sqn personnel were initially dispersed among the other medical support units, but reformed in late April in Theatre for the "Peacekeeping Phase", to provide Role 1 and Role 2 enhanced medical support in the Divisional area, and to help rebuild the Iraqi medical services. "C Sqn re-emerged from all corners of Southern Iraq as a body of people with vastly different stories and a diverse range of experiences.. The Sqn was augmented by 50 TA medics from 5GSMR and tasked to provide an ambulance matrix from the Iraqi border to Al Amarah, a distance of some 160km through unsettled areas and on a high state of alert.

Sqn HQ was based in Saddam's Basrah palace. Four medical sections were dispersed around the AOR, dealing with the primary health care of the troops and supporting long range patrols. By July, with temperatures over 50 deg C, they were busy with cases of heat stroke and D and V. The Unit returned to the UK at the end of July.

E (28) Evacuation Sqn of 1 CSMR deployed in sections with the battle groups of 7 Armoured Brigade. "It seemed at times that the Iraqis were targeting medical vehicles and using the red crosses as aiming marks. Cpl Dom McClurg had his 432 ambulance targeted by small arms fire and RPGs on a number of occasions". The unit was soon returned to Germany when the initial fighting phase ended.

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Artist David Rowlands Medium: Oil on Canvas

Blood, Heat + Dust: Second Edition

Operation Telic and the British Medical Deployment to the Gulf 2003 -2009

Chapter 5:

The nature, history and weaponry of the Iraqi Insurgency



Painting: *Fighting Logistics 8th May 2004*

Artist: David Rowlands Medium: Oil on Canvas

Regarding the painting 'Fighting Logistics 8th May 2004' on the previous page, David Rowlands recalls that;

> *"In central Basra, 1st Battalion The Black Watch occupied the Ba'ath Party Headquarters buildings which had been bombed. When I was with the battalion, a soldier invited me to accompany him to the roof of a tall, badly damaged building to admire the view. We walked up many flights of stairs, then onto the flat roof. We could see the old British military cemetery down below. I was then shown the hole in the roof through which a 500kg satellite-guided JDAM bomb had been dropped by a US plane. The bomb was lodged (still unexploded) at the base of the building. I was very relieved when we finally walked gingerly down the rubble-strewn staircase again and out of the building! That night, in a bare, concrete room nearby, with no electric light, I lay in my sleeping bag on the dirty floor amongst the debris and shattered glass.*
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> *Very early next morning, I accompanied the Commanding Officer (Lt Col Bullock-Webster), with his bodyguard and driver, in a patrol of Land Rovers around the old centre of Basra. This painting is a result of that tour, and shows a foot patrol of 'Jocks' in the early morning light".*

Introduction

I have used a wide range of published sources to illustrate the nature and pattern of the insurgency, both to produce a coherent record and to inform future generations, operations and commanders. The stories that I found and from which I have selected are often truly horrifying, both in the numbers of casualties involved and in the nature of the deaths of some of those selected out for assassination and execution to shape the insurgent and the sectarian political agenda. In short, every tenet of civilised behaviour, human decency and the rules of war have been thrown out of the window at one time or another. It would also be dishonest and less that helpful to the historical record and to our understanding of the campaign if we did not recognise that from time to time the coalition standards of behaviour have fallen far below that which we believe to be acceptable, as for example in the revelations about the treatment of the incarcerated in the Abu Graib prison, and a number of other events which have been brought to the attention of the media.

The rereading and compilation of accounts reveals just what a nightmare much of the Iraqi story has been for many of those involved on all sides of events, and it is not difficult to understand how the various pressures which find their roots in the psychology of the "War on Terror" have brought about local failures of leadership and behaviour at all levels. From a military medical perspective, medical personnel can become tangentially or unavoidably involved in such events and their consequences, for which a policy of open examination and reflection is the best preparation for the future.

A brief Synopsis of events in Southern Iraq, May 2003 to May 2009

The military occupation of Iraq was completed in two weeks. Regime collapse and dissolution of the structures of State followed rapidly. The light forces strategy of the US Military left the occupying forces critically under resourced and under prepared to deal

with the political consequences of the complete evaporation of the Iraqi security services, and the Iraqi insurgency developed within the power vacuum that followed.

Operation Iraqi Freedom, to which Op Telic 1 was the UK contribution, was prematurely called complete by President Bush on 1st May 2003. With hindsight, we may regard this as the conclusion of the conventional phase of warfare in Iraq and the introduction to the insurgency phase as the various Iraqi forces reorganised themselves. Outside organisations such as Al Qaeda were drawn in by the opportunities presented to prosper from the disorder and to attack Western forces. There was a period of relative calm in the spring and early summer of 2003, during which the fighting men of Iraq and their factions reorganised themselves.

In effect, there developed a series of insurgencies and a series of counterinsurgency campaigns, broadly involving US forces in the North, Centre and west of Iraq, with Special Forces UK support, (as described in Mark Urban's book Task Force Black); and involving UK forces in the Shia Southern provinces, primarily in and around Basra. There was nevertheless much overlap and interaction, and the US campaign will not be addressed in detail in this book. However, we have much to learn from the US experience about the brutalities of the counterinsurgency campaign, where all of the rules and remaining civilities of warfare and respect for human life are torn up at huge cost to life and limb.

For this reason, I have drawn heavily on press reports and eye witness accounts of aspects of the insurgency which were previously largely unfamiliar to us, including the intensive use of suicide bombers and of the insurgent use of internet for propaganda, recruitment and operational development. Iraqi insurgents frequently released propaganda videos. These videos mostly consisted of footage of combat, training, executions or suicide attacks, and posted online as recruiting tools, as last testaments of suicide bombers, to demonstrate attacks and to influence public opinion.

In general terms, the shape of events from 2003 to 2009 in respect of the insurgency was as follows, as reported by and adapted from contributions to Wikipedia:

"In the summer of 2003, the U.S. military was focused on hunting down the remaining leaders of the former regime, which included the killing of Saddam's sons Uday Hussein and Qusay Hussein on July 22. Some 200 top officials of the former regime were killed or captured, as well as numerous lesser functionaries and military personnel. However, as the Ba'ath party organisation disintegrated, members of the secret police and army began forming guerrilla units, since in many cases they had simply gone home rather than openly fight the invading forces. These began to focus their attacks around Mosul, Tikrit and Fallujah. By the autumn of 2003, these units and Jihadists had begun using ambush tactics, suicide bombings, and improvised explosive devices, targeting coalition forces and checkpoints".

Following the collapse of the Iraqi government and its institutions and security forces, a number of Shi'ite Islamist groups, including the Sadrist Trend led by Muqtada al-Sadr, the Supreme Islamic Iraqi Council and Fadhila, were able to expand their influence in Basra, solidifying their standing following the January 2005 elections. Basra became a centre of smuggling activity in Iraq, including cigarette smuggling, opium from

Afghanistan which transits Iran, oil and gas smuggling, illegal weapons, and other criminal rackets.

Violence steadily increased as the three parties vied for control of Basra's resources, continuing through 2005 and 2006. At the same time, attacks on British forces increased. The increased use of explosively formed penetrators (EFPs) restricted the conventional movement of UK forces outside their bases, which militia targeted with rocket and mortar fire on a regular basis, and obliging greater use of limited helicopter assets for mobility. The Mahdi Army also enforced strict Islamic rule in Basra, threatening women for wearing makeup and punishing individuals for playing secular Western and Arabic music.

In late September 2006, British forces launched Operation Sinbad, a six month operation originally intended to purge militia from the Iraqi police but eventually targeted the militias directly. However, British forces did not have sufficient numbers to complete the task. Despite a temporary decrease in violence, British troops were again under attack and withdrew to their positions at the palace and the airport in 2007.

The UK military returned control of Basra to the Iraqi forces in December 2007 and concentrated its forces at the city airport.

In February 2008, Muqtada al-Sadr's followers renewed a ceasefire which had been declared in August 2007, brokered among others by General al-Sulemeini of the Iranian Revolutionary Guard Corps (IRGC), under which they pledged not to attack rival armed groups or American forces in Iraq.

The truce, however, came under strain and the Iraqi Government, initially with US and subsequently with overt UK help, launched Operation Charge of the Knights in late March 2008 to recapture Basra from a militant stranglehold. Government forces emerged in control by early April 2008.

Thereafter, the conditions were judged favourable for an accelerated UK withdrawal by early 2009, before which the UK Forces were able to re-enter Basra and continue with a mentoring role for the Iraqi security forces and a supporting role to the various national and international development agencies.

The Iraqi Insurgency

The insurgency arose among a population with a vigorous martial history and a dissolved and dissipated army with huge stocks of ammunition and weaponry, including automatic rifles, RPG7 hand held rockets and MANPADs (Man Portable Air Defence Missiles). The insurgency was predictable with hindsight from a reading of the Iraqi press as far back as mid 2002. It may fairly be attributed to strategic foresight of Saddam Hussein and his Generals. In 2002, given that an invasion by US forces was highly likely, and given that the conventional Iraqi Armed Forces could not be expected to fight the US on conventional terms, following the hard lessons on the receiving end of Operation Desert Storm in 1991, a strategy of dispersal of all small arms and weaponry, the development of guerrilla tactics, and early dissolution and dispersal of the Army in front of invading forces was highly logical.

As Wikipedia reports:

> "The Iraqi insurgency was composed of a diverse mix of pre-planned and ad hoc militias and foreign fighters. The fighting manifested both as armed conflict with the U.S. led coalition, and sectarian violence among the different ethnic and religious groups. From early 2004, the insurgency primarily targeted Coalition armies and Iraqi security forces. Some 10% of significant attacks targeted Iraqi civilians, but caused the largest number of casualties. Fighting was most intense in the centre of Iraq, in cities such as Baghdad, Fallujah and Bakuba, the home of the minority Sunni Iraqis and many former members of the Iraqi security forces. This area is known as the Sunni Triangle. In a poll taking during February-March 2007, 51% of the Iraqi population was said to approve of the attacks on Coalition forces, rising to over 90% among Sunni Muslims.
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> Iraq's sectarian divide between Kurds, Sunnis and Shias created another major dynamic in the insurgency, which was composed of at least a dozen major organisations and some 40 distinct groups. These were subdivided into countless smaller cells."

Who exactly are the Iraqi resistance?

The following narrative by the journalist Ghaith Abdul-Ahad , writing in The Guardian, on Friday 25th June 2004, gives an insights into the workings of the low level insurgents.

Ghaith Abdul-Ahad joined the front-line anti-American fighters in Kerbala, Falluja and Sadr City, and discovered that they were not always the well-trained, highly motivated fanatics we imagine.

> **'This is the only fun the kids get - shooting at the US sitting ducks:**
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> "By the time I arrive in Kerbala, in the last week in May, the clashes between Moqtada al-Sadr's Shia militia and the Americans have been going on for weeks. Apart from the scores of Shia militiamen running around the streets with RPGs on their shoulders, the streets are empty. The police have evaporated, leaving only their burned-out cars from previous skirmishes with rebel fighters.
>
> We park our car on the outskirts of the shrine area. Normally, thousands of devout Shia pilgrims from Iran, Afghanistan and central Asia would be bustling around on buses, taxis and donkey carts, but today there are no buses, no donkeys, and certainly no pilgrims.
>
> The main street leading to the shrine is terrifyingly empty, with shattered windows and piles of garbage everywhere. As we start along the street, a bunch of militiamen from the Badr brigade, one of the main Shia factions, demand our press passes. They are all dressed alike - in flip-flops, black T-shirts and pyjama pants - and all are carrying AK47s. "I'm sorry," says one ugly militiaman. "You are not allowed in. We have instructions not to allow journalists to take pictures of the shrine because

this will compromise the safety of the shrine." As if the hundreds of Americans and militiamen shooting at each other just metres from the shrine are not compromising its safety.

We ask him to check; after a few minutes of creaking noises from the radio, he comes back with a big grin: no journalists allowed. It takes us a little while to figure out the game that we will have to play for the next three days. The Shia factions, we work out, are very keen not to allow journalists to go into the centre of the city and report the activities of the other Shia factions - they are not yet fighting each other, but they don't like each other much. After all, it's a family issue, and we Iraqis don't like foreigners to mess with our affairs.

So we do a big loop and sneak through the alleys, telling the guards at every checkpoint that we are not here for the fighting but have an appointment with Ayatollah X, Y or Z. We finally come out of one alley to find ourselves face to face with three gunmen, their heads wrapped in keffiyehs, Kalashnikovs and RPGs in their hands (this is now considered the new Iraqi dress code, or the "muj style"). They are the Mahdi army, a militia led by Moqtada al-Sadr, which, according to the US army, includes highly trained former Iraqi military officers.

I manage to convince one of them to take us to their HQ. He puts his AK on his shoulder and points at the end of the street - "Snipers. Run very fast" - and we sprint across the street. He leads us through a maze of alleyways which make up part of the old covered souks of Kerbala, the shops heavily barricaded with steel bars, the streets piled with weeks' old rubbish, fighters sitting in groups of three to five, smoking. Every once in a while someone shouts, "Americans, Americans!", and one or two move into a sniping position, shout at each other, and then come and sit down again. They look tired, hungry and bored, fiddling with their RPGs and rifles.

Finally, we arrive at the HQ, 50m from the shrine and a street corner where most of the fighting has taken place in the past few days. They take us to the "sheikh" for permission, a young guy in his early 30s with a big bushy beard who is the local Mahdi commander. I spend the next two days with these men on a clutch of street corners from where they take occasional pot shots at the Americans. This is the front-line elite, a bunch of badly equipped men with rusted AKs and decade-old RPG rockets. When we first arrive they are brewing tea, piles of RPG rockets stacked on the walls two feet away from the fire.

"So how long you have been here?" I ask one of them.

"Three weeks now." He says he is here because he wants to defend the shrine of Imam Ali. "I'm unemployed and have nothing else to do." He is 17.

Others start to gather around us. "Don't talk to them." "No, do talk to them, they must know what's happening." "Are you Americans?" "Are you spies?" "Who sent you here?" "Take my picture." "No, take my picture with an RPG." "No, don't let them photograph the RPGs - they'll sell the pictures to the Americans."

Suddenly, there are some explosions, and three of them run towards the corner. We hear heavy machine-gun fire and I see American Armoured Personnel Carriers firing at a building in the street.

"Where's the machine gun?"

"I don't know! You had it yesterday!"

"No, you had it!"

"No, no, it's there with Ali."

"Where's Ali?"

"He went home."

"So where is the machine gun?"

"With Ali."

So they decide to fire RPGs without machine-gun cover. They hop into the street, fire off a grenade, and hop back. All the while we are squeezed behind the corner.

All I can think is that I have to stay alive otherwise my girlfriend will kill me. They can't see what they are shooting at but shout Allahu-Akbar all the same, and everyone starts giving numbers of how many Americans they have killed.

Then another man shows up, shortish and in his 40s, and while everyone is ducking or hiding behind columns, he strolls about as if he is in the park. Another fighter loads an RPG for him and the guy turns with the thing on his shoulder as if looking for the direction he should shoot in. Someone shouts: "Push him into the street before he fires it at us!" Another fighter grabs him around his waist and pushes him to the corner where he stands, bullets whizzing around him, takes his time, and - boom! - fires his RPG. He stands there until someone grips his pants and pulls him in.

His eyes are not even blinking at the sounds around him. They give him another one and he spins again and everyone hits the ground. Someone shouts: "He can't hear you, go and show him!" The deaf mute is getting support fire from a kid who shoots off a few rounds, then jumps back to fix his AK, which is falling apart. "If you take a picture of me fixing this, I will kill you."

We wait for the fire to subside and run across the street to the other side, the same dark alleys in which the same bored fighters are sitting doing nothing but chewing over the same old conspiracy theories. The walls and the ground are varnished with fresh blood. In the market a couple of shops are on fire from earlier fighting. A man is hiding behind a pile of empty banana boxes with his eight-year-old son.

That is when we catch sight of a small boy with a stunned look on his face. He says his name is Amjad and he is 11 years old.

"How long you have been here?"

"Ten days. Since my brother was killed. There, at the end of that street."

"And why are you here?"

"To become a martyr like my brother."

I ask him why he wants to die. "We should all die for the sake of our leader!" shouts one of the militiamen who have gathered around us.

On the last day, while I am trying to leave this crazy place, we are chased by an overheated young muj ("muj", from mujaheddin, means simply a religious fighter - since the Shia started fighting the Americans, they too have been happy to call themselves "muj"). He demands that we give him all our films. "You are foreigners working with the Americans!" We tell him it's not true. He click-clicks his AK, and points it at us. "I said, give me the films or I will shoot!"

"No, leave them alone," someone calls out, "they have been with us for the last three days, the sheikh knows about them." Shaking, we leave, and head to the shrine to see if there are any pilgrims there. As we are sitting on the pavement, three men with AKs come over and tell us we are under arrest. I wish I had taped the previous conversation.

They take us to the shrine of Imam Abbas, and into a marble-clad room filled with big, ugly guys with thick beards and an arsenal of automatic weapons. These men are from the Shrine Protection Force, a militia loyal to the grand Shia Ayatollah Ali al-Sistani, and so loosely allied with the Americans.

"It is all because of journalists that all this is happening," says a guy dressed in black, sitting behind a big wooden table. He says that the Mahdi are manipulating the media. "They are thugs and assassins, they have paralysed the holy city of Kerbala, they have desecrated the shrines and shoot from behind them, trying to provoke a response.

"But, alhamdulillah [thank God], the Americans are very wise and respect the shrines. Our brothers, the Americans, are taking very good care of this thing, but as far as the Shias around the world and in Iraq are concerned, they hear that the Americans are fighting 'close to the shrines', and that Shias are being killed. They see the smoke on your films so they come en masse to fight and they are immediately brainwashed by Moqtada and his thugs."

If that's the case, I ask, why doesn't the Ayatollah come out publicly and denounce those people, and show his support for these "brothers"?

"Are you crazy? It's haram [forbidden by Islamic law] to support an infidel, even when he is right, against a brother Muslim."

"So what is your strategy?"

"We will pray for Allah to stop this."

I decide that Allah has a few other things to solve in Iraq first. In any case, once they discover that we are photographers and not video cameramen, the detention comes to an end pretty quickly. And I decide to stop chasing bullets and RPGs and find somewhere calm. So I resolve to head to Fallujah - after all, the Americans have managed to install peace over there, haven't they?

Sadr City in eastern Baghdad

Sadr City is an easy job for a journalist: all you have to do is cruise around looking for trouble. It is a Soweto kind of slum: rubbish-filled streets, ponds of sewage, and thousands of unemployed kids. It is Saturday, and we are driving through the streets for the second time in the day. It is late afternoon when we see a bunch of kids directing the traffic away. By now we are able to sniff trouble from miles away, but I tell my driver to head to that street. Makeshift barricades are laid in the middle of the road, made of stones, tyres and chunks of car metal. Someone's house has even been dismantled for the barricade.

"Don't go, there are Americans down the street," shouts one of the kids, so we duck into a side road. The battlefield is an empty plot of land by a mosque, surrounded by alleyways.

In one of them, a dozen teenagers, three or four of them wearing Arsenal T-shirts and flip-flops, are emptying a car boot of a mortar tube and a sackful of shells. I am allowed to stay and take pictures, but with the usual proviso: "If we discover that you are working for the Americans, we will kill you."

The target is a police station and three Humvees parked in front. Masked like a western cowboy, the shooter, or the "expert" as they call him, takes measure of the angle and shouts to another fighter: "Give me one!" The other guy produces what looks like a rusted, 2-ft long shell. The fighters here are also Mahdi, and the fighting in Sadr City often feels like one big carnival. All the kids are by now doing their cheering chant: "Ali wiyak, Ali!" "Ali with you, Ali!" If I were an American soldier, I would be expecting a flying shell every time I hear kids cheering in Sadr City. After all, this is the only fun they get, shooting at the sitting ducks.

The expert tosses the shell into the barrel, and a big explosion follows. "Right a bit!" shouts one of the kids at the end of the street. "It fell on a house!" The second one falls much too far to the left. "It fell on another house, move to the right a little bit!"

The third one falls something like 10 metres away from us, but doesn't explode. The fourth lands by the Americans, and detonates. "Ten dead, I saw it with my own eyes!" shouts another kid. The fifth doesn't leave the tube, and he has to up-end the tube and shake it. In all, the firefight lasts for an hour, at which, after a few more rounds and a few more civilian houses destroyed, the fighters jump into their car and drive away.

Then the RPG session starts, kids aiming at the Americans and hitting whatever target they fancy. As one prepares to fire his RPG, the rusted rocket doesn't launch.

"Come, you can use mine," says a man who is standing by, watching. Helpfully, he goes to his nearby home and returns with his RPG, as if he were lending a neighbour his Hoover.

Then, "They are coming, they are coming!" and everyone starts to run; the 50 or so kids who have gathered to watch the game, break into a sprint. We jump into the first open door, where a man pulls us inside and closes the door.

The house is nothing but two rooms and an open courtyard; home to two families with countless tiny kids. "So they shoot and run, and soon the Americans will come and start breaking into the houses and firing at us," says the man.

Within a few minutes we hear a Humvee pull up by the door, and - boom! boom! boom! - they start firing what sounds like a heavy machine gun. Everyone jumps to the ground, and Ali is asked once again to show his mercy upon us. "This has been our life for the past few weeks; we don't know when we will be killed and who will

kill us," says the father. After a while the Humvees go, and we hear the sound of the kids in the streets again. Everything back to normal.

That evening, after another session of shooting and counter-shooting, we are sitting with the fighters by the office of Moqtada al-Sadr. We are prepared for a long night waiting for American mortar shells. I think to myself, here we go, another dozen houses gone.

A young muj extends his hand and says: "Do you want a beer?" I am stunned, and what remains of my religious belief rapidly evaporates. But the beer is good and I sit all night with the great religious fighters, drinking beer and waiting for the shells that never come.

The main insurgency groupings in Iraq – a layman's guide:
An official British Army assessment in 2006

"The Analysis Team has identified some 17 discrete 'confrontations' in Iraq, each of which had the potential, during the Op Telic 2-5 period, to resort to lethal force in pursuit of an intended goal. The following is a Layman's Guide to the principal insurgent groups in Iraq. PJHQ accept this list as a reasonable representation of the situation in Iraq at the beginning of 2005.

'Global Insurgency': This title is Al Qa'ida (AQ) inspired, but was adopted by Al Zarqawi's organisation (AZQ) inside Iraq, and is strongly anti-Shia. AZQ is principally based in the West (AL ANBAR Province) and the North (MOSUL) but is capable of operating anywhere in Iraq. AZQ may 'sub-contract' intimidation and assassination to other radical Sunni groups. (Current UK counter insurgency (COIN) doctrine does not

fully address this aspect of an insurgency.) The AQ campaign is focussed towards establishing an Islamic Caliphate extending from Indonesia to Turkey.

There are also specific aims that are political (although not in a Western sense) and which seek to restore religious authority. Al Zarqawi's role was to achieve success in Iraq in order to give further momentum to this type of insurgency. There is a difference of opinion between US and UK analysts (and, it appears, commanders) as to the importance of 'Foreign Fighters'. The UK view is that most the insurgents are predominantly Iraqi although the AQ (Iraq) leadership may be foreign. Al Zarqawi was killed in Iraq on 7 June 2006.

Former Regime Elements: The Former Regime Elements (FRE) insurgency follows the accepted 'political' insurgency model (and is therefore covered by existing British doctrine). Active in both rural and urban areas, it emanates from Saddam's tribal support around TIKRIT (the 'Sunni Triangle'). FRE elements are not particularly keen to have Saddam back, preferring a Sunni dominated (New) Ba'ath Party in power. Political outreach initiatives are aimed at bringing FRE groups back on side. These Sunni groups are federated rather than homogeneous: they are mostly secular in nature but some are tending toward radicalism as the Shia gain political influence.

Radical 'Islamic' Groups: There are a relatively large number of comparatively small groups that can be characterised by two broad categories: current UK COIN doctrine does not really take account of both these types of organisation.

Ansar-Al-Sunna: Ansar-Al-Sunna is a Sunni dominated radical Islamic group with strong ties to AZQ, but it is essentially home grown in Iraq. The group has a political agenda: a fundamentalist state dominated by the Sunni interpretation of Sharia Law (which is not attractive to the West). Ansar-Al-Sunna is largely based to the West and South of Baghdad (NORTH BABIL) with growing influence in the North around MOSUL. They can operate anywhere but are generally active along the ethnic 'fault lines' within Iraq. They distrust the Shia and regularly attempt to provoke them into using violence.

Wahabbi: The Wahabbi are a Sunni dominated sect inspired by the fundamentalist Islamic view of the world (and law) in the mid-1500's Salafism. There is an Iraqi 'chapter' of a much wider political movement within the (older) Arab Islamic States. Essentially they are Islamic 'bully boys' who use fear and intimidation but do not generally go in for spectacular 'terrorist' actions. They hate the Shia.

'Militant' Shia Groups: Shia groups tend to be more political than purely religious in nature, although there is a clear religious dimension not least because of the number of Sunni groups intent on terrorising the Shia. While, strictly speaking, none of the following groups form part of the insurgency, the groups outlined below are important 'players' on the complex political stage in Iraq. They are:

a. **Muqtada Al Sadr's Grouping**. The grouping includes the Muqtada Militia, Office of the Martyr Sadr, Jaysh-Al-Mahdi, and others. They share a strong Shia religious tradition, with radical clerics in leadership positions, but also have a political agenda,

and they may yet enter mainstream politics. They exist in Baghdad (Thawra – ex-Sadr City), Najaf and Karbala and in the south (al-Amarah, Basrah, an Nasiriyah).

b. **The Supreme Council for the Islamic Revolution in Iraq** (SCIRI). SCIRI is a Shia political party founded in 1982, and was led by Ayatollah Sayed Mohammed Baqir al-Hakim until he was assassinated in NAJAF in August 2003; his brother Abdul Aziz al-Hakim assumed the leadership in his place. SCIRI gained prominence after the fall of Saddam and won over many of the Southern Shias by providing aid and social services. It has close links with, and financial backing from Iran, and is often accused of furthering Iranian interests (tending towards the destabilisation of Iraq to keep it weak so that Iran is dominant, possibly as part of a wider plan towards regional hegemony). In the January 2005 elections SCIRI joined the United Iraqi Alliance. SCIRI is closely linked with the Badr Corps.

c. **The Badr Corps**. The Badr Corps was originally more a political organization (a Shia militia) than a militant religious group, but the Corps has radical religious leanings to a Shia dominated, Sharia state. It is widely regarded as the armed wing of SCIRI (see above) and receives financial and other support from Iran. At the end of the period the Badr Corps was in the political ascendancy: it has the option of moving back to the shadows if events go against it. The Badr Corps has been linked with violent action against individuals and elements who fail to behave in traditional Islamic ways."

General Sir Richard Dannatt, Chief of the UK General Staff, stated in September 2007 that "The militants (and I use the word deliberately because not all are insurgents, or terrorists, or criminals; they are a mixture of them all) are well armed – probably with outside help, and probably from Iran. By motivation, essentially, and with the exception of the Al Qaeda in Iraq element who have endeavoured to exploit the situation for their own ends, our opponents are Iraqi Nationalists, and are most concerned with their own needs – jobs, money, security – and the majority are not bad people".

The weaponry, tactics and strategies of the Insurgency

An understanding of the asymmetric tactics of the insurgency is crucial to understanding the pressures upon UK and US forces, the types and patterns of injuries, and hence the demands upon the military and the civilian medical services.

Insurgent operations initially included relatively large scale conventional attacks on security forces. From April 2004 onwards, there were large-scale assault and raids on the Iraqi police, their police stations and compounds of Iraqi security forces, by platoon-sized elements or larger, often up to 150 men. Large-scale attacks were occasionally launched against U.S. forces. They were launched both by Sunni insurgents in cities such as Ramadi, Fallujah, and al-Qaim, and by Shia militiamen in cities such as Baghdad, Najaf, and Kufa during the twin uprisings of 2004. Some attacks combined multiple weapons and tactics at once, such as rocket-propelled grenades, mortars, and car bombs. Although these attacks usually failed militarily, they were designed to convey an impression of strength on the part of the guerrilla groups.

As reported in Wikipedia:

> "The tactics of the Iraqi insurgency varied widely. Minority Jihadist elements used car bombs, kidnappings, hostage-taking, shootings and other types of attacks to target Iraqi collaborators and U.S. forces with little regard for civilian casualties. For most attacks, the Iraqi guerrillas operated in small teams of five to ten men in order to maintain mobility and escape detection. Larger attacks involving as many as 150 men were used on occasion, such as during a battle near the Syrian border town of Rawa on June 13, 2003 and during a large ambush of a U.S. convoy in the town of Samarra on November 30, 2003).

In consequence of heavy losses and improved defensive tactics by Coalition forces, the insurgency evolved with the use of suicide bombers and improvised explosive devices (IEDs) for military effect, along with assassinations, kidnappings and video executions for criminal, sectarian and propaganda purposes.

IED Use in Iraq: A transforming military technology and strategy

Many Iraqi insurgent attacks made use of IEDs. Some 250,000 tons (of 650,000 tons total) of Iraqi Army ordnance were looted or otherwise dispersed to the insurgency, provided an almost endless source of ammunition and explosives, which was augmented by the adaptation of common household components and by smuggling from Syria, Iran and elsewhere.

An improvised explosive device (IED) is a bomb constructed and deployed in ways other than in conventional military action. They may be partially comprised of conventional military explosives, such as an artillery round, attached to a detonating device. They are made in an improvised manner incorporating destructive, lethal, noxious, pyrotechnic, or incendiary chemicals and designed to destroy or incapacitate personnel or vehicles. IEDs may incorporate military or commercially-sourced explosives, and often combine both types, or they may otherwise be made with home made explosives.

Methods of detonation included simple pull-wires and mechanical detonators, cell-phones, garage-door openers, cable,, radio control, and infrared lasers.

155-millimetre artillery shells, rigged with blasting caps, and improvised shrapnel, (concrete, ball bearings, etc.) were commonly used. Improvised explosive devices became larger as coalition forces add more protection to their vehicles, with evidence of aviation bombs of 500 lb being used as IEDs, as well as explosively formed penetrator (EFP) warheads.

IEDs were often concealed or camouflaged hidden behind roadside rails, on telephone poles, buried underground or in piles of garbage, disguised as rocks or bricks, and even placed inside dead animals. These attacks became the insurgents' most lethal and effective method to attack coalition forces, with continually improving tactics. IEDs also spawned a complex range of countermeasures which increased the physical and mental burden upon deployed coalition personnel.



Munitions rigged for an IED discovered by Iraqi police in Baghdad in November 2005

According to iCasualties.org, as of November 21, 2007 approximately at least 40% of Coalition fatalities in the Iraq War are caused by IEDs. According to the Washington Post, 63% of U.S deaths in Iraq occurred due to IEDs. A French study showed that in Iraq, from March 2003 to November 2006, on a global 3,070 deaths in the US-led Coalition soldiers, 1,257 were caused by IEDs, i.e 41%.

An IED typically consists of an explosive charge (potentially assisted by a booster charge), a detonator, and an initiation system, which initiates the electrical charge that sets off the device. An IED designed for use against armoured targets will also include some form of armour penetrator, such as a copper rod or cone, and a shaped explosive load. IEDs are diverse in design, and may contain many types of initiators, detonators, penetrators, and explosive loads. IEDs may use artillery shells or conventional high-explosive charges as their explosive load as well as homemade explosives.

Antipersonnel IEDs typically also contain shrapnel-generating objects such as nails or ball bearings. IEDs are triggered by various methods, including remote control, infra-red or magnetic triggers, pressure-sensitive bars or trip wires. In some cases, multiple IEDs are wired together in a daisy-chain, to attack a convoy of vehicles spread out along a roadway, or an airstrip.

IEDs made by inexperienced designers or with substandard materials may fail to detonate, and may detonate on either the maker or the emplacer of the device (known as pre-detonations or "own goals"). Some IEDs are sophisticated devices that are constructed with components scavenged from conventional munitions and standard consumer electronics components, such as mobile phones, washing machine timers, pagers, or garage door openers. The sophistication of an IED depends on the training of the designer and the tools and materials available.

Car bomb/vehicle-borne IEDs (VBIEDs)

This is typically used by suicide bombers, and can carry a relatively large payload. It can also be detonated from a remote location. VBIEDs can create additional shrapnel through the destruction of the vehicle itself, while vehicle fuel is an incendiary weapon. VBIEDs emerged as one of the most dangerous weapons, when directed against targets such as Iraqi police stations, recruiting centres for the security services, and military convoys. Many Iraqi civilians were killed in such attacks.

Where the driver of the car bomb has been coerced into driving the vehicle, this is known as a Proxy Bomb.

Boat-borne IEDs

Boats laden with explosives can be used against ships and areas connected to water. Suicide bombers used a boat-borne IED to attack the USS Cole, US and UK troops have also been killed by boat-borne IEDs in Iraq.

Animal-borne IEDs

Both live and dead animals can be used to conceal and deliver IEDs. The following story illustrates this morbid ingenuity quite graphically, although this particular anecdote comes from Afghanistan. Michael Evans wrote in The Times on April 30th, 2009, that

Donkey 'suicide' bombing is latest tactic against patrols

A senior British Army officer and six other military personnel survived an attack when a tethered donkey laden with explosives was detonated as their armoured vehicle passed in southern Afghanistan.

The huge explosion showered the soldier standing on "top cover" out of the Mastiff's turret with donkey entrails and blood, and the sight was so gruesome that the rest of those in the vehicle thought he had been mortally wounded in the blast, south of Garmsir in southern Helmand province.

"I'm all right, I'm all right," he shouted, according to one of the officers at the incident who spoke to The Times, giving the first account of the incident. "We'd spotted the donkey tethered to a tree as we were on our way down south to monitor an operation that had been going on that day, but thought nothing of it. There are donkeys around everywhere," the officer said.

Nothing happened when they first passed, but as the patrol returned to the British battle group headquarters at Forward Operating Base (FOB) Delhi, explosives hidden in buckets slung from the donkey's saddle were detonated.

"I was asleep because you can feel quite nauseous travelling in a Mastiff and was woken by the explosion," the officer said. "When I saw the top cover guy covered in blood, I tried to get to him with emergency medical kit.

"He said he was all right but I told him he had been badly injured. When we realised what had happened it wasn't long before the first donkey jokes started to come out — 'drop the dead donkey' was one, and 'pain in the ass' another."

The explosion damaged three of the wheels of the Mastiff and caused severe hearing problems for the Territorial Army soldier riding aloft. The stench of donkey remains lingered for weeks inside the vehicle.

"We were really lucky, especially the top cover TA soldier. The explosion seemed to go upwards and over the top but there were nails packed into the explosives, so it was a miracle there were no injuries. We reckon the two buckets could hold about

20 kilos of explosives," the officer said.

Troops in Afghanistan have been attacked by a boy with a wheelbarrow full of explosives and a bicycle with a bomb attached, but the explosion south of Garmsir in southern Helmand province is thought to be the first using tethered livestock.

Tactics for the placement of IEDs

Common locations for placing these bombs on the ground include animal carcasses, soft drink cans, and boxes. Typically they explode underneath or to the side of the vehicle to cause the maximum amount of damage; however, as vehicle armour was improved on military vehicles, insurgents began placing IEDs in elevated positions such as on road signs, utility poles, or trees, in order to hit less protected areas.

In October 2005, The UK government charged that Iran was supplying insurgents with the technological know-how to make shaped charges, which focus the blast in a specific direction, and can pierce greater thicknesses of armor with less explosive. Both Iranian and Iraqi government officials deny this.

Despite the increased armour, IEDs killed soldiers with increasing frequency. May 2007 was a particularly deadly month for IED attacks, with 89 of the 129 Coalition casualties coming from an IED attack.

Platter charges

These are rectangular or circular pieces of flat metal (usually steel) weighing a few kilograms with plastic explosives pressed onto one side of the platter. The explosives propel the platter into the target with an approximate velocity of 6,000 feet per second (1,800 m/s). The effective range can be as far as 50 meters, although the accuracy is poor.

Explosively formed penetrators

Explosively formed penetrators (EFPs) are a type of shaped charge that is effective at long standoffs from the target (50 meters or more). They proved particularly dangerous and difficult to counter because they can be placed and hidden so far from their intended targets. An EFP is a cylindrical shaped charge with a concave metal disc (often copper) in front, pointed inwards. The force of the shaped charge turns the disc into a bolt of molten metal, capable of penetrating the armor of most vehicles in Iraq.

Improvised Rocket Assisted Munitions

Mortars were used in an attack during October 2006 on Camp Falcon, a forward base which included an ammunition dump. The ammunition dump was destroyed by the attack.

In 2008, rocket-propelled IEDs, or Improvised Rocket Assisted Munitions (IRAM) were used in numbers against U.S. forces in Iraq. They have been described as propane tanks packed with explosives and powered by 107 mm rockets.





Improvised explosive device in Iraq. The concave copper shape on top is an explosively formed penetrator

Humvee photo: Source: english.people.com.cn/200610/20/images/1019_D37.jpg

Trigger mechanisms and methods for IEDs

Command Wire Improvised Explosive Device (CWIED)

This uses an electrical firing cable which affords the firer complete control over the device right up until the moment of initiation.

Radio Controlled Improvised Explosive Device (RCIED)

The trigger for an RCIED is controlled by radio link. A receiver is connected to an electrical firing circuit and the transmitter operated by the perpetrator at a distance. In more sophisticated models, the transmitter and receiver operate on a matched coding system which prevents the RCIED from being initiated by spurious radio frequency signals. An RCIED can be triggered from any number of different mechanisms and commercial components, including cell phones, as were used to deadly effect in the Madrid bombings.

Victim-Operated Improvised Explosive Device (VOIED)

These are designed to function upon contact with a victim, and are also known as booby traps. VOIED switches are often well hidden from the victim or disguised as innocuous everyday objects. They are operated by means of movement, Switching methods include: tripwire, pressure mats, spring-loaded release, push, pull or tilt. Common forms of VOIED include the under-vehicle IED (UVIED) and improvised landmines.

Insurgents have been known to rig an entire house to detonate and collapse shortly after a clearing squad has entered, known as a House Borne IED.

Infrared Triggers to IEDs

Iran and Hezbollah were accused of teaching Iraqi fighters to use infrared light beams to trigger IEDs. In some cases, when a more advanced method was disrupted, the insurgents regressed to using uninterruptible means, such as hard wires from the IED to detonator, which are harder to conceal. The "advanced" IEDs were found to be derived

from old IRA technology, which was perfected by the IRA in the early '90s.

Improvised Incendiary Devices

These use exothermic chemical reactions to spread fire. Such devices may be improvised or may be a modification to an existing weapon. An example is the Molotov cocktail.

The evolution of the IED

IED technology evolved rapidly. The following article by Al Welch, published in CBRNeWORLD, describes the problem clearly:

"Improvised explosive devices (IEDs) have been used by terrorists for many years, though it is only recently that the public awareness of such weapons has become significant. Before the invasion of Iraq in 2003 knowledge of IEDs was limited predominately to the security forces and individuals facing an internal terrorist threat in their own country: the UK with the IRA, Spain with the Basque separatists ETA, Sri Lanka with the Tamil Tigers and Colombia with the Revolutionary Armed Forces of Colombia (FARC). The IED is still a specialist subject requiring professional knowledge to defeat it, though the campaign in Iraq has seen the term "IED" meaning "bomb" firmly embedded within the public domain.

Although an amount of the momentum has recently shifted to Afghanistan, Iraq has clearly been the catalyst for the proliferation, technological advancement and the heightened public perception of IEDs we encounter today.

The Changing Face of Warfare

Following the initial invasion and the dissolution of Iraqi conventional forces, the campaign in Iraq very rapidly evolved into a form of asymmetric warfare: a military situation in which two belligerents of unequal power interact and attempt to take advantage of their opponent's weaknesses. This interaction often involves strategies and tactics outside the bounds of conventional warfare. Within Iraq the insurgent groups, without conventional warfare training or technologies, have developed terrorist techniques in an attempt to match the coalition forces' capability. One such very effective tactic is the use of the IED.

IEDs offer a number of advantages to the terrorist:

- They are cheap to manufacture, using readily available materials and low production costs
- They are relatively simple and remain unhindered by the technological sophistication, safety and quality requirements of conventional weaponry
- They are easy to disguise; in Iraq they have been either camouflaged as, or hidden in, vehicles, cadavers, rubbish, building materials, household goods, etc
- The terrorist does not need to be in the vicinity of the weapon to make it function

- IEDs are both physically and psychologically effective: they kill, maim and the very threat of their presence causes fear and anxiety

In Iraq the development of IED capability has set into a recurring pattern: as the duration of a campaign increases, the technological capability of the insurgent also advances. In effect, a game of chess is enacted where security forces develop countermeasures to nullify an existing threat, leading the terrorist to devise a new tactic to keep one step ahead. This constant exchange creates an immense challenge for the security forces: once a threat has been defeated they can be certain that the insurgents will have modified their tactics in order to circumvent any countermeasures set in place.

The Use of Conventional Munitions

Conventional military ordnance is frequently used within IEDs in Iraq, to an extent not seen in the production of IEDs anywhere in the world before. The reason is simply one of availability: Iraq was involved in a war with Iran (1980–88), defeated during the First Gulf War (1990–91) and engaged in a protracted campaign against Kurds in the north of the country. This left the country strewn with stockpiles of military ordnance (rapidly looted after the invasion) and anti-tank/anti-personnel mines. By utilising this prolific stockpile of munitions, Iraqi insurgents initially negated the need to manufacture their own homemade explosives (HME).

However, tighter controls and diminishing supply has led to an increasing use of HME, often in addition to conventional munitions or incorporating them as the booster to initiate the main charge.

However, conventional munitions by their very nature are not designed to be used profusely in an improvised manner, and merely grouping them together without distinct initiation often results in the IED only partially functioning.

The Tactical Weapon of Choice

Since 2003 attacks have continued to become more sophisticated. The early days were marked by simple roadside attacks using either command wire or short-range radio control (RC) devices such as vehicle keyless entry systems (KES) and garage door openers. Effective drills and coalition force tactics negated the initial impact of such attacks, but insurgents went on to advance their use of RC devices and achieved some initial success largely due to the scarcity of electronic countermeasure (ECM) equipment or jammers available to coalition forces.

Once effective ECM was in place, insurgents further refined both the complexity of their IEDs and altered their tactics. Notably, there was an increase in suicide attacks, the introduction of multiple IEDs, more complex means of initiation (such as passive infrared [PIR]), projected munitions and the employment of anti-armour weapons, particularly the explosively formed projectile (EFP).

The primary weapon of choice for insurgents in Iraq has been the VBIED. During 2005/2006 its use was at its highest level, though since the last half of 2007 it has been in decline as a result of improved drills and procedures, effective

countermeasures and successes in targeting VBIED cells. However, insurgents have now returned to using simple VBIEDs once more – an example of how the threat spectrum is manipulated in a constant bid to dodge security forces' countermeasures.

The reduction in VBIEDs has affected an increase in body-borne suicide attacks.

It is far simpler and less risky for insurgents to prepare a suicide vest than a VBIED, and it is easier for an individual to breach a security cordon. Furthermore, by using female and child suicide bombers the tactic also allows the insurgents to exploit stereotypes and cultural sensitivities.

The use of female suicide operatives has been on the rise since November 2007. Although the tactic is not new, it is a deliberate ploy by extremists to exploit sensitivities and etiquette in order to defeat existing security measures. There is a lack of female search personnel, therefore women operatives are often able to circumvent body searches. Islamic dress for women also aids in disguising not just a weapon or device but also gait and body language which could otherwise attract the attention of security personnel. The lack of foreign fighters arriving in Iraq forced insurgents to recruit child and female suicide bombers, drawing on such motivations as despair, stigma and vengeance, and also providing financial remuneration to families.

Chemical Weapons – A Powerful Propaganda Device

The initial premise for the invasion of Iraq was to counter the threat posed by Iraq's possession of weapons of mass destruction; however, none were discovered or have ever been employed against coalition forces. Insurgents have had limited success in using chemical munitions within IED attacks: from January to July 2007 Iraqi insurgents adopted the use of chlorine gas within a number of IED attacks. This is the only real example to date of an intentional use of a chemical weapon. The attacks were all VBIEDs, with the majority being suicide initiated, and targeting indigenous security forces and the civilian population alike.

The attacks yielded many casualties, and large numbers of which were reported as suffering from the effects of chlorine poisoning. However, the death and serious injury tolls were no greater than other similar attacks relying on blast and fragmentation effects alone. Only a minority of the devices demonstrated effective dispersal of the chemical agent and the remainder merely included the chemical agent as part of the main filling, the effects of which were largely negated by the intense heat of the explosive event.

The chlorine devices were in physical effect a failure, though as a propaganda tool they managed to make a considerable impact – they were successful as a weapon of hype rather than hurt. Around the time of their use it was considered that the incorporation of chlorine into devices was a forerunner to a more potent chemical attack though this never materialised and the tactic has shown little favour among the insurgents.

Proliferation of Information

The technical development of devices is only one concern when it comes to the IED evolution; it is of equal importance to understand how insurgents are becoming ever more skilled at building and deploying IEDS. Coalition forces rapidly became targets for IED attacks, implying that skills to mount such operations were already established in the country at the time of the invasion. Elements of the former regime's military were trained specifically to manufacture and emplace IEDs; however, they alone could not have planned and undertaken the sheer volume of attacks that were to follow.

Iraq is home to a vast number of insurgent groups allied to religious factions, tribes or geographical areas, and many espouse allegiance to al Qaeda. In reality, the groups form a sizeable and disparate collection of insurgent cells with little hierarchical structure between them, operating independently with minimal coordinated operational guidance. This has made it hard for security forces to pin down, infiltrate and neutralize them.

IED cells which have undertaken successful IED can go on to contract out their skills.

The experience and technological capability embedded in the indigenous military have been supplemented by organizations with their own vested interest in maintaining the instability of Iraq and the constant drain on coalition resources. Though persistently denied, the involvement of Iran in supplying weaponry, materiel and expertise has been widely reported, and cross fertilization of information from insurgents in Afghanistan and expertise from Syria's Hizballah have also been highlighted.

Arguably, the biggest single factor in the proliferation of the IED is technology, namely the internet which has above all other forms of communication redefined how insurgents share information and expertise. For example, whereas in the past an insurgent may have had to attend training camp to acquire specific knowledge, the individual can now readily access information, advice and guidance online. This is not only more convenient for the insurgents, but also carries less risk.

Once posted online, terrorist training documentation is widely distributed and reposted across a multitude of forums and allied websites. It is near impossible to limit the spread of such material. Similarly, it is common for insurgents to film their attacks, often to a fairly professional standard, and then post the video online for training and propaganda purposes, often encouraging recruitment and inviting financial support.

The Target

Iraq can be considered a target-rich environment for insurgents where coalition and indigenous security forces are vulnerable to IED attack and the use of such devices has been seen to affect the civilian population and critical infrastructure. Plus,

internecine fighting between insurgent groups has helped fuel the IED phenomenon.

The most common form of attack within Iraq against coalition forces uses the roadside IED. The limited usable road network and the necessity to patrol and transit convoys have led to an unavoidable repetition of routes by coalition forces. The insurgent is able to exploit this in a number of ways: the patrols have a predictable route and schedule and the condition of the road system, often dilapidated and strewn with roadside debris, aids the insurgent in camouflaging IEDs.

When not mobile, and within a security force base, coalition forces are still targets for insurgent strikes. Attacks using projected munitions, most commonly the 107mm rocket, are routine. Other forms of attack including suicide and large vehicle IEDs have also been utilized, though with limited success due to the effective security measures in place.

Civilian Deaths

Indiscriminate attacks on the civilian population have been an enduring feature of the campaign in Iraq. The use of VBIEDs within the urban environment, most commonly markets, housing estates and places of entertainment, have been commonplace and accounted for thousands of deaths. The majority of such attacks have been well planned, designed to draw the maximum number of victims into the killing area and promote instability and sectarian unrest between the Sunni and Shia, often instigating a revenge attack – a commonplace tactic seen wherever populations are divided by ethnicity or religion.

Attacks on critical infrastructure are another evident attempt to destabilize the country by destroying vital utilities and telecommunications facilities and disrupting the transport network. Attacks on the road system have also been used to isolate communities divided on sectarian grounds and as part of a tactic to hamper the effectiveness of coalition forces by destroying major lines of communication. An example is the protracted campaign of attacks against bridges over the extensive Iraqi waterway system in 2007. This was a systematic attempt to bring parts of the country to a standstill and, despite being ultimately unsuccessful, caused extensive damage and disorder. The campaign saw some of the largest VBIEDs encountered to date in Iraq; the recovered VBIED following a failed attack on the Qayyarah bridge over the river Tigris in Ninawa province in October 2007 reportedly contained over 22,000kg of bulk explosive.

The Extent of the Evolution

The insurgency in Iraq has progressed along similar lines to those seen elsewhere across the globe: the insurgents manipulate the threat spectrum in order to maintain the upper hand. What has set Iraq apart has been the speed of the advancement and proliferation of the threat spectrum, aided by both technology and external influence. The modification in insurgent tactics is testament to the

success of the coalition forces in countering specific threats, and to their achievement in creating more reliable and effective indigenous security forces.

Wanton targeting of the civilian population is not necessarily a new tactic, but its use in Iraq has certainly been sustained and extensive. Encouraged by the unstable and divided nature of the country, it is likely to continue for the foreseeable future. The technology and experience that was imported and readily assimilated by the Iraqi insurgents is now being exported to assist other insurgencies; once the students, now the teachers. Those tasked with countering IEDs the world over must maintain a constant and informed awareness of the latest tactics and technologies being used, together with a full understanding of the IED threat spectrum".

Ambushes by insurgents

Iraqi insurgents frequently launched ambushes of military convoys and patrols, using AK-47 assault rifles and rocket-propelled grenades. Soft-skinned vehicles were most commonly targeted.

Attacks were usually broken off before support could be called in. Direct ambushes of U.S. forces declined tactics and defences improved. The percentage of multinational forces casualties from mines or improvised explosives rose to 70%.

Ambushes against the poorly protected Iraqi police and security forces proved lethal. There were isolated cases of larger ambushes, such as an attack on a coalition convoy in Samarra on November 30, 2003 that involved 100 fighters. There was a massive ambush of a coalition convoy in Sadr City on April 4th 2004 by 1000 Mahdi Army men.

Sniper tactics

The Iraqi insurgents also used snipers, including vehicle-borne units. Major Greg Rowlands of the Royal Australian Infantry, a tactics instructor to US company commanders, wrote in 2008 that "they generally engage targets from 100 to 1000 meters and primarily use the SVD sniper rifle. However, they have also been known to use .50 Cal and captured coalition M24 sniper rifles. [Although an] insurgent sniper pair usually operates from a dominant terrain feature ... [they also use cars and vans resourcefully.] The pair usually films the shot, extracts, and then posts the very graphic and shocking event to the internet ... [focusing on] lucrative targets".

By December 23, 2006, 43 U.S and three British soldiers had been killed by sniper fire in Iraq since the beginning of the invasion. Private security contractors were also targeted; on March 22, 2004 two Finnish businessmen were shot and killed by snipers in Baghdad. Two private security contractors, one British and one American were also killed by sniper insurgents.

A particular feature of snipers is their ability to spread fear and rumours. Soldiers told of a supposed member of the insurgency nicknamed Juba, who was said to have killed

and wounded up to a hundred US soldiers, and there are numerous video clips on YouTube about this individual, or more probably a group of individuals. Iraqi government or rival sectarian medical personnel and ambulances were not assured safety from snipers.

Mortar and rocket strikes

Hit-and-run mortar or rocket strikes on coalition bases or locations associated with the Iraqi government were also common. Insurgents mounted mortar tubes in the rear cargo area of civilian trucks. Improvised multiple-rocket launchers were also used to target specific buildings in urban areas.

Attacks on aircraft

From November 2003 military helicopters were also targeted. The insurgents, often concealed in palm groves, would attack the helicopter using rocket-propelled grenades and heat-seeking shoulder fired missiles such as the SA-7, SA-14, and in one case the SA-16. Countermeasures such as flying very low at a high speed, reduced the risk but increased the vulnerability to .50 calibre machine gunfire. A number of aircraft, including Apache gunships, were damaged or destroyed when multiple machine gunners engaged them at close ranges of 50-400 meters..

Another new tactic used by the insurgents to bring down helicopters was the so-called "aerial IED". An explosive charge designed to force the blast up into a flight path, may have been responsible for the downing of several helicopters.

Sabotage

Saboteurs repeatedly attacked economic targets, including the Iraqi oil industry. There were also attacks on water pipelines and the electrical grid.

Suicide bombers

The individual bomber will conceal explosives on and around their person, commonly using a vest; and will use a timer or some other trigger to detonate the explosives. Abhorrent as it is to Western values and beliefs, an IED delivered by a human is a low technology, steerable and accurately targetted bomb which has a high chance of success if undetected. Suicide bombers have been commonly used in Iraq against a variety of targets.

From August 2003, VBIEDs were increasingly used as weapons by guerrilla forces. Initially, they were conducted by fanatical individuals, but tactics became more challenging in their selection of suicide bomb candidates, to include women, children, and the mentally ill and proxy bombers.

Suicide attacks on non-military and civilian targets

There were many attacks on non-military and civilian targets, beginning in earnest in August 2003. These included the assassination of Iraqis cooperating with the Coalition Provisional Authority and the Governing Council. Suicide bombings targeted the United Nations headquarters, the Jordanian Embassy, Shi'a mosques and civilians, the International Red Cross, Kurdish political parties, the president of the Iraqi Governing Council, hotels, Christian churches, diplomats and restaurants. Armed and unarmed Iraqi police and security forces were heavily targeted in ambushes, as were private contractors working for the coalition and other non-coalition civilian support personnel.

Large-scale bombings were conducted by foreign fighters, and by former Iraqi secret service operatives. Many of the suicide attackers were recruited from outside Iraq. The network of Abu Musab al-Zarqawi was frequently blamed by the U.S. and the Iraqi government for suicide attacks on non-military targets.

One aim of these attacks was to sow chaos and sectarian discord. However, in a report in the *New York Times*, between April 2004 and May 2007, attacks directed against occupation forces comprised 74% of all significant insurgent attacks. 16% were directed against collaborationist elements and only 10% were directed at civilians. In February 2007, the Pentagon's quarterly report, Stability and Security in Iraq, found that "Although most attacks continue to be directed against coalition forces, Iraqi civilians suffer the vast majority of the casualties". In late 2006, the BBC News website noted that although "about 80% of insurgent attacks are targeted against coalition forces, the Iraqi population suffers about 80% of all casualties, according to US officials in late 2005."

The following articles illustrate the effectiveness, the challenges, the realities and the indiscriminate nature of the developing suicide bombing campaign; the ability of individual suicide bombers to infiltrate seemingly well protected targets; and the carnage from vehicle borne bombs.

Brian Whitaker, wrote in the Guardian on Sunday 30th March 2003 that

The first suicide bombing of the war

"As a suicide bomber claims soldiers' lives, Iraq's vice-president has threatened similar attacks in the US and Britain.

Four American soldiers died yesterday near Najaf in the first suicide bombing of the war. At a press conference afterwards, Iraq's vice-president, Taha Yassin Ramadan, named the bomber as Ali Jaafar al-Nuamani, a non-commissioned officer in the Iraqi army - and indicated that suicide bombings will now become "routine military policy".

He also repeated the threat to carry out attacks in the US and Britain: "We will use any means ... and we will follow the enemy into its land," the vice-president said.

In the US, Mr Rumsfeld is increasingly being blamed for the military quagmire. The latest issue of the New Yorker magazine accuses him of repeatedly rejecting advice

from his advisers about the number of troops that would be needed. He was so convinced that the Iraqi regime would fall apart that he insisted at least six times on sharply reducing the number of ground troops that the military planners wanted to send, the article says.

The British government yesterday repeated its view that the war will end once Saddam Hussein is removed, but there are growing signs that this will only mark the end of the first phase. The next stage - making Iraq secure and establishing a stable government - is likely to be longer and more even more difficult.

"A prolonged stay of US and British forces may turn the country into a magnet for militants seeking a new jihad," according to a report by Associated Press, which says thousands of Muslim militants who say they are ready for martyrdom have

flocked to Iraq since the war began. It quotes a warning by John Voll, an Islamic affairs expert at Georgetown University in the United States: "If there is an American occupation, then Iraq will definitely move to the top of the list of jihad for the international network of Islamists."

Michael Howard wrote in The Guardian on Tuesday 28th October 2003:

Coordinated suicide bomb attacks against civilian targets. Iraqis celebrate. Then brutal reality dawns

One by one, the bombers struck - killing men, women and children as they prepared for holy month of Ramadan.

For most Baghdad residents, it should have been a day of double celebration. The start of the Muslim holy month of Ramadan, and no Saddam Hussein to spoil the party. Workers looked forward to reduced office hours and a seasonal bonus in their pay packets. Grocery stores and sweet shops did brisk business as families prepared for ifthar, the evening meal that ends the daylight fast.

Then reality dawned. In 45 terrifying minutes, a series of apparently choreographed attacks left 34 Iraqi police officers and civilians dead, and at least 224 injured. An American soldier was also killed. If this was to have been the country's first taste of Ramadan liberated from Saddam's regime, it was a bloody reminder that the struggle for Iraq was far from over.

The carnage began at 8.30am at the al-Baya'a police station in southern Baghdad when a white "police car" packed with explosives drove at the local police station. Seconds later 15 Iraqis - men, women, and children - and an American soldier had died, while bloodstained survivors staggered around, confused and dazed.

The bomber, dressed as an Iraqi police man and driving the car disguised as a police vehicle, had gained access to behind the barriers at the police station in the suburb of al-Allam.

A detective, his legs still bleeding from shrapnel wounds from the blast, said: "I was in my office and suddenly there was a loud explosion and glass flew across the room at me. I was taken outside behind the building and I saw a group of policemen lying on the ground."

Five minutes after the attack, an ambulance drove up to the security barriers outside the offices of the International Committee of the Red Cross in central Baghdad. An Iraqi guard working for the Red Cross told reporters: "I saw an ambulance coming very fast towards the barrier and it exploded."

At least 12 people were killed and 23 injured by the blast, which blew down a perimeter wall and shattered windows in the ICRC building as well as those of a nearby hospital where the dead and injured were taken.

"We don't know why we have been attacked. We always fought for the welfare of Iraqi people," said Nada Doumani, a spokeswoman for the ICRC.

The next suicide car bomb attack came 20 minutes later in northern Baghdad and was directed against a police station in al-Shaab district. At least eight people died in the blast, and many were wounded. "A Land Cruiser raced towards the police station. They [the police] shot at it, but it turned and exploded," said Taher Hussein, who lives nearby.

Half an hour later and the target again was a police station, this one in the wealthy suburb of al-Khadra, in southern Baghdad. The police station is situated near a school, a clinic, and a mosque. Three children were reported to be among the dead. Eyewitnesses said a boy of 12 standing 200 metres away was decapitated by flying metal.

"A car tried to cross the central reservation and head for the police station," said Ammar Abbas, who owns a local grocery store. "It got stuck and blew up. Then there was chaos, people running away, people on the ground."

An ambulance driver who ferried the injured to hospital said that amid the confusion one Iraqi man had been shot and wounded by a US military policeman, who had been inside the station, as he tried to approach his house to check for damage.

The day's carnage could have been worse. One suicide bomber did not get through and produced what a US military spokesman described as "some valuable clues to who might be behind this wave of bombings". The suspect was seized at 10.15am in Baghdad Gedeeda, or New Baghdad, in the eastern part of the capital. Iraqi police shot and captured the bomber before he could deliver his deadly cargo, wrapped up in another Landcruiser and again aiming at Jadida police station.

Shouting "Death to the Iraqi police. Death to the collaborators," the man tried to get out of his car, which was stuffed with TNT, and was shot as he exploded a grenade. Before drifting into unconsciousness the failed suicide attacker told police he was a Syrian national.

Brigadier General Mark Hertling of the US 1st Armoured Division said that it was "a reasonable supposition," that the other suicide bombers were also foreign nationals. The attacks, which were "criminal and sacrilegious, but also amateurish", bore the hallmark of foreign capability, he said. This was a marked change in thinking for the US military.

A day before General Martin Dempsey, ground commander of the 1st armoured, said: "We have no evidence of an infusion of foreign fighters into Baghdad."

Gen Hertling described yesterday as a great day for the Iraqi police, because security precautions around the target sites had prevented the bombers from destroying them. But that was scant comfort to the policemen or to the hundreds of ordinary Iraqis who were caught up in the mayhem.

Of the 34 people killed in the bombings, 26 were Iraqi civilians - the rest were Iraqi policemen and one American soldier. Throughout the morning ambulances screamed across the capital in the direction of plumes of smoke, and emergency services were stretched to the limit.

In al-Yarmouk hospital, where a number of injured children were being treated, Ali Hussein, a doctor, said: "This is all Saddam's work. He's behind the Ba'athists and the Islamists and the foreign fighters. Everything leads to his door. This is not resistance, this is revenge against the Iraqi people for our disloyalty."

Michael Howard in Kerbala and James Meek in Baghdad wrote in The Guardian on Wednesday 3rd March 2004:

Festival time in Iraq. But by the end of the day 220 lay dead

“Iraq yesterday suffered its worst day of violence since the war's end, when its majority Shia community was targeted in a series of sophisticated and simultaneous attacks that killed as many as 223 people and left its religious leaders blaming the Americans for multiple security failures.

Crowds in Kerbala and Baghdad turned on US troops in frustration and fury as the scale of the atrocities in both cities became clear, raising fears that the Shias will seek revenge for the bombings and bring the country to the brink of a religious civil war. The US military last night pointed to al-Qaida involvement in the multiple explosions on one of the holiest days in the Shia calendar, with a Jordanian militant Abu Musab al-Zarqawi, an associate of Osama bin Laden, being named as the prime suspect.

Last night the UN secretary general, Kofi Annan, warned that the restoration of Iraqi sovereignty, due to take place on June 30, could be jeopardised by the violence. Paul Bremer, the US administrator in Iraq, said the signing of the intermim constitution would be delayed until later this week after an "appropriate period of mourning".

The attacks were aimed at Shia pilgrims celebrating the festival of Ashura, which marks the death of the revered martyr Imam Hussein 13 centuries ago. At 10am in Kerbala, with thousands of men, women and children crammed around the golden-domed Iman Hussein shrine, the first of five bombs exploded. Four others followed in as many minutes in streets packed with pilgrims trying to escape the carnage.

One eyewitness, Ghalib Abdul Hussein, an agricultural engineer from Baghdad, said he saw "bodies sliced by the force of the blasts". Two hours later, limbs were being laid out on a table that had been intended for serving drinks. The dead and injured were loaded on to makeshift stretchers or wooden carts normally used to carry goods.

"The blasts occurred within a two-mile radius of Hussein's shrine and appear to have been aimed at causing the maximum number of casualties," said Captain Ali Hussein of the Kerbala police. He could not confirm what the attacks had been caused by, though there were reports that devices may have been planted in piles of roadside rubbish. Almost simultaneously, two miles away at Kerbala's "Baghdad gate", a busy dropping off point for taxis and buses from the capital, a suicide bomber stepped off the kerb into a crowd of pilgrims and set off his device. It killed perhaps 20 people, witnesses said.

In the mayhem, a number of Iranian pilgrims and foreign journalists were beaten up as some Iraqis looked to apportion blame, and crowds of survivors ran to hospitals to give blood. Some of the pilgrims explicitly blamed the Americans for stirring up religious tensions by launching the war; others blamed al-Qaida or Sunni extremists.

At least 85 are thought to have been killed in Kerbala - including 15 children - and a police officer at the city's only hospital reported 165 dead. More than 230 were injured.

Seventy miles away in Baghdad - and at almost exactly the same time - the Kazimiya shrine, also surrounded by tens of thousands of Shias, was targeted by suicide bombers. Two are thought to have blown themselves up at its doors and a third detonated his bomb inside the shrine, according to witnesses. Rescue workers who raced to the mosaic-walled courtyard inside the shrine found the area strewn with the dead and the maimed.

The death toll could have been much higher. Another bomber was captured at Kazimiya after his explosives failed to detonate. Police in Basra discovered two women strapped with explosives marching in an Ashura procession, and other bombs were found near Shia mosques in Basra and Najaf, the holiest Shia city.

"I was watching the beating of the chests and the [Baghdad] explosion took place," said Haider Zubaidi, a farmer who suffered a broken arm and head injuries. "I saw mutilated bodies everywhere. I saw the suicide bomber walk into the crowd and then he blew himself up and just disappeared. It was terrifying. There was flesh

flying, there were bodies flying," one of the caretakers of the mosque, Saad Abdul-Zahara, told the New York Times.

Hours after the explosions, columns of ambulances were still tearing from the scene down the airport highway towards city hospitals. As the morning drew on, hundreds of beaten-up old cars, pickups and vans converged on Khadhimiya hospital, axles groaning with the weight of relatives come to ask after the missing. Tempers ran high, non-Shias were unwelcome, and Shias were questioned aggressively about their origins and addresses.

The morgue quickly filled up, and at about 2pm, a Guardian translator, Qais al Bashir, saw some two dozen corpses laid out on the hospital floor, partly covered, bloodied and burned. A crowd of angry Shias demonstrated outside the hospital, crying for vengeance against the perpetrators. Many of them blamed terrorists from outside Iraq, in league with ex-Ba'ath party members who had grown rich under Saddam Hussein and feared losing their wealth in a post-occupation settlement. Many were struck by the careful coordination of the attacks in Kerbala and Baghdad.

"We believe these people are terrorists from al-Qaeda, but who planned it, who fixed the time and who put the money in?" asked one man. "It's the supporters of the former regime."

Some people blamed the Americans, but others pointed out that Iraqi Shia militia and clerics were responsible for the security around the mosque yesterday. Others blamed Saudi fundamentalists. Al-Qaeda, Saudi fundamentalists and supporters of the Saddam regime are predominantly Sunni. Behind yesterday's Shia rage was the same half-articulated sentiment, part desire, part fear, that if the US would only stand aside, the Shias would take their revenge against the Sunnis in their own way.

Back from the most urgent press of relatives at the hospital gates, scanning the long list of the admitted wounded, Shia women waited. They were already dressed in mourning black: such is the nature of their dress, and such is the nature of their holiday, a festival of mourning even before yesterday's killing began.

Towards dusk, the demonstrations had faded but the tensions had not. The area around the hospital was suddenly cleared of vehicles, relatives and journalists when a suspect bomb was found. A minibus and a battered car drove away from the hospital. On their roofs, each vehicle carried a makeshift coffin. They sped off in different directions, taking their dead home.

The Shia spiritual leader Ayatollah Ali al-Sistani blamed the US-led occupation forces in Iraq for failing to secure the country's borders and called for unity. In January, Kurdish forces near the Iranian border intercepted a letter, purported to have been written by the suspected al-Qaeda militant Abu Musab al-Zarqawi, outlining a strategy of spectacular attacks on Shias, aimed at sparking a Sunni-Shia civil war.

Yesterday's well-organised explosions may well have been the first act of that apocalyptic scenario. A security adviser with the coalition authority said that the insurgence in Iraq had an increasingly "Islamist radical" flavour to it. He said the aim of Sunni Arab militants operating in Iraq was to delay the transfer of sovereignty and to keep US forces from leaving the country.

"Our presence here is their best recruiting weapon," the adviser said, predicting that there would be an increase in suicide bombs before June 30. Ahmed al Saafi, an aide to Ayatollah Sistani, criticised US forces in Iraq for "failing to do more to ensure security".

There are many such dramatic postings on the internet, some filmed by the insurgents themselves and some captured by security force surveillance cameras.

Michael Howard wrote the following in The Guardian on Thursday 29th July 2004:

Suicide bomb havoc as Iraq attacks kill more than 100

Summary of a morning of terror

8:30am A suicide bomber dressed as a policeman and driving an explosives-laden police car detonates the vehicle at the al-Baya'a police station in south Baghdad. An American soldier is among those killed, says the US military

8:35am A suicide bomber driving an ambulance blows up the explosives-rigged vehicle outside the headquarters of the International Committee of the Red Cross in central Baghdad. At least 12 people are killed, including two of its employees

8:55am A suicide driver detonates his car bomb at a police station in the northern Baghdad district of Sha'ab, near a market place

9:15am A suicide bomber detonates his vehicle at a police station in the southern Baghdad district of al-Khadra, demolishing the front of the station

10:15am Police foil an attempt by a fifth suicide driver to set off his bomb-rigged car on Jadida police station in the eastern district of New Baghdad. He explodes a grenade, wounding an officer and himself

More than 100 people were killed in Iraq in a wave of attacks yesterday, as insurgents demonstrated that the interim government's honeymoon is well and truly over. In the deadliest single suicide bomb for a year, 70 people were killed and 30 wounded in Baquba, 40 miles north of Baghdad.

Clashes occurred in several other locations throughout the country, exactly a month after the US formally handed over sovereignty to an Iraqi administration. There was a fierce battle in the town of Suwariya, 40 miles south-east of Baghdad. Seven Iraqi soldiers fighting alongside multinational troops were killed in the clashes that also left 35 insurgents dead. There were also shootings and clashes in the western



Image from a video of a car bomb explosion in Iraq.
Source: flicklife.com/b9faf53c900cd2642fa9/Suicide_car_bombing_in_Iraq.html

city of Ramadi and the northern city of Kirkuk. Central Baghdad descended into chaos after a rocket hit a busy street, killing two people and wounding four, including three children.

The hostage crisis also escalated when a militant group holding two Pakistani contractors last night said it had executed the men, but freed their Iraqi driver, according to the TV station al-Jazeera. A video of their death was said to be too gruesome to be shown.

The Baquba suicide bomb left a trail of destruction, obliterating market stalls and de stroying several buildings. As well as tearing through scores of civilians as they shopped at the market, the bomb struck a group of men lining up at a nearby recruiting office for the Iraqi police.

In western Iraq, two foreign soldiers were killed and two aircraft were forced to make emergency landings after coming under fire, a US spokesman said.

The Baquba bomb raised fears of a fresh insurgency campaign three days before Iraq holds a big political conference in Baghdad, at which 1,000 delegates will gather. It is billed as a crucial next step in Iraq's transition to democracy ahead of elections planned for January".

Suicide bombers were also able to penetrate defended locations and military bases, as the following reports show.

Michael Howard and Suzanne Goldenberg reported in The Guardian on Wednesday 22nd December 2004 that:

19 US troops killed in explosion at mess tent

"Iraqi insurgents inflicted their deadliest single attack on US forces since the start of the war yesterday, killing at least 24 people and wounding more than 60 in an explosion that spewed fire and shrapnel into a lunchtime queue at a crowded mess tent.

The Pentagon said the blast at Camp Merez at the airport south-west of Mosul killed US soldiers, members of the Iraqi National Guard and a number of civilian contractor's staff. They included 19 US soldiers. A spokeswoman for Halliburton, the largest contractor in Iraq, said seven of its employees and subcontractors had been wounded.

"The number is very chaotic, we've had different numbers," said Lieutenant Colonel Paul Hastings, an army spokesman.

Witnesses described puddles of blood on the concrete floor of the darkened dining hall as soldiers tried to extricate the wounded from crumpled and melting chairs and tables.

An extremist Islamist group, the Ansar al-Sunna, claimed responsibility for the attack on the internet, and indicated that it might have been a suicide bombing. "One of the mujahideen ... carried out this martyrdom operation on the canteen of the infidel occupation forces," said the group, which has become known as one of the most brutal insurgent factions.

However, a US military spokesman said there were no human remains to indicate a suicide attack, and that the source of the explosion was still being investigated. The first reports had blamed rocket or mortar fire".

And so the carnage continued across the country: Rory Carroll reported from Mosul for The Guardian on Tuesday 1st March 2005:

Suicide car blast kills 115 in Iraq

"Insurgents mounted the bloodiest single attack since the fall of Saddam Hussein yesterday, killing at least 115 people when a suicide bomber drove a car at a queue of men waiting to take medical tests to join the Iraqi army and police.

Another 130 were wounded in the blast in the town of Hilla, about 60 miles south-east of Baghdad. The explosion vapourised the car and hurled shrapnel into the would-be recruits outside the clinic as well as traders and shoppers at a nearby vegetable market.

Iraqi politicians had hoped that last month's elections would weaken the insurgency, but though there has been a slight decline in the rate of shootings and bombings, yesterday's attack underlined the ability of the militants to strike. As in previous blasts, they targeted those hoping to join the country's security forces, which are struggling to reach the strength required to take over policing of the country from multinational forces.

In Hilla, one witness, Zeyd Shamran, said he saw the car moments before it exploded. "There were two people in it and when it stopped one man got out, shook hands and kissed the other man." The explosion left a gaping hole in the ground and the streets were littered with body parts and pools of blood.

Political parties in Baghdad condemned the bomb and continued talks over forming a new government, which they said would make security a priority with a stronger, more professional force. Hilla is a largely Shia town but it is close to three mainly Sunni towns, which have become hotbeds of resistance. Although no one took responsibility for yesterday's blast, some groups have been trying to foment sectarian conflict and even civil war.

Police and security force recruits have been repeatedly targeted, regardless of sectarian loyalty. Two attacks killed 100 in 24 hours last February. The promise of a $200 (£110) monthly salary and the absence of alternative employment keep recruitment centres swamped. Razor wire, concrete blocks and security checks have made police and army bases more difficult to bomb so insurgents, a disparate mixture of nationalists, Islamic radicals, and loyalists from Saddam's Ba'ath regime, have increasingly hit softer targets.

Maximising casualties is a way of destabilising the state and discrediting the US-backed government as ineffectual. Most suicide bombers are thought to be from Saudi Arabia, Jordan, Egypt, Sudan and other Arab countries.

Firefighters sprayed hoses at blackened bodies, while others dug through rubble for remains which were loaded on to wooden carts and police pick-up trucks. A convoy of police and civilian cars ferried the wounded to hospital while an angry, shocked crowd milled at the scene. Around 400 people, mostly young men, had gathered outside the single-storey clinic to obtain medical certificates.

"I was waiting for my turn for the medical exam in order to apply for work in the police," Abdullah Salih, 22, told Associated Press. "Suddenly I heard a very big explosion. I was thrown several metres away and I had burns on my legs and hands, then I was taken to the hospital."

Muhsin Hadi, 29, whose leg was broken in the blast, said he was lucky to have been the last in line when the bomb exploded. "Suddenly there was panic and many frightened people stepped on me. I lost consciousness and the next thing I was aware of was being in the hospital."

The following article was posted by Pat Dollard for Associated Press on June 6th, 2008:

Female Suicide Bombers

"Al Qaeda In Iraq Exploits Desperate Women As Suicide Bombers After Getting Their Men Killed.

"IRBIL, Iraq (AP) - A girl strapped with explosives approaches an Iraqi army captain, who dies in the suicide blast. A woman posing as a mother-to-be to disguise a bulging bomb belt strikes a wedding procession as part of a coordinated attack that kills nearly three dozen people.

The attacks last month were among the latest blows by female suicide bombers and further evidence of shifting insurgent tactics amid an overall drop in bloodshed around Iraq.

U.S. military figures show the number of female suicide attacks has risen from eight in 2007 to at least 16 so far this year, not including a suicide bombing Friday near Ramadi that Iraqi police believe was carried out by a woman. That compares with a total of four in 2005 and 2006, according to the military.

Some female bombers appear motivated by revenge, like the woman who killed 15 people in Diyala province on Dec. 7. She was a former member of Saddam Hussein's Ba'ath party whose two sons joined al-Qaeda in Iraq and were killed by Iraqi security forces.

Activists and U.S. commanders also believe al-Qaeda in Iraq is increasingly seeking to exploit women who are unable to deal with the grief of losing husbands, children and others to the violence started by al-Qaeda itself.

"Al-Qaeda is preying on those who don't have jobs, who don't have education and who are feeling despair," said Maj. Gen. Mark Hertling told The Associated Press on the sidelines of a conference this week on women's issues.



The use of women as suicide bombers is a relatively new phenomenon in Iraq, although it has been used by militants elsewhere, particularly in Sri Lanka. Farhana Ali, a terrorism expert with the RAND Corp. who has studied the issue extensively, said al-Qaeda's efforts to recruit women reflects its desperation after recent crackdowns.

"Al-Qaeda and insurgents are now desperate and want to ensure that their cause (and) organization stays alive," she said. "Women's participation in violence keeps the cause alive for many reasons: Women, like men, also share similar grievances, especially women who have suffered a loss."

"Women control their families and communities and when that structure is broken down, women are vulnerable, weak, easily exploited by insurgents," she added. Faiza Sayyid Alwan, a Sunni provincial council member from Diyala province who has escaped three assassination attempts, says vulnerable women need to be given more options.

"We must intervene," she said at the conference in Irbil, the largest city in Iraq's northern Kurdish region. "While the enemy is trying to reach her with negative influences we must reach in faster and rescue that woman by giving her better ideas, by helping her, by training her and giving her a better opportunity."

The rise in female suicide bombings comes as the U.S. military says violence is down to its lowest levels in more than four years. The reasons include last year's U.S. troop buildup, a Sunni revolt against al-Qaida and a cease-fire by radical Shiite cleric Muqtada al-Sadr.

American commanders claim al-Qaeda in Iraq is seeking out women and children to evade stepped up security measures and checkpoints. Iraqi women often are allowed to pass through male-guarded checkpoints without being searched and they traditionally wear flowing black robes that make it easier to hide explosives belts.

Hertling, who commands U.S. forces in northern Iraq, said five of seven suicide attacks in the past three months in Diyala have been carried out by women. They included a double bombing on May 17 in which a woman blew herself up outside an office for a U.S.-allied Sunni group and a female suicide car bomber killed one person in an attack on a police patrol.

"They do look for those three categories of illiterate, poor and able to manipulate religious fervor," he said. In many cases, recruiters have promised the women that they will provide for their families after their deaths, then failed to follow through, Hertling said. He also said at least two of the recent suicide bombers were the wives of an al-Qaeda in Iraq leader who was killed in U.S. military operations, although he declined to give more further details.

Omayah Naji Jubara, the head of the Iraqi and Arabic Women's Organisation for Salahuddin province, said Iraqi women outside major cities often find that "all the

doors are closed to them" for jobs and education. "Those terrorists come to poor people who are hungry and frustrated with the lack of government support," said Jubara.

In the meantime, the military is increasing the number of women in the police force. Hertling said 112 women have enrolled in a police class in the volatile northern city of Kirkuk and the military is trying to set up a similar training program in Diyala, northeast of Baghdad. "Just the fact that you're going to have Iraqi policewomen, that will help with security, help with searches, deal with female crimes that aren't well dealt with by male police officers," he said.

Alwan said insurgents will try to exploit women's misery as long as the Shiite-dominated government struggles to improve their lives.

"Religion has been used in a very violent way to pressure the women to do certain things," she said. "Women in Diyala have been widowed, they have no support. They're unemployed. Many have been displaced, their houses demolished, their property gone, destroyed. Where can she go, a woman like that? What can she do?"

Aqeel Hussein in Baquba and Damien McElroy reported on: 15th November 2008 that:

'Mother of all suicide bombers' warns of rise in attacks

"A captured Iraqi terrorist known as the "mother of the female suicide bombers" has taunted interrogators that her network of volunteers is too big to be destroyed by her arrest.

Itisam Adwan, who is accused of grooming young and vulnerable women for bomb attacks, has told police in Baquba that so many others are following her lead that they will not be able to stop them.

Last week a suicide bomber who blew herself killing five Iraqi guards at a checkpoint was revealed by police to have been just 13 years old - making her the youngest such attacker so far in a spate of such bombings in the city, capital of the troubled Diyala province.

Baquba, 50 miles northeast of Baghdad, has suffered an onslaught of women, some barely out of their teens, willing to inflict mass casualties as they target the security forces and public venues like markets. Although female suicide bombers had been seen in other wars, such as Chechnya's Black Widows or the Tamil Tigers' Death Maidens, the phenomenon was rare in Iraq until early this year.

The attack on Monday brought to 27 the number of women who had dressed up in explosives to kill themselves and others in Diyala alone. Across Iraq since the beginning of the year in Iraq more than 30 women have died in suicide attacks, compared with only eight in 2007.

Six days after the attack, police said they had still not determined the identity of the girl involved. But they revealed startling details about Itisam Adwan, whom they arrested in late September, and the role of women in fomenting such attacks. The terrorist, who goes by the nom de guerre, Umm Fatima - the mother of Fatima - is said to be both tough and unrepentant.

Captain Ahmed Jasim, a spokesman for the Baquba police, said that the 38-year-old had described how a group of women, mainly widows of terrorist "martyrs", who are grooming younger relatives and acquaintances for death.

"She said she is just one of many mothers who do the same job," he said. "And there are many girls who are willing to die. The mothers tell them that they will go to heaven, where they will sit by rivers of honey and have lunch with the prophet Mohammad and live in comfort.

"The girls are the wives of al-Qaeda members, so their husbands tell them that their martyrdom would be glorious and the husbands too will automatically get to heaven as a result of their wives willingness to kill themselves in the name of religion."

Rania Ibrahim, a 15-year old who was captured at a checkpoint wearing a suicide vest in Diyala in August, is one of those pushed into terrorism in this way. She was a frustrated, poorly-educated teenager who had been sold into marriage with a terrorist operative. Umm Fatima, her husband's aunt, then cajoled her into attacking a police station.

"I left school at 11 and my mother spent the rest of the time trying to find a buyer to marry me," she said. "I wanted to be a doctor but my husband said he wanted me to go to paradise, where he would soon join me."

But Rania, who claimed she was fed pills and alcohol before her attack, attracted the suspicions of police at the check-point. She was called forward and the police cut the belt from her body. Umm Fatima, who is believed to have held the remote electronic trigger for the device, was unable to explode the bomb.

Rania is now in prison in Baquba but her mother, Bassad Selman Mohana, lives in a dilapidated house near the centre of the once neat and prosperous central Iraqi city. She said she felt betrayed and deceived by her son-in-law, Mohammad Hassan, who was himself arrested a month after his young wife was taken into custody.

"My daughter is a good girl and I thought he was a good man," she said. "Around here, everyone makes price the first factor in determining who the girls marry. He deceived me, I did not know he was involved with al-Qaeda."

The Jamestown Institute, a terrorism research foundation, reported that al-Qaeda has recognised the success of the tactic of using women to stage suicide attacks in Iraq. For the first time the group has now nominated a woman as an emir or prince of its operation. Websites have dubbed the women, Umm Salameh, as the emir of

the al-Nitaqayn - the battalion of the two belts.

The name alludes to a famous Koranic figure who was the daughter of the prophet Mohammad's closest lieutenant and first successor, Abu Bakr. Umm Salameh is the widow of an al-Qaeda leader in northern Iraq who was killed last year in an airstrike.

"When Muslim land is occupied by non-believers, jihad is mandatory for all Muslims, male and female," said Dr Hani al-Sibai, a London-based Islamist Sunni scholar. "Women are allowed to conduct jihad without the approval of parents or spouse."

The enshrouding black gowns, known as abayas, that many Iraqi women are forced to wear in deference to Islamic guidelines on modesty, afford the perfect camouflage for a would-be bomber. Islamic tradition prevents men from searching Iraqi women.

Farhana Ali, an analyst with Rand Corp, told an American radio station: "It's creating an enormous security problem for US and Iraqi forces." Baquba has been a stronghold for al-Qaeda since the 2003 invasion of Iraq and overthrow of Saddam Hussein by the American-led coalition. The city has been named by al-Qaeda propagandists as the putative capital of an Islamic state of Iraq. A senior interior ministry official has acknowledged that conflict on its streets has impelled some woman to strike out at the authorities.

Brigadier General Abdul Karim Khalaf said: "The psychological pressures of the security situation that we used to have in Diyala - the systematic killing, especially in some parts of Baquba where the government's forces' presence was weak - allowed the insurgents to use religion to exploit women. Women bombers are a problem for us. Men can't search women... so they take advantage of this weakness in Iraqi society."

Some see the recruitment of women suicide bombers an act of desperation by al-Qaeda, which has been pushed out of its former strongholds in Baghdad and western Iraq by a surge of US forces. Diaa Rashwan, who follows Islamic militancy for Egypt's Al-Ahram Centre for Political and Strategic Studies said women should be in the "last rows" of fighting. "So to see women (suicide bombers) shows an abnormal situation: the absence of men."

To cope with the higher threat the Baquba police has recruited a 200-strong women only force to search females passing though checkpoints. But the cult of the suicide bomber is now part of the city's daily life. One student said that whenever he passes a heavy-set girl, he is often tempted to ask if she is concealing plastic explosives".

Suicide bombers displayed ingenuity in penetrating Coalition defences, as the following report by Michael Howard in Baghdad, writing in The Guardian, Friday 13th April 2007 illustrates:

US admits Green Zone is no longer safe as suicide bomber strikes

"US officials admitted last night that the bombing of the Iraqi parliament shows that not even the heavily fortified Green Zone is safe any more, despite the security crackdown launched earlier this year in the Iraqi capital. American and Iraqi security officials were last night investigating how a suicide bomber evaded a ring of security checks and blew himself up in the assembly's cafe, killing three MPs and five other people and wounding more than 20.

About 100,000 US and Iraqi soldiers are on the streets of the capital as part of the troop "surge" begun two months ago; while security inside the Green Zone has been tightened following the recent discovery there of two suicide bomb belts. But after the deadliest attack ever in the Green Zone, US officials warned that nowhere is safe in Baghdad. "The international zone is not safe, it is just safer than the rest of the city," said Lieutenant Colonel Christopher Garver. "Enemies of the country are trying to drive a wedge between the people and the government." In Washington the secretary of state, Condoleezza Rice, said: "We know that there is a security problem in Baghdad. This [crackdown] is still early in the process and I don't think anyone expected that there wouldn't be counter-efforts by terrorists to undermine the security presence."

The blast came hours after a suicide truck bomb exploded on a major bridge in northern Baghdad that links the east and west of the city. The steel structure collapsed and sent cars tumbling into the Tigris river, killing at least 10 people. The parliament bomber struck at around 2.30pm as lawmakers and government officials gathered for lunch on the first floor. The Saddam-era building also houses Iraqi government offices and has withstood repeated mortar attacks since March 2003.

Barzan Mohammed, an assistant to the deputy speaker of parliament, Arif Tayfour, said: "I was just leaving my office for lunch and there was this very big bang. I ran along the corridor to the restaurant but all I could see were huge clouds of dust. It was choking and there was the smell of burning meat. "The windows were blown out, there were tables and chairs everywhere and the sound of groaning. Then I saw that many people had been hit, and that blood was everywhere."

Major General William Caldwell, the chief US military spokesman, said witness accounts pointed to a suicide attack but "we don't know at this point who it was. We do know in the past that suicide vests have been used predominantly by al-Qaeda." Initial reports said the explosion was near the cash register and there was speculation a cafe worker had smuggled in a bomb in food boxes. But Mohammed Abu Bakr, who runs the parliamentary media unit, and other witnesses said they saw two legs on the floor. "None of those killed or wounded lost their legs," he said.

A police source said they had found the remains of what appeared to be a suicide belt, and the bomber was believed to have been a man. The building was sealed after the blast and MPs were told to stay where they were for fear of a second blast. Among the dead MPs was Mohammed Awad, a member of the hardline Sunni National Dialogue Front, which holds 11 seats in the legislature and is harshly critical of the Shia-led government of the Prime Minister, Nuri al Maliki. Another was Taha al-Liheibi, of the Sunni Accordance Front, which holds 44 seats and is part of the National Unity government. The third was Omar Ali al-Hussein, a member of the Kurdistan Islamic Union.

Iraq's parliament is surrounded by concentric rings of checkpoints that start from the outer borders of the Green Zone. Police were looking into reports that a security scanner checking pedestrians at the entrance near the parliament building was not working yesterday morning, and that people were searched by hand and metal detectors instead.

Once past these outer hurdles there is a further check at the door of the building itself. Dogs sniff for explosives, handbags and briefcases are checked and put through a scanner, and individuals are patted down by guards to check for weapons. Everyone who enters, including MPs, must have a pass or be escorted by someone with valid credentials.

Peter Beaumont, foreign affairs editor, wrote in The Observer on Sunday 4th February 2007:

Suicide Truck bombing: 135 die in bombing as 'civil war' grips Iraq

"A suicide truck bomber blasted a food market in a mainly Shia area of Baghdad yesterday, killing at least 135 people and wounding scores more. The bomber was driving the lorry carrying food when he detonated his explosives, destroying stores and stalls that had been set up in the crowded outdoor Sadriyah market, police said. The explosion came as a group allied to al-Qaeda called for fighters to widen their campaign outside the capital. Afternoon shoppers were buying food for their evening meal as the bomber struck. It was the latest in a series of attacks against commercial targets in the city as insurgents seek to maximise the number of people killed ahead of a security sweep planned by American and Iraqi forces.

The blast sent plumes of black smoke into the air. The district has suffered a number of large bombings in recent months. Yesterday's killings came at the end of one of the bloodiest weeks since 2003, and follow the admission in the US government's National Intelligence Estimate that Iraq now meets the conditions of a long-predicted civil war. The intelligence report said progress must be made within 12 to 18 months to avoid further deterioration.

Levels of violence have sharply increased ahead of the planned US-led military 'surge' against armed groups announced last month by President George Bush. The present counter-offensive by armed groups, both Sunni and Shia, has seen four US

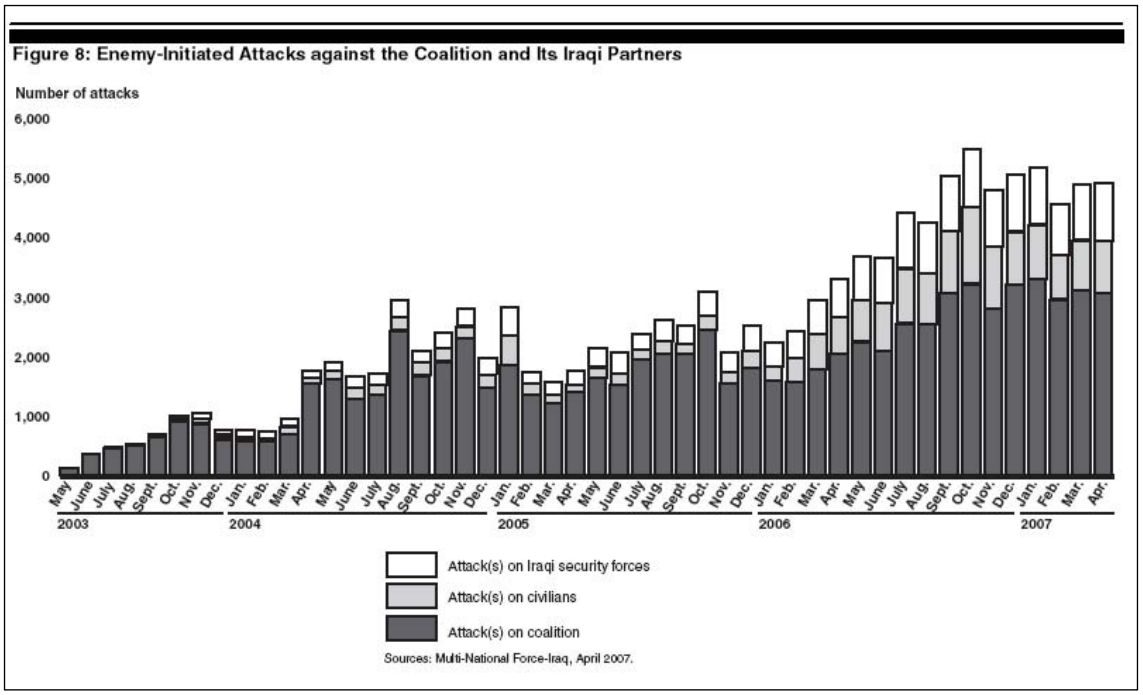


Aftermath of a vehicle bomb in Baghdad:
Source of image: isiria.wordpress.com/2008/04/10/ Attribution unknown

helicopters shot down recently as the insurgents have adjusted their tactics. Elsewhere in the country, a leading Shia cleric, Grand Ayatollah Ali al-Sistani, renewed an appeal for Iraqis to reject violence and unite.

But in the northern, ethnically mixed city of Kirkuk, a string of car bombings, including a suicide attack, killed at least four civilians and wounded 37 other people. Two of the cars were detonated outside the offices of the main Kurdish parties in the city. Fearful residents rushed home and shops shut early in anticipation of more attacks, while police imposed a vehicle curfew. A police source said all entrances to Kirkuk were closed to prevent more car bombings. Further north, another curfew was imposed in Mosul, Iraq's third largest city, after clashes between insurgents and police erupted in several neighbourhoods. A police source accused the militants of planning to take over the city.

The violence continued despite the curfew. A car bomb hit an ambulance and killed an injured woman who was being taken to hospital, and six mortar bombs struck the offices of the state-funded Iraqiya satellite television channel. The call for more attacks outside the capital came in an audio tape message by Abu Omar al-Baghdadi, leader of the Islamic State of Iraq group. He made it clear he wanted his followers to target a string of Sunni provinces, saying the attacks 'must not involve Baghdad alone'."



A chart showing the rise in insurgent attacks from 2003 to 2007

Human walking (coercive) bombs

Michael Howard wrote in The Guardian on Saturday 2nd February 2008 that:

> "**Bombs strapped to Down's syndrome women kill scores in Baghdad markets**
>
> "This was the deadliest day in Iraq since the start of the US surge a year ago. Mobile phones were used to set off devices, say military.
>
> Remote-controlled explosives were strapped to two women with Down's syndrome and detonated in coordinated attacks on two Friday morning markets in central Baghdad yesterday, killing at least 73 people and wounding nearly 150. The first targeted shoppers at a pet market in the al-Ghazl area, killing 46 people and injuring 100. About 20 minutes later, a second bomber struck at a smaller bird market in south-eastern Baghdad, killing 27 people and wounding at least 67.
>
> The toll made it one of the deadliest days since the US troop surge a year ago began to arrest the spread of violence. The chief Iraqi military spokesman in Baghdad, Brigadier General Qassim al-Moussawi, claimed the female bombers had Down's syndrome and that the explosives were detonated by remote control, indicating they may not have been willing attackers in what could be a new method by suspected Sunni insurgents to subvert stepped-up security measures.
>
> The US ambassador to Iraq, Ryan Crocker, said the bombings showed that al-Qaida has "found a different, deadly way" to try to destabilise Iraq.
>
> US secretary of state Condoleezza Rice said the bombings in Iraq proved al-Qaida is "the most brutal and bankrupt of movements" and would strengthen Iraqi resolve to reject terrorism. Police said both bombers were women who had slipped

}past local security checks by hiding explosives under their black abaya robes.

Major-General Qassim Moussawi, spokesman for the Iraqi military in Baghdad, said the suicide bombs were detonated remotely by mobile telephones. "We found the mobiles used to detonate the women," he said, adding that the women had mental disabilities. He did not elaborate on how the Iraqi military knew about their mental condition.

In January, the number of Iraqi civilians and security forces killed fell to 600, the lowest monthly death toll since December 2005, according to unofficial tallies. Despite the nationwide reduction in violence, senior US military officials in Iraq have repeatedly warned against complacency, saying that a number of Sunni and Shia militant groups are still bent on fomenting sectarian strife.

The twin blasts underlined the fragility of the recent security gains in Baghdad and are bound to damage public confidence in the ability of Iraqi security forces and neighbourhood watch groups to stop attacks on Iraqi civilians.

The weekly animal bazaar at al-Ghazl has been bombed several times since the US invasion in 2003. But the improved security environment in recent months has revived its popularity. Taking advantage of the lifting of the Friday curfew on vehicles, families flocked to the area.

Witnesses said the bomber had passed through a checkpoint, claiming she had birds to sell. "She called people to her and then there was a flash and a big force, and we were all knocked to the ground," said Kamel Hayder, a student who had gone to the market with his younger brother. "When I raised myself there were bodies everywhere, and I was covered in blood, but I could not tell whether it was my own or that of the birds."

A pigeon vendor said the market had been unusually crowded, with people taking advantage of the day off to be outdoors on the pleasantly crisp and clear winter day. January had been unusually cold and rainy. "I have been going to the pet market with my friend every Friday, selling and buying pigeons," said Ali Ahmed, who was hit by shrapnel in his legs and chest. "It was nice weather today and the market was so crowded."

He said he was worried about his friend, Zaki, who disappeared after the blast about 40 yards away. "I just remember the horrible scene of the bodies of dead and wounded people mixed with the blood of animals and birds, then I found myself lying in a hospital bed," he added.

Rescuers hauled the dead and wounded on to makeshift stretchers or the back of pick-up trucks. The wounded were taken to five hospitals. The casualties included a high number of women and children. The blast occurred close to the site of another bombing which killed 13 people on November 23. US commanders blamed that attack on an Iranian-backed Shia militant cell, which they said was trying to lay

the blame on al-Qaida in order to drive the area's mostly Shia residents back into the arms of Shia militias for protection.

There were no claims for yesterday's attacks. US and Iraqi commanders said Sunni militant groups were stepping up efforts to recruit female suicide bombers, in part because cultural sensitivities meant the predominantly male police force was less likely to pay close attention to them at checkpoints.

While involving women in such deadly activity violates cultural taboos in Iraq, the US military has warned that al-Qaeda is recruiting women and young people as suicide attackers to thwart stepped-up security measures. Syria also has reportedly tightened its border with Iraq, a main transit point for foreign bombers.

Women in Iraq often wear abayas, the black Islamic robe, and avoid thorough searches at checkpoints because men are not allowed to touch them."

Assassinations

Assassination of local and government officials, translators for coalition forces, employees at coalition bases, informants, and other (so-called) collaborators has been a regular occurrence. Assassinations have taken place in a variety of ways, from close-range small arms fire and drive-by shootings to suicide car-bombers ramming convoys.

Lawrence Joffe wrote in The Guardian on Saturday 30th August 2003 of the death of the Shiite cleric who headed the largest opposition group in Iraq and advocated a form of pluralism in his society:

The Assassination of Ayatollah Mohammad Baqir al-Hakim

"The Shiite cleric and political leader, Ayatollah Mohammad Baqir al-Hakim, who has been assassinated, aged 63, in his hometown of Najaf, devoted most of his adult years to opposing the regime of Saddam Hussein. He had just finished a sermon on the need for Iraqi unity and was emerging from the gold-domed shrine of Imam Ali when he and at least 75 others were hit by a massive car-bomb explosion.

Al-Hakim headed the Supreme Council of the Revolution in Iraq (SCIRI), probably the largest opposition group in the country. As a scion of one of the most prominent and respected Iraqi Shiite families, he wielded enormous influence over the Shiites, who constitute more than 60% of the Iraqi population.

The ayatollah only returned to his native country on May 12 this year, after spending more than two decades of exile in Iran. The parallels with Iran's Ayatollah Khomeini are striking. The Iraqi was often seen as someone of equivalent status for his fellow citizens to Khomeini in Iran and just as that cleric spent 12 years in exile - in Najaf - before returning, via Paris, to vast crowds in Tehran, in early 1979 so al-Hakim received comparable adulation when he returned.

With hindsight, it should have been obvious that al-Hakim's life was in danger. For milling amongst May's throng in Najaf were supporters of the 29-year-old Ayatollah Moqtada al-Sadr. The younger sheikh is the son of the late Ayatollah Mohammed Sadeq al-Sadr, murdered in 1999. He is said to represent radicalised urban Shiites who dwell in Sadr City - formerly Saddam City - in Baghdad.

Al-Sadr's acolytes repudiate the right of "exiles", like Hakim, to assume natural leadership of the Iraqi Shiites. Some say they represent a generational challenge to the older Shiite opposition. Rumours have associated al-Sadr's men with a recent unsuccessful assassination attempt on al-Hakim's uncle, Grand Ayatollah Seyed Mohammed Said al-Hakim.

Schisms have mounted alarmingly within the Shiite community. Only a day after Saddam's overthrow, another prominent Shiite cleric who returned from exile, Ayatollah al-Khoei (obituary, April 12 2003) was hacked to death in the Najaf mosque. A taboo had been broken, as the right of sanctuary in a holy place is pivotal to Shiite beliefs.

Al-Hakim spoke out against American rule of Iraq. "They gave the justification that they came in the name of liberation, but now they are an occupying force", he said in June, adding ominously: "If the people lose their patience, there will be social uproar." Yet the politician was subtle and pragmatic. He admonished supporters not to use force against the foreign armies, and allowed, and even encouraged his brother, Abdel-Aziz, to sit on the provisional governing council. This was all the more remarkable, given that Abdel-Aziz also heads SCIRI's Iranian-based Badr Brigades, which United States defence secretary Donald Rumsfeld warned not to intervene during this year's US and British invasion. By contrast, supporters of Moqtada al-Sadr have shunned the council.

Al-Hakim cut an inspiring figure. Though his head was swathed in the familiar auspicious black turban of a sayyid - descendant of the house of Mohammed - his face often betrayed a mischievous smile. Such a demeanour gave little hint of his past suffering.

Al-Hakim was born in Najaf, where his father was a senior cleric. He received a traditional Shiite imam's training, but was arrested and tortured for his beliefs by Saddam's forces in 1972. Five of his brothers and another dozen or so relatives were killed by the Ba'athist regime.

In 1980 he fled to Iran, a predominantly Shiite country, just as it began fighting his homeland in a brutal eight-year-long war. Until then al-Hakim had belonged to the shadowy Dawa (the call) group, Shiites who periodically launched armed attacks on state functionaries, yet who were mainly dominated by conservative clerics.

In Tehran al-Hakim created SCIRI as an umbrella group, encompassing Dawa and other bodies. He was angry with US "betrayal" in 1991, when the first president Bush appeared to promise to assist a Shiite rebellion, and then let them down in

March, leaving them at the mercy of Saddam's Republican Guard. Tens of thousands were believed slaughtered in Iraq's south.

By the late 1990s, Dawa seemed to have distanced itself from SCIRI, accusing the latter of falling too far under the sway of Iran, and especially leading the hardline Ayatollah Ali Khamenei. Yet after 2001, al-Hakim made strenuous efforts to advocate inter-denominational pluralism, and democracy - doubtless realising the innate numerical preponderance of Shiites in Iraq. He also suggested he no longer had plans for an Iraq based on vilayet e-fagih - the Iranian fundamentalist formulation of "rule by clerics".

Signs of SCIRI's potency were clear when Iraqi dissidents met last December in London, and set up a British and American-backed 65-member Follow-up and Arrangement Committee (FUAC). SCIRI members gained eight seats; and affiliated independent allies another eight, thus making them, nominally, the most powerful opposition force in Iraq. ”

Kidnappings

Kidnapping were another insurgent tactic after April 2004, some or much of it criminally driven for ransom money. Foreign civilians bore the brunt of the kidnappings, although U.S. military personnel were also targeted. 80% of hostages taken by insurgents were released.

The goal of the kidnappings appeared to be to attract media attention and motivate recruits. Most kidnappings were conducted by radical Sunni groups on the fringe of the insurgency. The Mahdi Army, and the nationalist and more moderate religious elements of the Sunni insurgency, rejected kidnapping as a legitimate tactic.

Rory Carroll, the Guardian's Baghdad correspondent was abducted for 36 hours before being freed on Thursday. This is his story in The Guardian, Saturday 22 October 2005:

‘Gunmen surrounded us, firing into the windscreen. The dreaded moment had arrived: kidnap'

“We finished the interviews, deep in the Baghdad slum known as Sadr City, and the Guardian's two vehicles started heading back to the hotel. The street was deserted until three cars, including a police Land Cruiser, sliced around a corner and into our path. Gunmen piled out and surrounded us.

One pistol-whipped Safa'a, the driver, spraying his blood on to my lap. Another wrestled the translator, Qais, out of the door on to the ground. Another pumped three bullets into the windscreen of the follow-up vehicle, narrowly missing the driver, Omar.

It was 2.15pm on Wednesday, and a moment I had dreaded since moving to Iraq nine months earlier had arrived: kidnap. A potential death sentence for Iraqi staff

as well as the foreign correspondents who are the targets. Since hostages started having their heads sawn off we have all been obsessed by it.

In agreement with my Iraqi colleagues, the plan, if cornered, was for me to leg it. With a gun at my head that was not an option. I was bundled out and thrown into a Honda. I glimpsed Omar sprawled on the ground, an AK-47 trained on him.

We sped away, the Land Cruiser leading. A man in police uniform in the front passenger seat pointed a pistol while my neighbour in the rear seat handcuffed my wrists behind my back and shoved my head into his lap. "OK, OK," he said. It was not OK.

Angling my head it was possible to see sagging powerlines, crumbling houses, sheep grazing on rubbish, traffic. I waved a foot to try to catch the attention of a trucker. It was rammed back on to the floor. The driver, stocky and stubbly, turned with a toothy grin and said "Tawhid al-Jihad". Otherwise known as Abu Musab al-Zarqawi's al-Qaida in Iraq, the beheaders of Ken Bigley. I stopped breathing.

We pulled off the road and, within sight of traffic, had a 10-minute pitstop to change. A different car and different clothes. I stripped naked and was handed a brown T-shirt and a pair of stonewashed fake Versace jeans with no button. "More Iraqi, good, good," said one man. I was left barefoot. We rejoined the traffic. Documents and a copy of Iraq's draft constitution poked from the pocket of the front seat, suggesting this was a newly stolen car. The kidnappers relaxed. One lit a cigarette and flicked through my documents.

"Irish. Journalist. Not British?" He shrugged. American helicopters buzzed overhead but however hard I visualised it, no Rangers came shimmying down on ropes. The front passenger turned and indicated his colleagues. "Ansar al-Sunna." The bad news was that that was the group that killed an Italian journalist. The good news was that this contradicted the driver. I suspected - hoped - they were winding me up.

The headcutters are Sunni extremists but Sadr City is Shia, a rival Islamic sect, and the fiefdom of the radical cleric Moqtada al-Sadr. We had gone there to follow Saddam Hussein's trial on television at the home of a family persecuted by his regime. The kidnappers had learned of our presence and lain in wait.

We pulled into the walled driveway of a smart two-storey house. The vehicles left and the house owner, a medium-built man in his late 30s, took over. A portrait of a Shia imam gazed down from the wall of the living room, which was bare save for rugs and cushions.

As the man I would come to call Haji, a term of respect for Mecca pilgrims, sifted through possessions taken from my car, I asked about my colleagues. He examined a notebook spattered in blood. "They OK, no problem."

He said I was to be exchanged for a Shia militiaman jailed by the British in Basra,

the spark for last month's violent protests. I wanted to believe that but feared being sold to the highest bidder. There was a rumour that Sunni groups were back in the market after a lull in hostage-taking.

A separate set of metal cuffs clicked on to my wrists and I was led into a hallway. Beneath a stairwell there was a black cavity, an entrance to an unlit concrete passageway five metres long, one metre wide. A rug and a pillow were laid out. The door clanged shut and a lock turned. Pitch blackness and silence. Going by previous hostage cases, this could be home for months. Still, no bag over the head, not chained to a radiator - could have been worse.

I sat down and tried to remember why I volunteered for Iraq. Curiosity, ambition and hoping to clear my head after a broken relationship, among other things. It wasn't feeling clear now. No story was worth this. In any case I'd missed the story - Saddam could have broken down and pleaded guilty for all I knew. Hours passed. I pictured news of my abduction reaching family and colleagues. Not a happy image so I thought about my cat, Edward. Insects crawled up my leg. Dusty Springfield crooned in my head. Who invited her in?

Sounds of domesticity reverberated through the concrete. A woman's voice. Children running and laughing. Pot walloping in the kitchen. The television blared. Egyptian comedies, it sounded like; Haji's family laughed long and loud. After fitful sleep the door banged open. "Morning, Rory," smiled Haji. After being allowed to use the toilet and shower, with cuffs removed, a younger man provided pitta bread, jam, cheese and sweet tea in the living room. "You on al-Jazeera, BBC, everywhere," announced Haji, chuffed. I was a celebrity. Great, get me out of here.

Cuffed again and back in the gloom, it occurred to me that the British government's official position was not to negotiate with terrorists. Fingers crossed for the Irish government. Children banged on the door and took turns at holes in the chipboard to peer at this exotic, valuable pet who could not be allowed to stray.

Unleashed for supper, feeling stiff and sore, desperate to lengthen my time out of the tomb and provoke dialogue, I obtained permission to stretch and do press-ups. Haji grinned and took a photograph. The children loved it. The pet does tricks!

Momentarily more host than captor, Haji fetched an English-language version of What is Islam, a summary of the faith by the late ayatollah Muhammad Shirazi. He appeared not to have read up on 60 things forbidden by Islam, pages 38-41, which include a ban on imprisoning someone unjustly.

Back into the passage for a second night. Then, Haji's mobile rang. A murmur, then laughter. Minutes later the door swung open. I was going home, he said. In the boot of his car. A moon hung high over Baghdad as I clambered in. After 20 minutes of bouncing over potholes I feared I was en route to another gang of kidnappers, my buyers. I found an oil spraycan. The plan: zap their eyes and sprint.

We stopped. The boot opened to reveal a police pick-up truck with a mounted machine gun. Real police. Haji shook an officer's hand, nodded at me and drove into the night, apparently a free man. Ahmad Chalabi, the deputy prime minister, waited with a smile at his palm-fringed compound. Elements of Moqtada al-Sadr's movement had snatched me, ostensibly to gain leverage for friends detained by the British in Basra, he said, though some wanted to sell me to jihadists.

He said his lobbying had clinched the release. "We got you out just in time." It was over. I slumped into a seat. An aide fished a can of beer from his jacket pocket. "I think you'll be wanting this."

One year ago hostage Norman Kember was dramatically freed by the SAS in Baghdad. In his first newspaper interview, he told Aida Edemariam why he didn't regret his journey to Iraq, in an article by her in The Guardian on Saturday 10th March 2007:

'Was I reckless? No'

“One year ago hostage Norman Kember was dramatically freed by the SAS in Baghdad. In his first newspaper interview, he told Aida Edemariam why he didn't regret his journey to Iraq, in an article by her in The Guardian on Saturday 10th March 2007.

“The four men were taken easily, in broad daylight. They were accelerating away from a Sunni mosque when two cars full of armed men cut them off, relieved them of their driver and interpreter, and of their freedom. For the next 118 days Norman Kember, Tom Fox, Harmeet Singh Sooden and James Loney would be chained side by side in an upstairs room in a suburb of Baghdad, deprived of natural light and of any contact with the outside world apart from the grainy videos in which they were forced to appear.

They spent their waking hours attempting to manage despair; their sleeping hours were broken and dread-filled, not to mention uncomfortable - until they found a nail and were able secretly to spring the locks, they were handcuffed together even when they slept. If one wanted to turn on to his side he had to ask permission from the others, a far cry from the spirit in which Kember had tried to put himself to sleep on his first night in Iraq - by reading Agatha Christie's They Came to Baghdad. They took turns being the ones with one hand free, and had to bang on the door every time they wanted to go to the toilet. Eventually their gun-toting minders gave them notebooks, which they used to play word games, write diaries and compose last letters to their families. In mid-February they were told Fox and Kember would be moved to a different house to facilitate their release. Kember was never moved. Fox, an American, was taken away and shot. His body was later found dumped in a street.

This is not quite the way Norman Kember would tell it - or at least, the way he

refused to tell it when he was eventually freed by the SAS. He did not behave as we expect our accidental heroes, our insta-celebrities, to behave: much gushing, endless media interviews, story sold to the highest bidder. He refused all except a brief statement at Heathrow and one interview, made sure he reiterated what he believed, that the problem of Iraq should be solved without violence, and sold his book, notable for its refusal to sentimentalise or overdramatise, to the publisher of the Jerusalem Bible rather than Penguin.

He was punished for his noncompliance. He was perceived, wrongly, he says, to have been insufficiently grateful to the SAS, and was denounced in the papers and in hate mail sent to his home in suburban northwest London. "It was really annoying," says his wife, Pat, cradling a cup of tea in their austerely comfortable living room. "It didn't annoy me - I expected it," retorts Kember. "If you take a strong stand, you expect people to disagree with you strongly."

…Almost the first thing they received was a telling-off from the commanding officer for putting lives at risk. Kember argues, simply, that soldiering entails risk. Did he not think the officer might be right, that he was reckless? "No, I don't think so." How about the cost, which has been estimated at £8m? "Oh yes. Of course I feel guilty about it. That money ... was desperately needed in the health service. But it is a flea compared to the vast amounts of money being squandered on the war - and where's it got us? I'm grateful the Foreign Office decided I was worth rescuing."

Executions

Executions were one of the most gruesome aspects of the insurgency, and a device particularly favoured by Al Qaeda operatives under the direction of Al Azarwi. While selective, they were also indiscriminate in the sense that they selected vulnerable individuals for their perceived propaganda value, including Margaret Hassan and Nick Berg.

They were also designed to achieve specific political purposes, as in undermining the political will of individual national contingents, as for example the Italians and the Russians. In many cases, tapes of the beheadings were distributed on the Internet for propaganda purposes. This tactic proved counterproductive as it caused such revulsion among moderate Iraqis.

Video reveals full horror of Italian hostage's execution

John Hooper and Nick Paton Walsh wrote in The Guardian on Thursday 15th April 2004:

'Murder puts pressure on Berlusconi over troops'

"Silvio Berlusconi and his government were last night confronted with their involvement in Iraq when one of four Italian hostages was murdered in reprisal for

the prime minister's refusal to withdraw troops from the country. The kidnappers, from a previously unknown group called the Green Battalion, threatened to kill the other three hostages if their demands were not met.

The Arab television station al-Jazeera told Reuters news agency last night it had received footage of the killing but would not broadcast it because it was "too bloody". The US Fox network reported that the video showed a hooded man being killed by a shot to the head. The hood was then removed.

The dead man was named last night as Fabrizio Quattrocchi, 36, from Genoa. The Italian foreign minister, Franco Frattini, confirmed during a live chat show that an Italian official had seen the video of the execution.

The killing of the Italian raised concern for the dozens of foreigners reported to have been abducted in Iraq in recent days. A US spokesman said on Tuesday that 40 foreigners from 12 countries were being held.

Yesterday, a French television journalist was freed after a four-day ordeal, which, he said, was marked by constant movement and threats to his life. Alexandre Jordanov, who works for Capa Television in Paris, was kidnapped on Sunday while videotaping a US military convoy under attack.

Two US soldiers and seven employees of Kellogg, Brown and Root, a Halliburton subsidiary, have been missing since their convoy was attacked on Friday on the main highway west of Baghdad. One of the missing, Thomas Hamill, 43, a truck driver, is known to have been abducted. His captors threatened to kill and mutilate him unless US troops ended the assault on Fallujah. The deadline passed on Sunday with no word on his fate.

Today Russia will begin evacuating 816 people, including its citizens and people from other parts of the former Soviet Union, who were mostly involved in rebuilding the energy infrastructure. The evacuation is a reaction to the kidnapping of three Russians and five Ukrainians on Monday night. They were released hours later, their captors apologising for their "mistake". The ministry for emergency situations said that it had laid on seven flights to take 553 Russians and 263 citizens from the Commonwealth of Independent States."

American beheaded in revenge for torture

Brian Whitaker and Luke Harding wrote in The Guardian on Wednesday 12th May 2004:

"A US hostage in Iraq was pictured being beheaded by Islamic militants in a video released yesterday that said that the grisly act was revenge for the abuse of Iraqi detainees by US troops.

Five men wearing headscarves and black masks were pictured standing behind a

bound man in a Guantánamo Bay-style orange jumpsuit, who identified himself briefly before one of his captors put a large knife to his neck. A scream was heard, followed by shouts of "Allahu Akbar!" - "God is greatest" - as the head was held out to the camera.

The pictures, released through an Islamic website, shocked America and reinforced the Bush administration's insistence that US abuse of Iraqi prisoners paled in comparison with the barbarity of the nation's enemies.

The video of the decapitation bore the title "Abu Musab al-Zarqawi shown slaughtering an American". It was unclear whether Mr Zarqawi - a lieutenant of Osama bin Laden thought to be based in Iraq - was shown in the video, or was claiming responsibility for ordering the execution.

The slaughter marked the end of a convoluted odyssey for Nick Berg, a committed supporter of President Bush's Iraq campaign who had twice travelled to Iraq to seek work as a communications contractor only to be arrested, released and then captured by militants. His decapitated body was found near a flyover in Baghdad on Saturday but the US military did not disclose the discovery until yesterday morning.

How 26-year-old Nick Berg fell into the hands of Islamist militants is unclear, but while in Iraq he also came to the attention of the FBI and the Iraqi police. The state department said he was a private citizen who was not employed under any known contract.

The killing recalled the kidnapping and beheading of the Wall Street Journal reporter Daniel Pearl in 2002 in Pakistan. Four Islamist militants have been convicted, but seven other suspects - including those who allegedly slit his throat - remain at large."

Jason Burke wrote in The Guardian on Wednesday 17 November 2004 on the murder of Margaret Hassan:

Margaret Hassan:
Relief worker who dedicated her life to helping the Iraqi people

"Margaret Hassan, who has been reported killed at the age of 59, was Care International's director in Iraq. She had been held hostage after being abducted at gunpoint in Baghdad on her way to work four weeks ago.

Hassan was born Margaret Fitzsimmons in Ireland, where her early childhood was spent in a Dublin suburb. Later, her family moved to London, where she completed her education. In 1961, when she was 17, she met and married Iraqi-born Tahseen Ali Hassan, who was 26 years old and studying engineering in the UK. In 1972, she moved with her new husband to Iraq, where she began working for the British

Council, teaching English to Iraqis. Falling in love with the country, she learnt Arabic, converted to Islam and became an Iraqi citizen.

In 1979 Saddam Hussein consolidated his grip on power in the country and, two years later, led his nation into war with Iran. The conflict cost huge numbers of lives and inflicted massive deprivation on the populations of both countries. However, Hassan never contemplated leaving, becoming first the assistant director of studies at the British Council in Baghdad and then its director. Her husband worked as an economist.

In 1990, Saddam invaded Kuwait. Operation Desert Storm, the first Gulf war, was launched by an international coalition headed by the Americans the following year. Again, despite the 42-day bombing campaign, Hassan never left Iraq. During the war the British Council suspended its work. At the conflict's end, Hassan was left jobless.

Capable and tough, she became the director of the 60-strong Iraqi section of Care International, the Brussels-based relief organisation, which had just started working in the country, focusing its efforts on sanitation, waste, health and nutrition projects. Throughout the 1990s, Hassan was a vocal critic of the sanctions imposed on Iraq by the United Nations.

In January 2003, before the US embarked on military action, she briefed both the United Nations and British MPs, drawing attention to the effects of the embargo. "The Iraqi people are already living through a terrible emergency," she said. "They do not have the resources to withstand an additional crisis brought about by military action."

She told one journalist the aid agencies were only "providing the proverbial useless drop in the ocean". Iraq, she argued, was not a third-world country, and, as a result, the people were really suffering. "Sanctions are inhuman and what we are doing cannot redress that inhumanity."

Articulate and forthright, Hassan was often interviewed by the press and other media, and helped distribute tens of thousands of pounds worth of medical supplies purchased by one British newspaper after an appeal to its readers. Her Arabic was fluent, tinged with a strong Iraqi accent.

Childless herself, "Madam Margaret", as she was known, was especially interested in Iraq's young people, whom she called "the lost generation". She was well known in many of Baghdad's slums and other cities. Infants would crowd around her wherever she went. The last Care project completed was a rehabilitation unit for those with spinal injuries.

Hassan was kidnapped in Baghdad on October 19, when men dressed in police uniforms stopped her car as she was being driven to her office. Her driver and unarmed guard were pulled from the vehicle and beaten. Hassan stepped in to stop the beating, offering to go with the gunmen. That was the last time she was seen.

Hours later she appeared, distressed, in a video issued by captors calling themselves "an armed Islamic group".

However, Hassan did appear in three harrowing videos. The most recent footage - released on November 2 - was so distressing that al-Jazeera, the Arabic television station, refused to screen much of it on humanitarian grounds.

It is understood the first part showed Hassan pleading for her life directly to camera before suddenly fainting. A bucket of water was then believed to have been thrown over her head and she was shown lying wet and helpless on the ground before getting up and crying. Hassan, who had British, Irish and Iraq nationality, was then shown pleading for her life and appealing to the British government.

Her Irish birth made her eligible for Irish citizenship, and that allowed the Irish government to take up her case, as it did with that of the British hostage Kenneth Bigley, who was murdered last month. In the video, her captors threatened to hand her over to Abu Musab al-Zarqawi, who beheaded Bigley. It is unclear whether any such transfer occurred. Zarqawi recently called for her release - a measure of her known popularity among Iraqis.

Following the release of the video, Deirdre Fitzsimmons, Hassan's sister, made an emotional plea for her release. She said her sister was an Iraqi and had dedicated her life to helping the Iraqi people.

Following Hassan's abduction, protesters gathered outside Care International's Baghdad headquarters, carrying her picture and banners calling for her freedom. Their appeals, however, were in vain. Last week a body of a Western woman, believed to be that of Hassan, was found by American troops in Falluja. A video of her execution has been passed to al-Jazeera, who have refused to broadcast it. The identity of her murderers remains unclear.

Chapter Summary

This chapter has described the extent and form of the Iraqi insurgency: the range, sophistication and sheer brutality of techniques available to insurgents; and the experience of those involved through the eyes and words of professional reporters.

Wikipedia has collated such information as exists on the entire suicide bombing campaign from 2003 to 2009. Suicide bombings in Iraq since 2003 have killed thousands of people, mostly Iraqi civilians, and arguably constitute a new phenomenon in the history of warfare. Suicide bombings have been used as a tactic in other armed struggles, but their frequency and lethality in Iraq is unprecedented.

A 2005 Human Rights Watch report analysed the insurgency in Iraq and highlighted, "The groups that are most responsible for the abuse, namely al-Qaeda in Iraq and its allies, Ansar al-Sunna and the Islamic State of Iraq, have all targeted civilians for abductions and executions. The first two groups have repeatedly boasted about massive

car bombs and suicide bombs in mosques, markets, bus stations and other civilian areas. Such acts are war crimes and in some cases may constitute crimes against humanity, which are defined as serious crimes committed as part of a widespread or systematic attack against a civilian population."

A 2008 RAND Research Brief Counterinsurgency in Iraq: 2003 - 2006 depicts a chart that shows in June and July 2004, Iraqi insurgents began to shift their focus away from attacking U.S. and coalition forces with roadside bombs and instead began targeting the Iraqi population with suicide bombers and vehicle-borne IEDs. By increasing the number of suicide bombings against civilians and accepting their targeting in retribution, the insurgents sought to expose the weakness of the coalition-Iraqi security and reconstruction apparatus, threaten those who collaborated with the government, generate funds and propaganda, and increasingly enact sectarian revenge.

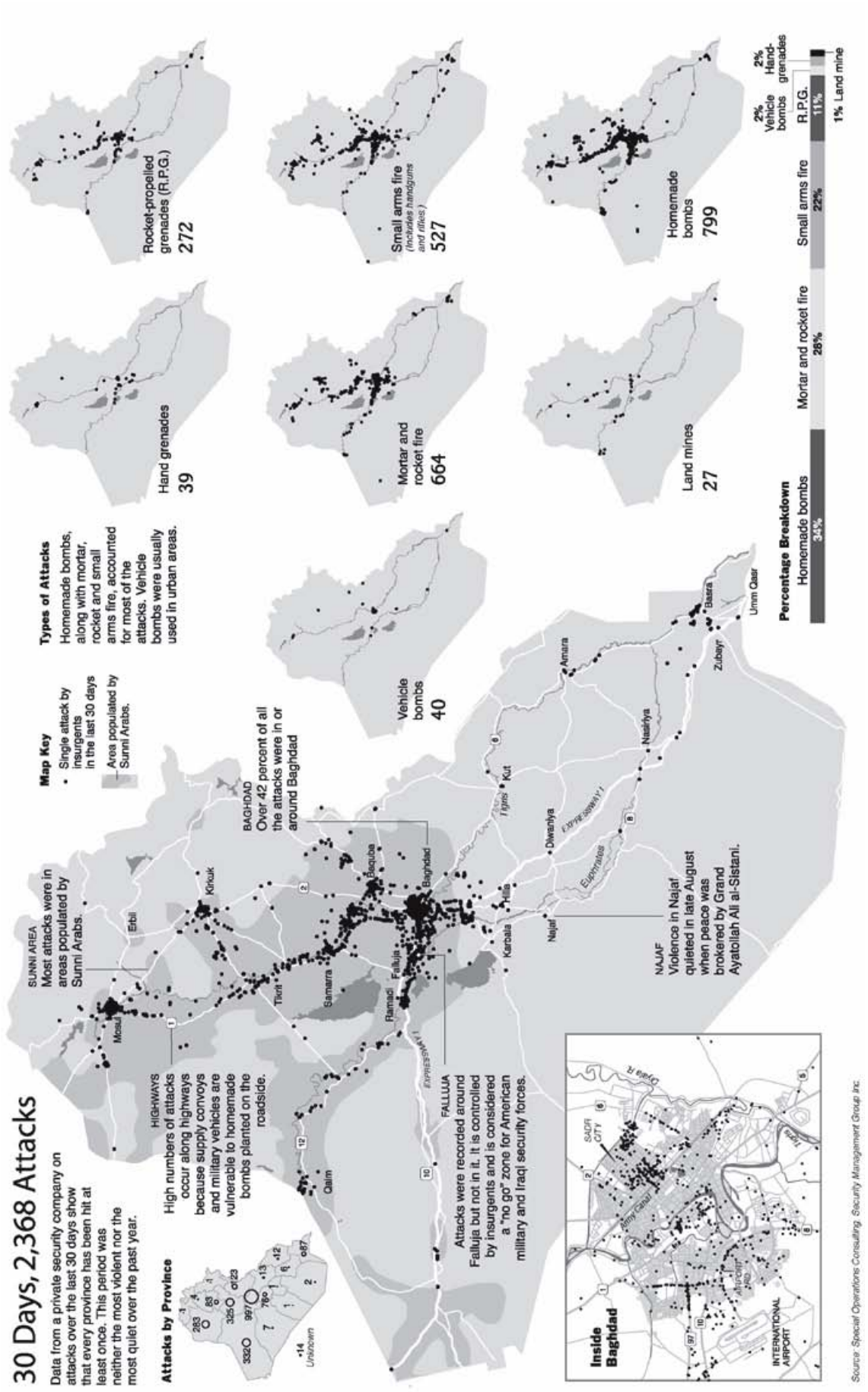
Determining the exact number of suicide bomber attacks in Iraq is a nearly impossible task. Attacks are so frequent that the global media no longer bother to investigate each attack. Even if reporters did follow up, most incidents that are attributed to suicide bombers are unverifiable (as the alleged bomber will have destroyed himself in the blast and any remains will be over-mixed with other human remains). In most reports, Coalition troops or Iraqi police are the sole source for the allegation of a suicide bomber attack. This single source for information raises the possibility that at least some of these attacks could be remotely detonated bombs and not suicide attacks."

Source: Wikipedia en.wikipedia.org/wiki/Suicide_bombings_in_Iraq_since_2003

Following page: Map of Iraqi insurgent attacks in September 2004

The NY Times carried the following extraordinary graphic, depicting 30 Days and 2,368 Attacks in Iraq across the length of Iraq in mid 2004.

Source: blog.richardsprague.com/2004_09_01_archive.html


30 Days, 2,368 Attacks
Data from a private security company on attacks over the last 30 days show that every province has been hit at least once. This period was neither the most violent nor the most quiet over the past year.
Attacks by Province
HIGHWAYS
High numbers of attacks occur along highways because supply convoys and military vehicles are vulnerable to homemade bombs planted on the roadside.
SUNNI AREA
Most attacks were in areas populated by Sunni Arabs.
BAGHDAD
Over 42 percent of all the attacks were in or around Baghdad
FALLUJA
Attacks were recorded around Falluja but not in it. It is controlled by insurgents and is considered a "no go" zone for American military and Iraqi security forces.
NAJAF
Violence in Najaf quieted in late August when peace was brokered by Grand Ayatollah Ali al-Sistani.
Map Key
Single attack by insurgents in the last 30 days
Area populated by Sunni Arabs.
Types of Attacks
Homemade bombs, along with mortar, rocket and small arms fire, accounted for most of the attacks. Vehicle bombs were usually used in urban areas.
Rocket-propelled grenades (R.P.G.) 272
Small arms fire (Includes handguns and rifles) 527
Homemade bombs 799
Hand grenades 39
Mortar and rocket fire 664
Land mines 27
Vehicle bombs 40
Percentage Breakdown
Homemade bombs 34%
Mortar and rocket fire 28%
Small arms fire 22%
R.P.G. 11%
2% Vehicle bombs
2% Hand-grenades
1% Land mine
Inside Baghdad
Source: Special Operations Consulting- Security Management Group Inc.

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Blood, Heat + Dust: Second Edition

Operation Telic and the British Medical Deployment to the Gulf 2003 -2009

Chapter 6:

History of the UK military campaign Operation Telic Phases 2 – 7



Painting: *Sergeant-Major Darren Leigh MC, 1st Battalion The Queen's Lancashire Regiment*

Artist David Rowlands Medium: Oil on Canvas

Regarding the painting 'Sergeant-Major Darren Leigh MC, 1st Battalion The Queen's Lancashire Regiment' on the previous page, David Rowlands recalls that;

> *"On 9th August 2003, there was widespread disorder across Basrah. In the suburb of At Tannumah a large crowd gathered outside the Iraqi police station. Company Sergeant-Major Leigh, with only some 30 soldiers and three vehicles, faced a crowd 300-strong. The rioters were throwing a hail of bricks, then surged forward in an attempt to overwhelm the police station.*
>
> *Sgt-Major Leigh's small force held them back, but came under fire from gunmen behind the crowd. Despite the disparity in numbers, and sensing that his small party of Queen's Lancashires were isolated, Sgt-Major Leigh seized the initiative by rapidly advancing into the crowd to disperse them. A grenade wounded him in the legs. Despite his injuries he led his 30 men in the subsequent baton charge against the mob, so that they were forced to withdraw and eventually disperse as darkness fell. For his quick thinking, courage under fire, and determination despite his wounds, Sergeant Major Leigh was awarded the Military Cross.*
>
> *On his upper sleeve is the regiment's tactical recognition flash, which 'Daz' had sewn upside down."*

Introduction: An Overview of Operation Telic 2-7

Through the latter part of Operation Telic 1, there was growing evidence of future trouble.

Operation Telic 2 opened in July 2003 to the situation in Basra so clearly described in the Human Rights Watch report in Chapter 5.

By late July, disturbances were increasing in Basra, such that soft hat patrolling was replaced by helmets and riot control gear. These are vividly described in BBC and Observer reports in August 2003, while the general state of decay and disorder is captured in Suzanne Goldenberg's report in the Guardian on 4th October.

The capture of Saddam Hussein on 13th December 2003 was almost an irrelevance to the deteriorating security situation early in Operation Telic 3, and to the changing political environment which saw the growth in Shia political power in the South and the rise of the Mahdi Army.

During Operation Telic 4, the news was dominated by the Shia uprising and events in and around Fallujah further North. The Daily Mirror recorded a bayonet charge by members of 16 Air Assault Bde to escape an ambush in Basra. UK casualties increased as the insurgency became more aggressive. Pte Johnson Beharry was awarded the VC for his actions during operations around Al-Amarrah.

The news during Operation Telic 5 was dominated by the detachment of the Black watch battle group to support US forces from Camp Dogwood in south central Iraq.

By Mid 2005 and Operation Telic 6, UK support for security sector reform was



"Corporal SG Jardine CGC. 1st Battalion King's Own Scottish Borderers Al Uzayr, Iraq 9th August 2003"
Artist David Rowlands Medium: Oil on Canvas

compromised by extensive infiltration of the Basra security forces by extremists, as described clearly in Steven Vincent's report of 31st July in the New York Times, leading to an ugly incident in September when UK forces had to demolish a police station after the seizure of two Special Forces soldiers, and producing the totemic photographs of firebomb attacks on Warrior Armoured vehicles, as described in articles in The Guardian and the Sydney Morning Herald. The conflict between UK forces and members of the Basra security forces involved in murder and extortion, as reported by CNN on 10th October.

During Operation Telic 7, Iraqi national elections were held on 15th December.

Operation Telic 2 July 03 to Nov 2003

BBC News reported on Sunday, 10th August, 2003 that:

Trouble flares again in Basra:

"Disturbances have broken out for a second day in the southern Iraqi city of Basra as frustration over fuel shortages took hold. Two deaths were reported in the city as hundreds of youths took to the streets. A Nepalese former Gurkha working for a civilian security company was shot dead in an ambush as he was delivering mail for the UN, a military spokesman said.

One Iraqi was also reported to have been killed during the protests, although it was unclear how this happened. Streets were barricaded with burning tyres as tempers boiled over in temperatures of up to 57C and high humidity.

According to the British forces, the protests took place in four separate places in the north of the city, involving around 1,000 demonstrators in all. Major Charlie Mayo, a spokesman for the coalition, told BBC News he felt "concerned" by the mood in Basra.

"We're confident that if we can get the fuel to the people... we are working very hard to get the power up and running, then things will calm down. But it's not easy. It's very hot, the temperatures are very high, it's a tough environment. We are working very hard with the Iraqi people to get this right."

Earlier he stressed that the trouble was not on the scale of Saturday's violence when an estimated 2,000 people took to the streets. But he did say that coalition troops were fired upon and gave fire in return, as well as giving warning shots.

Fuel shortages and electricity black outs have left air conditioning units and fridges without power. "They did not give us what they promised, and we have had enough of waiting," said Hassan Jassim, a 19-year-old student at Basra's vocational school. "It's not political. We don't have gas, power or salaries. I am not against this coalition, all I want is water," said Fadil Salman, a driver.

The UK forces had hoped to avert a repeat of Saturday's trouble by providing fuel in tankers and guarding the petrol stations. But as the temperatures soared, hundreds of people took to the streets again. The governor of Basra, Wael Abdul-Latif, appeared on television earlier on Sunday appealing for calm. The BBC's correspondent in Iraq Mike Donkin said that order was restored on Saturday when Muslim clerics appealed for calm.

He said the British army was going to approach the clerics again on Sunday to ask them to repeat their appeal.

The fuel shortages have been exacerbated by some Iraqis bringing down power lines in order to loot valuable copper from the wires. The resulting power cuts have meant the oil refinery has not been able to work and so diesel and petrol cannot be produced. It is believed that Kuwaitis have also been smuggling cheap fuel out of Iraq. "There is no fuel and our situation is terrible," said Abdul Karim al-Mussawi, 45, a construction worker."

Jamie Wilson wrote in The Observer on Sunday 10th August 2003:

British troops battle to control mobs in Basra

"British troops in riot gear fought to restore calm in the southern Iraqi city of Basra yesterday as dire shortages of fuel and power sparked disturbances. One witness said soldiers fired into the air to keep back a crowd at a petrol station as Muslim clerics desperately appealed to the crowds for calm. Another said the British fired baton rounds at a crowd, wounding two young boys. Reports that at least three





Tempers over fuel and power shortages boiled over: Disturbances in Basra Aug 2003 (BBC)

soldiers were hurt in the riots had not been confirmed last night.

British commanders blamed the shortages on oil smuggling, sabotage and looting. Main roads leading into Iraq's second city were blocked as black smoke rose from fires. By late afternoon, many of the British forces appeared to have withdrawn, leaving large parts of the city in the hands of the rioters, who threw stones, burned tyres and attacked cars registered in nearby Kuwait.

Locals accuse Kuwait of buying up diesel oil being smuggled out across the desert and the sea. 'All the disasters that have come upon us are because of Kuwait and Kuwaitis,' said one, Abu Hassan. 'The British have been here four months and things have not improved. Now we have shortages in everything.'

There has been ill feeling between Iraqis in the south and their wealthy Kuwaiti neighbours since Saddam's invasion of the oil-rich state in 1990. British officials said they were doing all they could to stamp out oil smuggling and the sabotage and looting of power cables that have left electricity supply at 'minimal' levels, depriving Basra of refrigeration and air-conditioning as temperatures soared above 50C. Residents, businesses and hospitals have difficulties running their own generators.

'There has been widespread unrest in Basra today in response to the current critical fuel and power shortage,' the Coalition Provisional Authority office in Basra said in a statement. 'Many districts have had minimal power for four days now.' The statement said an Italian official in the Coalition office in southern Iraq, Mario Maiolini, met a delegation of community leaders to listen to their concerns. One British military spokesman said violence broke out outside at least four petrol stations and troops rescued the occupants of a Kuwaiti tanker in the process of being torched.

'We are taking measures to control the crowd,' he said. 'We are doing our best to bring about a normalisation of the situation.' He could not confirm that troops had opened fire. The owner of the flashpoint fuel station where the tanker was burned

said soldiers fired baton rounds, wounding two boys in the crowd.

Shia Muslim clerics were at the scene, on Saad Square, trying to convince the crowd of hundreds to stop hurling stones at the soldiers. Hundreds also marched on the headquarters of the British forces demanding the restoration of power and fuel supplies.

The Navy said yesterday it had intercepted a ship smuggling 1,100 tons of oil out of Iraq. Royal Marine commandos from HMS Sutherland boarded the vessel, the Panama-registered Navstar 1, in the northern Arabian Gulf late on Friday and arrested the captain and his Ukrainian crew. 'This is the most significant seizure we have had since the end of the war,' said Lieutenant Commander Richard Walters.

The US administrator in Iraq, Paul Bremer, said coalition forces were determined to put an end to any illegal activities hurting Iraq's economy and its people. 'The seizure of the Navstar 1 demonstrates the commitment of the coalition forces and the Iraqi police to protecting Iraq's assets, so that they can benefit all Iraqis, rather than the criminals,' he said. Earlier in the week, US authorities seized 12 oil barges and detained 150 people in a two-week campaign to stamp out the activity. Damage to Iraq's major northern oil pipeline has meant sales since the war have been restricted to supplies from its Basra fields."

Suzanne Goldenberg wrote in The Guardian on Saturday 4th October 2003:

A land ruled by chaos

"In place of the promised peace, I found a country where lawlessness, violence and fear have filled the void.

In the centre of the rollicking Iraqi border town of Safwan, where dusty small boys dodge cars and lorries - and the odd slap from overheated adults - to offer tins of Pepsi for sale and Kuwaiti mobile phones for hire, lives a man who has inflicted his own private joke on Saddam Hussein's regime.

On a road lined with shabby tents and shacks, squatted by tea sellers, phone merchants and car salesmen, Risan al-Mana occupied the raised brick platform where Ba'ath party leaders used to take the salutes of the coerced and terrified "volunteer" brigades. Then he turned it into a sales office for a dubious trade in used cars from Kuwait. So much for Saddam, and his all-powerful Ba'ath party, Mr al-Mana laughed. They were consigned to the scrapheap of history.

So was the old Safwan, or at least the version I visited a few weeks before the war that would end Saddam's brutal career. The town, a sad and flyblown place, had been sinking into lethargy for 12 years, ever since the border was closed after the Kuwait war. It had one teahouse, where the most vigorous motion was the clicking of domino tiles. The town's inhabitants, under closer than usual surveillance

because they lived in the border area, were the most terrified people I had ever seen, frozen into silence by the sight of my government minder.

By the time I returned to Safwan it was nearly six months since US forces had roared across the border from Kuwait, and I was no longer required to travel with a minder. From the border towns of Safwan and Umm Qasr, the US columns had advanced north along the Euphrates river, rising from the flat, featureless desert to the isolated stands of palm trees and the fertile plains before curving eastwards to Baghdad. On April 9, they entered the capital's Firdowz Square, where a crowd looped a noose around a statue of Saddam and broke it off at the knees.

The moment, recorded by a legion of cameras, came to symbolise the end of the regime. But what has risen in its place? Are the forces which now occupy and control Iraq building the foundations of the modern state they promised, or laying the foundations for another version of the old, repressive regime? My route, as I retraced the road to Saddam's ruin, took me through the southern heartland of the Shias, the despised and neglected majority of Iraq. It crossed sectors controlled by British, American, Italian, Romanian, Dutch, Bulgarian and Polish troops. It led past charred and contorted Iraqi army vehicles sinking into the sands, government buildings and army installations reduced to powder. But there was a more fundamental destruction.

Iraq under the US-led occupation is a fearful, lawless and broken place, where murder rates have rocketed, 80% of workers are idle and hospital managers despair at shortages of IV sets and basic antibiotics. Police are seen as thugs and thieves, and the American and British forces as distant rulers, more concerned with protecting their troops than providing security to ordinary Iraqis. The governing council they created is simply irrelevant. A mile away from one of the richest oilfields on earth, the queues at petrol stations stretch for hours. "We completely underestimated how broken this system was," says Andrew Alderson, the financial officer of the British-led administration in Basra.

Gratitude at having been freed from Saddam has given way to resentment and mistrust in a part of Iraq that could never remotely be considered as Ba'ath country. Compared with Baghdad, the south is an occupation success story. Apart from Basra, where there have been sporadic attacks on British forces, the foreign troops in the south operate in relative security.

None of the towns has a night curfew and, aside from in Basra, there was relatively little looting at the end of the war. In Nassiriya, the first town in Iraq with 24-hour electricity, Italian soldiers patrol without helmets. There has never been an attack on US forces there. And for good reason. Almost every person I met along the way had had a member of their immediate family jailed or executed by the regime, or had been jailed themselves. Some were exiled, but returned in the wake of the US invasion with their hopes for a new Iraq.

All were thankful to be rid of Saddam, but months after that cataclysmic event they detect few dividends from the occupation. "You have done very little for the people of Iraq," says Salaam Daoud Salaam, an English teacher in Basra. "Yes, you removed that man from power - a very good thing. But what about the rest? We haven't felt that meaning of liberty. It lasted just for a few days, but then our suffering is coming back."

Benefits, when they did arrive - a partial restoration of electricity, and a gradual reduction in crime - were seen as miserly and overdue, a betrayal of the promises made by Britain and America to build a new Iraq, prosperous, modern, and free.

Saddam's Republic of Fear, the mechanism of iron controls that held the state together, was gone, but its replacement is a violent chaos. The void created by the defeat of Saddam's highly centralised one-party regime has empowered religious extremists, political gangs, tribal chieftains, criminals and speculators, the venal and the corrupt. These are the men profiting in the new Iraq. The knock at the door at night is no longer a member of Saddam's secret police, but it could very well be an armed robber, an enforcer from a political faction, or an enemy intent on revenge.

For men with strong nerves, like Mr Mana and his nephew, Yusuf al-Ghanem, there is still money to be made. One of the features of the new Iraq is the porosity of its borders, not only with Kuwait, but Iran, Saudi Arabia, Jordan and Turkey, and the explosion of smuggling: sheep and stolen oil to Kuwait, drugs from Iran, and guns and extremists from several directions. Mr Mana has exploited the postwar chaos to do a roaring trade in used cars from Kuwait. Most of his models are from the 1980s. A Chevrolet Caprice - the car of choice for Iraqis - sells for perhaps $800 (£500), and he moves up to 15 cars a week. That's a substantial amount of money in today's Iraq, but it carries enormous risks.

A number of the drivers bringing the lorries from Kuwait have been murdered and robbed of their cargo. Nearly every day Mr Mana is asked to moved on by the British forces, who control the southern zone of Iraq, threatened with death by business rivals, or visited by the local Iraqi police. "They think we are doing business in an illegal way but they should know that in Iraq, everything is illegal," he says.

Such annoyances are part of the price of doing business in today's Iraq. It is, he says, "a time of great danger, but also of opportunity".

The dangers are readily apparent in Basra, Iraq's second city after Baghdad. It also ranks second in terms of its problems: a capricious electricity supply, kidnappings, carjackings and revenge killings, marauding tribesmen from the countryside, a more generalised lawlessness and economic paralysis.

The day I arrived in Abul Haseeb, on the south-eastern edges of the city, the mourning canopies had gone up, and the Sunni minority was preparing to bury

five members of the Augebi clan. The mood was less one of grief than revenge.

The gang that had descended on the small plot of palm trees belonging to the Augebi clan some nights before had not bothered to hide their faces or their names. Armed with AK-47s, and with a captured member of the clan in tow, they burst into the hut of Shaab Ahmed Ismail al-Augebi, 52, dragging him out with his two adult sons, and a boy, Ibrahim, 13.

It was five days before all five bodies turned up, horribly mutilated. Three had been splashed with acid and dumped in a pit of diesel and water at a fertiliser plant 15 miles away. The motives for the attack remain murky, but Assad, one of Shaab's surviving sons, swiftly turns accuser. "The main reason they came here is because we are Sunni. We pray at the mosque and we wear beards," he says, and then names the gang leader, an enforcer from the Islamic Dawa party, one of the most powerful Shia groupings of the new Iraq. "It's hell now, what we are living through," he says.

In the party's offices in the heart of town, a property purloined from the departed Ba'athists, the local Dawa chief is noncommittal. "A lot of gangs and bad people are using the name of Dawa party," says Hassan al-Saadi. "But they are not Dawa." However, he goes on to warn of the dangerous import from Saudi Arabia of the radical Wahabi strand of the Sunni faith, and suggests the Augebis are followers.

Whatever the force behind the murders - thugs from the Dawa party, the fallout from a struggle between radical Shias and Sunnis, or personal enmities that have yet to come to light - it is clear to all what the murders could produce: revenge and more killing, the explosion of tensions barely contained since the war.

The murders are deemed sufficiently provocative to appeal to the mediation services of a higher authority. That is definitely not the British, whose forces control the sector and are nominally the rulers here, but a local religious leader, or more properly, his brother, Abdul Radha al-Moosawi. Beneath the huge glittering chandelier of the Moosawi mosque, a collection of domes that is the largest in Basra, Mr Moosawi, an urbane man who normally devotes his energies to the family's date farm, is unusually ruffled. "This has a deep danger if you look in all directions. It will have a very bad effect," he sighs. "I believe the target is to destroy the social fabric of the people."

Longing for the stability of old is never far from the surface in Iraq, and understandable in the present chaos. But it is not mere nostalgia. My next stop is beneath a burlap tent where a tribal chieftain, Ali al-Ghazi, is holding court, peeling off $100 bills for supplicants and overseeing the preparations for lunch for 300. In these parts, near the town of Nassiriya, there is no more powerful authority.

The town straddling the Euphrates saw the first serious clashes of the war on March 23, when US convoys were ambushed and 18 troops were killed. A few months before the war, Mr Ghazi threw in his lot with the US invaders. His men, equipped with Thuraya satellite phones from the Americans, fed information on

Iraqi troop positions to the CIA, and his brother, Taysir, took two bul lets in the shoulder around the time the convoy was attacked. Now, it is payback time.

After suffering in a neglected backwater during Saddam's time, Nassiriya's new rulers have yet to appoint a provincial governor, or to consolidate a new police force. The local elected council has no money. That has given the Ghazis and other tribal leaders a free run as arbiters of disputes, and dispensers of justice according to the ancient tribal laws of revenge and retribution. In the months since the war, the clans have sanctioned the revenge killings of about 50 Ba'athists in Nassiriya. There would have been far more but for the new-fangled notion of settling old scores with cash.

The system of keeping order is imperfect. The day I met the Ghazi clan, a local businessman turned a gun on the manager of the local television station, demanding it put his advertisement on air. A few days before that, a local enforcer from an Islamist party, meant to be providing security to the town hospital, rampaged through the wards, beating up two male nurses and firing shots in the air outside the cardiac care unit.

"You can sit in the hospital from 7pm to midnight most nights and watch the emergency room turn into a bazaar," says Imad al-Din, the deputy manager. "Some people come injured after fights. Some people come injured after trying to stop someone stealing their car. Some people come as drunkards."

The atmosphere of lawlessness is even chipping away at the authority of the tribes as a younger generation grows impatient with the rituals attached to avenging old injury. At the Ghazi tent, an elderly chieftain notes with dismay: "The young people are so hasty nowadays. They don't follow the rules."

Still, the Ghazis are not about to jump to attention when the police come calling. "They don't deserve our respect," Taysir says, and describes two episodes when police officers questioned the rightful ownership of vehicles driven by members of the tribe. "I told them that if they don't give back the car, we will take one of theirs," he says.

The Nassiriya police see little choice but to acquiesce. They say they are afraid to patrol without enforcers from the tribes or the city's political factions. "Every time we try to make an arrest they threaten to kill us," admits one police captain. So the police back off.

No one dares to challenge the threat to the emerging institutions of Iraq. Instead, the power of the tribes is being reinforced and legitimised. On this day, a handful of important visitors make their way to Mr Ghazi's tent: two British representatives from the provisional administration, and Mowaffak al-Rubaie, a physician who returned from London to become a member of the Iraqi governing council. "The centre has no influence, not compared to the previous regime, so we are trying to give them that sense that there is a government," Mr Rubaie says. "What I came here for first is to show that the IGC cares."

What he came for second was to formalise a tribal role in the police force, or at least extract a promise from the tribes to obey the law. Mr Ghazi is unimpressed. "We, we will keep order and security in our region," he says, and dismisses the IGC. "We have no need for them. They have need for us."

The resurgence of traditional forces has dismayed Iraqis, and disoriented those exiles who returned believing they could rebuild lives interrupted. "I spent the last 20 years outside Iraq, and now it's a different country. It has been a big shock," says Adil al-Ageli, an official in the local administration of Najaf. The Agelis were among thousands of Iraqis expelled by Saddam, who branded them foreigners because their families trace their roots to Iran. Almost all of the acquaintances and friends who arrived with Mr Ageli in the first optimistic days after the war have returned to Syria and Iran, convinced they no longer have a home.

For Mr Ageli's son, Ali, the dislocation is intense. The child is dismissive of the family's original home in the holy city of Najaf. By the standard of today's Iraq, Najaf is having a revival, with Shias eager to practise their faith after the repressions of Saddam. In the town's market, TV sets blare images of men beating their chests and chanting, and the pilgrims from Iran, India and inside Iraq throng to the shrine of Imam Ali, despite the devastating car bomb attack at its portals in August, which killed scores of people and a leading Shia cleric.

But for Ali, there is only chaos. There are no sports teams, no public parks, no friends. "I don't like the children here. I can't like them. I met adults, and I liked them because they tell me what I can and cannot do, what is yes and what is no, but the kids my age don't care about any of this," he says. "They are so rough."

Mr Ageli looks on, sad-eyed. He shares his son's misgivings, but he has sold their house in Syria and his savings have run out. In the meantime, he is disturbed by the growing rivalry between Shia clerics over control of the holy shrines of Najaf, and their coffers. A few mornings ago, the armed followers of a relatively upstart cleric called Muqtada al-Sadr turned up at a shrine in the adjoining town of Kufa. As pilgrims watched aghast, the thugs from Sadr's so-called Mahdi army beat and chased away the men who have been hereditary custodians for the site as long as anyone in Najaf can remember.

They then took control of the strongbox where donations from pilgrims are gathered, shearing off the three locks from the finance ministry, the community charitable trust and the keepers, which had served to regulate the funds for years. The bonanza was estimated to be worth several million dinars a week, enough for a steady supply of AK-47s. All of Najaf is talking about the affront.

Locals, or at least the wealthy ones, see Sadr's followers as an ill-bred rabble, because he draws much of his support from the poor slums of Baghdad. In the wake of the takeover, there is talk of a full-on battle for supremacy between the upstart cleric and more established religious leaders. "No one tried to usurp us, not even Saddam himself," says Ali al-Kufi, one of the hereditary keepers of the shrine.

But in the new Najaf, there was no one equipped to stop them - not the police, and certainly not the clerics, who are engaged in their own power grabs. "The destruction didn't happen only to Iraq as a state, but it touched their very souls," Mr Ageli sighs. "We can rebuild the state of Iraq, but for our souls there is no way." Ali seizes the moment: "Does this mean we can go back to Syria or Iran?" he asks.

After the social fragmentation of Basra, Najaf and Nassiriya, I had been looking forward to Hilla. Built near the ancient ruins of Babylon, the town lies on the eastern bank of the Euphrates, within striking distance of Baghdad. The US forces forded the Euphrates on March 31, moving swiftly to take the capital's airport on April 3, and consolidating their hold six days later. While Baghdad descended into violence and looting, the people of Hilla took their destiny into their hands. They looked to the future as well as the past, establishing a local administration and setting up a commission to excavate the mass graves outside town, perhaps the largest collection of Saddam's murdered victims.

Ask anyone in Hilla, and they will say: "You can't find a city better than this." Police patrol at every junction, the criminals are on the run. Power remains intermittent, but adroit management of supply has allowed the factories to get back to work. On the edges of town, the vast Babylon textile mills, with 2,800 employees, have rumbled back into production, although they are running at half capacity.

In the centre of town, at the blue and white-striped headquarters of the Babylon governate which houses the department of martyrs and missing persons, Captain Amer Mahmoud al-Shemari toils into the night. It is hard to know what prepared Mr Shemari for this job in his previous existence. He fled Iraq on a forged passport in 1985 after completing his military service. He returned two days before the start of the war, confident that Saddam would fall. During the intervening years, he lived in Jordan, Syria, Lebanon, Qatar, Oman, Iran and Dubai. He worked at a factory making oil soap (in Jordan), as a car mechanic (Syria), and as a secretary (Dubai).

During his first full month of work in Iraq, last May, he oversaw the first exhumation of Hilla's mass graves, a time when they were digging up 100 to 150 corpses a day. Most were young men, seized at random and killed without trial or mercy after Saddam's troops reasserted their control over Hilla following the 1991 uprising. But workers also dug up the corpses of old men, and of women clutching their babies in the folds of their now crumbling abbayas.

That particular grisly task has stopped now. Mr Shameri says he can not continue digging without proper equipment. There are about half a dozen additional gravesites around Hilla. At the first site unearthed, at the back of a farm north of Hilla, the unidentified dead have been reburied, with their bloodied scraps of clothes placed atop small mounds of earth.

In the interim, he is trying to notify families of the dead. On this evening, Saida Hathem al-Reda has arrived to pick up the black-bordered slip of paper that will at

last enable her to obtain a death certificate for her husband, Mohammed Abid al-Tufaili. Like many of the thousands killed by the regime in Hilla in the dying days of the intifada, Mr Tufaili was not in the least political. He went out to buy groceries and never came back. His wife, an illiterate and unworldy village woman with four small children, made the rounds but there was no word until his body was recovered in June. "Every day I said tomorrow he will come," she says. Now that she is certain of his death, she says: "What kind of difference will it make? What good does it do if I get angry or upset?"

Mr Shameri tells her that atrocities will never be repeated. He says Iraq's new rulers - when they emerge - will be guided by the suffering of the past, and chart their way to a better future. "I am quite sure that nothing like these crimes will happen in the future because all the people in high positions have been damaged under Saddam Hussein so that they can feel what happened to the people," he says. "They will deal with others in a more compassionate way."

But it is difficult to see how the disorder fostered by the occupation is preparing the way for such an state. At no point in my journey did Iraqis mention the US-appointed governing council as a potential force for good. Although southern Iraq is relatively quiet in the absence of any real authority, it is hard even here to sustain hopes for a stable future. At the casualty ward of Hilla's general hospital, gunshot and stab wounds have tripled since May. Nowhere is safe in the end.

The neighbourhood of Nuab Dubat is a dreary row of hovels built to house the soldiers from the adjacent Iraqi army base. One is the home of Ali al-Meyahi, who was a member of the Republican Guard, meant to be Iraq's premier force. Like the other 400,000 members of Iraq's army, he lost his job at the end of the war. Now he faces the prospect of losing his home. The base has been taken over by Polish soldiers, and the night before three mortars intended for those forces landed practically on Mr Meyahi's doorstep.

Shrapnel perforated the blue front door of his house, injuring his son Ahmed, 10, and daughter Safa, 12, who were sitting on the wooden bench at the back of the house. The children were only lightly wounded, but when a Polish soldier looms in the doorway, offering medical treatment at the military ambulance parked outside, Ahmed screams in terror.

Mr Meyahi shakes his head. In his 21 years in uniform, he says he was always a reluctant soldier, more so after the regime killed his uncle and a cousin in the purges of 1991. When he was ordered to defend Baghdad, he melted away during the night of shock and awe on March 21, and went home to await the peace. Instead, he lost his job, and watched his finances dwindle.

As the months passed, he sold the bedroom set and his wife's jewellery. The family's only assets now are the television and the refrigerator, gifts from his wife's parents. After half a lifetime serving the regime he dreaded, he does not fancy his chances in the new Iraq. "When the war started, we thought our dream would come

true, that the coalition would come to liberate us. That is why we left fighting. We were looking forward to having a better situation, but what we have seen until now leaves us without hope," he says.

It's hard to shake off the despair that descends as I draw nearer to Baghdad, and the end of the journey. I stop in the town of Mohawil, 30 miles from Baghdad. Last April the troops paused here for just 37 minutes before pushing onwards to victory. The new mayor of Mohawil, Wasil al-Shameli, returned with them from exile in circumstances that he was not prepared to describe. But he offers his explanation for the violence and disorder that has descended on his country.

"It's true there was a horrible regime, but there were government departments, and offices working. But after the war and the looting, all the government institutions were destroyed, and it happened suddenly. It left Iraqis feeling naked," he says. "This was also complicated by the fact that we had an entirely military way of change. So of course we have a jungle now, and jungle law."

After an elegant dissection of the chaos of the present, Mr Shameli sketches an even more depressing scenario for the future. At his mayor's desk, beneath the empty picture frame that once held a portrait of Saddam, he says he has given up hope of building the political and legal institutions that could transform Iraq into a law-based society.

"It will not be a society of institutions because the Americans are allowing tribalism and religious extremists to take part in this society, so of course it will affect the future," he says. "If the forces of modernity retreat in the face of tribalism, it will create another dictator, another Saddam."

He pauses. "I am so, so sad. I am so sorry. I am one of those citizens who hoped to build another culture for Iraqi society. Now I have started to feel that we are returning to the 1920s." There seems little more to say, and we take our leave. Mr Shameli invites us to return some day, but he isn't sure how long he will be mayor.

From Mohawil, it takes less than an hour to reach Baghdad. The car passes through a few crumbling towns, and soon an entire expanse of wrecked Iraqi army vehicles appears on the left side of the road, the detritus of the regime. It gives way to the brash concrete pillars of an American army post, and then we are speeding on one of the raised highways into Baghdad.

In Firdowz Square, since I was last there, a new statute has been erected in place of the toppled Saddam. It is a female figure rising from a green mass of algae to hold up a sun and a crescent moon. The sculptor has said it is meant to be a symbol of hope and renewal for the new Iraq".

Operation Telic 3 November 2003 to March 2004

Early in Operation Telic 3, on 13th December, the symbolic capture of Saddam Hussein took place during an operation in Tikrit. Social unrest continued in the South.

The BBC Press reported on Thursday, 15th January, 2004 that:

Iraqis protest against poll plans

"Tens of thousands of Iraqi Shia Muslims have protested against US plans for the handover of power. The march past the main mosque in the southern city of Basra was peaceful, but the BBC's Dumeetha Luthra says it was a display of latent power. The Shias, who are the majority of Iraqis, do not want to be marginalised as they were under Saddam Hussein.

Iraq's leading Shia cleric, Grand Ayatollah Ali Sistani, has called for direct elections later this year. The coalition says early elections are not feasible, and proposes an appointed government broadly representing Iraq's diverse religious and ethnic groups.

The demonstrations in Basra, Iraq's second city, were called for by the city's clerics and show the strength of local leader Ayatollah Saeed Ali Hakim, says our correspondent. It sends a clear message to the Americans, she says - we can mobilise the people against you if we need to.

Speaker after speaker called for the rejection of the US plans and demonstrators chanted and sang in support of their leaders, shouting "No, no to America, yes, yes to Sistani." Armed members of the Shias' own private militia were in evidence, but the British armed forces who control the southern zone of Iraq kept a low profile.

Shias were oppressed under Saddam Hussein and had been expected to be strong supporters of the US-led coalition which overthrew the old regime. While the Shia-dominated southern areas controlled by the British military have seen far less unrest than in the so-called Sunni Triangle around Baghdad, the Basra protest shows their support is not unconditional.

Correspondents say problems arose after an agreement in November between the interim Iraqi Governing Council and US administrator Paul Bremer that a new Iraqi assembly to take power by the middle of the year would be selected, not elected. Shia concerns are that the selection process by regional caucuses of "notables" will ensure representation of minority groups such as the Sunnis and the Kurds from the north, possibly at the expense of the Shias.

Direct elections with some form of proportional representation would give power to the Shia majority, but Mr Bremer says Iraq's war-torn infrastructure simply could not support general elections by the desired transfer deadline of 30 June. Yet our correspondent says that the problem for the Americans remains that an Iraqi government would have no legitimacy without Shia backing.

Also in dispute is the role that the United Nations should play in Iraq, and whether the status of US forces in Iraq should be subject to approval by any transitional authority. The Coalition Provisional Authority is set to meet the UN Secretary-General Kofi Annan on 19 January. Commentators say it is hoping Mr Annan will use the opportunity to send a clear message to Ayatollah Sistani that democratic elections will not be possible before the end of June.

Operation Telic 4 April – November 2004

CNN reported on Thursday, April 22nd, 2004 that:

Basra bombs kill 68 Iraqis: Fallujah firefight leaves dozens of insurgents dead

"Deadly car bombs ripped through a southern Iraqi city Wednesday and a fierce firefight raged for hours in the Sunni Triangle city of Fallujah. The five suicide car bombings near police facilities in and around the city of Basra killed at least 68 Iraqis -- including 18 schoolchildren, police said. About 100 people were wounded in the bombings, which occurred after 7 a.m. (11 p.m. Tuesday ET) during the height of rush hour, a senior military source said.

Most of the dead were civilians, killed in three bombings: one near each of three Basra police stations and two at the nearby Regional Police Academy at Az Zubayr, police said. Ten boys and girls being driven to kindergarten in a minivan and eight girls in another minivan headed to a high school were killed in one of the blasts, according to police official Col. Ali Abdullah. The dead included at least 16 Iraqi police officers.

Basra, which is a relatively quiet region of Iraq, is under the control of British coalition forces. British Foreign Minister Jack Straw blamed "insurgents who are trying to disrupt the [June 30] handover of sovereignty to the Iraqi people." One car exploded in Az Zubayr and then, 30 minutes later as people gathered at the scene, a second suicide car bomb went off in the same location, police officer Hassan Kahlaf said. He said that the first bomber was dressed as a policeman.

Crowds threw stones at the coalition forces as they were trying to reach the sites of the blasts, a British military source told CNN. British Army Capt. Hisham Halawi said calm seemed to have returned to Basra as British forces and Iraqi police began an investigation. Coalition authorities in southern Iraq issued a statement, denouncing the attack.

"On behalf of the Coalition Provision Authority, we wish to express deep shock and revulsion at the murderous attacks on Iraqi police forces this morning and the loss of so many innocent Iraqi lives," said a statement from Basra governorate coordinator Henry Hogger and regional coordinator Patrick Nixon.

36 insurgents killed in Fallujah fighting

Iraqi insurgents Wednesday opened fire on Marines in the volatile city of Fallujah, resulting in heavy fighting that left 36 insurgents dead, and at least three Marines wounded, according to the U.S. military.

The ferocity of the fighting was captured on video, with Marines unleashing a withering barrage of machine-gun fire. Some Marines fired from rooftops; others were seen running through the streets amid heavy gunfire. The battles lasted more than four hours. After coming under repeated sniper fire, one Marine was quoted by the military as saying, "The enemy can hide well, but not shoot well."

A March 31 attack by insurgents that killed four American contractors, whose bodies were mutilated and dragged through the streets, prompted the coalition to send the Marines to Fallujah, about 35 miles west of Baghdad.

Other developments

A Danish civilian missing in Iraq and presumed detained has been found dead, the Danish government said Wednesday. The Foreign Ministry said the citizen, who was not identified, was found on April 12th, two days after the Dane went missing. The ministry said it has been "working intensely on the case since first being informed of the possible abduction" on April 11th.

U.S. Air Force unmanned Predator aircraft armed with Hellfire missiles are being used to battle insurgents in Iraq, according to the U.S. Central Command. The Central Command said it used an armed Predator to kill a number of suspected insurgents April 11 near Balad air base, north of Baghdad. The drone fired a number of Hellfire missiles at people who were attempting to fire mortars at the base".

This is reported at length by Wikipedia:

The Rise of the Mahdi Army in 2004

"Early 2004 was relatively quiet. Guerrilla attacks lessened in intensity while insurgent forces reorganised, studying the multinational forces' tactics and planning a renewed offensive. The Spring Fighting of 2004 marked the entrance of militias and religiously based (Shi'a and Sunni) militant Iraqi groups, such as the Mahdi Army into the conflict. There were two main causes for the start of the Spring Fighting.

The first was the rise of the Shiite cleric Muqtada al-Sadr and his militia, the Mahdi Army, in the south of the country. Muqtada al-Sadr also has great influence in the Sadr City section of Baghdad. The second cause, probably the flashpoint for the conflict, was the highly-publicized killing and mutilation of four Blackwater private military contractors on March 31 in Fallujah.

Provocation and the start of the offensive

"On March 28, the U.S. overseer of Iraq, Paul Bremer, ordered the 60-day closure of Al-Hawza, a newspaper published by Muqtada al-Sadr's group, on the charges of inciting violence against the occupation. The next day thousands of Iraqis rallied outside the offices of Al-Hawza in support of the newspaper.

On April 3rd, Bremer sent troops to al-Sadr's home and arrested Mustafa Yaqoubi, a top lieutenant, sparking further protests.

On April 4th, Spanish troops clashed with demonstrators in Najaf demanding Yaqubi's release, resulting in the death of one Salvadoran soldier and at least 20 Iraqis. It is unclear which side fired first.

Sadr declared "America has unsheathed its fangs and its despicable intentions, and the conscientious Iraqi people cannot remain silent at all. They must defend their rights in the ways they see fit," according to the Washington Post. Violent protests occurred throughout the Shiite south, soon spilling over into a violent uprising by Mahdi Army militiamen, which was fully underway by April 6th, 2004.

Baghdad and the Shia South

"The Mahdi Army forces began an offensive in Najaf, Kufa, Kut, and Sadr City on April 4th, 2004. They began by taking control of public buildings and police stations. In Sadr City in Baghdad, Iraqi police were expelled from three stations. Members of the newly arrived 1st Cavalry Division were sent out to retake them. Militamen ambushed the US forces and eight U.S. troops were killed, and 51 more wounded in the bloody battle. US forces subsequently regained control of the police stations after running firefights with Mahdi rebels that killed 35 Mahdi Army militiamen.

Mahdi Army members still maintained influence over many of the slum areas of Sadr City. The fighting was not only in Sadr City, instead, it spread to other parts of Baghdad throughout the month. The highway linking Baghdad with the western province of Anbar was cut by the insurgents and resupplies for Marines in the province could only be delivered by helicopter.

The militants gained partial control of Karbala. Other coalition forces came under attack: in Nasiriyah two Italian armoured vehicles were destroyed, and British forces came under fire in Amarah and Basra. Najaf and Kufa were seized by militiamen on April 6, 2004 after a few fire fights with Spanish and Salvadoran troops. Kut was seized on the next day after clashes with Ukrainian troops, mainly on the Tigris River bridge. On the same day, Karbala came under full Mahdi Army control.

One notable battle during the fighting in Baghdad was on April 9, 2004. An American fuel convoy came under attack near the Baghdad International Airport.

In what was described as a 5-mile long ambush, the 26-vehicle serial was attacked

by gunfire, mortar rounds and RPGs. Almost the entire convoy was destroyed.

After sporadic clashes, Coalition forces temporarily suppressed most militia activity in Nasiriyah, Amarah, and Basra. On April 16, Kut was retaken by US forces, and several dozen Mahdi Army members were killed in the battle. However, the area around Najaf and Kufa, as well as Karbala remained under the control of Sadr's forces. Sadr himself was believed to be in hiding in Najaf. Coalition troops put a cordon of 2,500 troops around Najaf. It is at this time during the war that kidnapping, and beheadings emerged as an insurgent tactic.

Operations in Southern Iraq in May 2004

"On May 4, following a breakdown in negotiations, coalition forces began a counter-offensive to eliminate the Mahdi Army in southern Iraq. The first wave began with simultaneous raids in Karbala and Diwaniyah on militia forces. It was followed by a second wave on May 5 in Karbala, and more attacks which seized the governor's office in Najaf on May 6. Four U.S. soldiers and an estimated 86 militiamen were killed in the fighting.

On May 8, U.S. forces launched a follow-up offensive into Karbala, launching a two-pronged attack into the city. U.S tanks also launched an incursion into Sadr City. At the same time, perhaps as a diversionary tactic, hundreds of Mahdi Army insurgents swept through Basra, firing on British patrols and seizing parts of the city. Two militants were killed and several British troops were wounded.

On May 24, after suffering heavy losses in weeks of fighting, Mahdi Army forces withdrew from Karbala. This left the Najaf-Kufa region the only area still under firm Mahdi control, though it was also under sustained American assault. Several hundred Mahdi Army rebels in total were killed in clashes with American forces. Unfazed by the fighting, Muqtada al-Sadr regularly gave Friday sermons in Kufa throughout the uprising.

On May 30, American forces withdrew from the interior of the city of Samarra, and encircled it. Insurgents took full control of the city. On the same day, insurgents also took control of Latifiya and Yusifiya south of Baghdad, effectively cutting Highway One between Baghdad and Karbala. The Americans responded by rerouting traffic onto Highway Eight to maintain contact with the south of the country".

The Daily Mirror reported on 14th April 2009 that:

US warfare experts inspired by bayonet charge by British troops

"Warfare experts in the US are using a famous bayonet charge by British troops as an example of how to tackle insurgents. They were inspired by the heroic assault by 20 members of the 16th Air Assault Brigade in Basra in May 2004. A convoy was ambushed by more than 100 members of the notorious Shia militia, the Mahdi Army. When they started to run out of ammunition the Brits fixed bayonets and charged at the enemy positions screaming.

Many of the Iraqis fled the British onslaught, which left more than 20 dead. Just a handful of British soldiers were wounded and the incident is now being hailed as a major triumph for shock tactics. The Urban Warfare Analysis Center said: "The attack captured the element of surprise. Enemy fighters probably believed propaganda stating that coalition troops were cowards, unwilling to fight in close combat."

The fighting in May also led to the award of the first VC to a living recipient since 1965, as vividly described in the citation for Pte Johnson Beharry later in this book.

The BBC reported on Saturday, 8th May, 2004 that

UK troops clash with Basra gunmen

"Hundreds of Iraqi militiamen loyal to radical Shia cleric Moqtada Sadr have clashed with UK troops in Basra. Members of his militia attacked patrols and set up checkpoints across the city in an apparent attempt to take control. The violence came a day after Mr Sadr's representative offered money for the capture or killing of coalition troops. The British military in Basra said two Iraqis had been killed, and three coalition soldiers injured in the violence. BBC correspondent David Willis says the fighting has now largely been brought under control.

Earlier militiamen had attempted to take over important buildings including the governor's office. Reports said British troops in some 50 vehicles had surrounded Mr Sadr's headquarters in the city. The escalation in fighting came as US troops stepped up the pressure on Mr Sadr. His militiamen have suffered dozens of casualties fighting coalition troops around the holy cities of Najaf and Karbala.

Newspaper pictures showing Iraqi prisoners being abused at Abu Ghraib prison provoked outrage and raised tensions in Iraq. In Basra, Sunday Times reporter Stephen Grey said he was woken by the sound of about eight explosions. He said there had been sporadic gunfire in the city and British troops had fired on a militia stronghold. "This is a very organised attempt to try and take over the city this morning, albeit apparently unsuccessful," he said. "The message in the mosque from Sadr's representative here was calling for people to come out on the streets today. They were combing the city trying to collect weapons from civilians." From 0600 local time, militiamen spread out across the city and set up checkpoints.

They attacked buildings including the main oil company headquarters and the governor's office - where they were beaten back by British troops and Iraqi police. British troops were deeply concerned at the uprising and were trying to "de-escalate" the situation, he said. Fighting also broke out in Amarah where reports said three Iraqi fighters were killed and British troops swept briefly into Mr Sadr's office. The violence came a day after Mr Sadr made a defiant speech in his home town of Kufa, near Najaf.

His top aide in Basra, Sheikh Abdul-Sattar al-Bahadli, told worshippers at Basra's al-Hawi mosque, he would give $350 to anyone who captures a British soldier and $150 for killing one. He also said any Iraqi who took a female soldier could keep her as a slave or gift to himself. It is not the first time his supporters have tried to take the governor's office. In April they occupied it for one day and withdrew after a gun battle".

On 1st June 20 04, Sovereignty in Iraq was transferred from the Coalition Provisional Authority to the Iraqi Government. The new interim Iraqi government was appointed with Sheikh Ghazi al-Yawar as President, and Dr Ayad Alawi as Prime Minister. On the day that the transfer of authority occurred, three American Marines were killed in Baghdad and one British soldier was killed in Basra.

Operation Telic 4 April – November 2004

On June 6th, 2004, Muqtada al-Sadr issued an announcement directing the Mahdi Army to cease operations in Najaf and Kufa, but the fighting in the south continued until June 24, 2004. Ironically, just as the Shi'a and Sunni offensives started together on the same day, they ended on the same day. On the day that the fighting ceased in the south, a massive coordinated attack by insurgents was underway in the Sunni territories. In five cities - Ramadi, Baghdad, Mahmudiya, Baquba and Mosul - attacks were underway. In Baghdad a suicide bomber killed four Iraqi soldiers, but the attacks in Mosul were the bloodiest. Four suicide bombers killed fifty-six civilians, eight Iraqi policemen and two American soldiers. The most intense fighting was in Baquba, where, with precise and strategic attack, the insurgents attacked and took control of the main police station and city hall, and burned down the home of the police chief. American and Iraqi troops withdrew from the city, but after a few hours American bomber planes hit insurgent positions in the city at city hall, the police station and at the football stadium. After the air strikes, the American forces entered the city without resistance". (Wikipedia)

David Rowlands wrote:

"The Battle Group based on 1st Battalion The Princess of Wales's Royal Regiment took over responsibility for Maysan Province, Iraq, in April 2004. CIMIC House, the former residence of the Maysan Provincial Governor, is situated in the centre of the city of Al Amarah beside the River Tigris. The Coalition Provincial Authority (CPA) and Civil-Military Co-operation (CIMIC) teams chose to use it as their base, and Y Company was deployed there to provide security. Following increasing tension in Iraq, an intense series of attacks by the Mahdi Militia against CIMIC House commenced on 5th August and lasted for a further 23 days. In temperatures of 50°C, the British troops conducted a heroic defence, enduring long days and nights of sentry duty, night-fighting patrols around CIMIC House and repelling continuous small arms, rocket-propelled grenade and mortar fire.



"The Defence of CIMIC House, Al Amarah, August 2004"

Artist David Rowlands Medium: Oil on Canvas

> The garrison of CIMIC House was routinely re-supplied by Warrior Armoured Fighting Vehicles. In the yard below CIMIC House are Warriors of A and C Companies. (Call sign Two Zero is the Warrior driven by Private Johnson Beharry VC). The Y Coy Sgt Major, Dale Norman, kneels beside the soldier firing the 51mm mortar. 'Tigris' was a stray dog, adopted by the Company."

Further operations against the Mahdi Army in 2004

The United States estimated that around 1,342 Sunni and Shi'a fighters were killed, and approximately 430 insurgents were captured. The USA, Iraq, and other allied forces suffered 383 killed. Some 2,500 American soldiers were wounded during this period. The results were indecisive. Most of Al-Anbar province (including Ramadi and Fallujah) as well as some Sunni territory north and south of Baghdad, including Samarra, were effectively left under insurgent control. The United States forces managed to maintain control of Baghdad and other major cities in the Shi'a south as well as some in the north.

Another uprising of the Mahdi Army occurred a month and a half later, and a bloodier battle for the city of Najaf unfolded. Also in November the Second Battle of Fallujah occurred which left ninety-five percent of the city in ruins". (Wikipedia)

On 30th September 2004 a ceremony at Umm Qasr marked the transfer of responsibility for Iraq's territorial waters to the Iraqi Coastal Defence Force, following training by instructors from the Navies of the UK, Australia, Netherlands Navy and the USA (MoD).



"The Royal Dragoon Guards, Iraq 2004-05"

Artist David Rowlands Medium: Oil on Canvas

David Rowlands wrote:

> "For Operation Telic 5 the Royal Dragoon Guards deployed to Iraq in October 2004 with three company-sized sabre squadrons, roled for a variety of light and dismounted roles.
>
> They were initially tasked with rear operations, which included providing convoy escorts. They found themselves quelling inter-tribal fighting north of Basrah. In late December a patrol was involved in a large fire-fight, beating off an attempted ambush by insurgents. The Regiment was then allotted responsibility for the southern half of Basrah Province in time for the Iraqi elections at the end of January. They then assumed responsibility for security sector reform, training and then mentoring the Iraqi security forces. One half squadron were engaged in similar operations with the Welsh Guards Battlegroup in Al Amarah. The Regiment returned from Iraq in late April 2005."

CNN reported on Tuesday, September 28th, 2004 that two British soldiers have been killed in an ambush on a British military convoy in the southern Iraqi city of Basra:

Two UK soldiers killed in Basra

"Two British armoured Land Rovers and a logistics vehicle were traveling in a convoy in the southwest of the city when they were attacked, a defense spokesman told CNN. The first vehicle, a Land Rover, was hit by a rocket-propelled grenade. As soldiers from the second vehicle were trying to rescue those hit, they came under attack from small arms fire, and a small-arms fight broke out.

The two casualties from the Land Rover later died in the Basra military hospital at Shaibah. Hospital officials in Basra told Reuters that at least two Iraqi bystanders were also injured in the attack. The deaths bring the number of British soldiers killed in combat in Iraq to 25".

Operation Telic 5 November 2004 – April 2005

Iraqi, American and British troops, including the 24th Marine Expeditionary Unit and the Black Watch, took part in **Operation Plymouth Rock**, which was a major anti-insurgent sweep of an area south of Baghdad launched on 23 November 2004, and aimed at rooting out insurgent forces. For this operation, and controversially, the Black watch moved North to Camp Dogwood.



"The Queen's Dragoon Guards: A Squadron, Al Basrah"

Artist David Rowlands Medium: Oil on Canvas

Padraic Flanagan of the Daily Express in Camp Dogwood, and Richard Lloyd Parry of The Times in Basra reported for the BBC on Wednesday, 3 November, 2004, that:

Under fire in Camp Dogwood

"The final convoy of the Black Watch battle group have arrived at their central Iraqi base, Camp Dogwood. They had travelled along the approach route noted for deadly bomb attacks by insurgents.

The sprawling desert base 25 miles (40km) south-west of Baghdad was targeted by Iraqi rebels with a rocket barrage from their hideouts across the river Euphrates six miles (9km) away on Tuesday evening.

No one was injured and no buildings were damaged as none of the missiles exploded in the latest attack. But it was seen as a message of intent from local warlords that British troops would not be allowed to establish a stronghold in the region without a fight.

In a similar vein, the first vehicles in the battle group convoy, which arrived last week, were hampered by several explosive devices planted by rebels along the camp's approach road. It is the presence of such bombs that most worries the 850 soldiers being re-deployed, according to Adjutant Capt Neil Tomlin of the Black Watch battle group.

"We are having to be very careful about driving, what sort of vehicles we move around in and how many vehicles we move around with," he said.

Trooper Tim Clews, of the Queen's Dragoon Guards, drove the 360-mile journey from Basra in an open-topped Land Rover across some of the most dangerous territory in Iraq. The 21-year-old father-of-one from Swansea, who manned an SA-80 rifle on the Land Rover's roof on the lookout for snipers, condemned the decision to redeploy British troops.

Trooper Clews said: "To be honest I can't understand what it is we are supposed to be doing here. "Iraqis don't want to kill each other, they only want to kill us."

With Camp Dogwood under repeat attack, specialist mortar experts are now at work with radar equipment to track down those responsible for the missiles fired at the camp. The rockets used in the latest attack failed to explode because they were old and landed in muddy sand saturated by a torrential thunderstorm.

So far, British patrols have all been in vehicles, but it is hoped that the security threat will lessen and allow foot patrols without helmets to take place regularly. Capt Tomlin is confident that a breakthrough is possible if troops can embark on foot patrols.

"If we get out of vehicles and talk to people they are very receptive," he said. "Generally, I think people are very happy to see us here and we need to build on that."

But, indicating that he was all too aware of the challenge ahead, Capt Tomlin added: "It's difficult at this stage to state what level of support the insurgents have among ordinary people - we need to build up a picture of that."

Tom Newton Dunn wrote in The Times on November 10th, 2004:

The Black Watch mourns the loss of its quiet Fijian

"Black Watch soldiers pledged to carry on with their mission to the south of Fallujah yesterday as the regiment mourned the insurgent's latest victim. While

15,000 US troops storm the rebel stronghold in Fallujah, the 850-strong Black Watch battle group has been given the task of barring any escaping fighters and stopping reinforcements or supplies getting through.

Private Tukes Tukatukawaqa, 27, who was born in Fiji, and known as "Big Tukes", was killed instantly at the controls of his Warrior vehicle by a roadside bomb on Monday night. Insurgents used the darkness to explode their device by command wire from just a few metres away. At well over 6ft tall and powerfully built, "Big Tukes" was one of the most easily recognisable members of the battalion. He was a trained sniper and one of the best rugby players in the regiment.

The blast hit the armoured fighting vehicle's driving compartment. But the Scots troops said that the painful loss of a fourth comrade in eleven days just hardened their resolve to complete their mission.

Soldiers at the unit's Camp Dogwood base, 25 miles south of Baghdad, also rejected calls from London for their withdrawal and criticism that the Black Watch was not up to trapping al-Qaeda fighters and Saddam loyalists fleeing from the US onslaught in Fallujah.

Lance Corporal Danny Buist, 29, from Arbroath, said: "We don't want to go anywhere. If we pulled out now, we'd feel like we've failed. It's a hindrance when people at home call from us to be pulled out. We know they're only trying to help, but it's not helping us at all. We're here, we're staying, so please give us the support to carry on and get the job done,".

Lance Corporal Lee Walker, 22, from Perth, a Warrior commander, added: "Obviously there's a little bit of fear there when you go out now after what's happened, it's fear of the unknown. But nobody wants to leave a job half done, and that's the same for all the lads out here. We want to complete the mission."

Lance Corporal Walker's best friend in the army, Private Scott McArdle, 22, was one of three troops who died in a suicide bomb attack last Thursday. The Scottish saltire over The Black Watch's HQ was lowered to half mast again at first light yesterday in honour of Private Tukatukawaqa, after flying at half mast over last weekend in mourning for Private McArdle, Sargeant Stuart Gray, 31, and Private Paul Lowe, 19, all from D Company The Black Watch".

David Loyn wrote for BBC News from Camp Dogwood on Thursday, 11 November, 2004:

The Black Watch mourns the loss of its quiet Fijian

"When the Black Watch battle group made their move north, there was an "intelligence vacuum" in the area according to an army source here; they did not know exactly what they would face.

In the nine days that they have been here four soldiers have died in combat, with more than a dozen injured, in this first significant deployment out of the zone in southern Iraq which the British have controlled since last year.

British forces have turned down American requests for support before, but agreed to this one for a strict time limit of 30 days in order to assist the American assault on Fallujah. he role of the Black Watch is to control the maze of roads on either side of the Euphrates River, stopping weapons and reinforcements going north to Fallujah, and trying to intercept insurgents fleeing south.

The rich villas in fertile ground which border the river belong to Saddam loyalists, and there are indications that their tactics of rule by fear are still in place, which makes it easy for insurgents to move around and take on the British forces.

Tactics learnt in Northern Ireland had to be swiftly refined in the face of determined opposition from what one senior Army source described as an "unholy alliance of Ba'athists, secular, trained killers on the one hand and religious zealots on the other".

The enemy is able not only to mount mortar and rocket attacks on Camp Dogwood and on mobile Black Watch patrols, but suicide attacks. The coolness of the attackers has surprised the British, with suicide bombers prepared to wait patiently in slow moving traffic before detonating their bombs close to British soldiers.

In response, checkpoints are now mounted for a much shorter time, with the Black Watch soldiers moving on quickly in order to retain the element of surprise. They have closed a number of roads, trying to siphon the traffic down a few routes which they can then control. Any traffic which approaches checkpoints is monitored from 200 metres away before being allowed to approach.

But the Black Watch also need to know the countryside, and they are still going out into villages, in soft berets, with their distinctive red hackle on display, in order to try to win friends and identify enemies. The Americans have done little patrolling here since they took Iraq last year, so the British are starting from scratch.

But the value of information gathered in just a few weeks is dubious. A senior source said: "Of course we would know more if we were here for three months." But this operation has a strict time limit, partly out of military necessity since the Black Watch have already extended their stay in Iraq to fulfil this commitment, and partly to fulfil promises made by Defence Secretary Geoff Hoon when he approved this controversial redeployment."

Jamie Wilson wrote from Camp Dogwood in Iraq on Thursday, 18 November 2004:

Black Watch soldier seriously injured by roadside bomb

"A Black Watch soldier in Iraq was seriously injured in a roadside bomb attack

yesterday as British troops operating south-west of Baghdad continued to come under sustained attack from insurgents.

Six soldiers had a narrow escape when a suicide bomber blew up his car near to where they were standing, a mortar attack forced a foot patrol to be abandoned and the regiment's base at Camp Dogwood came under rocket fire from insurgents.

The seriously injured soldier was undergoing surgery last night after the bomb detonated underneath the Warrior armoured vehicle he was driving on the east side of the Euphrates, an area nicknamed "the dark side" because of the high levels of insurgent activity. The incident happened at 6.45am, about six miles east of Camp Dogwood. He was evacuated by helicopter to the US military hospital inside the fortified green zone in Baghdad.

The six soldiers who narrowly avoided injury in the suicide attack were serving with the Queen's Dragoon Guards, who have been patrolling deep in the western desert cutting off supply routes into Fallujah. The soldiers, in two lightly armoured Scimitar vehicles, had stopped two cars at a checkpoint at 12.30pm yesterday. As they were inspecting the first car the second exploded. The first car escaped as the soldiers threw themselves to the ground.

It was the first suicide bombing directed at British soldiers in central Iraq for 10 days. A spokesman for the battle group put their survival down to good luck and a change of tactics. The Black Watch has been operating far more robustly in this dangerous area south-west of Baghdad since the first attacks."

Jamie Wilson reported on everyday life at Camp Dogwood with the Black Watch in The Guardian, Saturday 20 November 2004:

Rockets from over the river make terror just part of army routine

"War, they say, is 95% boredom and 5% terror, and for the men of the Black Watch, even the latter is beginning to feel routine. Nearly three weeks since the regiment arrived at Camp Dogwood, and with the exception of a brief but welcome respite over the Muslim holiday of Eid, rockets and mortars have fallen inside their bleak and uncomfortable base almost every day.

But the distant crump, followed by a high-pitched whistle, and the shouts of "Get down" drowned out by the boom of the explosion, still manage to raise the level of adrenaline in even the most experienced soldiers. Two arrived before breakfast yesterday, with three more whistling in around elevenses. The second salvo came just as a squad of Royal Engineers was starting an exercise on a rubble-strewn patch of desert that doubles as a parade ground.

At the first explosion, all nine men - and a small group of unsuspecting journalists - threw themselves to the ground. The second was accompanied by the confusing

commands to "get down" and "run like shit" and, by the time the third rocket arrived, much of the assembled company was trying to cram into the front shovel of a digger. No one was injured in the attacks, the third largest bombardment by insurgents since the Scottish regiment began its controversial deployment at its remote desert base west of Baghdad.

The regiment's commanding officer, Lt Col James Cowan, calls them a "nuisance", but Corporal Paul Brown, 34, from Gosport, might disagree. Last week, he became one of only two soldiers to be injured in the attacks within the camp, and a small piece of shrapnel that missed his jugular by little more than an inch is still embedded in his neck.

"They told me it will probably work its way out at some point," he said. But while it is hard to imagine anywhere more uncomfortable or unforgiving, for most of the 850-strong battle group the war being fought around Camp Dogwood is dusty and dirty, but it is not hell. Instead, it is an exercise in what the engineers, sat against the walls of their quarters yesterday morning waiting for the all-clear, call discomfort management.

They have christened the crumbling brick building they call home Taiconderoga Cottage, after the US name for the base, and have adorned the sign with flowers. The walls are covered with pictures of women in various stages of undress, while another sign reads: "Mushroom Troop - kept in the dark, fed on shite." The engineers have even used old cardboard boxes from their ration packs to make Venetian blinds to cover the holes in the walls where there were once windows.

As they lolled around, a whistle sounded from the far end of the corridor. Briefly, the men tensed, before Sergeant Dave Parsley, the troop leader, growled: "If you do that again, I'll rip your fucking lips off." "They're a lot better at this game than those we have come up against down south," said Sgt Parsley of the insurgents as he chewed on a fat cigar.

He should know. The paperweight next to his army issue camp bed is the top of a rocket fired into the base last week. It landed about seven feet from where he had taken cover, but it failed to go off. "I couldn't bloody believe it when I saw it," he said.

"Welcome to the Dogwood Hilton," reads a sign on the wall of probably the safest place in the camp. Nobody else wanted the underground bunker when the Black Watch arrived at the former industrial complex. But the 11 members of the refuelling crew who now call it home spent three days clearing it of rubble. It doesn't have hot running water, piles of white towels or king-sized beds, but the soldiers have done their best.

"We filled every spare little bit of space on the truck," said Corporal Robert Smith, 29, from Dundee. "We bought a DVD player and a stereo, and darts, of course," pointing to a board hanging on the wall. For the men inside the camp, the

insurgents remain an elusive enemy, firing rockets from the lush east bank of the Euphrates, a restricted zone under Saddam Hussein that was home to members of the well-trained Special Republican Guard.

For most of them, the only contact they will have with their shadowy foe will come in the form of the metre-long metal tubes similar to the one a bomb disposal officer attached wires to yesterday. After his retreat, a loud explosion sent a column of dust and smoke into the clear blue sky, a reminder, amid the boredom, of the danger the soldiers face. "I never, ever, want to see this place again," one soldier said, no doubt speaking for many".



In this photo (Crown copyright), a Black Watch tank blocks a road during a search operation near Camp Dogwood as part of Op Tobruk on November 25th, 2004. Op Tobruk was the culmination of Operation Bracken, designed to clear the area of insurgents. Note the vegetation.

The Press Association reported in the Guardian on Saturday 4th December 2004 that:

Black Watch returns to Basra

"The Black Watch rolled back into Basra today after their controversial month-long mission to Camp Dogwood near the "Triangle of Death". Soldiers declared "mission accomplished" as the battle group convoy of more than 200 vehicles arrived at the relative safety of Shaibah Logistics Base.

They dedicated the success of their campaign to their five comrades who died on the deployment. Lieutenant Colonel James Cowan, who led the Black Watch mission, said: "Their deaths are something we will never forget. To lose close friends is something we will always remember and our thoughts are with their families.

Some soldiers were dismayed that it may have been their final mission, with the Black Watch expected to fall victim to a shake-up of Scottish regiments, and felt their exploits deserved a reprieve. Lance Corporal Terry Ward, 23, from Rosyth, Fife, said: "I'm not happy about it all. We'll always be the Black Watch no matter what happens.

There were joyous scenes amongst the returning soldiers as they looked forward to getting home to see their families. The 370-mile road journey back to Basra took 40 hours as the sprawling 15km long convoy snaked through the desert dust trying to avoid roadside bombs.

Movements were planned with military precision - including a media blackout - and there were no casualties. During their stay at the desolate and windswept outpost of Dogwood, 25 miles The Black Watch faced an almost daily bombardment of incoming missiles. 26 rockets - each about the height of a man and packed with explosives - struck home. Many others landed but failed to explode.

Major Alistair Aitken, who led the Warriors of Black Watch's A Company into battle many times, said: "It is very sad that we are not taking some people home but I am enormously proud that this group of people have done such a good job.

"After working with the Americans you won't find a man in this company who doesn't have the highest respect for the American Marines, for the threat they face on a daily basis and the casualties they take on a daily basis. The support we had from them was outstanding. It felt like the whole of the Marine Corps air wing was watching over us and that gives you an enormous feeling of reassurance."

On 30th January 2005, Iraq held its first democratic national elections and local elections of the post war period. On 7th March 2005, British Forces assumed command from the Dutch battalion at a handover ceremony at Camp Smitty in As Samawaha, the principle city of Al Muthanna province. (MoD).



“My company commanders warrior, whist on patrol at Camp Dogwood, Iraq. I took this photo from the drivers seat of the warrior I was driving”.

flickr.com/photos/13180055@N04/1365814812. from Steven Mcelhinney's photostream



“A Friendly Power in Iraq: 1st Battalion The Royal Regiment of Wales”

Artist David Rowlands Medium: Oil on Canvas

Operation Telic 6 May - November 2005

By mid 2005, an uneasy peace had been reestablished in Basra, but at the cost of extensive infiltration and murderous criminality within the expanding police force. Steven Vincent's report for the New York Times captures the mood in the following report on July 31, 2005 from Basra:

Switched Off in Basra

"The British call it being "switched on" - a state of high morale and readiness, similar to what Americans think of as "gung ho" attitude. During the 10 days I recently spent embedded with the British-led multinational force in this southern Iraqi city, I met many switched-on soldiers involved in what the British call "security sector reform." An effort to maintain peace while training Iraqis to handle their own policing and security, security sector reform is fundamental to the British-American exit strategy. As one British officer put it, "The sooner the locals assume their own security, the sooner we go home."

From this perspective, the strategy appears successful. Particularly in terms of the city police officers, who are proving adept at the close-order drills, marksmanship and proper arrest techniques being drilled into them by their foreign instructors. In addition, police salaries are up, the officers have shiny new patrol cars, and many sport snazzy new uniforms. Better yet, many of these new Iraqi officers seem switched-on themselves. "We want to serve our country" is a repeated refrain.

From another view, however, security sector reform is failing the very people it is intended to serve: average Iraqis who simply want to go about their lives. As has been widely reported of late, Basran politics (and everyday life) is increasingly coming under the control of Shiite religious groups, from the relatively mainstream Supreme Council for the Islamic Revolution in Iraq to the bellicose followers of the rebel cleric Moktada al-Sadr. Recruited from the same population of undereducated, underemployed men who swell these organizations' ranks, many of Basra's rank-and-file police officers maintain dual loyalties to mosque and state.

In May, the city's police chief told a British newspaper that half of his 7,000-man force was affiliated with religious parties. This may have been an optimistic estimate: one young Iraqi officer told me that "75 percent of the policemen I know are with Moktada al-Sadr - he is a great man." And unfortunately, the British seem unable or unwilling to do anything about it.

The fact that the British are in effect strengthening the hand of Shiite organizations is not lost on Basra's residents. "No one trusts the police," one Iraqi journalist told me. "If our new ayatollahs snap their fingers, thousands of police will jump." Mufeed al-Mushashaee, the leader of a liberal political organization called the Shabanea Rebellion, told me that he felt that "the entire force should be dissolved and replaced with people educated in human rights and democracy."

Unfortunately, this is precisely what the British aren't doing. Fearing to appear like colonial occupiers, they avoid any hint of ideological indoctrination: in my time with them, not once did I see an instructor explain such basics of democracy as the politically neutral role of the police in a civil society. Nor did I see anyone question the alarming number of religious posters on the walls of Basran police stations. When I asked British troops if the security sector reform strategy included measures to encourage cadets to identify with the national government rather than their neighborhood mosque, I received polite shrugs: not our job, mate.

The results are apparent. At the city's university, for example, self-appointed monitors patrol the campuses, ensuring that women's attire and makeup are properly Islamic. "I'd like to throw them off the grounds, but who will do it?" a university administrator asked me. "Most of our police belong to the same religious parties as the monitors."

Similarly, the director of Basra's maternity hospital, Mohammad Nasir, told me that he frequently catches staff members pilfering equipment to sell to private hospitals, but hesitates to call the police: "How do I know what religious party they are affiliated with, and what their political connection is to the thieves?"

It is particularly troubling that sectarian tensions are increasing in Basra, which has long been held up as the brightest spot of the liberated Iraq. "Are the police being used for political purposes?" asked Jamal Khazal Makki, the head of the Basra branch of the Sunni-dominated Islamic Party. "They arrest people and hold them in custody, even though the courts order them released. Meanwhile, the police rarely detain anyone who belongs to a Shiite religious party."

An Iraqi police lieutenant, who for obvious reasons asked to remain anonymous, confirmed to me the widespread rumors that a few police officers are perpetrating many of the hundreds of assassinations - mostly of former Baath Party members - that take place in Basra each month. He told me that there is even a sort of "death car": a white Toyota Mark II that glides through the city streets, carrying off-duty police officers in the pay of extremist religious groups to their next assignment.

Meanwhile, the British stand above the growing turmoil, refusing to challenge the Islamists' claim on the hearts and minds of police officers. This detachment angers many Basrans. "The British know what's happening but they are asleep, pretending they can simply establish security and leave behind democracy," said the police lieutenant who had told me of the assassinations. "Before such a government takes root here, we must experience a transformation of our minds."

In other words, real security reform requires psychological as well as physical training. Unless the British include in their security sector reform strategy some basic lessons in democratic principles, Basra risks falling further under the sway of Islamic extremists and their Western-trained police enforcers".

Trouble at Basra Jail

On 25th August 2005, Lieutenant Colonel Toby Bridge, Commanding Officer of The Kings Royal Hussars, handed over responsibility for basic military training to the Iraqi Army. By September, the criminality within the Basra police force was becoming too serious to overlook, and relations between the British Army and the Basra Police were deteriorating. The arrest and detection of two SAS soldiers on 20th September brought matters to a head on matters of considerable sensitivity, as the following reports describe.

Richard Norton-Taylor and Ewan MacAskill reported for the Guardian on Tuesday 20th September 2005:

British tanks storm Basra jail to free undercover soldiers



Iraqi policemen walk through debris at the central jail in Basra. Photograph: Nabil al-Jurani/AP

"British troops used tanks last night to break down the walls of a prison in the southern Iraqi city of Basra and free two undercover British soldiers who were seized earlier in the day by local police.

An official from the Iraqi interior ministry said half a dozen tanks had broken down the walls of the jail and troops had then stormed it to free the two British soldiers. The governor of Basra last night condemned the "barbaric aggression" of British forces in storming the jail. Aquil Jabbar, an Iraqi television cameraman who lives across the street from the jail, said dozens of Iraqi prisoners also fled in the confusion.

In a statement last night the defence secretary, John Reid, said: "I am pleased to be able to say that the British servicemen who were seen being injured in the graphic photographs are being treated for minor injuries only and are expected to return to duty shortly. We remain committed to helping the Iraqi government for as long as

they judge that a coalition presence is necessary to provide security."

A Ministry of Defence spokesman said: "We have not had confirmation of the full details of this. We've heard nothing to suggest we stormed the prison. We understand there were negotiations." In a day of dramatic incidents in the heart of the British-controlled area of Iraq, the two undercover soldiers - almost certainly special forces - were held by Iraqi security forces after clashes that reportedly left two people dead and threatened to escalate into a diplomatic incident between London and Baghdad. The soldiers, who were said to have been wearing Arab headdress, were accused of firing at Iraqi police when stopped at a road block.

In another incident an angry crowd attacked a Warrior armoured personnel carrier with petrol bombs. A British soldier was forced to flee from his burning vehicle.

Muhammad al-Abadi, an official in the Basra governorate, told journalists the two undercover soldiers had looked suspicious to police. "A policeman approached them and then one of these guys fired at him. Then the police managed to capture them."

Senior British officials said the Iraqis who attacked the Warrior armoured vehicle had prepared their petrol bomb attack before the incident involving the two undercover soldiers. The origins of the attack on the Warrior, they say, lay in events the previous day when about 200 members of the al-Mahdi Army, a militia headed by the radical Shia cleric Moqtada al-Sadr, made a show of force in Basra, blocking roads in the city and demanding the release of their local commanders."



Adrian Blomfield and Thomas Harding reported in the Daily Telegraph on 20th September 2005 that:

Troops free SAS men from jail

"Two SAS soldiers were freed from a jail in Basra under the watch of British armoured vehicles last night a few hours after they were seized by Iraqis during the worst riots in Iraq's second city in two years. They had been wearing Arab clothes when they were arrested in the southern city by a Shia militia loyal to the Iraqi government.

The militia accused them of shooting at policemen who approached them. After hours of intense negotiations to secure their release, British forces arrived at the central jail last night. Iraqi government officials and the governor of Basra claimed that Warrior armoured vehicles had stormed the jail, destroying a wall. Scores of Iraqi prisoners escaped with the two soldiers.

The Ministry of Defence denied reports that Warriors had broken in. It said that a Warrior being used to collect the men "might" have accidentally knocked into a wall as it reversed in the dark.

"We would never orchestrate or authorise a jail break as is being reported," said a spokesman. The British embassy in Baghdad said three people had been injured as the men were released. Mobs angry over the alleged attack on the police set fire to a Warrior, forcing its gunner to leap from the turret. Television footage showed the Warrior engulfed in flames. The turret hatch opened and a soldier, his clothes and helmet on fire, scrambled out under a hail of missiles.

Three soldiers suffered burns and other injuries and the vehicle was badly damaged by a hail of petrol bombs. Troops and vehicles then surrounded Basra's jail, where the SAS men were being held.

There were chants of "Murderers out" as an armoured vehicle manoeuvred into position near a perimeter wall. Rioters, many of them children, then attacked it.

He and the other injured soldiers, believed to be members of the Coldstream Guards, were treated at the military hospital in Shaibah logistics base. Witnesses said the Warrior was towed away after troops fired in the air to disperse the rioters. The interior ministry said that at least two protesters were shot dead.

Photographs of the captured SAS troopers showed them with blood-spattered clothing and one with his head heavily bandaged. The MoD asked newspapers to blank out their faces to prevent identification. The confusion reflected the level to which relations between local authorities and the British military have sunk.

This summer, soldiers were able to patrol the city in relative safety. But security has deteriorated so badly that the Army has switched from lightly armed Land Rovers to the tank-like Warriors.

Although British troops and Iraqi security forces supposedly work together, in Basra the relationship has soured. Soldiers have been told not to stop if challenged while working under-cover, as insurgents often masquerade as police officers.

Despite the violence on the streets, many Iraqis in Basra said they supported the British military presence. One, Haider Samad, said: "Locals are angry with what is happening today."

The reason for the sudden upsurge in violence is a matter of debate. The Shias are in the ascendancy in Iraq and stand to gain politically if the new constitution is accepted in a referendum in mid-October. Intelligence sources have suggested that this could be the start of a concerted campaign to oust the American-led coalition.

The clashes followed a weekend of unrest after troops arrested six members of the Mahdi army, the militia loyal to the rebel Shia cleric Moqtada al-Sadr. Those held included Sheik Ahmad Majid al-Fartusi, the Basra commander of the group, and his aide, Sajjat al-Basri. On Sunday the Mahdi army said it would retaliate on Monday if its leaders were not freed. The rioting suggested that it had carried out its threat".

Op Telic 6 also brought a growing awareness of the role of Iran in backing the Basra insurgency, as the following CNN report of Monday 10th October 2005 indicated:

The role of Iran

"Basra police officers were among 12 people detained by coalition forces in a raid targeting terrorists in the southeastern city, according to the British military.

The raid came as British Prime Minister Tony Blair accused Iran of helping fighters in Iraq carry out deadlier bombings against coalition forces. Two weeks ago, in the wake of a controversial operation by British forces to rescue two soldiers sparked riots in Basra, a senior Iraqi official later said insurgents had infiltrated the country's security forces.

The people -- accused of being involved in and planning attacks in the region -- were detained in the Hadem area of the city on Thursday night in a raid that was carried out with "short notice. Some of the individuals are members of Basra police service," said a statement from the commander of the 12th Mechanized Brigade.

The statement issued on Friday said it was of great concern to the British military "that members of Basra police are involved in terrorism. We know that there are good people in the Iraqi police service and the actions of the few should not be allowed to obscure that fact. However, nobody who has been involved in murdering MNF soldiers should be allowed to hide behind their uniform. That would be a disaster for the good, law-abiding people of Basra."

Britain -- which has commanded the multinational forces in southeastern Iraq -- is responding to recent deaths in the region, including "eight MNF soldiers and six coalition members have been killed by terrorists in Basra province. This terrorism must be stopped and it is our right to protect ourselves and innocent citizens. This operation was designed to do exactly that".

Delivering best wishes for the Muslim holy month of Ramadan, the commander's statement also said some of the people arrested were "linked to militia groups in Basra. But let me make it absolutely clear: we have acted against them solely because they are involved in terrorism, not because they are as members of any particular political group or organisation."

Arwa Damon, Enes Dulami and Mohammed Twfeet reported for CNN on Monday, October 10th, 2005 that recent tensions between Iraqi forces and the British military were threatening the upcoming constitutional referendum, as the governor of Basra province warned on Monday:

Raids escalate tensions ahead of constitutional referendum

"British forces arrested 12 people in a raid last week, including three police officers in the southern Iraqi city of Basra. Among them was a police captain. Gov. Mohammed Al-Waili expressed concern over the British military's actions, saying the arrests have created "chaos among the people of Basra. They are threatening the upcoming referendum".

Al-Waili said the British military should deal with his office on a more regular basis and let him know what troops in the region are doing, "for both the safety of the people and the British forces." He has threatened to stop dealing with the British military, but he said he opened negotiations two days ago. He said he expected an apology from the British forces for their conduct. He added that Iraqi Prime Minister Ibrahim Al-Jaafari and the Interior Ministry have sent a fact-finding delegation to Basra to probe recent events.

In a statement on Friday, the British military said it was concerned "that members of Basra police are involved in terrorism. We know that there are good people in the Iraqi police service, and the actions of the few should not be allowed to obscure that fact."

Relations have been strained since late September when British troops staged a raid to free two British undercover soldiers who were being held first by police and then, according to British officials, by a militant group. Basra officials said the two men, dressed in civilian clothes, were arrested after they began firing on civilians. Al-Waili and other Basra officials have demanded an apology from the British over the raids.

Iraqis are scheduled to go to the polls Saturday to vote on the country's draft constitution. The government announced over the weekend there would be a four-day national holiday ahead of the vote and that 70,000 Iraqi troops and police would provide security. About 152,000 American troops are in the country, according to the U.S. military.

Najaf Gov. As'ad Abu Gilal survived an assassination attempt Monday when a bomb went off near his convoy on the main road south of Baghdad in the city of Mahmudiya, according to a Najaf police official. The official said the convoy came under small-arms fire after the explosion. A high-ranking Najaf police officer and another member of the police escorting the convoy were wounded.

Iraqi national security adviser Mowaffaq al-Rubaie said a majority of Sunnis support the constitution despite the vocal opposition of many Sunni leaders. He said the constitution was a huge step forward for Iraq and that he thought that it would pass.

Former Iraqi dictator Saddam Hussein is scheduled to stand trial on October19th for the 1982 killings of Shiite Muslims in the village of Dujail that followed attempts by opponents to assassinate him.

Operation Telic 7 November 2005 – April 2006

On 15th December 2005, democratic elections were held for a permanent, constitutional Iraqi government.

By the end of 2005 and early in 2006, the situation in Basra had become grim, as set out in the following comprehensive survey by the UNHCR, the Basrah Governorate Assessment Report on Security and public order, published in August 2006.

The UNHCR View of the situation in Basra

"In the past year, Basra has emerged as a flashpoint of violence with clashes between Iraqi Security Forces (ISF) and Shiite militias as well as among rival militias. The Governorate is dominated by various Shiite political groups and their armed militias, all vying for power and a share of the area's vast oil wealth. A variety of reports suggest that militias have infiltrated the security forces and are more loyal to their religious leaders than the Iraqi government. An internal US Embassy report on security in Iraq concluded there was 'a high level of militia activity including infiltration of local security forces' in the city.In addition, criminal gangs are part of the security problem in Basra.

Kidnappings for ransom or political reasons remain common and assassinations have been carried out on varying targets, including politicians, religious figures, tribal leaders, journalists, government officials, university professors and the staff of contracting organizations working with foreign organisations.

Militias are also accused of carrying out hundreds of executions of former Ba'athists. A wave of anger among Iraq's Shia over a bomb attack on the Al-Askari shrine in Samarra in February 2006 also sparked sectarian violence in Basra, affecting both its Shia and Sunni populations.

Basra's small Sunni Arab community, are believed to make up 15% of the population, has increasingly been targeted by armed groups. Local police often do little to prevent such sectarian attacks, which include the killing of clerics, burning of mosques, attacks on Sunni political offices and threats against ordinary Sunni citizens to leave. The Association of Muslim Scholars (AMS), a Sunni political party, claims some 1,200 Sunni families have been forced to flee Basrah because of the violence. According to Abdul-Razaq Àl-Dosari, a senior AMS cleric, about 25 Sunnis were killed by armed groups affiliated with religious groups in May 2006 alone.

According to data provided by the British military, the murder rate has doubled between November 2005 and February 2006, to an average of more than one per day.

Notable events in Basra Governorate in January 2006 included:

- Basrah's Governor threatened to suspend dealings with UK forces over security and other issues unless five Iraqi policemen held as suspected insurgents in British custody were released. Several hundred Iraqis demonstrated outside the Governor's Office demanding the release of the detainees.
- An improvised bomb exploded in a market, killing a girl and injuring four people.
- Twenty schoolchildren were wounded, two seriously, when a roadside bomb targeted a British patrol in Basrah.
- British troops arrested 14 police officials suspected of carrying out kidnappings and assassinations.
- Eight coast-guard members were captured by the Iranian navy during a skirmish near Basrah and released after nearly a week. One coast-guard member was reportedly killed in the clash.
- Two US civilians working for a security company were killed in a roadside bombing in Basrah.

Notable events in Basra Governorate in February 2006

- A bomb exploded in a Shiite mosque in Basrah, causing minor injuries.
- Gunmen kidnapped three children of a Shiite legislator belonging to the Islamic Dawa Party-Iraq Organization and former head of Basrah's Provincial Council.
- Police found the bodies of two of Basrah's Head of the Sunni Endowment's two bodyguards.

- Outrage at the attack on the Al-Askari Shrine in Samarra provoked attacks in many parts of Iraq, including Basrah, where gunmen killed 11 people in Mina Prison, all of them suspected Sunni militants.

  Shia militiamen attacked the headquarters of the Sunni-led Iraqi Islamic Party in Basrah, injuring two party members. Several hours later, men wearing black clothing reportedly took the two injured members from the hospital and executed them.
- Stones were thrown at two Sunni mosques and a Sunni shrine was set on fire.
- Three Iraqis working for UK forces at the Shaibah base in Basrah were kidnapped and released the same day.

The BBC reported on Thursday, 23rd February 2006 that:

'Sunni militants' killed in Basra

"Gunmen have killed at least 11 people after entering a prison in the southern Iraqi city of Basra. Police say all the victims were suspected Sunni militants, including several foreigners.

The attack in the largely Shia city comes amid a wave of anger among Iraqi Shia over a bomb attack on one of their holiest shrines in Samarra. A spokesman for Iraq's top Shia cleric Grand Ayatollah Ali al-Sistani said the anger may be hard to contain. "You wouldn't expect an abrupt or sudden calm, because there are some people whose reaction you can't control," London-based spokesman Fadel Bahar al-Eloum told the BBC.

Basra police say the gunmen entered the Mina prison late on Wednesday, disarming the guards and seizing a group of suspected Sunni militants. Their bodies were later found in the city, amid reports that they had been tortured before being shot. Egyptian and Saudi nationals were among the victims, police said. The gunmen were reportedly dressed as police officers and arrived at the prison in several vehicles.

The killings followed unrest in the city. There had been clashes between followers of Shia cleric Moqtada al-Sadr and Sunnis, and a Sunni shrine on the outskirts of Basra was said to have been burnt.

The offices of the Sunni Iraqi Islamic Party were also attacked. Earlier on Wednesday, unidentified attackers blew up the dome of the Shia al-Askari shrine in Samarra. The golden dome of the shrine was reduced to a shell of brown masonry and twisted metal. No group claimed responsibility for the bombing, although Iraqi television said several people had been arrested. No-one appeared to have been injured in the attack. The al-Askari shrine is one of two shrines in the city that attract Shia pilgrims from around the world.

Following the attack, thousands of demonstrators gathered near the shrine, waving Iraqi flags and calling for justice. Dozens of Sunni mosques in Iraq were later

reported to have been targeted and at least eight Sunnis killed across Iraq in what appeared to be reprisal attacks. President Jalal Talabani, a Sunni Kurd, has appealed for calm, and urged Iraqis to work together to avert "the danger of civil war".

Notable events in Basra Governorate in March 2006 included:

- Drive-by shooters killed a lawyer as she got out of a taxi in Basrah City.
- Drive-by gunmen killed the Head of Basrah's Sunni Endowment's bodyguard, the organisation that oversees Sunni religious property in the Governorate.
- An explosion caused by a bomb or mortar at the Southern Oil Company's Basrah Headquarters damaged the fuel section's building.

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Blood, Heat + Dust: Second Edition

Operation Telic and the British Medical Deployment to the Gulf 2003 -2009

Chapter 7:

History of the UK military campaign Operation Telic Phases 8 – 9



Painting: *'The Poachers' strike*

Artist David Rowlands Medium: Oil on Canvas

Regarding the painting "The Poachers' strike" on the previous page, David Rowlands recalls that;

> *"The scene depicts a 'strike' operation in downtown Basra, Iraq. This type of operation was conducted by all four Companies of the 2nd Battalion The Royal Anglian Regiment ('The Poachers') throughout the period April to November 2006, whilst deployed on Operation Telic 8".*

Introduction to Operation Telic 8-9

The phase of operations between April 2006 and April 2007 was a particularly difficult time for UK forces in Iraq, given the scale and growing technical and political sophistication of the rebellion in the South, and the challenges of developing a reliable police force for the southern provinces. The scale of the problem was far too large for a small force of well under 10,000 troops to police a population of 2 million Iraqis, and the freedom of movement of UK forces out of the fixed, well defended but heavily targeted bases was progressively reduced by ambush and IED tactics.

In July 2006, control of Al Muthanna province and Al Amarah was handed back to the Iraqis, and British Forces withdrew from Camp Abu Naji, which had been under regular attack, and reorganised for mobile operations along the Iranian border.

In September 2006, the launch of Operation Sinbad with the aim of rooting out corruption, militia infiltration and death squads in the Police Force led to intensification of fighting in and around Basra.

Operation Telic 8 April 2006 – Nov 2006

The situation in southern Iraq through 2006 was anarchic and beyond the capability of the UK troops to control. Indeed, they were more and more preoccupied with self defence measures. The UNHCR Report of August 2006 describes graphically the full extent of the practical consequences of this anarchy, both for the troops, the population in general, and for the provision of health care for the region, as the following extracts from the UNHCR Report show:

Incidents in Basra Governorate in April 2006:

- Seven Iraqi workers with a construction company, apparently all Sunni Arabs, were killed in Basrah.
- One British soldier was killed and three injured when a roadside bomb exploded near Ad-Dayr, northwest of Basrah. A few days earlier, four soldiers suffered minor injuries in a suicide bomb attack close to the British logistics base at Shaibah.
- Basrah police found the body of a Sunni ambulance driver, handcuffed and shot in an execution-style.

- The body of a Sunni lecturer from the Basrah Technical Institution was found by police a day after he was seized by gunmen. He was said to have links to the AMS.
- Two mortar rounds exploded near the British Consulate in Basrah during a reception but caused no injuries.
- A roadside bomb blast near an oil pipeline south of Basrah killed two members of Iraq's Facility Protection Services.
- Gunmen shot down six people in a market area of Basrah.
- A Sunni sheikh was killed by armed men when leaving his home in Basrah

According to the *New York Times*, the murder rate in May 2006 was 85 deaths; triple the number of killings in January. On 31 May 2006, after a month which had cost more than a 100 people's lives, Prime Minister Nouri Al-Maliki declared a month-longstate of emergency in Basrah to restore security. However, violence continued and Jawad Al-Bolani, Iraq's Minister of Interior, acknowledged that the initiative had not worked. Morgue officials report that the number of people killed in sectarian violence remains unchanged.

Relations between the British Forces and the local government soured after January 2006. After a series of arrests of corrupt police officials and following the release of a video appearing to show UK troops beating Iraqi civilians in Southern Iraq, the Provincial Council suspended relations with British Forces in February 2006. It was not until early May that local authorities agreed to formally resume co-operation.

Militias and insurgent groups continue to execute attacks on Multinational Forces (MNF) and the Iraqi Security Forces (ISF), foreign contractors, private security firms and oil facilities. Belligerents also specifically target Iraqis involved in reconstruction efforts, Iraqis working with MNF/ISF and Iraqis working with the Iraqi Government. Numerous nationals and internationals working in the South have been shot or kidnapped for working with or for international organisations. The main types of attacks against international actors are indirect fire (mortars and rockets), Improvised Explosive Devices (IED) and small arms fire. IEDs in the South pose the main security concern for MNF because some insurgents are using explosively formed projectile IEDs, which are lethal to any vehicle that is directly hit by one.

The city of Basrah has largely come under the control of Shiite clerics and militias: shops selling liquor, DVDs or recorded music have been targeted, as have men and women who mix in public. The increasing tendency towards strict Islamic behaviour and dress codes has taken a particular toll on women in Basrah. Women of all religions risk being targeted, verbally and physically, if they do not comply with strict Islamic dress codes (e.g. not covering their hair or wearing Western-style fashions) or if they behave in a manner considered 'immoral' (e.g. working in professions such as prostitution or dancing). A physician who heads the Basrah

Maternity and Paediatric Hospital reported that Mahdi Army followers came to the hospital to tell the male doctors not to treat female patients. The Governor of Basrah stated that 'today, our society is changing, becoming more religious', and 'we must reflect [the fact] that Basrah is becoming a purely Islamic city.

Public Health in Basra in 2006

As part of a comprehensive review of civic and public services in August , the UNHCR reported that the state of the Basra health services was as follows:

In the 1960s, the Ministry of Health (MoH) in Basrah Governorate was well equipped with well-trained staff, however thirty years of under-investment and extensive looting following the fall of the former regime in April 2003, has taken its toll on the quality of health services. The deteriorating security situation has also hampered reconstruction efforts in the health sector. The Basrah Health Directorate lists the following factors as contributing to the current poor state of health facilities in the Governorate.

- Under-investment and lack of replacement/maintenance of antiquated equipment;
- Shortage of drugs for chronic diseases;
- Limited training and expertise of medical practitioners;
- Poor sanitation and hygiene.

NGOs devoted to health issues in Southern Iraq say that dozens of children have died of relatively common diseases since January 2006 due to a lack of medicine. It is reported that there is a lack of essential supplies, especially intravenous infusions and blood bags, antibiotics, Pentostam, special milk for dehydrated children and medical material for emergency conditions. Children between the ages of one and three years are the most affected by problems of dehydration and pneumonia, meningitis, malnutrition and typhoid. Also some cases of cholera have been reported.

Specialists also note a disturbing increase of cases of Kala Azar (Leishmania) among children, especially at the height of summer and under deteriorating sanitation conditions in Basrah. Kala Azar, transmitted by the sand fly, is a chronic and potentially fatal parasitic disease if not treated. Kala Azar can be completely cured with Pentostam, however, it has not been available in Southern Iraq for several months.

Children exposed to piles of rotting garbage are increasingly suffering from typhoid fever as well as fungal and bacterial skin diseases.

According to Dr. Hussein Ashayri, clinician at the Children's Hospital of Basrah, up to 15 children per week come to the Children's Hospital with diseases related to their contact with accumulated garbage. Reportedly, many garbage collectors have

abandoned their jobs due to increased insecurity and trucks are old and are no longer working.

The European aid agency Saving Children from War reported that as a result of water-borne diseases and a lack of medical supplies such as I.V. fluids or cancer drugs, infants born in the city of Basrah are subject to abnormally high mortality rates. An increasing number of anaemia cases among children and women countrywide are being tackled by the Iraqi government and the UN, who are supplying flour fortified with iron and folic acid as part of monthly food rations. According to the Director of the Nutrition Research Institute, 60 percent of students in primary schools and 79 percent of women of childbearing age in Basrah Governorate suffer from anaemia.

A shortage of doctors and nurses has also been reported. Though there are no reliable statistics on how many doctors, dentists, pharmacists and nurses have left the area, but unofficial data suggests that at least 200 health professionals have left since January 2006. Health ministry statistics also suggest that an average of 30 doctors and nurses per month have left Iraq over the past year after being targeted by criminal gangs.

MoH reports that there are 84 Primary Health Centres in Basrah Governorate, 31 of which are located in Basrah City. Health care centres open from 08.30 - 15.00 Sunday to Thursday, and some have two or three shifts daily. There are five general public hospitals in Basrah City in addition to the Ibn Ghazwan Maternity and Children's Hospital and the Basrah Teaching Hospital. The Basrah MoH has 70 ambulances, of which 10 are currently inoperative. Ambulance services are mainly available in the cities, with limited services in rural areas. There are also four private hospitals in Basrah City:

- Al-Noor Orthopaedic Hospital;
- Al-Rahma Maternity Hospital;
- Ibn Al-Beetar Hospital for general surgery;
- Al-Musawi Hospital for eyes and general surgery.

The Emergency Unit in the Teaching Hospital was closed for five months in 2006 after a number of doctors were killed by unidentified attackers while working there.

The MoH reports that the supply of pharmaceutical drugs in Basrah is inadequate to cover the scale of health needs in the Governorate. Drugs are available at considerably higher prices from private pharmacies and are sold on the black-market without prescriptions, even though drugs sold through this channel are often out of date or used for purposes other than their intended use.



"The Queen's Dragoon Guards: B Squadron, Safwan"

Artist David Rowlands Medium: Oil on Canvas

May 2006

By May 2006, the mood in Basrah was ugly and the influence of the Mahdi Army was considerable. The following report of a tragic Lynx helicopter crash illustrates this graphically.

Jason Burke explains how the southern Iraqi city turned into a cauldron of violence after a British helicopter crashed in The Observer, Sunday 7th May 2006:

How the Basra riots turned bloody

"If you want to take on a major army in an urban street fight, there are worse places than Basra. The southern port city is a perfect mix of wide open streets - allowing armoured columns or heavily armed troops to penetrate rapidly, which then allows them to be hounded.

The British army had been trying to avoid this particular trap for a long time. Yesterday they found themselves deliberately walking into it, having effectively having set their own bait in the form of the British military helicopter that crashed in a residential area, reportedly killing four British servicemen at around 11am yesterday. If confirmed, the deaths will mark one of the most serious single losses for British forces in Iraq for over a year and come at a critical time for Tony Blair and British forces in Iraq. Equally, if a suspected missile strike is confirmed, it will mark a major step forward in the local insurgents' capabilities, and a serious blow to the UK deployment.

But initially the problem was elsewhere. For the troops of the Battle Group Basra, Highlanders and Royal Scots Dragoon Guards under the command of the Seventh armoured division, the priority was to reach and secure the site of the crash without being dragged into a Black Hawk Down scenario.

'We can confirm that there has been a helicopter crash in Basra,' said Major Sebastian Muntz, a British military spokesman in the city. 'British troops are on the scene assisting and emergency services are present.' It was fire crews fighting the flames around the helicopters who told local reporters that there were four charred bodies.

As the British troops moved into the site they were met by a hail of stones from a crowd of several hundred angry people. Molotov cocktails impacted on the armour of the Warrior fighting vehicles sending gouts of orange fire into the air. Soldiers emerged periodically to douse the flames.

As word of the incident spread, the crowds grew. They also changed in character. Where they had earlier been spontaneous, they soon took on a more organised nature. A clue as to why lay in the chants the rioters hurled at the troops: 'Victory to the Mahdi Army', they shouted, a reference to the armed militia of the radical Shia cleric, Moqtada al-Sadr. His men - and the Mahdi army - have repeatedly been responsible for violent unrest in Basra and elsewhere in southern and central Iraq, though the extent of their involvement in bombings and missile strikes is unclear.

Last September, British forces arrested two officials of Mahdi Army, the militia loyal to al-Sadr, raising tensions. About a week later, militiamen and residents clashed with British troops after two British soldiers in local clothes were detained by Iraqi authorities before being freed in a raid by British forces.

The most senior Shia cleric in the region, Grand Ayatollah Ali al-Sistani, has proved a strong moderating influence but is engaged in a power struggle with al-Sadr and has not always been able to keep growing anti-coalition fervour among the local population under control.

Much of al-Sadr's strategy depends on drawing British troops out of their heavily defended bases and into the streets. Yesterday they came to him. Soon it was small arms as well as rocks that were being used and, though reports are unclear, with British officials denying using anything other than plastic baton rounds, it appears that rapid gunfights, as over as soon as they had begun, swept the rubbish-choked alleyways.

Morgue staff in Basra have confirmed that four dead locals admitted during the confused hours of yesterday afternoon and Iraqi security forces, known to be trigger happy, were also involved in attempts to contain the violence.

If the attack, which may have taken the toll of British soldiers in Iraq to 108, is indeed a missile strike the consequences could be serious. Most British casualties caused by hostile action in Basra have been the result of remotely detonated

roadside bombs, though 'hostile fire' that hit a fuel tank brought down a transport plane, killing 10 last year.

'We rely very heavily on helicopters in the south of Iraq to minimise travel by road and successful militant missile strike would be a very serious problem for us,' said one recently retired British senior army officer. 'It could push up casualties significantly.'

Britain has about 8,000 troops based in the mostly Shia Basra area, though southern Iraq has long been less violent than Baghdad and western Iraq tensions are still high. Senior British officials have privately blamed much of the anti-coalition agitation on Iranian government agents infiltrated from the neighbouring state.

The most recent incident comes at the beginning of the hot season when temperatures soar and the failure of the coalition to successfully provide electricity and water to millions of people in southern Iraq is resented more profoundly than ever.

As night fell yesterday, the situation had calmed and a curfew was in place. Nevertheless one analyst was prompted to comment: 'We can expect a hot summer, from every point of view.'

The UNHCR Summary of events in Basra for May 2006:

- Nine British soldiers were killed in Basrah during this month. Five were killed when a helicopter crashed after an apparent rocket attack and four others died in two different incidents with roadside bombs.52 In clashes between UK Forces and Shiite militia members, which erupted after the helicopter crash, five Iraqis were killed.
- A bomb went off at the home of the Basrah Chief of Police.
- A sheikh of the Garamsha tribe was killed by men in police uniform. The killing was blamed on provincial authorities and in an apparent act of revenge tribesmen attacked a police station outside Basrah and killed 10 officers.
- On 10 and 12 May, two Sunni clerics were killed in and near Basrah. On 26 May in Basrah, a Sunni Sheikh was killed reportedly on his way to lead prayers in the Al-Kawaz mosque in the Al-Qadimah quarter.



A youth runs away with a piece of metal armour from a burning British military vehicle after a roadside bomb attack which slightly wounded two British soldiers in Basra, Iraq Saturday, May 20, 2006. The soldiers were transported back to their base and required little medical attention, according to a British Army spokesman.

(AP Photo/Nabil al-Jurani): Source: cryptome.org/info/ik51/pict12.jpg

The following reports illustrate the severity of the disorder across Iraq by late May 2006.

Qais Al-Bashir of the Associated Press wrote on May 31st, 2006:

Latest bombing in Iraq kills 5 policemen; prime minister tries to calm restive Basra in the south

"A parked car packed with explosives hit a police patrol in the northern Iraqi city of Mosul on Wednesday, killing at least five policemen and wounding 14, including a senior officer, as violence continued unabated after one of the bloodiest days in recent weeks.

Iraqi Prime Minister Nouri al-Maliki, meanwhile, arrived in Basra in a bid to stem escalating violence in the southern city. Sectarian tensions have been worsening in the Shiite-dominated area, where Britain has about 8,000 soldiers and other countries also have troops.

Al-Maliki, who was meeting with religious leaders, city officials and others, said his trip was an effort to "heal the rift and find a solution for what caused the latest events in Basra."

Elsewhere, Jamal Kadhim Hassoun al-Zamili, former governor of Diwaniyah city

south of Baghdad, was killed in a drive-by shooting late Tuesday that also wounded two of his guards, police Capt. Ali Hussein said.

A bomb hidden in an air conditioner exploded in the mayor's office in Muqdadiyah, about 60 miles north of Baghdad, killing the mayor, Sheik Allaywi Farhan al-Dulaimi, a member of the Sunni Iraqi Islamic Party, and wounding three of his guards, police said. Provincial Gov. Raad Rashid al-Mula Jawad imposed a curfew on the city and deployed Iraqi army forces there.

Gunmen killed a Shiite muazzin, the man who calls for the five daily prayers, as he was leaving his house to go to the Imam Ali Mosque in southwestern Baghdad, Hussein said.

A roadside bomb also hit a joint U.S.-Iraqi patrol on the highway near the Dora Refinery in southern Baghdad and the area was blocked off, police Capt. Firas Geiti said. No casualties were immediately reported.

Another roadside bomb struck a Japanese-Australian patrol in northern Samawah, on the Euphrates River about 230 miles southeast of Baghdad, damaging the last vehicle of the convoy and slightly wounding an Iraqi man who was selling ice, the man told AP Television News.

At least 17 bodies were found in separate locations in Baghdad, many blindfolded and handcuffed, apparent victims of sectarian killings often blamed on militias.

The new violence came a day after car bombs targeting Shiite areas tore through a car dealership in southern Iraq and a bustling outdoor market north of Baghdad as attacks nationwide killed 54 people and wounded 120.

Iraqi officials also said Tuesday that a key terror suspect who allegedly confessed to hundreds of beheadings was captured in a raid that netted documents, cell phones and computers containing information on other wanted terrorists and Islamic extremist groups.

An Emirati diplomat held hostage in Iraq after being abducted more than two weeks ago was released without ransom, Emirati authorities said Tuesday. Naji Rashid al-Nuaimi, 28, the first secretary at the United Arab Emirates Embassy, was kidnapped by gunmen who shot and killed his Sudanese driver. It was unclear who had kidnapped him.

Tuesday's worst bombing hit the market as Iraqis were doing their evening shopping in the Shiite area of Husseiniyah, about 60 miles north of Baghdad. At least 25 people were killed and 65 were wounded, Interior Ministry spokesman Lt. Colonel Falah Al-Mohamedawi said.

That attack came hours after a car packed with explosives blew up at a dealership in the largely Shiite city of Hillah, about 60 miles south of Baghdad, killing at least 12 people and wounding 32, Capt. Muthana Khalid said.

A bomb hidden in a plastic bag also detonated outside a bakery in Baghdad, killing at least nine people and injuring 10, police Lt. Col. Falah al-Mohammedawi said.

Before Tuesday's violence, at least 4,066 Iraqis had been killed in war-related violence so far in 2006 and at least 4,469 wounded based on Associated Press reports, which may not be complete because the reporting process does not cover the entire country.

During May, at least 871 Iraqis have been killed, surpassing the 801 killed in April. The deadliest month this year for Iraqis has been March, with 1,038 killed and 1,155 wounded".



"The Queen's Dragoon Guards: HQ Squadron, Umm Qasr"

Artist David Rowlands Medium: Oil on Canvas

Staff and agency writers wrote in the Guardian on Wednesday 31 May 2006:

A State of emergency for Basra

"A state of emergency was today declared in British-controlled Basra by the Iraqi prime minister. Nuri al-Maliki, who vowed an "an iron fist" against gangs threatening security in the city, said he intended to stem rising violence between escalating Shia factions. The prime minister said security should come "first, second and third". The state of emergency will last for a month.

Basra has seen a dramatic increase in violence over the past year, and local police say almost 140 people have been killed this month. The previously relatively calm

relationship between the local population and the 9,000 British troops stationed in the city has also been shattered. Nine British soldiers, including two members of the Queen's Dragoon Guards who died in a roadside bombing on Sunday, have died since the start of May.

In an address to local officials broadcast live on state television, Mr Maliki, who was visiting the city, appealed for unity and promised to crack down on sectarian violence. He denounced a series of killings and kidnappings that Sunni religious leaders have blamed on Shia-run death squads, saying: "We will beat with an iron fist on the heads of gangs who are manipulating security."What is going on in this city, the city of martyrs and sacrifices? We will not let Basra keep bleeding with the existence of these gangs while there are full security forces in it."

The prime minister held talks with the governor of Basra province, Basra city officials, army officers, members of the main political parties and local residents.

Basra is in the grip of a struggle between rival Shia factions battling for a share of the power handed to Shias by the US after Saddam Hussein's Sunni-dominated government was toppled. The city's oil accounts for virtually all of Iraq's state revenues, making it a major prize for all parties.

One Shia faction has threatened to disrupt lucrative oil exports, and Mr Maliki has previously accused "criminal gangs" of holding the city's oil trade to ransom. Much of the trouble has been blamed on the influence of the radical Shia cleric Moqtada al-Sadr, who led two armed uprisings against occupying forces in 2004 and has been an outspoken critic of the invasion.

Mr Maliki's government, a coalition of Shia, Sunni and Kurdish parties, was approved by parliament earlier this month following five months of negotiations after Iraq's general elections in December."

The BBC Reported on Saturday, 3 June 2006 that:

Basra car bomb kills at least 28

"A car bomb has left at least 28 people dead and another 62 wounded in the southern Iraqi city of Basra.

Police said the explosion took place in the main market place in the old part of the port city. The blast came just days after Iraqi Prime Minister Nouri Maliki visited the city and declared a state of emergency to try to impose calm.

The premier has vowed to crack down on gangs in the city who he said were threatening the country's oil exports. A large number of people were shopping in the market at the time of the explosion, police said. Pools of blood and the charred remains of several vehicles were seen at the site of the blast where hundreds of onlookers gathered to watch the rescue efforts. It was one of the deadliest attacks

to hit the oil-rich city since the start of the US-led invasion in three years ago.

The latest bloodshed came just hours after a Russian diplomat was killed and four others kidnapped in the Iraqi capital, Baghdad. Officials said gunmen used cars to block a road in the western Mansour district before opening fire on the Russian diplomatic vehicle.

Iraqi police say they have found eight severed heads on a roadside near the town of Baquba, 60km (35 miles) north-east of Baghdad - one of the dead is identified as a local Sunni preacher. Militants open fire and throw grenades at a checkpoint in Baquba killing seven policemen and wounding another 10 people. Police find four bodies in different areas of Baghdad, all showing signs of torture. It was one of the deadliest attacks to hit the oil-rich city in three years."

The UNHCR Summary of events in Basra for June 2006:

- Gunmen attacked the home of the Basrah Deputy Governor injuring one of his guards.
- A car bomb exploded near a petrol station in Basrah City, killing at least 10 people.
- A suicide bomber blew himself up inside a home for the elderly, killing two and wounding three persons.
- The chairman of the AMS for the Southern Region, Dean of the Basrah Sunni religious school Imam Al-Hassan Al-Basri and Imam at the Al-Basra Al-Kabeer mosque was killed by unknown gunmen.
- Hundreds of followers of cleric Mahmoud Sarkhi Al-Hassani attacked the Iranian Consulate in Basrah after a Shiite cleric criticized Al-Hassani on Iranian television as a fake cleric and pawn of Israel.
- A Sunni Arab professor at the College of Chemistry in the University of Basrah was killed on 10 June. Another lecturer at the Basrah University was killed on 15 June. On 21 June gunmen killed the Dean of the Abdullah Bin Om Kalthoum School in Al-Zubayr during the final examinations. The dean was reported to have been killed in front of his students.
- A Sunni sheikh was assassinated while on his way to Al-Hasanain Mosque in the Al-Mishraq area of Basrah City.
- A car bomb in the main market place of Basrah City left at least 33 people dead and another 55 wounded.



Ned Parker reported in The Times on June 5th, 2006, following a patrol with members of Delta company in Basra, dodging the taunts and the missiles:

Daily attacks and abuse - the new reality for British troops

"In A dirt alley strewn with trash and puddles of black sewage an Iraqi teenager smiled at me, slicing his throat with his fingers, as a gang of more than 30 sulky adolescents chanted "Down with Britain" and "Long live the Mahdi Army".

"F*** off," a second teenager shouted at one of the 12 British officers in our foot patrol. Others yelled taunts of "RPG, RPG" — rocket-propelled grenade. As we walked on, the teenagers began crowding round the soldiers, who kept their assault rifles pointed at the rooftops in case of snipers.

After 15 minutes, with the mood growing steadily uglier, the patrol piled back into its vehicles, which was when the stone throwing began. Rocks bounced off the sides of the armoured jeeps. A hard mud clod smashed into my vehicle's sweltering confines as the patrol returned to base for a respite.

That was just a minor incident in one of Basra's deadliest weekends since the US-led invasion of Iraq three years ago. Increasingly, a city that was once the success story of post-Saddam Iraq resembles war-torn Baghdad. On Saturday a suicide car bomb tore apart a packed street market, killing 28 people. The attack, one of the worst yet in Iraq's second city, was seen by many as a pointed message from Basra's

Shia groups to Nuri Maliki, Iraq's Prime Minister, who last week declared a state of emergency.

Early yesterday the Shia-dominated police force opened fire on a Sunni mosque in the city. Up to 12 people were killed as the security forces and Sunnis disputed whether those in the mosque were armed or innocent civilians.

My foot patrol enjoyed only a brief respite before being called back into Basra's scalding 50C (122F) heat, amid rumours that Shia mobs were planning to attack Sunni mosques.

It is a far cry from the halcyon days after the invasion, when British forces could patrol without helmets or any ostentatious display of weapons. Now Basra is threatened by gang wars among its Shia factions and attacks on the city's dwindling Sunni community. Saturday's suicide bomb "was probably one of the groups here struggling for power, struggling for the ascendancy over control of Basra province. It was probably trying to send a message to the Prime Minister to basically keep your nose out," said Major Rob Yuill, who trains Basra's police.

"It's . . . drifting toward a situation like Bosnia," he went on, comparing the targeting of Basra's Sunni minority to the fierce ethnic conflict of the Balkans in the early 1990s. "We're stuck in the middle. We're trying to assist the Iraqi police and Army, but we get caught up in it," said Sergeant Lans Downe, 25, commenting on life on the frontline of Basra's social meltdown. Nine British soldiers were killed in 50 attacks in May.

Every time the men of Sergeant Downe's Delta Company go out in their Warrior armoured personnel carriers, they are tailed by cars or watch men on cell phones marking their movements and passing the information to someone farther down the road.

"You are constantly being watched. They put a name on where you are and what you are doing," said Sergeant Downe, from Bristol. "Every time you are out (the danger) is a constant. One moment civilians will ask you for water. The next they bomb you . . . It's worse than it was in Northern Ireland."

Whenever they cross over or under a bridge the troops brace themselves for an attack. The bombs are often undetectable, camouflaged in fibre glass, breeze blocks or paper maché rocks. "The more we take off the street, the more they make, "said Sergeant Downe.

Their platoon tries to avoid going out on Saturdays, because that is when the worst attacks happen. But rocks and breeze blocks are hurled at their vehicles almost daily. When they are sent to secure the scene of a bombing, the mobs, made up of teenagers, escalate to Molotov cocktails and homemade grenades.

There are only about 700 British troops actively patrolling the city of 1.5 million. To protect Basra they are banking on a police force that, according to Major Yuill, has

only “a small minority” of good cops.

The men in Delta Company admit that they do not have the eyes and ears to rein in the death squads and gangs that have caused Basra’s murder rate to skyrocket. “A lot of it happens behind the scenes. There are a lot of side streets. It happens in the shadows, in the places we don’t know about,” Sergeant Downe said.

“Basra is a large area. We’re a small force,” said Lance Corporal Gavin Wooten, 25, from Sheffield and another member of Delta Company. As the city gets rougher, fewer Iraqis want to work with the British troops. Delta Company has gone from having six or seven translators to just two.

“All the Islamic parties are killing the translators,” said one of the few who remain with the British, who goes by the name Jack. He lives on a British base and lists the names of at least four of his friends who have been killed”.

Events in July 2006

On July 12, 2006, Iraq took full control of the Muthanna province, marking the first time since the invasion that a province had been handed from foreign troops to the Iraqi government. In a joint statement, the U.S. ambassador Zalmay Khalilzad and the U.S. commander in Iraq, General George Casey, hailed it as a milestone in Iraq's capability to govern and protect itself as a "sovereign nation" and said handovers in other provinces will take place as conditions are achieved. "With this first transition of security responsibility, Muthanna demonstrates the progress Iraq is making toward self-governance", the statement said, adding that "Multi-National Forces will stand ready to provide assistance if needed." At the ceremony marking the event, Iraqi Prime Minister Nouri al-Maliki stated, "It is a great national day that will be registered in the history of Iraq. This step forward will bring happiness to all Iraqis." (Wikipedia)

The UNHCR Summary of events in Basra in July 2006:

- Assailants killed a mother and her three children in Basrah, the family had fled from Baghdad to escape threats that they had cooperated with the US Forces.
- A British soldier was killed and another one injured as dozens of troops arrested a leading member of the Mahdi army, which is believed to be behind the majority of attacks on MNF in Basrah.
- A Basrah Police source said that the director of a paper factory in Basrah and the head accountant were kidnapped by unknown men.
- On 13th July 2006, Iraqi authorities in Al Muthanna, South-East Iraq, officially took over the responsibility for security in their province at a ceremony in As Samawah (MoD).



On 14 August - two days after Basra had been swept by organised riots, with mobs protesting against the lack of fuel and electricity in the city – when British forces were shot at and returned fire, killing at least one Iraqi - Captain David Jones was travelling from Basra with his driver in a clearly marked military ambulance (pictured above left), conveying a soldier to the military hospital in the Shaibah logistics base outside the city. He never arrived. Shortly after 9am British time, the vehicle was struck by a roadside bomb, killing Captain Jones and injuring the other two soldiers, and badly damaging the vehicle (illustrated above).

Source: defenceoftherealm.blogspot.com/search

Events in August 2006

Wikipedia reports that "On August 24, 2006, Maj. Charlie Burbridge, a British military spokesman, said the last of 1,200 British troops left Camp Abu Naji, just outside Amarah in Iraq's southern Maysan province. Burbridge told Reuters that British troops leaving the base were preparing to head deep into the marshlands along the Iranian border, stating "We are repositioning our forces to focus on border areas and deal with reports of smuggling of weapons and improvised explosive devices from across the border."

The base had been a target for frequent mortar and rocket barrages since being set up in 2003, but Burbridge dismissed suggestions the British had been forced out of Amara while acknowledging the attacks had been one reason for the decision to withdraw, the second being that a static base did not fit with the new operation. "Abu Naji was a bulls-eye in the middle of a dartboard. The attacks were a nuisance and were a contributing factor in our planning", to quit the base, he said, adding "By no longer presenting a static target, we reduce the ability of the militias to strike us. We understand the militias in Maysan province are using this as an example that we have been pushed out of Abu

Naji, but that is not true. It was very rare for us to take casualties." Burbridge stated that Iraqi security forces would now be responsible for day-to-day security in Maysan but stressed that the British had not yet handed over complete control to them.

Muqtada al-Sadr called the departure the first expulsion of U.S.-led coalition forces from an Iraqi urban centre. A message from al-Sadr's office that played on car-mounted speakers throughout Amarah exclaimed "This is the first Iraqi city that has kicked out the occupier...We have to celebrate this occasion!" A crowd of as many as 5,000 people, including hundreds armed with AK-47 assault rifles, ransacked Camp Abu Naji immediately after the last British soldier had departed despite the presence of a 450-member Iraqi army brigade meant to guard the base. The looting, which lasted from about 10 a.m. to early evening, turned violent at about noon when individuals in the mob shot at the base. The Iraqi troops asked the province's governor for permission to return fire, a decision the British military highlighted as evidence of the security force's training.

"It demonstrated that they understand the importance of civilian primacy, that the government -- and not the military -- is in charge", Burbridge said in a phone interview with the Washington Post. Injuries were reported on both sides, but no one was killed. Burbridge attributed the looting to economic factors rather than malice, stating "The people of Amarah -- many of whom are extremely poor -- saw what they believed to be a bit of an Aladdin's cave inside." Residents of Amarah, however, told the Post that antipathy toward the British was strong. "The looters stole everything -- even the bricks...They almost levelled the whole base to the ground", said Ahmed Mohammed Abdul Latief, 20, a student at Maysan University".

The UNHCR Summary of events in Basra for August 2006:

- Gunmen killed a Colonel in the Facility Protection Services in Basrah.
- Gunmen killed two off-duty members of the Interior Ministry Intelligence Service in Basrah.
- The Secretary General of Thar Allah Islamic Party escaped an assassination attempt when two roadside bombs went off near his house in Basrah.
- Clashes broke out in Basrah City when members of the Bani Assad tribe attacked the Governor's office, believing provincial officials were behind the killing of their tribal leader. Fighting between ISF, British Forces, militias and tribesmen left at least four policemen dead.
- Gunmen killed an Iraqi Army Colonel on his way to work in Basrah.
- A British soldier was killed in a mortar attack on a MNF base in Basrah.

On 21st September 2006 Defence Secretary Mr Des Browne confirmed that the southern province of Dhi Qar had been handed over to the Iraqi people. Instability continued in Basra.

The BBC reported on Monday, 25th September 2006 that:

Senior militant 'killed in Iraq'

"British forces have killed a senior al-Qaeda fugitive in a raid on a house in the southern Iraqi city of Basra, security sources say.

Officials named the dead man as Omar al-Farouq, a top lieutenant of Osama Bin Laden in South East Asia. Farouq was captured in Indonesia in 2002 but escaped from a US military prison in Afghanistan last year. Security sources say although he was hiding in Basra, al-Qaeda was not known to be actively operating in the area.

British military spokesman Major Charlie Burbridge said Farouq, whom he called a "very, very significant man" had been tracked across Iraq to Basra. He said about 200 troops surrounded the house, from where they came under fire. A gun battle erupted and Farouq was killed in the exchange. Major Burbridge said there was apparently nobody else in the building and there were no further casualties".

Events in September 2006

This was an operation led by the Iraqi Security Forces and supported by British, Danish and other Multi-National Forces in southern Iraq. The operation began during the early hours of September 27th, 2006. It was aimed at rooting out corrupt police. Some 2,300 Iraqi army troops and 1,000 British soldiers took part in the operations with another 2,000 in close proximity, in preparation to handing over security of Basra to the Iraqi government.

The rebuilding element of the Operation was carried out by Iraqi engineers with "low level immediate impact projects", school repairs and infrastructure projects such as foot bridges, street cleaning and fixing of street lights, fixing power cables and improving water systems. Midterm programs included hospital repairs and renovation, and the distribution of educational materials. Long term civil programs included the restoration of the local farm plantations.

The aim was also to remove, to root out the corruption that has plagued the Iraqi police as Shi'ite militias have begun infiltrating them. Forces consisting of "transition teams" of Royal Military Police will be inserted into local police stations looking for those "unable or unwilling to perform their duties", the teams were to operate in each station for up to 30 days. During the operation there were numerous insurgent attacks on the British and other coalition forces that resulted in casualties.

While the operation was ongoing a bus carrying seventeen police trainers was stopped near Basra on October 29th, and all of the occupants kidnapped. All seventeen were found executed four hours later.

It was becoming clear that the objectives of Operation Sinbad could not be achieved, as the following report by Ghaith Abdul-Ahad in Basra on Saturday 14th October 2006 in The Guardian indicates:

The British officer said: 'We are now just another tribe'

"As the 2nd Battalion of the Royal Anglians prepared to set out on patrol through central Basra yesterday, risking mortar attack and possibly more, all the talk was of their boss's suggestion that they were making the situation worse.

General Sir Richard Dannatt's comments that the British military presence in southern Iraq "exacerbates the security problems" and that they should get out "sometime soon" was met with a mix of frustration and quiet agreement in the heavily fortified Palace compound, a former Saddam palace in southern Basra that now houses the consulate as well as 1,200 coalition troops.

"I can't believe they are saying these things," one embassy official said. "This whole thing is to do with politics and Tony Blair. It's not about what is happening on the ground here, but what is happening there."

Three and a half years after British forces, in the general's words, "effectively kicked the door in" to southern Iraq, many squaddies still believe they are making a difference, and that if they were to withdraw now there would be a messy collapse into open civil war.

The extent of the deterioration of the security situation in the south of Iraq, however, is unmistakable. Eighteen months ago, when I was last embedded in Basra, the British army still patrolled in berets and without flak jackets. Today they will only emerge in heavily armoured Warrior vehicles, wearing heavy-duty helmets with protective screens across their faces, and body armour to cover their shoulders and upper arms.

Where the army once was able to patrol around the city relatively freely, they now know there are certain parts of it where they will be vulnerable to attack. Patrols often involve a visit close to a Sunni mosque, just to reassure worshippers that the forces are there.

Part of the difficulty is identifying the enemy. Basra has become riddled with organised gangs, militias and death squads, and its police force is corrupt. According to senior coalition advisers, there are around 20 different security and police groups in the city, ranging from the directorate of education police to the justice police; the governor alone has 200 armed gunmen protecting him. Some of the police units are active in organised crime and have been infiltrated by militias, others work as death squads. There are also around a dozen religious militias.

"We are in a tribal society in Basra and we [the British army] are in effect one of these tribes," said Lt Col Simon Brown, commander of the 2nd Battalion. "As long as we are here the others will attack us because we are the most influential tribe. We cramp their style."

He can see the general's point. "There is so much poverty and frustration in the streets of Basra, as long as you are in the street, someone will shoot at you. We complicate the situation. We give the disaffected and frustrated a chance to empty their frustrations by shooting at us."

One recent episode illustrates this. A military base in Amara called Abu Naji had been held by the British for months, attracting heavy mortar attack. In late August it was handed to the Iraqi army; within 48 hours, according to the commander of the unit, everything on the base had been looted. The decision was taken to set up a mobile base in the desert, shifting position every 48 to 72 hours. Staying in one place to be shot at, it would seem, wasn't worth the trouble.

"We cannot substantially influence the situation. Our powers are diminishing," said a British civilian contractor attached to the British embassy. "The army is holding the ring and they are buying us and the Iraqis time, but the talk of the troops is misleading. There can't be a military solution to what is happening in Iraq."

In the sweltering back seat of a Warrior, sweat running down his face, 2nd Lt Matt Lamber said he couldn't afford to get distracted by the general's comments. "I try not to think of that. I try to look at the smaller picture of what we are doing, and enjoy the small victories on the ground, the bad guys we arrest."

Concerns about the direction or the British campaign were also increasingly voiced in the more right wing media, as for example, in this commentary on the Eureferendum Blog on Sunday, October 15, 2006:

Before defeat becomes a rout

"A defeatist attitude amongst British forces is now evident, witness the incident on 3 October when a British soldier was killed and another seriously injured after three mortar shells landed inside the Shaat al-Arab Hotel base in Basra. Rather than any determination to avenge colleagues, what was particularly chilling was the almost off-hand way that British Army spokesman, Major Charlie Burbridge, was cited as saying, "It is a major challenge to stop these sorts of attacks."

Yet, challenge though it might be, it is by no means impossible. Faced with the same problem, the US Marines have developed lightweight counter-mortar radar which can be used to detect incoming rounds and direct helicopters or other assets to deal with the terrorists.



Yet that is simply not an option for the British. Even if they had the radar, they have neither the helicopters nor the rapid armoured vehicles that they would need to combat this threat. Instead, they must take the casualties and hope that, in due course, it will all end.

What is perfectly illustrated by this example is that equipment (and manpower) inadequacies have a significant effect on the tactics adopted – for the very simple reason that certain options require certain equipment - and thence morale and capability. Lacking the necessary (much less desirable) equipment, tactics are often inferior, capabilities are limited and morale falls as a result.

But there is also a peculiarly British arrogance in this theatre where commanders have mistakenly believed that skills acquired in Belfast and other public order operations are necessarily transferable to Iraq, slowing down and sometimes completely inhibiting the development of more appropriate (and effective), theatre-specific tactics.

All of this means that the British Army in Iraq is the next best thing to a failing organisation. You do not need to be the Chief of General Staff to realise that its continued presence will serve only to exacerbate the security situation – and expose British troops to continued casualties. But that is the situation into which General Sir Richard Dannatt – as professional head of the Army (its chief uniformed bureaucrat) – has walked.

The degree to which the situation has deteriorated is well illustrated by BBC and this local report. With the British roundly having been accused of causing the chaos and the security decline in southern Iraq, especially Basra, by their leniency with the militias and their parties, no one believes the situation is recoverable. The British presence is simply no longer desired.

Knowing that his Army is not up to the job in Iraq and that the government is neither willing nor able to provide the men and material necessary for it to improve

its performance - even if that was possible - Dannatt's only option is withdrawal. And not only does he know this – the government knows it and agrees. Furthermore, the decision to withdraw was made some time ago (when, precisely, we do not know, as the policy change was never announced), so Dannatt's difficulties lie not with the government but elsewhere.

Arguably, Dannatt's central, professional problem is how to extract the Army from Iraq in one piece, without the catastrophic loss of morale that would accompany an enforced withdrawal or open defeat. His public problem, therefore, is how to dress a defeat up as – if not a victory – "a job well done", giving sufficient of a fig leaf for the Army to walk away without too much immediate loss of face.

If you thus read his statements, from a military point of view, what he is saying is nonsense. Troops being present, doing their job, will invite a hostile reaction. That is both necessary and welcome in the normal run of things as it is only by provoking the enemy can you bring him to battle and defeat him.

But Dannatt has no intention of even trying to defeat the enemy so, by declaring the obvious, he is simply attempting to create a public climate where withdrawal is seen, on the one hand, to be operationally desirable and, on the other, not as a retreat or a defeat. That is where the media have probably made their biggest error. Somehow, they seem to believe that Dannatt is talking through them to the politicians. They cannot seem to cope with the possibility that he is using them to talk to the wider media as well as the public.

If that is why a Chief of the Defence Staff is talking to the media then, despite the spluttering of Charles Moore and Matthew Parris, he will remain in office. It will show that he knows – as does the government – that he has to get his troops out before a defeat becomes a rout".

Michael Howard in Sulaymaniya and Ghaith Abdul-Ahad in Amara, reported in The Guardian, of Saturday 21st October 2006:

Growing problems in Al-Amara

'We have liberated Amara from the British. Basra next'

"Ten days ago I sat on a mattress on the floor of a Mahdi army safe house talking to Abu Mahdi, a slim 40-year-old, bearded former Arabic teacher and low level commander in the Shia militia. I had first encountered him in Najaf in August 2004, when the Mahdi army seized the holy city. Now he boasted of how his comrades were effectively in control of his home town, 200 miles south of Baghdad.

"As we have liberated Amara from the British, Basra is next," he said. "My men are everywhere, can you see the British anywhere? For the people in the street it's my men who rule the town."



Mortar attack on the base at Al amarrah

Yesterday morning the militia loyal to the Baghdad-based cleric Moqtada al-Sadr demonstrated that fact - and the acute dilemma facing British and American military planners - in the most dramatic fashion. Residents described how fighters stormed three police stations in this city of 900,000 and blew them up. Around 800 black-clad militiamen with Kalashnikov rifles and rocket-propelled grenades patrolled the streets in commandeered police vehicles as others set up road blocks on routes into the town.

At least 30 policemen and 20 civilians were killed and more than 59 injured in what has become one of the most serious challenges to the authority of the Iraqi prime minister, Nouri al-Maliki. One Amara resident, Hossam Hussein, said he saw hundreds of gunmen, dressed in the Mahdi army's trademark black uniforms, swarming the city's main streets. "For the last few days, you could smell the trouble building here," he said by phone. "Amara is a battleground between the gangs the militia and the politicians. And sometimes you don't know who is who."

Tensions had been rising since five men, including the brother of a local al-Mahdi militia leader, were allegedly abducted - some say arrested - by police on suspicion of involvement in the killing of a senior police intelligence officer, Qassim al-Tamimi, who was also a member of the rival Badr brigade. By yesterday British commanders were on standby to re-enter the city they pulled out of two months ago.

Events in Amara vividly illustrate the predicament faced by British troops in Iraq - and offer a glimpse of the country that will be left behind when they are gone. Both protagonists of yesterday's violence - the Badr brigade and the al-Mahdi militia - are controlled by groups who are nominal partners in the ruling Shia coalition in Baghdad. If the turf wars seen here spread throughout the south it could prove catastrophic for Mr Maliki's attempts to impose order.

The British base nearest to Amara, christened by someone with a keen sense of Iraqi history, was called Camp Abu Naji after the name given by Iraqis to their British colonial masters when they first invaded Iraq back in 1916.

For octogenarian Iraqis the name resonates with law and order, the good old times after the chaos of the Ottoman Empire. For younger generations it represents occupation, puppet governments in Baghdad, and stiff, tall, blond British officers ordering people around.

At one point, the old army base, fortified with sand barriers and concrete blast walls, was home to 1,300 British and coalition soldiers, tanks, armoured vehicles and three helicopters. Life was never easy. In summer, temperatures rose to 60C. On the outskirts and to the north in the city of Amara British troops fought fierce battles in April and August 2004 with the Mahdi Army.

Since the ceasefire two years ago, the militias have gradually taken over Amara through democratic elections and the use of force. The elections organised by the British produced a city council dominated by religious parties affiliated with militias. For more than a year now it has banned any official dealing with British army.

Meanwhile the militias rained down mortars on the camp daily and ambushed supply lines. According to Lt Col David La Bouchere, commander of the Queens Royal Hussars battle group, around 283 mortars were fired in from last March to August.

The camp needed constant resupplying by around 160 trucks every couple of weeks. "It was a very stupid situation, we needed six to seven companies of soldiers just to protect the base," said Lt Col La Bouchere. "The answer was to leave the base and depend on a more mobile force." When the British left two months ago, officers called it a tactical redeployment; the people of Amara called it a retreat.

The British army said it was handing the base to the Iraqi army which would take responsibility for securing the town. But within a few hours thousands of Iraqis had massed at the gates. Within 48 hours the camp had been looted. "We weren't fair to the Iraqi army, we only told them that we would hand them the base few hours earlier, so they were not prepared," explains Lt Col La Bouchere. "We couldn't trust them to tell them in advance that we were leaving."

After leaving Amara, Lt Col La Bouchere decided to fight the militias their way. Replacing their tanks with soft-topped Land Rovers, they roamed the desert around Amara, using different routes and changing their bases every few days. One of their main missions is to patrol the long Iran/Iraq border trying to intercept smugglers bringing in alleged weapons and improvised explosive devices.

But to militiamen, smugglers and border guards the Abu Naji forces have become little more than players in a soldiering game. "They come, stay for few hours and leave," said one of the guards, on top on a border post. "The smugglers, they only

work at night, they come on motorcycles, with no headlights."

Back in his desert camp, sitting on canvas chairs, in front of a big map of the province Lt Col La Bouchere, said: "If you can't get rid of the militia let them counter-balance each other, and they will wither away." Yesterday's events in Amara suggest that might be wishful thinking".

The political concerns about Al-Amarah continued to be voiced in the EuReferendum blog, as on Friday, October 27, 2006.

For the second time of late, we are seeing an account of the British Army operations in Maysan province, most recently by BBC's Newsnight and now by The Telegraph, which offers an uncritical account of what may in fact be an extraordinary example of displacement activity.

It is all very well the boys and girls pounding through the desert emulating latter-day David Stirlings in their cut-down Land Rovers, and trying out their cross-country driving skills (illustrated) – so avoiding insurgent attacks – but when this is at the price of deserting Al Amarah and leaving it to the tender mercies of the militias, one might think that a grown-up newspaper would question the use of resources.

Once again though, if we start to confront the issues, it is evident that the British Army simply does not have the equipment to do the job. Thus it is safer for it to play with its toys in the desert than to do a real job, equally safe in the knowledge that the media (much less the politicians) are not going to give it a hard time".

Developments in Basra

The security environment for British troops and diplomats in and around Basra itself continued to deteriorate.

Thomas Harding reported from Basra in The Daily Telegraph on 1st November 2006:

British to evacuate consulate in Basra after mortar attacks

"The British consulate in Basra will evacuate its heavily defended building in the next 24 hours over concerns for the safety of its staff. Despite a large British military presence at the headquarters in Basra Palace, a private security assessment has advised the consul general and her staff to leave the building after experiencing regular mortar attacks in the last two months.

The move will be seen as a huge blow to progress in Iraq and has infuriated senior military commanders. They say it sends a message to the insurgents that they are winning the battle in pushing the British out of the southern Iraqi capital, where several British soldiers have died and dozens have been injured.

The evacuation also comes halfway through Operation Sinbad, which has experienced some success in restoring control in Basra. The operation ends early next year but Basra will need massive investment by the Foreign Office and the Department for International Development to build on its successes.

Without the British officials' presence the stability of the city's fragile economy and political infrastructure could unravel, paving the way for Iranian-influenced militias to take control. There are about 200 staff at the impressive consulate building - formerly one of Saddam's palaces - including a team of bodyguards and ex-Gurkha guards. There were 12 full-time staff, some hand-picked by Tony Blair.

A handful have already left by helicopter and the rest are expected to go this week, some of them to Basra air station eight miles outside the city and the rest back to Britain. A skeleton staff will continue to man the building until it is deemed safe enough for the rest to return. A Foreign Office spokesman insisted last night that its officials were "not bailing out".

"This is a temporary measure as a response to increased mortar attacks," the spokesman said. "Core staff will remain at Basra Palace and the consulate will continue to maintain a full range of activities." The Foreign Office and DFID operation in southern Iraq has been criticised for the poor handling of economic and political regeneration in the area.

While £14 million has been spent on refurbishing the consulate, including a new portico, hardened roof defences and swimming pool, it has spent just £12.5 million on reconstruction that included repainting a tower in the city. The palace, which is surrounded by a 30ft blast wall and graced with manicured lawns, is in the same fortified compound as 800 British infantry.

Major Charlie Burbridge, the British military spokesman in Basra, said: "We believe very strongly that the Foreign Office and other agencies are critical to the long term solution in Iraq. We have worked closely in our shared endeavour and will continue to do so."

Thomas Harding followed up his Telegraph report with this on 3rd November 2006:

Southern Iraq approaches the tipping point

“Sheltering under a table on the dining room floor of Basra Palace with 200 soldiers, seconds after a mortar round had been 10ft away from penetrating the roof and causing carnage, it would have been difficult to argue that the British Army was making progress in Iraq. As I lay flat on the floor in my body armour, the infantry officer with whom I had been dining seconds earlier said he felt mightily sorry for the battalion that had just arrived to replace his unit.

From dawn till dusk we had been rocketed or mortared 15 times in Basra Palace –

one of the two main British barracks in the southern Iraq capital. There was the usual fear and thrill of coming under enemy fire but that was just for 12 hours and by the evening the novelty was beginning to tire.

It was the start of a six- month tour for the Royal Green Jackets and even in the first week their faces were beginning to look strained. But by the end of their tour next April it should become clear where Basra is going and whether the British investment of 120 lives and £4 billion has been worth it.

We are now approaching the tipping point in southern Iraq. The area will either sink into the grasp of insurgents and Iranian-sponsored militias or become a beacon of hope for the rest of the country. The Iraqi soldiers, terrorists, politicians and population are all uncertain which way up the penny will fall.

But the 7,200 British troops are making a final effort to secure the area to allow for the multi-billion dollar investment that Basra desperately needs to fulfil its potential of becoming the next Dubai. All is being gambled on the success of Operation Sinbad. At its conclusion next February or March the insurgents might be beaten and the local police purged of all rogue elements. The Iraqi army could evolve into a steady, well-armed force and the politicians could be more willing to shoulder problems they have neglected during three years of having everyone else to blame for them.

That scenario is the Army's ticket for its way out of Iraq and would justify the expenditure of blood and treasure. Already Basra air station is being developed to accommodate most of the 3,500 soldiers who will be left behind to garrison the area as a potent reserve for the Iraqi security forces. They will be there until at least 2010, military sources have indicated. But in the meantime they are coming under increasing attack and there appear to be two reasons why.

One is that Operation Sinbad has forced the insurgents on to the back foot. In response to losing their grip on the local population they have increased shelling on British barracks. They are reduced to this form of indirect attack because every time they have used RPGs, gunmen or fixed ambushes they have suffered numerous dead.

But the second answer to the increased violence is that the insurgents are in control. The co-ordinated attacks on British troops demonstrate this and if the Army leaves early next year the Iranian-backed insurgent stooges in the police and local government will take over. Southern Iraq could then vote to secede from the rest of the country and use its massive oil wealth to become a major pro-Iranian Shia state in the Middle East. The Sunni minority in southern Iraq would become vulnerable to a bloody ethnic cleansing campaign.

But there are a number of obstacles that stand in the way of what would be a disastrous scenario for the coalition forces and Iraq's future. The British-trained Iraqi army's 10th Division is finally about to receive the hardware that will make it

a formidable force when its first Humvees and armoured personnel carriers arrive this month.

There is also a template for what might happen when the British leave. In the volatile town of Amarah a few weeks after the last British soldier vacated the town eight of its police stations were attacked by Mahdi army militias loyal to the cleric Moqtada al-Sadr. But the Iraqi army stood firm and, with help from senior Iraqi politicians, was able to restore order. The withdrawal of troops from Amarah also meant there was no target for insurgents, and their propaganda campaign against the "foreign invaders" lost its focus.

While the military is doing all it can to stabilise Basra there is considerable worry among commanders over the planning for the post Operation Sinbad phase. The British consulate has evacuated its well-protected premises down to a skeleton staff. The offices of its provincial reconstruction team are a sea of empty desks and blank computers. Without the funding and planning that needs to happen now, the three-year British struggle in southern Iraq will have been for nothing.

The Army will lose increasing numbers of troops unwilling to return for a fifth or sixth tour, it will struggle to find enough troops for Afghanistan and the mortar attacks will continue with the likelihood that one day a round will find its devastating mark."



"Ambush at Kardalan Fields, 18th January 2007"

Artist David Rowlands Medium: Oil on Canvas

David Rowlands wrote:

"The Shatt Al Arab waterway was frequently used as a smuggling route for arms and ammunition, some of which were used against British troops serving in Basra. As well as

looking for weapons and ammunition, the river patrols served as a deterrent to smugglers who use this part of the waterway.

On 18th January 2007, a patrol by two Offshore Raiding Craft and two Rigid Raiding Craft of the Royal Marines was nearing the floating, burnt-out hulk of Saddam Hussein's yacht. Suddenly, the patrol was targeted by large explosions on each side of the river, followed by a hail of small arms fire. The Offshore Raiding Craft returned fire using their General Purpose Machine Guns, while the smaller craft turned around and sped back upriver".

Operation Telic 9 Nov 2006 – April 2007

Thomas Harding wrote in the Telegraph on 12th November 2006:

Iraqi terrorists 'are being supplied with arms smuggled from Iran'

""British forces are enduring daily bombardments of mortar bombs and rockets at their bases in Basra. The weapons are believed to be sponsored, funded and smuggled from Iran whose border is just over 10 miles from the southern Iraq capital.

Military sources have disclosed that there is "very, very strong intelligence" that elements inside Iran have continued to fund and support the gun-running. There is still no "concrete evidence", in part, it is claimed, because Iranian weapons are designed to be untraceable. "But we know when something goes bang there is an Iranian influence on that bomb," an intelligence official said.

In Basra, Iranian trucks could be seen going through customs with little hindrance from the Department of Border Enforcement. British soldiers claimed that when they appeared the guards would spring into action, stopping vehicles, but as soon as they left the customs officers waved the traffic through.

At Basra Palace barracks, there have been only four days in the past month in which it has not been attacked. The heavy shelling has claimed the lives of a British soldier and a civilian contractor in the last two months and has led to the British consulate, which is housed in the barracks, to withdraw all but a skeleton staff.

Lt Col Simon Browne, the commanding officer of 2 Battalion The Royal Anglians, who finished their tour of Iraq this week, said: "I'm sure there is outside influence here and it is from Iran. "It is clear the insurgents are getting resupply from somewhere. I would believe it comes from Iran, or at least comes from Iranian sources." While hundreds of rounds have landed on his troops, it would be nearly impossible to definitively prove that they had been manufactured in Iran because the country's arms industry has been "past masters" at hiding its fingerprints on weapons, according to an arms source who has connections with Teheran. They are superb at ensuring that, apart from the date of manufacture, there is no identification that can trace the armaments back to Iran."

He claimed that it was "unquestionably Teheran" that was supplying the weapons to insurgents, including the single and twin 107mm rocket launchers adapted from a Chinese design. To try to prevent the influx of weapons, the British have put out long-range patrols along the 300-mile border in Maysan province in an attempt to catch smugglers.

But the porous border, which includes thousands of miles of waterways where the Marsh Arabs live, has yet to yield a weapons cache that would point the finger at Iran's mullahs.

Senior military commanders said they would not be surprised if Iran wanted to influence Iraq as it is a predominantly Shia state with strong ties to the new Baghdad government.

Brigadier James Everard, the commander of 20 Armoured Brigade in Iraq, said that during operations, troops had come across weapons manufactured in Iran but that did not necessarily prove that Teheran was trying to destabilise the country. One would need "a doctorate in Iraqi politics" to understand the exact influence Iran has on its neighbour, he added.

American generals are particularly keen to stop the smuggling, which they say is responsible for providing insurgents with infrared triggers and new explosives that are capable of penetrating thick armour."

Thomas Harding and Nick Britten wrote in the Telegraph on 16th November 2006:

Iraq claims second British woman

“Staff Sergeant Sharron Elliott, 34, became the second British woman to die in action in Iraq since the conflict began in 2003 when she was killed in a bomb blast while on a boat patrol in the Shatt-al-Arab waterway in Basra on Remembrance Sunday.

The bomb, believed to be a home-made device, also killed Warrant Officer Lee Hopkins, 35, of the Royal Corps of Signals, who was married with a three-year-old son, and two Royal Marines, Marine Jason Hylton, 33, a divorced father of two and Corporal Ben Nowak, 27, who had been a promising young footballer. Three other service personnel were seriously injured in the attack, which brought the British death toll in Iraq since 2003 to 125.

S/Sgt Elliot had volunteered to do a full six-month tour after being asked to fill a job temporarily, the Ministry of Defence said yesterday.

It also emerged that the four troops killed in the river bombing on Sunday were on a "personnel move" from Basra Palace to another British base along the Shatt-al-Arab waterway in Basra because it was considered the safest form of transport.

Two servicewomen have previously died in Iraq. Flt Lt Sarah-Jayne Mulvihill, 32, an RAF officer, was killed when a Lynx helicopter was shot down in May and Denise Rose, 34, a staff sergeant in the Royal Military Police's Special Investigation Branch, committed suicide in Basra in October 2004.

The patrol of two rigid raider craft was going up-river to the British base at the Shatt-al-Arab hotel when the boats, together carrying 17 troops, were attacked as they went through the bridge, which is opened to river traffic only on Sundays.

Intelligence sources believe the insurgents, thought to be Shia, waited for the boats to pass before detonating the bomb by command wire or remote control.

"Every device has its makers' fingerprints on it and previous cases where terrorists have planted IEDs [improvised explosive devices] have resulted in people being lifted," an Army source in Basra said. We gather information from a variety of sources and then pay these people a visit on a subsequent operation."

Phil Sands wrote for the San Francisco Chronicle Foreign Service on Monday, November 20th, 2006 from Amman in Jordan:

Interpreters for British harried, killed

Suspicion centres on militias battling to control Basra and remove foreign troops: Iraqi interpreters working with the British army in Basra are being hunted down and killed, according to Iraqi police. At least 21 have been kidnapped and shot in head over the last month, their bodies dumped in different parts of the city. Another three are still missing. In a single mass killing, 17 interpreters were slain. No one has claimed responsibility for the attacks, but militia groups battling for control of the southern Iraqi province -- and opposed to the presence of foreign troops -- are widely suspected.

"This is not a general threat against Iraqi security forces -- interpreters are specifically being killed," an Iraqi police officer told The Chronicle by telephone from Basra, speaking on condition of anonymity because he is not authorized to talk to the press. "It has been happening at a low level for the last year, but the campaign is getting worse.

"First they get letters warning them to stop cooperating with the occupation forces, then they are killed. The interpreters are the major target now," he said. "Word spreads about who is working with the British -- neighbors, people in the street, police officers all see the interpreters. Their identities don't remain very secret and someone is going around trying to kill them, and they're succeeding."

Britain is America's main coalition partner in Iraq, currently providing 7,000 soldiers in the southern provinces -- down from a peak of more than 20,000 troops

in 2003. The British military employs almost 2,000 Iraqis, primarily as interpreters and for such menial tasks as cleaning military camps.

In central parts of the country, the threat of death has long been a problem for Iraqis working with U.S. units, although no figures have been made public about the numbers who have been killed. However, this is a more recent phenomenon in the comparatively quiet south.

"It used to be tolerable, but now everyone openly calls us traitors," said a 27-year-old interpreter who worked for the British at Camp Bucca, a U.S.-run prison camp. "When I leave the base, no one is there to protect me, and we all know we're being hunted. The militias say we are spies. All of us live in terror for our lives. I want to stop this work, but my family needs the money. As far as the militias are concerned, I have turned my back on Iraq. All interpreters are waiting to be killed, and in three months' time, we probably will have been," the interpreter said.

Tshasin Difaee, a 30-year-old former interpreter, said he quit after being threatened by the Mahdi Army, the militia tied to radical Shiite cleric Muqtada al-Sadr and accused of death-squad killings in Baghdad.

"They knew my name, and I got a call on my mobile phone and was told to leave my job or lose my head," he said. "I'm still scared they're going to come for me. They can come at any time," he said.

Other ex-interpreters -- including one who worked in 2003 for the 7th Armored Division known as the Desert Rats, for the then-going rate of $2 a day -- have been found shot dead. Interpreters are now paid closer to $30 a day, but the risks have gone up as well.

"This is targeting the interpreters and I'm sure more will be killed," the Basra police source said. "The British don't seem to pay much attention. An Iraqi who did some menial work in the Shatt al-Arab Hotel (a British army base) was killed the other day, and I'm certain they never even noticed. No one came to ask about him."

Various armed factions operate in Basra, joined by a complex web of alliances and enmity. British forces are trying to halt the rising power of militia groups linked to al-Sadr and the splinter Fadhila organization, which holds the governorship of Basra.

This effort -- code-named Operation Sinbad -- has not contained the violence, and death squads still act with apparent impunity. British army spokesman Major Charles Burbidge said intimidation against Iraqi employees had recently surged, but amounted to "criminal acts -- we don't necessarily see them as terrorist acts."

"Over the last week, a number of our locally employed civilians have received written threats -- notes pinned to their door -- and they've been shouted at and threatened in the street," he said. "We take the safety of our civilians extremely seriously. We advise them on security matters, like not setting regular patterns and

making sure they go home before it gets dark. We are aware there are people here determined to see us leave, and they are prepared to hit soft targets in order to make that happen."

Burbidge said he knew of the 17 slain interpreters, but added only one working directly for British forces had been killed within the last month. Iraqi sources say at least four more, including ex-interpreters, have been slain.

Iraqis also disagree with the British about the general level of violence that is occurring in Basra. The British insist two bodies on average are found daily, but Iraqi police say the number is closer to double that, with an average of "two to three kidnappings" daily. Parts of Basra, including the university district of Qarma, are so dangerous that they are considered by Iraqi security forces to be no-go areas, according to police sources.

Hakim al-Meyarhe, president of the Security Council in the elected Basra Governing Council, said British soldiers were inciting insurgent attacks. Also speaking to The Chronicle by telephone from Basra, he said the solution was for troops to withdraw, something he insisted should happen by next summer.

"Of course we would like the British army to leave Basra," he said. "They'll have to do it step-by-step, but I think six to nine months is enough for them to do that. We'd like to see them gone in nine months -- they should have left Iraq completely by then. "British forces in Basra have made a lot of mistakes, and they continue to do so. They're arresting people inappropriately, storming into houses at night; raiding homes and families . . .

"They randomly arrest people without any permission from the government. These mistakes make people reactive negatively and violently. That's the reason for the mortar attacks we have here," al-Meyarhe said. "They are specifically directed against the British army interests, they're not attacks on the people of Basra."

The British and Iraqi governments both have refused to set a specific deadline for troop withdrawal, insisting it will happen when local security forces are capable of operating alone effectively. But last month, British Chief of Staff Gen. Sir Richard Dannatt admitted the presence of foreign troops is a cause for some violence in Iraq -- remarks that sparked a furor in London".

On 20th December 2006, Defence Secretary Mr Des Browne confirmed the handover of An-Najaf province in Iraq.

A police chief from the Basra Serious Crime Unit was arrested on December 22, along with six other officers. It is thought that he led the death squad responsible for the killing of the trainers. On December 25th, 2006 British forces backed up by the Iraqi army attacked the headquarters of the Serious Crime Unit in Basra after intelligence was received that corrupt police officers were preparing to execute all 127 prisoners kept there. The British destroyed the building killing seven gunmen. All of the prisoners were rescued, some reportedly showing signs of torture."

The BBC reported on Tuesday, 26th December 2006 that British officials are to explain to the authorities in Basra why coalition troops demolished the headquarters of the city's Serious Crime Unit:

Discussions to follow Basra raid

UK forces say Iraqis are still supporting them despite anger over the raid on a police station, and discussions will follow. A British officer said the destruction of the base has made Basra safer. Mohammed al Abadi, head of the city's council, had said the raid was illegal and threatened to stop co-operation.

He said local officials had not been informed of the operation and that it violated earlier agreements to move the prisoners without military action. Basra police commander Brigadier General Ali Ibrahim said: "This storming operation is illegal and violates human rights."We think that what the operation sought to achieve is very simple and could have been settled by Iraqi troops."

But the UK Foreign Office said there had been no formal announcement to withdraw co-operation with the British. A spokesman conceded some elements of the council were unhappy but said the UK and the Iraqi government would explain the reasons for them.

Major Charles Burbridge, speaking on behalf of the British Army in Basra, said the 127 prisoners rescued from Jamiat police station had been tortured. The raid had the backing of regional and national Iraqi politicians. "We still believe that we've done the right thing and I think it's important to acknowledge the fact that what we do here is never going to be overwhelmingly popular and if we don't get any criticism then this isn't democracy."

British forces raided and demolished the unit's headquarters, and rescued prisoners they feared would be killed. A Ministry of Defence spokesman said hundreds of seized files and computers were taken as evidence. The raid came three days after seven Iraqi officers were arrested by UK troops on suspicion of corruption and leading a death squad at the unit".

On January 28th, 2007, acting on intelligence, British soldiers conducted dawn raids in Az Zubayr, near Basra. Ammunition, light rockets, bomb-making paraphernalia, radio equipment and timer units were discovered at a house. Around 500 mortar rounds were later seized from a compound where troops had earlier spotted men transferring weapons into two vehicles. Up to five militants were captured.

On February 18th, 2007, the operation ended, the same day when British Prime Minister Tony Blair stated in a televised address that in the coming months 3,000 of the more than 7,000 British troops will be withdrawn from Iraq. By July 1,500 troops were withdrawn

On 20th February 2007 The MoD reported that the Iraqi Army division based in Basra had transferred from Coalition command, and that it was taking its orders direct from

an Iraqi headquarters in Baghdad. On 20th March 2007 The first coalition forces base, the Old State Building in Basra City, was handed over to the Iraqi Army.

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Blood, Heat + Dust: Second Edition

Operation Telic and the British Medical Deployment to the Gulf 2003 -2009

Appendix to Chapter 7:

Transcript of BBC Panorama Programme: Reporter: Jane Corbin



RECORDED FROM TRANSMISSION:
BBC ONE on 10:12:2007

JEREMY VINE: Good evening, I'm Jeremy Vine and this is Panorama. What's the truth about the end of our occupation of Basra? Was it really an orderly withdrawal, or were we driven out? And what was the price we paid to end the body count?

When the British Army drove out of Basra in September journalists were not invited to witness the end of our presence there, too dangerous in more ways than one. So it was left to the military and the politicians to write the script: "we went when we were ready" that was the message. Jane Corbin has reported from Iraq for Panorama since the invasion. The truth, she says, is rather different.

JANE CORBIN: An airbase in the desert on the edge of Basra city, Britain's last foothold in Southern Iraq. Any day now they'll formally hand over the security brief in this province to the Iraqis. Only four and a half thousand troops will be here by Christmas, a fraction of the forty-six thousand that invaded Iraq. There's a feeling of an army drawing down and in on itself. The enemy Shia militias are still out there. They remind the soldiers and me of that several times a week with attacks on the base. Powerful guns still target incoming missiles, but the truth is the British Army bowed out of Basra months ago.

Attacks on British forces here in Basra have dropped dramatically in recent weeks. But earlier this summer, British soldiers were involved in some of the bloodiest street fighting they'd experienced in decades. It's gone almost unnoticed until now.

SOLDIER: (Street fighting, machine gun fire) They're moving up on us... they're moving up on us!

CORBIN: May 21st a convoy was ambushed by gunmen in a warren of streets. These soldiers had been in Iraq for just four days. A passenger in their armoured vehicle had a camera, another a mobile phone. They filmed Lance Corporal Kevin Bagling and his mates from the Rifles Regiment fighting for their lives.

It looks like Mayhem. What did it feel like to be in the middle of it all?

Lance Corporal KEVIN BAGLING, 4th Battalion, The Rifles

Praying that we was coming back home. Didn't know what to expect really. But then most of it like all happened so quickly. It escalated so quickly. But you could tell it was going to happen because all the women and children was getting off the streets.

CORBIN: And at a certain point you got a bit close to comfort. What happened?

BAGLING: The corporal that was next to me he was firing rounds and the empty cases were going down my back. (laugh) and it hurt!

CORBIN: This skirmish - known as "Red Ten" in army slang - went on for 90 minutes. Temperatures inside some of the armoured vehicles rose to over 50 degrees. That's how tough it got for troops to fight in Basra this summer.

BAGLING: All the warriors were going down with heat casualties, so we had to get them out the area to like help 'em out.

CORBIN: What about the heat?

BAGLING: It was boiling. We went through six boxes of water in an hour and a half.

CORBIN: Six boxes of water?!

BAGLING: Yeah, it was mad. It was so hot. But you had to keep going up and down very fast or you'd be hydrated.

CORBIN: The Red Ten crew survived amazingly without serious injury and fought their way out of the ambush. But when they got back to their base the Lance Corporal received some terrible news.

What did you discover then in terms of the casualties and who they were?

BAGLING: My cousin died in small arm fire, he got shot in the head. But we didn't know nothing about this. One of the lads told me that he'd died. It was a bad experience like. You have to put it out your mind really when you're over here. You can't really get emotional over here because you have a job to do.

CORBIN: Kevin's cousin, Corporal Jeremy Brookes was one of eleven soldiers from the Rifles who were to die in operations in Basra this year. I met up with Kevin and Jeremy's battalion outside Basra on their last mission before their tour ended. The Iraq war was unpopular back home, embarrassing even. There was almost no coverage of what the soldiers went through last summer as they fought desperately to hang on in Basra city.

Lt Col PATRICK SANDERS, 4th Battalion, The Rifles

It was a difficult time. We were involved in some pretty intense fighting, perhaps some of the most intense urban fighting that we've seen in recent years and certainly in Iraq, and we lost a lot of good people, so close friends.

CORBIN: So that intense fighting was caused by the militias basically inside Basra.

SANDERS: Yes it was. I think it's fair to say that about 90% of the violence that was going on in Basra at the time was directed against us and what you saw was the Jaish-i-Mahdi, one of the Shia militias, effectively trying to drive us out of Basra.

CORBIN: The Shia militias had already watched as British forces withdrew from three of the four provinces they once occupied. By the spring troops were left in just two bases in Basra: the airbase, known as "the Cob" in military jargon, and 12 miles away by road Saddam Hussein's old palace on the Shatt al-Arab waterway in the heart of the city, a huge complex, bigger than 200 football pitches. I'd been to the palace when the British made it their headquarters just after the invasion.

Basra, April 2003

CORBIN: The Seventh Armoured Brigade has now moved in to Saddam Hussein's old summer palace in Basra and taken over.

Back in 2003 the people of Basra welcomed the British presence. The Commander, Graham Binns, had high hopes for Basra's future. Now Major General Binns is back, his job to manage the British disengagement and put the best face on it. Maj General GRAHAM BINNS Commander, British Forces in Iraq What I think are the undisputed facts is that we liberated a country quicker than we thought we would. The country then collapsed quicker than we were imagining because all the state institutions were removed. And then we didn't rebuilt it as quickly as Iraqis expected and we turned from an army of liberation into an army of occupation quicker than we thought and some people have chosen to fight us.

2005
[Film footage]

CORBIN: When Saddam's regime collapsed powerful Shia militias filled the vacuum in the South. They soon turned on the British. The Mahdi Army emerged as the dominant force. They were responsible for most of the British deaths, as they boasted in their propaganda movies. Their aim was to force the British out of Basra and take control of the city. The leader of the Mahdi Army in Basra is Sheikh Bahadli, seen here in white. The British military call him: "Sheikh Behaving Badly." I couldn't get to him myself, it wasn't safe, but he spoke to Panorama through an intermediary. Did his militia force the British out?

Sheikh ABDUL-SATTAR AL-BAHADLI, Mahdi Army militia

Yes, the attacks which were openly mounted by the heroes of the Mahdi Army, the popular resistance to fight the British occupiers, were a major cause of their withdrawal, even the British will acknowledge this.

CORBIN: The Mahdi Army, who also filmed themselves, had simple tactics. They siege the palace from the surrounding streets and prevent vital supplies from getting through to the British.

SOLDIER: That was miles away. Here it goes again (loud explosion).

CORBIN: A thousand people were living in the palace at the mercy of mortars and rockets. Soldiers recorded the incessant attacks with phones and cameras. Sometimes there were more than 70 hits in one day. This one clip shot by a soldier shows ten mortar rounds falling in less than two minutes.

Lance Corporal JAY COX, 4th Battalion, The Rifles

The militia were very, very good at calling in, in direct fight and they had our accommodation blocks, the cookhouse, Battalion Headquarters picked out as targets, so rounds would regularly hit your accommodation. So it was quite lucky that Saddam Hussein had built a palace that would withstand attack.

BAGLING: It's like an alarm clock some days. Like 6 o'clock in the morning, guaranteed, scoff times in the afternoon, scoff times at night. Guaranteed that they'd fire on us.

CORBIN: The palace's defences against the mortars didn't always work, and rockets seemed to come from nowhere. The attacks were relentless, dragging on for weeks, and somehow, under siege, the soldiers tried to keep to their daily routine. These young officers filmed themselves trying to get to the gym one day. Outside the palace, the city erupted in gunfire, but for once it wasn't aimed at them. Iraq's football team had won the Asia Cup and every citizen of Basra, it seemed, was out celebrating.

SOLDIER: Welcome to Basra Palace. (dry jest)

CORBIN: But there weren't many light moments. The militias kept up the pressure. The Cob, the main British base at the airport was also under sustained fire. Buildings were destroyed, people were killed. But soldiers from the airbase continued to provide a vital lifeline, supplies so that troops at the palace could hang on in there. The Royal Welsh Regiment fought their way into and out of the city with vital water, food and ammunition.

Lt Col JAMES SWIFT, 2nd Battalion, The Royal Welsh

We faced over 70 roadside bombs as a battle group in our first few months here. It would be not unusual for one trip into Basra to be confronted by a dozen roadside bombs, rocket propelled grenades, small arms fire, and the guys got on with the threat and got on with the mission.

CORBIN: A camera caught the actual moment when a roadside bomb or IED hit a British Warrior. That's what happened another day to Corporal Richard Paske, he survived though three comrades would die on re-supply runs.

Corporal RICHARD PASKE, 2nd Battalion, The Royal Welsh

The actual IED actually ?? raid outside ??. It knocked the gunner out, I think he was out unconscious for a couple of seconds, I was unconscious for a couple of seconds. And then obviously when we regained consciousness we went through our standard operational procedures to alert the other call signs that we were in distress. And when they came to us with aid, we sorted ourselves out, we fired back in and cracked on. Four hours later that's when myself and a gunner got took into the hospital.

CORBIN: Getting the critically wounded out of the centre of Basra was far harder. Using his rifle night sight a soldier filmed his unit holed up in the police headquarters keeping the militias at bay. One of the British took a direct mortar hit, only a helicopter evacuation under fire could save his life.

Lance Corporal JAY COX, 4TH Battalion, The Rifles

Yeah he filmed our pilot who actually pulled it in and kept the helicopter steady on the ground. But at that stage about six mortars came into the actual compound of the police headquarters. We did the changeover as quickly as possible and the helicopter lifted bringing Stephen back to the Cob and thus saving his life.

CORBIN: Lance Corporal Bagling who'd survived the Red Ten attack in May wasn't so lucky in June. As the militias intensified their attacks on the palace he was hit by a rocket propelled grenade.

Lance Corporal KEVIN BAGLING, 4th Battalion, The Rifles

I didn't really feel it, it was just like a scratching sensation, and I touched my neck and I just felt the blood, like. So I looked around and I said to all the lads: "I've been hit." But then I returned fire some more and went back into camp. We didn't realise how serious the wound was until we got back here and seen all the shrapnel pieces in my neck.

CORBIN: How many pieces were there?

BAGLING: Fifty-two.

CORBIN: Fifty-two pieces in your neck?!

BAGLING: Yeah, one was touching my jugular so...

CORBIN: And you were jolting in a Warrior all the way back to base with it just millimetres away from your jugular.

BAGLING: Yeah. (laughs)

CORBIN: Could have been a very different ending.

BAGLING: I know.

SOLDIER 2: Mate, that was close, I'm shaking.

Colleague 2: incoming! (Loud explosion)

SOLDIER 1: What did I hit Jacks?

CORBIN: Army mechanics filmed their narrow escape as mortars rained down. It was becoming clear that an even more formidable enemy than local militias was behind these attacks - Iran.

SOLDIER: Take cover!!! (loud explosion)

CORBIN: According to the British, Iran had been supplying the militias with weapons for several years. Three key organisers for the Iranians have been captured inside the city.

Lt Col PATRICK SANDERS, 4th Battalion, The Rifles

At that time there's no doubt that the Iranian support for the militias was pretty strong. They were providing weapons, they were providing ammunition, they were providing what we call 'lethal aid' things like very sophisticated roadside bombs, the sort of technology that you couldn't just knock up in a shack downtown in Basra. And they were providing training as well.

CORBIN: Did you know they were actually there providing hands on training? Did you have evidence of that?

SANDERS: I think most of the training took place in Iran, but we certainly received a lot of intelligence reports of Iranians coming to Basra, and towards the later stages when perhaps the militias themselves were becoming less enthusiastic about taking us on because of the losses they were suffering, then we started to see mortar teams speaking Farsi downtown in Basra itself.

CORBIN: In fact Iranian-speaking mortar crews operating in the city firing at British forces. Effectively there was a standoff between us and Iran here in Basra.

RICHARD JONES, British Consul General, Basra

Yeah, but that doesn't alter the fact that we decided our... we took our policy decisions according to our policy and not according to any particular pressure or any particular violence that was shown against us.

CORBIN: The Iranian government didn't respond when we asked if they were involved. It's clear though that UK forces, especially as their numbers reduce, remain vulnerable to Iran in the present political climate. As the battle for the palace reached its climax, the British were taking casualties but so were the militias. Posters of their so-called martyrs appeared around the city. More than 70 were confirmed killed over the summer, far more probably died. Civilians were caught in the middle. Local TV captured the damage. The militias' mortars were falling short and British guns and US helicopters targeted the Mahdi Army in the city. No one has reliable figures for civilian casualties but they mounted as the summer wore on. The British position inside Basra palace was becoming untenable. They needed a way out without losing more lives. In July a fledgling Iraqi army division began taking over security from the British. Baghdad sent General Mohan, the new Security Tsar, to Basra. He had a blunt message for his British friends. They had to go - now!

Maj Gen MOHAN AL-FIRAIJI, Basra Security Chief

The exit of British forces from the palace would provide an opportunity for the bombing against civilians to stop and would limit civilian casualties. And we also wanted to give the militias a chance, those who were carrying weapons under the pretext of fighting the occupiers. Now that they have left, why are you still resorting to arms?

Lt Col PATRICK SANDERS, 4th Battalion, The Rifles

They were telling us that we were part of the problem, and that they could, if we worked with them, deliver security and stability in Basra, and we took that advice, it's worth listening to the locals.

CORBIN: General Mohan was seen as a trusted intermediary by both the Shia militias and the British. Secret negotiations began for a ceasefire which would allow the British to withdraw from the palace without coming under fire, but the price exacted by the militias would prove uncomfortable.

AL-FIRAIJI: There was dialogue with some of the militia leaders, those who believed in peace and the rejection of violence, and they convinced their men that a new phase of peace must reign in Basra.

CORBIN: Do you know the details of this deal?

AL-FIRAIJI: The deal was simple, the Mahdi Army had to stop bombing British forces, and the British Army would release all Mahdi Army prisoners in its custody.

CORBIN: Those militia prisoners had been hard won by the British over the months, the fruit of carefully planned strike operations against key insurgents. The army's combat camera team filmed the night raids. One raid netted a man linked to Basra's notorious death squads involved in torturing and killing local people.

Was the guy you were looking for there? Did you grab him?

Corporal ANDY ROLFE, 4th Battalion, The Rifles

The bloke was inside the house. We had good intelligence. He was actually hiding on the roof in a wall bowser. Actually screws himself into a small hole and hid on there.

CORBIN: But you got him.

ROLFE: Yeah, we got him.

CORBIN: And this was a pretty big fish, as far as you're concerned.

ROLFE: He was a member of his family that was part of a death squad.

CORBIN: But by late summer, many of the prisoners they had taken, held on the airbase, became chips to bargain with the Mahdi Army. The top brass don't want to talk about the deal they made, perhaps because it involved negotiations with a militia that killed dozens of our soldiers.

You did do a deal with them.

Major General GRAHAM BINNS, Commander, British forces in Iraq

Well I'm not going to discuss the nature of those talks but I'm... you know, I've always said that we would talk to anyone who had the interests of Iraq and its security and prosperity in mind.

CORBIN: But we've discovered the details of the secret deal. We even witnessed the release of some prisoners as part of it. Scores of Mahdi vehicles turned up at the British airbase while we were there to pick up some of their freed men. All prisoners had to sign a paper promising not to attack British or Iraqi forces before being released. It's part of a wider Mahdi army ceasefire. They say they'll disarm and become part of the political process. Up to 85 men are being released over time though many of them, the British government admits, are an imperative threat to security.

This is basically doing a deal with the militias. The British did a deal with the militias who are killing British soldiers.

RICHARD JONES, British Consul General, Basra

Well as I say, I don't think the word 'deal' is right, and it's not really my place to get into the question of detainee releases because that's not my province, but...

CORBIN: Was it a political deal or a military deal?

JONES: It was....

CORBIN: Or 'decision' rather?

JONES: The decisions are decisions that are taken by the military and there is a clear process agreed with the Iraqi government of reviewing the situation of people that are held in our detention facilities, and that process resulted in releases.

Ministry of Defence footage, September 2007

CORBIN: Once the ceasefire and prisoner exchange had begun, the British were able to hand over the palace to Iraqi security forces. But Whitehall was nervous the media would present it as a defeat. So the PR strategy was to ban the press from the ceremony. The only pictures were taken by the military themselves. The ceasefire held. In September the soldiers were finally able to leave the palace without a shot being fired.

As you went out with the flags flying what did you think?

Corporal JAY COX, 4th Battalion, The Rifles

Try to be British at the end of the day. I think that we made our mark on Basra. To be honest, I think Basra is probably a better place, and although the militias are still there, they are a lot fewer in number than when we first arrived here in May.

CORBIN: For their part the militias didn't want to acknowledge they'd done a deal either. They claimed they'd defeated the British militarily.

Sheikh ABDUL SATTAR AL-BAHADLI, Mahdi Army militia

Our hard-hitting and concentrated attacks led to the speed of the British exit from the city centre and main palace. They say that the withdrawal was their choice and policy - No! If the matter had been left up to them, if it was in their hands, things wouldn't have been as simple as that. They would have stayed for years and years until they'd sucked all of Iraq's resources dry.

Lt Col PATRICK SANDERS 4th Battalion, The Rifles

Does this look like a defeated army? No, it's complete bollocks. We've fought hard over the last 3½ months. We could have stayed for as long as we wanted to. They threw everything they had at us and we left because it was the right thing to do. Arguably the peace and quiet that we're seeing in Basra at the moment is because we fought them at the negotiating table.

CORBIN: However it was achieved, the peace and quiet is giving British forces a chance to get on with Operation Stonehenge, reinforcing their quarters at the airbase. This doesn't look like an army leaving any time soon. The base, close to the border with Iran, is a vital asset. Our American allies won't want to lose it. The British Army is moving into over watch, their focus on training local forces to replace them. They say they'll only go back into Basra if asked. But the Iraqi general is not convinced they'd even come then.

If you have problems with the militias, if you fail to do the job you came to do, will you call the British back into the city to help you?

Maj Gen MOHAN AL-FIRAIJI, Basra Security Chief

The question is, are British forces ready to provide this help?

CORBIN: What do you think?

AL-FIRAIJI: I don't think so.

CORBIN: Why?

AL-FIRAIJI: The British military have restricted their mission in Basra and our allies say it openly, that their central mission will now be limited to the area of training and not fighting the militias.

CORBIN: The Prime Minister has announced troop numbers will fall to 2_ thousand next spring, yet the government has admitted that is not enough for anything other than self-protection. It raises the question of what exactly Britain's future role here will be. For Rifles who fought the battle of Basra palace and lost 11 men spent their last days in Iraq preparing for their memorials.

SANDERS: There's a section we're trying to do for the dead so you've got 11 there, we all have pictures of ten of them.

CORBIN: This year 32 British soldiers died in Basra. Not a single one has been killed in the city since the deal was struck with the Mahdi army four months ago. The memorial wall at the airbase commemorates the 173 British military deaths since the war began. If negotiation and withdrawal were ultimately the way out for the British Army, many will ask why it couldn't have happened sooner, saving lives.

Over 170 British lives lost here in Iraq and a war which started being unpopular with the public and has become even more so. Do you think it's going to be judged a success or failure what you've done here?

Maj Gen GRAHAM BINNS, Commander, British forces in Iraq

Well I think success or failure will be judged by others in the future, and I think those who look for success or failure in such star terms simply don't understand the nature of modern conflict.

CORBIN: With the British gone from the city, next week I'll be investigating the legacy for the people of Basra. The Iraqi Army and police are still weak. the Mahdi Army all powerful. It's a city where women are murdered for being inappropriately dressed; a place where torture and corruption are rife. We'll hear from the police chief who is standing up to the extremists, but with seven attempts to kill him so far, can he survive?

JEREMY VINE: And that's next week. Now there's uncut footage shot by soldiers on our website if you want to see more, as well as some of Jane's other films from Iraq.

Chapter 7 Transcript Resources and References

news.bbc.co.uk/1/hi/programmes/panorama/7139026.stm

This BBC transcript was typed from a transcription unit recording and not copied from an original script: because of the possibility of mis-hearing and the difficulty, in some cases of identifying individual speakers, the BBC cannot vouch for its accuracy.

Blood, Heat + Dust: Second Edition

Operation Telic and the British Medical Deployment to the Gulf 2003 -2009

Chapter 8:

History of the UK military campaign Operation Telic Phase 10 – 13



Painting: *Operation Telic 10. The UK Logistic Battalion*

Artist David Rowlands Medium: Oil on Canvas

Regarding the painting "Operation Telic 10. The UK Logistic Battalion" on the previous page, David Rowlands records that;

"June-November 2007: Operation Telic 10 took place during a particularly challenging and dangerous time in Basra. There were no safe or rear areas. The logistic hub at Basra Air Station took continuous indirect fire and all road convoys were subject to various improvised explosive devices and direct fire attacks. The United Kingdom Logistic Battalion's role was to provide 2nd Line logistic and equipment support to British Forces operating in south-eastern Iraq. The Battalion's responsibilities included force protection of the daily sustainment convoys that operated along a high threat route between Kuwait and Basra Air Station.

3 Logistic Support Regiment RLC formed the core of the Logistic Battalion, which also included elements from 6 Battalion REME (3 ES Company), 6 Supply Regiment RLC, 7 Transport Regiment RLC, 9 Supply Regiment RLC, 11 EOD Regiment RLC, 29 Movements and Postal Courier Regiment RLC, and The Welsh Transport Regiment RLC (Volunteers).

Notably, during the first 3 months of the tour, the UK Logistic Battalion was central to sustaining the 4th RIFLES Battlegroup in Basra Palace and British force elements bastioned in the Provincial Joint Co-ordination Centre located in the heart of the city. The Logistic Battalion was also key to successfully relocating the 4th RIFLES Battlegroup from Basra Palace to Basra Air Station, an operation that lasted 3 months and which culminated with the final extraction in September 2007.

During the second half of its deployment in Iraq, the Battalion contributed significantly to establishing the Kuwait Support Facility at Camp Buehring, during which it conducted the largest operational road move of stores since the invasion of Iraq in 2003. It supported numerous battle group interdiction operations on the northern flank of the Divisional Area of Operations. This painting serves as a tribute to the officers and soldiers of the UK Logistic Battalion for their courage, fortitude and outstanding achievements on Operation Telic 10".

Synopsis of Operation Telic 10-13

By early 2007, plans were in place and announced for the further withdrawal and UK force reduction, concurrent with the progressive handover of the southern provinces and bases within Basra. In April, Shaibah was handed over to the Iraqis and UK forces relocated to the Contingent Operating Base (COB) at Basra airport.

Basra Palace was the sole remaining base in the city, and became a particular focus of attacks. Movement to and from it became progressively more difficult, and casualties mounted alarmingly. In August the Ministry of Defence disclosed that 50 soldiers had been seriously wounded in Iraq from January until mid-July, more than in any year including 2003, when the invasion took place. A further 41 have been killed.

In circumstances surrounded in political controversy, a deal was brokered in September 2007 to hand over Basra to local security forces and to secure the relocation of UK forces from the Basra Palace base to the COB, where they remained and under regular attack

for the next six months.

By March 2008, the Iraqi Government decided to wrest control of Basra from the Shia Insurgency, and independently launched Operation Charge of the Knights. This assault initially faltered, but with US and UK support gained the initiative and secured its objectives by early April 2008, with the dispersal and subjugation of the Mahdi Army.

Thereafter, UK forces were able to return to Basra and to engage in the long delayed training and rebuilding programmes, while planning and preparing for withdrawal of all but a few specialists and training teams by the spring of 2009. The story of this series of events is set out graphically in independent reports from the UNHCR and from a series of newspaper articles, along with official MoD Reports and statements..

Operation Telic 10 April 2007 – Nov 2007

The Siege of U.K. bases in Basra, February to September 2007

Wikipedia records that "This was conducted and maintained by the Mahdi Army in Basra for most of 2007. Following the reported success of the coalition operation Sinbad, which purpose was to stabilise Basra and prepare it for the turning over of security to Iraqi government forces, the city was overrun by insurgent forces from three different militia forces, including the Mahdi Army, and the British found themselves under siege in their bases and capable of conducting only limited raids in armoured convoys into the city.

By this point in the war there were only two British bases left in Basra. One was on the outskirts of the city at the Basra airport with a compliment of 5,000 soldiers. And the second, which took most of the brunt of the fighting, was in the city centre at Basra Palace, a former palace of Saddam Hussein, with a garrison of 700 soldiers.

The first British soldier that was killed in the city, following operation Sinbad, was killed on February 27. The airport base was being constantly hit by mortar and rocket fire during the siege but the Basra City battlegroup at the palace was involved in most of the fighting. The Uti Triangle, a flat zone combining open wasteland, marsh and clustered buildings, was being used by the Mahdi army to conduct the mortar and rocket attacks on both the airport and the palace. More than 300 rockets hit the airport in the two months between June and August. Sniper attacks were also a deadly and common occurrence for British soldiers as well as IED attacks on patrols that were going out of the bases. The IED attacks and organised ambushes also hit convoys from the airport that were transporting needed food, fuel, ammunition and other equipment for the palace. Convoys were primarily used for this task because helicopters couldn't be used because of the high risk of being shot down.

One of the few British allies left in the city was the Danish contingent of 470 soldiers, however they were coming under attack also and by August 2, the Danish army withdrew from Iraq.

On September 3rd, under the cover of darkness and without any media attention, the British withdrew their troops from Basra Palace to the airport, leaving their last foothold they had in the city. Basra was left to the militias".



Basra Palace Base

Events in April 2007

On 8th April 2007, UK troops handed over control of the Shatt-Al-Arab Hotel to the 10th Division Iraqi Army

On 18th April 2007 Iraqi authorities took control of security enforcement in Maysaan Province.

On 24th April 2007, Shaibah Logistics Base was handed over to the Iraqi Army (MoD).

Events in May 2007

The Competing forces in Basra in 2007

Several groups were now vying for power in Basra. They included:

- The Mahdi army:
  A loose alliance of Shia militiamen, about half of which are connected to Moqtada al-Sadr's office in the Shia holy city of Najaf. His men control the ports and customs as well as the customs police.
- The Fadhila party:
  An anti-Iranian Shia militia organisation that controls the oil business in Basra, parts of the security forces and the ports and customs.
- The Badr brigade:
  The armed wing of the Supreme Council for the Islamic Revolution in Iraq. Before the 2003 invasion it was based in Iran for 20 years.
- Tribes:
  There are at least 20 major tribes in the Basra area. Iraqis often feel the strongest allegiance to their tribe, above nationality. At least one influential tribe in the city runs its own smuggling business. They also support politicians in the city.

'Welcome to Tehran' - how Iran took control of Basra

Ghaith Abdul-Ahad in Basra reported in The Guardian on Saturday 19th May 2007, how:

Britain has failed to stop southern Iraq falling into grip of militias

On a recent overcast afternoon in Basra, two new police SUVs drove onto a dusty, rubbish-strewn football pitch where a group of children were playing. The game stopped and the kids looked on. Three men in white dishdashas got out of one of the cars. One, holding a Kalashnikov, stood guard as the other two removed some metal tubes and cables from the back of a vehicle. As the two men fiddled with the wires, the man with the gun waved it at a teenager who wanted to film with his mobile phone.

Then, amid cries of "Moqtada, Moqtada" and "Allahu Akbar", there were two thunderous explosions and a pair of Katyusha rockets streaked up into the sky. Their target would be the British base in Saddam Hussein's former palace compound. Their landing place could be anywhere in Basra, and was most likely to be a civilian home. The men got back in their cars and drove away, and the children resumed their match.

"Since the British started deploying the anti-rocket magnetic fields our rockets are falling on civilians," Abu Mujtaba, the commander of the group of Mahdi army men told me later. The "magnetic fields" are the latest rumour doing the rounds of

Basra's militias; another is that the British are shelling civilians to damage the reputation of the Mahdi army.

The scene I had just watched was an everyday incident in an area long regarded as relatively safe and stable compared with the civil war-racked regions to the north. But as the British army's decision not to deploy Prince Harry highlighted this week, Basra and the nominally British controlled areas around it are far from secure.

During a recent nine-day visit, politicians, security officials and businessmen explained how the streets of the city were effectively under the control of rival militias competing to control territory, the fragile post-Saddam apparatus of state and revenue sources such as oil and weapons smuggling. As in Baghdad, gunmen speed through the streets on the back of pickups and the city is divided between militias as mutually suspicious as rival mafia families.

The law professor

"If the Prophet Muhammad would come to Basra today he would be killed because he doesn't have a militia," a law professor told me. "There is no state of law, the only law is the militia law."

His description of life in the city was echoed by Abu Ammar, once a prominent Basra politician. A secular technocrat, he had high hopes when the British first arrived more than four years ago. The city had been hit hard by Saddam's wars against Iran and Kuwait and he was optimistic that the occupation would bring democracy and prosperity. But the rise of the militias has put paid to that, he said. Now he was too scared to talk in a hotel lobby and insisted we meet in my room.

"When these religious parties say Basra is calm, that's because they control the city, and they are looting it," he said. "It's calm not because it's under the control of the police, but because all the militias have interests and they want to maintain the status quo. The moment their interests are under threat the whole city can burn." Like many I spoke to, he said the appearance of a functioning state was largely an illusion: "The security forces are made of militiamen. In any confrontation between political parties, the police force will splinter according to party line and fight each other."

The militia commander

The people who really control Basra are men such as Sayed Youssif. He is a mid-level militia commander, but his name and that of his militia - God's Revenge - strikes fear anywhere in Basra. Beginning with a small group of gunmen occupying a small public building, the former religious student built up a reputation as a fearless thug, killing former Ba'athists, alcohol sellers and eventually freelancing as a hitman for anyone willing to pay the price.

I went to see him in his Basra compound. Gunmen dressed in the uniforms of ministry of interior commandos stood guard outside and a sniper watched from the roof. In the room outside his office, tribal leaders, officials and more gunmen sat,

bare footed, waiting for Sayed Youssif to call them. Some wanted him to help their relatives join the army or police. Some had problems with other militias and were seeking his protection. But most were there to pay homage to a powerful man whose help they may one day need. As the official apparatus of state slides into chaos, men such as him have become the main dispensers of justice and patronage. No one in Basra can be appointed to the army, police or any official job without a letter of support from a militia or a political party.

Sitting in front of a mural of an eagle emerging from Basra and enveloping the whole of Iraq, he retained the manners of a religious student; stretching his arms on his lap, he lowered his head to listen intently as visitors address him. But on the desk in front of him, two phones that rang constantly and a pistol with two cartridges hinted at the power he now wields.

Sayed Youssif had just made a ruling in the case of a Sunni man whose brother was accused of shooting at Shias more than 15 years ago. Relatives of the alleged victims were demanding that he pay them compensation or be killed. The man pleaded that his brother had left the country two years before and he was too poor to pay 7m dinars (£2,500) in compensation.

The Sunni man shook, pleading for mercy. "Time has changed," said Sayed Youssif in a low but powerful voice. "Now you Sunni come here and beg like the mice. Do you remember the days when no one of us could even talk to you? You were the tyrants then, but we are not tyrants like you - I will give you a week to go to your tribe and either convince then to hand your brother or you will be judged in his place."

At the moment, he explained, he was preoccupied with a power struggle against the Fadhila party, another Shia militia that has controlled the governorship and the oil terminals for most of the past two years. Sayed Youssif and a group of other militias all with strong ties to Iran were trying to displace Fadhila. "I have told all city council members: you have to make a choice, you either vote against the governor or you will die," he told one of his aides. The next day, two bombs exploded outside the homes of city councillors from the Fadhila party.

The general

I went to meet a senior Iraqi general in the interior ministry. A dozen gunmen in military uniforms lay dozing as a junior officer led me through a maze of corridors padded with sandbags. The general was on the phone to another officer when I entered. He was jokingly threatening the caller: "Shut up or I will send democracy to your town."

When he finished his conversation, the general - who didn't want his name published because he feared retribution from militias -stretched out his hand to me and said: "Welcome to Tehran." I asked him about British claims that the security situation was improving. His reply was withering: "The British came here as

military tourists. They committed huge mistakes when they formed the security forces. They appointed militiamen as police officers and chose not confront the militias. We have reached this point where the militias are a legitimate force in the street."

He and other security officials in Basra, including a British adviser to the local police force, described a web of different security forces with allegiances to different factions or militias.

"Most of the police force is divided between Fadhila which controls the TSU [the tactical support unit, its best-trained unit] and Moqtada which controls the regular police," the general said. "Fadhila also control the oil terminals, so they control the oil protection force and part of the navy. Moqtada controls the ports and customs, so they control the customs, police and its intelligence. Commandos are under the control of Badr Brigade."

The relationship between militias and the security units they had infiltrated was fluid and difficult to pin down, he said. "Even the police officer who is not part of a militia will join a militia to protect himself, and once he is affiliated with a militia then as a commander you can't change him ... because then you are confronting a political party," he added. More than 60% of his own officers, and "almost all" policemen, were militiamen. "We need a major surgical operation, to clean the city," he said.

The British army's Operation Sinbad was designed to do just that. The army has claimed it was a success but the general saw it somewhat differently. "The Sinbad operation failed miserably, because it didn't cleanse the police force," he said. "Ahead of us we have years of fighting and murder, a militia will be toppled by another militia and those will split so day after day we are witnessing the formations of new groups. And the British withdrawal is leading to a power struggle between the different factions."

The intelligence officer

In the living room of his modest Basra home, a senior military intelligence official, call him Samer, told me the militias could take control of the city in half an hour if they chose. Next to the sofa we sat on lay a rocket-propelled grenade launcher, a machine gun and couple of grenades. Samer had survived two assassination attempts.

As a young man with a pistol tucked into the back of his trousers brought us cans of Fanta, Samer described the economic forces behind the growth of the militias. "The militias and the tribes are cartels, they control the main ports the main oil terminal, and they have their own ports and everyone smuggles oil. When the balance of power is disrupted, they clash in the streets," he said.

He told me how a few weeks earlier an official in the directorate of electricity loyal to Moqtada al-Sadr had been was replaced by another one loyal to the Fadhila

party, triggering clashes in the streets between different police units.

When there was a clash between two militias, the police force split and one police unit began fighting other units. Police cars became militia cars. (One Mahdi army commander was aghast that I found this strange: "Of course I should travel in a police car, do you want the commander to travel by taxi?"). Complicating matters further, Samer said most militiamen had multiple IDs associated with different groups. "They switch depending on who pays more."

Like the general, he said much of the blame for the current situation lay with the British: "The British officers are very careful about their image; they are too scared to go into confrontation. They allowed the cancer to [take over the body]. Even if the militias burn the city tomorrow, [the British] won't go into confrontation. They know they are outnumbered and they have huge losses if they do so."

The next day I went back to see the general. He was sitting with two other officers discussing his day." Our uncles, the British, flew me today to Ammara to attend the security handover ceremony," he said. "Give it one month and it will collapse," one of the officers replied. "One month?" the general laughed . "Give it a few days."

The Iranians

You can't move far in Basra without bumping into some evidence of the Iranian influence on the city. Even inside the British consulate compound visitors are advised not to use mobile phones because, as the security official put it,"the Iranians next door are listening to everything". In the Basra market Iranian produce is everywhere, from dairy products to motorcycles and electronic goods. Farsi phrase books are sold in bookshops and posters of Ayatollah Khomeini are on the walls.

But Iranian influence is also found in more sinister places. Abu Mujtaba described the level of cooperation between Iran and his units. His account echoed what several militia men in other parts of Iraq have told me. Sitting in his house in one of Basra's poorest neighbourhoods, he told me: "We need weapons and Iran is our only outlet. If the Saudis would give us weapons we would stop bringing weapons from Iran."

He went on: "They [the Iranians] don't give us weapons, they sell us weapons: an Iranian bomb costs us $100, nothing comes for free. We know Iran is not interested in the good of Iraq, and we know they are here to fight the Americans and the British on our land, but we need them and they are using us." Despite this scepticism about Tehran's motives, he said some Mahdi army units were now effectively under Iranian control. "Some of the units are following different commanders, and Iran managed to infiltrate [them], and these units work directly for Iran."

Most of the Shia militias and parties that control politics in Basra today were formed and funded by Tehran, he said. His assessment was shared by both the

general and the intelligence official. "Iran has not only infiltrated the government and security forces through the militias and parties they nurtured in Iran, they managed to infiltrate Moqtada's lot, by providing them with weapons," the general told me. "And some disgruntled and militias were over taken by Iran and provided with money and weapons."

In his office, littered with weapons bearing Iranian markings, Samer showed me footage his men had shot of a weapons smuggling operation after they captured six brand new Katyushas. "In Basra, Iran has more influence than the government in Baghdad," he said. "It is providing the militias with everything from socks to rockets."

But, like many he was philosophical about Iranian interference. "Unlike the US and the UK, Iran invested better. They knew where to pump their money, into militias and political parties. If a war happens they can take over Basra without even sending their soldiers. They are fighting a war of attrition with the US and UK, bleeding them slowly. We arrest Iranian spies and intelligence networks but they are not spying on the Kalashnikovs of the Iraqi army - they are here to gather intelligence on the coalition forces."

But others cite evidence of Iranian influence being used to pursue less strategic aims. A businessman in Basra, who regularly imports soft drinks from Iran, told me he once had a dispute with his suppler in Iran over price. When he refused to pay, gunmen from a pro-Iranian militia stormed his shop and kidnapped him. He was only released after paying all of what he owed to the Iranian dealer.

Nasaif Jassem, a city councillor for the Fadhila party that controls the governorship and the oil industry in Basra, was critical of Iranian interference. Fadhila, widely seen as backed by the British, split from the main Shia alliance in Baghdad after accusing it of having a sectarian agenda.

"This British occupation will go but the other occupation, that of Iran, will stay for a long time," he said. "They want to have an agent in Iraq that they can move every time they want, just like Hizbullah in Lebanon. Iran is sending a message to the west: don't you dare come close to us because we can burn Basra and its people."

Fear of the Iranians runs through the city. I saw it in the offices of the general as we sat in his office one late one night. His two mobile phones had just rung, each with someone asking for a wrong number. The general's face turned pale and he said: "They have located me - the militia control all the transmission towers for the mobile network and now they have located my position."

Were 'they' the Iranians or a militia, I asked. "They are all the same." He called on his guards to send more men outside and ran to the window to check that the sandbags behind the glass were well stacked. "Do you think I or the British commander can walk freely in Basra?" he asked. "No is the answer, but the Iranian chargé d'affaires runs around freely." The names of Abu Ammar and Samer have been changed for their safety.

On 30th May 2007 Three more provinces in Iraq - Erbil, Sulaymaniyah and Dohuk, were transferred to the control of Iraqi security forces (MoD)



Basrah Palace Base

Sean Rayment reported in The Telegraph on 2nd March 2008:

Basra's last battle: the untold story (The events of 1st June 2007)

"Rifleman Stephen Vause was close to death. The 20-year-old soldier had been badly injured in an insurgent mortar attack and medics inside the besieged base in the centre of Basra believed his only chance of survival was to be airlifted out and given surgery.

Brig James Bashall, who had only that day taken over as commander of British troops in Basra, faced a dilemma: should he risk the lives of 10 servicemen to save a single soldier? The decision was left to the helicopter pilot, Flt Lt Michelle Goodman, and her crew. "It was her call," says Brig Bashall. "It was dangerous. There was a risk the helicopter could be shot down." Minutes later, the RAF Merlin was flying low and fast out of Basra airport - the main British base on the city's

outskirts - and making for the small, isolated compound in the heart of an insurgent stronghold.

The aircraft jinked across roof tops to try to evade surface-to-air missiles - just 18 months earlier a Royal Navy Lynx helicopter had been shot down as it flew across a similar part of the city. Within minutes of landing, four mortar bombs exploded close to the helicopter, peppering its fuselage with red-hot shrapnel. For those watching on screens at the British Army headquarters, the casualty extraction seemed to take an eternity, before the helicopter rose into the air and peeled away, firing a volley of flares to ward off incoming missiles.

"My screen went white from the intensity of the flash, and at that point I thought I had sent 10 of my guys to their deaths - it was a horrible moment," says Brig Bashall. Rifleman Vause survived his wounds, but he remains in a semi-coma in the field hospital.

"It was an awesome bit of flying," says Brig Bashall, "and it was important that Stephen was rescued. The soldiers needed to know that if they were badly injured we would come and get them out - no matter what." This rescue mission took place on the night of June 1, 2007. The attacks would continue unabated for the next 12 weeks.

Throughout that long, hot summer, as the British prepared to hand over control of Basra to the Iraqis, they were attacked on more than 500 occasions, 19 British soldiers died and more than 100 were injured, as the insurgents attempted to bomb the Army out of the city. The insurgents' main target was a small base known as the Provincial Joint Coordination Centre (PJCC), where the British and Iraqi security forces worked side by side. The base was key to the transition of power and the militias intended to destroy it.

It was to be the most violent three months faced by the UK's Armed Forces in the entire Iraq campaign and many young soldiers would be pushed to their mental and physical limits. Now, for the first time, Brig Bashall has spoken of the extraordinary ordeal. In an exclusive interview with The Sunday Telegraph, he praises the "unstinting heroism" displayed by the men of the Army's 1st Mechanised Brigade.

In a frank and moving account of life in the heat of battle, the 45-year-old commander recalls the "dark moments" when friends and colleagues were killed and how Britain faced "strategic failure in Iraq". On Friday, many of those who took part in the battle will receive bravery medals from the Queen, when the twice-yearly Operational Honours and Awards list is published.

Brig Bashall, a former paratrooper, was chosen to orchestrate the handover of Basra from British to Iraqi control. It was always going to be a difficult task. He had just 4,000 men - drawn mainly from the Rifles, the Royal Welsh and the Irish Guards - to keep order in a city with a population of 2.5 million, equivalent to the size of

Greater Manchester. The transition should have been relatively trouble-free but, in the summer of 2007, a civil war was being fought on Basra's streets, as rival Shia militia groups vied for power.

"The Vause incident set the scene for the next 12 weeks," says Brig Bashall, from his office at the brigade's headquarters in Tidworth, Wiltshire. "It was clear that the number of attacks [against the British] were increasing but what wasn't appreciated was the extent to which the attacks would accelerate. "In the first three months of our tour, we experienced more attacks than the previous unit had in seven months. In terms of troop ratios, we lost more people in that period that the Americans did in Baghdad."

Back in May 2007, British troops were based in two locations in the city: Basra Palace, a sprawling base by the Shatt al-Arab river, and the PJCC in the centre of Basra, where just over 100 British soldiers and members of the Iraqi army and police were based. The PJCC consisted of a series of small but fortified buildings surrounded by a 10ft wall. In each corner of the base was a sangar, a fortified guard post where British soldiers kept guard. By the end of May it had become the focus of insurgents' attacks.

"The 110-strong force based at the PJCC was commanded by Lt Col Bob Fram and Major Paul Harding, his chief of staff. The team was also responsible for training Iraqi security forces - one of the key parts of our exit strategy. The complex was vital to the process of transition and the militia knew they had to defeat us in the PJCC."

By the beginning of June, the insurgents were mortaring the base daily, sometimes hourly, using the light and lethal 60mm mortar. "It was a nasty but deadly weapon. You had no warning of anything incoming," says Brig Bashall. Intelligence suggested the Iraqis intended to overrun the base and kill or capture the entire British force. Such an event, Brig Bashall believed, would have been a catastrophe.

In early June, more than 200 armed militia men tried to overrun the compound. The small force inside held off the gunmen for more than four hours. "We had 100 people in the base and if 80 were killed and 20 were captured that would have been strategic failure. The potential consequences of that might have led to a pull-out of Iraq because you just could not afford to lose that many soldiers."

Then, on the morning of June 20th, a tragedy took place that had a profound effect on virtually every soldier serving in the city. A British armoured convoy carrying food, water and ammunition had just driven through the gates of the PJCC. Major Paul Harding, a highly respected soldier who was serving with the 4th Battalion The Rifles, was supervising the unloading when a mortar bomb landed in front of his sangar. He was killed instantly.

"I was asleep in my room - it was 3am - the phone rang and my chief of staff told me that Paul had been killed," said Brig Bashall. "I was in a state of disbelief. Paul's death was devastating for me because I knew him. He had been a Regimental Sgt

Major and had spent 30 years in the Army and you don't expect to see these guys killed on operations. He was just in the wrong place at the wrong time.

"But you get up the next morning, if you can sleep, and you say 'right, we go on', because that is what Paul would have wanted. On operations things will go wrong. You will lose people and you have to be able to cope with that, get over your grief. We had a repatriation service. That helped because it brought some closure for some of the men who were there and we got on with the things we had to do. "Now that we have come back, it's more difficult. You are left with the realisation that for Paula, his widow, and her sons, their loss is for ever."

In the four weeks that followed, another 10 servicemen were killed. In one incident, on June 28, Cpl Paul Joszko, 28, Pte Scott Kennedy, 20, and Pte James Kerr, 20, were killed instantly by a powerful roadside bomb as they attempted to clear a route through the city. Three weeks later, on July 19, Senior Aircraftmen Matthew Caulwell, 22, Christopher Dunsmore, 29, and Peter McFerran, 24, were killed while they slept, after a 240mm rocket exploded inside the confines of the airport. By the middle of July, British troops were being killed at the rate of one every three days.

Even armoured vehicles were vulnerable to attack. With the help of the Iranians, the insurgents had managed to perfect their roadside bombs or improvised explosive devices (IEDs) to the point where they could penetrate armour. Iraqi civilians employed by the British were also a threat and many would pass information on convoy movements to the insurgents.

'Every time a convoy went into Basra it was attacked," says Brig Bashall. "The vehicles took a hell of a pounding. I went in on one occasion and we were attacked all the way in and all the way back out again. The insurgents could lay an IED very quickly and all routes into the city covered.

"I equated the situation with Bomber Command during the Second World War. Going out each night knowing that statistically the odds are against you coming back starts to play on your mind. That is where real courage comes into play. When you are going on yet another convoy, it begins to take its toll, especially if you have witnessed death or an injury. "There was a young soldier who was injured at the PJCC and who was found a couple of nights later lying in a sangar badly traumatised. The pressure had become too much for him and he just broke.

"We took him out and rebuilt him and he was OK. He made a full recovery without having to go back to the UK. Each man has a well of courage and that well can run dry. It happened a couple of times." It was during this period that Brig Bashall says he learnt the true meaning of the "loneliness of command". He knew his decisions might mean that soldiers could be killed or severely injured in action.

"You try to minimise the risk, but you cannot avoid an operation because you might take casualties. If you get it wrong, the guilt can eat away at your soul."

The British handed over Basra to the Iraqis at the beginning of August last year. The transition was a bloodless affair conducted with dignity, despite claims from American commentators the British withdrawal amounted to surrender.

"We were not bombed out of Basra," Brig Bashall insists. "We came out when I chose to. We dictated the pace. There was criticism of the UK because, to some people, it looked as if we were handing Basra over to the Mahdi army, but that was definitely not the case. Neither was there any pressure from the US for us to stay longer. Basra is different from Baghdad and General Petraeus [the US commander of coalition forces in Iraq] understands that."

Despite the sacrifices made by his troops and the problems that still exist in Basra - 45 murders take place every day, and the corrupt Iraqi police are aligned to many of the militia groups - Brig Bashall is confident about the future. The death of a soldier in Basra on Saturday was the first in combat since August.

"I have always believed that Basra will find its own level when we go," he says. "We have done a huge amount of good for Basra. We have invested millions in all sorts of projects and it is a better place for our being there. Basra is a functioning society, but not in the way you or I would understand. Remember, Basra is not Surrey and it never will be."

The events of August 2007

Anthony Lloyd reported for The Times on August 9th, 2007:

Death in Basra: the British under siege

A single shot, two hours of confusion. It was either remarkable marksmanship or a fluke. Private Craig Barber was killed by a single shot through a crack in the driver's hatch of his Warrior armoured fighting vehicle, open against the sweltering heat of the Basra night. He died immediately, hit in the head.

But because the Warrior had its engine running and the vehicle was stationary, no one realised that he had been killed. It was a further quarter of an hour before Private Barber's Warrior commander gave word to move and, puzzled by his driver's silence, jumped down to see what had befallen him.

What unfolded next underlines the extraordinary circumstances in which British soldiers now find themselves in the final days of their deployment in central Basra. Private Barber's comrades tried to get him out of the driver's hatch so that another soldier could drive the vehicle away. But he was a huge man. As they struggled, they came under more fire.

Forced to abandon their efforts and get into cover, a recovery vehicle was given the task of towing their Warrior away back to Basra Palace. The journey out, earlier in

the evening, had taken 25 minutes. With fire erupting around them, it took the soldiers more than two hours to battle their way back.

Once regarded as the model for post-invasion Iraq, Basra is now a logistical nightmare where even the simplest operation can turn deadly and soldiers frequently have to fight their way home. Private Barber, who was on his second tour of duty in Iraq with 2nd Battalion, The Royal Welsh, was due to return to South Wales within days to celebrate his first wedding anniversary with his wife Donna and son Bradley, 3.

As members of the battlegroup fought their way back to Basra Palace, the radio hissed with word of fighting as militia closed in. One vehicle took a direct hit from a rocket-propelled grenade. Two roadside bombs were encountered and destroyed. A Rifles' sniper on a rooftop killed all three members of an al-Mahdi Army bomb team as they laid another device. The fighting continued almost up until the palace gate, ending with a large firefight and a huge volley of machinegun fire. The battlegroup estimated that they had killed between 20 and 30 militiamen during the action. It was scant consolation.

British Forces are due to withdraw from Basra Palace in weeks, pulling back to the much larger airport base on the city outskirts. Until then they face many more operations like Monday's. It had started as it so often does for the Basra City battlegroup. Infanteers from 4 Rifles and the Royal Welsh Regiment had left Basra Palace to an area known as the Uti Triangle in the city centre. The odd flash of a distant rocket-propelled grenade lit the sky and, once or twice, the chatter of machineguns drifted over the barks of dogs and growl of the engine, along with the stench of sewerage and rotting rubbish.

The Uti Triangle, a flat zone combining open wasteland, marsh and clustered buildings, has been frequently used by al-Mahdi Army mortar and rocket teams targeting British Forces both in the palace and airbase. The plan was for an advance group of Warriors, manned by soldiers from the Royal Welsh, to clear the route and establish a cordon around the area. Troops from 4 Rifles would then move into the zone, conduct a search and speak to locals.

Attacks against British troops in Basra have now surpassed all previous levels in number, sophistication and intensity, but a great many ordinary locals both dislike the militia of the Mahdi Army, and would prefer British troops to remain in the city.

Soldiers based in the palace still draw a lot of information from locals who fear that should the British leave, the city will descend into a worse mafia-style fiefdom of gun law than it already is. Uti was a case in point. The bulk of the tribe living there detested the Mahdi Army, were aggrieved to have their yards used as firing points for mortars, and appeared only too happy to see British soldiers.

"F*** the Jaish al Mahdi," spat one young Iraqi man in English as the riflemen passed him. "Chase them out of here." But any British operation in Basra now is a

race against the clock. Militiamen, bolstered by weapons, training and equipment from Iran, have consolidated their control over various areas of the city. They can react quickly to word of any British presence on the ground, deploying ambushes along the only two routes back to palace.

At dawn the day after Private Barber's death, the flag was at half mast, again. There was not much time for grief though. Instead the soldiers started preparing for the next night's operation".

Anthony Lloyd reported for The Times on August 9th, 2007:

Army warns on Basra deaths

"Gordon Brown has been warned by senior army officers that delaying withdrawal from Iraq will lead to an increase in the number of British troops being killed. Senior officers believe an imminent concentration of troops in one base at Basra international airport is bound to lead to the Iraqi militias intensifying their attacks.

The warning comes as new figures show that the airport and a second base at the Basra Palace have been hit by more than 300 rocket and mortar attacks in the past two months, more than in all the previous four years put together.

The Ministry of Defence (MoD) disclosed that 50 soldiers had been seriously wounded in Iraq from January until mid-July, more than in any year including 2003, when the invasion took place. A further 41 have been killed.

"We have seen a clear increase in attacks as the enemy try to take the initiative," said one senior officer. "The longer we sit and wait, I fear the more soldiers will die. We need to be given a clear mission or get out."

There is serious concern among senior commanders that Brown agreed to a request from George Bush to delay any decision to withdraw British troops from Iraq until after the American commander, General David Petraeus, gives a "progress report" to Congress next month. The deal, designed to prevent the president coming under domestic political pressure to announce a timetable for the withdrawal of American forces, was agreed during the prime minister's visit to Washington last month. The MoD said the attacks were part of the jockeying for power that was going on in Basra ahead of the British withdrawal.

"We see this as an attempt by the militias to claim credit for 'driving us out'," a spokesman said. "But irrespective of what they may claim, this is not the case."

Tim Shipman in Washington reported in the Sydney Morning Herald on August 20th, 2007:

British military sparks US fears of losing Basra

Military advisers in the United States have warned that British troops face an "ugly and embarrassing" withdrawal from the southern Iraqi city of Basra. Stephen Biddle, who sits on the Council on Foreign Relations and is a member of a group that advised the US commander in Iraq, General David Petraeus, told the The Sunday Times in London that coalition forces were no longer in control of the city.

"I regret to say that the Basra experience is set to become a major blunder in terms of military history," Mr Biddle was quoted as saying. "The insurgents are calling the shots … and in a worst-case scenario will chase us out of town."

Another senior US officer told The Sunday Telegraph: "The short version is that the Brits have lost Basra, if indeed they ever had it … They did not have enough troops there even before they started cutting back. The situation is beyond their control." The officer warned of "a stink about this that will hang around the British military".

General Jack Keane, a former US Army vice-chief of staff and the architect of the surge strategy, who has just returned from Baghdad, echoed these concerns: "It is disappointing and frustrating to see a situation in Basra that was once working pretty well now coming apart," he said.

In Britain, the Brown Government has tried to depict a quiet process of handover to Iraqi troops in Basra in which the remaining forces in the city withdraw to the airport in November. What US generals see, however, is a close ally preparing to "cut and run", leaving behind a city in the grip of a power struggle between Shiite militias that could determine the fate of the Iraqi Government and the country as a whole. When the US's top commanders in Iraq held a conference with their British counterparts recently, Major-General Jonathan Shaw - Britain's senior officer in Basra - was quick to share his views on counter-insurgency operations.

Previously, the Americans would have listened carefully, deferring to their British colleagues' long experience in Northern Ireland. This time, however, eyes simply rolled. Few were in the mood for a lecture about British superiority, when they fear that Downing Street's planned pull-out from Basra will squander any progress from their own hard-fought "troop surge" strategy elsewhere.

One senior figure recalled: "It would be OK if he was best in class, but now he's worst in class." The meeting, called by General Petraeus, is emblematic of what is fast becoming a minor crisis in Anglo-US military relations".

Chris Hughes reported in The Daily Mirror on 28th August 2007:

Basra rifles stolen

"Thousands of British troops were placed on high alert at Basra Air Base yesterday over fears a terror gang broken into the camp. All soldiers were on standby at midday after eight SA80 assault rifles were stolen and an "early warning' system" that protects troops against attack was spiked. The huge generator which powers the base's main alarm was also taken.

Intelligence officers fear rebels either broke in, then escaped or infiltrated the base in southern Iraq pretending to be LEP's - locally employed workers. Just months ago the Mehdi Army - the country's Shia terror group - bragged they had got into camps in Basra.

A source in Iraq revealed there is evidence someone escaped through a "perimeter fence". The military insider said: "Troops in Basra are already under constant threat of a rocket attack. But nobody believed that the enemy could actually get into the base itself and walk off with weapons." Last night the Ministry of Defence said: "We can confirm there has been an incident at the Contingency Operating Base which is now under investigation."

Sky News reported on Monday September 3rd, 2007:

British Troops Pulling Out Of Basra Base

"Britain expects to hand over Basra to Iraqi control this Autumn, the Ministry of Defence has said after British troops began withdrawing from their Basra Palace base.

In a phased withdrawal, the first of 500 British troops are moving back to Basra airport in the city's outskirts. The MoD has said the Palace is expected to be handed over to Iraqi authorities "in the next few days. Handing over Basra Palace to the Iraqi authorities has long been our intention, as we have stated publicly on numerous occasions. The Iraqi security forces want to take full responsibility for their own security and the handover is a step towards that goal."

The operation to move the troops is expected to be finished around midnight UK time. Sky News Defence Correspondent Geoff Meade said: "This does not indicate that the British forces are withdrawing entirely.

"They are pulling back to the main British base at Basra airport where there will be about 5,500 UK forces remaining on what the UK government calls "overwatch. This means they will be available to support the Iraqi authorities if they are needed."

Basra is the last of five provinces in the UK's sphere of operations in southern Iraq yet to move to local Iraqi control. Prime Minister Gordon Brown had said Basra



would move to "overwatch" as soon as conditions on the ground permitted the move. As pressure mounts on Mr Brown to announce a timetable for Britain's forces to pull out of Iraq altogether, some observers have criticised the withdrawal from Basra Palace.

Meanwhile, Liberal Democrat Leader Sir Menzies Campbell said the "retreat" of troops from central Basra underlined "the futility of the continuing British presence in Iraq. We have heard from the most senior British military voices their concern about the lack of post-invasion planning," he said.

"Nothing confirms that more than the fact the British troops will now be confined to Basra airport, an area which is impossible to defend and from where they cannot conceivably carry out any useful military function other than training the Iraqi army."

Raja Razek, Daniela Berretta and Jomana Karadsheh of CNN reported on September 3rd 2007 that:

UK: Basra pullout was pre-planned

“British Prime Minister Gordon Brown has dismissed a suggestion that a withdrawal by UK troops from their base in the southern Iraqi city of Basra was a defeat, insisting it was an "organised" move. Brown, speaking as 500 British troops completed their withdrawal from Basra Palace, said Monday troops would still be able to intervene in the city in "certain circumstances."

Asked if the move was a "pull-out in defeat ... a retreat," Brown told the BBC: "Let me make this very clear. This is a pre-planned, and this is an organized move from Basra Palace to Basra Air Station." The move consolidates most of Britain's 5,500-strong force at Basra airport, which has been hit daily by mortar attacks. The move does not represent a major shift nor does it represent a pullout, the British Ministry of Defence said.

A British military spokesman in Basra said there were no major incidents during the withdrawal, although a British vehicle was damaged and two soldiers suffered non-serious wounds in an attack. People in Basra cheered the British departure. The pullout happened at a "snail's pace" as the convoy checked for roadside explosives, Tom Newton Dunn, Defence Editor for The Sun and the only British journalist with UK forces in the area, told Sky News.

Iraqi Army Lt. General Mohan, commander of operations in Basra, said he had told Shiite militants who have been fighting the British troops that Iraqis were now in charge of the Basra palace. He said the militants "have behaved except for some simple violations."

Basra will be the last of four provinces in southern Iraq that Britain has handed over to Iraqi control. The other three were Muthanna, Maysan and Dhi Qar. British forces will remain in Basra to train and supervise Iraqi forces. During their time in Basra, British forces have helped the Iraqis take more responsibility for governing Basra, she said. Previously, the British had handed over two other bases to the Iraqis. The palace was the third.

CNN correspondent Michael Ware said he believed the move would have little effect on Basra's security. "The Brits have had no control for years," he said from Baghdad. "From the moment the British forces were deployed in the south, they didn't have enough troops. If you really want to change the underlying dynamic of the south, you must be ready to challenge Iran. They were not able, and did not have a public mandate, to do so. The British presence has been merely token. As British military intelligence officers told me two years ago, all they are doing there is trying to stay alive."

Lt Col Tim Collins wrote for The Daily Mirror on 4th September 2007:

Success? Not on a road full of bombs

“Lieutenant Colonel Tim Collins earned worldwide praise for his inspiring eve-of-battle speech to the 1st Battalion of the Royal Irish Regiment in Iraq in 2003, a copy of which hangs in the White House's Oval Office. He retired from the military in January 2004 and has since branded the war in Iraq a catastrophe. Here, he gives his views on Britain's withdrawal from Basra.

The withdrawal to Basra's airport is "job done" according to the MoD, which has presented it as the army making way for the Iraqis to take over. But since the 10-mile journey from city centre to airport took more than 16 hours - because the route had to be checked for IEDs (improvised explosive devices) - it seems a little odd to talk about the security situation being so tranquil that it is safe to hand over to the Iraqis. There has been some success, we are told. But of what nature? As far as I can see, there are three possibilities . . .

Firstly, that it really is a job completed and a secure Basra will be handed back to a grateful Iraqi nation, with the security precautions yesterday being just that: precautions.

Secondly, that this is an acceptance that all that can be done has been done and it is time to consolidate the UK's scarce and exhausted military resources to focus maximum effort on the winnable war in Afghanistan. Or there is the third possibility, that the British have, in fact, brokered a separate peace with the Sadrist militias - the Shia religious faction led by Muqtada al-Sadr - and, by proxy, Iran.

And that the militias then declared a ceasefire so the British could consolidate on the airfield as a prelude to a total withdrawal, with Iraqis who have worked for the UK hanging off the departing helicopters in scenes reminiscent of the US withdrawal in Saigon, Vietnam.

My own view is that the UK has such limited military resources now, against the tasks that the government has set it, that withdrawal was inevitable. When the deployment to Helmand province in Afghanistan was announced back in 2005, just as the cuts to the army demanded by the Treasury were being enacted, I was among those who feared the senior brass hats did not make enough of a stand, and allowed the army to be spread too thin.

But the army leadership dismissed the warnings, predicting it would all be over in very short order. They were very wrong. The withdrawal from Basra Palace yesterday will come as a welcome boon to military planners, who know there will now be some breathing space. A fast turnover of combat units had degraded morale, and the harsh conditions of Iraq and Afghanistan have been wearing out gear at an alarming rate. A pragmatist would take the view that Iraq is a campaign we'd like to win but which would need a decades-long commitment.

It is safe to walk the streets of Ramadi without body armour and there is no longer a need to send divers down to clear dead bodies out of the turbines on the Haditha Dam. I'm less sure I would want to walk through Basra without body armour - unless I had the permission of one of the Sadr Militia commanders, that is.

If this is success in the south then it looks like nothing I have seen before anywhere on Earth. It remains to be seen how history will judge yesterday's events in Basra. There is a real fear among Iraqi Sunnis that the Iranians have a bigger role in the success of the militias than they are prepared to admit.

I am clear that Muqtada al-Sadr is no Iranian puppet but there's no doubt he'd be well disposed towards Iran were he able to rule his own state. The Iraqi Sunni fear is that there is a plan for the Shia militias to move towards a breakaway state in the south of Iraq.

The stakes are high indeed. But if this withdrawal does unravel, then it's certainly not the fault of the British army.I pay tribute to the fine job they did and especially to the 168, some of whom I knew, who gave their lives. No army could have done better considering the scarce resources available and the difficulties they faced from the weather, the terrain and the enemy.

I am afraid that the failings of politicians are what we must now look to - the mistakes in going to war without a coalition such as we had in 1991; the dismissal of the Iraqi army and police, and, most of all, the lack of planning that created the vacuum into which the militias swarmed.

When I was asked yesterday if I believed that the army had failed in its mission, I had to point out that it wasn't possible - because they have never been given a clear mission by the politicians in the first place. That is the real failure. It's a fact that our resources are now so limited, such a step was inevitable. No other army could have done better. If it all unravels it won't be their fault".

On 5th September 2007, the MoD reported that a ceremony took place in Basra to mark the official handover of Basra Palace to the Iraqi authorities.

Events of October 2007

On 29th October 2007 Karbala Province was transferred to Iraqi control. (MoD).



Gethin Chamberlain reported in The Telegraph on 29th October 2007:

Message from Basra: 'get us out of here'

I was given a simple and stark message from a senior British officer in Iraq: 'We have got it wrong'.

It was as astonishing an admission as any that has emerged from the lips of a British officer in the four and a half years since the tanks rolled over the Iraqi border. The British Army, said the man sitting in a prefab hut in Britain's last base in the country, were tired of fighting. Not only that: their very presence in Basra was now the problem.

"We would go down there [Basra], dressed as Robocop, shooting at people if they shot at us, and innocent people were getting hurt," he said. "We don't speak Arabic to explain and our translators were too scared to work for us any more. What benefit were we bringing to these people?"

The officer — one of the most senior in Iraq — agreed to speak to The Sunday Telegraph only on the highly unusual condition of anonymity, but he made clear that what he said reflected a major change in British tactics. "We are tired of firing at people," he said. "We would prefer to find a political accommodation."

It is a spectacular U-turn. Until September, when British troops pulled out of the city in what Gordon Brown described as a "pre-planned and organised" move, the fighting was as intense as any since the start of the war in 2003. This year, 44 British soldiers have died as a result of Britain's operations in Iraq. Yet their commanders are now saying they got it wrong.

Rather than fight on, they have struck a deal – or accommodation, as they describe it – with the Shia militias that dominate the city, promising to stay out in return for assurances that they will not be attacked. Since withdrawing, the British have not set foot in the city and even have to ask for permission if they want to skirt the edges to get to the Iranian border on the other side.

Britain has always said that it would hand over control of Basra province to the Iraqi authorities only when the Iraqi forces were capable of taking control. But the picture emerging from inside the city suggests that this is far from the case.

Since the withdrawal, attacks on British forces in the region have plummeted, but the level of violence in Basra remains high. Iraqis living in the city say it is now patrolled by death squads. Even the British admit that local Iraqi troops are unwilling to take on the Shia militias. As for the police — as elsewhere in Iraq — they remain ineffective and are heavily infiltrated by members of the militias.

"The army here in Basra is not good," admits Capt Allah Muthfer Abdullah, whose armoured battalion was brought down from Baghdad three months ago to shore up the local forces. "We don't trust them. The army here joins the militias at night and by day they come back to us.

We need more soldiers from Baghdad or the north — or a brigade of the US army." He blamed Iran for arming and supporting Basra's militias, claiming that the city was now more dangerous than the Iraqi capital.

A local commander admitted that his men needed much more time before they could guarantee security. "Soldiers from Basra can't fight against militias," said Capt Ali Modar, of the new 14th Iraqi Division, which has taken over responsibility for security in the city. "It is difficult to overcome them. We need people to come from other parts of Iraq. Soldiers from Basra know that if they arrest anyone they will be killed, or their families will be killed."

A former British Army interpreter in the city, whom it would be too dangerous to name, said that people had no confidence in the Iraqi army. Tribes and militias had seized control, he said. "It is not safe here. I have to sleep with a gun under my bed. The British Army leaving is a bad thing."

The British appear to base their new strategy on an almost total faith in one man, Gen Mohan al-Furayji, who came down from Baghdad to take over responsibility for security, promising to sort out the city. The general, a Shia in his early fifties who spent time in the notorious Abu Ghraib prison in Baghdad after falling out with Saddam Hussein in the 1990s, is answerable only to Nouri al-Maliki, the Iraqi prime minister.

The British are so convinced that he is the answer to Basra's problems that they are making plans to deal with him, instead of the elected provincial governor, Mohammed al-Waily, who one official dismissed as "a problem".

But relying on one man is a high-risk strategy and its fragility was demonstrated last Wednesday when gunmen tried to kill the chief of police, Maj-Gen Abdul-Jalil Khalaf, at a busy market in the city. He survived the assassination attempt, the fourth he has faced, but it followed serious fighting the previous day between Gen Mohan's forces and supporters of the Shia cleric Moqtada al-Sadr. Even as British officers were extolling the strengths of the new security forces, al-Sadr's Mahdi army was overwhelming the Iraqi security forces to free one of its men from the main police headquarters in the city.

With no presence in the city, British forces are hard pushed to keep abreast of what is going on. They say they get their information from local newspapers and from the Iraqi army, although one battalion of that force is isolated inside the city and the other battalion is in training outside. The British have already encountered much the same problem in the neighbouring Maysan province to the north east, which they handed over in April.

"There is a vacuum of knowledge there," one officer said, admitting the border with Iran was porous. Soldiers report that Iranian-made roadside bombs smuggled across are turning up more regularly around the British base in Basra, though none has yet been successfully detonated.

Instead of going into Basra, British troops now patrol their base at the airport and make forays up to the border to deter smuggling and to show people they are still around. Many are disheartened by the lack of public support for the war back home. Soldiers from the 2nd Battalion, the Royal Welsh (the Royal Regiment of Wales), driving their Warrior armoured vehicles into the desert around the Rumaliyah oil fields, saw little point in fighting on.

"If we went into the city every night, we would still be doing it in 10 years' time," said Capt John Kestin, 26. "There is nothing the military can do any more without the backing of politicians, and no politician wants to touch Iraq with a bargepole. Having the military out here without political backing is pointless."

His company commander, Major Sid Welham, said the heavily armed force had orders to keep clear of areas where they might encounter insurgents. "We are avoiding areas where we know there may be trouble, much like in Basra," he said.

But until the pull-out from the city six weeks ago, the Royal Welsh were in the thick of the fighting. Capt Kester and L/Cpl Thomas McAlister, 25, a Warrior driver, described missions into Basra that were so intense that they had to call in Tornado jets to strafe enemy positions, missions in which colleagues were killed, and firefights that lasted for hours as they tried to get their casualties out of danger.

At the same time, troops back in the base at Basra airport were enduring a daily barrage of rockets. Many in Britain were unaware of the sheer scale of the attacks. At one stage, 300 rockets a month were raining down on the camp. Capt Sarah Heyhoe, 26, a medic attached to 2 Royal Welsh, described how doctors continued to treat patients even when the hospital was hit, though the lights had gone out and the rooms had filled with smoke. "You can't stop an operation," she explained, bashfully.

How the Iraqi forces might cope with such intense opposition is uncertain. "No one is pretending these are first-class forces," one senior British officer said. The hope is that the local troops will suffice, but much of the force intended to secure Basra is not yet formed. Out of four scheduled divisions, only about one and a half exist and half of their men are on holiday at any one time.

Lt Col Derek Plews, the British military spokesman, said there was much work to be done, particularly in getting supplies through from Baghdad. "The Arab psyche is really bad at the administration side of things," he said. "They just think about the fun bit of it, such as firing the bullets."

The Irish Guards training the nascent force at the former British base at Shaibah say some of the recruits look promising, others less so. But it is too late to worry about that now.

The Army is due to hand over control to the Iraqi authorities before Christmas. By next spring, Britain will have just 2,500 troops left outside Basra, about half their current level. Five years on from the invasion, the British Army will be back to the

position it was in before it first seized the city, camped on its western edge, looking in across the Shatt Al-Basrah waterway. At least then it was able to take on those inside.

For Britain, in southern Iraq, it is all but over. It tried force, and ultimately had to admit that force failed. Since March 2003, 171 British men and women have lost their lives in the war. British commanders can only hope that the Iraqis have more luck.

But if, as the British mantra now runs, the answer is "an Iraqi solution to an Iraqi problem", the question that must now be asked is why it took so long to reach that conclusion, and whether it should have been reached much earlier, at a cost of far fewer British lives.

Operation Telic 11 Nov 2007-April 2008

20th March 2003

Following the withdrawal the U.K. was heavily criticised for pulling back from the city. Formally the city was handed over to Iraqi security forces, but it was in practice in the hands of the militias. They led a turf war in the coming months with up to 100 people, mostly civilians, were being reported killed each month. A black market monopoly formed over the oil exports from the city.

The Basra police were mostly spared from attacks up until the withdrawal because the militants focused primarily on the British. However after the British left killings of policemen became common. Four days after the U.K. pullout an attempt was made on the life of the Basra military intelligence chief. He survived but two bodyguards were killed and later in the month a suicide bomber destroyed the police headquarters in the city killing three policemen.

By the end of March 2008, the situation in the city was so out of hand that it led to an Iraqi troop surge into the city which led to major fighting with the militias.

Ghaith Abdul-Ahad wrote from Basra in The Guardian on Saturday 17th November 2007, chronicling life in the city following the British troop withdrawal:

When night falls, the assassins gather in Hayaniya Square

“Hayaniya Square in Basra is a busy intersection leading to a poor and run-down neighbourhood. On one side of the piazza, sewage water flows through what was once a dried-up river bed, filling the air with an oppressive smell. On the other side, a pair of kebab stalls send columns of smoke from skewers of burning meat into the warm air. Two sheep, whose fate lies on those skewers, stand tethered to a nearby telegraph pole.

The square is dominated by a painting of six men dressed in casual trousers and

jackets, behind whom loom the faces of Moqtada al-Sadr, the leader of the Mahdi army, and his father, Muhammad Sadiq al-Sadr. The six men, described on the mural as martyrs, are Mahdi army commanders who were killed by the British.

At night, when traffic in the square slows, a group of men gather. These are the sakkaka, or assassins. Their Toyota saloons, chosen for the voluminous boots that can accommodate two bodies with room to spare, stand parked nearby.

The assassins chat, eat kebabs and stroll around in small groups, discussing their sinister trade. They buy and sell names of collaborators, Iraqis who worked for the British, as well as journalists and uncooperative police officers, businessmen and the foot soldiers of other militias.

Depending on the nature of their perceived crime, the price on a collaborator's head can vary from couple of hundred dollars to a few thousand. The most valuable lives these days in Basra are those of the interpreters and contractors who were employed by the British before they withdrew from the city.

Local people lower their eyes when they drive through the square. Gunshots crackle all through the night. Not far from Hayaniya I met the commander of the Mahdi army's security committees. A dark green liquid had flooded the street outside his house and rocks and bricks had been thrown into the pungent water to form stepping stones. A sheet of corrugated iron was placed in front of his door as a bridge and a doormat.

In the corner of the living room was a wooden table with a desktop computer, a laptop and piles of CDs and books. Behind it sat the commander, a cleric in his early 30s. "We liberated the town from the British," he told me. "That is our victory, achieved with God's help. Basra is the first Iraqi city to be liberated from the occupiers."

He fiddled with the thick ring on his finger. In front of him on the table were two telephones. One, the "Najaf phone", was used only to call Moqtada's office, 250 hundred miles away in the holy city of Najaf. "Now is not the time for to escalate the situation with the British," he said. "They retreated to the airport and that's fine, for now. Our goal is to get rid of the governor of Basra, consolidate our control over the city and finish with the collaborators."

The day before our meeting, the energetic Iraqi army commander in the region, General Mohan, whose 8th division is in charge of security in Basra, banned illegally imported right-hand drive cars from the streets of Basra. The Mahdi army controls the ports and the smuggling of these cars. The ban was aimed at draining a vital financial asset of the militia.

Within a few hours of the ban, an Iraqi army checkpoint in Basra seized a smuggled car with some Mahdi gunmen inside. Half an hour later, the Mahdi army had detained 55 Iraqi soldiers, and paraded at least seven Iraqi army armoured vehicles in the street, eyewitnesses said.

"We didn't want that escalation, but this Mohan is an American agent and he is risking dragging Basra into open warfare," the commander told me. The following day there was an assassination attempt against the police chief, an ally of Mohan.

Real power

The Sadr office in Basra has become the real centre of power in the city. Outside the large compound, dozens of cars were parked, white pick-ups with no licence plates, a few police cars and many of the assassins' Toyota saloons. Bearded men wearing the Mahdi army's colour of choice, black, came and went.

Behind a metal gate overshadowed by a big mural of Moqtada, were two separate doors, one for women and one for men. In the men's waiting room, a young militiaman sat behind a pile of visitor's badges while men crowded around. To receive a badge, each visitor had to hand in his phone and his gun. An open drawer in the militiaman's desk was piled high with firearms and Nokia mobiles.

Although I arrived early in the morning, the waiting room was full. A man in white robes with papers in his hand stood in front of the desk. "What do you want, Haji?" asked the militiaman, who looked to be still in his teens.

The man replied in a pleading voice: "My daughter needs an operation," while pushing a handful of x- rays and medical reports into the militiaman's face. "Do you have a phone? No? Here is a badge. Go to the social services committee. May Allah heal her," the militiaman said.

The office is subdivided into committees, covering social services, security, culture and conflict resolution - the latter being a sharia-based tribunal. This is where most of the visitors went. Behind the reception room, across a wide yard, two thuggish men stood guard outside a makeshift courtroom. Inside, four clerics sat behind two low benches, their backs to the wall. The judge, a senior cleric, sat with a younger man who worked as clerk. The room smelled of incense and foot odour.

The judge explained how the system works. "Someone files a grievance against someone, we send an order summoning the accused here and they have to show up," he said.

What if they didn't show up?

"We send the Mahdi army, and then they usually show up immediately. No one says no when they get a letter from the Sadr office." A quick smile fell across his face. Once the accused arrived, he said, the judges conducted a hearing and justice was dispensed.

"Most of the cases that come are of a social nature, but there are some murders and financial cases," he said. "If we look into a case, we send a letter to the civil courts and police telling them that it's not under their jurisdiction any more. We rule according to the sharia law. Once a verdict is issued then all parties have to adhere to the ruling."

And if they don't? "We have our ways," he said.

The judge called on the case in front of him. A woman named Sedeeka accused her brother and uncle of beating her to force her out of their house. "They beat me, and they told me to leave the house or we kill you," she cried. She tried to pull her clothing aside to show the judge her bruises, but he turned his head away and told her to stop.

The uncle denied trying to force her from their home, but the cleric, after making the woman swear on the Qur'an that she was telling the truth, ordered the uncle to pay. A case that would have taken months in a civil court had concluded in a few minutes".

7th UK Armoured Brigade Operations

On 16th December 2007, Basra Province was handed over to the Iraqi authorities. As a result, all four provinces in Multi-National Division (South East) were now under Iraqi security control. (MoD)

Jomana Karadsheh of CNN reported on December 16th, 2007 that:

British troops return Basra to Iraqis

"On Sunday, British troops handed over responsibility for security in the southern Iraqi province of Basra, a major milestone in the scaling-back of the foreign military presence nearly five years after the U.S.-led invasion

"As you step up, we step back," the British commander, Maj. Gen. Graham Binns, told Iraqi troops and political officials, at a transfer ceremony broadcast live on Iraqi state television. The changing of the guard came on the same day that Iraq resumed train service from Basra to Baghdad after a four-year hiatus.

The handover of Basra became official with the signing of a "memorandum of understanding" by Iraqi and British officials. Britain has been in command of the south since the Iraq War began, with its troops based in Basra. It has been working to withdraw its troops from the region, which has always been more stable than Baghdad and other outlying regions. Roughly 5,000 British troops are there now. Prime Minister Gordon Brown's government has announced plans to cut forces to about 4,500 by the end of December.

National Security Adviser Mowaffak al-Rubaie said the transfer means that Basra police will be the first called to respond to any security incident, and will be backed up by the Iraqi Army as needed. British troops could be called in to help, but it would be coordinated through the office of Prime Minister Nuri al-Maliki in Baghdad, he said.

"Our help will continue to be one of assistance, not interference, to support not to direct, to listen not to ignore, to understand not to fear," Binns said. Improved security allowed Basra to begin its long-stalled train service to the capital, said Gate'e al-Mayahi, chief of Baghdad's central railway station.

The train route runs between the towns of Latifiya, Mahmoudiya and Yusufiya, Iraq's "triangle of death." The trains stopped running four years ago because of insurgent attacks. Railroad officials, spectators and journalists gathered at the Allawi station Sunday morning for a ribbon-cutting ceremony. Traditional music filled the air as people waved the V-for-victory sign. Several men boarded the train about 9 a.m. as Iraqi police looked on. "This is proof that the security situation has improved," he said.

The British military, which is now emphasizing the training of local troops and police, plans to reduce its troop deployment to 2,500 by spring. "There are now 30,000 Iraqi police and armed forces in the region," the Defence Ministry said in a statement on its Web site last week.

Maj. Gen. Binns said last summer he did not expect they would be ready for a handover by the end of 2007. "There has been an extraordinary and dramatic reduction in the level of violence in last few months, and the people who can take credit for this are the Iraqi security forces," Binns said. Al-Rubaie said "huge progress" has been made in "cleaning a lot of bad elements in the police," but it remains a "huge challenge" and "one of the main tasks."

Associated Press reported on 12th December 2007 that:

Gynocide in Basra: Mass Graves and bodies discovered

"Religious vigilantes have killed at least 40 women this year in the southern Iraqi city of Basra because of how they dressed, their mutilated bodies found with notes warning against violating Islamic teachings, the police chief said Sunday.

Maj. Gen. Jalil Khalaf blamed sectarian groups that he said were trying to impose a strict interpretation of Islam. They dispatch patrols of motorbikes or unlicensed cars with tinted windows to accost women not wearing traditional dress and head scarves, he added.

The women of Basra are being horrifically murdered and then dumped in the garbage with notes saying they were killed for un-Islamic behavior, Khalaf told The Associated Press. He said men with Western clothes or haircuts are also attacked in Basra, an oil-rich city some 30 miles from the Iranian border and 340 miles southeast of Baghdad.

Those who are behind these atrocities are organized gangs who work under cover of religion, pretending to spread the instructions of Islam, but they are far from this religion, Khalaf said.

Throughout Iraq, many women wear a headscarf and others wear a full face veil although secular women are often unveiled. Since the overthrow of Saddam Hussein and the rise of a Shiite-dominated government, armed men in some parts of the country have sometimes forced women to cover their heads or face punishment. In some areas of the heavily Shiite south, even Christian women have been forced to wear headscarves.

Before the U.S.-led invasion in 2003, Basra, Iraq's second-largest city, was known for its mixed population and night life. Now, in some areas, red graffiti threatens any woman who wears makeup and appears with her hair uncovered: Your makeup and your decision to forgo the headscarf will bring you death.

Khalaf said bodies have been found in garbage dumps with bullet holes, decapitated or otherwise mutilated with a sheet of paper nearby saying, she was killed for adultery, or she was killed for violating Islamic teachings. In September, the headless bodies of a woman and her 6-year-old son were among those found, he said. A total of 40 deaths were reported this year.

We believe the number of murdered women is much higher, as cases go unreported by their families who fear reprisal from extremists, he said.

Marie Colvin reported for The Sunday Times on December 16th, 2007 that:

I felt a new terror on Basra's streets

"As one of the first journalists to visit Basra without military protection in recent years, I found Islamic militias waging a brutal campaign for control in Iraq's second city.

There are two photographs in every police file. One is a long shot of a woman's discarded body, the other a close-up of her last expression. All the women fell foul of the unwritten rules of the new Basra – they dressed wrongly, they left the home to work, or perhaps they were merely rumoured to have a boyfriend.

Forty-eight manila files have been opened in the past six months. Not one case has been solved. The bare number cannot begin to conjure the horror of these deaths at the hands of Islamic extremists who have the port city in a tightening grip of fear.

In one folder at the Basra police station, the young woman in the autopsy photograph seems to be straining upward in agony, her eyes popping in terror. She is "female unknown identity, found in Hayer Hussein neighbourhood, behind the electric station. 24/8/2007".

In another, a woman's nose has been crushed. Trails of blood run from her closed right eye like lines of tears. She is "female unknown identity, found in Al-Mishraq al-Jaid neighbourhood, behind the car dealer. 7/11/2007".

Their autopsies revealed painful deaths. One woman found in "a red dress" had a 9mm bullet wound in her left hand, three in her right hand, three in her right upper arm, and three in her back. Two of the women were beheaded, one with a saw.

Residents say police have not been investigating. "Everyone knows the militias are doing this, but the police live in fear of them. We all do," said a middle-aged businessman who was too afraid to give his name.

The walls of Basra would be a good place to start looking for the killers. One graffito on a wall bordering the main Al-Dijari road reads: "We warn all women of Basra, especially those who are not wearing abbaya [a long, loose black cloak worn over everyday clothes], that we will kill you." It is signed in the name of an offshoot of the Mahdi Army, the strongest militia in Basra.

It is not just women who live in fear. Professionals such as engineers, doctors and scientists have been dragged from their homes and murdered. Yet last week Gordon Brown responded angrily in the House of Commons when challenged over the security situation in Basra. "Iraq is now a democracy," the prime minister said. "Millions of people have voted. When I went to Basra, only two days ago, I found that there had been a 90% fall in violence over the past few months. We are now able to hand over Basra to provincial Iraqi control . . . This is Iraqis taking control over their own security."

But what kind of security will the British be passing on to local forces in a ceremony at Basra's international airport today? Will David Miliband, the foreign secretary, who is flying in to represent the government at the formalities, genuinely be able to remark upon a job well done? Or are the Basrawis being delivered into the hands of the militias?

The phone rang on the walnut desk of Major-General Jalil Khalaf's office at midnight. He is the new police commander of Basra and had just been telling me about his determination to stop the killing spree. The call sent him into agitated overdrive. He picked up another receiver and started barking orders: "Put check-points around the area. Seal it. Quickly. Quickly. The car is white model Crown. All check-points, arrest all cars of that description."

Half an hour earlier, a young Christian woman had been kidnapped in the Kharj neighbourhood, and he feared the worst. Khalaf, a dapper dresser in a sharply tailored black suit with matching waistcoat, arrived in mid-June and appears to be the first commander to start taking any action. Brown's figures suggest it is taking effect. "I have reopened all 48 women's files and started investigating them," he said. "They are also slashing their faces for wearing make-up. These groups declare 'We are religious', but this is not religion."

He believes the true death toll is higher. Families have buried their dead rather than face what is considered a loss of honour, whether the victim is blameless or not. He has sent a 100-page report back to the national government in Baghdad, detailing

Basra's problems. They differ from those in Baghdad, which had descended into fighting between Sunni and Shi'ite factions before the American "surge" policy of increasing troop numbers brought some semblance of order this autumn.

Basra's 2m residents are almost all Shi'ite – the fighting is among the main three parties that represent this branch of Islam who are vying for wealth and power. The stakes are high. Basra, through Umm Qasr just to the east, is the country's only port and the outlet for most of Iraq's oil, of which the province has the country's greatest reserves. Most of the nation's imports come across its docks too.

It should be a wealthy city, but to drive around reveals the extent of its deterioration. The whole place stinks. The governor, a member of Fadila, the region's third most powerful militia, couldn't fix the sewage pipes, so he diverted them into the Ashar river. The city is mostly low concrete buildings, many crumbling, and whole neighbourhoods are inhabited by squatters who have thrown up illegal and badly built brick or shanty houses. There are daily cuts in electricity and water supplies.

The only civic project that seems to be going well is the provision of new pavements with red tiles. This despite the fact that the city's roads are pitted with potholes. Strange until one learns that the province's governor has just opened a tile factory. Khalaf's efforts to bring order to the city have given him black bags under his eyes. He describes a world in which the police and the political parties and militias are separate and competing forces. So far the militias are winning.

"The problems are like an interlocking chain," he said. "The militias control the ports, which earns them huge sums of money. That money they use to fund their own activities. "Second, borders," he continued. "There is a 280km border between us [and Iran]. Smugglers cross the borders with guns and weapons and these go to the militias. We don't have enough guards or the sophisticated equipment you need to stop them. You could smuggle a tank across that border if you wanted."

The militias are exporting oil products and animals, too, he said. His efforts to stop them and weed the militias out of his own force have not gone unnoticed. So far he has survived seven assassination attempts. Many of his bodyguards have been killed. He believes most of the attempts came from within his own force.

"I will enter the Guinness Book of Records for assassination attempts," he said. The root of the problem, Khalaf believes, was the misguided manner in which the British set up the security forces, particularly the police. "They relied on the political parties and allowed them to nominate people for positions in the police," he said. "Of course, the parties nominated their own members."

Khalaf's personal stock-taking revealed huge quantities of police communications equipment had been delivered directly from police warehouses to the militias, and 1,000 cars had disappeared. "They were cars with police insignia painted on the side!" he said, exasperated.

Khalaf also found he was paying 3,500 members of the force, at the cost of millions to the Iraqi national treasury, who were actually serving with the militias. They didn't even bother to show up for work. His report to the government detailed 28 militias or their offshoots. "All of them have weapons, all are well-trained," he said. "They have RPGs [rocket-propelled grenades], many rifles, bombs, mortars. Their weapons are stronger than ours."

So worried was he for my safety at the end of my interview that he gave me four trucks of soldiers as an escort to the building I was staying in, and his personal Koran for extra safety. I was already forced to travel under cover of traditional abbaya for fear of identification as a westerner.

The level of lawlessness is striking even during a short visit to Basra. On my first day,a male relative of the family I was staying with was kidnapped driving into Basra. A series of desperate calls began to try to find him. It has become a well-established ritual.

The next day, waiting in the anteroom of Major-General Farid Mohan, commander of the army in Basra, I asked the man next to me if he was okay. He had two black eyes and lumps on his bald head. It turned out he was the leader of the first ministry of finance delegation to visit Basra in five months. He had been kidnapped and tortured. Mohan had negotiated his release hours earlier.

Iyad Ahmed sat slumped forward in the grey dishdasha (robe) and leather sandals that he had on when he was kidnapped from his room at the Qusr Al-Sultan, the best hotel in Basra. He had arrived 20 days earlier to investigate the ports and borders.

"When I was kidnapped, I was investigating the theft of 653 new cars stolen from the international free zone in the middle of the afternoon. The thieves killed the guard at the gate as they drove the cars out."

Following the trail, the ministry team found that 90 of the cars had been used in assassinations, and 35 in suicide bomb attacks. Ahmed thinks he was targeted when he started investigating free zone officials for what he believed was their involvement in the car hijacking. The free zone is said to be controlled by the Badr organisation, the Islamic party controlled by Abdul Aziz Hakim, the second most powerful Islamic party in Basra.

"I was threatened," said Ahmed in an outraged voice. "A Mr Falah, the senior man, told me, 'See what we will do to you today'." About 11.30 that evening eight new 4x4s full of gunmen stormed into the hotel. "They dragged me out of my room in just this," he said slapping his dirty robe. "I was shouting, 'I am a government employee'. I thought at first they were after the two women working on my team."

He was blindfolded, driven to what he believes was a farm because of the noises and tortured for 24 hours. "They beat me all over, they kicked me, and they hung me by my wrists for three hours."

Mohan secured his release by promising the kidnappers a "gift" if they gave him Ahmed. It is a mark of the hypocrisy of some Islamic extremists that because the Koran forbids them from extorting money they pretend that their ransom for a kidnapping is a "gift". Ahmed vowed to keep working, although rather fearfully. "These militias are bigger than the government," he said.

The government of Nouri al-Maliki, the prime minister, appears finally to have acknowledged the problem in Basra, but it is unclear if it has the will to wrest the city from the grip of the Islamic parties and their thugs.

"The government is trying to support the forces in Basra," said Ali Dabbagh, its spokesman. "We're not trying to hide the fact that there is a threat in Basra, but we think most of the threat is coming from organised criminal gangs who are hiding behind the slogans of JAM [local shorthand for the Mahdi Army]."

He pointed out that 15,000 police had been fired from forces across Iraq because they were engaging in criminal activity or belonged to a militia. He said that another part of the problem in Basra was that there was a "political struggle – [Islamic] parties are fighting each other". He said, however, that he thought today would witness "a smooth transfer of power to Iraqi security forces. They are capable of dealing with Basra and we can ask the Iraqi security forces or multinational forces to intervene if there is a problem".

Yet it is hard for the Baghdad government to move against the religious militias because it is itself led by Shi'ite religious parties. In the cauldron of Iraqi politics, being seen to attack one's coreligionists is not a good idea. The Mahdi Army is in theory observing a six-month cease-fire, which it announced in late August. Huge murals of Moqtada and his father Mohammed Sadiq al-Sadr line the main roads, rather as larger-than-life portraits of Saddam Hussein did when he was president.

The Sadr office in Basra is a rival centre of power to the official government. Pickup trucks, new Toyotas, even two police cars are parked outside the gates of the compound. Inside the activities are not just military. There are departments for welfare and even a tribunal run on sharia principles.

I met Sheikh Ali As-Sayeedi, one of the Mahdi Army leaders, in his office, furnished with faux-Louis XIV furniture, korans and kitsch plastic ivy. Many leaders used to declaim openly that their ambition was to take power in the city. But now that the British troops are leaving and Iraqis are taking over, they are more cautious in their language.

Sayeedi, however, insisted that the Mahdi Army had driven British forces from Basra and that they would not give up fighting until the American-led coalition left Iraq.

"It is a good next step for Iraqis to take back their sovereignty in Basra," said Sayeedi. "We believe all forces should leave the country. We don't respect any

agreement with these forces. Our people are freedom fighters not militias. "Our programme is to help the Iraqi people and make everyone happy in Basra."

Why then, I asked him, is everyone in Basra blaming the Mahdi Army for the violence in the streets?

"People here support us," he insisted, leaning forward and visibly angering. "Criminals do crime and then say that they are the Mahdi Army to appear stronger."

It is not hard to find the signs of muscle-flexing on the streets, however. On Friday, the Muslim day of prayer, Mahdi checkpoints closed down the city's main roads for their new custom of busing in hundreds of followers to pray in the middle of the main arteries. Traffic snarled as drivers wove through dirty side roads to get around the jams. As prayers broke up, men wearing the black turbans of the Mahdi Army strolled away, machineguns slung casually over their shoulders.

The British gave up the battle for control of the streets of Basra months ago. In September they withdrew from Basra Palace, their base for four years, to the airport. They say they expect the transition to be smooth. The Iraqis have been policing themselves for four months without calling for help. The British insist the handover is no defeat but the next step in the nationwide transition to Iraqi control.

"The formal handover allows them to deliver Iraqi solutions in an Iraqi way," said Major-General Graham Binns, the commanding officer for British forces in Basra province. "The way forward is to have the Iraqis take the next step."

He insisted the British were not cutting and running. They will remain at the airport, reducing to 2,500 by next spring. The Basra government can call on them for support that ranges from surveillance to reentry. Binns confessed to regrets. "I was more of an idealist when I arrived and perhaps too ambitious," he said. "I didn't think it would end this way. "I'm proud of the way we built up the Iraqi security forces, but we were unable to meet the aspirations of the Iraqi people. I would like to have done better."

Tomorrow the Iraqi police and army will mark their first day of independent control of Basra with a military parade at Basra Palace. Last Thursday, Iraqi army guards lounged in sociable groups at the massive arch that leads into the compound on the Shatt al-Arab waterway. Three drank tea together, their weapons leaning against the concrete blast wall installed by the departed British.

They seemed unworried, unlike the civilians outside the walls of the new army headquarters. They certainly didn't look like soldiers ready to take on the well-armed militias. Few in Basra would say that the British have met their goal, "to establish the security necessary for the development of political institutions and for economic reconstruction".

An opinion poll published today suggests that 70% of Basrawis believe security

will improve after the British have left – mostly because they have been removed as a target – but everyone I spoke to said this was their number one worry.

"I must look over my shoulder every minute when I am on the street," said Rula, a 36-year-old mother of four who has refused to quit journalism despite threats. "I look hard at the face of my daughter before I leave for work. Someone might cut my throat and I will not come home again."

Fears that the militias will begin an all-out battle for Basra or that the city will descend into chaos are unlikely to materialise. The factions will no doubt clash as they jockey for power, but they have carved out their lucrative spheres of influence and have too much to lose to go to war.

Iran will play a key role in the future of Basra. Tehran has more influence here than anywhere else in Iraq. The mullahs fund all the Shi'ite groups rather like a wealthy donor hedging his political bets. Essentially, the political players are happy with their lot. It is the rest of the people in Basra who will suffer, most likely for years to come.

"I went to university because I had dreams for my future," said 18-year-old Nayla. "NowI only go to classes twice a week because I am so afraid to leave the house. I have no future."

Reporting risk

Marie Colvin was the first unembedded western journalist from a British newspaper to visit Basra for nearly two years. Colvin could only venture out wearing traditional Islamic dress. She lost the sight in one eye in 2001 from shrapnel from a grenade while on assignment for The Sunday Times in Sri Lanka".

The Iraqi Army's Operation Charge of the Knights

Wikipedia reports that on March 25th, 2008, the Iraqi Army launched an operation code-named Saulat al-Fursan, Operation Charge of the Knights, to drive the Mahdi Army militia out of Basra. The operation was the first major operation to be planned and carried out by the Iraqi Army since the invasion of 2003.

Coalition and Iraqi aircraft patrolled the skies above Basra providing intelligence and carrying out air strikes in support of Iraqi forces. Coalition forces provided embedded military transition teams (MiTTs) in Iraqi Army units and US Special Forces also conducted joint operations with ISOF units.

Iraqi forces faced heavy resistance from Mahdi Army militia inside the city and the offensive stalled, requiring American and British air and artillery support, eventually resulting in a stand-off. More than 1,000 casualties resulted in six days of heavy fighting".

The following US sourced report, excerpted from Marisa Cochrane's , "The Battle for Basra," Iraq Report 9, Institute for the Study of War of June 2008, and posted on the Website of the US Institute for the Study of War, is an excellent general account of the context and detail of the operation.

Operation Knight's Charge (Saulat al-Fursan) March 2008 - May 2008

"By 2008, the problem of militia control in Basra was clear. In the wake of the premature British withdrawal from the city center and transition to an overwatch capacity in late 2007, Basra became a haven for militia and criminal activity. Rival militia factions and criminal gangs were vying for control of the city's lucrative infrastructure and resources, namely shipping and oil. Iranian-backed militias known as Special Groups, mafia-style gangs, and other militias — many of which were operating under the Jaysh al-Mahdi (JAM) banner — dominated the city. Iraqi and British forces were unable to maintain security and became frequent targets of attacks. In an effort to stem the attacks, British troops made an agreement with JAM that stated no British soldier could operate in Basra without the permission of the British Defense Secretary. While the pact was intended to encourage the militia to enter the political process, it effectively allowed JAM and other groups to operate in Basra unchecked. While U.S. troops recognized the deterioration of security in Basra, the main effort of their operations in early 2008 was targeting al-Qaeda in Iraq and other Sunni insurgents in northern Iraq, particularly the city of Mosul.

Preparing the Operation

As concern over Basra increased, Coalition and Iraqi forces began developing plans to clear Basra. On March 21st, 2008, Multi-National Force-Iraq (MNF-I) commander, General David Petraeus, met with Maliki's National Security Advisor, Mowaffak al-Rubaie, to discuss the details of this security plan. The offensive was to resemble the Baghdad Security Plan that was launched the year before. This included a gradual build-up of forces in the southern city; the construction of combat outposts throughout the city to expand the Iraqi Security Force presence; and a steady squeeze on militias before large-scale clearing operations. The operation was intended to be launched several months later, during the summer. At the end of the meeting, Rubaie asked Gen. Petraeus to meet with Maliki, who had a different timeframe for the Basra offensive.

The next morning, Maliki told Gen. Petraeus that he had his own plan for an Iraqi-led operation that was to launch within days. Indeed, Maliki informed Gen. Petraeus that he had already instructed the equivalent of two brigades of Iraqi forces to deploy to Basra within thirty-six hours. The Prime Minister also planned to head to the southern city to oversee the operation personally. Although Gen. Petraeus advised against any hasty action that would be inadequately planned and prepared, he agreed to support the effort. Two days later, on March 24th, Prime Minister Maliki arrived in Basra, along with the first of the additional Iraqi forces and a Coalition liaison team.

A Shaky Start

On the morning of Tuesday March 25th, 2008, Iraqi Security Forces launched a security offensive termed Saulat al-Fursan, or Operation Knight's Charge, to restore stability and law to the province by purging criminal elements in the area.Shortly after the Iraqi Security Forces entered the neighborhood of Al-Tamiyah, a stronghold of Sadr's Jaysh al-Mahdi militia in western Basra, violent clashes erupted.

Throughout the day, as Iraqi forces expanded in to other Sadrist strongholds, including the neighborhoods of al-Jumhuriyah, al-Hayyaniyah, Khamsa Meel, and al-Jubaylah, they met with fierce resistance and continued to clash with militiamen. Over the next few days, fighting between the government security forces and local militias persisted and spread to the neighborhoods of al-Ma'qil, al-Husayn, and al-Kharma. The newlyformed and inexperienced 14th Iraqi Army Division struggled to contain the violence during the first few days of fighting. The units faced much stronger resistance than they expected because of the large amount of Iranian weapons provided to the militias. While Maliki issued and later extended an ultimatum for the militias to lay down their heavy weapons, the persistent violence indicated the gunmen had no intention of doing so.

In Baghdad, when the earliest reports of the fighting in Basra reached MNF-I, U.S. commanders rushed to provide the necessary combat and logistical support for the operations. Coalition commanders provided air assets and intelligence support. A company from the 82nd Airborne Division, which was stationed at Tallil Air Base in neighboring Dhi Qar province, was sent to Basra so as to augment the military adviser effort. Iraqi reinforcements were also rushed to Basra to stabilise the city, including Emergency Response Units (ERUs), Iraqi Special Operations Forces (ISOF), Iraqi helicopters, and conventional forces. Iraqi border enforcement teams (and embedded Coalition Border Enforcement Transition Teams) were also deployed along the Iran-Iraq border to interdict weapons flow.

The fierce fighting continued throughout the last week of March. It was evident that Iraqi forces had failed to adequately assess the enemy situation and plan accordingly. During that time, roughly 1,000 Iraqi Security Force members deserted or refused to fight; in some cases this resulted from the strains of poor planning and coordination and in others it was due to heavy militia infiltration. Most of the Iraqi Army soldiers who deserted were from the newest brigade of the 14th Iraqi Army Division, which had completed its training only five weeks before.

Most of the Iraqi Police who deserted did so under the orders of Sadr's Jaysh al-Mahdi. By the end of the first week, the offensive reached a stalemate. The Iraqi Security Forces were unable to take control of the Jaysh al-Mahdi's heavily-fortified neighborhood strongholds. The intense clashes continued with neither side gaining momentum. Still, there were some successes during the first week of operations in Basra. Two Iraqi Army battalions, along with a company of Iraqi Marines, successfully secured the ports, reclaiming them from the militias.

Engagement of tribal leaders and local security volunteer recruitment efforts yielded 2,500 recruits during the first week of the offensive, in an important step to replicate efforts that has contributed to security improvements elsewhere in the country. Iraqi forces began flying in their own supplies and troops on their two C-130 transport planes.

In a bid to curtail the fighting, Muqtada al-Sadr called for a ceasefire and ordered his militia off the streets on Sunday, March 30th. This ceasefire agreement followed several days of negotiations between Sadr, Hadi al-Amiri, the head of the Badr Organization, and Ali al-Adeeb, a member of the Maliki's own Dawa party. In an interesting political move, Amiri and Adeeb flew to Iran, where Sadr has been living for over a year, without the knowledge of Prime Minister Maliki.

Perhaps what is most significant was that the agreement was brokered in Iran by the head of the Islamic Revolutionary Guards Corps-Qods Force (IRGC-QF), Qassem Suleimani. Suleimani heads IRGC-QF activities in Iraq and is responsible for providing lethal aid, training, and weapons to Iraqi militias known as Special Groups. There is a great deal of overlap in membership of JAM and Special Groups. According to reports, the Iraqi lawmakers sought not only to ask Sadr to call of his militias, but also to ask the Iranian commander to stop funding and arming Shi'a militias in Iraq. The fact that the agreement was brokered in Iran by the head of the IRGC-QF indicated not only the important role Iran had in the conflict, but also the extent of its influence over Iraqi politics".

(Marisa Cochranes report continues after the following BBC report.)

The BBC reported on Sunday, 30th March 2008 that

Iraqi cleric calls off militias

"Iraqi Shia cleric Moqtada Sadr has ordered his fighters off the streets of Basra and other cities in an effort to end clashes with security forces.

He said in a statement that his movement wanted the Iraqi people to stop the bloodshed and maintain the nation's independence and stability. The government called the move "positive", while the military said a curfew in Baghdad would end on Monday. The fighting has claimed more than 240 lives across the country since Tuesday.

Iraqi Prime Minister Nouri Maliki had given militias until 8 April to surrender their weapons in return for cash. But Hazem al-Araji, an aide to Moqtada Sadr, told journalists in Najaf the move would not mean handing in weapons.

The BBC's Adam Brookes in Baghdad says this means the Mahdi Army will remain intact and although the move gives Nouri Maliki a chance to claim victory, the

central demand has not been met and this is not a resolution of the conflict.

The cleric's statement said: "Because of the religious responsibility, and to stop Iraqi blood being shed, and to maintain the unity of Iraq and to put an end to this sedition that the occupiers and their followers want to spread among the Iraqi people, we call for an end to armed appearances in Basra and all other provinces. Anyone carrying a weapon and targeting government institutions will not be one of us." The cleric also demanded that the government apply the general amnesty law, release detainees and stop what he called illegal and random raids.

Moqtada Sadr also told his followers to "work with Iraqi government offices to achieve security and to file charges against those who have committed crimes". A spokesman for Mr Maliki, Ali al-Dabbagh, told Iraq television the statement was positive. "As the government of Iraq we welcome this statement. We believe this will support the government of Iraq's efforts to impose security."

He also warned: "The government will be forced to implement the law against those who do not obey the instructions of the government and of Sadr." A spokesman for the interior ministry, Maj-Gen Abdul Karim Khalaf, said government operations in Basra would continue, but would target "criminals".

In Basra, the British military has given a death toll of 50 but local medical sources report as many as 290 dead and the Iraqi army has reported killing 120 "enemy" fighters there. Scores of people are believed to have been killed in other southern cities, according to Iraqi police or medical reports. At least 44 people were killed in and around Kut, 15 in Nasiriya, 12 in Karbala and six in Hilla.

Marisa Cochrane's "The Battle for Basra," Iraq Report continues

Reinforcements Arrive

One of the Iraqi reinforcement units was the 1st Iraqi Army Quick Reaction Force (1st IA QRF), which arrived in Basra in April, 2008 following a three-day journey from Anbar province. The 1st IA QRF, formerly known as the 1st Iraqi Army Division,, was the most experienced Iraqi Army unit. In a major logistical achievement, "within three days of receiving the order to deploy, the 1st IA (QRF) moved a full division headquarters along with the brigade-sized Quick Reaction Force 1 and its three battalions with hundreds of vehicles from their bases around Habbaniyah, Ramadi, and Hawas to Shaibah Airfield on the outskirts of Basra." U.S. Marine Military Transition Teams (MiTTs), embedded with the units, also accompanied the QRF 1 to Basra.

Following the arrival of these seasoned Iraqi reinforcements and the enactment of the ceasefire, the Iraqi Security Forces shifted into more deliberate shaping operations, similar to the original plan to clear Basra put forward by the Coalition and Iraqi forces. This phase of shaping was intended to move Iraqi units into

permanent positions throughout Basra, from which they could conduct full-scale clearing and counter- insurgency operations. Coalition Forces provided air support and other intelligence and logistics assets throughout this phase.

This phase continued throughout the first half of April, during which time Iraqi units expanded their presence in the city—moving into central neighborhoods, setting up checkpoints, and cordoning-off militia strongholds so criminal elements could not flee the area. As ISF units move into Mahdi Army strongholds, like al-Hayyaniyah, Coalition Forces provide air support and engage criminals. Lt. Gen. Mohan led an ISF convoy in a show of force through al-Hayyaniyah on April 2nd. Remarkably, the convoy encountered almost no resistance as it rode through the main Sadrist haven in Basra, suggesting that the ceasefire was taking hold.

Also during this time, Hillah Special Weapons and Tactics (SWAT) teams, Iraqi National Police ERU, and ISOF units conducted targeted raids on criminals in al-Halaf and Mufitiyah areas of northern and central Basra. Upon arrival, the QRF 1 moved to Qibla, a neighborhood on the southwestern edge of Basra. There it began cordoning and preparing positions in the neighborhood.

As they prepared for the next phase of clearing, Iraqi forces also conducted humanitarian operations in some areas of Basra. In an effort to tackle Basra's economic woes, Maliki announced plans on April 3rd for the creation of 25,000 jobs and plans to spend $100 million to improve Basra city services. The next day, the 3rd Brigade of the QRF1 began distributing food and water to residents of al-Hayyaniyah.

The Real Clearing of Basra

On April 12th, the Iraqi Security Forces launched larger-scale clearing operations in the city. This phase was remarkably successful, given the heavy militia resistance in the earliest stage of Operation Knight's Charge. They conducted deliberate clearing operations throughout the city.

During these operations, the QRF1 paired with elements of the 14th Iraqi Army Division. On April12th, these units engaged in house-to-house clearing of the Qibla neighborhood, where they had been conducting preparatory operations over the last few weeks. Iraqi soldiers moved systematically through the area, searching for wanted criminals, illegal weapons, improvised explosive devices, and other prohibited materials. Several days into the clearing operations, the QRF 1 commander, Maj. General Tariq, met with local sheiks to discuss measures to spur economic development in Qibla. The efforts of the QRF 1 were largely successful in reasserting government control over the area. House-to-house operations were also conducted in the Jaysh al-Mahdi stronghold of al-Husayn in the southwestern part of Basra.

On April 19th, operations began to reclaim the largest Sadrist stronghold of Basra, al-Hayyaniyah. Iraqi forces they faced some resistance from Mahdi Army forces. On several occasions, JAM militias attacked IA checkpoints and patrols; during the

ensuing firefight, Coalition air assets were called in to conduct air strikes against the militants. Elsewhere in the city, militias continued to target the government security forces. Within the first two weeks of April, one senior intelligence officer was assassinated; another intelligence officer and a senior Iraqi Army commander were also severely wounded in a separate IED attack.

Members of the Iraqi Security Forces that stood down in the early days of the fighting were dismissed from their positions. Some 500 police and 400 soldiers from Basra were fired. Many of these men were Sadr loyalists. Despite Sadr's request for reinstatement, they were not permitted to rejoin the ISF. Generals Mohan and Jallil were relieved from their positions in Basra and given new assignments in Baghdad.

From mid-April to mid-May, the QRF 1, along with its U.S. Marine MiTT advisors and elements of the 14th Iraqi Army Division, systematically moved through northwestern Basra. Clearing operations in the second half of April generally met with little resistance. The offensive also turned up many Iranian munitions. On April 28, Lt. General Mohan announced that in the three previous weeks, 324 wanted and suspected criminals were arrested, and "320 roadside bombs of different types and sizes, 1783, and huge quantities of ammunitions were all seized."

Emboldened by their successes and incensed by the extent of Iranian support for the militia groups in Basra, the Iraqi Security Forces began to accelerate their targeting of Sadrists in Basra in late April. Acting upon Maliki's orders to reclaim all government property, Iraqi troops, backed by British forces, surrounded the main Sadrist office in Basra, which occupied a former Iraqi Olympic committee building. The government forces prevented them from holding Friday prayers and forced them to abandon the building the following day. Days later they destroyed the Sadrist prayer ground attached to the property.

On April 24th, they launched a campaign to remove all partisan photos or slogans from public places—a direct affront to the Sadrist Trend. The same day, a prominent Sadrist and his brother were detained in central Basra by the ISF. On April25, a Sadrist security delegation was denied entry into Basra. In early May, Iraqi forces targeted other Shi'a groups with suspected malign links. On May 3, they raided the Iraqi National Gathering party headquarters in Basra. The next day they destroyed the prayer ground of the ISCI-linked Thar Allah party after the discovery of a large weapons cache in the building.

By mid-May, clearing operations in Basra were largely complete. Earlier in the month, the QRF 1 moved into the al-Latif neighborhood on the northern bank of the Qarnar Ali river, and conducted house-to-house searches for wanted criminals and illegal weapons. "The clearing of al-Latif resulted in several cache discoveries, including dozens of automatic weapons, mortars and IEDs. The QRF 1 also detained several criminals, and raided and demolished the residence of a known IED maker and militia leader."

As militia elements fled north from Basra, towards their remaining strongholds in the northern Basra province and southern Maysan province, the ISF pursued them. On May 13th, a fourth phase of the offensive began in the areas north of Basra, and particularly in the city of al-Qurnah. Al-Qurnah had long been a Sadrist stronghold and Special Groups hub for weapons distribution.

Most of the 14th Iraqi Army Division units remained in Basra to hold the previously cleared areas. On May 25th, Iraqi Army units entered the southwestern city of al-Zubayr to conduct security and humanitarian operations. Al-Zubayr was an important node on the JAM/Special Groups trafficking networks from Iran. Weapons, fighters, and financial facilitators would move through al-Zubayr on their way to or from Nasiriyah.

Reconstruction Begins

As the security operations progressed, ISF and the Government of Iraq

also stepped up their efforts to deliver food, water, services, and medical aid to residents. During the month of May, more than 79,000 Halal meals, 400,000 liters of water, and 5.5 tons of medical supplies were distributed in the neediest areas of Basra. Iraqi forces also led operations to provide medical support to the residents of the Tanumah, Qibla, and al-Hayyaniyah neighborhoods. Some 3,000 local citizens were hired in mid-May to undertake clean-up efforts. On April 1, 2008, after a shaky first week of fighting, the Iraqi Prime Minister announced plans to recruit an additional 10,000 new soldiers and police to secure the city. Nearly 1,000 turned out for an Iraqi Army recruiting drive in Basra. In late May, another Iraqi Army recruiting drive was held in the Hayyaniyah neighborhood; more than 3,000 turned out to apply for the 1,000 available posts.

Maliki also moved to establish local security volunteer groups to employ the tribesmen until they are incorporated into the government's forces. In the Tanumah neighborhood, located across from the city center on the eastern bank of the Shatt al-Arab, a government-sanctioned volunteer security force was created to patrol the area after the Iraqi Army left to clear another neighborhood. 760 volunteers, mainly from the Kanaan tribe, now patrol the neighborhood and the area along the Iranian border. Given the success of the Sons of Iraqi security volunteer movements in central and northern Iraq, the creation of similar groups in the south was an important security step.

The security gains during the Basra offensive breathed new life into the city. With the militias at bay, many residents ventured out for the first time in since the operations began. Shops and restaurants have reopened, many of them playing formerly-banned Arabic music. Basra's Corniche, the city's famous riverfront promenade, became crowded with residents, even late into the evening. Alcohol was again for sale in some shops, albeit discreetly.

At Basra University, male and female students interacted freely, and strict Islamic styles of dress were replaced with more secular and even Western styles. Jaysh al-

> Mahdi checkpoints were replaced by Iraqi Army and Police checkpoints. Basra's residents enjoyed their newfound freedoms, uncertain of how long they will last".

By May 12, 2008, Basra "residents overwhelmingly reported a substantial improvement in their everyday lives" according to The New York Times. "Government forces have now taken over Islamic militants' headquarters and halted the death squads and 'vice enforcers' who attacked women, Christians, musicians, alcohol sellers and anyone suspected of collaborating with Westerners", according to the report; however, when asked how long it would take for lawlessness to resume if the Iraqi army left, one resident replied, "one day".

Operation Telic 12 April 2008 – November 2008

Public accounts indicate that the British Forces in Basra were excluded from the operational planning of Charge of the Knights, but that they rapidly re-engaged in support of the Iraqi Security Forces.

Operation Telic 12 marked the turning point in the exit strategy from Iraq, with Operation Charge of the Knights allowing UK forces to reengage in the reconstruction of Basra and to prepare an uncontested departure strategy.

Kim Sengupta reported in the Independent on Sunday, 6th April 2008 that:

> ""British troops have returned to Basra, in a major change of policy, six months after withdrawing from the city because their presence was said to be provoking violence from the militias.
>
> Around 150 UK military personnel with Mastiff and Warrior armoured vehicles have been deployed in the past few days alongside Iraqi government forces in the aftermath of fierce fighting against the Mahdi Army. The Ministry of Defence described the move as "a logical extension of our training role that will provide additional mentoring and monitoring to the Iraqi army". However, British troops have until now been kept strictly outside the city limits, with officials saying that stepping back into the quagmire of Basra would set back the exit strategy from Iraq.
>
> The Americans have been pressing for UK forces, which are now stationed at the airport, to be more actively involved in operations in the city. The British return to Basra comes days after the Government announced that Gordon Brown's pledge to reduce troop levels by 1,500 this spring could not be fulfilled because of security concerns. The development comes alongside the disclosure that up to 1,500 Iraqi soldiers refused to fight, or deserted in the operation against the radical cleric Moqtada al-Sadr's Shia militia. The numbers, according to Iraqi and American sources, included dozens of officers and at least two senior field commanders. Iraqi officials said that Colonel Rahim Jabbar and Lieutenant Colonel Shakir Khalaf, a brigade commander and his deputy, have been suspended for declining to fight.

In addition to those who refused to follow orders, about 100 members of the Iraqi security forces simply changed sides, to the Mehdi Army. The Iraqi Prime Minister, Nouri al-Maliki, has faced strong criticism over the operation, which he had led after flying from Baghdad to Basra and which ended, critics say, in a stalemate with an Iranian-brokered peace deal. The Independent revealed how Mr Maliki countermanded the plans of Lieutenant General Mohan al-Furayji, the Iraqi commander in charge of the south, who had wanted to wait until June to carry out the operation after a build-up of resources, economic projects on the ground and an offer of amnesty to the Shia fighters.

Gen Mohan had planned to target all militias rather than just the Mehdi Army. The offensive which took place concentrated, instead, on Mr al-Sadr's forces while the Badr Brigade, which has links to Mr Maliki's government, and the Fadilla group of Basra governor Mohammed Waeli were not targeted.

There are now signs of a future confrontation, with Mr Sadr asking a million Iraqis to march to the Shia holy city of Najaf to protest against the Americans. The radical cleric also accused the Iraqi government of breaking the agreement under which he withdrew his militia from the streets just over a week ago.

Any outbreak of violence is almost certain to spread to Basra and surrounding areas, and the British troops, in six Military Transition Teams, are likely to be involved while mentoring and directing their Iraqi charges. UK assistance to Iraqi forces so far has consisted of providing logistical support as well as artillery fire, from outside the city, on militia positions. American and British sources say that while some parts of Basra that had become "no-go" areas had been reclaimed by Iraqi troops, the Mehdi Army remains a potent military force. Some Shia soldiers and policemen who refused to take part in the mission against the Mehdi Army said they could not fight fellow Shias, while others feared that their families would be targeted if they took part. One officer, a lieutenant from Sadr City, said: "What they were asking us to do was to fire on our friends, members of our family. A lot of men were unhappy, we felt there should have been talks before the attack began."

Mr Maliki, however, said there would be firm action against those in the military who disobeyed orders. "Everyone who was not on the side of the security forces will go into the military courts", he said. "Joining the army or police is not a trip or a picnic. They swore on the Koran that they would not support their sect or their party, but they were lying."

On 16th July 2008 Diwaniya (Al Qadisiyah) Province was transferred to Iraqi control. (MoD)

Major-General Barney White-Spunner then commanding British Forces in Iraq and the multinational forces in Basra, was thus able to write for The Times on July 23rd, 2008 that:

Basra - here's the good news story

"The city is firmly under the grip of Iraq's new security forces, and normal life is returning. There is an interesting piece of graffiti on a bridge near Basra. A fleeing militiaman has scrawled "We'll be back"; underneath an Iraqi soldier has scribbled in reply "And we'll be waiting for you".

The Shia militias, the Jaish al- Mahdi, who controlled large parts of Basra until March this year, has now gone and instead the city is firmly under the grip of Iraq's new security forces, in whom the coalition has invested so much training. They re-established control in April, in an operation romantically named "The Charge of the Knights", systematically clearing the city with British and American support, confiscating illegal weapons and arresting the violent gangs whose combination of criminality and vicious extremism was making life a misery for so many of Basra's people.

Around the city the posters of religious leaders are being replaced with billboards advertising cars and mobile phones and photographs of Nouri al-Maliki, the Iraqi Prime Minister, who is rightly credited with being the driving force behind the army's crackdown. You see the symbol of The Charge of the Knights everywhere, a black horse carrying the flag of Iraq trampling the gangsters underfoot.

This improvement in security has made Basrawis more confident of their future than at any time since 2003. A recent poll showed that only 8 per cent now regard security as their main concern; 80 per cent have confidence in the Iraqi security forces to protect them. Women are free to walk the streets uncovered and to wear Western dress should they so choose.

Yet what also makes people here so confident is that they know that they live in what is potentially one of the richest cities in the Middle East. They have both oil and natural gas. The "flare-off" I see from my window alone represents enough gas to heat a sizeable town. Then they have Iraq's major southern airport, in which we have invested heavily with them so that it is increasingly used by commercial airlines; you can now fly to Basra from London, changing in Amman. They also have Iraq's only ports. Last week they unloaded 24,000 tonnes at Umm Qasr port and every berth was full, double the traffic of just a month ago.

Most importantly, they have the people determined to realise this potential and, as one Basrawi businessman put it to me this week, to be a "Dubai, not a Mogadishu". What they want and need now are international partners.

Basra is a surprisingly attractive city, built along the banks of the Shatt al-Arab waterway, laced with a series of canals, and affectionately known as "the Venice of the East". Its city centre is one of the oldest and most beautiful in the Middle East.

It has seen better days, after years of repression under Saddam and the recent fighting, but it is slowly recovering its former glory. The restaurants along the famous Corniche are reopening, and the streets and bazaars are buzzing. It has always been a cosmopolitan city, a mixture of races and religions where Sunni and Shia have regularly worshipped together, and with active Christian and Mandaean communities, it prides itself on having been the intellectual capital of Iraq.

Saddam did not just persecute Basra because he thought it was the centre of the southern insurgency against the Baathists, but because Basrawis showed an independence of thought that was inimical to his regime. Examples of the two sides of Basra's culture are now re-emerging. This week the city hosted a major Islamic conference, with many international representatives, and which emphasised unity and peaceful coexistence after the recent factionalism. And last month they were able to hold al-Murbad, the annual poetry festival, which had been a regular feature of life in Basra for centuries and which again attracts an international audience. The Basra diaspora, those intellectuals and professionals who left because of persecution by Saddam and the militias, are now returning. House prices have doubled since April and, in the more upmarket suburbs, have trebled.

It is a remarkable transformation, and it is largely due to the professionalism of the new Iraqi security forces. You will meet them everywhere in the city, accompanied by their British training teams, patrolling the streets, manning check- points and providing reassurance to people that the nightmare of the militias is over and that it is now their democratically elected government that is in control.

They are an impressive lot of young men, whom we have got to know very well as we live and work alongside them in their bases throughout the province. They believe in the new Iraq and, as their commander and my counterpart General Mohammed frequently tells me, they are determined never to become like "the army of Saddam".

Some of those violent extremists who fled a few months ago will try to come back, but together the Iraqi and British armies are putting a security framework in place that will frustrate them. It will take a lot now to prevent Basra from realising its birthright. The Iraqi forces will, as that anonymous soldier scrawled, "be waiting for" anyone who tries to stop them.

The MND SE Official Blog of 1st September 2008 announced that:

Improvements offer Iraqis optimism for the future

"The UK's most senior military representative in southern Iraq has given an upbeat assessment of the progress he believes is being made in the region.

Major General Andy Salmon's views echo those made by his predecessor, Major General Barney White-Spunner, from whom Maj Gen Salmon took over recently.

On his return to the UK last month, Maj Gen White-Spunner praised the progress made in Basra in recent months, in particular the work of the Iraqi Security Forces in ridding the city of rogue militias as well as the increase in foreign investment.

2008 has seen a significant and noticeable improvement in the security situation in Iraq. Violence is down to levels not seen since 2003/04 and there are a number of signs that a degree of normality is slowly returning to a country that has been plagued by terrorist and ethno-sectarian violence:

"Basra and the surrounding region have undergone an incredible transformation over the last five months and there is a real sense of optimism," Maj Gen Salmon explained. "Since taking over command in MND(SE) I am eager to get on with the task of helping Basrawis rebuild their great country and supporting the Iraqi Government in providing peace and prosperity.

"A stable and secure environment is the foundation upon which much-needed economic development can take place. With the Iraqi Security Forces increasingly capable of protecting the Iraqi people, one of the key challenges remains how to help national and local government build civil capacity and stimulate economic growth so that the ordinary Iraqi citizen feels the benefit of his country's considerable wealth."

The country still faces a number of significant political, economic and administrative challenges, as well as security concerns that will take time to resolve. Nevertheless, a number of positive indicators give cause for hopefulness that a more secure and stable Iraq is gradually emerging.

The successful Charge of the Knights military operation in Basra, which began in March, demonstrated the Iraqi government's intent to crack down on violent extremists and criminals regardless of religious or political affiliation. Subsequent operations in Sadr City, Mosul, Al Amarah and Diyala have reinforced the message and boosted public confidence in the Government:

"The last five months provides an indication of what a powerful partnership Iraq and Britain have but I realise there is much work to done, and I am confident that by working together we can achieve our goals. So it is with a sense of optimism that I look to the future and the challenges that lie ahead," Major Gen Salmon added.

Several representatives have now been appointed to areas where there have been recent military operations, armed with considerable special funds to fast track regeneration and reconstruction projects. In addition six Arab countries have recently undertaken to appoint Ambassadors and to open Embassies and consulates in Iraq, signalling the return of normal regional diplomatic relations. Furthermore, recent high level visits to Baghdad – from King Abdullah II of Jordan and the Turkish Prime Minister, as well as Ministerial visits from several Gulf States – have reinforced this trend.

Infrastructure developments and inward investment

Although demand still outstrips supply, electricity generation has reached record post-war levels this year and investment in new generating capacity is planned. A new airport at Najaf has recently been opened, and improvements to Basra and Irbil are in train, adding to the network of provincial airports across the country. The development of Umm Qasar port is also playing an essential role of increasing import and exports from the country.

Foreign inward investment has now reached over $7.4Bn and an increasing number of visits from international investors demonstrate that Iraq's business potential is clearly recognised. Work has also begun on a new 5-star hotel in the centre of Baghdad.

Major General Salmon's view that Iraq is heading in the right direction is shared by General David Petraeus. In an interview with the International Herald Tribune newspaper on Thursday 21 August 2008 Gen Petraeus, who recently handed over command of Multi National Forces in Iraq to General Raymond Odierno, compared life in Iraq today to the situation he found when he arrived early in 2007:

"I don't know that it was a death spiral but it was a pretty dire situation," he said. "There have been very substantial gains at this point."But don't take any of this to imply that we think we're anywhere near finished, or that there's anything but an enormous amount of hard work going on. It's not durable yet. It's not self sustaining - there is still a lot of work to do."

On 29th October 2008 Wasit Province was transferred to Iraq control. (MoD)

On 23rd October 2008 Babil Province was transferred to Iraq control (MoD)

The British Army was fortunate to be able to piggy back its reputation on the back of Operation Charge of the Knights, and its consequences. Other revelations were about to enter the public domain, confirming suspicions that had been voiced in the Press a year earlier.

Nabil al-Jurani, Deborah Haynes and Michael Evans wrote in The Times on August 5th, 2008 that:

Secret deal kept British Army out of battle for Basra

"A secret deal between Britain and the notorious al-Mahdi militia prevented British Forces from coming to the aid of their US and Iraqi allies for nearly a week during the battle for Basra this year. Four thousand British troops – including elements of the SAS and an entire mechanised brigade – watched from the sidelines for six days because of an "accommodation" with the Iranian-backed group, according to American and Iraqi officers who took part in the assault.

US Marines and soldiers had to be rushed in to fill the void, fighting bitter street battles and facing mortar fire, rockets and roadside bombs with their Iraqi counterparts. Hundreds of militiamen were killed or arrested in the fighting. About 60 Iraqis were killed or injured. One US Marine died and seven were wounded.

US advisers who accompanied the Iraqi forces into the fight were shocked to learn of the accommodation made last summer by British Intelligence and elements of al-Mahdi Army, the militia loyal to Moqtada al-Sadr, the radical Shia Muslim cleric.

The deal, which aimed to encourage the Shia movement back into the political process and marginalise extremist factions, has dealt a huge blow to Britain's reputation in Iraq. Under its terms, no British soldier could enter Basra without the permission of Des Browne, the Defence Secretary. By the time he gave his approval, most of the fighting was over and the damage to Britain's reputation had already been done.

Senior British defence sources told The Times that Nouri al-Maliki, the Iraqi Prime Minister, who ordered the assault, and high-ranking US military officers had become disillusioned with the British as a result of their failure to act. Another confirmed that the deal, negotiated by British Intelligence, had been a costly mistake.

The Ministry of Defence has never confirmed that there was a deal with al-Mahdi Army, but one official denied that the delay in sending in troops was because of the arrangement agreed with the Shia militia. A spokesman for the MoD said that the reason why troops were not sent immediately into Basra was because there was "no structure in place" in the city for units to go back in to start mentoring the Iraqi troops.

Colonel Imad, who heads the 2nd Battalion, 1st Brigade, 1st Iraqi Army Division, the most experienced division, commanded one of the quick-reaction battalions summoned to assist British-trained local forces, who faltered from the outset because of inexperience and lack of support. He said: "Without the support of the Americans we would not have accomplished the mission because the British Forces had done nothing there. "I do not trust the British Forces. They did not want to lose any soldiers for the mission."

Lieutenant-Colonel Chuck Western, a senior US Marine advising the Iraqi Army, told The Times: "I was not happy. Everybody just assumed that because this deal was cut nobody was going in. Cutting a deal with the bad guys is generally not a good idea." He emphasised, however, that he was not being critical of the British military, which he described as first-rate.

Captain Eric Whyne, another US Marine officer who took part in the battle, said that he was astounded that "a coalition force would make a pact with essentially their enemy and promise not to go into their area so as not to get attacked". He alleged that "some horrific atrocities" were committed by the militia in Basra during the British watch.

A senior British defence source agreed that the battle for Basra had been damaging to Britain's reputation in Iraq. "Maliki, and the Americans, felt the British were morally impugned by the deal they had reached with the militia. The British were accused of trying to find the line of least resistance in dealing with the Shia militia," said the source.

"You can accuse the Americans of many things, such as hamfistedness, but you can't accuse them of not addressing a situation when it arises. While we had a strategy of evasion, the Americans just went in and addressed the problem."

Another British official said that the deal was intended as an IRA-style reconciliation. "That is what we were trying to do but it did not work." The official added that "accommodation" had become a dirty word.

US officials knew of the discussions, which continued until March this year. They facilitated the peaceful exit of British troops from a palace compound in Basra last September in return for the release of a number of prisoners. The arrangement fell apart on March 25 when Mr al-Maliki ordered his surprise assault on Basra, catching both the Americans and British off-guard. The Americans responded by flying in reinforcements, providing air cover and offering the logistical and other support needed for the Iraqis to win.

The British were partly handicapped because their commander, Major-General Barney White-Spunner, was away on a skiing holiday when the attack began. When Brigadier Julian Free, his deputy, arrived to discuss the situation with Mr al-Maliki at the presidential palace in Basra, he was made to wait outside.

The first British troops only entered the city on March 31. The MoD spokesman said that the operation was launched at such short notice that the only support that could be given in the first few days was air power – in the form of Tornado ground attack aircraft – and logistics. He said that after British troops were withdrawn from Basra last year it was realised that the Iraqi forces still needed help, which was why the current British force contained more instructors and trainers.

Operation Telic 13 November 2008 – May 2009

Nicholas Watt wrote in The Guardian on Wednesday 17th December 2008 that:

Brown: British military to withdraw from Iraq

"Britain's six-year occupation of southern Iraq will end by the summer, Gordon Brown announced today on a surprise visit to Baghdad. A joint statement by the prime minister and his Iraqi counterpart, Nuri al-Maliki, said: "The role played by the UK combat forces is drawing to a close. These forces will have completed their task in the first half of 2009 and will then leave Iraq."

Amid tight security – days after an Iraqi journalist threw his shoes at George Bush – the prime minister arrived to give his personal backing to the agreement, which will see the bulk of the 4,100 British troops leave the country by June, with all military operations ending on 31st May.

Brown is expected to make a statement to the Commons tomorrow in which he will indicate that British troops will start to withdraw from Basra airport, their last main base in Iraq, in March. Around 300 troops will remain to help with the training of Iraqi forces. Under an agreement signed with the Iraqi government, all but a few hundred British troops must leave the country by 31st July, six years and three months after the 2003 invasion.

The withdrawal, which will be set in motion next month when Basra airport is formally handed to the Iraqi authorities, can take place because a series of tasks set by Britain in the summer are near completion. They are:

- Increasing the training of the Iraqi police and military forces so they can assume control of security. Britain has trained 20,000 Iraqi troops from the 10th and 14th combat divisions and 22,000 police officers.
- Stepping up political progress so that provincial elections are held in Iraq by no later than early next year. These will now be held on 31 January.
- Intensifying reconstruction to build on the growing strength of the Iraqi economy. It is forecast to grow by 9.8% this year, with inflation down to 6% after a high of 46% last year.
- Create the conditions for the Iraqis to resume control of Basra airport so that it can return to full civilian use. The Iraqi authorities will take control of the airport next month, although the Americans will retain a major military presence there to protect supply lines to Kuwait after the withdrawal of British troops.

Brown told reporters at a joint press conference with Maliki: "These tasks are now in the process of being completed. When they have been completed the mission will end. We have agreed that the mission will end next year. Having completed the four tasks we will end our mission on 31 May and our troops will be coming home in the next two months [afterwards]."

On 31st December 2008 UNSCR 1790 expired. (MoD)

On 1st January 2009 Basra International Airport was transferred to Iraqi control. The Iraqi government became fully sovereign, including taking back control of its airspace. New individual agreements for the presence of coalition forces between the Government of Iraq and the Governments of individual countries came into force. (MoD

Terri Judd wrote in The Independent on Wednesday, 1 April 2009 that:

British troops say goodbye to Basra as US takes over: The pull-out begins

"It has been a campaign as mired in controversy as it has been costly in lives. But yesterday, almost exactly six years to the day after British forces rolled into Iraq, they began to leave. Major General Andy Salmon handed over military command of the southern area of the country to his US counterpart, Major General Michael Oates, signifying the start of the withdrawal of most of the UK's 4,100 personnel from Basra. British combat operations in Iraq will end on 31st May and all but 400 troops will leave by the end of July. The 400 remaining British soldiers will chiefly be training Iraqi Army officers and working as part of the Naval Transition Team. All will be aware that 179 of their comrades have lost their lives since the invasion in 2003.

"We remember, particularly at such a time, those who paid the ultimate price in this endeavour, those who suffered injury and disablement in order that we might get to this point today," said Air Chief Marshal Sir Jock Stirrup, Chief of the Defence Staff, who was in Iraq for the handover ceremony alongside the American General Ray Odierno, commanding general of coalition forces in Iraq. Later the Royal Marines Band played "Sunset" as the pennant of the UK's Combined Amphibious Forces was lowered and replaced by that of the American 10th Mountain Division flag.

While the mood in Basra was yesterday described by the Army as "reflective but positive," a suicide bombing at a police station in the northern Iraqi city of Mosul, which left eight dead and 12 more injured, was a reminder that the violence continues. It was the latest in a string of attacks this month, raising fears that insurgents are attempting to regroup only three months before US troops are due to withdraw from the cities.

However, the British insist the situation in Basra has been more stable. In the past eight months there have been five attacks on the main base, in comparison to 28 in March last year alone.

As a result the Defence Secretary, John Hutton, said yesterday that the UK led Multi-National Division South-East and US-led Baghdad-based MND Centre would be merged in Basra as Iraqi Security Forces were able to deliver security in the south with only minimal coalition assistance. For the Americans the route south to Kuwait remains essential as they prepare to remove two brigades themselves by the end of the summer.

Yesterday, a bright pink trailer offering "pretzel dogs" was a sign that the Americans had begun moving into the British base, having been warned by their unofficial website that they will have to endure more spartan living conditions until the luxuries to which US forces are accustomed are built.



Basrah prepares for provincial elections January 2009



Iraqi Army on Patrol in Basrah, January 2009

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Pointing The Way Out: The Utility of Force and The Basra Narrative January – August 2007

Colonel I N A Thomas OBE
COS MND (SE) (Jan – Aug 07)

"There is no period so remote as the recent past".
Alan Bennett, The History Boys.

The Narrative
All of the inquiries into the conduct of, and lessons from, Operation TELIC (Op TELIC) will need to study the evolving context during the campaign and then the resulting narrative before coming to judgements. The danger of the series of articles begun in the last British Army Review (BAR) is that they encourage readers to leap to conclusions with neither the context nor the narrative properly understood. This article sets the context, as understood by those present in Basra at the time, and explains the narrative for a critical period of the campaign, from Jan – Aug 07, a period characterised by just shy of a quarter of the total UK campaign deaths, Op ZENITH (the reposturing from Basra), and the so called "deal".

In January 2007, Iraqi, UK and US narratives were running on divergent lines. Cohering them fell to the divisional HQ in Basra. The major task facing the HQ was to understand these narratives and drive a divisional course of action that kept within the tolerances of each.

Iraq in 2007 was still rebuilding itself after the destruction of its official organs of state by Saddam and then the Coalition. It was re-building itself bottom up, consistent with the Arab cultural dynamics of loyalty, whereby loyalty is to blood not institutions; it goes from the inside out and official/state allegiances attract the weakest loyalty. In this context, militias were potentially a cohering force in society, being a primary source of loyalty, a form of urban tribe, in an otherwise incoherent society. Every militia had its political party (more than vice versa) and also its violent wing, forming a three layered polity of the state institutions (the official state), and the militias split between their social organisations (the shadow state) and their violent henchmen (the dark state).



Iraq Prime Minister Nouri al-Maliki greets Col. Philip Battaglia, commander of the 4th BCT (US Army)

The Shia-dominated Government of Iraq (GoI) was in permanent internal competition between factions, with Prime Minister Maliki at that time weak, constantly juggling allegiances and cutting deals to stay in power, and hence unable to stand up to the powerful militias, the Jaiysh al Mehdi (JAM) and the Supreme Council for the Islamic Republic of Iraq (SCIRI). This had particular relevance for Multinational Division (South East) (MND (SE)) with an essentially Shia area of operations (AO); the internal GoI power politics were played out on a daily basis here unlike anywhere else in Iraq. In simple terms, whilst the GoI was clear that the job of the Coalition was to solve the security problems, it could not always agree who posed the problems. In the US AO, the security problem was clear: the existential threat was (Sunni) Al Qaeda in Iraq (AQ-I). The problem in MND (SE) was that the Shia polity was not coherent enough to agree who the security problems were amongst the Shia militia; and even if authorisation for eg. a strike operation was gained in advance, whether the GoI stuck to this agreement after the event depended upon the local political reaction. The GoI wanted the Coalition out of the Shia south as soon as it judged it could contain the situation on its own; and yet nervousness about their ability to do this created an uneasy dependence they resented and which hampered everything the Division did in the south.

By January 2007, two provinces in Iraq had achieved Provincial Iraqi Control (PIC),[1] both in MND (SE). Al Muthanna and Dhi Qar represented polities dominated by an alliance between the SCIRI militia, the rural tribes and the local ISF whose personnel came from these tribes and militias. External/official/state loyalties were based on coherent internal/blood loyalties. This accommodation dominated local power, worked to the intent of the GoI and suppressed JAM activity. This 'deal' with local militias, based on them acting in accord with GoI intent, was recognised and accepted at General Petraeus' first Multinational Force Iraq (MNF-I) conference in February 07.



A QRL patrol heads towards one of the many border forts which are dotted along the Iraq Iran border (Cpl Ian Forsyth)

This pragmatism was eventually extended to Maysan in May 2007. Maysan was, as

it had historically been, a sparsely populated open flank that was out of GoI/Coalition control. The troop requirement to seal the border and cut suspected supply lines of explosively-formed projectile, improvised explosive devices (EFP IEDs) and other warlike materiel from Iran was beyond the Coalition, even after the surge. The border had no relevance to those who lived there, a 1920s British line on a map they did not recognise, cutting across their ancient tribal and communication links to their fellow Arabs and co-religionists in what the rest of the world labelled SW Iran (Arabistan). Without local Iraqi active participation, Maysan would remain untreatable. The pragmatic judgement made by MNF-I about Maysan was that granting it PIC would still allow surgical strike ops to take place as agreed by MNF-I and GoI but put the onus of governance on GoI. PIC was granted in May 07 and the last UK BG withdrew.

Basra

Basra represented the major obstacle to progress in MND (SE). Its shattered polity, reflecting the disparate sources of its population, provided no leadership to its people and the provincial council refused official contact with MND (SE) HQ following the destruction of the Jamee'at[2] over Christmas 06 (agreement to this destruction having been given by the Basra Provincial Council security chiefs in advance but reneged on afterwards in the light of the local, JAM-orchestrated, uproar). Every local Baswari source of influence was represented in the GoI in Baghdad, making every military strike conducted by MND (SE) a political hazard, thus limiting what could be achieved by military means. This divided loyalty characterised and permeated the Basra Iraqi Security Forces (ISF); as General Jalil, the Police chief, said in May 07, "[the problem] is not about training or equipment, it's about loyalty – and MNF can't touch that". Loyalty remained something only the Shia polity, in Baghdad as much as in Basra, could resolve.

Meanwhile, January 2007 saw MND(SE) hand over primacy to the ISF; henceforth, MND(SE) theoretically operated in support of the 10 Iraqi Army (IA) Div. Yet this same force was, by its own admission, riddled with sympathisers from every militia faction that might need to be confronted; some of the 10 IA Div 'jundi' were drawn from the same communities as the militias and were their kith and kin. Sharing of intelligence was impossible, detention operations were curtailed and the ISF was reluctant, and sometimes refused, to have joint Coalition/ISF patrols on the streets of Basra City. The Coalition presence drew fire onto the ISF; and the image of the ISF as the puppets of the 'Occupying' Coalition undermined their attempts to be seen as the legitimate expression of Iraqi/GoI nationalism. In this context, the presence of the MNF on the streets of Basra City was seen as working against the long term ISF goal of gaining the loyalty of the people. (In contrast, UK troops did embed successfully with 10 IA Div battalions when they deployed to Baghdad: the Sunni opposition clarified Shia loyalties and allowed UK mentors to be seen as welcome allies against a common foe.) Having said that, the evident popularity of the work of Operation SINBAD in cleaning up areas and injecting money into Basra seemed to have earned some political credit with the politicians; but the popular approval of Coalition activity seen on the ground did not always translate into political support and progress. What it seemed to buy in early 2007 was a relative freedom to conduct strike ops at an unprecedented tempo and scale for 19 Brigade amid ever rising attacks by improvised explosive device (IED), indirect fire (rockets/mortars) (IDF) and casualty rates on all sides.

UK Support for Op Telic Reduces

For the UK, domestic support for Operation TELIC had reduced rapidly since the 19 Sep 05 kidnap and rescue of the two British Servicemen in Basra had laid bare the extent of JAM and other militia infiltration of the ISF and Basra polity; and revealed the scant control of MND(SE) over Basra. The view from Basra was that by then, UK had already committed to Afghanistan, and UK political opinion and resource prioritisation increasingly favoured Afghanistan. We understood that an increase in force levels in one theatre necessitated a reduction in the other; a key consideration. Seen from Basra, it seemed that by 2007 there was a national convergence between declining political support for the Iraq operation and rising political appetite for the Afghan operation. The UK could not do both. In addition, as explained already, it was not clear that increased Coalition troops were necessarily the answer to a problem rooted deep within the Shia polity. Furthermore, the UK had deployed its reserve (the Theatre Reserve Battalion from Cyprus) in support of Op SINBAD (intended to be a "clear–hold-build" operation for Basra), and the sense was that UK had showed the Iraqis how to do it and now it was time for the Iraqis to show the will to do it for themselves.

> ...Op ZENITH was conceived with a moral forcing function, to leave a security gap the ISF would have to fill..... by forcing them to confront their internal political and hence security issues.

Accordingly, Op ZENITH was created in November 2006 to execute the re-posturing from Basra to the Contingency Operating Base (COB) at the Basra Air Station. It must be noted that the operation was endorsed by headquarters of the Multinational Corps- Iraq (HQ MNC-I) and its execution was substantially underwritten by Corps resources. In part, Op ZENITH was conceived with a moral forcing function, to leave a security gap the ISF would have to fill, so reducing Iraqi dependence by forcing them to confront their internal political and hence security issues. The UK necessity was to demonstrate sufficient success in Iraq to keep the domestic political support sufficient to sustain the UK commitment to Op TELIC and the US Coalition. Op ZENITH was to be the metric of success; and it was imperative that it should succeed. It would have to be (and,

importantly, be portrayed as such in information operations (IO) terms) a relief in place with the ISF, not a withdrawal in contact. The HQ was tasked to work within US tolerances but reduce to certain force levels by certain times, in accordance with Op ZENITH. These orders remained extant throughout the build up in 2006 and into pre-deployment briefings in January 2007.

The Surge

The US, meanwhile, had changed tack. 2006 had been dominated by a rising sectarian conflict in the US AO and decreasing US political support for the war. This culminated in the cross-party Iraqi Study Group report (which included consultation with Coalition, including UK, allies) that recommended in autumn 2006 an accelerated transition to Iraqi control across Iraq. Yet over Christmas 06/07, the President opted for a surge instead, to prevent the total collapse of Iraq and the defeat of US hard power in its attempt to create political change in the Middle East. The US not only planned to inject more troops into Iraq, but also declared they would stay there until the job was done.

On arrival in January 2007, the HQ found itself trying to cohere what appeared to be three diverging and incompatible strategies working to three different clocks (to use Gen Petraeus' memorable term); on each of the components of strategy, the GoI, US and UK were incoherent.

Policy. US policy was to stay as long as it took; UK policy was to transition to the ISF as fast as could be agreed; GoI policy was to get rid of the UK from the south - but only when it could survive without it.

Resources. UK had already "surged". US and GoI were focussed on the intense sectarian conflict centred around Baghdad with the 'minor irritant' of JAM (to quote a Corps' operation order (OpO) low on the priorities for Corps, ISF or MNSTC-I[3] assets. No 'surge' was on the cards for MND (SE).

Reality. The violence in the Shia Basra AO differed significantly from that in the sectarianly-divided US AO. US troops were a valid response to a war between opposed peoples. The target of the violence there was largely the opposing sectarian population; so there was a population to protect. It was not clear from the evidence in Basra that this logic applied there: 90% of the violence was against MNF, with residual violence based on financial motives; flares of violence between competing Shia entities were centred on control of resources, not motivated by nihilism (the energy infrastructure remained largely undamaged through the period). The conclusion drawn was that inter-Shia violence was self-limiting: fear of Sunni revival united all Shia leaders in limiting the amount of damage each faction would do to the other; the competing factions in Basra wanted a bigger slice of the economic cake, not to destroy the cake itself; the goal was for an Iraqi end state, no matter that Iranian sponsorship was accepted pragmatically as a means to an end in the short term. Unlike further north, the dynamics in the south appeared fundamentally constructive, if only the polity could be brought to recognise it. Basra's problems appeared deeply culturally engrained and it did not seem clear that foreign, Christian troops, with all the distorting influence these had on Iraqi loyalties, were the answer to Basra's problems. In any case, as explained, a surge was not an option; another way had to be found to deliver a course of action each country could validly claim was 'success'.

Military Goals

In January 2007, the HQ saw Basra as a fundamentally political challenge (foreshadowing General Petraeus' oft repeated comment that summer, "It's all about the politics!") and influence was identified as the primary objective; with kinetics in a supporting role. Intelligence efforts were re-tasked to prioritise politics over target acquisition. The application of force only had meaning in so far as it contributed to progress towards the political end state – an Iraqi self-reliant polity in Basra; this became the governing rationale for strike operations. Military goals were set as: reducing the influence of forces (broadly defined) working against the Basra political process, countering malign Iranian influence, training the ISF, executing Op ZENITH; with force protection recognised as being an enabling function, necessary to create the freedom of action to carry out activity essential to achieve the mission. Notwithstanding the constraints of the Shia polity, it was the absence of any political process that gave 19 Light Brigade (19 Lt Bde) such freedom to strike during their tour; but that resulted in UK forces having the highest per capita casualty rate in the Corps with consequent rising political concerns domestically. UK troops were most certainly up for the fight; the challenge was to give it purpose.

At one level, success was being achieved: Op ZENITH's reliefs in place were proceeding well. 19 Lt Bde's high intensity of strike operations paid dividends and appeared to be achieving the desired effects of: disrupting JAM; and demonstrating that MNF held the initiative and was reposturing from Basra at its own volition and not being "bombed out". This effort was capped by the killing in May of the commander of JAM in Basra, Wissam Abu Qadir. This spectacular success against a charismatic and extremely security-aware leader shocked and palpably hurt JAM, affecting its morale and throwing the organisation into some turmoil, diminishing its ability to launch coordinated attacks against MNF. After a brief, but intense and



General Sir Richard Dannatt (then Chief of the General Staff) speaks to General Mohan a whilst on a visit to Basra in 2008 (Cpl Martin Coleman RAF)

ultimately futile, spasm of retaliatory violence, which was absorbed and defeated by both the outgoing 19 Lt Bde and the newly arrived 1 Mech Bde, JAM entered a month long period of mourning and wrangling over who should succeed Wissam. This gave the movement much to think about, created room for manoeuvre and contributed to the energisation of the political process set out below. Furthermore, lessons had been learnt from the sacking of Camp Abu Naji in 2006 by JAM shortly after its vacation by UK troops and its handover to the ISF. MND (SE) plans, underwritten and resourced by the US Corps and closely integrated with the ISF, allowed the transition to the ISF of the Shaat al Arab Hotel, the Old State Building and Shaibah Logistic Base without a shot being fired, a credit to 19 Lt Bde, 1 Mechanised Brigade and 102 then 101 Logistic Brigades. Meanwhile, Maysan had been granted PIC in April 07 amid much Iraqi fanfare and MNF sucking of teeth but acceptance of reality. Progress could be said to be taking place, apart from within the Basra polity. It was only in May 07 that a Basra political process began and the means to assist it appeared: Mohan and the deal.

General Mohan was appointed in May 07 as Maliki's security supremo in Basra, taking charge of all agencies of the ISF. He was also charged with resolving the unhelpful status of Governor Wahili as a governor of marginal legitimacy, without the support of the people or even that of his own council. Furthermore, the GoI denied his legal status as Governor yet did nothing to remove him, thereby creating a political impasse with an embattled figure primarily concerned with his own enrichment and political survival. He was thus emblematic of Shia political ineptitude and inability to tackle its shadow and dark states, in which Wahili had considerable 'wasta'. General Mohan began a process of political engagement across the official and shadow states, inevitably - but unadmittedly - dealing also with the dark state. His goal, which was shared by the Division HQ, was to cohere the factions around the unifying draws of Basra's latent wealth, its fear of Iran, its desire for self-government and its fear of a Sunni revival. In the absence of clear political guidance from Maliki to the contrary, he chose to attempt to include all parties in an accommodation, the classic 'big tent' approach common to Arab tribal customs. In this context, he recognised that the presence of MNF in Basra not only provoked violence but was used to justify it: it distorted local loyalties by allowing the militias to mobilise popular support under the banner of resistance to the MNF "occupation". So Mohan endorsed Op ZENITH and was keen to see Basra Palace vacated. Yet he recognised the Coalition's worth as the ultimate big stick, so necessary in the Iraqi political tradition to be called on in extremis, a big stick he knew the ISF at that time could not be trusted to supply. The move of MNF to the COB would retain this big stick but, equally importantly, it was expected to reduce the level of violence on the streets of Basra to levels Mohan felt the ISF could handle. His target date for his schemes was the promised but unscheduled provincial elections.

> The move of MNF to the COB would retain this big stick

This gave a political context and purpose to the operations of the newly arrived 1 Mech Bde. MNF operations had to be consistent with this new-found political process. Operations began to be cleared through Mohan to ensure consistency. This remained subject to MNF judgement not Mohan's veto; but the Iraqi political fall-out, and rebukes from the Corps, from previous contraventions of Iraqi political sensitivities, gave weight to Mohan's preferences. Mohan recognised that some sort of confrontation with JAM would be needed, and this would be best done by the ISF rather than MNF, but he recognised the current shortcomings of the ISF. So he wished to buy time and space to build up ISF capability; this provided the focus for MND(SE) activity – training and mentoring the ISF.

Dealing with JAM

Coincident upon Mohan's arrival, an interlocutor in JAM was found who offered to contribute to GoI, UK and hence US goals, by taking the majority of the violent opposition to MNF out of the fight. This created the possibility of

buying Mohan's political machinations time and space. The interlocutor and many of his followers were in the COB detention centre; that gave the Division 'hard power' over him. More importantly for the long term, and the Iraqi end-state, was the 'soft power' of attraction. He was a known anti-Iranian with a strong following within JAM, who appeared to share the same aspirations for Basra as the MNF and GoI – increased development, prosperity, education, religious moderation, and Iraqi control. His motivation for attacking the MNF was that they were "the Occupiers"; the counter argument was that the MNF would leave when Maliki ordered them to - the Iranians wouldn't. The objective was a cessation of violence between the MNF and his members on the basis that they undertook to support the political process and development in Basra, oppose Iranian influence – especially the Iranian backed JAM Special Groups (terrorist cells who accounted for a significant number of lethal attacks against coalition forces) - and, on meeting those conditions, gain release.



Major Hancock, The Royal Anglian Regiment commander of the UK MITT Group attached to 50 Bde, Iraqi Army during Operation Charge of the Knights-14 in Basrah City, 18-19th June, 2008. Op TELIC 12 (Cpl Rob Knight)

It is important to note that it was not the intent that MNF operations should in any way be circumscribed by, or beholden to, the interests of the JAM interlocutor. Any concessions made were on the strict conditionality that he delivered his side of the bargain; otherwise, his group was subject to MNF action as before. The package was negotiated by MND (SE), agreed by GoI representatives including Mohan, authorised by the US chain of command, and cleared through Her Majesty's Government (HMG). It was agreed in mid-August 07.



British Mastiff armoured vehicles on patrol during Operation Charge of the Knights-14 in Basrah City with the UK Military Transition Team (MITT) Group attached to 50 Brigade, Iraqi Army in June 2008.

Others must pick up the narrative from then on. From UK, it appeared that the violence fell off, MNF were successfully relieved in place in Basra Palace in September, development improved and PIC was granted to Basra in December 2007, a US/GoI endorsement of improvements in conditions in Basra; as one Foreign and Commonwealth (FCO) observer was heard to say, "At the start of 2007, we couldn't wait to get out; now we're wondering how long we can stay." Critically, the UK political support for Op TELIC was sustained and the Coalition continued. UK, US and GoI narratives seemed to have been aligned. Neither the radicalisation that took place in early 2008 in Basra, nor the Charge of the Knights (CotKs) was foreseen in August 2007. But both would have been considered within the likely parameters of any Iraqi resolution of internal Shia divisions. Basra, of all places in Iraq, was never seen as having an extreme religious bias; indeed, its fleshpot history from the 1950s suggested quite otherwise. It seems possible, if not likely, that the taste of radicalisation lost the radicals the hearts and minds of the population. This will undoubtedly have been played into the Shia polity within the GoI and it would be consistent with the 2007 analysis to suggest that this provided Maliki with the unifying focus for Shia elements within the GoI to give him the mandate to identify what they were all against. As Saint-Just said in 1791 in the context of exporting the French Revolution, "If you want to create an **Us**, [first] create a **Them!**" From afar, it appeared that the CotKs succeeded due to a clear decision by the GoI as to what Basra's problems were, a firm commitment to resolve them, and the support of the population for the ISF who themselves were not drawn from Basra and were therefore not compromised by diffuse local loyalties. For Iraq and the Iraqi end state, and indeed for the Coalition end state of a self-reliant Iraq, the results of CotKs were unequivocally good – a Basra that appears to be flourishing and with violence containable by its own security apparatus. The GoI had finally addressed its own Shia demons, as only it could.

The complexity of factors depicted in this narrative show that counter insurgency (COIN) is not a discrete military activity; it is a pan-, and inter-government, objective that requires the whole of government to succeed. The inquiries will need to look beyond just the military tactical level if they are to understand and improve the way UK does its business. The recent criticisms by Professor Hew Strachan and Sir Christopher Meyer and the precepts of the earlier analysis of "War amongst the People" by General Sir Rupert Smith need to be seriously addressed. Similar comments were made after the Boer war 100 years ago, in fear of a future calamity nearer to home. Now, the lessons that must be learnt from Iraq have immediate relevance to our current departmental main effort (ME), the campaign in Afghanistan. □

1 Handing over responsibility for the security of a province to the Iraqis with the MNF acting in support of the ISF.
2 The HQ of the Iraqi Serious Crimes Unit (SCU) – ironically named since some of its members were suspected of committing, rather than solving, serious crimes.
3 The organisation responsible for training, organising and equipping the ISF.

"First Do No Harm" - 7 Armoured Brigade in Southern Iraq

Brigadier Sandy Storrie
Commander 7 Armoured Brigade
Mar 07 - Mar 09

Introduction

Recent editions of this Review have included surprisingly little coverage of events in Iraq (This was not editorial policy - we simply did not have the material - Ed.). The last three years have seen only four pieces: of which one was about the US Army, and the other three were by members of that Army, serving or retired.[1] By comparison, four articles on UK operations in Afghanistan appeared in the last edition alone.

This cannot be through lack of interest or engagement. Many readers of this Review have invested heavily in Iraq: time, effort and in some cases blood. Yet in the admirable eagerness to embrace the new challenges of Afghanistan, there seems to be a general reluctance to reflect critically on the latter stages of our time in Iraq: the major campaign of the last six years.

This disappoints me for two reasons. First, because - to quote the truism - those unable to learn from their mistakes are condemned to repeat them. But secondly because the last 12 months have actually seen major progress in Southern Iraq, and unless we are prepared to think critically about how that was achieved, we may overlook opportunities for other campaigns.

So the aim of this short piece is summarize the experiences of 7 Armoured Brigade last summer, and to set out the progress that was made. I shall briefly describe the context, the mission and concept of operations, the main events, and the results as I saw them. Finally I shall suggest some reasons why I think we were successful, and some possible lessons for the future.

Context



'O-Group' - a Colour-Sergeant from the Royal Anglian Regiment The Poachers delivers a set of orders prior to Operation Charge of the Knights-14 in Basrah City with UK MITT Group attached to 50 Bde, Iraqi Army (Cpl Rob Knight).

Space prevents me from discussing in detail the events of 2007. Suffice to say that, through the combined efforts of those deployed,[2] the Iraqi Security Forces (ISF) assumed responsibility for security within Basra on 16 December 2007. Control of the city was then contested between the ISF and the Jaish-al-Mehdi (JAM), until resolved decisively in the ISF's favour by Op CHARGE OF THE KNIGHTS (COTK): a three month operation commencing on 25 March 2008, conducted principally by Iraqi units with Coalition forces including 4 Mechanised Brigade in support. When my own Brigade deployed in mid May, therefore, our principal task was to support the ISF in consolidating their security gains, and achieving irreversible momentum to Iraqi self-reliance.

This was not what the Brigade had been expecting. In fact, much of our training had concentrated on the worst-case contingency of an opposed re-intervention into Basra. But the success



Major 'Herbie' Hancock, The Royal Anglian Regiment The Poachers commander of the UK MITT Group attached to 50 Bde, Iraqi Army during Operation Charge of the Knights

of COTK led swiftly to a revised UK Concept of Operations, which directed the Brigade to generate not combat units but Military Transition Teams (MiTTs), to live and operate alongside the Iraqi Army (IA) in the city. A MiTT - discussed in detail in this issue by two of my COs - is essentially a small team of UK soldiers embedded within the IA to provide planning advice, operational support and access to Coalition capabilities and joint fires. MiTTs ultimately took many forms ("one size does not MiTT all") but initially all comprised a mentoring element (with Iraqi Brigade HQs ideally mentored by a British CO and his staff, and Iraqi Battalion HQs mentored by a British sub-unit commander or equivalent), and a force protection (FP) element based on a platoon or troop mounted in four Mastiffs (MF), ideally with a forward air controller to access Coalition joint fires. As time went on we were able to expand the mentoring element, whilst relying increasingly on the Iraqis for FP: but more of that later.

The direction to MiTT was received just as our Mission Rehearsal Exercise was ending: unfortunate but unavoidable. We responded by pooling the available resources of four combat units to form the UK MiTT Group; a bespoke organisation under CO SCOTS DG, which ultimately grew to over 1000 strong. Three things helped in this respect. The first was the inherent cohesion of 7 Armoured Brigade, and the "All of one Company" ethos embedded by my predecessor. The second was the FORM cycle, under which I and my COs had trained together for more than a year by the time we deployed. And the third was the readiness of all my COs to set aside personal ambitions and Regimental interests in pursuit of Brigade objectives. You have to lose your ego when conducting counter-insurgency (COIN)[3] and from the outset my COs set an admirable lead.

Mission and Concept of Operations
The Divisional mission was given in the Corps' Operation Order 08/02:

"MND (SE) will support and develop the ISF, and assist those building civil capacity, in order to achieve sustained security and set the conditions for Iraqi self-reliance and economic growth."

Both GOC's[4] concepts of operations thus sought to:

- Adapt and consolidate security gains.
- Energise and deliver economic development and reconstruction.
- Catalyse inclusive politics.
- Deliver positive messages.

In keeping with the spirit of the integrated HQ, I did not issue a separate intent, but focussed the Brigade instead on the first of these bullets, with subsidiary efforts on the second and fourth. The third lay outwith my control.

Key Phases / Events
The situation as we deployed was promising but fragile. COTK had been successful and the ISF had achieved a measure of dominance across the AO. Nonetheless there was at that stage widespread concern that their control might be only temporary, pending a return by the JAM. We therefore sought to exploit this window of opportunity by rolling out the MiTTs as quickly as possible to support 14 Iraqi Division and its four Brigades. MiTTs were deployed to the Basra Operations Command (BaOC) at the Shatt-al-Arab Hotel, to the HQ of 14 Iraqi Division, to the Brigade HQs of 50, 51, 52 and 53 Bdes[5], and to the battalions of 52 Bde, which as the least experienced units in the Division were felt to be the priority for training. Links were also established with the three US MiTTs mentoring 26 IA Bde, which had remained in Basra after COTK. The MiTTs for the BaOC and 14 Div were found principally from staff augmentees from HQ ARRC, who provided an invaluable level of staff horsepower which my Brigade could not generate. All other MiTTs were found from within the Brigade: with 18 cap-badges ultimately represented.

The conditions into which these MiTTs initially deployed were spartan, and imposed significant risks in terms of environmental health and FP. Our next priority was therefore to de-risk and consolidate them, and to force generate and deploy additional MiTTs to expand the MiTT footprint across the AO. MiTTs

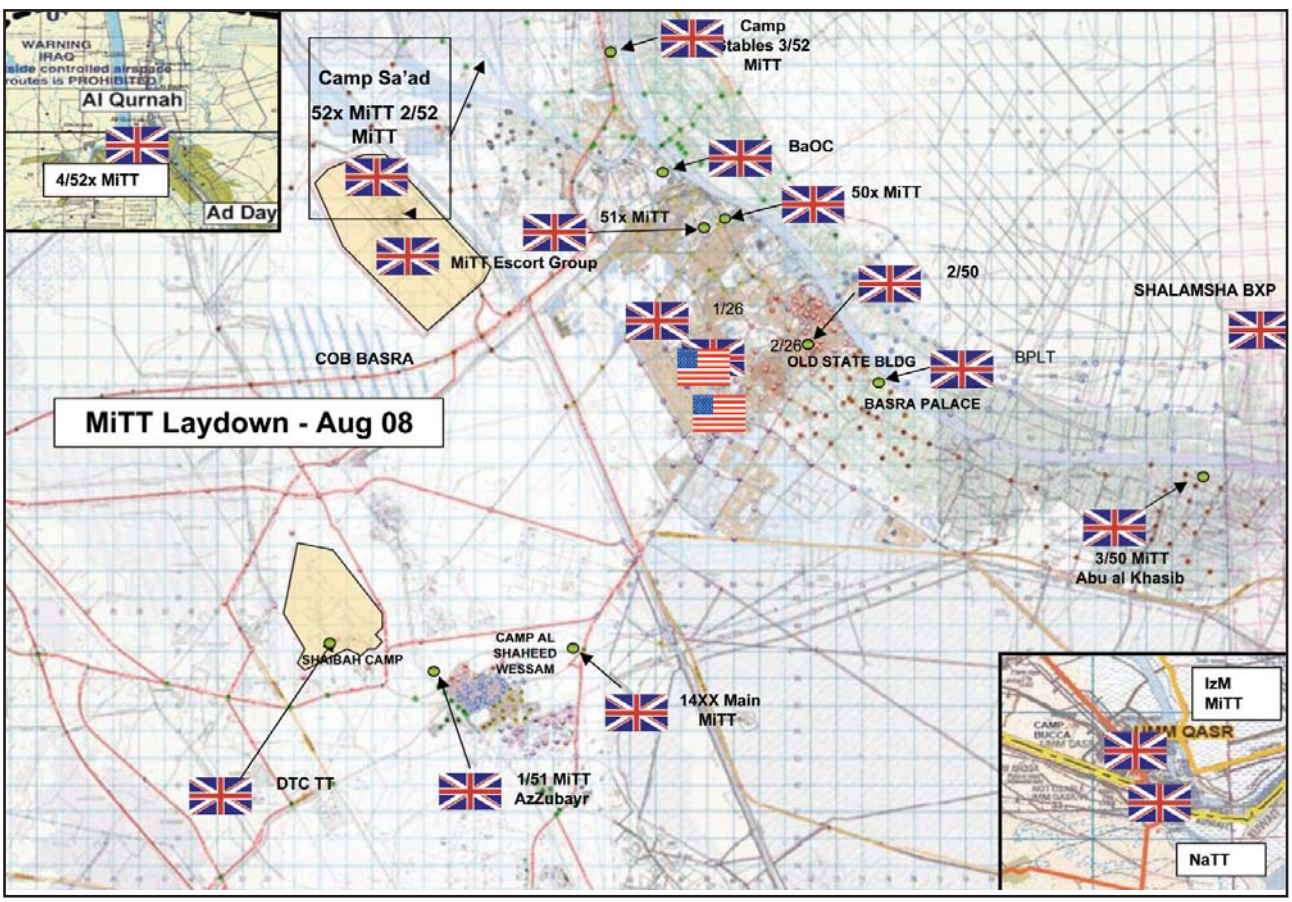


Senior commanders of the Iraqi 52nd Brigade with Major Pete Smith, commander of the UK MITT team (Cpl Rob Knight RLC)

were permanently deployed to al-Qurnah and al-Latif, and a FOB was constructed at the Border Crossing Point at Shalamsha. A vigorous engineering programme was put in place to provide sufficient life support and FP to allow these MiTTs to operate effectively. This completed the original PJHQ roll-out plan, but still left significant parts of 14 IA Div unMiTTed. The key constraint was the availability of MF, but by taking additional risk on logistic convoys, and re-equipping some force elements with vehicles borrowed from the US, we were able to release sufficient MF to create additional MiTTs for the Iraqi units in the Old State Building, at Abu al-Khaseeb, and in az Zubayr. Given our recent history in some of these locations, I thought hard before re-occupying them, but doing so greatly enhanced our situational awareness across Basra Province, and increased the numbers of Iraqi soldiers exposed to MiTT effect.

In July and August, two decisions forced a rebalancing of MiTT effort. First, as 53 Bde emerged from basic training, the Iraqi MOD decided to send it not to Basra but to Baghdad, beyond the AO of UK MiTTs. And secondly, the Corps indicated that it would withdraw the US MiTTs from the battalions of 26 Bde, leaving only the team with the Brigade HQ. This threw up additional (and exposed) tasks, but fortunately also released some resources, and enabled the Brigade to concentrate its combat power in the city. This was the "high water mark" of MiTTing, with some 800 soldiers routinely based outside the COB from this point on.

By midsummer it became clear that concerns over a JAM return were receding, and that additional risk could be taken in order to promote and accelerate Iraqi self-reliance. I therefore directed a step change in profile on 1 Sep 08, by which tanks were removed from routine operations, the use of Warrior was minimised, the C-IDF battery was put at 12 hours notice to fire and its manpower re-assigned to other tasks, and routine overflight of Basra City was discontinued. BULLDOG was withdrawn from Umm Qasr and MiTT commanders were granted decentralised authority to reduce patrol sizes, adjust profile (including soft hats) and use Iraqi vehicles and helicopters where appropriate, subject to a waiver from the GOC. Over time, the default came to be what we called "1+3 MiTTing": with a single UK mentor and three FP soldiers routinely travelling in Iraqi vehicles and/or helicopters as the passengers of the IA. All this to reduce UK profile, promote Iraqi lead, and preserve public consent.



MiTT Laydown

The Brigade then entered a sustained phase of capacity-building through Ramadan and beyond: facilitated greatly by the opening of purpose-built Joint Operation Centres for HQ 14 Div and the BaOC. Concurrently, a major engineering operation was mounted to build nine Joint Security Stations - reinforced police stations in Basra's most challenging areas - and their associated forward operating bases, to enable the deployment of a US MP battalion charged with developing the Iraqi Police. Finally, we created a bespoke logistic MiTT for the Iraqi Motor Transport Regiment, and began to reassign MiTTs away from battalions which had reached the required standard to others that had not. These also represented the first moves to "cut the umbilical", and begin to establish distance between Iraqi units and their associated MiTTs.



Boats in the Evening

During TELIC 12, Brigade and attached units were subject to 14 IDF and 12 IED attacks, principally in the first half of the tour. Through good procedures and no small portion of luck, no significant casualties or damage were sustained. An important factor in this respect was the generation of a riverine capability in Mk 6 assault boats, used principally in the marshes to the north of the Common Operating Base (COB). This severely disrupted the IDF teams' preferred MO, and in the final three months of the tour only two IDF attacks were received, both ineffective.

Throughout the tour steady state operations were conducted at Umm Qasr port (MiTTing the Iraqi Marines and linking the various port security agencies), Shalamsha BXP (FOB construction, border operations and FP for the US biometric teams) and the Divisional Training Centre (continuation and specialist training courses). Initially the tour was also characterised by a high tempo of UK and Iraqi strike operations, which made a significant dent in insurgent capability, and deterred the return of other JAM members from abroad. In the final two months of the tour, enemy activity dropped off almost completely, and only one further opportunity to strike was presented, and successfully taken.

Results

The principal achievements of the tour were:

- The development of 14 IA Division, which is now fit for purpose and able to overmatch any insurgent capability it is likely to face.
- A significant reduction in insurgent capability. Aside from those netted by UK strikes, Iraqi Army operations MiTTed by the Brigade resulted in the arrest of over 300 other suspected militia members, and the recovery of over 2000 weapons.
- A progressive reduction in the level of background violence and reported crime in Basra City, from 31 violent deaths in July to only 6 in November.
- An observable rise in economic activity in Basra City and Umm Qasr port, which was operating to capacity from mid summer onwards.
- A major fall in attacks on UK forces: with only one in the last two months of the tour.
- No UK fatalities: the first Op TELIC on which this has been achieved.

Lessons Identified

Despite the evident success of this operation, I would counsel some caution in drawing lessons. TELIC 12 presented a specific military problem and the circumstances are unlikely to be exactly repeated. And as Lieutenant General John Kiszely has pointed out, all counter-insurgencies are of their own kind, making problematic the transfer of lessons from one to another.[6] I would therefore prefer just to set out the reasons why I think we were successful, and allow others to judge the extent to which these experiences can be applied to other situations.

I would be the first to acknowledge that conditions were right for us. Prime Minister Maliki had intervened personally in Basra (and by his engagement had redefined the internal Shia power-struggles as insurgency), and had committed capable Iraqi forces into the city. The Division was on the Corps Main Effort - at least at the start of the tour - and COTK had been a success.

Furthermore, in early 2008 many Basrawis had experienced militia "government" and its manifest shortcomings, and so the COIN "competition in government" had swung back towards the Government of Iraq. And external support to the militias seemed to have reduced. Together, these factors produced strong public support for the IA, and - since we were seen to be operating in their support - even for us. The IA had also developed: its commanders were more confident and they were receptive to being MiTTed. They had seen how MiTTing could work from the US mentors embedded with 1st Iraqi Division and could see the potential benefits. Finally I think our own soldiers were better placed: this was 7 Armoured Brigade's third TELIC and we understood the environment better as a result. In all those senses we were lucky in that we were in the right place at the right time.

However I also think we made our own luck: in the following areas:

- Our pre-tour preparation was sufficient, despite the late upheaval from the decision to MiTT.
- The Divisional strategy of empowering the ISF was correct, and was understood and bought-into throughout the Brigade.
- We resourced the Main Effort of

MiTTing with our numbers and our talent. Main Effort is *"a concentration of resources in an area where a commander seeks to bring about a decision"*: we concentrated resources accordingly and saw the benefit.

- We partnered the Iraqis: genuinely. MiTTing was the obvious manifestation of that, but we also made a real emotional commitment to their success. They went from being our mission to being our friends. There was little if any of what one of my COs has called "…the tension, fear and contempt of previous TELICs". As a result, strong bonds of trust were formed, and public consent was surprisingly solid; particularly when we were seen to be operating directly in support of the ISF. It was less certain when we were thought to be operating independently, but our focus on the first category let us get away with occasional unilateral ventures when we needed them.
- We accepted tactical risk to best support the IA. We deployed the MiTTs to some isolated locations, in challenging conditions, and then the MiTT commanders exposed themselves still further with the 1+3 MiTTing I have described. I am not suggesting that this will always be the right thing to do, but in our case it worked. TELIC 12 was a constant adaptation to changing conditions and we had to work hard to keep up.
- We decentralised execution, with as much authority as possible pushed downwards, and local commanders empowered to make judgements based on their superior feel for local situations and personalities. We also devolved financial authority to the lowest possible level; with CO MiTT Group able to spend up to £2K on consent-winning projects without reference, and additional funds available on request. The corollary is adequate supervision - what Lieutenant General Alistair Irwin used to call "the comradely but demanding eye of the chain of command." This was not always an easy balance to strike and most of the errors which occurred came about when supervision mechanisms broke down.
- We practiced "full-spectrum COIN", by which I mean that we were conducting MiTTing and reconstruction projects by day, and J2-led strike operations by night. The physical detention of some capable adversaries undoubtedly played a big part in success, but sensitivity to profile, restraint in avoiding actions which could have caused collateral damage, and a focus on meeting public needs provided important non-kinetic support. In my opinion, a mature counter-insurgency demands high selectivity and precision in the use of force. Fortunately our targeting mechanisms usually allowed this, and where these criteria could not be met, we tended not to act.
- Finally, we didn't mess it up, in that we did not have any of the cultural mistakes or incidents that can derail an otherwise successful campaign. On a few occasions we came close, but the strong relationships we had built with the Iraqis carried us through. In COIN I suggest that there is profound value in the Hippocratic principle "First do no harm": do not, by your conduct or cultural insensitivity, make a bad situation worse. This may be self-evident but it demands the highest standards of performance from the whole of the force: and also I think a slightly different approach by commanders. The military mindset is essentially and rightly proactive, and there is much to be said for that. But there are also times, particularly on the military line of operation, when the best thing to do is to sit on your hands. So where there was significant risk that collateral damage, negative public reaction or unintended consequences would outweigh the tactical benefits from any operation (particularly a unilateral one) I tended to opt for inaction, despite the occasional hit for morale.

The result of all this (we felt) was that we entered a "virtuous circle" of COIN, in which improved security increased our freedom of manoeuvre, which enabled more J9 and economic activity, which enhanced public consent, increased the flow of information to the ISF, and improved security further. This has enabled the security gains of COTK to be consolidated and deepened, with the ISF leading throughout.



Comd 7 Bde Brig Storrie with a senior Iraqi commander

My advice to any commander faced with a similar MiTTIng problem would be this: align your own C2 structure as closely as possible with that of the indigenous formation you are supporting, interact with it at as many levels as possible, and spend as much time as possible with your mentoree, even if it is just "hanging out" with him. I would echo both TE Lawrence's advice that *"formal visits to give advice are not so good as the constant dropping of ideas in casual talk"*, and the views of the chief BaOC mentor, Colonel Richard Iron, who said that past a certain point, mentoring is rather like parenting, in that it's just about "being there", and providing an appreciative audience. For senior commanders this may also include providing some light relief from the pressures of command.

Conclusion

7 Armoured Brigade was fortunate to be in Iraq at a time when much of the hard work and sacrifice of the last six years began to pay off. Although our own tour was relatively benign, we felt an acute sense of responsibility to our

predecessors: not least the 200 Coalition soldiers who had given their lives to get us to that point. We were presented with a window of opportunity, which we seized, and which we opened further. By the end of the tour, the Shi'a insurgency was effectively defeated, the ISF was well able to overmatch any residual threat, and the public mood in Basra was upbeat and forward-leaning. I would not define that as complete success - economic and political progress was still to be made - but the conditions were set for success to be achievable. And critically, Iraqis were taking responsibility for making it so.

All proper military matters conclude with three points and this article is no exception:

- First I would like to pay a public tribute to the officers and soldiers of my Brigade, who worked so hard in difficult conditions to deliver progress.
- Secondly I would like to acknowledge the wider range of civil and military actors from across the Coalition who also played major parts: both last year and on earlier TELICs. Any successful counter-insurgency demands a long-term, integrated approach, and I would not wish my inevitable focus on the actions of 7 Armoured Brigade to obscure the contributions of others.
- Finally I would like to encourage critical discussion of our Army's performance in Iraq: and I include in that the work of my own Brigade. Humility, cultural sensitivity and decentralised execution are likely to be enduring themes and we would be ill-advised simply to sweep Op TELIC under the carpet and move on to the next challenge. As Chris Tuck has written, it may be that Britain has "*…a general approach to counter-insurgency that has enduring relevance, [but] …it does not follow that this translates into an intuitive and effective understanding of how those principles should be operationalized in a particular context.*"[7]

My COs and I have briefly described how we applied COIN principles in Iraq last year: I leave it to others to consider how far our experiences and ideas might bear broader application elsewhere.

1. Respectively, the articles by Brigadier Nigel Aylwin-Foster and Colonel Kevin Benson in Issue 140, and the after-action reports by Gen (Retd) Barry McCaffrey in Issues 142 and 144.
2. Principally but not exclusively from 19 Light, 1 Mechanized and 4 Mechanized Brigades.
3. An insight for which I am indebted to Col Ben Edwards, who drew it from his experience commanding SCOTS DG on Op TELIC 7.
4. Maj Gen Barney White-Spunner until 12 Aug, thereafter Maj Gen Andy Salmon, who produced the four bullets quoted.
5. Located, respectively, at the Naval Academy, the Thar Allah building, in Ad Dayr, and in training at Numaniyah.
6. Lt Gen Sir John Kiszely, "Learning about Counter-Insurgency", RUSI Journal Vol 151 No 6, December 2006, pp 16-21.
7. Christopher Tuck, "Northern Ireland and the British Approach to Counter-Insurgency", Defence and Security Analysis Vol 23, p180, June 2007. ☐



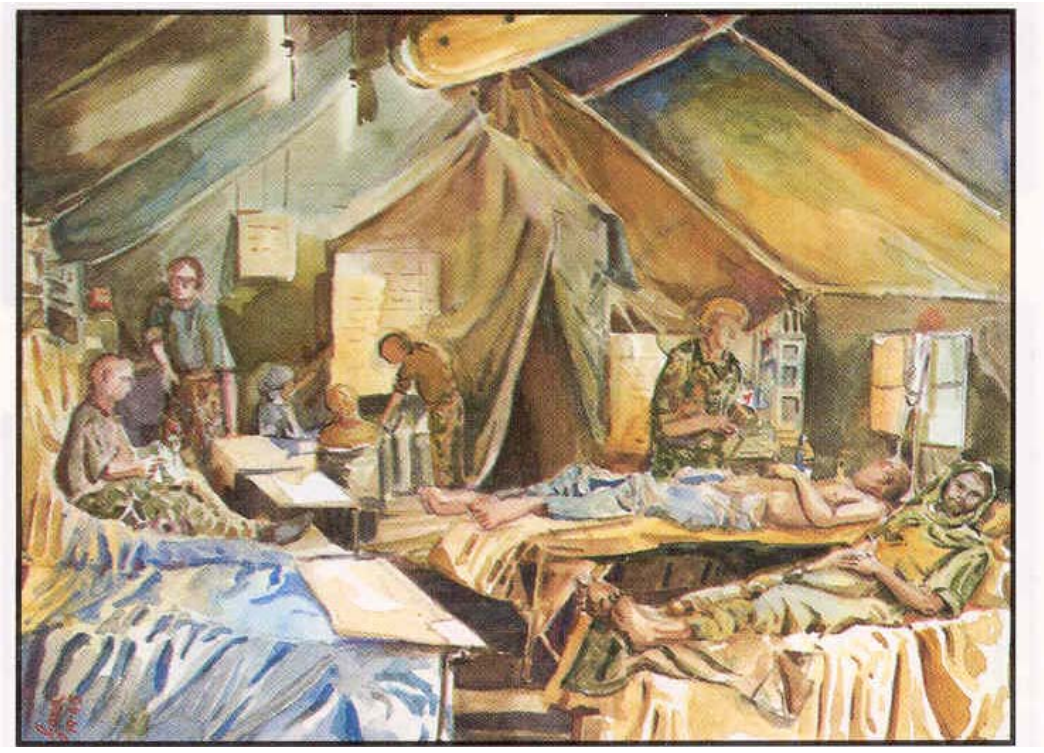
Major Barry McMaster and his Military Training Team of the 4th Battalion, The Royal Regiment of Scotland based in Abu Al Kasib, delivered British funded school supplies to 3 schools in Basra (LA (Phot) Jannine B Hartmann).

Blood, Heat + Dust: Second Edition

Operation Telic and the British Medical Deployment to the Gulf 2003-2009

Chapter 9:

A brief background to British Military Medicine before Operation Telic



Painting: *Surgical Ward, 34 Field Hospital*

Artist Gora Pathak 2003 Medium: Watercolour

> "Military medicine in the 20th century in the West may be summarised as those aspects of medical practice and public health directed to diseases and injuries essentially restricted to combat. Commanders largely understand and use the full capabilities of their medical systems. Unfortunately, military historians still generally ignore the medical aspects of the campaigns and wars they report. Perhaps they will eventually accept the impact of medicine on war as at least as important as their discussions of weapons and tactics."
>
> *Robert J. T. Joy, Readers Companion to Military History*

Military operations put military personnel and civilians at risk of death and injury. The military medical services must mitigate these risks. In doing so, the effective practice of military medicine also contributes substantially to the fighting power of armies and navies. The significance of this contribution is illustrated by the improvements in the health and well being of soldiers and sailors on modern military campaigns, when compared with the high rates of death and incapacitation from disease in former centuries.

The Defence Medical Services (DMS) are thus integral to the planning and conduct of every British military operation, and are close to any action. Their presence and role had often goes unnoticed by the wider public, as the Armed Forces had been fortunate for many decades and until Operation Telic for the relatively low level of losses in combat operations. Events in Iraq and Afghanistan since 2003 have transformed the profile, the experience and the modus operandi of the DMS.

Military medical planners prepare for a range of contingencies, and conduct research into new and evolving threats to body and mind. The deployment of medical resources and people to zones of conflict calls for a continuous state of planning and anticipation, and for the engagement of people from a wide range of professional backgrounds to lead, conduct and execute the medical task. These diverse individuals include personnel in full time employment within the Armed Forces (regulars), and reservists from civilian employment, predominantly from the NHS.

Medical care and provision encompasses a wide range of disciplines, from general and core aspects of preventive and environmental health control on land, at sea and in the air, to the specialist aspects of advanced surgical and medical care for those injured in combat.

The evolution of modern military casualty care

Modern military medical practice is governed by history, and the price of that experience has been paid with many lives. It is thus instructive to study history. The recognisably modern Army was formed following the restoration of Charles II to the throne in 1660. This created career opportunities for medical officers in peace and war. The Army was subsequently structured on the regimental system that continues today. Early on, medical officers and their warrant officer assistants were appointed to the regiment, which also provided a hospital. The regimental basis of appointment for medical officers was abolished in 1873.

The Duke of Marlborough instituted mobile field medical units known as 'marching hospitals' and 'flying hospitals' to accompany his armies. In 1812, the modern medical service was created under the Duke of Wellington in his campaign against Napoleon's forces on the Iberian Peninsula.

Over the 40 years following Napoleon's defeat at Waterloo in June 1815, the British Army forgot the lessons it had learned during the Peninsular War. This neglect culminated in the ill-prepared Army of the Crimean War and its aristocratic disregard for medical or logistic support. The work of Florence Nightingale in imposing clinical order and discipline on this shambles is legendary. The changes she introduced revolutionised British military medical care, reduced mortality rates and profoundly influenced civilian hospital practices and nurse training in the latter part of the 19th century. She also provided advice on the scientific care of the sick to the United States during the US Civil War. She became the first woman to receive the British Order of Merit, and in 1907 the recognition of the International Conference of Red Cross Societies.

The Medical Staff Corps was formed in 1855, to be composed of "...men able to read and write, of regular habits and good temper and of a kindly disposition". In 1857 the Medical Staff Corps was reorganised into the Army Hospital Corps. It reverted to its former name in 1884. In 1898 a single Medical Corps was formed when Queen Victoria signed a Royal Warrant forming the Royal Army Medical Corps.

At the beginning of the 20th century, military medicine was still outside mainstream command structures, poorly organised and recruited. The Director General Army Medical Services at the time, James Jameson, observed in 1901 that ". . . . the Medical department is looked upon as a kind of excrescence of the War Office".

The first major test for the new Corps was in 1898 at the battle of Omdurman, under the command of Major-General Kitchener and with the participation of a young cavalry officer, one Lt Winston Churchill. 28 British troops were killed and 434 were wounded. Kitchener observed that "the general medical arrangements were all that could be desired. This had been attained by the unremitting energy, the untiring zeal and devotion to their duty by the entire medical staff."

The British armed forces were involved in a number of large and small campaigns during the 20th Century as the dynamics of empire changed. Medical care was required on a huge scale during the Boer War and during the First and Second World Wars. In the fullness of time, historians may yet remember the 20th century as the 'Century of Industrialised Slaughter' as much as the cauldron of technological advancement. The experiences of the military medical services in these conflicts did much subsequently to shape civilian medical practice in the UK, and many civilian health professionals were temporarily conscripted into the military service of the state.

Casualty Treatment and The Boer War of 1899-1902

The Boer War was perhaps the first major national expeditionary war of the modern era. It had a considerable influence on strategy, tactics and practices, including the introduction of the notorious internment camps which were held to be the forerunners



An ambulance of the Australian contingent during the Boer War (www.diggerhistory)

of the Nazi concentration camps. The 46 camps that were set up housed 117,000 inmates, of whom 20,000 died.

Lord Roberts noted that the Army Medical Department was "far from being prepared for expansion." Medical planning was nevertheless on a substantial scale. 850 doctors were initially despatched to service ten hospitals. By the end of the Boer War, the Corps had expanded to 8,500 personnel and 21,000 hospital beds across southern Africa.

Transport for the wounded was difficult, with ox-carts used as ambulances. Poorly equipped Bearer Companies were responsible for casualty transfer. The main source of morbidity was the typhoid bacillus, and standards of hygiene were still very poor. Lord Wolseley, the Commander-in-Chief, was reportedly contemptuous of the role of the Sanitation Officer. Simple precautions such as boiling all drinking water were often neglected, causing an epidemic of gastroenteritis which affected over 100,000 soldiers. A Royal Commission noted that ". . . regarding hygiene and sanitation, Tommy doesn't understand it, and his officer regards it as just a fad."

During the war, 14,000 men were inoculated against typhoid, which halved the incidence of the disease. The Boer War nevertheless left 14,000 British dead from disease and 6,000 killed in action, and the sick (disease and non-battle injured, or DNBI) greatly outnumbered those wounded in action.

The nature of the gunshot wound had also changed, as low velocity lead balls had been replaced by better machined, higher velocity 'hard nosed' bullets. Surgical strategies also changed, as advances were made in surgery and anaesthesia – e.g: in respect of the

correction of depressed compound fractures of the skull - and penetrating wounds to the chest.

Frederick Treves, later the Royal Surgeon, reported that:

> "The amputation of a leg was in progress when pressure of work (in a small operation marquee) was at its height. Beneath the table at the time of the operation was the prostrate figure of a man. He had been shot through the face. His big moustache was clotted with blood, his features were obliterated by dust and blood, his eyes were shut, and his head generally was enveloped in bandages. I thought he was dead, and that in the hurry of events he was merely awaiting removal. The limb after amputation was unfortunately dropped upon this apparently inanimate figure, when, to my horror, the head was raised and the eyes were opened to ascertain the nature of the falling body. This poor fellow was attended to as soon as the table was free. I was glad to see him some weeks later in the Assembly Hotel at Pietermaritzberg, hearty and well."

The Boer War was one of rapid movement. The Battle of Magersfontein in December 1899 cost Lord Methuen some 8,000 men, but observers from the German General Staff, reported that:

> "The splendid services of the Royal Army Medical Corps still remain to be noticed, the officers, NCOs and bearers had traversed repeatedly, with the greatest coolness, the fire swept zone, which was nearly a mile in depth. On the 11 December they brought in, partly from the firing line, 500 wounded, dressed their wounds, and brought them down . . . to be evacuated by rail to Cape Town . . . nor was it only in the British ranks that these men gave their services, for they did the same when asked by the enemy for aid."

In the same month, when General Buller was defeated at Colenso, the Germans reported that:

> "Four field hospitals were erected, and the dressing stations were set up about a quarter of a mile behind the firing line. The medical service was hampered less by the number of wounded than by the extent of the battlefield. A volunteer bearer corps of 2,400 men undertook the task of bringing the wounded to the Dressing Stations and to the Field Hospitals. By 5 P.M. all the 760 wounded had been bandaged and were in the hands of the doctors."

The medical officers, nursing staff and orderlies were particularly exposed to disease, and more than 300 members of the Corps died. Awards for gallantry included six Victoria Crosses.

Casualty Treatment in The Great War of 1914-1918

Political developments in the cauldron of the industrialising world in Europe saw the move of the Army from the rolling grasslands and hills of the southern African veldt to the vile mud and environmental challenges to health in Belgium and northern France. During the Great War, the British suffered by far the largest number of casualties of any national conflict in history. The personal equipment and protection available to the individual soldier was woefully inadequate by modern standards, but the structures of casualty evacuation and care were beginning to take a modern form.

Front-line units provided only the most superficial medical care. Near the front line, in a support or reserve trench, the Regimental Aid Post was attended by the Battalion Medical Officer and his orderlies and stretcher bearers. The facilities were crude.

Advanced Dressing Stations (ADS) were provided behind the front line for the early care of casualties, who were moved to the ADS by hand carriage, wheeled stretchers, trolley lines, or on foot as conditions permitted. From 1916, relay posts for stretcher bearers were established every 1000 yards or so. Communication trenches were allocated for the removal of casualties.

A Field Ambulance was attached to each infantry Brigade, to provide one or more ADS close to the front lines. The ADS were better equipped than the RAP, but could still only provide limited care, including dressings and some emergency operations such as limb amputations.

The ADS were frequently overwhelmed by the volume of casualties. The wounded were passed on down the line to the Casualty Clearing Stations (CCS) by the wagon transport of the Divisional Supply Column, or by buses, light and broad gauge railways.



A Regimental Aid Post during the First World War. This RAP is in open ground near Monchy-le-Preux, 1917 (www.1914-1918.net)

The Field Ambulance was also responsible for the stretcher bearer relay posts, walking wounded collecting stations, sick collecting stations and rest stations. A larger ADS, the Main Dressing Station, was often provided at Divisional level.



Australian casualties awaiting evacuation at the 3rd Battle of Ypres: (www.diggerhistory)



An Australian Field Ambulance Unit in WW1 (www.diggerhistory)

Casualty Treatment in The Second World War

The Second World War was characterised by expeditionary land, naval and air operations across much of the globe, in hugely different circumstances from one area to another. At a technical level, there were significant advances in drugs, antibiotics, blood transfusion, anaesthesia and surgical technique in the first half of the century which were put to good use in wartime. The structure of the casualty evacuation system was by now well established, but adapted to the diverse conditions from the plains of northern Europe to the jungles of Asia. The introduction of aircraft for forward casualty evacuation and long range transport transformed the evacuation chain and speed of delivery of casualties to base hospitals. The horrors of the concentration camps and of experimentation on captive populations brought new insights into human physiology, perseverance and disease.

Once again, the Second World War saw huge numbers of British doctors, nurses and health workers recruited into the Armed Forces, to return home to found the National Health Service in 1948.

Medical Aspects of the Burma Campaign of 1942-1944

The medical experience of the Burma campaign in World War II particularly repays study, as representing the extreme challenges of environment, environmental health and hygiene. The conflict led to major advances in preventive medicine, including the development of insecticides, anti-malarial drugs, and new methods of immunisation. The rate of sickness from preventable disease was particularly high in tropical and semi-tropical countries. The Burma campaign lasted from 1941-1945, and was the longest fought by the British Army in the Second World War. It began with military disaster, retreat and loss of face; it ended in August 1945 with the total defeat of the Japanese army.

Burma was the key to the British defence of India. The fighting took place in jungle, in mountains and across the hot and arid Burmese plain. Combat was brutally primitive with face-to-face and hand-to-hand fighting, and at the same time a modern campaign with the airlifting of entire divisions, aerial re-supply, landings by glider, casualty evacuation from small jungle airstrips, and the deployment of landing craft in support of sea borne invasions and river patrols. The ratio of preventable diseases to battle casualties in the earlier phases of the Japanese war exceeded 100:1 in some theatres.

The country and its climate affected both sides. Disease and infection were widespread, and included tick-borne scrub typhus, malaria, leeches and 'jungle ulcers'. The monsoon lasted for months, when the rain fell steadily day after day.

An historical account of the medical aspects of the Chindit expeditions of 1943 and 1944 under the command of Brigadier Orde Wingate was commissioned by the Surgeon General's Department of the US Army in 1969, and provides a particularly detailed study of the campaign and its lessons.

The Burma campaign was noteworthy for the importance which the commanders placed on preventive disease measures:

> "When General Slim took command of the British Fourteenth Army in 1943, he recognized that its health and morale were unsatisfactory. He directed that steps be taken to employ the latest results of medical research and practice in treating sick and wounded, and to obtain adequate supplies of recently-developed therapeutic drugs; to move close to the troops the treatment facilities needed to care for malaria patients; to provide air evacuation facilities for seriously ill or injured men; and to implement a variety of measures to improve morale and thereby reduce the malingering and insanitary practices which augmented the already high sick rates. Air evacuation made a huge difference to medical logistics and to the transport of the wounded and sick. Whereas the surgeon saved the individual life, the physician, less dramatically, saved hundreds by his preventive measures. Good doctors are no use without good discipline. More than half the battle against disease is fought, not by the doctors, but by the regimental officers.
>
> "In Burma, malaria discipline and DDT reduced the ratio of sick to wounded from 120:1 in 1943 to less than 20:1 in 1944. To emphasize the importance of the daily intake of the malaria-suppressant, mepacrine, Slim ordered surprise checks of whole units, every man being examined. "If the overall result of the blood tests was less than 95 percent positive I sacked the commanding officer. I had to sack only three; by then the rest had got my meaning."

General Sir Archibald Wavell when Commander-in-Chief stated:

> "Disease and especially malaria is a more dangerous factor than enemy resistance. We must be prepared to meet malaria by training as strict and earnest as that against enemy troops. We must be as practiced in our weapons against it as we are with a rifle.
>
> " The truth of this statement with regard to malaria applies equally to all diseases. … the defeat of the German Armies in North Africa was in a large measure due to their appalling sickness rate as a result of their complete lack of sanitation and sanitary conscience. Their incidence of enteric fever and dysentery was over 50 percent of their strength whereas that of the victorious Eighth Army as a result of the constant attention given to this important aspect of warfare was infinitessimal, and one of the deciding factors of the whole campaign."

The development of field hospitals

The field hospital has been a key element in the infrastructure of military medical care on deployment over two centuries. Records of field hospitals in one form or another go back much further into antiquity. For example, the Spanish Army of 1550 provided surgeons and a field hospital from a tax on soldiers' wages, and from 1585 ran a permanent military hospital at Mechelen in Flanders. Field hospitals may be set up in tents or they may make ad hoc use of any available buildings. Historical records provide

a rich resource of images of such makeshift and opportunist accommodation.

Following the overdue reforms after the Crimean war and the many clinical and microbiological advances of the 19th century, field hospital care became much more systematic. British military hospitals and casualty clearing stations were established in large numbers during the Boer War and the First World War.

The Casualty Clearing Stations and Field Hospitals in the First World War

The Casualty Clearing Station (CCS) was a relatively well equipped tented or hutted medical facility to retain, hold or evacuate casualties as necessary. It was usually a few miles behind the lines and on a railway line. A typical CCS could hold 1,000 casualties, and each would admit 15-300 cases in rotation. They were often located at railheads. Motor ambulances and canal barges also carried casualties to base hospitals or to a port of embarkation. On the Western Front In 1916, 734,000 wounded men were evacuated from CCS by train and 17,000 by barge. There were four ambulance trains in 1914, and twenty-eight by July 1916. Many CCS locations are now the site of military cemeteries.

Behind the Casualty Clearing Stations were the General and Stationary Hospitals. The latter were allocated at two per division, and could hold 400 casualties. General Hospitals could hold 1040 patients and were located at the principal bases at Boulogne, Le Havre, Rouen, Le Touquet and Etaples. The establishment of a General Hospital included 32 Medical Officers of the RAMC, 3 chaplains, 73 female nurses and 206 RAMC general duties troops. The hospitals were enlarged in 1917 up to 2,500 beds. Most casualties were then evacuated to the UK from a General or Stationary Hospital for further treatment or convalescence. A 'Blighty' wound was a ticket home.

Admissions of wounded men to Hospital, Western Front 1916
(Source: Official History)

	Number of men	% of total admitted
Died in hospital	36,879	7.3%
Returned to duty after treatment	169,842	33.6%
Evacuated to UK for further treatment	290,461	57.5%

Hospital Deployments in the Second World War

World War II saw the worldwide deployment of recognisably modern field, general and evacuation hospitals and another mass mobilisation of civilian medical resources. It saw the introduction of antibiotics, blood transfusion and a range of treatment methods for burns, and improvements across the spectrum of military health care including anaesthesia and air evacuation. British medical personnel were exposed to the horrors of prisoner of war camps, both as internees in the Far East and in the occupation of the German concentration camps such as Bergen Belsen in north west Germany.

Military medical developments after World War II

The worldwide deployment of medical services - from north Africa, Italy, northern Europe, the Far East, to the Indian sub-continent and the horrors of the Burmese campaign to the liberation of the concentration camps of central Europe - brought a wealth of medical experience back to the UK. There have been many significant deployments since 1945, including Korea, Suez, and the first Gulf War of 1990-91. The British National Health Service was founded upon the political altruism of a generation of professionals whose capacity for public service was forged in the cauldron of war between 1939 and 1945.

The British Armed Forces and their medical contingents were progressively downsized after World War II, but continued to be involved in major military campaigns, including the Korean campaign of 1950-1953, the Suez campaign of 1956, and many subsequent minor operations. Much of military focus after World War II was on Cold War preparations against Warsaw Pact invasion. This sustained a large but unused reserve medical force, and the planning focus remained on mass casualty treatment and evacuation.

The Falklands campaign of 1982 was a particular test of expeditionary military medical care over long distances, while the Gulf campaign of 1990-91 represented a return to the 'heavy metal' warfare of armoured divisions, rather than the light infantry campaigns and internal security operations which characterised most operations after 1945.

Other battle honours have included the war in Korea, counter insurgency operations in Malaya, civil insurgency in Northern Ireland, and many United Nations and NATO peacekeeping missions such as in Bosnia, Cyprus, Angola and Kosovo.

Despite the technological advances of the jet age, the field medical units of 1991 were very similar to those of the desert campaigns of 1941-43. Over this period, the helicopter was perhaps the most visible sign of technical change in the medical chain.

British military contributions to the theory and practice of medicine

The British military medical services have also made significant contributions to the theory and practice of clinical epidemiology, environmental health, medicine and surgery. There have been a number of particularly notable British contributors to this military medical history, including Sir William Leishman (1865-1926) and Dr Charles Donovan (1863-1951), who described the parasitic disease Visceral Leishmaniasis in 1903. These men separately but simultaneously demonstrated parasites in stained smears from the spleen of patients suffering from a malaria-like illness, and the causative parasite was named *Leishmania donovani*. In 1913 Leishman perfected the protective vaccine against typhoid fever. During World War I he studied the diseases of trench warfare, including the parasite of tick fever.

Sir Harold Gillies and Sir Archibald McIndoe were two other acclaimed clinicians with military associations. They made enormous contributions in Britain to the development of plastic surgery on war casualties in the 20th century. Gillies developed a major centre

for maxillo-facial and plastic surgery at the Queen's Hospital, Sidcup to treat the many casualties from the Battle of the Somme in 1917. Between 1917 and 1921, the hospital treated more than 5000 servicemen. Gillies and his colleagues Tommy Kilner, Archibald McIndoe and Rainsford Mowlem continued this pioneering work during the Second World War. McIndoe, working at the Queen Victoria Hospital, East Grinstead was particularly renowned for work with burned airmen.

Research and the Academic Foundations of Modern Military Medicine

Modern medical practice is complex and technological, and the expectations of it are high. Research within the military Medical Services sustains the expertise and knowledge base to permit this. This research includes studies on the effects on the body and mind of weapons of all types, including conventional and unconventional weapons, and weapons known to be in use or under development by possible opponents. It also includes the development of antidotes, protective and defensive measures. This requires awareness and interaction with the entire spectrum of modern science and technology. For example, laser beams can be used in an offensive capacity to dazzle and blind soldiers, sailors and airmen, and new forms of protective eyewear are needed.

A number of specialist research institutions continue to underpin the national defence medical effort. These include the large chemical and biological defence institute at Porton Down in Wiltshire. The advances of molecular biology, genetic engineering and research into the human genome raise new possibilities in the engineering of unpleasant organisms for biological warfare. New chemicals and drugs need to be investigated and understood for their use as weapons against our troops.

This search for new and safer forms of incapacitation is particularly important in the circumstances of modern urban warfare and counter terrorism involving risk to large numbers of civilians. This need is most strikingly illustrated by the tragic experience of the Moscow theatre siege by Chechen separatists in 2003, when more than one hundred civilian hostages died during rescue attempts. Deaths commonly arose from suffocation following narcosis caused by an anaesthetic gas which was pumped in large volumes to sedate an entire public theatre full of hostages and hostage takers.

Maritime and air operations have produced many additional challenges to human physiology as their reach and technology has evolved. Their history is noted later.

The theory and practice of complex trauma care has been revolutionised by the experience and academic study of casualties in Iraq and Afghanistan. Much of this work is addressed later in this book.

The Allied Health Professions and Military Medicine

The care of service personnel requires the specialist teamwork of many different professions and skills, including doctors, dentists, nurses, technicians, health care managers, X-ray, transfusion, pathology, and rehabilitation specialists. In this book, the term ‘medical professional (s)’ may be assumed to include all branches and disciplines

of professional practice involved in the delivery of clinical and preventive medical care to the healthy population, to sick patients and to casualties of war.

The various corps of the Defence Medical Services are a broad church of specialist skills and professions, all of which contribute to the effective working of the whole machine. They include the technical support disciplines of pathology, radiology, physiotherapy, theatre technical, clerical, and the entire range of skills needed to service modern medical units and to care for the staff. Given that manpower is always in short supply, all members of medical units are also responsible to a large degree for their own personal domestic maintenance, and for doubling up on other duties.

Military Dentistry

Dental disease continues to be a major cause of morbidity among deployed troops. In the 17th century dental instruments were included in the surgeons instrument chests and surgeons described the treatment of facial wounds. Soldiers needed good incisor teeth to bite open cartridge cases. From 1660 regimental surgeons were required to preserve the soldier's teeth so that he could bite through the paper cartridge when loading. By 1857 army surgeons were requested to conserve teeth rather than extract them and appropriate instruments were provided civilian dentists were contracted to provide care during the Anglo-Boer war and later in the home garrisons. During the First World War, RAMC dental officers failed to stem the wastage of manpower, and in 1921 the Army Dental Corps was formed, with its School of Instruction established at Aldershot. The Corps expanded rapidly during World War II and entered every theatre of war. Since then, military dentistry has been a key element of preventive health planning and care.

Dentists are deployed in war with Field Ambulance, Field Hospital or other units. Many dental problems in the field can be foreseen by excellence in pre-emptive care in peacetime. Unfortunately, dental problems occur very commonly among operational troops despite best efforts at preventive and preemptive care. For example, during the first three months of the Op Telic deployment in 2003, 'dental casualty' rates were of the order of 35-40 per 1000 deployed troops and naval personnel, amounting to some 1700 total cases, of which 500 produced moderate or severe debility. Clinical presentations included broken teeth, restorations and acute infections. Dentists also treated 135 Iraqi PoWs and performed more than 2000 extractions.

Military nursing

Army, Naval and Air Force medicine is underpinned by a Corps of Nurses. A formal military nursing service was developed in the army in the late 19th century, but records of military nursing care date back to the reign of Elizabeth I and the English Civil War. The Crimean war brought significant reforms, and in 1881 an advertisement appeared in the *Times* and *Daily Telegraph* for "Nursing Sisters to be trained in military hospitals....", and nurses subsequently accompanied the army on expeditionary campaigns in Egypt and the Sudan. In 1887 Princess Christian gave her name to the

Army Nursing Service Reserve, members of which served during the Anglo-Boer war.

In 1902 the Indian Nursing Service and the Army Nursing Service were combined into Queen Alexandra's Imperial Military Nursing Service. Military nurses served in nearly all theatres during World War I and many lost their lives. At the end of the war, military nurses were also recruited to Queen Alexandra's Military Families Nursing Service.

During World War II, army nurses served worldwide, many suffering the hardships and deprivations of the Far East prison camps. In July 1950, non-commissioned ranks were admitted to the Corps. Male nurses were members of the RAMC until 1992 when they transferred to the QARANC; female non-nursing trades were transferred to the RAMC and RADC. Military nurses have continued to serve in deployed medical units and staff the wards of Ministry of Defence Hospital Units.

Naval and Air Force Nursing

The care of naval personnel was disorganised and highly unsatisfactory until the 18th century. In 1590, Admirals Hawkins and Drake instigated a charitable medical aid scheme for the care of invalid sailors, which became compulsory in 1604. In 1689 the first hospital entirely for naval patients was requisitioned at Plymouth. Royal Naval Hospital Haslar, in Gosport opened in October 1753. These hospitals were initially staffed by local civilians. In 1902, the Queen Alexandra's Royal Naval Nursing Service was formed, and in 1910 the nucleus QARNNS Reserve came into being. In 1914, civilian hospitals supplied large numbers of nursing staff to augment the regular service. The Voluntary Aid Detachment of the British Red Cross and the St. John Ambulance Brigade also recruited many female nurses. Male nurses were absorbed into the Sick Berth Attendant Branch. Similar arrangements were made in the Second World War.

The Royal Air Force also has a small corps of nurses in the Princess Mary's Royal Air Force Nursing Service, founded in 1923. In practice, nursing staff are employed together and interchangeably to common standards and practices, while maintaining their distinct Corps identities.

Preparedness for the Gulf War: British Military Medical Resources in 2003

British armed forces were expanded dramatically in the 20th century to meet the needs of the nation during the first and second world wars. They supported very large military medical services during these times, with bases and hospitals across the world. Since 1945 there has been a progressive contraction as imperial bases were closed and commonwealth nations received their independence, through successive defence reviews, and in 1990 with the ending of the Cold War standoff in Europe between NATO and Warsaw Pact countries. With some 200,000 young and fit personnel spread across three services and around the world, the military population is now too small for the defence medical services to sustain an independent hospital service or to train its clinical professional staff alone. It is thus largely dependent on the National Health Service to develop and maintain professional skills.

Military Hospital Services since 1991

In recent times national Defence Reviews have had a significant impact on the Army, Navy and Air Force medical services. The Defence Review of 1994 reorganised the Defence Medical Services, such that health care in the UK was focussed on NHS hospitals with military elements, including the Royal Centre for Defence Medicine in Birmingham and Selly Oak Hospital.

Additional regular hospital personnel were jointly employed in NHS Hospitals with integral military elements at; the Royal Hospital (RH) Haslar in Gosport, which was in turn linked to the Portsmouth Hospitals Group; and Ministry of Defence Hospital Units (MDHU) at Derriford (Plymouth); Frimley Park near Aldershot; Peterborough; Northallerton in Yorkshire; and the Psychiatric Unit in Catterick, Yorkshire. Each MDHU comprises 50-100 beds with the appropriate complement of staffs that are responsible for all military patients.

Overseas, the RAF Hospital in Akrotiri in Cyprus, and the small Royal Naval Hospital in Gibraltar also survive.

The Defence Secondary Care Agency (DSCA) took overall responsibility , has managed these hospitals since 1996. The DSCA was superceded by the Defence Medical Education and Training Agency (DMETA) in 2003.

Its role was described in his report to the House of Commons for 2004-2005 by Surgeon Rear Admiral Raffaelli, then Chief Executive of DMETA, illustrates how the processes and terminology of modern Government have been adopted into MoD management, in extracts as follows:

> "The Defence Medical Education and Training Agency (DMETA) is charged with providing Secondary Care personnel from those available in DMETA to meet the Commanders in Chief's requirements for operational deployments and exercises.
>
> Throughout 2004-2005, DMETA has met the operational requirement, and its education and training commitments including Phase 2 Training for all medical personnel and Continuing Professional Development for trained personnel as agreed with the single Services. We inherited difficulties in the Ministry of Defence Hospital Units (MDHUs) with regard to ensuring personnel achieve their mandatory individual military training but, with new Command and Control arrangements now in place across all DMETA units, there have already been significant improvements.
>
> Estate rationalisation continues. Integral to this is the Medical Training to the Midlands (MT2M) Project which aims to meet the demands of several Defence Reviews and to deliver the Surgeon General's vision of establishing a military medical Centre of Excellence based on the existing Royal Centre for Defence Medicine (RCDM). The Project is now in the assessment study phase with a view to achieving completion by 2010, and will see the collocation of the Defence Medical Services Training Centre (DMSTC), RCDM HQ and DMETA HQ onto one military site in the West Midlands while also enhancing the accommodation and support for

our personnel who work in Birmingham. (This site was subsequently named as Whittington Barracks, Litchfield.)

Two notable parochial initiatives have been the expansion of the clinical academic division at RCDM and the establishment of a new MDHU at Queen Alexandra Hospital, Portsmouth on 1 April 2005.

We have also been working closely with DG Healthcare in support of his Managed Military Health System project and other improvements to clinical outputs include the development of a prosthetic limb service for amputees at the Defence Medical Rehabilitation Centre (DMRC) and an increased capability and capacity for DMRC to deal with complex polytrauma patients. Our clinical research capability has been enhanced at both DMRC and RCDM to help provide the evidence base for healthcare provision for the Armed Forces.

We have introduced a formal approach to the analysis, design and development process of the courses we provide for medical personnel and that they are compliant with the Defence Systems Approach to Training Quality Standard. As with other Defence Training Authorities, we have also been actively engaging with both the Adult Learning Institute and the Defence Operational Capability Audit team to ensure that the training environment for our young people complies with best practice in all respects.

The introduction of Service Level Agreements to better articulate the various services we provide to our partners has assisted those relationships by providing a better mutual understanding of each other's business, and we intend to develop more of these in the coming year. Key to all of this work is the communication of what we are doing, how we are doing it and why. Delivery of such messages has been aided by the production of the DMETA Website on the Defence Intranet and we are working to fully develop the site on the World Wide Web within the coming year.

The Field Medical Units

On 1st Jan 2003, the Army Medical Services could call upon five Regular Field Medical Regiments based in Germany (1) and the UK (4), and upon four Field Ambulances of the Territorial Army based in the UK, organised as squadrons to reinforce the regular units.

It could call upon three regular field hospital cadres and 11 reserve field hospital cadres, none of which was or is fully staffed at peacetime establishment. Total regular army medical and allied health professional personnel number around 3,000, including doctors, nurses, allied health professionals, support and logistic professionals. There were some 5,000 TA reservists at various states of readiness and deployability, and a number of ex-regular reservists discharged from service over the past decade. The Naval Medical Service comprises some 500 personnel and the RAF Medical Service about 300.

Military medical practice continues to evolve with rapid changes in civilian medicine, which include sub-specialisation in training and practice; the modern medico-legal

environment; and military technology and operational doctrine. Changes in the size and scope of the peacetime military medical service have increased reliance upon reservists in many overseas operations, and the need for flexibility in the deployment of reserves. This has been exercised in the complex mix of regular and reserve personnel deploying in formed units on overseas operations.

The military medical services have also maintained regional recruitment bases and independent field ambulance and hospital units, alongside a national manpower pool of skills administered from York. Most reserve medical manpower is provided by the Army, but the Royal Navy and Royal Air Force also provide significant numbers of reserve personnel.

Medical Operations in Afghanistan since 2005

At the time that the first edition of this book was going to press, the then Defence Secretary John Reid was signing off the opening to Operation Herrick with the deployment of 16 Air Assault Brigade to entry operations in Southern Afghanistan, for another rematch with the Afghans. He expressed the aspiration that the task would be completed without a shot being fired.

The past, as they say, is History.

Since then, the British Armed Forces have undergone a cathartic experience in the latest rematch in the Afghanistan, resulting in a radical modernisation of equipment and tactics across the spectrum of military operations, including casualty and complex trauma care.

Between 2005 and 2009 the DMS ran two parallel overseas operations, and the lessons and experiences of both were mutually reinforcing and mutually informative. This has been the most intensive phase of military medical operations since the Second World War, and has produced a massively experienced corps of regular and reserve health care personnel.

At the time of writing of this book (early 2010), operations in Afghanistan continue. While they influenced the medical work of Op Telic, not least because many personnel served on tours to both operational theatres, the experiences and consequences of Operation Herrick will be set aside for the telling at a later date.

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Medicine and Victory: British Military Medicine in the Second World War:
Mark Harrison, published July 2004

Blood, Heat + Dust: Second Edition

Operation Telic and the British Medical Deployment to the Gulf 2003 -2009

Chapter 10:

The principles of war and military medical operations



Painting: *Orders Group*

Artist Gora Pathak 2003 Medium: Watercolour

Introduction

Armed forces expose their employees to life threatening risks as a fundamental component of their professional work. In this way, they are like few other employers. The military medical services are organised and structured to mitigate the consequences of these risks for the health and well being of service personnel; they are not designed or equipped to manage the large-scale health consequences of war for civilian populations caught up in conflict.

The nature of warfare is nevertheless changing continuously, as are social attitudes to its conduct. In particular, campaigns are now conducted in the full glare of reporting, data distribution and media technology, which include the use of digital cameras, mobile phones, satellite and internet terminals, both by observers and by the participants themselves. The behaviour of troops on operations and the consequences of their actions are now under unique scrutiny, which rightly places new obligations and constraints on all military forces.



The camera is watching you: Channel 4 documentary filmmaker with 202 Field Hospital, April 2003

Military medical doctrine defines health among military personnel as "the ability to carry out duties unimpeded by physical, psychological or social problems". This conveys a wide remit of responsibility for the medical services and for all commanders. It covers all elements of health promotion, education, physical and psychological fitness, protection, sustainment and post-operational rehabilitation, as well as the treatment of disease and injury.

In peacetime, the Defence Medical Services provides individual health care to armed service personnel and to their dependants. This covers the whole spectrum of preventive medicine, general and family practice (primary care), and hospital care (secondary care) for a widely dispersed, healthy and predominantly young population. This care is provided in close cooperation with a range of civilian health agencies, and primarily by the National Health Service.

The deployment of military medical resources on combat operations is a complex and challenging task. Medical planners must balance the medical requirements set by the circumstances of the military operation - with the professional considerations of the ethical provision of care to combatants and non-combatants alike - across a spectrum of conditions which include disease and non-battle injuries (DNBI), injury from combat, psychiatric, dental and primary health care. The practice of military medicine is always subject to the operational demands of the military commanders and the priorities of the particular operation, creating a challenging moral dynamic for medical personnel. Medical commanders must understand in detail the working of the military machine; the demands of best and most ethical practice; the practical dilemmas and tensions which these different forces create in the particular circumstances of war; and the practical contribution which military medical forces can make to the successful outcome of campaigns, to the attainment of political objectives, and to the restoration of peace and goodwill in zones of conflict.

This chapter describes the principles, concepts and doctrine by which modern military medical operations are mounted, with special reference to the British military medical deployment on Operation Telic in 2003.

Military Doctrine

Doctrine is the knowledge base, experience, guiding principles and ethos by which any organisation works. Military Doctrine governs actions at all operational levels, including the grand strategic (or national political) level, the operational and the tactical use of military forces.`

Doctrine creates the understanding through which all planning, leadership and direction is exercised, while leaving sufficient room for flexibility and initiative to adapt to different strategic and tactical circumstances. For example, health service doctrine in the UK is based upon universal access to state funded health care, free at the point of use, and delivered according to a set of ethical and behavioural standards, such as confidentiality and respect for all individuals regardless of age, social or ethnic origins. All health professionals are imbued with this 'doctrine' during training. Doctrine may or may not be 'right' - and it may or may not deliver the results intended - but it nevertheless provides a basis for effective working throughout the organisation, and sets standards which professionals can take with them in moving from one hospital to another, and when moving between civilian and military practice.

Armed forces acquire doctrine through collective experience, through the study of history, and through the application of intellect to the problems of war. Strategic doctrine sets the principles through which the political and military leadership determine the application of force to achieve political objectives. In the UK, a guiding principle of doctrine is that the state will not commit armed forces to war without the clear consent of parliament.

Military doctrine describes the ways in which wars will be fought and battlefield tactics applied to achieve the political and strategic goals. British military doctrine is built upon a wide knowledge base. It is set out in publications which are widely available to military commanders at all levels, as they are to the public and to politicians. It is underpinned by the writings and teachings of the great political and military thinkers, including Sun Tsu and von Clausewitz. It has been adapted to the technological advances and capabilities of the 20th century. In war-fighting operations, modern doctrine owes much to the combined arms blitzkrieg operations of the German forces in World War II.

In peacemaking and peacekeeping operations, British military doctrine and philosophy draws heavily on centuries of imperial engagement across the world, on the downsizing of empire after the Second World War, on domestic instability in Ireland, and on operations as diverse as Borneo, Aden, Bosnia and Kosovo in which the armed forces have been almost continually engaged over 50 years.

Joint Medical Doctrine

In peacetime, a creative tension always exists in healthcare systems between the principles of independence by which clinicians would like to practice, and the need for a collective approach to optimise the use of scarce economic and human resources. Similarly, in military medical practice, there is a tension between the ideals and aspirations of medical practice and the pragmatic realities of military campaigning, where the intellectual thrust is towards the achievement of the primary political and military aim, and where the centre of logistic effort and the provision of resources is for the fighting troops.

It is thus essential that military doctors and medical planners fully understand the intellectual and practical environment in which they work, and the way in which their efforts and principles must be directed to the strategic goals. Good medical practice makes an important contribution to the fighting power of armies, and hence must ultimately be distinguished as a component of that power. Military medical doctors cannot thus occupy a moral high ground in the philosophy of the rights and wrongs of war, but they can and must do their best to mitigate the worst effects of war.

Joint Medical Doctrine is the concept adopted by the British armed forces which describes the core knowledge and framework of military medical operations. It is jointly applicable to Army, Navy, Air Force and civilian components, and describes clinical standards, challenges and constraints. Joint Medical Doctrine standardises practice at all scales of deployment. It provides for flexibility and consistency across the evacuation chain. It allows for multinational interoperability and provides a defensible

basis in law. It advances the fighting power of armed forces through contributions to the conceptual, moral and physical components.

Specifically, Joint Medical Doctrine applies a number of key principles to the advancement of the fighting power of armed forces. It seeks to conserve force strength in all operations through effective preventive medicine and the restoration of the sick and wounded to normal activity. It provides intelligence on endemic diseases, environmental and industrial risks, climate and geography. It anticipates enemy action, the effects of conventional and unconventional weapons, and provides psychological support after the stress of battle.

Effective joint medical doctrine considers the entire population at risk in the theatre of operations. Doctrine is used to identify the specific military task and dictates the conduct of the medical estimate, or specific planning process. It produces medical intelligence and a detailed operational analysis, taking into account the timeliness of treatment through the casualty evacuation chain, sustaining a duty of care to each and every casualty, and ensuring a continuum of care from the point of wounding to definitive treatment, including a secure flow of information about each casualty. It also addresses care as a logistic function, taking into account factors such as distance and time in the safe delivery of the 'product' (the live casualty), whilst noting that clinical priorities and conditions change with time.

Fighting Power

Armed forces ultimately deliver their 'product' as fighting power. War is ultimately waged in the minds of the participants, and it is on these that fighting power is focussed. Fighting power comprises a moral component, which draws upon the morale of troops and the popular support of civilians and their resolve. It comprises a physical component, which arises from force generation, force protection and mobility; and it comprises the conceptual component, based upon doctrine, training and experience. Fighting power is thus ultimately willpower. It is measured by the effectiveness with which assets are used and the quality, morale and motivation of the personnel rather than by numbers of tanks, guns, aircraft or ships alone. Thus, in the jungles of southeast Asia in the 1970s the political willpower of the more poorly equipped Vietcong helped them to achieve their aims against the forces of the United States.

The medical contribution to fighting power

The modern battlefield is a frightening place. The speed of events, the loneliness of dispersal, the fluidity of movement, the subterfuge of asymmetric warfare, and the power and accuracy of modern weaponry all conspire to accentuate fear in a generation of soldiers for whom death is little known or understood, and for whom the comforts and legislated certainties of peacetime life give way to lawless brutality. Success is achieved in these circumstances through certain moral power and effective physical power.

Moral power sustains the fighting troops. Their willpower is also sustained to a large degree by the knowledge of prompt and expert medical care when needed. Moreover, the early deployment of an effective medical force signals a clear indication of resolve and intent to allies, troops and potential adversaries alike.

Physical power is sustained by effective administration. The medical services contribute to the physical component of fighting power through the preparation of the force for deployment, for its health protection on operations, and for the prompt treatment and return to role or rehabilitation of physical and psychological casualties.

The quality of people is critical to the effective deployment of medical services to war. These people must have the correct training, calibre and adaptability. Deployments such as those needed during the two Gulf wars bring a surge of individuals from their peacetime to their wartime locations, and from many backgrounds. They include regular Army, Navy, RAF personnel, and very large numbers of reservists voluntarily or compulsorily mobilised from their civilian jobs. The effective, efficient and timely logistic movement of resources, personnel and equipment is critical to the deployment, support and operation of the medical services, and hence to the sustainment of fighting power.

Manoeuvrist doctrine and effect based warfare

British and western military thinking recognises that military effects can be achieved which are disproportionate to the force employed by the skilful application of resources and of the principles of war to any military operation. The use of wit, lateral thinking, low cunning, intelligence and flexibility of approach has become codified as Manoeuvrist Doctrine, which is taught to all military officers. Medical planners and commanders need the same flexibility of mind and approach in the exploitation of manoeuvrist doctrine as any other commander, as the medical component can be a potent tool of strategic action.

Manoeuvrist doctrine aims to create the conditions for peaceful achievement of aims wherever possible, and outcomes at minimum cost of destruction, damage and loss of life where military engagement is necessary. This has become known in current jargon as 'effects based warfare'. It recognises the wider picture in any campaign. At a national and strategic level, it takes into account all factors, including economic, diplomatic, industrial and social. For example, the US was able to achieve many of its objectives in Afghanistan in 2001 and 2002 through the astute harnessing of local militias such as the Northern Alliance to small forces on the ground in order to remove the Taliban regime and capture Kabul. Conversely, in the context of the perverse aims of modern terrorist organisations, the September 11th Airliner Massacres of 2001 were a dramatic demonstration of effects based warfare, in that limited assets - in this case 19 suicidal hijackers and four civilian airliners - could be used to produce extraordinarily disproportionate consequences.

Complexity in Military and Medical Command and Control

Carl von Clausewitz observed that "War is the realm of uncertainty; three quarters of the factors on which action in war is based are wrapped in a fog of greater or lesser uncertainty. . . . The commander must work in a medium which his eyes cannot see; which his best deductive powers cannot always fathom; and with which, because of constant changes, he can rarely become familiar."

War brings fog, confusion, disruption and the best efforts of the opponent to disrupt your plans. Uncertainty and the fog of war are as important to medical planners and commanders as to fighting units. Military organisations and evolutions are complex systems composed of multiple parts, each of which must act individually according to its own circumstances. The action of each part changes the circumstances affecting all the other parts and may be uncontrollable. All parts are connected in a complex web. Uncertainty is countered by flexibility, contingency planning and the effective use of reserves.

The behaviour of complex systems is unpredictable, or non-linear. Small influences can have large effects, or vice versa. Clausewitz wrote that:

> "success is not due simply to general causes. Particular factors can often be decisive — details only known to those who were on the spot . . . while issues can be decided by chances and incidents so minute as to figure in histories simply as anecdotes."

For example, photographs of disgraceful prisoner abuse in Abu Gharaib Jail by US Forces in 2004 had a disproportionate impact on Iraqi and Western public opinion, and severely undermined grand strategy and policy.

Any military action thus exhibits messy, unpredictable, and often chaotic behaviour. It defies orderly, efficient, and precise control. Effective command and control must identify and respond to changes in the situation. Command and control connects all the elements of the organisation together in a cooperative effort. It is an activity of reciprocal influence, with give and take among all parts. Good commanders exert command and control through this complex web of reciprocal influence. They do not provide precise, predictable, and mechanistic order to a complex undertaking like war.

The most proficient German commanders of World War II described this instinct for command as "finger tip control".

Mission command

Manoeuvrist doctrine is made possible by the application of the principles of *Mission Command*. This recognises the importance of individual initiative and disciplined risk taking to the achievement of objectives at all levels. Mission command tells commanders at all levels why rather than how to complete a task, thus leaving maximum room for initiative at all levels in the command chain down to the lowliest Private. It relies on trust and competence throughout the system. It empowers all

commanders to work to clear objectives, with each understanding the intent of the immediate superior commander and at the next level. Thus, a Theatre Commander will understand and work to the objectives of the Defence Council and the Cabinet. A Battle Group Commander will understand the objectives of his Brigade and Divisional Commanders, while a Trooper will understand the intent of his Section and Platoon Commanders. Such trust and decentralisation is intended to achieve timely and effective decision making through the application of common doctrine and training, subject to the control and allocation of material and human resources to the task.

Mission command is as important for medical commanders as for any other commander. It enables the organisation to work through the uncertainty, fog and inertia of war to sustain momentum and achieve decisive effects in the most efficient way with the minimum of detailed high-level orders.

The principles of war

> "One must keep the dominant characteristic of both belligerents in mind. Out of these characteristics a certain centre of gravity develops, the hub of all power and movement, on which everything depends. That is the point against which all else depends. This is the point against which all our energies should be directed."
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> *Carl von Clausewitz On War, pp 595-596.*
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> "Be audacious and cunning in your plans, firm and persevering in their execution."
>
> *Carl von Clausewitz Principles Of War*

Von Clausewitz's principles have withstood the test of time and radical advances in technology through the aviation and digital information ages. Modern western armed forces have codified the ten most valuable principles of military direction as The Principles of War. They have served all military commanders well, and have survived the march of time and technology. They are:

- The Selection of the aim;
- The Maintenance of the aim;
- The Concentration of force and effect;
- Cooperation;
- Offensive action;
- Security;
- Surprise;
- Flexibility;
- Economy of effort; and
- Sustainment and morale.

Military textbooks and teachings give many examples over the centuries of how attention or inattention to these principles has led to success or catastrophe. Medical planners also understand and adapt the ten principles of war to the objectives of each and every operation.

The Selection of the medical aim:

The selection of the aim applies most importantly at the strategic and political level, but also at all levels of command beneath. The selection of the strategic aim is testing, and has a profound bearing on the conduct of operations and medical support. The aim of any operation determines the resources to be allocated and the framework in which the operation is to be conducted. Hence, medical planners preparing for operations in Iraq would wish to know, assess and analyse the overall aim in detail for guidance on the allocation and provision of resources at the outset and throughout the operation. This has particular bearing on the principles of medical provision for the civilian Iraqi population, for example, and the extent to which military resources might be intended to support indigenous Iraqi resources.

The Maintenance of the medical aim

To achieve success, all efforts must be focussed on achieving the specified primary aim. The vagaries of war and of the political environment may produce many reasons to deviate from the aim, and these must be constantly re-evaluated. Deviation from the aim may upset the planning assumptions on which the original aim was selected, resulting in the misallocation of resources, confusion and misdirection, and hence failure of the operation.

The overall aim may nevertheless need to be altered in changing strategic circumstances. Attainment of the core aim may allow considerable flexibility in subsidiary operations to achieve the aim. For example, the British medical resources in Iraq in March and April 2003 were challenged by an unexpected degree of breakdown of the local Iraqi civilian medical system, exacerbated as the regime collapsed by looting and the settling of scores. This presented military medical units with a large potential humanitarian demand for medical care from the local population which they were not configured to provide, and for which solutions had rapidly to be found. The provision of care to Iraqi civilians distracted resources from the principal aim of providing care for coalition service personnel, but addressed the important parallel aims of adherence to the Geneva Convention and of developing goodwill with the civil population, thus in turn advancing the strategic aim.

Humanitarian demands and disasters rapidly distract military medical personnel from the primary objective of supporting the military force, and will rapidly overwhelm military medical resources. It is thus essential that military medical effort is directed to the application of expertise and logistics to facilitate the entry and operation of civilian, charitable and non-governmental agencies rather than to address the problem head on using its own limited resources.

Concentration of medical force and effect

All military operations have a centre of effort. The focussing of forces, concentration of effort and maintenance of the momentum of operations achieves decisive results in the shortest possible time and in the most economic way. Scarce medical resources must also be concentrated to achieve the commander's intent. Medical units in the field help sustain forces by effective primary health care and maintaining the well being and morale of troops. In peace support operations, such as those in southern Iraq at the end of hostilities, medical resources must be focussed to achieve the maximum discernible benefit to the local population in the shortest time and thus establish the local goodwill which is crucial to the Force Commander's intent.

In support of the operational objectives, major medical unit assets and resources must be located to produce the maximum benefit to the greatest number of casualties on the shortest time lines, consistent with security and efficiency. We will see in later chapters how this was achieved on *Operation Telic* in respect of the casualty collection units and of the deployed hospital assets.

The principle of Cooperation

Cooperation between forces leads to the most economic application of effort and attainment of effect. In medical terms, cooperation is achieved through sharing of resources and personnel; between services; between national medical elements; and between civilian and military agencies. On Operation Telic UK Field hospitals had embedded US administrative staff to ensure the efficient care and transfer of US personnel.

In the Gulf it was also achieved in detail through redeployment of staff, resources and assets as the operation progressed, and through the alternating of casualty flows between hospitals to share workload and relieve pressures. Concurrent with cooperation is specialisation, so that skills which are consolidated in one hospital are readily available to casualties transferred from other hospitals.

The principle of offensive action

This principle covers the maintenance of the initiative and the setting of conditions for success at all times, even where local conditions seem adverse. Clearly, medical units do not take 'offensive action' in a warfighting sense, but medical commanders can take the initiative in a number of ways. They can continually anticipate developments and prepare proactively to set the conditions for eventual success, through anticipation and preventive actions. For example, preparations may be made for a major increase in humanitarian medical care, or anticipation of a cholera outbreak, to help set the conditions for goodwill and well being among the civil population at the end of military operations.

Most offensive actions are characterised by mobility, and medical assets must be as mobile as the units they support to ensure proximity and timeliness of care. The medical

plan must also address the offensive principle of 'one foot on the ground', so that there is always insurance against unexpected events during mobile operations. Thus, if one field hospital is on the move, another will be set up and running to take casualties.

The principle of Security

Warfare in depth is not solely the prerogative of the attacking side. As was frequently shown in Iraq both during and after warfighting operations, irregular forces can threaten supply lines and rear troops, and attacks on ambulances were not uncommon. Medical units must make reasonable preparations for their own security and for the security of their patients so as not to divert resources unduly from the main effort of the campaign.

Medical units must also take all steps to ensure the security of the main force. This can include concealment of medical locations, particularly in forward areas. This can make it difficult for casualty transfer assets to locate a medical facility. Conversely, detection of a medical asset by an adversary can give significant clues to the location of the main force.

Electronic security is particularly important, as mobile phone and radio broadcasts can reveal locations and cause major breaches of security. In the final preparations for war in Iraq, all mobile phones were necessarily confiscated during the combat phase. The broadcasting of official casualty notification messages can reveal tactically useful intelligence to opponents.

Force Security and Personal Digital Technology

A number of commanders have commented on the command challenges arising from the attachment which individuals have to their personal phones, and the effects upon morale when use of phones is denied. Mobile phones bring serious security risks. They can be easily eavesdropped upon, and they provide precise positional coordinates; their signals have even reportedly been used to target guided missiles for selective assassination in Afghanistan and Chechnya.

The instantaneity of mobile calls carries other risks. They circumvent official rules and lines of communication which may be in place for good reason and primarily for the electronic security of the force. If phone coverage is available, servicemen can make calls direct from the battlefield to anywhere in the world. This could have difficult consequences: one can conceive of a mortally injured soldier making a final mobile phone call or transmitting a picture home to a distraught family who are unable to influence events. This will surely happen sooner or later.

Civilian contacts can have real time insight and reaction into events through direct personal contact with service personnel. Nevertheless, where consistent with operational security, the provision of robust personal communication links to the outside world can bring considerable benefits to individual morale.

Soldiers have taken cameras to war since their invention, but digital cameras and mobile phones with inbuilt cameras pose new security risks. Such instruments are compact and independent of photographic laboratories. Their contents can be disseminated instantaneously over the telephone networks and the internet, and in practical terms their use cannot be controlled, as was the case in Abu Gharaib prison. They may reveal aspects of war which may well have gone unreported in earlier times.

The principle of Surprise

Strategic or tactical surprise sets the conditions for dislocation and disruption of opposing forces. Medical units may be closely involved in such operations and must understand the principles by which surprise is achieved. Surprise often dictates a fast tempo of operations, which may conflict with the demands of casualty care in settled conditions, or in the time available for setting up medical facilities.

The principle of Flexibility

War brings unforeseen events and changes in plans, for which all commanders must be prepared. The maintenance of a broad range of capabilities, anticipation of events and outcomes, and willingness to adapt organisations rapidly to new circumstances, all contribute to flexibility. In Iraq, field hospitals were obliged to adapt to a much wider range of medical problems - for example civilian burns, paediatric and obstetric cases - than had been anticipated or resourced, and to provide for the security of PoWs using hospital staff.

This flexibility also applies to the acquisition of equipment, which should generally be simple, robust, lightweight, mobile and adaptable to a variety of circumstances in difficult conditions.

Economy of medical effort

This principle self evidently seeks to achieve the maximum effect with the maximum economy of resources. Medical skills and resources are particularly scarce in wars relative to the potential need, and it is thus essential that planners use every device to optimise the allocation of medical units in the zone of conflict, so as to ensure the minimum possible access times for casualties consistent with the principles and circumstances of war. For example, the tactical and practical cost of delivering easily accessible hospital care throughout the war zone during operations is prohibitive, and casualty evacuation chains - including the air bridge to the UK - are thus optimised to expedite rearward evacuation of needy cases through levels of care to NHS hospitals in the UK.

Economy of effort is also advanced by standard treatment protocols, which reduce the need for stock holdings and duplication of systems in the medical chain.

Sustainment and morale

The moral component is fundamental to success in war. It sustains forces and populations through difficult times, prolonged campaigns and reverses of fortune. The provision of effective and high quality medical care to troops in the field has a profound effect on morale, and the maintenance of combat power. It allows troops to take risks in the confidence of excellence of care if they are injured.

The sustainment of deployed forces by field medical units also makes a major contribution to the economy of effort and to the preservation of combat power. For example, minor ailments, the hot conditions of southern Iraq, and outbreaks of gastroenteritis produced a regular flow of combat troops through the medical units for temporary care and respite from which they could be promptly returned to their units.

Medical considerations may also need to place limitations on behaviour of deployed troops. For example, strict constraints must be placed on the off duty and sexual behaviour of troops in some war zones, particularly in Africa, where the risk of AIDS is endemic, or in the playing of sport during operations, where significant limb injuries are common.

Modern Technological Warfare and medical planning

Modern technological and effect based warfare - for which the US armed forces (and to a greater or lesser extent its Western allies) are adapted and equipped - is significantly different in concept from that which has gone before, and this has consequences for medical planning.

The accuracy of modern weapons, and the ability of aircraft and missiles to deliver them throughout the theatre of operations at speed and at will, create the risk of death and injury over a very wide area almost simultaneously. Compared with the area destruction of cities in World War II, these attacks are relatively focussed and fewer lives and limbs are lost. This strategy is nevertheless highly dependent upon the accuracy of information and intelligence, which can lag far behind the weapons themselves, resulting in the loss of innocent civilian lives. This happened all too often during efforts to kill individual Iraqi leaders during the 2003 campaign.

The speed or tempo of operations, illustrated by the rapidity of advances of coalition armies into Iraq both in 1991 and in 2003, is a major challenge for medical planners, who must provide medical support for highly mobile forces, and for civilian populations subsumed in the advance. In this respect the second Gulf War differed very considerably from the first, which was fought out in open desert away from all centres of population.

Asymmetric Warfare and medical operations

This describes the imbalance of technology and strategy between a conventionally armed Force - such as the British, US or Russian armies - and an insurgent, terrorist or

other force. Paradoxically, the US and British armed forces are now so powerful when unleashed in conventional terms - as demonstrated in the two Gulf wars - that any potential adversary must resort to asymmetric warfare to achieve his political, tactical and strategic goals. In Iraq, the conventional war phase rapidly transformed into asymmetric warfare, through armed resistance, ambushes and assassinations, designed to force coalition withdrawal through attrition.

Asymmetric warfare is not one-sided, and indeed Western forces (particularly Special Forces) have spent many years conducting and countering asymmetric warfare in many different contexts. Asymmetric warfare is thus an extension of manoeuvrist doctrine, to be countered and outwitted by the full spectrum of technical intellectual and physical resources.

Asymmetric warfare is particularly significant for the medical services, because it is often fought outside the rules of engagement of 'conventional' forces and wars. For example, the protection afforded by the Red Cross or Red Crescent may not be recognised, and medical assets may be particularly attractive targets to opponents intent on undermining morale.

The Implementation of British and US Military Medical Doctrine

British and US military medical doctrines adapt the principles of strategic and tactical doctrine to the specific challenges of health care provision to the armed forces in peace and war, in a range of operational environments. To a considerable degree, UK and US doctrine is highly convergent, as developed from experience during Operation Telic, and as brought to fruitiojn subsequently in the integrated UK/US Field Hospital at Camp Bastion during Operation Herrick.

Doctrine demonstrates how the military medical services are integral to all military operations, and how they must operate seamlessly with all elements of the armed forces at every level of operational engagement, through planning and implementation. They must be configured and resourced for rapid transition to expeditionary warfare and prepare for a wide range of operations on a variety of scales. The principles of the effective conduct of war apply as much to preparations for military medical operations as to all other aspects of military activity.

Medical support is a central component of campaign planning for expeditionary warfare. Medical support must be closely aligned to the operational plan, but must also take into account the legal status of operations, the public and professional expectations of standards and quality of care, based upon timely, continuous, progressive and balanced delivery.

There are tools and methods to quantify the probabilities and risks of casualties on operational deployments, based on historical data and modified by the destination of the force and its geographic and climatic characteristics; the size of the force and the likely demand for medical care; the distance from the UK; the likely duration of the deployment; the nature of the opposition and likely weapons to be faced.

Detailed information and intelligence allows modelling of future operations and advance preparation of the battle space to identify and optimise choices and risks. The detailed conduct of the estimating process draws upon and contributes to this overall planning. In modern battle preparation, computer simulations and wargaming allow options to be explored in greater detail and their likely consequences to be calculated.

Medical planning and the modern spectrum of conflict

Military Doctrine, the *Manoeuvrist Approach* and *Mission Command* must also be adaptable to a wide range of different military circumstances, which we grade in the *Spectrum of Conflict*.

Until the late 1800s, wars and engagements were often fought out like board games between two opposing sets of combatants on a small battlefield. The 20th century saw the widespread adoption of total war between nations - with the full engagement of civil populations - and the extension of guerrilla conflicts where engagements became more diffuse and inseparable from the civic base. Modern warfare ranges from small, planned, geographically precise engagements and 'police actions', through peacekeeping and peacemaking to warfighting operations involving the full weight of military capability and force. The scale of military resources also often brings them into play in aid of the civil power in emergencies and disasters, such as earthquakes.

Conflicts are often complex, with more than two opposing sides, including irregular militias and a diverse civil population. Small groups of insurgents are empowered to commit destructive acts by modern technology and its widespread availability. However, with time and engagement, one side is usually weakened or outmanoeuvred, with the practical consequence of progressive dislocation of its medical and trauma care resources for both combatants and civilians.

The Medical Estimate and 'Threat Analysis'

The Medical Estimate defines the process by which a detailed plan is reached from the overall objectives of the operation. It takes into account the higher commanders' intentions and the logistic needs of the operation, the medical skills capability and the resources that need be deployed. It must consider the scale of requirements across the full range of contingencies, environmental risks and hazards - including disease and non-battle injuries - and specific weaponry which may be used by the opponents. It must provide for the convenience, efficiency and flexibility with which medical care can be delivered in the war zone, given the demands of clinical timelines, security of casualty evacuation routes, communications systems and ease of access to trauma care across the battle space. It must consider how continuity of care can be sustained across the levels from immediate resuscitation to specialist hospital care.

Sustainment and morale

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Medical considerations may also need to place limitations on behaviour of deployed troops. For example, strict constraints must be placed on the off duty and sexual behaviour of troops in some war zones, particularly in Africa, where the risk of AIDS is endemic, or in the playing of sport during operations, where significant limb injuries are common.

Primary health care in the field

Primary health care encompasses a wide range of issues which ensure the safety and well being of troops in the field. Every deployment brings different geographic, environmental, climatic and disease variations, which must be anticipated. Past operational experience provides considerable knowledge of the working conditions of each area of the globe. Health protection measures must be instigated against new forms of conventional and unconventional weaponry, including vaccination and antibiotic policies. Biological and chemical weapons may be used as area denial agents, causing health risks, as may the military use of potentially toxic substances, including fragments of depleted uranium warheads.

The Prevention of Illness

Basic health care is the responsibility of all field commanders, but the specific medical issues may be addressed either through the resources of the line regiments, the medical support regiments, and the field hospitals.

British military medical doctrine makes clear to all officers and men that good health is the precondition of effective fighting forces. The doctrine defines factors which maintain good health in the widest possible terms, including diet, exercise, alcohol, cigarette and drug consumption and other components of illness prevention; psychological and spiritual well being; and social factors such as family well being which give service personnel peace of mind. Where illness prevention fails, measures must be taken to restore function, promote healing and rehabilitate casualties. Efficient conduct of these functions within the theatre of operations maintains the force at maximum effectiveness.

Operational Health Risk Assessment

Soldiering and warfighting involve the taking of calculated risks with well being, so medical commanders must undertake an Operational Health Risk Assessment for all military deployments. All hazards which may damage good health must be identified and anticipated. Calculations of risk take into account the probability of exposure to the hazard and the seriousness of the consequences of that exposure. The Population at Risk (PAR) defines the numbers of people to be exposed to the hazards and thus put at risk. Post-operational and post-exposure surveillance are used to audit the effectiveness of the risk assessment and the needs of future operations, including psychological matters. For example, the high public profile surrounding the alleged 'gulf war syndrome' has focussed attention on the effects of multiple pre-deployment vaccinations and their role in protection against biological weapons.

Environmental hazard mapping

This is an important component of operational health risk assessment. It maps all potential hazards to troops in the operational area. These include industrial hazards, such as chemical and oil production plants and stores which might release hazardous materials, smokes and fumes during warfighting; and areas of endemic infectious diseases. This information contributes to the overall Intelligence Preparation of the Battlefield which is conducted by the force commanders. Thus hazard mapping for the Kuwait and Iraq theatre of operations would take into account the geography of the desert, the towns, villages and infrastructure of southern Iraq, and endemic diseases of the Euphrates and Tigris rivers and the residual marshes of the delta.

Environmental Health

Human populations acclimatise to their environments and their risks with time. European troops must acclimatise to the specific threats to health in the Middle East, which include temperature, endemic diseases and the flora and fauna. Some risks are general and widespread, such as heat and dust, and others are local and specific, such as scorpion and snake bites. Environmental health teams attend to the many environmental health risks faced by troops on deployment. These include field sanitation and hygiene, problems with which can prove devastating to the efficiency of field units.

Diarrhoeal and parasitic diseases are a particular danger to troops abroad. Other lesser hazards in southern Iraq included the possibility of malaria faced by troops working around the marshes, and wildlife such as scorpions, venomous snakes and camel spiders.

General considerations for Medical Planning for Expeditionary Operations

The factors which influence the planning process for any military operation are conveniently considered under the headings of the four Ds:

- Destination
- Distance
- Demand
- Duration

and under the four Cs:

- Capacity
- Capability
- Convenience
- Continuity.

We will look at these later in respect of the specific planning issues for *Operation Telic*.

The Importance of Time in expeditionary campaigns

Military operations are profoundly influenced by the time available for the attainment of objectives. Time is a finite and transient resource. The ability to compress complex military activities into the available time defines the fighting power of armed forces.

Time changes everything. In the short term of hours and days, it pressures the formulation of plans, the dissemination of orders, and the implementation of resources. Armies which use time to their advantage through short decision-action loops will always have the advantage over slower opponents.

In the longer term, seasonal changes with time have a profound influence on campaigns and their outcomes. The Napoleonic and Hitlerian advances on Moscow of 1812 and 1941 foundered with the advent of winter. In the longer term of years, political circumstances change, for example with the aging and natural death of political elites, and in the ultra long term of decades and centuries, populations alter with migrations, birth and death rates, economic and cultural change. Great Britain and its Empire, as it was at the end of World War II, has gradually transformed into the post-imperial United Kingdom of 2004, with a much greater racial, cultural, religious and economic diversity than was the case in 1945, and a different form of influence in the world.

At the human level, time is a key determinant of the duration and schedule of a military operation overseas. Troops do not function well when separated from their families and homes for many months. Specialist personnel are an expensive and scarce asset, and the timescale of operational deployments must ensure the most efficient entry and exit from theatre of personnel not immediately required for operations. There are thus significant problems arising from long deployments, which include attention to the entertainment, rest and recuperation of troops; the rotation of individuals and units; the rest and

reconstitution of forces for future operations; and the impact on civilian reservists and resources.

The Doctrine of Casualty Management

Levels or Roles of Care

Military medical planners aim to give the battlefield casualty the best chance of survival in testing conditions and circumstances. To help discussion and understanding, the stages of casualty care are known conventionally as Levels or Roles of Care.

Level 1, or Role 1 care on the battlefield.

This is the care which is given at the point of wounding and in the immediate vicinity. Immediate recovery and extraction may be very difficult, so a casualty is dependent on self care, on the efforts of his or her immediate colleagues, and on the integral medical resources of the immediate unit. This may include trained medical assistants and a Regimental Medical Officer (RMO).

Soldiers are taught a high standard of basic first aid and are issued with aide memoires to standardise the practice of Battlefield First Aid Drills. Higher standards of first aid training and immediate trauma care should help to reduce immediate morbidity, as in the best use of shell dressings, airway control, and intravenous resuscitation in RAPs.

The armed forces have also strongly promoted the Battlefield Advanced Trauma Life Support (BATLS) concept for medical officers, a derivative of the civilian ATLS programme, and the Battlefield Advanced Resuscitation and Trauma Skills (BARTS) package for regimental medical assistants and combat medical technicians. The first aide memoires cover the most common situations in a sequential, protocol driven way which minimises the risk of error.

Casualties are among the most perishable goods on the battlefield. The outcomes for those who survive initial or catastrophic wounding are time sensitive. Casualties must be returned to safety and care during military operations, which in turn places both the casualties and the medical teams at further risk.

Level 2 or Role 2 care

This describes the care that is available in forward medical facilities. These are known in common parlance as field dressing stations. They may be set up anywhere with a degree of protection from the elements and the battle. They are necessarily collocated with ambulance evacuation and casualty transfer points, from where casualties are transported to more robust treatment facilities when it is safe and possible to do so. Dressing stations have a small casualty holding capability, and they may be augmented by surgical and trauma teams. In this case they are known as Role 2 'Plus' facilities. Surgical and advanced resuscitation teams may thus be deployed well forward in the battlefield - particularly in light, mobile and rapid manoeuvre operations over long distances, as was the case in 2003 in Iraq. However, these units have limited resources when compared with field hospitals.

Level 3 or Role 3 care

This level describes that available in field hospitals. The full capabilities of a modern field hospital are described in Chapter 7. In general terms, field hospitals are equipped for immediate, life saving operations, temporary intensive care and short stay holding facilities. Hospital ships and casualty receiving ships such as RFA Argus may be equipped for either level 3 or level 4 care.

Level 4, or Role 4 care

This describes the level of care available in base hospitals and civilian specialist hospitals, which are equipped with the full range of diagnostic and treatment resources. Such facilities are found in host nation hospitals, such as in Kuwait City in 2003, in major NHS hospitals in the UK, and at Ramstein in Germany, which provides a closer base hospital for US casualties without the need for transatlantic transit.

These roles may vary in maritime operations, where casualties will usually be evacuated directly from the point of wounding and from Role 1 to Role 3 care on a suitably equipped ship, such as RFA Argus.

Timelines on the battlefield

The concepts of bimodal and trimodal distributions of the numbers of deaths with time after wounding on the battlefield define the allocation of casualty evacuation resources.

Mortality after civilian trauma usually describes a three phase pattern of immediate, delayed and late deaths with time, known as the trimodal distribution. The first hour of opportunity to correct survivable injury is known as the golden hour. However, resuscitation must be carried out with care, as was learned during the Vietnam War. Overly enthusiastic use of intravenous fluids led to fluid overload to the lungs - a condition known as Adult Respiratory Distress Syndrome, or more colloquially as Da Nang Lung.

In the first phase, within an hour of wounding, deaths occur immediately from overwhelming and uncorrectable injuries to the central nervous system, heart or major vessels.

A second wave of deaths encompasses the first few hours following injury, during which death is often due to lung injury, causing failure of oxygen delivery to the body, or hypoxia; and to loss of blood, or hypovolaemic shock. Many of the deaths in the second wave are believed to be avoidable if prompt and appropriate life saving care is given.

The third wave of trauma deaths occurs days or weeks after the injury, and is related to late infection and multi-organ failure such as the kidneys, heart and lungs resulting from early damage. The effective early management of trauma thus increases survival and reduces long term morbidity.

The trimodal distribution of death describes a pattern of outcomes which may be modified by early and appropriate intervention. In practical terms, delays in casualty evacuation ensure that death in war fits a bimodal rather than a trimodal pattern.

Casualties with major chest, abdominal and intracranial trauma will usually die in the first few minutes after injury, however good the medical services in place. Longer casualty timelines effectively cause the first and second peaks of the trimodal model to merge. Peripheral, limb injuries and the 'lucky misses' will be disproportionately common among survivors, and the third peak will be small, as the patients should generally survive if offered competent care, albeit with incapacities such as amputation.

Casualty evacuation assets are thus focussed on the prompt resuscitation and evacuation of the 'second peak' of casualties who would die within a few hours of wounding but for rapid and effective medical intervention. These few hours define 'time lines' over which care must be delivered. Planning to meet these clinical timelines will be profoundly influenced by the military situation. Thus, in circumstances ideal for helicopter retrieval and evacuation, short time lines to definitive care may be met over very long distances. In difficult circumstances and terrain, Level 3 medical assets may need to be very close indeed to the fighting troops. Assets must also be dispersed so that time lines are satisfactory for troops in the logistic zone.

Casualty Movement and Evacuation

Safe, speedy, comfortable and efficient casualty movement is essential if lives are to be saved and morbidity minimised. Unfortunately, the circumstances of war dictate that communications are often poor, the environment is dangerous for the immediate aid and recovery teams, and the routes of evacuation may be unsafe and unreliable.

Casualty evacuation is both a logistical and a clinical problem in all circumstances of war, for armies in the advance and for armies in defence and in retreat. Circumstances differ hugely from one conflict to another, and even at the local geographic level within individual war zones. In ideal circumstances, environmental and battle conditions are suitable for helicopter recovery from the point of wounding, or secure metalled roads allow excellent road transfer to hospital. Unfortunately, this is rarely the case.

During war, casualties usually take many hours or even days to reach a hospital from the time of wounding, other than for the very lucky few. In the Gulf War of 1991, the average delay at a British field surgical hospital was around 10 hours for British soldiers, and more than 24 hours for Iraqi casualties brought in from the battlefield. Delays of days are often reported by surgeons working for the International Committee of the Red Cross in areas such as Afghanistan, where evacuation may be on foot or by pack animal.

Technology does not provide easy answers. The helicopter has been seen as the solution to rapid evacuation, but helicopters have serious limitations imposed by range, weather and vulnerability to hostile intent. Mean casualty evacuation times to hospital are usually of the order of hours, even in advancing forces with full and secure helicopter and road transport. Any means of transport may need to be employed.

The casualty evacuation chain and matrix

Casualties need to be moved and transferred at various points in the medical evacuation chain, between Role 1, 2, 3 and 4 facilities. Expeditionary military operations must establish their own infrastructure of medical and casualty care. In the Gulf in 1990-91 and in 2003, in Bosnia, Kosovo, Macedonia and Sierra Leone as recent examples, these frameworks had to be created over long distances, in often harsh environmental and geographic conditions, and without the benefit of the indigenous infrastructure of the host nation(s). An informative paper by Martin Bricknell (JRAMC 2003) describes the evolution of modern casualty evacuation principles in various Operational theatres in much greater detail.

The medical infrastructure must thus account for the collection, primary care and transfer of casualties arising over a wide area, from accidents - particularly road traffic accidents (RTAs) - from combat incidents, and from disease and non-traumatic problems. To optimise clinical time lines and to minimise transfer delays to hospital care, the commander of a medical support regiment must distribute his ambulance assets widely around the operational area, along highways and major routes and with other logistic units.

This process has become known as the establishment of the Blue Light Matrix. Ambulance teams, where sections of two or more vehicles are dispersed to optimise coverage. This devolution places considerable responsibilities upon the individual ambulance crews, who must have a clear understanding of the tactical plan, routes and navigation skills; they must be able to maintain good communications; and they must be able to provide tailgate primary health care and resuscitation for trauma casualties in transit.

Helicopters have an important role in evacuation and casualty transfer in some operational theatres. They provide speed of transfer over significant distances, but they are limited in some environmental and weather conditions, and are vulnerable to ground fire, particularly at landing sites.

At the rear end of the chain, tactical transport aircraft - such as the Lockheed Hercules and civilian and military jetliners - may be used to transfer casualties over strategic distances. Further forward, the medical services must set up a framework or 'Matrix' of evacuation systems to optimise casualty movement. .

Clinical Governance on the battlefield

Clinical governance is a loose and broad terminology which has evolved in civilian practice in recent years to describe the search for the highest attainable standards of practice and outcome in the health services. It has been a prime driver towards greater specialisation of care, and the military medical planners have also adopted it as a principle for best medical practice in the field.

In general terms, military medical services were once considered to be unlikely to be able to achieve civilian standards of care on operational deployment, because of the

circumstances of war and the lack of availability of technical assets and suitable accommodation.

As pointed out by General Louis Lillywhite (Personal communication): "We can now demonstrate that we can better civilian outcomes - this is not unique as during previous periods the military medical services has led the civilian services (who subsequently catch up in the ensuing peace and then overtake). The military structure lends itself to learning by outcome for a number of reasons. Medical personnel in rearward medical units in essence mark the work of those in more forward units by having to address any sub-optimal care, whilst a clinically informed medical leadership has ensured that those lessons are communicated.

"Such examples can be found in British military medical history, but also in the annals of US, Israeli and Egyptian military medical history. The advent of 'clinical governance' within the civilian medical services has formalised this process, and it was formally adopted into the peacetime DMS in 2001. Subsequently, its formal adoption in 2005 (following the pivotal visit to Theatre by Brig Freeman et al, see Chapter 30) into the operational medical services has arguable underpinned the majority of advances made in the current conflicts, including the equipment enhancements. An initial barrier, the separation of Role 3 and Role 4, was addressed by the development of weekly conferences linking UK with Iraq and Afghanistan, the development of a JTTR and the deployment of dedicated data collection nurses".

Military medical units must seek to do the best with the resources available in a range of different circumstances, in ways which are open to audit and which will withstand independent and media scrutiny at a later date. Such scrutiny may include the availability of appropriate personnel and resources; field hygiene and environmental health issues; casualty retrieval and stabilisation strategies; and the care given at all levels in the evacuation chain from the point and circumstances of wounding. Indeed, military medical staff are often the most vociferous advocates of clinical governance issues, and in particular of the availability of resources and equipment to complete the medical task.

Principles of Casualty Treatment

The circumstances of injury in warfare

War complicates the management of casualties in many ways. It produces new and complex types and mechanisms of injury, which in turn depend upon the types of weapons used; the nature and circumstances of the casualties; and the nature and circumstances of the evacuation methods. Much trauma in war occurs in unpleasant circumstances, well away from the protective reach of well equipped trauma centres and specialists. Combatants also get injured in road traffic and 'industrial' accidents and by accidental burns. Provision must be made during conflict for the full spectrum of injuries which are usually met during peacetime.

The condition of the casualties

In warfare, the immediate problems of casualty management are compounded by the dangerous circumstances in which the injury occurred, and the additional measures and

delays that the attending medical teams incur in securing themselves, for example from sniper or shell fire. Casualties with major injuries are thus much more likely to die before effective medical care can be brought to bear, and survivors are a self-selected group. Factors which affect the condition of the casualties on recovery and on delivery to effective care facilities include:

- the nature and complexity of the trauma
- the delay in recovery from the battlefield
- the climatic and environmental circumstances
- the nature, effects and duration of the evacuation
- the circumstances of the medical team
- the triage state and requirements of other casualties

The physiological problems of casualties in direct consequence of the war wounds are often compounded by heat, dehydration, hypothermia, physical and mental exhaustion, and concurrent illness such as diarrhoeal disease. Wounds are invariably contaminated by dirt and dust. There may be significant malnutrition in dislocated populations and isolated garrisons.

These factors can also affect the treatment teams, who will often work in seriously unsatisfactory circumstances as the conflict progresses. These factors all conspire to impair the chances of survival.

Triage: The good of one, and the good of many

In peacetime, substantial medical resources are applied to the care of limited numbers of individuals. The provision of care in civilian practice is intensive of resources to small numbers of casualties in a well ordered environment. In wartime, scarce resources must be applied to optimise the care of substantial numbers of individuals

Triage is the process of grading casualties for treatment in circumstances where not all can be evacuated or treated immediately or effectively. The concept of triage has long been understood, and a mass casualty situation which mandates triage - or selective application of care resources - arises whenever the number of casualties overwhelms the immediately available medical resources.

The immediate demands of triage will oblige difficult and unpalatable decisions from the medical attendants. Care must be taken to avoid the disproportionate consumption of resources by one group of individuals at the expense of others in such situations. The object is simply to maximise survival and optimise outcomes with the resources available. Such a situation is as readily found in the vicinity of a terrorist bombing as on the battlefield. War in effect represents a prolonged, dispersed and unpredictable series of mass casualty incidents

Trauma Life Support

The systematic approach to the provision of civilian trauma care only developed in the late 1970s, following the experiences of Dr James Styner in Nebraska in 1976. Styner was

an orthopaedic surgeon who was involved in a light aeroplane crash which caused the death of his wife and serious injuries to his children. His problems in obtaining emergency care at the small regional hospital where they were treated prompted him to develop an advanced trauma life support (ATLS) course for health professionals in Nebraska. This set down strict procedures for assessment of trauma casualties, and for team working to optimise their care.

An ATLS course was adopted by the American College of Surgeons Committee on Trauma in 1980, since when the course has been disseminated worldwide. The systematic introduction of ATLS methods is perceived to have improved the management of trauma in civilian practice in recent years. The process has also been adopted by armed forces for the training of battlefield paramedics and doctors.

There are nevertheless differences between civilian and military trauma practice. Much severe civilian trauma is blunt, arising from road traffic accidents. Penetrating civilian trauma in civilian life is usually from a single point and mechanism of wounding, for example from a stabbing or a single gunshot. Peacetime trauma management methods thus do not easily adapt to the circumstances of conflict.

Concepts and standards of trauma management in war

High quality trauma life support places specific demands on the military casualty treatment system. For reasons which we have already seen, these standards may be sought but are rarely achievable in reality. Military medical planners must balance the needs of the military commanders, the plan and the principles of war with the needs of the individual casualty. The current national and multinational medicolegal environment may leave military commanders exposed if standards of care or protection are perceived to have fallen below what is expected, and exhaustive media scrutiny of the circumstances surrounding individual deaths often follows. The deployed medical infrastructure must seek to achieve civilian clinical time lines wherever possible.

Strategies for the delivery of appropriate trauma care

Trauma care resources are usually scarce and dislocated in war zones relative to the needs of the combatant and civilian population at risk. Planners thus face a number of challenges where circumstances change with time and movement. There are two general strategies to optimise trauma care in war: one is to attempt to bring the trauma team to the casualty, and the other to bring the casualty to the trauma team. Both have advantages and disadvantages, which are discussed in greater detail in later chapters.

General Observations on the management of trauma in zones of conflict

The bimodal and trimodal distribution of death

Mortality after civilian trauma has been described as having a trimodal distribution. The first peak of deaths occurs within minutes of the event from non-survivable injuries, even with the most advanced medical resources immediately to hand. The second peak may account for some 30% of deaths, in the first few hours following injury. Death is most often due to hypoxia and hypovolaemic shock. This group stands to benefit the most from excellence in trauma care. The third peak, of up to 20% of trauma deaths, occurs late after the injury, from sepsis, multi-organ failure and other complications.

Military doctors have also been trained to think of the outcomes after major trauma as fitting a trimodal pattern, with the early peak of deaths (within one hour), an intermediate pattern (within hours and days) and a late pattern (weeks to months) from the longer term consequences of injury. In practical terms, delays in casualty evacuation ensure that death in war fits a bimodal rather than a trimodal pattern. Casualties with major chest, abdominal and intracranial trauma will usually die in the first few minutes after injury, however good the medical services in place.

Longer casualty timelines effectively cause the first and second peaks of the trimodal model to merge. Peripheral, limb injuries and the 'lucky misses' will be disproportionately common among survivors, and the third peak will be small, as the patients should generally survive if offered competent care, albeit with incapacities such as amputation. Such was our experience during the 2003 Gulf War. Of the eighty surgical cases treated in 202 Field Hospital during the first two weeks of war, only one survivable abdominal injury case reached hospital care.

Damage Control Resuscitation (DCR) and Damage Control Surgery (DCS)

Damage Control Resuscitation (DCR) is a modern concept in the management of trauma in civilian hospitals. It makes permissible short, temporising and deliberately curtailed procedures tailored to the prevailing physiological circumstances, which may be adaptable to the circumstances of conflict. Life- and limb-saving surgery may require early, staged and incomplete procedures in the course of resuscitation to repair or pack bleeding structures, and to correct shock and acidosis.

DCS describes incomplete, interrupted and deliberately limited procedures in an unstable physiological state, pending further intervention. The concept has been of considerable use in major civilian trauma centres, where it can be used to tide a casualty over initial problems of hypovolaemia and hypoxaemia, and where the full weight of intensive care support can be brought to bear immediately. Precision with the definition of DCS is important, as it excludes uncomplicated emergency surgery such as amputation or laparotomy in an otherwise stable patient. Hence, the physiological circumstances distinguish DCS from other forms of trauma surgery.

Damage control resuscitation is thus a complex and sophisticated strategy, which to be effective requires the full range of hospital facilities, intensive and post-operative care. Clinicians in remote and austere conditions therefore require a clear understanding and a precise definition of the concept of DCR, if it is not to be misused and to fall into disrepute and semantic debate. Dispersed surgical teams need to use restraint and maturity of judgement, in deciding where to intervene and where to defer. DCS is generally impractical in field conditions: inappropriate intervention merely delays safe evacuation to better equipped hospitals, and reduces the overall chances of survival of the casualty, due to progressive physiological deterioration.

Trauma Life Support in Conflict

This section is an extract of an Editorial published in 2004 by the British Medical Journal, by Lt Col Rew and Lt Col Clasper.

"War injures and kills combatants and civilians. Medical resources are usually scarce in combat zones, and doctors must plan to make the best of these resources to minimise death and suffering. Planners seek to apply the widely adopted principles of advanced trauma life support (ATLS) to the treatment of penetrating wounds, burns and other forms of acute physical trauma on the battlefield. This recognises the critical importance of effective early resuscitation after wounding to minimise the consequences of shock and to improve survival.

"This descriptive model may not help with the allocation of trauma care resources in war. Much severe civilian trauma is blunt, arising from road traffic accidents, rather than from penetrative fragments and bullets, blast and burns. The circumstances of war also differ from the peacetime casualty incident, in that communications are often poor, the environment is dangerous for the immediate aid and recovery teams, and the routes of evacuation may be unsafe and unreliable.

For example, helicopters are of little use in a sandstorm. Circumstances differ hugely from one conflict to another, and even at the micro-geographic level within individual war zones. Rapid treatment and casualty evacuation to definitive care undoubtedly improves survival. However, other than for the very lucky few, casualty evacuation times to hospital are usually of the order of hours, even in advancing forces with full and secure helicopter and road transport. A delay of several days is often seen by surgeons of the International Committee of the Red Cross (ICRC).

"One possible solution to the problem of how to optimise trauma care on modern ATLS principles is to disperse resuscitative surgical teams widely around the war zone, to bring care forward to casualties. This has led to the development of the concept of forward damage control surgery, with surgical teams collocated with mobile casualty receiving stations.

"Unfortunately, these teams cannot work to best effect in such relative isolation. The resuscitation and immediate aftercare of patients who may have multiple penetrating, blast and burn wounds requires complex, multi-disciplinary teamwork. This includes high dependency and intensive care support resources of a high standard, and a holding capability for post-operative cases pending safe and stable evacuation, or definitive corrective and revision surgery.

Forward trauma teams that are obliged to take on ambitious surgery without such support will face a high morbidity and mortality. Conversely, hospitals in conflict zones equipped with such facilities will substantially extend their care capabilities and the range and effectiveness of damage control surgery. This in turn substantially increases the demand for specialist resources for the further care of patients who would otherwise die.

"Israeli military experience, even with very short medical communication lines, has previously supported this finding. In one Israeli study, 96% of 351 deaths occurred within the first four hours, usually from exsanguination. For those casualties who reach hospital, the hospital death rate is very low, although delays in evacuation increase serious wound infection rates and late morbidity.

"In war, trauma care resources must be optimised for the many, rather than dispersed for the few. Each conflict has its own characteristics, imposed by geography, climate, the nature of the warfare, the balance and resources of the opposing sides, the military and civilian populations at risk, and the adequacy of their personal protection.

"Medical problems are compounded by the wide dispersal and rapid mobility of forces, and by the long range of modern weapon systems. These factors can produce simultaneous civilian and combatant casualties over a wide and insecure area. Current efforts to match resources to peacetime templates and timelines by dispersal of the medical effort are most unlikely to succeed. They can then lead to a serious mis-allocation of scarce trauma team skills.

"In modern warfare, as in the major conflicts of the past century, surgical teams are usually best concentrated for the good of the many in well equipped civilian or military field and base hospitals. The wide dissemination of Advanced Trauma Life Support skills and equipment through war zones, supported by commitment to robust casualty evacuation systems, should help minimise early deaths and late morbidity from war trauma.

"Military and civilian planners must also prepare for a full range of eventualities, with adequate resources for the care of the civilian population at risk, including pregnant women and young children. Tragically, we seem to be stuck with war and its consequences, and realism about the achievable will give the best chance of rehabilitation to those many casualties who receive survivable injuries."

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Blood, Heat + Dust: Second Edition

Operation Telic and the British Medical Deployment to the Gulf 2003 -2009

Chapter 11:

Front Line (Level 1) Medicine on Operation Telic



Painting: *Private Michelle Norris MC*

Artist Stuart Brown, by kind permission

Introduction: Front Line support on Operation Telic 1

Front line medical care is the sharp end of trauma management. It involves the immediate combatants, who are trained and equipped for immediate life saving actions, such as the application of tourniquets and pain relief; and the regimental medics and embedded combat medical technicians who are equipped for basic life preservation.

Coming to their help are the front line casualty evacuation teams, either in wheeled or tracked, armoured ambulances, to transport the casualties to the regimental aid post and onward to the field hospital(s), or in helicopters to move directly to the hospital.

Those in the front line are often the youngest and initially least experienced in the realities and horrors of casualty care. They are the first to see the dead and dismembered, and the agonies and fear of the living, who will be among their close friends and colleagues.

In this chapter, we consider initially the work of the front line medics on Op Telic 1, told wherever possible through their own eyes, words, photographs and digital photoessays. Later in the book, we record some of the acts of heroism in the care of casualties, involving ordinary soldiers and young medical personnel.

Op Telic 1 saw a diverse range of formats for the provision of front line care, including the light, wheeled medical manoeuvre units of 3 Commando Brigade and 16 Air Assault Brigade: and the armoured ambulances of 7 Armoured Brigade.

Helicopters were used increasingly in the rapid transport of casualties directly from the point of wounding and the Role 1 RAP to hospital during Op Telic 1. Later in the campaign, as road transport became more and more difficult, they were used for all casualty transfers.

In this chapter, we consider the specific work and experiences of the role 1 medics and Regimental Medical Officers, forward of the Dressing Stations and Field Hospitals. In subsequent chapters we will look at the structure and work of the Close and General Support Medical Regiments on Op Telic 1, which evolved into the UK Med Group structure for subsequent phases of the campaign.

The philosophy behind “Front Line Care” and “Care under Fire”

Rationalisation of the training of combat medics and forward medical personnel through the British Army Trauma Life Support (BATLS) programme,

The following paper by in *J R Army Med Corps 2000; 146: 110-114* sets out the “state of the art” in thinking about prehospital care and training at that time, and the philosophy behind BATLS and the preparation of BATLS Manual under the Authority of the Professor of Military Surgery . . .

A Brief History of Advanced Trauma Life Support

There are marked differences in the epidemiology of trauma in different countries. In 1983, only eight people died from gunshot wounds in the United Kingdom. In the same year, the figure in West Germany was 53, approximately one per million of population. Canada had the same ratio with 20 deaths, but in the United States of America with a population of 226 million the figure was 10,838. By 1994, this figure had risen to a shattering 37,500 deaths due to firearms related injury from all causes. In the same year, the UK with a population of 58.5 million had 261 deaths from firearms.

Analysis of civilian trauma data suggests a trimodal death distribution:

- **Instantaneous**. These occur within seconds to minutes of injury and include injuries to the brain, spinal cord, heart and major vessels.
- **Early**. These extend from the first few minutes to a few hours. Examples include airway and respiratory compromise, continuing haemorrhage and subdural and extra-dural haematomas. It is in this phase, often referred to as The Golden Hour of trauma management, that properly trained individuals can save many lives.
- **Late**. These occur from a few hours to days or even weeks after injury. The majority are due to sepsis with associated multi-organ failure.

In February 1976, a surgeon piloting his own aeroplane crashed in a rural cornfield in Nebraska. He was badly injured, his wife was killed, three of his children had critical injuries and a fourth child minor injuries. He considered the treatment that he and his children received to be woefully inadequate and said *"When I can provide better care in the field with limited resources than what my children and I received at the primary care facility, there is something wrong with the system and the system has to be changed"*.

The need for training was thus identified., and a prototype Advanced Trauma Life Support (ATLS©) course was developed and was adopted in 1979 by the American College of Surgeons Committee on Trauma. Aparallel course, the British Army Resuscitation and Treatment Skills course (BARTS) is run for non-clinicians.

Lessons from Battlefield Injuries

Following the attendance on one of the American ATLS courses by the late Brigadier Ian Haywood, a former Professor of Military Surgery, the need was identified for a similar course modified for military requirements.

The Department of Military Surgery at the Royal Army Medical College [now the Royal Defence Medical College (RDMC)] and the Army Medical Services Training Group [now the Defence Medical Services Training Centre (DMSTC)] were tasked with devising a course for the British Army, known as the British Army Trauma Life Support (BATLS).

The military medical services now have to deal with the complex injuries produced by modern weapons - including gunshot wounds and multiple injuries produced by fragments with relatively high velocities and capable of producing high energy-transfer wounds. They also have the problems of the effects of blast and extensive burns.

Despite advances in weapon technology, the hospital mortality following battlefield injury has been reduced significantly during this century; from 8.1% in World War One, to half that in World War Two (due mainly to advances in resuscitation and surgery) and reduced still further in Korea and Vietnam.

In the Falklands Campaign of 1982 there were over 250 deaths; the majority occurring before arrival at a surgical facility. Those casualties who reached a field hospital had a survival rate of 99.5%.

In the Gulf War of 1991, casualties were fewer than anticipated and the survival rate was high. In one British Army field hospital, 63 casualties with penetrating missile injuries underwent surgery; most had multiple fragment wounds involving two or more body systems, ranging from 1 to 47 hits with an average of 9 hits. The average lag-time before surgery was over 10 hours for allied casualties and 24 hours for enemy casualties.

To continue to improve survival rates we must look at the situation before casualties reach hospital. They must be kept alive from point of wounding to arrival at a surgical centre, otherwise the expert facilities there will be to no avail.

Much research has been devoted to finding out why and when casualites die. A US Army Medical Corps officer, Colonel Ronald F Bellamy, has analysed a large number of deaths in battle. His data are supported by analysis of various British campaigns including that of Urban Terrorist activity in Northern Ireland. These data provide a model for a military trauma population and for the role of resuscitation in the field.

Lessons from Battlefield Injuries: Casualties who are Killed in Action (KIA)

This group are those who die on the battlefield before reaching a fixed medical facility; 90% of US soldiers fatally wounded in Vietnam were in this category and 70% of these died within five minutes of wounding. Prior to the current campaigns, mortality was never below 20% of those who sustained significant injuries and only the Israelis has managed a KIA below 20% (DoW took it above 20%). Except for two of the Israeli campaigns, KIA was normally in the range of 23 – 27%.

The common causes of death in action are: • Exsanguinating haemorrhage (46%):

- 80% bleeding from major vessels and structures within the torso (non compressible haemorrhage).
- 20% bleeding from major vessel and soft tissue injury in one or more limbs (compressible haemorrhage).
- Penetrating brain injury (21%). These are devastating injuries and offer little potential for improved outcome even with early surgical intervention.
- Respiratory injury (4.5%), including airway obstructions; Open pneumothorax; and Tension pneumothorax.
- Combinations of the above (9%). A combination of brain injury and exsanguination is the most common.
- Mutilating blast injury (10%).

Casualties who Died of wounds (DoW)

These are casualties who die after reaching a fixed treatment facility. They constitute 10% of this military trauma population. Half of them die within 24 hours of wounding.

There are three main causes of death:

- Brain injury (4%).
- Hypovolaemic shock (2%). This was usually due to continued bleeding from the liver and/or pelvis with or without coagulopathy.
- Sepsis and multi-organ failure (4%).

The Importance of Early Medical Intervention

The concept of managing the severely injured within the *golden hour* may be applicable during operations other than war. In war fighting, this concept will be severely constrained by the tactical situation on the battlefield, particularly the problems of time and distance. So where does BATLS fit into the concept of medical care on the battlefield in war fighting? Rather than consider a trimodal death distribution, it is probably better to think of three casualty population groups:

- KIAs (17-20%). This group has fatal injuries and will die irrespective of the level of sophistication of available medical care.
- Moderate to minor injuries (65-70%). This group requires the well documented methods of battlefield care for example, analgesia, antibiotics, limb splintage and soft tissue wound excision. The majority of this group are limb injuries.
- Severe but potentially survivable injury (10-15%).

A favourable outcome for this group requires the timely application of effective trauma care. The includes the management of airway and respiratory compromise, compressible haemorrhage, recognition of the need for urgent or early surgery and appropriate use of intravenous fluid resuscitation. BATLS and *BARTS training is aimed at providing the skills to save lives in this third group*. Better early management also significantly reduces death due to multi-organ failure by vigorous and correct initial management, for example in the restoration of tissue perfusion and oxygenation, followed by intensive surgical, medical and nursing care.

Every medical attendant needs the basic skills to keep casualties alive at Role One and Role Two or until they reach a surgical facility.

The battlefield casualty's chance of survival improves significantly after arrival at a field hospital. Military constraints limit how far forward hospital surgical facilities can be deployed. This is why it is vital to provide trauma life support in the prehospital phase of casualty management. Despite changing concepts of the deployment of surgical teams on the battlefield of the future, it is vital that:

The BATLS course concentrates on teaching these skills. The five senses, tempered by the sixth sense - commonsense, may be the only diagnostic aids available until the casualty is moved to a field medical facility.

General Louis Lillywhite kindly adds in a personal communication:

"In respect of BATLS and Forward Aid, a number of the techniques/equipment arose directly from the campaign, for example individual tourniquets although only after significant debate and resistance – as set out in papers inthe Journal of Royal Army Medical Corps). The experience of the continuing campaign in Afghanistan has resulted in continued improvements. For example the manufacturers of the IntraOsseous Devices have responded to experience of difficulty in inserting the earlier versions.

I think that even the 'Care Under Fire' approach derived from experience in Iraq. It is important to record that up until after I became DGAMS, BATLS was almost entirely delivered to both Reserves and Regulars by TA personnel. Indeed, the role of the Reservist Clinicians in sustaining clinical 'memory' over the period 1996 (Post DCS 15) until the Regulars started to re-engage needs to be documented. It was with some difficulty when I became DGAMS that I effected this re-engagement – the TA were more than happy to carry on whilst many of the young Regulars were very much involved in civilian ATLS training. This led to the somewhat strange situation of NHS Reserve personnel training the Regulars and Regular personnel working in the NHS training civilians.

The role of Colonel Peter Roberts on his retirement from the Regular Army in giving effect to my intent, on his own initiative, should also be highlighted.

Another issue that ought to be considered is the issue of BARTs vs BATLS. When I became DGAMS I recall that there was no difference between the two, other than in the name. It was with the introduction of advanced techniques that the role of the doctor and advanced first aider diverged again"

The training of Immediate Response Teams and "Combat medics" for Op Telic

The importance of the capabilities of the immediate responders was now apparent, and structural changes were introduced into front line units to ensure that:

a. All soldiers were adequately equipped and informed as to how to deal with major trauma. Simple strategies such as the development of "flip chart" note pads giving standard treatment protocols in simple language were introduced and rehearsed.
b. numbers, training and equipment of the combat medic cadre was improved.
c. The profile and importance of the medical cadre was improved and understood. Now, the brightest and the best of the soldiery would be put forward for the medical courses and cadres
d. Equipment issue was rationalised, ruggedised and standardised.
e. The particular needs and characteristics of "Care under Fire" were recognised and taught.
f. Procedures were developed to improve "in transit" care, both in vehicles and on helicopters.



g. Appropriate equipment was introduced, including Combat limb tourniquets; Pelvic tourniquets; Chest seals and Intraosseous fluid administration sets.

The Role 1 and forward medical teams were thus generally much better prepared and equipped than in the past, and training and equipment evolved throughout the decade.

Forward (Role 1) Medical Support of 3 Commando Brigade RM on Op Telic 1





42 Cdo RM RAP, set up on the Al Faw Peninsula, photo Surg Lt Tim Bonner

The Commando Medical Group is a component of the Commando Logistic Regiment, Tactical Assembly Area (TAA) Viking. The NBC threat state increased as the Unit was now only 12 miles south of Iraq. The entire perceivedBrigade's operation was concentrated in the TAA.

The Commando Forward Surgical Groups (CSFG)s were pre-positioned with 40 and 42 Commando, and Artillery Support Troop providing stocks of 105mm shells to 29 Commando. This was in readiness for their barrage of the Al Faw Peninsula from the Kuwaiti island of Bubiyan. The predominant threat was from the impact of Scud-B, Frog 7 and 122mm Multi-Rocket Launch Missiles along with an array of Iraqi artillery, which were in range of the position. There was great concern about the possibility of a chemical or biological strike.



Surgical Group in Old Customs House Unit



Ambulances on standby in Iraq

After the initial attacks of 40 Commando on the Al Faw Peninsular, Commando Surgical Forward Group 1 (CFSG1) followed soon after, treating injuries sustained predominantly by enemy forces. CFSG2 was attached to 42 Commando, and remained in place until 42 were re-tasked to clear and stabilise Umm Qasr. The Surgical Group then crossed the boarder to an old customs house, built as the intercontinental ferry terminal on the edge of the port. Their main work was with locals injured in the fighting and from enemy Prisoners Of War.

A few days after the stabilisation of the Basra area, the Regiment deployed to its final location, the Az Zubaya Port. This is a commercial port north of Umm Qasr, and was considered an ideal location to establish a Brigade Support Group area from which to mount current or future operations. The CFSGs followed their associated units around areas of operations in Basra and the Rumaliah Gas / Oil Separation Plants.

The work of the CFSGs is reported in greater detail in Chapter 12.

Role 1 Medical Support of 7th Armoured Brigade Operations

The combat units of 7 Armoured Brigade were supported by integral medical teams under the command of the Regimental Medical Officer, and by ambulance crews working forward from the Close Support Medical Regiments.

Experiences of an armoured battlegroup regimental aid post on Op Telic

Capt Steve Edgar RAMC

The young men and women in the regimental aid teams are usually the first to encounter the horrors and distress of the wounded on the battlefield. In a fluid environment around civilian settlements, this is as likely to be injured civilians as soldiers. Captain Steve Edgar, Regimental Medical Officer to the RAP, 1st Bn the Royal Regiment of Fusiliers during Operation Telic, recorded the experiences and thoughts of his front line medical team during the 1st Armoured Division operations on the approach to Basra, with the intention that this would provide some insight into the differing roles that make up the front line medical facility of an armoured battle group.

His personnel were a diverse group of soldiers, medics, the Padre, and young and inexperienced crews of the evacuation ambulances provided by 1CS Med Regt. His immediate concerns were the treatment of casualties while under multi-directional fire, and the vulnerability of his ambulances to rocket-propelled grenades (RPGs), antitank mines and NBC attack. In a change to conventional plans, practice rapidly developed to take the mobile, armoured RAP forward to the casualties, treat on site and prove the route for evacuation, a tactic which was sustainable given the low volume of casualties and the presence of sufficient reserve medical sections from 1CS Med Regt.



Armoured RAP crew: Picture Steve Edgar

Capt Edgar reports that:

I asked my team to record, in their own words, an event which has made an impression on them. We were involved in many fraught situations and their actions were at all times exemplary.

Training during peacetime for the war role has been put sternly to the test during this operation. We were, from the very start, among the furthest forward elements of the Battle Group, often hurtling forward into areas of contact to treat casualties with incoming fire still ongoing. The threat on the battlefield was in all directions, possible NBC casualties weighed heavy on our minds and the reports of enemy targeting the Red Cross on thinly armoured 432 ambulances with rocket propelled grenades heightened the tension during manoeuvres.

It was clear that all evacuation from the front line would be by armour and wheels, not helicopters as had been originally suggested. Anti tank mines lay by the sides of the roads and made two-directional traffic a constant challenge. In a change to the med plan enforced by circumstance, the pattern emerged that the RAP would be called forward to wherever there were casualties, to treat on site and prove the route for evacuation. This was only sustainable as the actual volume of casualties at any one time was low and the armoured medical section (AMS) from 1 CSMR were in reserve further to the rear.

On the first morning after the war started we were in a farm complex waiting to be called across the border.

"As the battle group started to cross the berm obstacle our call sign was called

forward to a civvy casualty who sustained a gun shot wound to the head. This civilian was taken away in a civilian vehicle before we could arrive at the scene. The next were three civilians crossing into our area who had sustained injuries including gunshot wounds to the leg and an injured hand. I was involved with the treatment of gunshot wound to the leg."

(LCpl Priest age 29 1RRF 432 comd RMA 2)

On the first morning of the advance into Kuwait, the RAP was called forward across the border.

"When we got through the berm we got to a little hamlet where we stopped for 20 minutes, then suddenly we got two children with severe wounds to their legs and one with her hand disfigured… I took it on myself to try and help the children… When one started to cry, I thought to myself this isn't right that children are getting caught up in this."

(Fusilier Thompson aged 20, 432 ambulance driver 1RRF)

The two teenage civilian girls had, it transpired, been hit by a helicopter gunship strike. One had severe blast injuries to the medial aspect of her right leg extending up to her pelvic area, she was becoming less responsive and more shut down. We tasked one of the warrior vehicles to request helivac and proceeded to stabilize the girls as best we could. 15 family members and locals, who were understandably anxious, surrounded them. The second girl had a traumatic amputation of her left hand and some fingers from her right hand were missing. She had also sustained an open femoral fracture, which had been splinted by the Sqn Medic.

When the helicopter arrived they were surprised to find that the casualties were civilian, we insisted they take them as there was no time for lengthy discussion. I had no idea where they were going and took what details I could from the locals, in Arabic, in the hope that someone somewhere may be able to find them and get them back to their families once treated. I have heard nothing of them since.

During the same incident, *Capt Edgar recorded that:*

"15 family members and locals, who were understandably anxious, surrounded the RAP. When the casevac helicopter crew arrived, they were surprised to find that the casualties were civilian. We insisted that they take them, as there was no time for a lengthy discussion. I had no idea where they were going and took what details I could in Arabic, in the hope that someone somewhere may be able to find them and get them back to their families after treatment. I have heard nothing of them since".

The move northwards continued, with the RAP attached to the Y Coy/B Sqn regimental combat team and the constant fear of counterattack.

"I'm the driver of a 432 track wagon and I'm driving for the RAP on the tour of Iraq. The driving is pretty hectic at times… Most of the time, when you are driving, in the back of your mind is that if this wagon gets a hit it would not withstand it. I've probably seen more blood and guts than most of the lads over here, but you put it



Armoured RAP crew: Picture Steve Edgar

all behind you. My worst nightmare is seeing someone who I know but luckily it hasn't come to that for me".

(LCpl Ali, 1RRF)

The Armoured Evacuation ambulances from 1 CSMR were attached to the other forward call signs for evacuation to the RAP/AMS once again near the thick of the fighting.

"One memory I have that is still quite clear occurred whilst attached to C Sqn QRL. It was the second night of being in Iraq, so things were quite tense. We had moved forward to take over bridge 4, as the Challengers moved forward we held back to hold the med support.

From where we were, you could see the firefight, tracer rounds and Artillery going down, just a few kilometers away. Whilst I was sleeping I heard someone shouting and my heart near jumped up my chest, I didn't know what was going on, the infantry boys attached had come under contact, 30 enemy to their section of 8. So there was a major need for support to prevent casualties. That was the start of the night, within the next few hours we were in dress cats R 1, 2, 3, and 4 having had a suspected nerve agent attack, but seeing the POWs smoking their cigarettes confirmed the fact that it was safe to unmask.

Just as everything felt like it was going back to normal we were fired upon in the middle of a replen. The enemy's whereabouts wasn't clear then he was sighted and fire was put down on his position. And after what seemed like hours the enemy was captured, however during this commotion an unsuspecting farmer trundled along on his bright red tractor from the area of the enemy. The Sqn let loose its arsenal on Mr farmer who managed to escape at 10 mph unscathed which I was thankful for."

Pte Moss age 20 1 CSMR 432 driver

The NBC threat was judged to be high, with incoming artillery and mortar shells, and the RAP received a report of a chemical casualty en route to it.

"Being fairly clued up NBC-wise, I volunteered/was tasked to move further down the road with a Chemical Agent Monitor in full protective clothing (IPE) in readiness to 'sniff' our possible casualty. When the ambulance turned up, I waved it down and opened up the back. I saw the casualty on a stretcher, and to my horror the medic in the back unmasked. Thinking he must be some lunatic on day release, and that we would have to treat him too, I sniffed with the CAM, got nothing, tried again, nothing. So I took the plunge and unmasked myself and the crew, then directed them forward to the MO".

The casualty had passed out and vomited into his respirator. Believing that he had been gassed, someone had administered a combopen of atropine, pralidoxime and diazepam, and the medic on the scene administered a second combopen. A blood sugar test showed that he was in fact markedly hypoglycaemic, and he improved dramatically with an intravenous glucose infusion, returning to duty within a few days.

As the battle group consolidated on the bridges west of Basra, the RAP moved to a position which was being intermittently mortared, and from which Warrior APCs and Challenger II tanks were probing forward.

"As the Battle Group consolidated on their respective bridges to the west of Basra, HQ moved up into the Airport. We moved down to the 'cloverleaf' 1500 metres from bridge 2, a site that was being intermittently mortared as, alternately, warriors then challenger 2s probed forward to harass the enemy. It was not long before the first of the two lowest points came for the Battle Group and us.

"A message came over the radio that one of our Challengers had been taken out by RPG and that there had been two casualties. Something didn't seem to click. I couldn't see an RPG taking out our best tank. It wasn't until we pulled up that we found out it was a 'blue-on-blue'. From another tank, two rounds of high explosive had left two dead and two injured. The Doc took the seriously burnt casualty. All that went through my mind was he's no older than 19 and he may die. We set upon the second casualty. It's the first time I've seen such bad burns. The poor bloke was in a lot of pain.

"I was well aware of the anger and frustration of the other tank crews. Later I read in the paper that one of the fatalities had left behind a wife and kids. The death of a British soldier leaves us feeling empty. I always find myself thinking, what if it had been me"

(Cpl Stockwell RAMC, 1RRF RAP).

There followed several days of relative inactivity. On Sunday 6th April, the RAP was briefed for the move into Basra.

Capt Edgar continues:

"Our aim in the RAP is to assess, stabilize and package casualties for speedy evacuation, there is no time for a complete investigation of all possible injuries so I do not know the true extent of these boys' wounds. I hope they are doing well. The waste of some lives and the ruination of others through blue on blue incidents is difficult to deal with.The fog of war obscures the complete picture of what happened.

Those on the ground find out only by piecemeal and by rumour the circumstances involved. All the procedures and equipment are in place to prevent it happening but it still occurs. There is no solace.

We returned to the bridge and began to alternate roles with the AMS. The heat, flies and tedium of waiting for days on end at the more frontline bridge position was gratefully interspersed with a couple of days of washing clothes, playing cards, admin and sick parades in the airport. On Sunday 6th April, I attended the morning briefing and we were given our H hour to move into Basra itself.

We were once again in convoy with Y Coy on the way in, when we had reports of a casualty in severe difficulties further forward. We moved as fast as possible up to his location.

"On the advance to Basra, we were called to an incident where a Fusilier was hit near the power station… We tried to save him under a mortar attack, but it was too late. Then I thought to myself we couldn't do enough, but in reality we tried everything to save him. It's like losing a brother. These events will stay with me for ever"

(Fusilier Thompson, 432 driver, 1RRF RAP)

Capt Edgar recorded

"We completed the move to our battle group objectives. It seemed a hollow victory at already too great a cost to all. But casualties continued and we, like the rest of the Battle Group, carried on. Intermittent firefights between looters and occasionally with our forces injured more. There is little more soul destroying for me or my medics than seeing injuries where we can do nothing, and being on the scene quickly increases the likelihood of this occurring".

On another occasion,

"We were tasked to go to the aid of a civvy cas. We jumped in the ambulance and shot off, it took about 10 minutes to get there. We went forward to a local shack where we found L/Cpl White holding a field dressing to the head of a youngish woman. She had a large head wound, with brain matter leaking out. I went to check the kids, who were terrified – obviously. I moved back to help load the woman onto the ambulance. Her breathing had already begun to deteriorate. We got sorted and

drove as fast as possible to the hospital. Unfortunately, the doctors did not rate her chances very much. (L/Cpl Cummings)

Capt Edgar added:

"We took her to the local hospital in one ambulance and took her children in another. There had been a firefight involving grenades and a shack was on fire next to theirs so they could not stay there. There was a large crowd at the casualty department, who were very matter of fact about the whole thing and took the children away, thanking us for bringing them. I didn't feel we deserved their thanks."

"We had a casualty, supposedly militia, brought in from Y coy. It looked like he had picked something up and it had blown up on him. There were traumatic amputations of both of his hands and an abdominal wound through which part of his liver was hanging out. He was voice responsive but deteriorating and was well shut down. The Doc and I tried cannulating him but failed, Doc then tried a cut down with no luck and eventually succeeded with femoral access. We stabilized him and evacuated to the DS. The emergency treatment of these people is exactly the same as for our soldiers but the mind-set on whether they make it or not affects us a bit different."

(Cpl Garry Crooks RAMC CMT1)

"We had taken over part of a hotel as the RAP and were based there with an evac ambulance as the RPG threat was still present. Efforts were ongoing to fortify the location and to prevent the looting from cascading any further out of control. In addition to this a wave of gastro-intestinal upset was spreading through the unit, putting people out of action for 24 hr periods, which had to be spent close to the latrines.

Occasional casualties were being evacuated to the DS 1a or 34 Fd Hospital during which the following incident occurred.

"Thinking back now, something that is scorched into my memory was what started as a quiet day, transporting a P3 casualty to the dressing station. En route we came across a mass of people surrounding a car and blocking our way. They were clearly very distressed, and one person in particular. I could make out the limp looking figure of an eight year old boy, motionless on the bonnet of a rusty old car. He'd been shot in the abdomen. This tasking from nowhere with the sheer amount of people fuelled by confusion and helplessness was not an easy one. From the word go my crew were outstanding considering their age and experience, the oldest being about 20. They never needed prompting or direction of any kind"

(Cpl Nazar, 432 Evacuation Ambulance Commander).

"We had just come from the dressing station which was set up at Basra International Airport. It must have been about five minutes into the drive and we



FV432 armoured ambulances bivvied up: Photo Capt Steve Edgar

were just coming up to the bridge. We were stopped by the Queens Royal Lancers shouting "there is a young boy with a gunshot wound"… His father was next to me screaming "help my son, please help him". The little boy had already been given some basic treatment, so we changed the fluid bag and got him away. By this time the sweat was pouring off me, and my heart was going, it didn't help that the back of the 432 was like a steam room. It takes about 30 minutes to get there but it felt like two hours… Finally, the DS was in sight; a thumbs up to his father that we were there brought relief to him and even more to me.

"The doctors and CMTs took the little boy through the tent and cracked on. I went outside and calmed myself down, it was a big shock to the system. Then I started thinking about what had just happened. I concluded that our crew gave 110% from the driver finding the route, the commander controlling the situation, and myself applying everything that I had learned in training and in theatre".

(Pte Patton, age 19, 1CS Med Regt Combat Med Tech)

Soon after, the RAP was withdrawn to the UK. Capt Edgar has the last word:

"The radio today said that Gulf War 2 was nearly over. I'm glad. Many Doctors and paramedical staff have been in front line fighting situations during this war, treating conditions they may never have encountered before. I hope this gives some insight into what we have done and serves as a lesson as to what we may encounter in the future. All involved have done their duty as required. I would think many

forward medical teams have had similar experiences and I do not claim we are anything special, but these have been ours."

Role 1 Medical Support of 16 Air Assault Brigade Operations

Forward Medical Support of 3rd Bn The Parachute Regiment

Captain David Luke, Regimental Medical Officer to 3 Para, reports the deployment of his embedded regimental aid post (RAP) medical team. The unit moved to Brecon in early January 2003 for live firing training, during which the RAP provided medical training and an immunisation programme. The unit's vehicles were shipped to Kuwait in early February, and its personnel flew to Kuwait to undertake acclimatisation training. There they rehearsed operational procedures for the subsequent move into the Rumaila oil fields.

The RAP was deployed with the A1 (fighting) echelon of the battalion, with the 16 Close Support Air Assault Surgical Group in Role 2 support. It supported the final assault on Basra by 7 Brigade with a 24-hour deployment to clear the old town of insurgents, and set up the RAP in a school.

3 Para subsequently moved to Allamarah, north of Basra, where the HQ was set up at Kalat Sali airfield. Medical teams were deployed with A Coy, 10km to the north, and B Coy, 40km to the north.

Captain Andy West, RMO, I Para, Op Telic

Andy West joined 1 Para as Regimental Medical Officer in August 2002. Soon afterwards, the Battalion was engaged in Op Fresco, providing cover for the Firemen's Union strike in the UK, and disrupting normal training. The Battalion moved to Otterburn ranges in Northumberland for predeployment training in January 2003, during which time invaluable training was gained in getting to know his new Medical Sergeant and Medics, in working together as a team, and in identifying shortfalls in the equipment scales.

1 PARA moved to Kuwait on 12th Feb 2003. The RAP was reinforced by a Medical Section from 16 CS Med Regt, including both Regular army and TA reinforcements. The time in Kuwait included sick parades, and vaccination parades which were held outside the cookhouse to catch the recalcitrant on their way in to meals. Conditions treated included chest infections, dust in eyes, diarrhoea and a newly diagnosed case of inflammatory bowel disease.

The Unit crossed the border on 24th March by vehicles and in CH47 helicopters. The original plan was to capture an airfield South of Baghdad by Air Assault, but this was cancelled "at the 11th hour", after the RAP members had spent a night under CH-47s waiting for the "off".

The RAP treated its first Iraqi casualties on 7th April, as it moved into the town of Ad Dayr.Oner of the company medics was met by four casualties from a grenade thrown into the crowded marketplace. Treatment was carried out on the vehicles and using kit stowed in individual manpacks (bergens). There were three P1 and one P2 casualties, one of whom needed a chest drain which was inserted by Sgt Smyth, Med Sgt under supervision. As the first casualties were treated, another 19 emerged from vehicles at the side of the road, pushing through a cordon for treatment. The local hospital had been looted the day before, and these were the worst of the casualties who had apparently been left behind by the nursing staff who had fled. They were triaged and the most seriously injured were sent back to 19 Sqn AASG in battlefield ambulances.

The next highlight was the delivery of a baby in the back of a truck. The parents had presented themselves to a company position in the middle of the night, as they could not find a hospital open. The father told us through an interpreter that he believed that his wife needed a Caesarian section for an obstructed labour. The baby was delivered by LCpl Tobin and LCpl Hall, while I was about 100 yards away on the radio to Brigade, trying to find an obstetrician, as I was somewhat alarmed at the prospect of having to organise a Caesarian!

The RAP treated a number of Iraqis over the next few weeks, including a significant number of children with wounds from "unexploded" ordnance. There were also more gunshot wounds, and local men with head injuries who had fallen from roofs while looting corrugated iron.

The Battle Group finished up at al Amara, taking responsibility for the security of Maysan Province. The RAP took over a disused mosque to run as an isolation ward for the large number of diarrhoeal cases, with up to 18 cases at any time. It was initially based at an airfield codenamed Sparrowhawk, and then moved to Camp Abu Naji, to work alongside DS1A from 1CS Med Regt.

Just before returning to the UK, the RAP was involved in the notorious incident at Al Majr Al Kabr, where six members of the Royal Military Police were killed by a mob. The Chinook Helicopter in which Dr West was sent to recover the injured and the bodies was nearly shot down (see Chapter 14).

Photoessay: Front Line Medicine

Andy West's photoessay is provided as an appendix to this chapter.

Medical support of Long Range Reconnaissance troops

In general terms, long range reconnaissance units comprise small numbers of personnel, but they pose specific problems of medical support, because operations take place at a distance from conventional medical facilities. They may be conducted by airborne, heliborne or maritime borne forces. The absolute numbers of casualties from such an operation will be low by definition, but injuries may be severe and a high quality of care is required, which may involve the deployment of mobile surgical teams with an ITU and holding capability.



Australian mobile long range reconnaissance forces in Iraq, 2003.
(Photo Australian MoD Internet resource)

These risks are minimised by training individual soldiers to a high standard of first aid, and including specialists with advanced training in each subunit or patrol. Recovery of seriously injured soldiers, where possible, requires exfiltration, usually by helicopter, to the nearest suitable treatment facility, which may or may not have been specially established for the duration of the operation using field medical subunits.

While the MoD embargos all mention and discussion of Special Forces operations, the US Armed Forces has a more open approach to medical matters. Frank Butler's chapter in the US Military Medical Department's Borden Institute publication on Medicine in Harsh Environments sets out in a public source document a wide range of issues in relation to Special Forces operations which make commendable reading.

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Acknowledgements:

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Blood, Heat + Dust: Second Edition

Operation Telic and the British Medical Deployment to the Gulf 2003 -2009

Appendix to Chapter 11:

Photoessay by Capt Andy West, RMO 1 Para



Capt Andy West having a busy day at Camp Abu Naji, 23rd June 2003.



0056: Members of 1 Para RAP giving vaccinations during prewar training in Kuwait, 12th March 2003



Members of 1 Para on a fitness and acclimatisation march, Kuwait, early 2003
(Photo Chris Ison)



The 1 Para RAP set up in Northern Kuwait on 20th March 2003, before the move into Iraq



Treatment of a casualty with a gunshot wound to the left buttock. The man was an Iraqi forward artillery observation officer who had been ambushed by 3 PARA. The bullet had exited via the left femur and through the right thigh. Initial treatment was carried out at the RAP in an improvised resuscitation area in a building, 1st April 2003.



The move North. 1 Para RAP parked up and awaiting business on 4th April 2003, near the Iranian border in support of the Household Cavalry Regiment screening force.



A fresh delivery for LCpl Tobin, 1 Para RAP, 10th April 2003, outside the C Coy position



0104: The RAP Obstetric team 15 minutes after its newest recruit arrived, 10th April 2003



Tailgate treatment of an Iraqi man, 11th April 2003. He was one of three casualties of a drive by shooting at a house containing Iraqi Army deserters. He underwent casevac by Puma helicopter.



Casualty Evacuation from the RAP, April 2003, near Al Quarnah hospital, which had been looted and had no basic supplies, clean water or power (Photo Chris Ison)



The RAP in new accommodation, 12th April 2003, in the old Baath Party HQ at Al Quarnah. The RAP 12' x 12' tent was set up within the building.



Casualty transfer from Al Quarnah hospital for helicopter evacuation from 1 Para RAP
(Photo Chris Ison)



Awaiting Helivac via 1 Para RAP from Al Quarnah hospital, 12th April 2003 (Photo Chris Ison)



Marketplace Chaos: the initial treatment of a young Iraqi boy who had been playing with a grenade, causing partial amputation of his hand and a degloving injury to his forearm. His father was in attendance (Photo Chris Ison)



Saddam Hussein is (still) watching you: (Photo Chris Ison)



Market Day: the young boy is prepared for evacuation (Photo Chris Ison)



Evacuation from Al Quarnah on 13th April 2003, while young children were throwing stones, out of shot. The casualty is being transferred from the ambulance to a Puma helicopter. (Photo Chris Ison)



Puma helicopter transfer, 13th April 2003 (Photo Chris Ison)



The dangers of interfering with unexploded ammunition, 17th April 2003. The explosion of the component of an Iraqi tank round caused this young man to lose the tissues of the palm of his right hand, to be peppered with fragments to his face and to lose vision in his right eye.



Luxury accommodation: The isolation ward at Camp Sparrowhawk, after most patients had recovered and had been discharged, 12th May 2005



Treatment of Heat Stroke, 16th May 2003. In the middle of the day, ambient temperatures were around 40 degrees in a building with no air conditioning there or in the ambulances. Damp towels, fans and fluids were the best available treatment.



Delivering unused 16 Bde RAP medical supplies to local health care workers at the medical warehouse in Al Amara on 16th June 2003



Happier times, hearts and minds. Al Amara, 16th June 2003



The new medical centre/RAP at Camp Abu Naji, Al Amara, 23rd June 2003. The antennae were courtesy of the previous occupants: an Iraqi Armoured Divisional HQ



Inside the RAP, Al Amara, 23rd June 2003. SSgt Ithia from 16 CS Med Regt is at work on the recently issued admin laptop computers.

Blood, Heat + Dust: Second Edition

Operation Telic and the British Medical Deployment to the Gulf 2003 -2009

Chapter 12:

The Close Medical Support Regiments on Operation Telic 1



Painting: *Supporting the Entry into Basra. Medics at Bridge 4. Iraq 2003*

Artist David Rowlands Medium: Oil on Canvas

Regarding the painting "Supporting the Entry into Basra" on the previous page, David Rowlands recalls that;

> *"1 Close Support Medical Regiment was reinforced by personnel from more than 40 units (from all three services) during Operation TELIC. Whilst this painting depicts a single Medical Troop at Bridge 4, it commemorates the hard work and dedication of all medical personnel who supported 7th Armoured Brigade during their entry into Basra.*
>
> *One night, when lying in bivouac beside the tracked vehicles of The Light Infantry, a sandstorm rose up. While struggling to keep our kit together, some of us climbed into the back of a lorry to escape the wind until dawn. However, my sleeping bag was blown away, so next morning I walked across the desert looking for it. After a fruitless search I wandered near the encampment of 1 CS Medical Regiment, where I was surprised to spot my sleeping bag. Here, Major Jo Palmer introduced me to the CO, Lieutenant-Colonel Andy Terrell. They asked me to paint the Regiment's forward squadron in the compound on the west bank of the Shatt al Basrah at Bridge 4".*

A brief history of battlefield casualty evacuation

Throughout history, casualties were left to their early fate on the battlefield, and survivors received late and inadequate care once the fighting had moved on. Effective methods of care, evacuation and treatment of battlefield casualties were a surprisingly late development in the long history of warfare.

The Smith papyrus of Egypt from about 3000 BC is the oldest known surgical text which deals with the effects of wounds. The Hippocratic writings of 400 BC discuss wound care, fractures, antiseptics and bandages, and conclude that war was the training ground for surgeons. The Roman army employed physicians to the legions, and enlisted soldiers (*capsarri*) were trained to dress wounds. Evidence of military hospitals has been found at frontier posts.

The introduction of gunpowder weapons in the 14th century increased the severity of battlefield wounds. From the 1550s, the Spanish army taxed soldiers' wages to pay for military surgeons and a field hospital. From 1585 the Spanish army of Flanders operated the first permanent military hospital (330 beds) at Mechelen. By the early 18th century, many armies had surgeons with various degrees of formal training.

The systems to ensure early casualty clearance from the battlefield, ambulance transport and an organised structure of staged medical care have been in place for less than two hundred years. In the early 19th century, two French officers, Barons Larrey and Percy, introduced light, well-sprung casualty carriages into the Napoleonic Army. Each French division had an ambulance corps of about 170 men, a chief surgeon and the new horse-drawn carriages. The British and American armies took a further 50 years to adopt these practices. At the outbreak of the US Civil War in April 1861, the US Army had a few two- and four-wheeled ambulances. By the battle of the Bull Run in July 1861, most Union wounded still depended on friends and relatives to pick them up in a family carriage. Three days after the battle hundreds of wounded still lay where they had fallen. The stretcher-bearers were members of military bands.

Over the course of the US Civil War, Major Jonathan Letterman, Medical Director of the Army of the Potomac, dramatically improved the Union system of evacuation with a system that has stood the test of time. Letterman reformed the ambulance system and created an orderly group of medical clearing stations behind each battlefront. The ambulances were tasked to bring all casualties to the clearing stations, for triage and onward transport to hospitals in the rear. This system introduced the principles of systematic reduction in the time between wounding and lifesaving surgery, and evacuation of a casualty no further than effective treatment of his wounds needed. The Letterman system was a hierarchy of battlefield medical services which has survived to this day.

In August 1862 General McClellan implemented Letterman's plan with the principles of the Geneva Convention for the Army of the Potomac. Ambulances were to be used only for the transport of sick or wounded soldiers. Stretcher-bearers and hospital stewards were to wear distinctive insignia. Ambulances were to move at the head of all wagon trains, not the rear. Only medical corpsmen were to be allowed to remove the wounded from the battlefield. Ambulances, horses, and harnesses were under divisional control, but trained ambulance drivers were under Medical Department control. In March 1864 President Lincoln approved a uniformed Ambulance Corps for the US Army.

In World War I, horses remained important for transport. Motor ambulances were introduced, but the increased speed was offset by poor road access to the front lines in France and the Low Countries, and by new logistic demands for fuel, lubricants and repairs. This problem of vehicular transport at the front line persisted into World War II, and solutions adapted according to the theatre of war and the nature of the terrain; the British Army in Burma used both pack animals and light aircraft to transport casualties over long distances. The history of the development of air and helicopter evacuation is developed further in the aeromedical chapter.

The control of battlefield ambulance and evacuation assets usually lies with field ambulance units, which combine the skills of casualty transfer with dressing station care and rearward evacuation.

Continuity in medical regimental histories

British military regiments place great store on historical continuity and upon unit traditions and histories. This is as true of field medical units as of any other fighting unit. Field ambulance units date back in their recognisably modern form to the late 19th century. Medical unit names and traditions have been preserved and handed down to successor units over the centuries.

It is thus instructive to follow this process in this abstract of the history of 24 Field Ambulance, provided by members of 3 Close Support Medical Regiment. It illustrates the scope and diversity of the experience of all British military medical units in the 20th century, with wide geographic deployments, serial amalgamations and the preservation of regimental heritage wherever possible.

> "The 1st Wessex Bearer Company (Coy) was formed in 1902. In 1908 it became the 1st Wessex Field Ambulance. Known as 24th Field Ambulance during the Great

War, it was mobilised on 4th August 1914 and went to Salisbury Plain. On 22 October 1918, 24th Field Ambulance entered the spa town of St.Amand-les-Eaux, full with some 2,000 French refugees and under German fire. The subsequent work for the civilians by the 24th in terrible conditions under bombardment earned the unit the *Croix de Guerre with Star* from Marshal Pétain, and now hangs in Exeter Cathedral.

After the Great War – and up to and through World War II - the unit continued as 128 Field Ambulance in the Territorial Army. 24 Field Ambulance was reformed in the 1950s as part of 24 Infantry Brigade; it moved to East Africa to support operations during the African mutinies, famine relief in Kenya, and in the Belgian Congo.

In 1964 the unit moved to Aden. It supported the operations in the Radfan Mountains. In the late 1960s, it returned to the UK to support operations in Northern Ireland, then moved to Germany in the 1970s as 5 Field Force Field Ambulance and later as 5 Armoured Field Ambulance. The unit became 24 (Airmobile) Field Ambulance in 1988.

It was deployed nationwide in the UK in 1989-90 to provide ambulance crews during a pay dispute in the civilian emergency services, and to the Arabian peninsula in the Gulf crisis in October 1990. The unit provided the advance element of 33 Field Hospital RAMC and later moved into the desert supporting the Force Maintenance Area. It provided medical support to 1 (UK) Armoured Division during the operations in Iraq and Kuwait in February 1991.

The unit returned to the UK as part of the Multi-National Rapid Reaction Corps during the 1990s. It was deployed in support of United Nations peacekeeping operations in the Former Republic of Yugoslavia in 1992, and re-equipped for armoured operations during 1993. Between 1999 and 2000, 24 Armoured Field Ambulance personnel were deployed in Kosovo.

In April 2000, 3 Close Support Medical Regiment was formed to support 3rd Armoured Division (UK), and 24 Armoured Field Ambulance was absorbed to form 24 Medical Squadron, equipped with both armoured and light vehicles. 24 Medical Squadron deployed to the Gulf in 2003 on *Operation Telic* as Dressing Station 1B with 1 CS Medical Regiment. In addition, members of 24 Medical Squadron deployed on peace sustainment operations in Iraq on *Operation Telic 2* with 3 CS Medical Regiment".

The Close Support Medical Regiment after 2000AD

The transfer of casualties from the front line fighting units and from points of wounding to Dressing Station (Role 2) and Field Hospital (Role 3) care remains a demanding and dangerous task. In the British Army, it is the task of specialist medical units, the Close Medical Support Regiments, the successors of the Field Ambulances. The methods of casualty transfer vary with the geography, the environmental conditions and the immediate circumstances of war. For example, in conventional armoured or 'heavy

metal' warfare, armoured tracked ambulances are needed to safeguard the wounded. In light infantry operations, wheeled ambulances and trucks may be used. In difficult country, light aircraft - or even pack animals - may be used, but wherever possible the system of choice is the helicopter. The principle is to achieve the most efficient means of evacuation with the least risk in the circumstances.

The close support medical regiments provide battlefield field ambulance functions to divisions and brigades, including Light Infantry, Air Assault and Armoured Units.

In April 2000, 1 and 3 Close Support Medical Regiments were formed from Field Ambulance units to support 1st and 3rd Armoured Divisions (UK). 4 and 5 Field Ambulances became the equivalent general support medical regiments (Chapter 6).

In 2003, the Territorial Role 2 Field Medical Units included eight field ambulance units, now restructured as independent squadrons of the regular medical regiments, and the ambulance train squadron, now re-designated for general casualty evacuation functions. The reserve medical force maintains a wide geographic footprint, with regional and city titles and headquarters. The descendants of the territorial Field Ambulance Units are B (220) Medical Squadron (Home Counties); C (222) Medical Squadron (East Midlands); 225 Field Ambulance (Dundee); 250 (GS) Medical Squadron (Hull); 251 Field Ambulance (Sunderland); 253 Field Ambulance (Northern Ireland); 254 Field Ambulance (City of Cambridge); and C (144) Parachute Medical Squadron (National, London). The long established Ambulance Train group is evolving into a specialist medical evacuation service.

Each Close Support Medical Regiment thus comprised a combination of regular and Territorial Army reserve squadrons. Each medical squadron was capable of independent operation and was affiliated to a particular brigade. Together, they supported a division. The training cycle works on a three-yearly cycle of Other Tasks (One Year) , High Readiness (One Year) and Individual Training (One Year). Each squadron rotates through the training and readiness cycle over this period.

Functions of the Close Support Medical Regiments

Medical Close Support now describes the provision of Role 2 support on the close contact battlefield. These units require similar levels of mobility, protection and flexibility as the units they are supporting. In general terms, these are either armoured divisions and brigades, or infantry divisions and brigades. The British Army possessed four formed Divisional Close Support Medical Regiments in early 2003, supporting their synonymous 1st, 3rd, 4th and 5th Divisions. Each Close Support Medical Regiment is made up of three self-sufficient Medical Squadrons, a Headquarters (HQ) Squadron and a Light Aid Detachment (LAD), which provides immediate engineering support for vehicles and equipment. Each medical squadron at war strength further comprises three types of troop; the Forward Troop, the Evacuation Troop and the Dressing Station; each responsible for different areas of medical care on the battlefield.

One further light, high mobility unit, 16 Close Support Medical Regiment, supports the airmobile 16 Air Assault Brigade. In the war establishment of the squadron, there are

additional troops provided for just such tasks. In practice, operational and training needs ensure that personnel and subunits are readily interchangeable to suit the needs of particular operations, and to augment war establishments.

Casualty Collection on Operation Telic

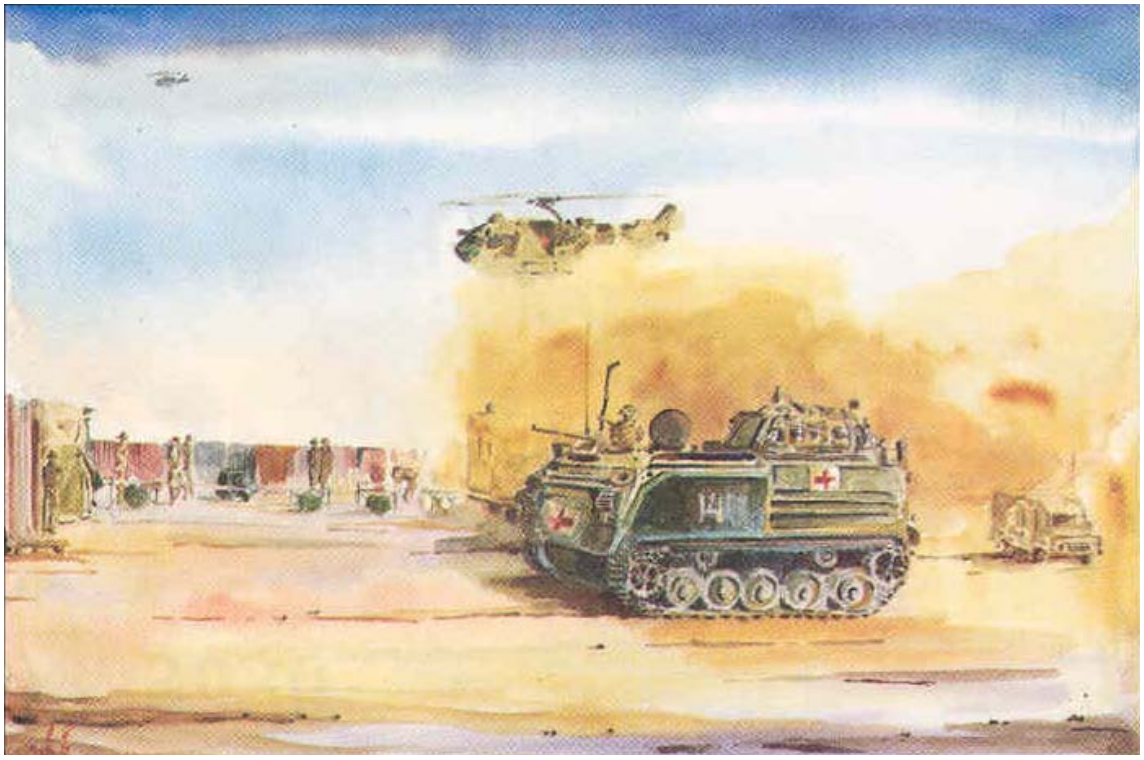
Forward Medical Troops

The Forward Troops of the Close Support Medical Regiments - the Battlefield Ambulance Sections - collect casualties from Role 1 treatment and transport them to the dressing stations. The sections consist of a Medical Officer (MO), a registered nurse (RGN), up to seven paramedic Combat Medical Technicians (CMTs), and one or two Drivers and Radio Operators. Forward Ambulance Troops may be deployed in pairs of armoured ambulances - one for command and one for load carrying - or in teams of wheeled vehicles. Each forward section is able to provide two treatment bays and can set up in less than 30 minutes. Their roles include:

- Replacement for - or reinforcement of - the Role 1 Regimental Aid Posts (RAPs),
- Reinforcement of Dressing Stations
- Cover of Helicopter Landing Sites for casualty exchange and transfer
- Support and relief for medical troops in combat
- Formation of a medical reserve
- Support for other units lacking Role 1 facilities
- Formation of a Light Treatment Facility (LTF), providing primary health care for up to 1000 troops, and two treatment bays for the initial treatment and triage of trauma casualties.
- Formation of an Ambulance Exchange Point, for the transfer of casualties between forward (Role 1) and Role 2 units, and Dressing Stations.
- Medical support for specialist tasks, such as obstacle crossings or other military choke points.

Helicopter casualty evacuation from the front line

The preferred method of evacuating serious casualties is by helicopter, where it is safe to do so. During Operation Telic, helicopters were used both to evacuate casualties from the Dressing Station to the Field Hospitals, and to evacuate casualties from the point of wounding. A system was established for requesting helicopter evacuation through a controlling cell in 1 (UK) Armoured Division headquarters. Here, the decision would be made on safety of helicopter access and priorities for evacuation.



The 432 series armoured ambulance: Artist: Gora Pathak 2003

Armoured ambulances

Modern armies are equipped with a range of wheeled and tracked armoured ambulances. The tracked M113 vehicle was the mainstay of the US forces for many years. The venerable tracked 432 series of armoured ambulances has now served British army medical units for 40 years, and each machine is older than most of the soldiers who use it. The recent upgrading of its engine will ensure many more years of service, and the vehicles have proved to be effective in carrying one stretcher case or up to three sitting cases per journey.

Wheeled ambulances

Light forces used wheeled ambulances (battlefield ambulances, or BFAs). The 2003 fleet comprised mainly derivatives of the Land Rover series of vehicles. They can carry two stretcher cases with a medical attendant. They offer the flexibility of speed, range and relative space and comfort for crew and casualties, but at the cost of no significant protection from flying shrapnel or small arms fire.

Prehospital Treatment Capabilities

The Evacuation Troop is responsible for moving injured soldiers from the forward troop to the dressing station. They use 432s and wheeled ambulances according to need. Each Evacuation Troop has up to twenty armoured or wheeled ambulances.

The Dressing Station Troop consists of a Headquarters element and four departments - Reception, two Treatment Teams and a Holding and Transfer Team. The reception section is responsible for the initial triage of casualties and maintains the admission

register. Each Treatment Section has five treatment bays and the capacity for a Field Surgical Team (FST). The Holding and Transfer Section conducts post-operative care, prepares casualties for evacuation or return-to-duty, and maintains the discharge register. The Dressing Station can be sub-divided to provide smaller care facilities. For example, two Light Dressing Stations can be formed when the main unit is split into two components of similar capability.

The Guard Section may be manned by military bandsmen, to provide for the security of the DS and for other general duties. The Psychiatric Troop and the Surgical Troop are formed as self-sufficient sections which are usually deployed with the Dressing Station.

For Operation Telic, a decision was made to upgrade the accident and emergency treatment capability by providing a four-bay A & E department and a six-bay minor treatments department, along with a surgical capability and intensive care nursing support.

As General Louis Lillywhite has emphasised in a personal communication, "the emergence of the A&E Cadre within the DMS – it did not exist untl the late 1990s – was driven by the need to upgrade the casualty reception capabilities of both the Dressing Station and the Field Hospitals, which were previously the remit of junior clinicians and General Duties Medical Officers. This innovation included the first use of aFVII (I think in the Lancet). The debate on the use of forward Field Surgical Teams has been ongoing since their first use (by Australia) in their modern format in the Sinai Campaign in WWI.

A Chemical Decontamination Cell (CDC) may be set up near the Dressing Station if there is a chance of incoming chemical weapons casualties. In practice and in desert conditions, this would mean casualties of mustard gas and other blister agents. The purpose of the CDC is to remove all traces of chemical contaminant which would put the dressing station personnel at risk, and there are rehearsed procedures for the removal of clothing and the use of absorbent powder, bleach and slurry. These procedures are intensive of personnel and resources, particularly in the desert heat.

Collective Protection (COLPRO) is the term used for equipment which provides safe temporary accommodation for personnel in chemical warfare conditions. It is deployed as a form of rubberised lining for standard frame tents which provides protection for personnel when used with strict and disciplined decontamination procedures. Collective protection is demanding of resources such as carbon filters and generators, and slows all activities. Most importantly, it is a mixed blessing on desert deployment, as desert heat can produce unmanageable temperatures inside. Conversely, with good air conditioning systems, it can be used intelligently to provide a controlled cooling environment.

The Headquarters Squadron keeps the unit working. The Quartermaster's (QM's) Department provides the facilities to support and maintain the medical squadrons, including rations, clothing, medical supplies and accommodation. A fully staffed close support regiment needs more than 400 personnel to provide all its capabilities.

Close Medical Support on *Operation Telic*

The medical plan for Operation Telic was unusual in that 1 (UK) Armoured Division was to command three quite different brigade medical structures. The Commando Medical Squadron - part of the Commando Logistics Regiment - provided medical support to 3 Cdo Bde. 7 Armoured Brigade was supported by elements of 1 Close Support Medical Regiment, and 16 Air Assault Brigade was supported by 16 Close Support Medical Regiment.

Forward Role 2 medical and surgical support of Royal Marine Operations

The Royal Marine Medical Squadrons of the Commando Logistic Regiment in 3 Commando Brigade comprise a Headquarters, two Medical Troops and a Support Troop. Each of the medical troops provides a 50-bed Dressing Station. This consists of a reception, major and minor treatments (A&E Dept), an operating theatre with two operating tables, a 50-bed ward area and integral medical stores. They can operate independently or join together to make a 100-bed facility. The dressing stations can be erected and dismantled within 3 hours and can treat 500 battle casualties at a rate of 100 per day each before requiring re-supply. They are versatile and rapidly deployed. They can also be broken down to make 25-bed units when needed.

The Commando Forward Surgical Groups

The Commando Forward Surgical Groups were pre-positioned with 40 and 42 Cdo.

CFSG1 followed the initial attacks of 40 Cdo on the Al Faw Peninsula. CFSG1 deployed from Kuwait to Al Faw and then on to Basra. Its workload included 47 battle trauma cases, comprising 13 British, 28 PoW and 6 civilian casualties. Of the 43 combatants with ballistic injuries, eight underwent surgery at the FSG and the remainder were evacuated. Five of the eight operations were for peripheral limb injuries, and three for chest and abdominal injuries. FSG1 also supported 150 DNBI cases, including 10 children of less than 12 years of age. There were 2 deaths, 30 casualties were evacuated by helicopter, 50 by road, and 108 cases were returned directly to their units.

The Medical Logistic Squadron supported the surgical teams. FSG2 reported 12 trauma cases from combat injuries.

The Royal Marines sustained a remarkably small number of casualties in operations but a larger number in air and land accidents. Casualty transfer was primarily by helicopter to 202 Field Hospital and onward to the UK after stabilisation.

The regimental aid post (RAP) Commando Logistic Regiment

It was a typical beginning for a November exercise, cold, wet and very windy, the ideal platform to launch the newly instigated RAP. Having only been created in November 2002 and there being questions as to whether there was a need for a Regimental Aid Post at CLR, OP TELIC was to prove an ideal testing ground.

As a result of the Norway deployment prior to Xmas, almost half of the initial RAP personnel were injured, in particular Surg Lt Katie Bray RN who sustained a knee injury which took her out of the frame for any impending deployment. At short notice a new Doc was found to step into the frame.

Prior to departure onto operations, it was recognised that CLR had an increased lift capacity and would therefore be more stable on the ground than a fighting unit, and would also be able to provide an enhanced RAP capability. With this knowledge CLR RAP managed to take with it a complete Primary Dental Unit with Surg Lt(D) Gill "The Drill" Murdoch RN and MA(D) Adam "Essence" Walmsley, and a new concept for RAP's, the introduction of a Remedial Instructor.

Upon arrival at Camp Gibraltar it was soon recognised that the infrastructure for giving the Anthrax injection was not as yet available in theatre. With this in mind CLR took upon the role of providing the Anthrax vaccine for Bde troops. During the course of OP TELIC a total of over 600 Personnel from all over 3 Cdo Bde were given the Anthrax vaccine at CLR RAP.

The remedial set up proved to be a huge success and this, combined with a complete dentist unit, the force cashier and a primary care medical facility which remained static for prolonged periods, meant that we were able to treat hundreds of patients during our time at Camp Gibraltar. After a month and a half it was time to move up to TAA Viking, and with the 4 tonner filled to bursting point we headed up the road.

Once again we set up a large RAP providing dental and medical cover for all the units transiting through our location. During the early stages of the war we stopped doing remedial therapy and loaned our Remedial Instructor, Sgt Clark, to the journalists as a general dogs body and also to make wets, as was later reported in the national press. The main complication of this stage had to be treating patients whilst in respirators and also trying to medevac a patient in the middle of the night only to have a scud warning come in as he was being loaded into the ambulance. The result, Surg Lt Sandy "I'm not a Rhino" Wood RN being pushed down a generator trench whilst still holding the patient level and comfortably unaware of the chaos surrounding him.

As hostilities progressed the RAP found itself moving into Southern Iraq to the Iraqi Naval Base Al Zubayr. Having quickly established itself within three hours of arrival ready to receive patients, it was a short 24 hours before the RAP received its most serious casualties from the contact on the waterway north of the port. Fortunately this along with some civilians with burns were the only serious casualties treated at AZP by CLR. However this did not mean life was quiet.

After much negotiating CLR managed to acquire a physiotherapist, Capt Phyllida 'I'm not just a personal masseur' Simmons RAMC, and this, combined with the fact that 40 and 42 Cdo were to be rehabbed through our location meant that the RAP again became a focal point for medical, dental, financial and rehabilitation whilst at AZP.

On Easter Day the RAP area also became the AZP chapel, which provided an ideal quiet corner for all the Bde at AZP to remember all those who were lost during the operation.

The whole experience proved to be a huge success for CLR RAP. During the operation over 2000 patients at the medical centre (of which only 500 were from CLR) were treated. In the region of 600 dental patients were seen and about 200 patients were seen by the RI or Physio.

Source: royalnavy.mod.uk/server/show/nav.2634

Role 2 Medical support to 7th Armoured Brigade

1 Close Support Medical Regiment

The advance party from 1 CS Med Regt departed for the Gulf on Valentines' Day 2003. The last troops from 1 CS Med Regt left theatre on 17th July. The mission of 1CSMR was to provide Role 2 support to 7th Armoured Brigade. It was augmented with surgical teams, and was also to provide care of PoWs and humanitarian assistance to the civilian population.

The execution of the plan involved attaching a close support medical troop to each of the battle groups, with a Battlegroup Ambulance Officer to control the evacuation of casualties. The medical sections and their ambulances were grouped together as a Medical Squadron Group. Two Dressing Stations (1A and 1B) were deployed in support of 7th Armoured Brigade. The most important brigade task was to conduct a relief in place with the forward American medical units, allowing them to continue towards Baghdad. Dressing Station 1B moved forward first, taking over the care of five patients from the Americans. The next day Dressing Station 1A crossed the border with 7th Armoured Brigade, but it was to remain on wheels for several days as a mobile reserve.

Dressing Station 1A (A (29) Medical Squadron)

This unit was formed from A(29) Medical Squadron, Dressing Station 1A deploying with COLPRO for operations in a chemical weapons environment. They joined the advance on the night of 22 March 2003. The Main Brigade Support Group moved over 50km in 12 hours from the forward staging area in Kuwait to the Iraqi border. It crossed into Iraq on 23 March, and on 27 March relieved Dressing Station 1B. On 30 March, DS1A was again placed in reserve for the entry into Basra, and ready to move to an upwind location should Iraqi forces use chemical weapons. On 31 March it linked up with the remainder of 1CS Med Regt at Shaibah Airfield, before moving to Basra International Airport on 6 April to support the northern sector during the final push into Basra itself. It then moved to provide a primary care centre for HQ 7 Armd Bde in Saddam's former palace by the Euphrates River.

Dressing Station 1A handed over to a Medical Section from the reformed C (31) Medical Squadron on 2 May, but remained in the Basra Palace before moving north to Al Amarah



to relieve the AASG from 16 CS Med Regt on 29 May. Medical personnel turned their hands to other tasks, from visiting Iraqi colleagues in rundown hospitals to moving millions of pounds worth of Iraqi currency into safe storage. Personnel from 612 and 4212 Sqns RAF (Aux) joined Dressing Station 1A on 30 May, after spending the earlier part of the conflict in Cyprus.

Clinical highlights of their deployment included the initial treatment of young children with burns, and a Norovirus gastroenteritis outbreak among British troops which produced 40 casualties in 24 hours

The clinical workload included 16 paediatric (child) cases, 16 psychiatric cases, 80 soldiers requiring physiotherapy, and 260 casualties with viral enteritis. The unit also recorded 340 other DNBI cases and 108 dental cases. 30 battle casualties were treated, giving a total of 835 cases.

Before closing down on 2 May, DS1A had treated 22 P1, 30 P2 and 1,730 P3 casualties among UK and US forces, and 23 P1, 35 P2 and 41 P3 casualties among Iraqi forces and civilians. P1 casualties are those assessed as needing immediate treatment, P2 casualties are those where treatment is assessed as urgent but can be delayed pending early evacuation, and P3 casualties are minor, walking wounded, disease and non-battle injuries. A significant proportion of the P3 caseload was made up of cases of gastro-enteritis, the result of the extremely unhygienic conditions in which British troops found themselves. There were three deaths of UK soldiers and four deaths of Iraqi soldiers.

Dressing Station 1A remained in Al Amarah until relieved by 3 CS Med Regt on 14 July. During this time it continued to receive a trickle of casualties. On one exceptional day, a number of British troops sustained serious injuries as a result of a hostile contact in a

village south of Al Amarah, during which the helicopter-borne Rapid Response Team itself sustained a number of casualties as the Chinook came under fire whilst trying to extract earlier casualties.



Personnel of DS1A 1CSMR setting up the dressing station



Members of 1CSMR at Basrah International Airport, Endex April 2003

Dressing Station 1B (formed from 24 Medical Squadron)

Dressing Station 1 Bravo (DS1B) followed a similar pattern of deployment to 1A, with manoeuvre in the 1st Armoured Division area of operations south east of Basra, moving through the brigade support group area at RAF Shaibah and finishing combat operations south of Basra International Airport. As with DS1A, this DS had an attached surgical team comprising two surgeons, anaesthetists and scrub nurses, and one ITU trained nurse and one laboratory technician.

Dressing Station 1B was formed from 24 Medical Squadron from 3 Close Support Medical Regiment, deploying as a single formed sub-unit. Tasked with conducting the relief in place with forward American medical units, it also moved forward with the Forward Brigade Support Group, crossing the border on the 22 March and set up in a potato field, where it treated most of the casualties from the first few days of the battle. It moved to Shaibah Airfield on 31 March, in support of 34 Field Hospital. For the final push into Basra, it planned on a move to a location close to Bridge 4 to support the southern axis of the advance. In the event, the collapse of Iraqi resistance was more rapid than expected and it conducted a hasty move to Basra on 6 April. It closed its doors on 14 April and prepared to return to the UK by 3 May.

During the conflict medical personnel from Dressing Station 1B treated 220 primary care cases, 20 minor injuries, 36 dental cases, 15 trauma cases requiring non-surgical resuscitation, and three major cases requiring primary surgery.

B (30) Medical Squadron Group

For *Operation Telic* B (30) Medical Squadron took under command elements of E (28) Evacuation Squadron. Each of the four principal battle groups in 7th Armoured Brigade received a Troop Commander as Battlegroup Ambulance Officer, to control the movement of casualties out of the battle group area. These Troop Commanders stayed with their respective battle groups for the duration of the contact battle, while Medical Sections, armoured and wheeled ambulances were added as needed. For example, 1 BW received three additional medical sections and numerous ambulances because their mission planning predicted a large number of Iraqi casualties. In the event these did not occur and medical assets were redeployed. This method of control of evacuation from within the battle group area was to prove very effective.

16 Close Support Medical Regiment

16 Air Assault Brigade consisted of the 1st and 3rd Parachute Regiment (PARA) BGs, 1 Royal Irish Regiment BG, 7 Royal Horse Artillery Regiment, D Squadron from the Household Cavalry Regiment (HCR), 13 Air Assault Logistic Regiment and 7 Battalion Royal Electrical and Mechanical Engineers (REME).

16 Close Support Medical Regiment (16 CS Med Regt) was responsible for the provision of front-line medical support to the highly mobile 16 Air Assault Brigade and also to UK special forces (SF). 16 Air Assault Brigade is a light infantry brigade that was configured

for airmobile and vehicle mounted operations on Operation Telic. The brigade was thus well suited to conduct deep penetration operations into southern Iraq to secure the oilfields and major routes to the west and north of Basra. The medical support elements of 16 CSMR included 144 Parachute Field Ambulance Squadron (Volunteers) and 23 Parachute Field Ambulance - descended through amalgamation from parachute field ambulance units with illustrious histories during the Second World War and beyond, including battle honours at Arnhem.

"I went up the Tigris with one hundred Devon territorials, young, clean, delightful fellows, full of the power of happiness and of making women and children glad. By them one saw vividly how great it was to be their kin, and English. All our subject provinces to me were not worth one dead Englishman"

(T E Lawrence - Seven Pillars of Wisdom).



Capt Tom Booth at an unusual landing site during 16 CSMR operations

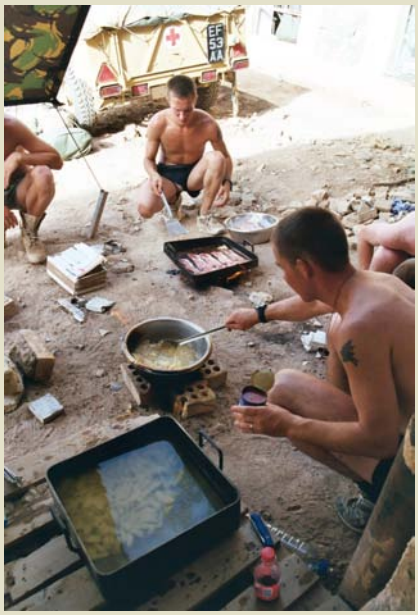
Notes on the 16CSMR Deployment from Captain Tom Booth

"On 17th Feb 2003, 16 Close Support Medical Regiment (16 CSMR) arrived in Concentration Area Eagle in Kuwait, to prepare to provide role 2+ medical support to 16 Air Assault Brigade.

"We practised Advanced Trauma Life Support (ATLS) and Nuclear, Biological and Chemical Advanced Life Support (NBC ALS) drills. A Battle Group (BG) parachute jump in 2 Romeo NBC Dress State and combat body armour (CBA) was also undertaken. The entire brigade also practised lengthy night road moves. The drivers and vehicle commanders indulged in marathon conversation to stay awake.

My entire joke and anecdote reserves were soon used up.

"The medical sections consisted of General Duties Medical Officers (GDMOs), including myself, and Combat Medical Technicians (CMTs), all 'champing at the bit' for some action. The unit also included the Air Assault Surgical Group, comprising a resuscitation department, a Field Surgical Team (FST) and a rudimentary Intensive Therapy Unit/High Dependency Unit (ITU/HDU). There was a Headquarter (HQ) element; radiography; a psychiatry team (forever disappointed by the lack of business); a primary care team; a dental team; a physiotherapist and laboratory support. The resuscitation facility was manned by an Accident and Emergency (A + E) consultant and nurse, a GDMO and CMTs. The FST consisted of two surgical bays manned by a general surgeon, an orthopaedic surgeon, two anaesthetists and eight Operating Department Practitioners (ODPs). The ITU/HDU was manned by an ITU nurse and CMTs. We had an X-ray machine and ultrasound to carry out Focused Assessment with Sonar for Trauma (FAST), a novel way of looking for bleeds in the abdomen and chest. Unlike NHS hospitals, the laboratory provided instant, on site blood tests and a hundred bags of blood for transfusion. The AASGs were transported in four tonne cargo trucks, the Pinzgauer light trucks, and a 14-tonne Leyland DROPS (Demountable Rack Offload Pickup System) which carried a COLPRO NBC (Collective Protection) facility with tentage and air filters. The AASG could thus be erected in forty-five minutes, including manhandling the X-ray machine from lorry to the tent.



Central catering: Members of 16CSMR on deployment in Iraq, 2003 (Photo Tom Booth)

Warfighting

"At the start of the war, 16 CSMR fanned out under tactical control of the various subunits in the brigade. Briefings on 21 March confirmed the 'Dallas' breach co-ordinates by which we were to enter Iraq. There was a palpable sense of nervous energy amongst all of us: the training was about to be turned into reality.

"As the convoys moved towards Tactical Assembly Area (TAA) 'Gryphon' at the Kuwait-Iraq border, we all heard a loud thud from a Scud. NBC warning messages came to the convoys from different locations at different time intervals. Over the next couple of hours we frantically masked and unmasked on repeatedly hearing "Gas! Gas! Gas!" followed by "Unmask!". Travelling to the border in the restrictive 4 Romeo was hot and disorientating. In TAA 'Gryphon' we 'scrimmed up and dug in' as United States Marine Corps (USMC) Cobra helicopters flew forays into the Ramalyah oilfields. From a distance, plumes of thick oil well smoke spiralled skyward reminded me of the television clips from the first Gulf war.

"At 0315 Zulu time on 22 March, 19 Squadron AASG were briefed that the USMC 5th Regimental Combat Team had crossed the breaches on the Kuwait-Iraq border and had taken 600 Enemy Prisoners of War (EPW). We were told several Iraqi batteries were unlocated and a radio-controlled Improvised Explosive Device (IED) had been found in Gas Oil Separation Plant (GOSP) 'Oxford'. Furthermore there were numerous unexploded munitions and minefields throughout the Area of Operations (AO).

"Within several hours of this briefing we had driven through such a minefield, passed dead Iraqi soldiers, felt the intense heat of the searing oil wells, and set up the AASG in 'Chester' to the north of the Ramalyah oil fields, thirty miles west of Basra. Six injured EPWs arrived from the immediate vicinity and handed in their AK47s. One was septic following a high velocity bullet wound to the thigh whilst one complained of terrible foot injuries. It would seem that he was trying to avoid interment in a PoW camp: he was merely an officer with blisters.

"The two AASGs leap-frogged each other northwards. On 28 March, 19 Squadron were set up whilst 23 Squadron were packed nearby anticipating the next move. At 1300 Zulu a major incident was declared and personnel from both squadrons assembled in the functioning AASG. Several Iraqi Forward Observation Officers (FOO) from the Fedayeen had been 'in contact' with the Household Cavalry Regiment (HCR) as their Scimitars had probed the Lines Of Exploitation (LOE) northwards near the Shatt al-Arab waterway. The HCR themselves had strayed into a coalition air force 'killing zone' twenty five miles from Basra and were shot at by A10 Warthogs. As a result both troopers and Fedayeen were killed and injured. A GDMO attached to the HCR immediately started resuscitation and arranged CASEVAC to 'scoop and run' the casualties to the AASG. On arrival the A + E consultant triaged the six casualties and the anaesthetists, surgeons, GDMOs, nurses and medics efficiently followed ATLS guidelines. There was a flurry of activity as fluids, analgesics, antibiotics and dressings were administered; chest drains inserted; limb fractures reduced; and the management documented. Following forward surgery the casualties were swiftly evacuated. At 1900 Zulu the resuscitation department sprung into life again. A WIMIK (Weapons Mount Installation Kit - i.e. a stripped-down Land Rover with roll cages and weapon mounts) had overturned whilst driving cross-country using night vision goggles. One casualty had his life saved by his Kevlar helmet which supported the weight of the vehicle as he lay underneath it for nearly an hour. He was packaged by a 16 CSMR section and brought to the AASG. He had sustained multiple rib fractures around the shoulder joint and needed an urgent CT scan of the neck. As helicopters were grounded he spent a long night strapped immobile to the stretcher awaiting CASEVAC the following morning.

"16 CSMR would see more casualties from the reconnaissance units during the conflict. A Scimitar overturned near the Hammar canal and 23 AASG were involved in attempts to revive the drowned crew. However, most casualties in the warfighting 'phases' (March and April) were Iraqi civilians. There were thirty-

seven of these cases in 19 Sqn AASG alone. Many used 16 CSMR as a casualty service to replace the paralysed local hospitals. Five of the civilians who presented themselves to 19 Sqn AASG had stepped on mines or handled munitions resulting in traumatic amputations, and six had gun shot wounds. Six other cases were petrol-related accidents, and some in children. One child developed a chemical lung injury from petrol inhalation; he was talking on admission but became unconscious within half an hour and needed urgent CASEVAC. It was difficult to convey this information to the distraught family using sign language and sketches of helicopters, but it was harder still to find out where the child lived and how we should contact the family thereafter. Despite prompt, intense efforts from the anaesthetist who travelled with the child to a field hospital, we were informed that the child had later died. We were all deeply moved by this incident.

"By early May, the brigade AO encompassed the Maysan province, north of Basra, incorporating a long stretch of the Euphrates, Tigris and the Iran-Iraq border. We were welcomed as liberators; children lined the streets waving and hoping for ration pack sweets if they were lucky - or 'biscuits brown' if they weren't.

"Each AASG set up a 'bedding down' facility in former army barracks in the towns of Al-Amarah and on the airfield at Qualat Salih. The walls were covered in Saddam catch phrases such as the ubiquitous "Yes! Yes! Yes! Saddam Hussein! God Bless Him!" The facilities were run by GPs, nurses and sections to cater for an epidemic of Norwalk virus gastroenteritis sweeping through 1st UK Division. There were also sporadic cases of shigella dysentery. The environmental health team worked hard to advise subunits of the hygiene standards needed to contain the epidemic. A viral chest infection also affected the division at the beginning of March. This was severe and some members of the regiment even needed to be evacuated to the UK.

"Soldiers also reported to our primary care team with eye complaints such as corneal abrasions caused by sand, sun-related skin conditions and scorpion bites. One patient brought his spider to the AASG pinned to a piece of cardboard. Another wore his in his boot for fifteen minutes before the scorpion stung him. With the help of a paratrooper, who kept scorpions at home and had brought an identification book to war, we discovered that the boot scorpion could kill. However, with minimal treatment his leg numbness and pain dissipated in hours.

"Our physiotherapists were also busy, whilst the dentists looked into 1700 mouths treating wisdom tooth inflammation, dental fractures and dental abscesses.

"The NCOs in particular agreed with this sentiment, but unfortunately there were further Road Traffic Accidents (RTAs) and munitions accidents in the brigade, with 3 PARA suffering a WIMIK RTA. It flipped over whilst making a 180o turn in a sandstorm. At the time all aircraft were grounded. A paratrooper was admitted to 23 Sqn AASG in Al-Amarah with a major pelvic injury. He was resuscitated with more than his own volume of blood, and the transfusion technician used donated blood from nine AASG volunteers.

"A terrible incident also occurred at Qualat Salih airfield. There was an explosion in the living area of 7 Bn REME and one soldier suffered extensive penetrating chest injuries. A GDMO swiftly reached the scene and attempted resuscitation, unsuccessfully; he was the only casualty to die in the AASG and the atmosphere was leaden. Royal Military Police investigations, conducted after the incident, attributed the explosion to children playing in an abandoned Iraqi tank and firing a tank shell.

"Many 16 CS Med Regt members had not worked clinically as a team before. Nonetheless, the training paid off and I was impressed by the cool heads of the youngsters. In moments of reflection thereafter, most expressed their view that the best aspect of *Operation Telic* was putting their training into practice as CMTs; this made a change from "Constantly Moving Tents"! Others felt proud that they had helped people, and others were awed by the life experience; they said that they missed their families and partners. The detailed Permanent Joint Headquarter (PJHQ) casualty estimates had proved to be accurate. Our only deficiency in planning had been regarding paediatric equipment; paediatric trauma stretched our creativity to the limit.

"BATLS and BARTS training had proved essential, as had practice in erecting and dismantling the AASG complexes. It is satisfying to know that we made a difference to many lives."

Forward Surgical Support to 16 Air Assault Brigade

(from information provided by Lt Col Paul Parker FRCS RAMC)

Lightly equipped and mobile surgical teams are designed to provide a high standard of medical and surgical care to the personnel of the brigade in austere, arduous and remote environments. On Operation Telic, two surgical teams known as Air Assault Surgical Groups (AASGs) deployed to Kuwait with 16 CS Med Regt in February 2003. During the conflict phase, the two surgical groups leapfrogged each other northwards in support of the rapid advance of 16 Air Assault Brigade. The final position was at Al-Amarah, some 180km north of Basra.

Each AASG comprised a four-table resuscitation facility, a two-table Field Surgical Team (FST), and a twin-bedded Intensive Care facility and two High Dependency beds. An Accident and Emergency Consultant and nurse, an experienced radiographer and laboratory technician with two further registered general nurses (RGNs) and Combat Medical Technicians provided resuscitation support. Each team had an orthopaedic and a general surgeon, two anaesthetists and eight operating department practitioners, and was independently mobile on thirteen light trucks. Further equipment consisted of a Polymobil 111 x-ray unit, a Sonosite 180 ultrasound scanner and an ISTAT gas, haematocrit and electrolyte analyser. 100 units of mixed blood were carried by each AASG. The units would set up in tents or in and around buildings.

The mission of the 16 CSMR surgical teams was to provide role-enhanced surgical and



Members of 16 CSMR on deployment in Iraq (Picture Lt Col Paul Parker)

medical support to the advanced dressing stations (Role 2) of 16 Air Assault Brigade during Operation Telic and to prevent death, disease and injury to the best attainable standards, including the shortest possible clinical timelines.

When the war began on 20 March 2003, 23 Squadron was set up in the Brigade tactical assembly area just south of the Kuwait/Iraq border. 19 Squadron was mobile on wheels and ready to move at short notice. 19 Squadron moved with the 3 Para Battle Group across their start line into Iraq on 22 March. The medical squadron set up 40 km north of the border in the southern Rumaylah oilfields. Once 19 Squadron was open for casualties, 23 Squadron followed 1 Para into the oilfields. During the course of the war, the two squadrons leapfrogged each other northwards in support of 16 Air Assault Brigade as it crossed the Hamar canal and the Euphrates river. By 14 April they reached their final locations in Maysan province of south-central Iraq on the outskirts of the town of Al-Amarah on the banks of the Tigris River.

Clinical casework for the 16 CS Med Regt units

The dressing stations gave primary health care support to the brigade personnel. Fortunately, fighting was limited, but fifty-one surgical procedures were performed within Iraq on thirty-one patients. Twenty-one of these patients were Iraqi POWs or civilians. Operations included seventeen wound debridements, five laparotomies, five amputations, four insertions of Denham pins with Thomas splintage for femoral fracture, three external fixations of tibial and pelvic fractures, and one arterial repair between 20 March and 25 April. Other cases included eleven manipulations of fractures under anaesthetic with application of plaster casts, and four operations for finger injuries. One case necessitated amputation on a critically injured six-year-old Iraqi child. This highlights the need for preparedness for child casualties at all levels in the chain of



16CSMR Surgical team deployed, Op Telic, March 2003: Photo: Lt Col Paul Parker



16 CSMR Surgical team mobile in Southern Iraq, March 2003: Photo: Lt Col Paul Parker



16CSMR set up at Al-Amarah, Southern Iraq, early April 2003: Photo: Lt Col Paul Parker

care in modern warfare. Two further below-knee amputations were performed for anti-personnel mine injuries. Of note was the first recorded British military use of the new Activated Factor VII clotting agent to reduce major bleeding in severely injured casualties.

Lessons learned by the close support medical regiments

The experience of the close support medical regiments highlighted a number of areas for future review. The forward surgical teams were relatively underused, and debate continues as to the most appropriate deployment of such resources. The need for a broad range of medical stores - including paediatric equipment consistent with a balance between self- sufficiency and mobility - is acknowledged in the light of the range of clinical challenges faced. The operation also highlighted the need for experienced medical and paramedical staff, including combat medical technicians, battlegroup ambulance officers and senior doctors to support the junior Regimental Medical Officers (RMOs). The experience also highlighted the need for better medical force protection, including personal body armour, as the rules of the Geneva Convention were often ignored by the insurgents in mounting attacks on ambulances. This necessitated protection of ambulances with Challenger tanks and Warrior APCs from time to time.

Footnote: Women on the Front Line

History is full of examples of female combatants, and some of the most courageous stories of women in WWII involve female agents of the Special Operations Excutive (SOE).

The introduction of women into combat units during the decade of Op Telic within the UK Armed Forces has been accompanied by considerable debate and public interest, and was initially a source of great concern. Women have now distinguished themselves in many operational roles, and many of the taboos have been broken, even to the introduction of women into fast jet roles.

The following articles from The Times in 2008 illustrate clearly how times have changed with Op Telic.

Chris Smyth wrote in The Times Online on June 18th, 2008:

Women on the front line: The first British servicewoman killed in action in Afghanistan has highlighted the dangers and contribution that female soldiers make in theatre

"Although women are still technically barred from the front line, the distinction means little in the all-consuming combat environment of Afghanistan. The Intelligence Corps, of which the dead female soldier was a member, do one of the most delicate and dangerous jobs in Afghanistan, collecting precious information, making local contacts and trying to win over the Afghan population to British

counter-insurgency efforts.

While commentators are already speculating about the public reaction to the death of a female soldier, and whether it could mark a turning point in attitudes to the conflict in Afghanistan, in the Army the death is likely to be seen like any other. “A man or a woman dying is of concern to everyone,” Mr Beaver says, “but you get on with the job and grieve later”.

Jo Salter, the RAF’s first female fighter pilot, agrees. “It’s always so sad when there’s any death at all. Gender isn’t the issue.” She says attitudes towards women in the forces have changed a lot since she began her career in the early 1990s. “The culture has evolved over time,” she says, with new recruits accepting female colleagues as a given. “When it first happened there was more discussion, but as society shifts everyone who joins understands that’s now how it is."

There are now 17,820 women soldiers in the Armed Forces, about 9 per cent of the total. Most of these are in the Army, but the RAF has a higher proportion of female soldiers – and almost a fifth of its officers are women. It is thought that about 1,600 women are serving in Iraq and Afghanistan.

Although they are still barred from the infantry and in other roles where their duty would be “deliberately to close with and kill the enemy”, the distinction is being quickly eroded.

Five British servicewomen have so far died in Iraq. When the first of them, Flight Lieutenant Sarah-Jayne Mulvihill, was killed in May 2006, the debate about female soldiers was reignited. But when Joanna Yorke Dyer and Private Eleanor Dlugosz were killed by a roadside bomb in April last year, public attention focused instead on the fact that Second Lieutenant Dyer had been in the same company as Prince William at Sandhurst. She too was with the Intelligence Corps, and was killed while on night time operations against Shia militia in Basra – a reminder of the dangers faced even by those not in so-called “front line” units.

Iraq and Afghanistan have also proved, if proof were needed, the compelling bravery of female soldiers. In March Flight Lieutenant Michelle Goodman, a helicopter pilot, became the first woman to be awarded the Distinguished Flying Cross, for rescuing a wounded comrade under heavy fire in one of the most dangerous parts of Basra last year.

And in 2006 Private Michelle Norris, a 19-year-old army medic, became the first woman to be awarded the Military Cross, Britain’s top medal for gallantry, for braving sniper fire to give first aid to her seriously wounded commander during a firefight in al-Amarah, southern Iraq.

The medals, like the deaths, are another sign that women are becoming just as much a part of the horror and glory of war as men have always been.”

Catherine Philp wrote in The Times on June 19th, 2008:

360-degree war puts women in the line of fire

One dusty evening last summer Lieutenant Lucy Butler was readying herself for the night's logistic run through Basra. Three soldiers died on the previous week's foray, but this was not combat – technically speaking.

"It's all semantics really," her commanding officer said. "Lucy will be mortared, blown up and shot at tonight. That's enough combat for most people."

From her watch tower, Gunner Georgina Bell scanned the road for suspicious vehicles approaching the base. "If I genuinely thought it was a suicide bomber, a warning shot's not going to do any good," Georgina explained. "You try to take out the individual first." In other words, kill him before he kills you.

Those who believe women do not serve on the front line are shocked to hear of situations like these. But they happen every day in the new order of conflict that is Afghanistan and Iraq.

Officially, British servicewomen may not serve in so-called close combat, where their duty is "deliberately to close with and kill the enemy".

But it is a phrase more redolent of Flanders Fields than the poppy fields of Helmand or the mean streets of Basra. In times gone by, rules like these kept women far behind the men. Those who killed did so at a distance, from behind the controls of artillery guns or in the cockpits of planes.

In the heat of the Iraq insurgency, however, all that began to change. There, the linear conflicts of territorial gain were replaced by "war among the people", where battles erupt and melt away along civilian streets. The old front line no longer exists, having been replaced by a "360 degree war" that has put women in the line of fire as never before.

Thus Iraq claimed the lives of five British servicewomen, the first of the post September 11 conflicts. A significant proportion of the women soldiers in Afghanistan and Iraq are irritated by their exclusion from the infantry, the "fighting" part of the Army that overwhelmingly feeds the military's top brass. A host of reasons are cited from physical inadequacy to the unknown impact on "unit cohesiveness". But women, while not accompanying infantry, still work in mixed-gender units under the most vicious of fire, with no proven detriment.

When Private Michelle Norris's male sergeant was seriously wounded in a firefight in Iraq, she crawled under sniper and machinegun fire to save his life. "I know some people doubt whether we can work properly on the front line," the 19-year-old medic said as she received the Military Cross, the first woman to win the top military honour for gallantry. "I hope I've proved we can."

In reality, the rules are already stretched to breaking point. Gunner Bell could not join the infantry but her artillery unit was deployed in an infantry role for its first

tour in Iraq, because of the shortage of infantry troops.

"Anyone who says we can't fight on the front line should come out here," she said, "and they'll see we already do."

With one crucial difference. Gunner Bell can kill in self-defence. What she cannot do is go out with the express intention of taking a life. To some servicewomen, that is the real nub of the matter, and one that not just the Army resists.

"I think that once you are done with all the other arguments, that's the real problem," one female officer said. "That very socially destabilising idea of women with a gun, going out, quite deliberately, to kill. So I have the right to die for my country, just not the right to die fighting for it."

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Blood, Heat + Dust: Second Edition

Operation Telic and the British Medical Deployment to the Gulf 2003 -2009

Appendix to Chapter 12:

Photoessay:
A General Duties Medical Officer with 1 Close Support Medical Regiment

Operation Telic March – July 2003

Captain Taff Edwards RAMC



battle landscape, Southern Iraq, 2003: Artist Gora Pathak

Captain Taff Edwards RAMC

Six months before Op Telic, I was a civilian doctor working as a Senior House Officer in Accident and Emergency Medicine at the Whittington Hospital, London. I had qualified from Guy's and St. Thomas's Medical School two years earlier. I joined the Army, and started the five months of basic training. We had courses on all sorts of subjects – Tropical Medicine, Military Psychiatry, Sexual and Reproductive Health, Military Medicine and Surgery, Battle Field Advanced Trauma Life Support (BATLS), Nuclear and Biological Warfare Medicine, and military knowledge including weapon handling, radio voice procedure, planning and giving orders, platoon and company attacks, and life in the field.

I was posted in December 2002 to A Squadron, 1 Close Support Medical Regiment, in Munster in Germany. In mid January. I was in London sitting an exam for the Diploma of Catastrophe Medicine. We had all finished our vivas and were in a city pub. There was much speculation about which units were going to go out to the Gulf. But I hadn't really thought about it much. Then my mobile phone went. It was the adjutant of my new unit. The purpose of the call was clear. I was going to war.

I arrived in Germany two weeks later. I had been assigned as a "Resuscitation Medical Officer" to A Squadron, who were operating the Dressing Stations for 7th Arnoured Brigade. I met the squadron for the first time at the pre-tour fancy dress party. The following night was our last night in Germany. I rang home.

The following morning, we headed up the autobahn to the airport. Check in, waiting lounge, xray machines. One soldier was pulled out for having his issue water bottle filled with vodka.

We boarded an unmarked 747, complete with air hostesses. At two in the morning we landed in Kuwait. The first thing I noticed was the cold. Something I didn't expect. For the next few hours there was hanging around, administration, a coach journey, more waiting, another coach journey and finally a four ton truck picked us up. At 1000hrs we arrived at the 1 CSMR camp, Hammersmith Centurion 8, 30km from the Iraqi border.

We were there for the next three weeks. Checking kit, weapons, topping up our tans and listening to the BBC World Service, which was often the quickest way of getting information about what was happening. There was no running water, no electricity and no toilet blocks. We dug deep trench latrines. After a few days the post started to arrive. In the second week the satellite phones were issued out, at the rate of three for 100 soldiers. The phone cards entitled each of us to 20 minutes a week on the SatPhone.

The signal came for the final preparations. All personal kit was stowed away in containers and locked to be collected later. The incoming missile alerts then started. On the first day of the war, everyone was on edge. The air was heavy with helicopter, fighter jets and high altitude bombers.

On the night of Thursday, 20th March, the regiment dispersed in squadrons. We drove off into the night. An all round defence was formed, each vehicle team made their own shell scrapes, and we waited for the move north into Iraq. The infantry and tank regiments had moved already. We would follow immediately behind.



Camp Hammersmith: The 1CSMR holding camp in Kuwait



Vehicle holding area Barnsley, Kuwait, 21st March 2003

At midday on Friday the 21st March we started the move north across the desert. We were the last to go. To our left and right we could see other convoys, both British and American, all converging on the holding area code named Barnsley. There were rows upon rows of vehicles to be herded by the Military Police towards the Kuwaiti motorway leading to Iraq.



Capt. "Whizzer" Oakes,
Squadron 2ic, aka Biggles

Saturday 22nd March. The advance through the southern areas of Iraq had been slowed. That night we didn't sleep much. The noises were all new to me. The "drill" of distant automatic fire, the "rumble" of bombing, the "clatter" of helicopters. We were now just 10km away from the border. We were to move that evening. We had been briefed during the day on operations that were still going on around the border areas and along the Main Supply Route (MSR). We were to expect plenty of gunfire as the area had not been fully cleared since the attack had begun 3 days earlier. We were to keep moving.

"The crossing into Iraq couldn't have been simpler. On the Kuwaiti side, we passed a service station with rows of Pepsi-Cola machines. The border gate was open. I was in Iraq. The convoy trundled on!" The tension was high. It was pitch black. All our concentration was spent on following the small taillight of the land rover in front of us.

We were only moving 30km into Iraq but progress was painfully slow. It was constant stop/start. We could clearly see small hamlets we passed through. The only sign of life were the dogs roaming wild on the road. Ahead, on the night horizon, evidence of the ongoing battle was evident – illumination rounds, tracer rounds and low flying helicopters lit the sky, whilst Challenger 2 tanks raced paced us on the way to the front.

After 11 hours of travel, we finally reached our destination – a field! Once again we were to wait for our next task, in support of the Forward Battle Groups and dressing station DS1Alpha. Initially we would be leap frogging with DS1Bravo. They had moved first and were therefore up and running, so we stayed packed up ready to move elsewhere. With Field Hospital so close to the Forward Edge of the Battle Area (FEBA) we almost felt surplus to requirements. So it was a good week before the order came to open up.



Desolate landscape on the road to Basrah, late March 2003

The doctors worked 12-hour shifts. I drew the short straw and was first up. I was itching to do some work. The tents were put up just off the MSR. After the camouflage nets were thrown on, the only indicator of our role the Red Cross flag flying at the entrance to the reception tent.

I turned up for the first shift armed with my stethoscope, combat body armour (CBA), helmet, pistol, NBC suit and respirator. I was apprehensive. It had been 7 months since I had last seen a patient.



Desolate landscape on the road to Basrah, late March 2003

Monday 31st March 2003. Immediately I was busy. The Padre of the Black Watch had cracked his head on a tank and was suffering from concussion; two infantry soldiers with grenade fragmentation puncture wounds to their arms and legs, their CBA had protected their torso; an Iraqi soldier with a Gun Shot Wound (GSW) to his elbow; a



Incoming casualties

British soldier with an acute stress reaction, and a Prisoner of War who was having breathing difficulties. My shift was up. It was with an enormous sense of achievement that I went to my pit that night. I slept well. My own war had started.

1st – 5th April 2003. The next week was spent moving the DS slowly further north towards Basrah. The DS was collapsed and we didn't set up again until the move into the city. The British forces encircled the city, ready for the final sweep into Basra. From the south, the brigade would rush the city. The main obstacles were the two pairs of bridges, which could create a bottleneck and an easy target. Our next task would be to set up at Basrah Airport, near bridges 3 and 4. DS1B would be at bridges 1 and 2. As we moved into the airport, the Royal Regiment of Fusiliers moved out.

The airport was like a ghost town. The departures board read "Air France, Madrid, AF2201", the check in desks were lit up and the baggage scales worked. In the waiting area an ornate fountain showered water into a marble pond. The VIP lounge was staggering. Lavish marble floors, air-conditioning, intricate Arab mosaics and carpentry adorned the bar.

The final assault on Basrah was imminent and so there was plenty of work to do. Three days ahead of schedule the final push went in. It was an opportunistic move by the brigade but it paid off.

"As a consequence we were put on stand by, ready to receive casualties. My diary recorded on the 7th April:

1300hrs - no casualties,

1400hrs - no casualties,

1500hrs - casualties expected,

1515hrs - casualty arrive, a case of diarrhoea and vomiting.

By 1700hrs nothing had come in. Basrah had been taken. That was it. I went to bed."



The Medical section crossing Bridge 4 into Basrah on Sunday 13th April.
This was a dangerous RPG ambush spot.

We would expect to see fewer battle casualties, and our main role would be to meet the Primary Care requirements of the Brigade HQ elements. It soon became clear that we were over staffed for our new role. This meant long days with not much business, and even longer days off duty. Our new home was the Presidential Palace in Basra.

Homesickness was soon to settle in. Tempers were frayed as the workload diminished. Anger erupted at the prospect of our sixth week on the same ration meals, Lancashire Hotpot. During this long month, my relationship with my girlfriend was tested. My letters and phone calls home were irritable.



Sunday service lead by Padre Stephen Hancock.



One of numerous volleyball games.



View of Basra Palace and the Shat-Al-Arab River from my bunk.

With the war-fighting phase at an end, the mix of the teeth arm elements changed to match the new tasks. The Armoured Regiments down sized, while the infantry units were allocated large Areas of Responsibility (AOR's). This also meant re-shaping the medical assets. After a good few weeks of awaiting my own fate, my new assignment came through. It was good news. I would get my own command on attachment to the Duke of Wellington Regiment, which was tasked with stabilizing Az-Zubayr town (AZ), its Port, and protecting the oil pipelines. The Az-Zabayr region was also home to numerous other close support and close service support units. My task was to provide additional medical support to the Dukes' Regiment Aid Post, primary care to CSS units in the area, and initiate case-vac procedures of patients back to the field hospital. My

section consisted of myself (the MO), a Nursing officer, a Medical Sergeant, a radio operator and 5 CMT's. This was my first role as an independent leader and clinician since I joined the army. I was still only two months out of basic training. The next few weeks would be a steep learning curve for me.



The personnel of 3 Section, A Troop, C squadron, 1 CSMR at the former Az zubayr prison, May 2003

We rolled out of the palace. Previously, all my road moves had been in packets of at least 10 vehicles. Now, it was just three vehicles. We were an entirely self-sufficient unit heading out to an area, which we did not know. As I sat in the passenger seat in the lead landrover, I felt vulnerable. AZ was a market town some 20kn south of Basrah. We entered the town centre on market day. The roads were packed with shoppers, farmers robed in white dish-dashes, screaming children, honking goats. The gutters were littered with rotting fruit and vegetables while the roadside stalls were displaying fresh produce. The pavements were full of pedestrians, often being pushed into the road. It was an amazing sight.



Cpl. Chris Gapper weaving through the bustling crowds in Az-Zubayr



Graffiti in our accommodation in
AZ Zubayr prison camp

Thursday 7th May 2003. The Duke of Boots welcomed us at the old prison they were using as their base in the centre of town. We were allocated two cells! The windows were barred, while meat hooks in the ceiling and the stained tiles beneath indicated what had happened here. The walls were adorned with murals of anti-Semitic and anti-American slogans. We nevertheless made the place our home.

While the soldiers settled in, I attended the CO's O (orders) group. The next two months would be a busy period for the regiment. They had a large operational area to look after and the troops would be thinly spread. Activities included 5-day long range patrols into the desert, static reconnaissance locations in the south, special operations in the smaller villages in the province and helicopter vehicle check points (Eagle VCP's). This needed a complex medical plan.



Medical operational planning, Az Zubayr prison cell floor, May 2003



Cpl Chris Gapper familiarises himself with the AK47

The next day the planning started in earnest. Sgt. Griffith and I got to work planning and writing the standing orders, case-vac plan, ambulance routes and medical estimate while the rest of the section got involved in extra teaching and training. This included weapon handling of the AK47, Minimi Machine Gun, Claymore mines, illumination flares and grenades, and extra medical skills. The practice firing of the illumination flares at dusk over the town square caused great excitement. The dog population of AZ took exception to the flare and erupted into a chorus of barking and wailing. This was hilarious for the first 5 minutes. As it carried on into its second hour, and getting to sleep in the racket became impossible, a few of the lads had a sense of humour loss!



Pte Sarah Marriott and Capt. Bruce Jenner learning cast techniques, Az Zubayr prison, May 2003



Capt. “Millie” Milne, RMO of the DWR, May 2003

During my time with the Dukes, I was particularly helped by Capt. “Millie” Milne, the Regimental Medical Officer of the Duke’s. She also kept me sane as the tour began to drag on into its 3rd, 4th and 5th month. In those circumstances a sense of humour is imperative. I often lost mine but Millie would save the day.

The heat became almost unbearable. By the end of June, it was reaching the mid-fifties at midday. But the work continued. Patrols continued to go out, operations went ahead and the days slid past. Inevitably, some soldiers succumbed to the heat. New units began to move into theatre without sufficient acclimatization. Dehydration, heat exhaustion and collapse became increasingly common. On one occasion, in a 24 hour period, we had 34 patients entering our facility with heat related problems. Their condition varied from dehydration to collapse. In all we had to case-vac 8 soldiers up to 202 Fd Hosp and two were subsequently sent home.



Treating heat casualties at Az Zubayr as the temperatures soared in June



Capt. “Millie” Milne, RMO of the DWR, May 2003

I was very fortunate to make another friend in Pat, the Padre to DWR. During one of our nighttime “discussions”, whilst sampling the left over communion wine, that we elected to visit to Kurna, a small town that marks the meeting of the two great rivers, the Tigris and Euphrates, and thus the centre of biblical Mesopotamia. Kurna was completely left alone during the war phase, and there were no troops stationed near the sleep town.



Pat the DWR Padre giving communion at Kurna

Monday 2nd June 2003. For those with biblical knowledge, Kurna is recognised as the birthplace of mankind, the Garden of Eden, the home of the tree of knowledge. And so Pat, Will the Media Officer, two drivers and I borrowed the air-conditioned vehicles and made the 3 hour journey north of Basrah. Kurna was a very peaceful town. Vastly

different from the busy hustle and bustle of Basrah and AZ. Heads barely turned as we entered the town's periphery and worked our way through the residential streets towards the Garden. It was even sign posted. As we parked up, a large group of children came running towards us. It was quite clear we were a novelty up here, whilst the populace of Basrah had long learned to go about their day to day business alongside us. I was surprised at amount of English the children spoke. Numerous conversations were started. "Where are you from? Are you English or American? How old are you?" For the first time in months I felt safe with the local population. As for the "Apple Tree of Knowledge", its authenticity was clearly questionable, notwithstanding the symbolism.

Unfortunately, the DWR's time in Iraq was coming to end. It had been a fantastic experience to be, albeit for a short time, to be part of their "family". Before they left though, a grand celebration was organized on Waterloo Day, their own annual Regimental day. The day began with a commemorative church service. The festivities followed. The regimental drummers performed, tug-o-war competitions, 5-a-side football all topped off with a sumptuous BBQ. Each soldier was issued with two cans of strictly non-alcoholic San Miguel beer.



Duke of Wellington's Regiment Inter-Company Tug-o-War competition and Corps of Drums on Waterloo Day, 18th June 2003



RAP set up for Op Ferret, July 2003

The Dukes left theatre and 40th Regiment Royal Artillery took their place. Every other week, the Battle group would perform special operations. These were short individual missions or tasks with specific objectives. Examples included the simultaneous arrests of Baath Party members for interrogation or raids on known smugglers. They would often be performed at short notice and therefore generated a flurry of activity. The most memorable for me was Operation Ferret in which I provided a forward medical capability to 40Regt. A Gamsha tribe in southern Iraq had been identified by intelligence as operators for drug smuggling and the laundering of US dollars. Their behaviour was clearly encouraging crime and instability within the operational area. The mission was straightforward enough – "To capture and question adult males of the Gamsha tribe to gain information regarding alleged illegal activity."

Thursday 11th July 2003. The surge of adrenaline on such operations is empowering and the mood amongst the soldiers dramatically improves. My part in the operation was to move a small medical section forward with the task group and be ready to receive battle injuries. In the mean time I would still have to continue to provide primary care back at base but also to treat walking wounded returning. The plans were written, the orders given by the CO and disseminated down the chain of command. So it was at 0300hrs we left base in a convoy to the forming up point approximately 5km form the village

We parked up by a mound of sand, and quickly set up a mini-RAP ready to receive casualties. Our BFA and a 432 armoured ambulance went forward with the raiding force.



A member of our "female" section reassures the local women during an operation

"Papa 21, this is Charlie 10. Med support needed at grid XXXX XXXX. Over."

"Roger. Leave now. Out". The OC of the "Female" section had called in. In our peacekeeping activities we had learnt the necessity to have a section made up entirely of female soldiers. This was to demonstrate respect to the cultural aspects of Muslim life. The message only indicated that the doctor was needed, not why. Within seconds Gapper and I were racing forward in the land rover towards the grid location.

The air was still thick with smoke and I could see a soldier frantically waving at us. I jumped out and grabbed my medical kit. I was lead into a small mud bricked building. There on a thin sponge mattress, a darkly robed woman lay screaming in early labour. After examination my concerns grew. She was some 2cm dilated and the presenting part of the baby felt a bit too soft to me. A breech presentation seemed possible. I looked at



Treating a lady in early labour during Op Ferrett, Gamsha tribal Village, 11th July 2003

my trauma kit. Abdominal, GSW, fractured femur, 30% burns…. all these things I was equipped to deal with. Breach delivery, hell no. I looked at my drug box. I had the choice of morphine or diazepam. After a small dose of diazepam she seemed happier but the contractions continued. As luck would have it, a local interpreter turned up to help. He had been employed to help with the operation. He a GP who had been working in Basrah hospital, and he had trained at Birmingham Hospital Medical School. After a quick phone call and organizing transport, we moved her to AZ Hospital. I later heard from the translator that both mother and baby were well



Heading back to base at the end of an operation (Route Maui, 12th July 2003).

Friday 12th July 2003. That night a signal came through from our own CO. Our fly home date had been confirmed for July 17th. We were going home in a week's time. This concluded a quite unique, emotionally demanding and professionally testing phase of my career, during which I had learned much. I have since been back out to Iraq on Op Telic 4 in 2004, but that is a different story.



The author's first cold beer back in the Squadron bar in Germany, July 2003

Blood, Heat + Dust: Second Edition

Operation Telic and the British Medical Deployment to the Gulf 2003 -2009

Chapter 13 Part I:

The General Support Medical Regiments on Op Telic 1



Painting: *Field medical unit, Southern Iraq, 2003*

Artist: Gora Pathak

The General Support Medical Regiments (GSMRs) create the primary medical infrastructure in the logistic zone. They must provide primary health care and casualty transfer facilities for troops across the depth of the operational region. This medical infrastructure may include land and air ambulance services over several hundred kilometres in challenging climatic conditions. The primary care aspects include vaccinations and the prevention and treatment of endemic infectious diseases; field sanitation and hygiene; environmental health issues, dental care, the management of psychological, battle shock and psychiatric casualties; a wide range of general practice problems for men and women; and even veterinary care for specialist military animals, such as bomb disposal sniffer dogs.

In this chapter, we describe some of the challenges to the two General Support Medical Regiments, 4GSMR and 5GSMR, which were deployed to the Gulf.

The GSMRs have a very similar structure to the close support medical regiments, but are not normally resourced with surgical teams. They provide wheeled ambulance sections, dressing stations, and primary care facilities from the early stages of a deployment.

On Operation Telic, they were tasked to provide care and casualty transfer between the dressing stations at Role 2 and the field hospitals at Role 3 in the divisional area in Iraq, and around the hospitals in the logistic and general deployment area of 102 Logistic Brigade in Kuwait. 4GSMR and 5GSMR were wheeled medical support regiments. They were augmented with reservists and non-surgical specialists from other units for their wartime role. The Dressing Station and Medical Sections of 5GSMR were used to provide a mobile reserve for 1st Armoured Division.

4GS Medical Regiment



4 GSMR was formed from two Regular Army and two Territorial squadrons, 220 Maidstone Fd Amb TA squadron and 222 Leicester Fd Amb TA Squadron. It is tasked to provide medical support in peacetime to 101 Logistic Brigade in Germany, and to 102 Logistic Brigade in the UK. In peacetime, it is commanded from its headquarters in Aldershot, and tasked to NATO's Joint Rapid Reaction Force.

For *Operation Telic*, as described by the Commanding Officer, Lt Col Huw Williamson, 4 GSMR was to deploy early to provide primary care, and thereafter to provide a field ambulance service between Role 2 (1CSMR and 16CSMR) and Role 3 (34 Field Hospital and 202 Field Hospital) units in northern Kuwait and southern Iraq. It provided pre-hospital emergency care, a blue light matrix, primary dental and psychiatric care, a graduated incident response capability, a 48-hour bedding down capability with air conditioning for minor casualties, and the transfer of patients from hospitals to airfields for evacuation

The regular component deployed into Kuwait in the second week of February 2003. A (11) Med Squadron and E (13) Squadron went with an RHQ and a compact HQ Squadron. 4 GS Medical Regiment comprised 250 personnel, including regular and TA

soldiers, mainly RLC (V) drivers. The blue light matrix was relatively simple to establish in Kuwait, which is a well developed state with an excellent network of modern all weather highways, service stations, closely located logistic units, and a mobile telephone network. Kuwait offered safety of passage around the logistic area, which included Concentration Area COYOTE, the Rear Support Group (RSG) at Camp FOX, Camp RHINO, the Air Port of Disembarkation (APOD) at Kuwait International Airport, the three seaports of Disembarkation (SPOD) and the JFLogC headquarters in Camp ARIFJAN.

The regiment's environmental health team (EHT) was busy with problems caused by the harsh conditions in northern Kuwait. Considerable work was done continuing the anthrax immunisation programme, providing arrival health briefings and supporting the field hospitals in evacuating those unfit to remain in theatre due to illness or injury, by use of road moves between Coyote Hospital and the aeromedical team at the APOD. The Regiment's air-conditioned ambulances, issued for the Oman exercise in 2001, were invaluable as the heat increased. The unit also hired 25-seater air-conditioned coaches in Kuwait to increase its casualty transport capacity.

Warfighting Operations

During the warfighting phase, 4 GSMR's primary task was casualty collection and transfer. This was achieved by dividing the task into two zones of responsibility, with a Forward - or northern - loop between 34 Field Hospital at RAF Shaibah and 202 Field Hospital in northern Kuwait, and a Rear - or southern - loop between 202 Field Hospital and the casualty clearance airhead at Kuwait City.

The transport security situation in southern Iraq was very different for ambulance crews to that in Kuwait. Roads were poorly maintained, and there was hostile action from insurgent forces and restive crowds against individual vehicles, to the extent that ambulances always had to move in pairs and often with combat troop and armour support.

The UK operational plan obliged the Commander of 102 Log Bde, Brigadier Shaun Cowlam, to divide his assets between JFLogC and a reformed 102 Log Bde to provide closer third line support for 1 (UK) Armoured Division in southern Iraq. 4 GSMR deployed E Squadron north into the port of Umm Qasr, to assist 17 Port and Maritime Regiment RLC in opening the port and 23 Pioneer Regiment RLC in maintaining the security of the town.

E Squadron also sent its ambulance troop north to support 34 Field Hospital in SHAIBAH. This was to provide an evacuation loop down to 202 Field Hospital in COYOTE, where A Squadron was based to provide the southern hospital evacuation loop to the APOD.

The two squadrons also maintained their primary health care coverage in northern Kuwait, and the blue light matrix along the UK main supply routes (MSRs) TAMPA/HALBERD and BROADSWORD.

The anthrax immunisation programme was continued. E Squadron provided medical support to the humanitarian assistance projects in Az Zubayr and Umm Qasr hospital. For her outstanding work in these projects Capt Sue Everington QARANC (V) was appointed MBE.

In the early post-war phase, 4GSMR thus received a number of additional taskings, which included conduct of a health needs assessment in the town of Um Qasr; medical support to the Iraqi civilian authorities at Al Zubayr Hospital; and post-operational psychiatric briefings. A Squadron also provided a three-man team for the re-opening of the British Embassy in Baghdad. The two TA squadrons of 4GSMR subsequently provided a composite squadron to replace E squadron in mid-July for a five-month tour in the region.

Lt Colonel Duncan Robertson RAMC, Senior Medical Officer 4 GS Medical Regiment attached from February to May 2003, recalls his experiences with the Unit.

> "On 8 February 2003 I was doing sick parade as SMO at the Infantry Training Centre in Catterick. I was given 48 hours notice to sort out my kit, say goodbye to the family and get to Aldershot.
>
> "The Regiment arrived in Kuwait on 11 February. After a few days in the desert, I was attached to the American 520th Medical Support Company at Camp Arifjan, south of Kuwait City. My role was to assist the US 'Physician's Assistants' (PAs) in delivering primary care to the US and British Forces in the camp. Most days the clinic would see upward of 230 cases - on occasion 300 - between five clinicians and two senior practice nurses, along with a vaccination programme against smallpox.
>
> "On the morning of 19 March, it was time to leave. We had to muster out at Camp Fox in Kuwait. Our journey was interrupted by a number of Scud alerts when we had to disgorge from the vehicles, kit up and take cover. From Camp Fox we were to move north to join the main body of 4GS, near 202 Field Hospital close to Camp Eagle, and then to move one squadron up to the border, in preparation for Humanitarian Aid (HA).
>
> "A few days later, a senior nurse and I were tasked to continue to a location near Al Zubbayr, to do our best to provide some HA to Iraqi civilians. Our two ambulances were only allowed to carry a basic spectrum of treatments, including aspirin, antacids, skin creams, dioralyte rehydration sachets and eye ointments. After practising convoy ambush/escape drills, we set out at first light with a convoy of some forty vehicles, including water tankers. Eventually the convoy arrived safely at the newly occupied military base established at Shaibah airfield. Strict light discipline was enforced due to the risk of further sporadic contact and possible 'snatch squads' in the area. That thought left me feeling doubly exposed and vulnerable when using the field latrines that night at the edge of camp.
>
> We had got used to the sound of the surrounding British armour firing salvos towards Iraqi targets. At about 0200 there was brief but intense alarm when we were woken by a salvo of incoming shells. The next morning (26 March) we were up and breakfasted by 0400. It took till after noon for the small HA convoy,

escorted by a Warrior armoured vehicle from the Black Watch, to reach the edge of town. A translator accompanied each ambulance and we would work out of the back door. The main frustration was the insufficiency of medical supply for the overwhelming numbers of un-triaged 'patients' clamouring at the door, and the knowledge that this could only be a gesture rather than a proper service. Photographers and journalists from the Chicago Tribune and Washington Post appeared on the scene. A local doctor turned up and indicated that he would like to do all he could to help the coalition.

"The translator did a terrific job trying to encourage the crowd to filter children and the elderly to the front. I remember rather pathetically trying to reassure these frightened people that the troops were not going to disappear (as in 1991) and would stay to help them. I was also struck by the selfishness of many Iraqi men as they pushed their way forwards. The main cohort of sick consisted of elderly with dehydration and heart disease. One man collapsed just by the ambulance and required resuscitation with oral fluids. There were children with discharging ears and eczema, and my inadequate supply of creams soon ran out. Dental disease was rife. There were also three or four extensive household burns – though we only had a couple of tubes of flamazine. We advised them to use it with 'clingfilm'.

One woman came out of her house but was too frightened to approach the ambulance or the water lorries. In the end I went as far as I dare into the square - and away from the safety of the vehicle - and laid a box of water on the ground. She came forward slowly and picked it up and gave a little wave back; a small gesture, but at least I was contributing something positive. The visit was brought to an abrupt close when an individual with a weapon was spotted nearby, and we selected a safe zone inside a local police compound where a squadron of marines were resting up. Children were shouting at us through the vents in the wall. We replenished our supplies of food and water and prepared to do the same in another location in the afternoon.

"At this point I was called up to the front gate. A young couple had brought a recently born infant to the camp for help. The neonate had severe spina bifida in the lower back, and the family were desperate for help. I received advice that there was a functioning hospital in Um Qasr - some forty-five minutes' drive away – and someone had a car and fuel. The family clearly expected more but there was nothing else I could do. I wished them well as they departed through the throng and never saw them again.

"That same day, the RMO of the Black Watch (Lt Col Kevin Beaton) had uncovered a 'stash' of UN drugs in the Ba'ath Party HQ in Al Zubbayr. He wanted to put it to good use. He made the decision to break out the medicines and hold an impromptu 'clinic'. His actions were very popular with the locals.

"Everyone digested the day's work. Though tired, it was good to be back in the safety of the camp. One ambulance crew reported resuscitating a small child/baby (burn victim), filmed by Sky TV. Sadly, it was merely one small tiny act within the chaos and confusion that was going on all around us.

We were due to repeat the same activity the following day, but such was the day-to-day pace of events that we were told to return to the camp in the Kuwait desert to sit and 'wait out'. Damn! - we were annoyed and frustrated. I am sure there was a good reason for this, but at the time you would be hard pressed to find any of the team to agree. We headed back the following morning thoroughly deflated.

"It was becoming clear that there were too many cooks in the kitchen – not enough 'British work' for the primary care support. 5 GS had taken up the reins around Al Zubbayr. We hung around Kuwait for another week or two, washing, eating meals, writing letters, listening to daily reports, reading papers, maintaining kit, training, sweating, sleeping and doing PT just after dawn (skylarks) or at dusk (night owls, like me): but not in any way delivering HA.

"In early April, we were sent forward again to Umm Qasr. There was a well-established 'medical centre' in the port, led by Major Taj Baidwan of 4 GS E Sqn. My next role was to perform a Health Needs Assessment (HNA) in Umm Qasr. This incorporated a visit to a Spanish Support Vessel in Um Qasr port. In the HNA, I recommended to HQ Medical Branch that three British doctors, a nurse and some medics should assist the staff in the local hospital.

The following day I arrived in the hospital with another doctor and a senior nurse and set up with a translator. There was poor crowd control of entry and exit. Soon I had the unusual and unnerving experience of consulting with one person whilst twenty others watched in curiosity. Most were happy and appreciative, but as the situation deteriorated tempers frayed, and we had to abandon the clinic for safety. By the end of the day, the local doctors were annoyed and had the feeling that "the British had made things worse": not good. We did not have the manpower to offer long-term support to these people, but with greater resources we could have done much more for hearts and minds with good quality primary care.

At the end of the day, Dr Shihabih, the local hospital doctor, sought advice on a six-week old infant, dehydrated and moribund. The local paediatrician had fled in the face of allegations of Ba'ath party membership. I felt the only hope, under the circumstances, was the medical team aboard a Spanish ship at Umm Qasr port, with modern facilities and an operating theatre. I spoke to a local Iraqi counsellor who had access to an Iraqi ambulance.

I headed off with the Iraqis and the infant for Umm Qasr. We were given permission to board the ship, and I could now only wait until 4 GS rescued me from the beery hospitality of the Spaniards. It took the regiment a convenient five hours to find me. Sadly, the infant died two days later despite our ad hoc arrangements: I don't know what its father thought. Two days later the Spanish took over the hospital and I returned to Kuwait, to boredom and to the UK towards the end of May. I was glad to get away."

Primary Health Activities in the Consolidation Phase

Royal Navy anaesthetist, Surg Lt Cdr Brando Tamayo, reports that:

> Throughout May, June and July E(13) Squadron based in Umm Qasr remained responsible for Role 1 care and the Blue Light Matrix in southern Iraq and Kuwait, with Lt Col Peter Gilbert RAMC now seconded from 202 Field Hospital as the new SMO. In June - with temperatures soaring towards their summer highs of around 50∞C - and the impending RSOI (Reception Staging and Onward Integration) of troops from 19 Mechanised Brigade fresh from the UK and BFG, PJHQ ordered the formation of a Role 1+ Heat Illness Unit in Area Ripper (Concentration Area COYOTE). This was drawn from elements of both E(13) Squadron, led by Capt Sue Everington QARANC, and 202 Field Hospital, led by Major Jo Cooke QARANC, with a myself nominated as the unit Medical Officer In Charge.
>
> During the six-week operation 8000 troops passed through the location with some 300 needing treatment for heat related illness. Five patients suffered from frank heat stroke and were evacuated by helicopter to 202 Field Hospital for intensive care but no deaths were seen during the period. E(13) were finally relieved by 22 Squadron 3CSMR in mid-July.

5 General Support Medical Regiment



The operational role for 5GSMR was to support 1st UK Armoured Division in Kuwait during the pre-war phase, and in southern Iraq during warfighting operations and beyond. The concept of operations involved the allocation of three ambulance troops, one per brigade, in the divisional area.

During the warfighting phase, the headquarters of 5GSMR deployed to Shaibah airfield with 518 personnel. Additional tasks included the provision of medical care for PoW processing. In all, some 1500 patient episodes were recorded. 900 casualties were moved, including PoWs, allied personnel and Iraqi civilians.

5 GS Medical Regiment is based in Preston and is formed from 3 Regular Squadrons: A Squadron, HQ Squadron and E Squadron. It has a TA Squadron - B Squadron based in Hull - and has two TA ambulance troops based in Chorley. A Squadron is structured as a Close Support Squadron and B Squadron as an Area Medical Support to provide primary care in the Divisional Rear Area. In peace it has an establishment of 325 personnel, including its TA complement. For Operation Telic, its operational strength was increased to 520 people, including a band of medically trained musicians for additional support.

The regiment was the only Divisional General Support Medical Regiment and, whilst under command of 3 (UK) Division, regularly trained with 1 (UK) Armoured Division in Germany. This presented several command challenges during the latter part of 2002.

On arrival in theatre, the regiment deployed into the Divisional Assembly Area near Camp Coyote. Initially, the Unit provided a GP clinic for the Anthrax immunisation program; a dental clinic; a group of ambulances to form part of the blue light matrix; an environmental health team; and a psychiatry team. At the outset of hostilities, the principal tasks of the regiment were to provide a Primary Care Service including General Practice, a 48-hour 'bedding down' capability, and a blue light' matrix of Pre-Hospital Emergency Response Teams in the Divisional Rear Area.

Other tasks included evacuation of battle casualties directly from the divisional rear area to field hospital; the provision of infrastructure support to divisional psychiatric and environmental health assets; a primary care facility including general practice, dental care, bedding down and environmental health at the Corps PoW holding facility; road evacuation from the forward squadrons of the close support medical regiments and the commando medical squadron through the divisional rear area to the field hospitals; an ambulance control cell and specialist medical logistics staff to the medical branch of 1 (UK) Armoured Division; and the management of the divisional medical radio communication net.

As the fighting brigades moved forward into Iraq, so 5 GS Medical Regiment moved forward to provide medical support in the expanding divisional area. This required the movement of RHQ and D Squadron into Iraq, first to a location just north west of Safwan, and then - as the operation to secure Basra was completed - to Shaibah airfield where support was given to 4 GS Medical Regiment to move casualties from 34 Field Hospital to an ambulance exchange point just south of the border in Kuwait.





5GSMR deployed at Shaibah camp (acknowledgement: Lt Col Jerry Tuck)

Prehospital Treatment Capabilities

Elements of E Squadron remained with the fighting brigades throughout and ambulances approached Basra from the Al Faw peninsular in support of 3 Cdo Bde, entered Basra with 7 Armoured Brigade, getting as far north as Al Amarah with 16 Air Assault Brigade running the gauntlet of the border crossing point at Safwan. Almost every ambulance crew took home a story of having been shot at, shot near to or stoned whilst undertaking their duties.

During the campaign, some 1500 patients (including PoWs) were seen and treated in the primary care facilities and 900 people evacuated by ambulance including allied personnel,

enemy PoWs and Iraqi civilians.

Captain Robert Hardman, a general duties medical officer attached to A Squadron of 5GSMR, recalls:

"I joined the unit in early March 2003. A Squadron was split into two area medical troops to provide Role 1 care for PoWs. We moved to Camp Rhino in Kuwait on 20 March, during which journey we were in and out of gas masks and shelters in response to the Scud alerts. We moved to a holding area on 21 March and dug shell scrapes.

"I was woken at 0200. The advance across the border was going faster than expected, and the American marines had taken several hundred prisoners, a number of whom were injured. We sent an advance party of three medical officers and nine medics in three Land Rovers. We stopped short of the border, dug another shell scrape and watched the shelling of Umm Qsar in the early morning rain.

"We then moved forward across the breach in the border berm and received nine Iraqi casualties from a red-eyed US Marine medic. SSgt White set up a treatment facility and the patients were prepared for evacuation. One man had a dirty but not a life-threatening head wound; three had gun shot wounds to the abdomen, and five men had limb injuries. The easiest CASEVAC we had during the entire conflict was carried out by a US Blackhawk helicopter and we managed to get the seven most urgent cases into the helicopter.

"The remainder of the medical troop joined us later that day (22 March). A further 1000 PoWs arrived to be processed; most were in good health but there were a few more casualties with gunshot injuries. It quickly became apparent that as prisoner numbers increased we would not be able to bring all the prisoners wanting medical attention to our facility. I therefore volunteered to go down to the camp with a couple of medics.

"I was not prepared for the scale of the camp. A central road divided two lines of six prisoner cages, which were progressively filled from one end, so that the newer prisoners filled the furthest cages. Each cage was about the size of a football pitch with a barbed wire fence around it. At the back of each was a marquee for sleeping and shade, and a front shower facility. As we arrived in our four-tonner with its red cross, shouts went up of "head pain, head pain" and "blood shit, blood shit", and a quarter of the men in each cage pressed forwards.

"We spent a morning sorting out and triaging the men in the first cage. Those most in need of treatment were trucked back to the medical facility in rotation. It soon became apparent that there were a number of mentally ill patients from local asylums among the prisoners. Our favourite, who became known as the 'Mad Wxxker', would regularly announce that he was the head of the Ba'ath Party in the area. On being taken for questioning, he would whip off his clothes and engage furiously in his ononastic tendencies.

"We managed to identify all such patients eventually and release them to a local hospital. MW managed to get back into camp with his Ba'ath Party story, and vomited on a computer, succeeding in rendering it useless. We established a routine for triaging

those with minor problems in the cages, recognising the regulars and the acutely ill, and giving vitamin tablets to the time wasters to keep them happy.

This way of working allowed the most patients to be seen at our medical facility, but put a great deal of pressure on our young medics, who gave an excellent account of themselves and within days were identifying problems and treating hundreds of prisoners. Their youth was brought home to me when I discovered that my own medic, Private Gough, was only 17 and had not yet learned to drive.

Later, we had further difficulties when we received a large number of PoWs delivered to us after receiving treatment elsewhere, in the mistaken belief that we were a hospital facility. This took two weeks to resolve, and again challenged the skills and adaptability of our medics in setting up a surgical ward in an Arabian Marquee"

Lessons from the General Support Medical Regiments on Op Telic 1

This was the first major deployment of the general support medical regiments since their formation. They fulfilled their intended tasks and roles without significant problems. Useful lessons were learned in respect of the need for longer lead times for mobilisation and expansion to fully deployed strength. Communications systems and methods of co-ordination of deployed ambulances needed to be improved. Fortunately, there were relatively few serious casualties, and the blue light matrix system was never overburdened.

Unfortunately, the Red Cross markings on ambulances did not provide sufficient protection for their crews and casualties. The cultural and legal restraints enshrined in the Geneva Convention which generally afford protection to medical crews are not always held in respect by opposing forces, as was the case with the irregular forces on the Iraqi side. We might consider whether circumstances might have been different if the Muslim Red Crescent had also been displayed. As it was, firing against ambulances did not translate into any tragedies during the combat phase, although there have subsequently been losses of US medical vehicles and helicopters during post-war operations.

Chapter 13a Resources and References

The General Support Medical Regiments

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Blood, Heat + Dust: Second Edition

Operation Telic and the British Medical Deployment to the Gulf 2003 -2009

Chapter 13 Part II:

"UK Med Group" Operation Telic Phases 2-13



Introduction

With the downsizing of the medical footprint at the end of Op Telic 1, all of the UK military medical assets were amalgamated under one rotating command organisation, the "UK Med Group", whose structure and function is described in this 2005 MoD press release.

"The UK Med Group in Iraq was established from Op Telic 2 onwards as the consolidated medical command structure for operations in Iraq. It comprised a Field Hospital based at the Shaibah Logistics Base and a Squadron of a Close Support Medical Regiment, providing primary and secondary care to UK and coalition forces in the Multi-National Division (South-East) sector of Iraq. (The hospital was relocated to the Contingency Operating Base at Basra Airport from late 2007.).

The UK Med Group mission was to save life, prevent further injury and maintain the health and well-being of the deployed force to the highest attainable clinical standards in some of the most austere and inhospitable conditions. The Med Group Support Squadron was tasked to provide and maintain the infrastructure, environment, equipment and supplies necessary for the clinical staff to do their job.

The Close Support Squadron provided primary care, emergency resuscitation and an ambulance service to the force across our area of operations from Al-Amarah in the north to Um Quazar in the south. Health promotion was an important element of the Med Group's work and included smoking cessation and sexual health clinics.

The Command element and Regimental Headquarters of the Med Group was based on a formed medical unit. The Med Group was a joint operation comprising nearly 400 personnel brought together from various units and across the three services, including some 50% Territorial Army and Regular Reserve personnel and at one stage a surgical team from the Czech Republic. Non-hospital medical support to UK forces was provided by roulement of squadrons of the close and general support medical regiments. Each unit was augmented by individuals from a wide variety of regular and reserve trades and skills".

Command of the UK Med Group devolved to the Commander of the incoming lead Medical Regiment, whose various post-operational reports have contributed to the writing of this chapter, for whose permission to inspect and abridge I am grateful both to the authors and to General Mike von Bertele, Director General of the AMS (2009+). Additional material has been sourced and abridged from the Corps Magazine of the AMS, with the kind permission of Captain Pete Starling, the Editor and curator of the AMS Museum.

The key medical units which were deployed on the various phases of Op Telic are listed in this chapter, and commentaries on their experiences have been provided if and where they have been sourced.

Common themes running through the commanders reports were the challenges of pulling together functional field units from the cadre-ised peacetime structures, to which unfamiliar clinical personnel were often bolted on at the last minute; the

frequency of turnover of clinicians and particularly of Clinical Directors; the challenges of integrating individual reinforcements (IRs) from numerous different parent units and the challenges of securing and reorganising logistic stocks during the regular changes in force size, structure and location.

In a personal communication on the subject of the Joint Medical Group, General Lillywhite points out the debate from 2003 onwards as to:

- the appropriateness of the grouping together of Role 2 and Role 3 units.
- If grouped, the who should command (CO from the hospital or from the Med Regt);
- whether it should form part of the Log Group or be independent;
- and the relationship between a Commander Medical and the Joint Med Group.

> "The difficulty was that it was rare for COs of Medical Regts to have any understanding or practice of running a Role 3 units, and many Field Hospital COs had little experience of planning or executing Brigade Ops or in negotiation with Bde or Bn commanders so essential to delivering effective combat support on operations".

The specific experiences of the Hospital Squadrons are covered in Chapter 17.

Operation TELIC 2 from June 03 to November 2003

During this phase, 3rd (UK) Mechanised Division was the lead unit under the command of Major General Graeme Lamb. The UK Med Group was led by 3 Close Support Medical Regiment, Royal Army Medical Corps, and 33 Field Hospital formed the nucleus of the Hospital Squadron, working in the newly built tented hospital at Shaibah Logistics Base.

Key operational events during this phase were growing public disorder and civic unrest across Basra Province. We have been unable to source the Post operational reports to add detail to this period.

Operation TELIC 3 from November 2003 to March 2004

The lead UK Division was succeeded by the Multi-National Division (South-East) under the command of Major General Andrew Stewart, with the UK contribution being based around 20 Armoured Brigade, under the command of Brigadier Nick Carter.

UK Med Group was led by 5 General Support Medical Regiment, producing a "Blue Light Matrix" for the area, with 22 Field Hospital forming the nucleus of the Hospital at Shaibah.

There was also a Medical Branch staffed by UK personnel within the Headquarters of Multi National Division South East (MND SE), whose area of responsibility included an area as large as the South of England.

Key operational events included further public disorder and civic unrest, with the rise

of the Mahdi Army in the South, and the capture of Saddam Hussein outside Baghdad.

Writing in the RAMC Magazine, Lt Cdr P Chilcott, Capt M Mitchell and Flt Lt J Cowell reported that:

> "The Multi National Division's mission was to conduct security and stabilisation operations within the boundaries in order to create the conditions for the transfer of civil authority and control to the Iraqis. The priorities of Commander Med, Col Hubbard, were:
>
> - medical provision for coalition forces
> - assistance and advice to the Iraqi Ministry of Health
> - development of medical support to the Iraqi Civil Defence Corps (ICDC)
>
> The Division also controlled Dutch and Italian Role 2 enhanced medical assets.
>
> Under Wing Cdr Bruce Court, the Preventive Medicine Cell had a wide remit over communicative diseases and heat illness.
>
> Under Major Richard Jeffery and Capt Mitch Mitchell, the Med Ops and Plans Cell were preoccupied with the constantly changing force structure and in liaising with PJHQ.
>
> Lt Cdr Peter Chilcott was responsible for medical support to Iraqi Security Sector reform, and particularly for training the Iraqi Civil Defence Corps, ICDC, which was under the command of coalition forces. This training was delivered through medical officers and Senior NCOs from the UK Battle Groups and Brigades, teaching platoon medic skills to Combat Medical Technician First Class standard, including airway management, intravenous cannulation and treatment of pneumothoraces.
>
> Under Sqn Leader Mark Dray, the Force Protection and Medical Intelligence Section oversaw public health matters as they affected both the deployed forces and Iraqi civilian health services, for example in respect of insect vectors and drinking water.
>
> Major Theo Van der Zanden coordinated medical logistics, while Watchkeepers Flt Lt Cowell and WO1 Paul Wiles coordinated the health surveillance returns.

Operation TELIC 4 from April 2004 – November 2004

UK Med Group continued under the command of Multi-National Division (South-East), led by Major General Andrew Stewart to July 2004 and by Major General William Rollo thereafter.

UK Medical Group was formed around 1 General Support Medical Regiment, RAMC, with 207 (V) Field Hospital as the nucleus of the Hospital Squadron until succeeded by 256 (City of London) Field Hospital (V). Key operational events included the Shia uprising and the US battles for Fallujah.



The Shatt al Arab from Basra Palace Source: Ian Miller pbase.com/kissfoto/irag

The Medical Branch of MND (SE) was based at Basrah Air Station, and staff changed over in November 2004. Responsibilities included units from the UK, Italy, the Netherlands and Japan, and planning in support of the passage of 6-7000 pilgrims on the Hajj. An international study day was run by Commander Med on 29th December 2004, attended by a wide range of delegates.



1 Close Support Sqn Op telic 4 Source: Ian Miller pbase.com/kissfoto/irag

B (30) Squadron 1 Close Support Medical Regiment on Op Telic 4

Lt Col Andy Terrell, commanding 1CS Med Regt, reported in the RAMC Magazine that

"Op Telic 4 was a successful and busy tour for the squadron. B Sqn strength was increased from 90 to 170 personnel for the tour, including 29 reservists from 152 Ulster Ambulance Regt (V), 157 Transport Regt (V), members of 205, 207 and 212 Field Hospitals, and the Honorable Artillery Company. This was necessary for the task of providing emergency medical and ambulance cover across the UK area of operations, for which task the Squadron was split between the Al Amarrah, Basrah City and Shaibah bases.

The tour started in March 2004, and the difficulties were increased constantly by the relentless heat. As the situation deteriorated, we found ourselves becoming increasingly busy and operating in an environment of growing hostility. The spike of activity that took place during August ensured that everyone was kept on their toes, providing top cover of every vehicle move and ambulance call out. The Troop based in Al Amarrah was particularly busy, as described by Pte Mike Winder:

"The first few weeks were quite an eye opener. The level of hostility was quite high and we had to deal with multiple minor casualties. But despite this and not having any welfare kit for 3 months, morale was quite high. During the quieter periods, we played football, volleyball and received a continuous programme of military and clinical training. Although we saw a reduced level of insurgent activity and casualties during the last six weeks of the tour, we had to stay alert as every now and then a more serious casualty would arrive. On a personal note< I found the tour to be a positive experience and I learned a great deal."

Despite the sweltering temperatures, regular increases in insurgent activity throughout the tour, regular increases in insurgent activity resulted in mortar attacks against base locations. There were continual engagements of patrols by RPG



Source: Ian Miller pbase.com/kissfoto/irag

and small arms fire. They began to reduce by September, but rocket attacks against the bases increased significantly. By October, mobile patrols were no longer being subjected to direct engagement, but there was a new threat with the start of a wave of increasingly sophisticated command wire and remote control IED attacks. The nature and positioning of these devices posed a huge threat to the soft skinned vehicles and it became clear that the Red Cross provided no immunity from attack. On two separate occasions our convoys came under direct engagement.

B Squadron Detachment at Shaibah Logistics Base on Op Telic 4

Shaibah provided medical, logistic and equipment support for the MND (SE) area, and its welfare and recreational facilities were the envy of everyone in Theatre. The NAAFI personnel did a sterling job organizing special events to help break the daily routine. Lance Cpl Alex Craig reflects on his time there:

"Shaibah had its high and low points. Even volley ball can become boring! We still managed to keep quite busy. Our troop was made up of 50% reservists, whom played an integral part and we all seemed to get along very well. Most of us were new to the operational environment and relied on the veterans. Being a trained member of an armoured ambulance section, the soft skinned wheeled ambulances were quite a change from the smell and grease of the FV432s.

Our main responsibility was transporting patients to Basrah Airport three times a week on a regular basis, along with civilian transfers from the Field Hospital ITU



Members of 1 CS Med Regt Op Telic 4 Source: Ian Miller pbase.com/kissfoto/irag

to civilian hospitals in Basrah City. Providing an ambulance crew in support of the infantry regiment based in Al Faw on the Gulf Coast provided a welcome relief. It also gave us the opportunity to work alongside the infantry on patrol. As a whole, Shaibah was a good experience for all and morale was kept high throughout."

"For B Sqn the tour was a great success, and we were fortunate that everyone who deployed returned home safely.".

Operation TELIC 5 from November 2004 to April 2005

Multi-National Division (South-East) was led by Major General William Rollo to January 2005; and thereafter by Major General Jonathon Riley, with 4th Armoured Brigade under command.

UK Med Group was based upon 5 General Support Medical Regiment. The Hospital Squadron was provided by 33 field Hospital.

Key operational events included the detachment of 1st Battalion, the Black Watch (Royal Highland Regiment) from the UK operational area from end of October 2004 to south-east of Baghdad to support 24th Marine Expeditionary Unit. There was major unrest in Basra.

The experience of 5 General Support Medical Regiment on Op Telic 5

Commanding Officer Lt Col Phil Harrison reported that:

"We were warned off for deployment in late May 2004. Force generation was a considerable challenge, in identifying specific individuals to fill our templates (orbats). The unit came together on predeployment training on the Catterick Training Area in early November 2004. This was the only occasion on which the entire Med Group would be together. The training included those soldiering skills which would be called upon more than most thought possible, with numerous individuals deploying "outside the wire" on driver, convoy commander and top cover duties and dealing with vehicle breakdowns, IEDs, cordon and control ops. We completed the Relief in Place in Iraq on 17th November 2004.

The 5GSMR Med Group included 360 personnel from 72 different units and 21 cap badges. It provides Role 1-3 medical support to MND (SE) and multinational forces in the UK Area of Responsibility (AOR), maintaining the field hospital at Shaibah Log Base; a role 2 facility to the Al Amarah Battle Group in the Welsh Guards AOR; a role 1 facility for the Duke of Wellingtons Regt Battle Group in Basrah City, and primary health care support, psychiatry, dentistry, physiotherapy and a "blue light matrix" for UK personnel throughout Southern Iraq, along with medical resupply.

Initially, there were severe shortages of personnel for force protection, and clinical staff, including nurses, had to be used as "top cover" (riding as armed lookouts through the upper hatches of vehicles). We also faced challenges in the move into a new hospital; the reconstitution of vast quantities of legacy equipment from earlier

operations; the initial issue of Saxon ambulances; the creation of a credible and capable reserve; the relocation of subunit headquarters; and medical support for the Immediate/Incident Response Team (IRT) at Basra Air Station.

There were also challenges with a high flow of individual reinforcements and a high turnover of hospital staff, with some 200 staff rotating through 100 posts; and with the integration of the "CONLOG" staff, specialist nurses employed directly through civilian agencies. A particular problem was the rotation of the Clinical Director role, such that the post was held by seven different individuals in six months.

The Med Group also took over a new hospital built by Royal Engineers on a 1 metre high platform (to avoid flooding), and with its own power supply, sewerage and air conditioning. The clinical upgrade included a new CT scanner, whereas previously patients were transferred to Kuwait for CT scans.

On Iraqi Election Day, its first major incident was a VBIED outside the main gate of Shaibah, producing 20 casualties.

Maintenance of morale during down time provided an opportunity for a busy sporting fixture programme, and the helicopter landing pad doubled as a cricket pitch. The monthly publication of "The Clandestine Times" with its "no holds barred" remit left no one unscathed from its scurrilous journalism.

5 UK Med Group played host to a large number of official political and military visitors, including the House of Commons Defence Select Committee. A Study Day was held to consider mass casualty scenarios. Mid tour saw a roulement of Unit personnel, including Ops Officer Melvin McCoy, who possessed the unmistakable skill of keeping everyone amused throughout the day.

Throughout the deployment, 5 UK Med Group treated 6467 primary health care patients, and admitted 1069 patients to the Hospital, for 80 operations. 219 patients were evacuated out of Theatre.

The Medical Regiment structure was found to be well suited to the complex demands of Operations in Iraq. It was also able to make significant progress in developing operational clinical governance procedures with wider significance for the Defence Medical Services. It was also able to make substantial progress in reducing heat casualties, by making this an operational command rather than a medical responsibility.

16 Close Support Squadron from 3 CS Medical Regiment on Op Telic 5

The Squadron provided the manpower for all medical outstations and ambulance troops, including a blue light matrix at three locations and Role 2 capability at two sites, and was busy throughout the tour both with training programmes and operational work. It deployed in support of activities for the Iraqi Elections, and in a training role for the Iraqi Police Service and National Guard, along with refresher training for the

Team Medics from the fighting units.

Casualty Extraction from vehicles was a particular feature of training, as many of the incidents attended by the ambulance crews were Road Traffic Accidents. The Squadron also started to use the AFV 432 Ambulances for the first time since Op Telic 1.

5 GSMR also provided personnel to support the Hospital Squadron, with the CMTs getting considerable experience of trauma care. Out of hours, the January Beauty Pageant saw some very brave men waxed, moisturised and beatified. The CO had the unenviable task of judging the competitors.

Combat Med Tech Class 2 Pte Jarman recalls her personal assessment of life as a new soldier on Op Telic 5.

"I was posted to 5GS Medical regiment direct from basic training four months prior to deploying on Op telic 5 as part of Task Force Eagle. My first operational tour was a great experience, living and working at Camp Smythe. My role within the medical Reception Station was to help out in the Primary Health care department, and to work in one of the two treatment bays alongside other CMTs and nurses in the event of receiving trauma patients.

General day to day work consisted of seeing routine patients during the morning and afternoon sick parades, where patients were booked in, filtered through the medical staff and presented to one of the two doctors at the location, and maintaining the facility to a high standard. I gained a vast array of medical knowledge and there was always support and clinical knowledge where needed.

CMTs were encouraged to think on their toes and collect histories from our patients tom present the correct information to the doctors. We had three clinical training sessions each week from the doctors.

I really enjoyed my tour in As Samawah. I also took full advantage of the welfare facilities which included a gym, a Dutch restaurant, an Expeditionary Forces Institute shop, Internet, Phone facilities and a launderette. The accommodation was very comfortable. I lived with two colleagues in a Corrimec room which had adequate space for us and could be made very homely with improvised furniture. We also had showers and flushing toilets. I enjoyed my tour of duty in Iraq and learned a great deal about the provision of medical support to the troops and about life as a young soldier on operations."

An Official Report on Medical Issues during Op Telic 2-5
By Major General Rollo

"The medical input suggests that no major health issues emerged that had not been identified before operations began. However, resources have not been available to allow the analysis of significant amounts of medical data collected.

In terms of general health in theatre, 'D&V' occurred at low background rates, with predictable peaks during roulement periods while incomers developed 'resistance' to local pathogens and the requirement to adhere to field hygiene was reinforced. Heat illness generally peaked during the first few weeks of each roulement; however, following a visit by the Army Professor of Occupational Medicine a fall in heat injuries was noticed. Generally heat injury prevention relies on the training of the individual soldier and junior commanders.

It was recommended that roulement should be managed so that major troop movements do not occur during the hottest periods. For individual augmentees the acclimatisation policy should be strictly enforced.

In terms of trauma care, the 'Golden Hour' criterion (evacuation from the point of wounding to a hospital within 60 minutes) is long-established and widely supported by Coalition military surgeons experienced in Iraq and Afghanistan. Op TELIC 4 analysis suggests that the Army was failing to meet this norm. Although 85% of casualties were evacuated by helicopter to Role 3 hospitals the average time into surgery was over 2_ hours.67 The low numbers of British casualties makes statistical comparison with other British and US campaigns difficult. The UK has exploited US data, which suggests that:

a. Operational medical support should as far as possible replicate the integrated trauma systems which are common in civilian practice.

b. Non-haemostatic agents such as Quick-Clot and Chitosan have resulted in a significant reduction in the number of (US) deaths due to uncontrolled haemorrhage.

   The UK adopted a similar policy regarding the use of these agents in Apr 2005.

c. Swift evacuation direct to a hospital facility, bypassing other field medical posts, although these may contain a multi-disciplinary medical team, is associated with an improved mortality.

Insight: The net effect of current practice was to draw 'forward' a greater weight of hospital medical support, with its logistic enablers and care facilities.

Insight: The average time from wounding to surgery of over 2_ hours appeared excessive, and urgent steps should be taken to identify the causes of delay, and to eliminate them.

In terms of casualty evacuation, the UK policy of relying on allocated rather than dedicated aircraft for casualty evacuation proved adequate in Iraq. Calls for

helicopter evacuation, possibly based on the perception that movement by air is 'best', may have resulted in delays and casualties being moved in less than optimal circumstances. Movement of casualties has to be dictated by clinical need (tempered by the tactical situation) and the person providing the first medical response will generally be able to make appropriate evacuation decisions. The Medical Group deployed in Iraq has now received armoured wheeled ambulances, following attacks on ambulances (one of which was fatal).

Although this may suggest a reduced requirement for helicopter evacuation, the improved force protection offered by armoured ambulances may be counter-balanced by longer evacuation times and lower quality patient care (owing to the ground and vehicle characteristics). There may therefore be an increased requirement for helicopters to make up for lost time.

Heavy reliance was placed on medical Reservists. Several factors need to be assessed here. Frequent changes in people can undermine continuity of care and affect Clinical Governance and Assurance measures, while long tours can result in clinical skill fade, and can create difficulties with NHS Trust employers. Risk analysis is important when considering the range of clinical specialists retained in theatre.

Contracted civilian nurses have been deployed in Iraq since mid-2004: this initiative has reduced pressure on the Defence Medical Services, but the contracts limit employment (for medico-legal or operational reasons). Employing contract nurses in general duties or away from a hospital facility can be contentious. The UK has been involved in multi-national medical support, hosting medical personnel from several countries. The UK has benefited from US medical arrangements, but there are limitations in the attachment of medical personnel to and from other nations through language, legal constraints and varying standards in clinical practice.

The Divisional Medical Staff were also involved in the medical reconstruction effort both by involvement in re-establishing local health services (which were neglected, often as a means of coercion under the Saddam Regime) and in initiating health practice reform. Medical planners needed a range of skills to be able to contribute to this programme, which follows Geneva Convention obligations. Successive Commanders Medical were involved in discussions with the Minister of Health in Baghdad, and with the CPA(South), necessary to ensure that projects to improve health care for the many were supported and not just prestige projects for a few. Raising standards and 'democratising' the health profession in Iraq was also important. Despite much good work, efforts across Iraq have not been uniform due to lack of central direction.

Insight: The consensus among senior medical commanders was that health activities as part of nation-building and reconstruction should be co-ordinated by the J9 branch of the regional headquarters. Regular and reservist staff with appropriate skills could be assigned to provide expertise in this area.

Lack of clarity over the position and entitlement of contractors and private military companies extended to medical care. There were significant numbers of non-MOD contractors in Iraq, and many arrived in theatre with no arrangements for medical organisations to treat or evacuate them if they fell ill or were injured. This task fell, *de facto*, to the coalition forces who were trying to reduce their medical footprint. JSP 567 Contractors on Deployed Operations (CONDO) indicates that the UK will provide full medical support only to contractors directly employed by MOD. It does not cover those on supporting contracts or private suppliers: Other Government Department employee medical support was a grey area.

Insight: Force planning staffs should be aware that medical support may have to support a 'population-at-risk' greater, and with a different spectrum of pathology, than the uniformed Service personnel deployed, including entitled contractors and, in some cases, individuals from Other Government Departments. Arrangements may have to be negotiated for support for other unentitled contract personnel.

Operation Telic 6 from May – November 2005

Multi-National Division (South-East) was led by Major General Jonathon Riley from January 2005, with 12 Mechanised Brigade under command.

UK Med Group was led by 3 Close Support Medical Regiment, with 205 (Scottish) Field Hospital (V) forming the nucleus of the hospital squadron.

Key operational events included the continued deterioration of conditions in and around Basra.

Lt Colonel Kevin Beaton, commanding 3 CS Med Regt, stated in his Post Operational Report of November 2005, how:

> "We were warned off for deployment in early October 2004. Predeployment training more than proved its worth, but for the lack of secondary care clinicians to add full value to the training package. Subsequently, 139 clinical personnel were rotated through 69 appointment slots, and we had to cope with seven different clinical directors over the six month period. A three month tour for continuity of the Clinical Director post was recommended. Personnel were drawn from 73 units, and better integration of pre-deployment training was deemed essential.
>
> Pre-deployment education substantially reduced the incidence of D and V, and heat related problems.
>
> Problems were found with all of the ambulance variants available to the Squadron. AFV 432 Ambulances had limitations with protection, speed and reliability. The Saxon was vulnerable to RPG missiles. Land Rover ambulances were vulnerable to small arms fire and were unstable. Warrior had limited space for casualty treatment. The requirements for a better vehicle were highlighted.

The delays caused by a 30 minute "notice to move" of the IRT at Basra Air Station were noted.

Problems with tented hospital accommodation were noted, as were difficulties with the reliability of the Air Bridge to the UK, and with the Medical eligibility Matrix, which determined who could be treated in Med Group facilities, primarily because of problems with subsequent "exit plan" for casualties from outside the chain of command.

The role of UK Med Group in developing training packages for a variety of Iraqi departments, including the civilian ambulance service, was noted.

Med Group personnel were involved in numerous Battlegroup and Brigade operations.

3 CS UK Med Group treated 6,886 primary health care attendees, 801 hospital admissions, and undertook 168 operations and evacuated 269 patients from Theatre. A CT Scanner was installed in the hospital on 4th March 2005. Clinical Governance was substantially improved and a large volume of medical supplies were reorganised.

Operation Telic 7 from November 2005 – April 2006

Multi-National Division (South-East) had 7 Armoured Brigade under command, with 29 Close Support Medical Squadron. 34 Field Hospital provided the nucleus of the Hospital Squadron.

Key operational events included the Iraqi National Elections.

Operation TELIC 8 from April 2006 – November 2006

Multi-National Division (South-East) commanded 20 Armoured Brigade

UK Med Group was founded upon 22 Field Hospital, providing Regimental Headquarters and Support Sqn, with 5 GS Med Regt providing the Close Support Sqn, under command of Lt Col Ashley Boreham. He who reported that:

"22 Field Hosp was simultaneously tasked to support 16 Air Assault Brigade Entry Ops into Helmand and to lead 22 Med Group in Iraq, which also included two RAF Hospital Squadrons on three month rotations. The unit contained many individuals with previous experience from Op Telic 5. The composite unit was drawn from 84 donor units. Problems continued with the organisation of personnel, collective training and individual reinforcements. Predeployment training at the Strensall Hospital Trainer was followed by direct deployment to Iraq to maintain operational tempo.

Key events during the deployment included the withdrawal from Al Muthanna, Al Amarah and Camp Abu Naji. Med Group assets were continually redeployed to

support the Basra North (Shaat al Arab Hotel) and Basra South Battle Groups (Basra Palace); border patrol duties (Operation Vedette), Operation Sinbad; a deployment back to Al Amarrah in support of the Iraqi Army and Police; and medical support of the Divisional Temporary Detention Facility.

For urban operations, medics were deployed in Warrior AFVs, backed up by Saxon Ambulances linking to the Helicopter Landing Sites. The forward deployment of appropriately equipped primary Health Care nurses was found to be valuable.

Med Group also organised the move of the Hospital from Shaibah Logistics Base to the COB at Basra Air Station, to take place a month after the Relief in Place of 20 Brigade by 19 Brigade

22 Med Group treated 1484 primary health care attendees, 4164 dental attendees, 940 physiotherapy patients and undertook 219 operations. 270 patients were evacuated from theatre. 85 soldiers with acute stress reactions were retained in theatre due to forward deployment of the mental health team.

Operation Telic 9 from November 2006 – April 2007



Multi-National Division (South-East) commanded 19 Light Brigade.

33 Field Hospital was the lead element of the UK Med Group, commanded initially by Lt Col Simon Price Thomas, and subsequently by Lt Col Martin A Toney. 24 Lt Med Sqn of 3 Close Support Medical Regiment provided the lead Close Support element.

33 UK Med Group took over from 22 on 8th November 2006 and handed on to 34 UK Med Group on 29th May 2007. 57 units contributed personnel. The first half of the tour was marked by the complex move of the Hospital to the COB. There was a substantial increase in hostile action and doubling of battlefield deaths and casualty flows, including two deaths from within the Close Support Squadron.

Teleconferencing with RCDM was introduced during the Tour, as was Platelet Apheresis and digital radiography. The uprated AFV 432 Bulldog ambulance variant was introduced.

Indirect fire onto the COB and the increase in IEDs on the roads added to the difficulties for personnel.

UK Medical Group – An overview of Op Telic 9
Lt Col S P Price - Thomas RAMC

"This was a most exciting period for the UK Med Group. The current UK Med Group, based on 33 Field Hospital and 24 Lt Med Sqn of 3 Close Support Medical Regiment, formed up into a single unit, conducted its Force Generation, Pre Deployment Training, has deployed and was just over half way through a 6 _ month tour at the time of writing.

The Pre Deployment Phase saw the usual organised mayhem of training activities taking place across the UK, and culminating at the AMSTC Hospex at Strensall. The Main Effort was the creation and maintenance of unit cohesion. I believe we have been successful and we now have a strong and happy, if a little tired, team of highly motivated professionals.

The tempo of operations in Iraq has increased markedly during Op TELIC 9. This has been reflected in the increase of casualties from Hostile Action that have been admitted to the Field Hospital. The various clinical teams and staffs have been tested on a number of occasions but they have not been found wanting. They have all risen to the challenge. It is easy to forget that the majority of casualties presenting at the Field Hospital have already passed through the hands of soldiers from the CS Med Sqn. Their achievements are evidenced by the excellent survival rate of casualties reaching the Hospital.

The most enduring memory of the tour to date must be the huge achievement of moving the UK Med Group from its traditional home at Horsley Lines at Shaibah Logistics Base, to its new home at the Contingency Operating Base at Basrah Air Station. It was a quite remarkable feat of detailed planning on an enormous scale. All Ranks played their part, but special mention must be made of the planning team and the Support Squadron for their perseverance, in what was sometimes a seemingly interminable catalogue of challenges. As if the move wasn't enough, the state of the infrastructure on arrival at COB left much to be desired, and the Lines remain a veritable building site even now, almost 10 weeks after the move.

Many of our people were young and inexperienced on arrival in Theatre. They have had to grow up quickly in the face of adversity and trial. I am enormously proud of their achievements and it truly has been an honour and a privilege to have commanded and served with them. I hand over to Lieutenant Colonel Martin Toney and wish him a successful remaining tour as Commanding Officer 33 Field Hospital.

The move of the United Kingdom Medical Group from Shaibah logistics base to the Contingency Operating Base at Basrah Air Station – January 2007
by Major Matt Wills RAMC

The plans for the closure of SHAIBAH Logistics Base were months in the making. They included the move of the United Kingdom Medical Group from its traditional home in HORSLEY Lines to the Contingency Operating Base at BASRAH Air Station.

The Estimate and much of the longer term work had already been done by the previous UK Med Group (based on 22 Field Hosp). Indeed, that UK Med Group had been able to allocate a Project Officer for much of its tour to overseeing the project and its build as the Medical Subject Matter Expert to the Royal Engineer Clerk of Works at the site. A mirror image of the HORSLEY Field Hospital, with a few minor amendments, was promised and during the Op TELIC 9 recces the hospital build appeared to be going as planned. Indeed, the whole project seemed to be moving along without anything more than the odd minor hitch.

The Estimate had shown that the UK Med Group would move as soon as the Hospital build was complete. This was going to be planned for late November but it soon slipped to Christmas week so the Op Telic 8 UK Med Group would be well gone and the Op Telic 9 UK Med Group would have been in the chair for about 6 weeks.

33 Field Hosp was well versed in the movement of its hospital. Exercise Loyal Ledger and most recently Griffin Focus had shown that; but moving a 25 bed Close Support Hospital was a very different proposition to a 50 (expanding to 75) bed, hard wired, concrete based, monster, whilst maintaining critical clinical capability throughout the event. Meanwhile 101 Logistics Brigade had taken over as Headquarters Force Support and had 'scrubbed' the plan it had inherited. The move of the UK Med Group became closely linked to the whole of Operation Revenant, the closure of Shaibah Logistics Base. The UK Med Group was to move first.

The UK Med Group's Planning Team was initially inexperienced both in concept and in general operational medical terms of Op Telic, but it soon learned and, following a detailed estimate update, Rehearsal of Concept (ROC) Drills at unit and

Brigade level, the UK Med Group was ready to go to print with a particularly detailed Fragmentary Order (FRAGO). Eventually, the complex J5 Plan and then J3 Operation turned out to be the easiest part. The Devil, as ever, was found in the nitty gritty of J4 Logistics, and J6 Communications and Information Technology. The Service Support paragraph was a real monster, ranging from moving armouries, ammunition bunkers; to moving the Chapel and the welfare telephones.

However, no military plan in modern Peace Support Operations survives first contact with a civilian contractor; particularly, one with several local sub contractors. The Hospital build seemed to get from bad to worse. Delay after delay. Meeting after meeting. Not even the Commander could bring any degree of urgency to the building site that was to become the new home of the UK Med Group. Even the gods played a joker card when a mini tornado swept through the unsecured tentage and destroyed much of it just weeks before D Day!

At one point the move was going to happen over Christmas. The Commanding Officer even wrote off the Festive Season, but the contractors saved the day and yet another delay pushed the move into the next year. In some ways this was viewed as a good thing. At least the unit could celebrate Christmas together even if most of the dinner was spent lying on the floor, after the Attack alarms had sounded!

The great plan was eventually unveiled and scheduled for the night of 5 January 2007. A series of daily convoys from Shaibah had soon moved all bar the essential medical equipment to the Contingency Operating Base. A container farm sprang up outside the Hospital site and Support Squadron strained at the bit to move onto the site; but delay followed delay, and the Cavalry Battle Group couldn't move out of the earmarked Med Group accommodation because its camp wasn't ready to receive them. After a few days of dual occupancy, (with some interesting but unrepeatable stories to tell at RQMS level), the Advance Parties were off their blocks and onto the site.

As the New Year dawned the Close Support Medical Squadron, from 3 CS Med Regt in Catterick, upped stakes and departed for the COB. A welcome source of manpower, they provided an invaluable impetus to the hard pressed soldiers of the Support Squadron. Almost immediately, the CS Med Sqn took up post in a Joint BLM with the RAF from the Basrah Air Station Medical Centre, continued to provide cover to the ongoing Strike Ops of the Battle Groups and ably assisted in the 'great unpack'.

Vast amounts of equipment had to be off loaded into the new hospital to prepare it to receive patients on the night of D Day. Electro Medical equipment had to be plugged in, calibrated and the power supply checked. Just before the move took place, the kitchens were destroyed by rocket fire, so friction had already been added by the requirement to ration in another camp.

122 containers were moved from Shaibah and unpacking the hospital took three days. The work didn't really finish until early February because the new office

complexes were not ready for occupation for a further fortnight after the move. Imagine the sight of RHQ, the Command Post, the Close Support Medical Squadron, and the Quartermaster's Department all operating out of the rear compartments of the Hospital Management Cell for three weeks. All sharing just two networked computers and a single phone. It was emotional, and tempers became a little frayed at the edges!

The matter was exacerbated by torrential rain which proved that the new hospital leaked at the canvas joins and that the accommodation areas really did flood. The matter reached crisis point when All available Ranks, including the Commanding Officer and the rest of his Headquarters deployed into the shin deep, liquid mud, to dig drainage ditches, build bridges and generally rescue some of the accommodation from ever rising flood waters.

But the crux of the plan has not yet been mentioned. Usually, when a Field Hospital moves, it packs up all its capability, moves, unpacks its capability and then opens for business. In this case, critical clinical capability had to be available at all times, with the minimum of clinical risk acceptable, and a hospital had to be ready for business at all times. Only the bare essentials of the hospital contents could be left behind during the move, as immediately after the move the hospital was to be fully operational.

The manning for specialised areas within the Field Hospital was tight. In order to be able to cope with a Major Medical Incident, the trauma specialists could only be away from their posts for the minimum of time. Although equipment could be off loaded into departments by Support Squadron personnel, it had to be placed in the correct places and checked by specialists, so these specialists had to commute by helicopter to COB from Shaibah over several days, to ensure the new departments were ready to go. On the run up to the chosen date, AEROMED was used to evacuate the more seriously injured casualties to UK and the less poorly were moved to the bedding down facility at the COB Medical Centre.

Since there was to be no reinforcement from UK of clinical staff to cover the move, a tight timeline was devised. The UK Med Group was nominated as the Divisional Main Effort for an operational window with a rolling H Hour. In the late hours of 4th January 2007 the clinical 'activators' were moved to the new hospital. They moved into their departments and conducted final checks of electro med equipment.

The Clinical Director was dispatched to the Brigade Ops Room to accompany Commander Medical, and assist with the regulation of any trauma casualties away from the UK Med Group and to other allied medical facilities, most notably American facilities at Tallil and Balad. With no trauma cases reported from the Battle Groups, the first clinical team departed Shaibah by Merlin Support Helicopter at 0100 hrs.

They flew direct to the HLS at the rear of the new build. They disembarked, moved

directly into the hospital, dropped off their body armour and helmets in their departments and prepared to receive casualties. The Field Hospital at the Contingency Operating Base was declared open, and within seconds the Shaibah Hospital was declared shut, and the 2nd team of clinicians embarked onto the Merlin.

The move from the Shaibah Hospital was planned meticulously. Personnel slept in Hospital Departments by Chalks. They were roused at the appropriate moment, moved in line down the hospital spine, in full rig carrying their specialist equipment. They received their final briefing and then moved to the Armoury where selected personnel were issued their weapons and ammunition. The column followed their guide along a path marked by cyalumes and then crouched in lines awaiting the arrival of the helicopters. There was hardly a sound, it could have been an infantry patrol preparing to start its Mission. The Merlin arrived with a clatter of engines and hot downwash. This was followed by the inevitable quickening of pace, the odd stumble in the dark, embarking the helicopter, struggling with the twisted seat belts and squeezing up as close as possible amongst the rucksacks and equipment.

The helicopter took off leaving Horsley Lines behind for the last time. The lights of Basrah City were visible in the distance and the slight shock and temporary blindness once the Merlin had fired its chaff en route for the COB was almost comforting. The Merlin landed successfully at the HLS and the column of people filed up the path to the new Hospital. All were met in turn by a smiling Commanding Officer who had been commanding the move from the makeshift Ops Room.

A final helicopter move brought the remaining staff and equipment. By 0440 hrs the Hospital Squadron was complete at the new site with full operational capability. The window of clinical risk had totalled 15 minutes with the help of additional support helicopters from the Joint Helicopter Force. There was even a Lynx flying Top Cover to give the move added protection. A final convoy of essential equipment packed in ISO containers, was escorted by the Rear Operations Battle Group. By sunrise the new hospital had all its equipment and all its people - a little tired perhaps, but fully operational.

A sizable Rear party returned to Horsley Lines for the final clear out, but within less than a week the final convoy including the CT Scanner was on its way to its new home.

The Op Telic UK Med Group is now based at the Contingency Operating Base at Basrah Air Station.

Op Telic 9: Support Sqn by WO2 A Purdie
OC Maj R Stephens RADC

The first elements of Support Sqn deployed on Op Telic 9 at the end of October. The Sqn was given an additional 45 personnel for the tour, which all brought essential skills to the support of the UK Medical Group from various cap badges.

The Sqn soon settled into Horsley Lines at Shaibah Logistic Base (SLB) after a smooth handover with 22 Field Hospital. Within weeks of our arrival we began the preparations for the move of the UK Med Group to the Contingency Operating Base (COB) at Basra. During the first month numerous recces were carried out and it was soon realised this was going to be a mammoth task, as a result the Regimental Quarter Master Sergeant, WO2 Andy Purdie was brought out from UK to assist the move. During this period the use of a mini bus almost immediately named 'the battle bus' became a common sight among convoys of WARRIOR and SNATCH vehicles. The Sqn also found time to win the inter Sqn volleyball and football competitions. The MT Dept, who it was said, had more time to practise and provided the majority of the team.

With the build up to Christmas and the impending move of UK Med Group to the COB the QM's Dept carried out write off action of Christmas to everyone's displeasure, cries of 'scrooge' could be heard echoing around Shaibah Logistics Base, and under extreme pressure Christmas was re-instated despite the impending move. The Sqn was given a well deserved day off for Christmas Day, which included a wonderful Christmas dinner, which had to be consumed whilst lying on the floor due to mortar fire. The New Year began in earnest with the move of the UK Med Group to the COB, with most of Support Sqn moving early to play key roles in the activation parties. The move went extremely well despite many hiccups along the way, mainly due to civilian contractors and poor weather, but also due to the flexibility and resilience of all members of Support Sqn we managed to get the hospital in place, on time and without losing any capability.

Since the move, the Sqn has been extremely busy supporting the UK Med Group and trying to make improvements to the infra structure of the camp which has now been transformed from a muddy bog to an excellent facility. The RQMS, WO2 Rick Fawcett, even managed to construct his own bridge, which he named Pegasus Bridge.

During this busy period on Op Telic 33 Field Hospital rear party should not be forgotten, they have carried out a fantastic job of ensuring personnel were collected at RAF Brize Norton for their R&R and continue to do so.

Op Telic 9: CS Med SQN Basrah City Life

2Lt Annear

Basra Palace Med Troop had a busy tour to the half way point and time of writing.

We were involved with many tasks that we didn't expect to be doing, including manning the 2 Rifles RAP, deploying with the Quick Reaction Force and acting as Coy medics on strike operations, in addition to providing a 24 hr BLM service and manning Casevac vehicles on operations. All the while under constant threat from mortar fire, rockets and the occasional small arms attack.

From the arrival in November, every member of the troop performed really well, most treating more trauma in a month than most medics see in a whole tour, as well as going on foot patrols and learning the intricacies of armoured infantry operations (where's the door button?) and shooting 30mm cannon. We had medics deploying by Snatch Landrover, Bulldog AFV, Warrior and boats and put more casualties on helicopters than we ever thought would be necessary.

The medics worked hand-in-hand with the infantry Battle Group and were regularly praised by patrol commanders for their competence and skills in contact situations. Nearly all of the guys have had to treat injuries out on the ground, providing the intimate support that is the crucial first stage in the evacuation chain. The knowledge that a medic is accompanying a patrol was a great psychological help to the fighting companies.

The opportunity to actually put into practise their hard earned skills has made most of the troop glad that they are here (or so they say…) and without our support to the BG a lot of blokes would be a great deal worse off.

The action of the medics during our MASCAL incident (caused by some of the incessant Indirect Fire attacks that we endure) exemplifies all that was expected, and a great deal more, of Combat Medical Technicians. Between our Medical Section and the small RAP we still had less than one medic per casualty and they performed immensely well, coping with a situation that saw us dealing with more casualties, all at once, than the hospital could cope with.

Op Telic 9: Harry's Private Life

Pte Harris

We arrived at Basra Palace in the early hours of the 6 Nov 07, disembarking without too many dramas. We were taken to our accommodation to get some quick shut eye before work the next day. Morning soon came and although it was November it was still very hot. We made our way over to the RAP where we met the 2 Rifles medics and the rest of the CS Med Sqn team.

I volunteered to do the night shift in the RAP - all was quiet until around 11 O'clock when the first rounds of IDF came in, I was told they were mortars. I had never heard it before, but it is a sound I have got very used to and I have had lots of practise at the Immediate Action drill.

In my first week I did a lot of primary health work, but my first casualty came from an IED on a bridge that had hit the Royal Marines. Most of the casualties had been taken to other locations, but this one was bought in by a RM Medic.

The MO had a quick look and we identified that it was a shrapnel wound, entry and exit, to his right hand. The patient was treated and evacuated. I saw him in the cook house a few weeks later which was good to see.

A couple of days later a call came in that a non British Call Sign had a casualty and was coming to our location. There were two casualties - one was taken straight into the RAP and I went to help with the second. It was indicated to me that there was nothing we could do. It was the first death I had seen in my short time in the army, and after I removed his personal effects and ammunition from the body I helped place the body in a body bag ready to be taken to hospital. Everybody remained very professional and the body was treated with the greatest of respect. A service was held and the body was flown back to the Hospital to be taken back to the UK.

More IDF came in that night and has done virtually every day since.

As CS Med Troop at Basra Palace we mainly carried out two roles, acting as Med Support for the QRF and acting as Med Support for Ops. It was only a matter of time before there was a mass casualty incident at the Palace. This happened when mortar rounds hit the QM's compound.

All medics were required but one of my colleagues and I were already attending to the casualties of an IED attack against a SNATCH patrol in another area. All casualties were treated and everybody at the Palace did an amazing job to get everybody treated and evacuated. To date at the Palace we have treated approximately 60 casualties and received over 400 rounds of IDF. I gained a wealth of experience and believe I am a better medic for my time at Basra Palace.

Op Telic 9: Life In The City – Tales Of The Saah Med Troop

2Lt Pete McGowan

Life on the mortar range was an interesting experience for the Shatt al Arab Hotel (SAAH) Med Troop. Based in the North of Basra City, we were attached to the 1 Staffords BG. The original Troop arrived late October / early November and took over from members of 5 GS Med Regt. Back in those halcyon days IDF attacks were few and far between. Since then we had a few changes to the team with several guys going back to UK for courses. But the professional work ethic remained constant throughout.

We began the tour with an intense training regime of moulages and clinical lessons, which soon proved to be valuable training. Six days after our handover, on Remembrance Sunday, the Troop was thrown into action. A Royal Marine boat patrol on the Shatt al Arab waterway was contacted by an IED as it passed under a small bailey bridge. The result was 3 T1 casualties with serious head injuries and a T3 casualty. The guys on the boat had to limp the long journey from the contact point. The bravery of the marines during this 50 minute move to safety is impressive and indicative of their organisation. As the boats came in our guys went straight to work, Triaging first then treating. The T3 casualty was brought to the med-centre whilst the T1 injuries were transferred to the Helicopter Landing Site to be flown out by the Incident Response Team. Unfortunately there were four of our comrades in arms who didn't make it on the long journey to the jetty.

Not long after that the Troop had to contend with the Troop Commanders "Luckiest Subby Alive" routine when he had a 107mm rocket go off 15metres from where he sat. Never mind the fact he was the other side of a brick wall with a big water tanker between him and the explosion! Since the start of tour until the time of writing we had over 800 strikes in camp, an area of less than a 1/2km square! Hundreds landed outside the perimeter but no one counted those. We saw the full range of the insurgent capability with 61mm, 82mm, 120mm mortars and 107mm, 120mm rockets. We experienced a number of shellings of 20+ rounds and the largest rocket bombardment in the City since MNF forces have been in the Country. It was during this bombardment that SSgt Fortey had to dive from the port-a-loo mid ablution! A sight more terrifying than the metal flying through the air! We had one BFA blown up (TWICE!!) a Saxon put off the road, our old offices fragged and the old crew room destroyed! One really had to complain at the service one receives at this hotel! However, the morale of the Troop never waned.

The hardest time was when the Troop lived down in tented accommodation. We had several close calls. The 2 Rifles Company based with us down in the tents and A Coy from 1 Staffords were not as fortunate. We had several strikes on the tents resulting in mass-casualty situations with several soldiers hurt, some extremely seriously. The work of the Troop in these situations was beyond compare. Most of the Troop were not long out of training. The guys had a hard tour. We have supported countless Ops, of which the Op launched on Christmas Day was by far

the biggest. It made a big impact on the news back in the UK; the mission was to shut down the Serious Crimes Unit of the Basra City IPS, an organization heavily corrupted and infiltrated by Militant JAM. This we did with style, blowing their base to smithereens!

The dangers faced by the guys should not be underestimated. All of the crews experienced RPG and SAF contacts against them and the call signs they were with on the ground, and the IED threat is high, but the Shatt Al Arab Hotel Troop was made of stern stuff and laughed in the face of such danger.

Special mention must be made of one of the team, Rory, who was seriously injured by an IED that saw a comrade killed. Rory was a medic from 5 GSMR who was attached to the RAP of the Staffords, but it is testimony to the closeness of the entire medical contingent at the SAAH that the injury and subsequent casevac to the UK of the big South African knocked the wind from our sails.

It was not all danger. The Troop had lots of fun and morale is kept high. Capt Peter Starkey, our extraordinary doctor, was usually at the centre of things. He has earned himself the nickname 'Sparkey' after electrocuting himself. The med centre used to be a restaurant of the rather grand hotel. Consequently, light fittings were shaped as candle stick holders to give the place a touch of class. The Troop Commander raised a giggle or two when he turned up to Pizza Night in his tux, a classy dresser one might say, that or his Barrack Dress Cap- too many viewings of Ice Cold in Alex!

Pte Robson 'cleaned' up at poker several times. Capt Smith, our original cameo from the RADC, lost so many times that Pte Robson invested in a mechanical dealing machine to speed up the humiliation process! Of course it was only for worthless chips they played - but the fun was there none the less! Pte Robson proved to be the master of many board game – Monopoly, Scrabble, Cluedo and Go For Broke! But chess was a different matter, Troopy beat you at that! Not that the Troop Commander was a sore loser or anything!

Day to day there was quite a bit to do, kit checks, lessons, maintenance and increasing force protection took up time. Everyone however, had time to keep in touch with home or just chill in their bed space. No one would miss the place when we left. But all would take with them a sense of pride that the job was well done!

Post Deployment Footnote

Lt Col S Price-Thomas RAMC

Reflecting on the deployment in the months following Op Telic 9 it was clear that this had been a hard tour, which had provided significant challenges to all ranks of the UK Medical Group. The casualty rate in the first 3 months of the tour had already exceeded the previous 6 months on Op TELIC 8, and was characterised by large numbers of casualties with multiple trauma.

Insurgent activity focused on increasing the frequency of indirect fire (IDF) on all operating bases using mortars of all calibre up to 120mm as well as rockets up to 240mm, and this led to several mass casualty incidents that stretched staff and resources to the limit. The cookhouse for the new hospital complex at the Contingent Operating Base (COB) at Basrah Airfield was destroyed just prior to the move of the Medical Group from Shaibah. Fortunately no one was injured at the time. IDF attacks regularly happened several times a day, often without warning until the first rounds had landed.

It was not just within operating bases that troops were feeling the pressure. There was a relentless increase in the numbers of Improvised Explosive Devices (IEDs), of increasing size and sophistication. Movement by road or waterway was equally hazardous, and it was during one such attack on a Warrior fighting vehicle in the early hours of Thursday 5th April 2007 that 2 RAMC Combat Medical Technicians, Corporal Kriss O'Neill and Private Eleanor Dlugosz, were amongst 4 service personnel killed when the vehicle they were travelling in was attacked by a massive roadside bomb. This came as a devastating blow to the families of the individuals and it sent a shockwave through the Medical Group.

Cpl O'Neill's new Commanding Officer, Lt Col Martin Toney, said:

"Cpl O'Neill was a reflective and utterly dependable soldier who used his maturity and common sense to great effect, becoming the squadron's "safe pair of hands". He would turn his hand to all sorts of things, including helping to rebuild Iraq by training the police service, and was a key player in the unit. My thoughts and





prayers are with his family and friends, especially his wife and children, at this hugely difficult time."

And of Pte Dlugosz he added: *"DZ was one of those soldiers who, despite a degree of shyness and a natural reticence, always surprised with her guts and determination. She returned to Iraq as a Class 1 Medic and almost immediately began patrolling in the city, first from Basra Palace and then latterly from the Contingency Operating Base. My thoughts and prayers are with her family and friends. She had such promise and her sudden death is a sad loss to all."*

Op Telic 10 May 2007 – November 2007

Headquarters, 1st Mechanised Brigade

3rd Close Support Medical Regiment and 34 Field Hospital (Lt Col T Rowland)

34 Field Hospital provided the RHQ, Support and Hospital Squadrons to Op Telic 10. 3 Close Support Med Regt provided the Close Support elements.

Lt Col Rowland reported the following observations:

"Op Telic 10 was the most sophisticated and best supported UK Medical Unit I have ever seen. Equipment was much improved. The Bulldog ambulance transformed battlefield treatment and evacuation. Living accommodation, communications and the rotation of personnel were much improved. The predeployment training package was much improved, allowing the unit to arrive in a high tempo operational theatre at the ready.

"Relief in Place of a force in contact is one of the most difficult military activities to undertake. My overriding concern was to ensure a seamless transition in the provision of medical support to the force, just as the Manoevre Brigade was stepping up its operational tempo.

Arrangements were made for IRs to deploy two weeks in advance of the Units' Transfer of Authority. Key staff were dispersed throughout the living accommodation to mitigate risk from IDF strikes. Role 2Enhanced staff with appropriate military and clinical skills were formed into tactical groupings and trained to react in extremis to operational requirements outside the COB.

There were two distinct phases to the tour. The first two months saw a very high casualty tempo. IDF against base locations generated a high rate of casualties, and there was even discussion about moving the hospital away from the COB.

The Bulldog ambulance, with its single stretcher fit and uprated communications, provided a dedicated treatment resource near the point of wounding.

Military Assistance to training Iraqi security forces was a key aspect of the second haf of the tour.

The need for continuity in the Clinical Director post was again noted. Airmobile support from a US Field Surgical Team was rehearsed as a contingency plan.

24 (Light) Medical Squadron
OC: **Major P A Carter RAMC**

Having completed an arduous, 7-month tour in IRAQ, 24 Squadron returned home to Catterick in early June 2007. Op Telic 9 has been recognised as the most medically demanding Op Telic thus far. We commemorated our achievements with a formal medal ceremony on 13th June 2007, which was presided over by the former Commander Medical, Multi-National Division (South-East), Colonel Chris Parker OBE L/RAMC. This was a chance to bring our families and friends to watch us demonstrate our prowess on the drill square, amidst the rebuild of Gaza Barracks! Having spent months in the sunshine, it was inevitable that the day would bring rain but that couldn't douse the pride felt by those on parade, and by those watching, on a job well done. The parade culminated in a service of remembrance for our fallen colleagues, Cpl Kris O'Neill and Pte Ella Dlugosz, with the privilege of the presence of their families. This was a poignant service that reaffirmed our commitment to remain steadfast through adversity, now and on future operations.

16 (Close Support) Medical Squadron
OC: **Maj F Bell RAMC**

"Op Telic 10 has already proven to be as far different to Op Telic 9 just as that was different to Op Telic 8. From charging around the Maysaan desert like Lawrence of Arabia in a…ahem…Battlefield Ambulance (BFA) to charging into the heart of Basrah on a strike Op in a Bulldog Ambulance (BDA, don't confuse the two, you wouldn't want to be in downtown Basrah in a soft skinned bullet magnet) life has been far from quiet. Sadly at the time of writing 1 Mechanised Brigade has lost a number of personnel. The Squadron has dealt with over 200 casualties either in the Contingent Operating Base or out on the ground."



16 Sqn 3 CS Med Regt Photo 1 – '16 Sqn Warrior Medics!'

Basrah Palace – Probably The Most Rocketed Palace In The World?!

"Sat at the HLS waiting for the Merlin Helicopter to come and take us away to the Palace all I could think about was the stories that was told to me on RSOI in Kuwait. Saying to myself it can't be as bad as people are making out, surely? After the short 20 minute flight that only seemed to last 2, I was there. Under the cover of darkness we jumped off the Merlin and were greeted by SSgt Williams. He gave us a quick ground brief and as we were heading to the accommodation I received the first of many IDF attacks. This one how ever was directed at the Merlin that I had just left, but it thankfully missed.

After the arrivals briefs, there was no time to settle in. The Troop Commander was straight into a strike op brief. Routine at the Palace consists of a 48 hrs Quick Reaction Force (we are integrated into a infantry warrior section on QRF and on 15 minutes notice to move, ready to be crashed out to any type of incident ranging from suspect digging in the roads to helping out a callsign that is in a contact), or Operations.

Whilst on Operations, you are transformed into a vampire, living at night, sleeping during the day. The type of ops that we are doing up at the Palace ranged from mortar base plate checks to full on strike Ops. We were the first medical section deployed to the Palace using the Bulldog ambulances so we were right up there

with the infantry guys showing our presence, which was a great morale boost to them knowing that we were there just in case. Although it was very taxing it was rewarding knowing that it is helping rebuild Iraq's future."

by Cpl Buxey

Maysaan Province – Borders North Battle Group Medical Troop

Working with the Borders North Battle Group (BNBG) was an arduous and emotional experience, but it was never boring. We were kept busy either dealing with medical issues, keeping kit clean or going on operations. General day to day administration was challenging in itself - there's nothing like doing 'stag' in 50 degrees and it's always frustrating to open the doors of your Battlefield Ambulance to find Miami Beach staring back at you when you know you cleaned it out the day before!

I found living in the desert was at times difficult but at the same time we were our own entity, and were away from the usual pace of life in the Contingent Operating Base. Doing up to 21 days at a time on rations the mere sight of an apple or some tinned fruit could make your day. Water was the biggest issue of all as just laying down during the day was taxing and it was common to wake up for 'stag' in a pool of sweat. Water was parachuted to us every few days but the crates would often break on hitting the deck leaving water bottles all over the place and we spent many an hour loading up broken reefers. More often than not when you got your allotted amount in the morning, it was the temperature of bath water, great for the showers that we weren't allowed to have!

by Pte Kempster

Contingent Operating Base (COB) Troop – Blue Light Matrix

"My first crash out on the COB was to a T1 casualty that had been hit by some shrapnel during an IDF attack. We arrived on scene and I quickly began treating the casualty who was bleeding from an arterial wound on his left arm, which I stopped by applying a CAT tourniquet and we quickly transported him to the Hospital. On returning to the Blue Light Matrix, I sat down and the shock of what I'd just seen and done hit me, I began to question myself; did I do enough for him? Did I put him at ease and make him feel like he was going to be alright? You don't really get the time to think about it when the call first comes in because you are too busy preparing yourself and your kit.

Every time the mortar alarm sounds now I wait for the phone to ring in the BLM office to inform us that there as been a hit on the COB and that we have casualties.

I've treated many more casualties since then and I've gained a great deal of experience from that, I've dealt with many different types of casualties ranging from shrapnel wounds from IDF, gun shot wounds, casualties involved in RTCs, broken ankles from sports injuries and the more routine primary healthcare problems. I've also been involved in a mass casualty incident which really tested my medical skills and knowledge, all in all it has proved to me that the constant training we do is vital to our jobs as medics."

by Pte Bryant

The pace of operations in Iraq and Afghanistan was such that field medical units were in a continuous cycle of training and deployment, as the following accounts from 3 CS Med Regt squadrons back in the UK indicate.

The Pre-Hospital Emergency Care (PHEC) group
Maj D Woodward RAMC Regimental 2IC

"Significant improvements were made in the provision of the in-Theatre emergency response capability following our creation of a Pre-Hospital Emergency Care (PHEC) Group. The PHEC Group was instrumental in identifying best practice and areas for improvement, as well as developing mutual understanding between the 3 key PHEC providers: the Close Support Medical Squadron; the helicopter Immediate Response Team (IRT), and; the Role 2(E) Emergency Department (ED).

Achieving common knowledge of each others' Tactics, Techniques and Procedures (TTPs) has ensured a far smoother passage of information and handover of casualties between the key PHEC providers. Such improvements have been vital in ensuring the smooth introduction of the BD Ambulance into the evacuation and treatment system.

Formation of the PHEC Group has brought 2 additional benefits. First, an integrated monthly PHEC training programme has been established to enable all elements to train and learn together. Subjects covered have included: armoured vehicle extraction drills by day and night; use of airway adjuncts; catastrophic haemorrhage; ballistic trauma, and; major medical incident scene management. Second, a common Group ethos has been the established through a monthly forum involving the Officers and SNCOs from the 3 tactical elements. The forum enables issues to be raised, developments proposed and incidents to be reviewed as a means of identifying areas for improvement. The PHEC Group has been a great success and the format is commended to all.

12 (Close Support) Medical Squadron
OC: **Maj P Tynan RAMC**

12 Squadron had a large number of soldiers detached to support more pressed sub-units. Despite this pressure, 12 Squadron used its time productively to maintain key equipment and conduct high quality training without losing regular sports afternoons!

With our sister squadrons committed to operations, we were also the Regimental Reserve and, as such, successfully met the demand for Op Telic 9 and 10 backfilling and operational reinforcements. In addition to Operations, the Squadron supported the Army Primary Health Care Service and major exercises worldwide. It detached personnel as far a field as Cyprus, Gibraltar, Belize and Canada, laying claim to be a truly global sub-unit!

A relaxed pace at home, however, allowed it to develop a young and keen – if as yet inexperienced – squadron across key foundation areas. In particular, the Squadron became considerably fitter under the guidance of Troop Commanders and Physical Training Instructors. It gained a broad experience of Armour command, operation and maintenance from a few old hands and some keen 'young bloods'. The spread of Operational and Training Support Plot commitments also helped maintain levels of medical and operational skills in those individuals who had the opportunity to deploy.

Recent highlights included Ex Starlight Soldier, an entry level exercise that marked the start of a gradual build-up towards operations the following year. This exercise covered some of the current operational Tactics Techniques and Procedures (TTPs), basic patrol skills, map-reading and navigation. A varied program of medical moulage training from mass casualty management through to long-term field care provided the clinical challenges. We were extremely fortunate to be able to include amputees in some of this training, adding reality and in one case a 'shock factor'. Many readers will share our conviction in the benefits that such involvement brings through exposure to the unexpected.

7 (Critical Care) Squadron
OC: **Maj D Hill QARANC**

7 Squadron received an influx of junior manning over the last few months, allowing us to start the build-up towards critical mass for Op Telic 12 where we are due to form the nucleus of the Hospital Squadron. During this period, training concentrated largely on confirmation of individual skills and gaining a growing familiarity with the tentage and medical equipment back-loaded to us from the old Dressing Station establishments. We deployed to Swynnerton on Ex Starlight Shot 5, a squadron-level training event focussed on developing field skills, including Battle PT, contact drills, patrolling, night navigation and harbour area procedures.

We were proud to note that Capt Jon Bell QARANC was awarded the British Journal of Nursing's Defence Nursing Award for his submission, 'The Regimental Nursing Officer on Op TELIC: Blended Practice in the Operational Environment'.

Headquarters Squadron
OC: **Maj H Carter RLC**

Headquarters Squadron supported all 3 Close Support Medical Regiment sub-units with their respective tasks as well as functioning as a cohesive Squadron in its own right. 24 (Light) Medical Squadron's rear party was returned to them intact upon their return from Op TELIC 9. As always, personnel were posted in and out with alarming regularity.

In addition to keeping the Regiment on the road, Headquarters Squadron also contributed heavily to other tasks and trawls and deployed its members as Individual Reinforcements to Iraq, the Former Republic of Yugoslavia, the Falkland Islands, Kenya and Afghanistan.

The BOWMAN vehicle conversion programme kept a number of Squadron personnel in gainful employment. The Light Aid Detachment, Mechanical Transport Troop, Radio Troop and Quartermaster Technical Department all worked hard to meet tight deadlines. .

Gaza Barracks continued to be rebuilt. The Squadron Senior Clerk, Cpl Mardling organised a well attended 'Night at the Oscars' Squadron Summer Function which saw poet Pte Lindsay Ashton auction a signed copy of her published book of verse Listen for the Army Benevolent Fund which raised over £180. Headquarters Squadron has also found time to pursue sports. Most of the Light Aid Detachment could be seen hanging from rock faces on a Wednesday afternoon!

by WO2(SSM) T Jenkins RAMC

The AFV 432Mk3 "BULLDOG" Ambulance variant

"The Bulldog Ambulance has proven to be a great extension to the life saving equipment in the United Kingdom Medical Group's armoury. There is now the capability to push an armoured treatment platform out on the ground with the Battle Groups, saving lives by getting the medics where they need to be with the kit they require. Fitting the medical kit required some modifications and ingenuity, a lot of trial and error and hopefully a few hundred quid from the GEM Scheme!

Sitting on an Ambulance Exchange Point at the front of Ritz Gate, you can't help but get a feeling of wonder as you watch the Battle Groups drive past in Warriors and Challenger 2s; sadly the Bulldogs don't have that same "Wow" factor to them, looking like the little annoying brother that's always tagging along when the big boys go off and play, but the Battle Groups are always the first to say how happy they are having the Medics out on the ground with them. The vehicles have proven themselves time and again during ops where their presence has saved lives. The Bulldog has given commanders the opportunity to push a higher level of medical care further forward than was previously available."

by 2Lt P Sturgess RAMC



16 Sqn 3 CS Med Regt 'The improved armoured treatment platform.'



16 Sqn 3 CS Med Regt – 'The BULLDOG Ambulance fit.'



The Bulldog Armoured Ambulance

How the Bulldog Ambulance changed operational planning
by **Capt P Leighton RAMC Ops Officer**

"From the start of the tour the UK Medical Group worked vigorously to integrate itself fully into the operations conducted by the Battle Groups (BGs) of 2 Royal

Welsh, 4 Rifles, 1 Irish Guards and 1 Royal Horse Artillery. The arrival of the armoured Bulldog Ambulance was a key enabler in this process with the vehicle providing a reliable treatment and evacuation platform to augment the BGs own integral medical assets.

During June and July 2007 the UK Med Group supported 64 operations including: Brigade and Battlegroup strikes; sustainment convoys, and; enduring, enabling and support operations. Its core role, however, was as a key component of strike operations when the BD Ambulance was usually positioned within the outer cordon, ready to deploy forward to retrieve a casualty or act as a treatment platform. Such activities required detailed pre-planning and coordination, ideally with at least 2-3 days notice, but immediate operations could be planned and initiated within a few hours where necessary.

As the BD Ambulance was a piece of equipment new into service, UK Medical Group was responsible for developing the Tactics, Techniques and Procedures (TTPs) for its use on operations. The foundation TTPs are complete but they will continue to evolve with each successive operation. For example, one TTP innovation was the standardisation the layout of medical equipment within the vehicle across the entire Iraq operating fleet. As a result, Treatment Teams could operate with ease in any of the Brigade's vehicles, a key consideration when under pressure in volatile tactical situations.

Lt Col Rowland's summary of the tour included the following comments:

"The task of forming and deploying a UK Medical Group remains a unique and stimulating challenge. Bringing personnel together from all 3 Services and a whole range of different parent units presents a host of operational and administrative issues to confront. The Op Telic 10 UK Medical Group was no different. 34 Field Hospital provided the bulk of the Unit's framework, supplying the Headquarters staff for the Regiment, Hospital and Support Squadrons, but the vast majority of the Unit's personnel came from 3 Close Support Medical Regiment and deployed individual augmentees.

Establishing Unit cohesion early is, therefore, vital and existing pre-deployment training (PDT) events were used as combined training opportunities. In particular, key command and control; elements from 34 Field Hospital joined 16 Close Support Medical Squadron on the 1st Mechanised Brigade Mission Rehearsal Exercise in March, followed by a reciprocal arrangement for the Hospital Pre-Deployment

Training and HOSPEX in April and May. These combined training events allowed key Unit elements to operate in role and, most importantly, build mutual awareness and cohesion.

When training is finished the real test of the operational environment awaits. No matter how much you study or experience Iraq it always manages to confound expectations. The first half of the tour has seen the path towards Iraqi self-reliance continue to make good progress, staying on its prescribed path but with many twists and turns along the way. Flexibility to adapt to the unexpected has been a key requirement and that has certainly been the case with the significant rise in the threat from indirect fire (IDF).

During the first few weeks of Op Telic 10 it was the troops operating outside the Contingency Operating Base (COB) who bore the brunt. Now those within the COB have also been subjected to severe tests of character. Tactical challenges abound and after several tours where the Close Support Medical Squadron was limited in its ability to support tactical operations, the introduction of the Bulldog Ambulance has enabled a return to the provision of truly mobile medical support.

Throughout all of these challenges, leadership at all levels was outstanding, with an utter dedication to the task at hand by every member of the Unit. This was universal, with no distinction made as to whether someone was Regular or Reservist; RN, Army or RAF; Serving or Civilian. The strength of character, camaraderie and most of all good humour that was seen every day was testament to how well we recruit and train our personnel. A solid group cohesion exists and it was an honour to see the courage and resilience displayed by all members of the Unit during the first 3 months of this tour."

Operation Telic 11 from November 2007-April 2008

Multi-National Division (South-East) commanded 4 Mechanised Brigade.

UK Med Group comprised 1 CS Med Regt, commanded by Lt Col MS Bell. Uniquely, the Hospital element was built directly around the 1 CS structure, rather than from a separate Field Hospital.

Lt Col Bell commented that:

"Op Telic 11 has been a unique deployment with more change than I have ever experienced on operations, and with a much clearer chain of command based upon peacetime formation command structures and familiarity, which in turn helped me to develop a coherent predeployment training package. Populating the final Operational Establishment Table (OET) remained a challenge, as did the frequency of turn over of clinical staff and clinical directors. Clinical Directors should deploy for three months each and be exposed to some specific leadership and management training. Clinicians deploying to the Hospital should exchange some time from the three week predeployment training for operational deployment.

"The deployment evolved through three very different and overlapping phases:

1. The Force Level Review, from December 2007 to January 2008. On Takeover of Authority, the Med Group was based solely on the COB. Close Support elements were tasked to 4 Mech Brigade manoevre teams; to the Divisional Internment Facility; to Umm Qsar and to the Kuwait Support Facility. The combat force was reduced from four to three Battle Groups and from 14 to 11 subunits.
2. The Tethered Goat Phase, from January to March 2008, when IDF attacks on the COB were frequent and morale was affected. The Mastiff ambulance variant was well received on arrival in February 2008.
3. Charge of the Knights, from March to May 2008. The Med Group focus changed rapidly from supporting MNF operations to supporting Iraqi Security force operations and treating large numbers of their casualties. (Monitoring, Mentoring and Training, M2T). Three major incidents were well managed by flexible use of all hospital staff

The experiences of 1 (Close Support) Medical Regiment on Telic 11:

Lt Col Bell also wrote this article in the RAMC Magazine in June 2008:

"Having deployed on the Telic recce two days after moving into my quarter, I spent my first week in command in hot and hostile Basra. Recce complex, we embarked on the best predeployment training package I have ever encountered. It was hard work, taking us away for 9 out of 13 weeks, but the training has borne fruit here in Iraq with our officers and soldiers producing world class levels of care in difficult circumstances.

Deploying in late November, we spent some time in Kuwait acclimatising to the desert. The flight into Basra was the turning point. After 10 minutes of banter on the Hercules C130 the lights changed from their usual white to the dull green we were soon to get used to. Faces changed, the banter stopped and the tour began.

Within an hour of our first shift in the hospital we had casualties and an IDF attack. Well rehearsed drills gave us early confidence. Casualties were mercifully light and the real leadership challenge was to keep everyone fresh and motivated, with Regular education and training and daily operations in support of the battle groups. Our people performed with great effect and I was continually heartened at the respect and dignity shown to out patients. Many hidden talents also emerged from the Medical Group, and Xmas saw 10 acts on display in our "Brady's got talent" contest, the best four going through to a final on New Year's Eve.

Whether working out on deployed operations in our armoured vehicles, around camp in the emergency ambulances, through the hospital or in the admin departments, I was humbled by the efforts and fortitude displayed by all in the

Medical Group, and was honoured to command such a fine group of people. The people with whom I have deployed have helped make this the best of my five operational deployments, bringing Fun, Style and Excellence to the deployment.

The Med Group Support Squadron on Op Telic 11

1 CS Med Regt Adjutant Ian Razzell and Major Mike Covell commanding the Med Group Support Squadron give a more detailed account of the sophistication of the preparations by now in place to prepare a Medical Squadron for deployment to Iraq, as for the 170 personnel of 1 CS Med Regt in early 2007:

"A six month tour now seems like twice that once you get into it. It starts with the In Barracks predeployment training (PDT) phase, followed by mandatory OPTAG (Operational Training and Advisory Group) briefing periods; a field training exercise (FTX) in Sennelager; the Mission Rehearsal Exercise (MRX) with 4 (Mech) Brigade in Hohensfeld; and finally the Hospex at Strensall, where there was a frenzy of activity to receive and integrate the Individual Reinforcements (IRs). This was followed by as much leave as we could fit in before arriving at Brize Norton or Hanover for a flight to Theatre. We were all very tired and upbeat by November 2007.

Within days the advance party left Germany for Kuwait, followed by the Command Group and Main Body. The Reception, Staging and Onward Integration (RSOI) package in Kuwait was well designed for a Brigade to rotate through, although PT at 5.30 was an unexpectedly cold shock to us. The package included the Dismounted Patrol Scenario, in which soldiers were taught to deal with a mass crowd surrounding them. After 8 days, we prepared to move north to the Contingency Operating Base in Basrah.

The previous Med Group had clearly achieved a huge amount of work on the tour, and the winterisation of the new Brady Lines was almost complete. The handover from 34 was completed with a Flag Day which provided time for reflection for those leaving and sombre anticipation for those arriving. The test was not long coming.

Xmas was soon upon us. The Command Team entered the stocks for the ritual pie throwing competition, and others recovered from the 5km Turkey Trot run. All around the lines, Secret Santa was calling; lunch was served to all ranks by the Officers and Senior Ranks, and every opportunity was taken to enjoy the day so far away from home and family.

In the New Year, we had a large number of visitors, including senior politicians, service chiefs and the comedian Lee Hurst.

A View from the 1 CS Med Regt RHQ on Op Telic 11 . . .

"The soldiers of the RAMC train hard, fight harder and their task never gets any easier. Over the past few months it has been a privilege to watch some of these young service men and women become part of the exceptional Op Telic UK Med Group team.

It has become clear to me that many of these people remain as the unsung. The Support Squadron personnel who double check that each individual has their life saving personal protective equipment. This includes the soldier who reports for a 24 hour guard just after completing medical cover for a logistics convoy; and the Combat Medical Technician who distributes the entire contents of her parcel from home to her patients on the surgical ward. As they put it, "Just doing their job" .

. . . and from One Troop Commander Oliver Norris' experience:

Picture the scene: The troop commander walks into the tent and the troop fall silent. He pauses for dramatic effect, preparing to brief them on exciting upcoming operations. He leans on a solid looking cardboard box for dramatic effect. The next thing he knows he's upside down like a turtle on its back, wedged inside the cardboard box and weighed down by his entire battle rattle, unable to lift himself out. The soldiers are falling about in laughter and no one is offering to help him up. The tour hadn't started well for me.

1 Troop 1CS Med Regt deployed in November 2007 and spent the six month tour supporting operations by the 1 Scots Guards Strike/manoeuvre battle group, so we were the busiest bunch in the Squadron.

Two thirds of the tour passed off relatively peacefully. IDF and IED, although frequent, has relatively limited effect and we rarely went into the city. IDF was quite exciting initially but the novelty soon wore off: especially if you were stuck in the ablutions.

The most frequent type of operation was a counter IDF/IED patrol, but we also spent periods in the desert, training the border police and working with the Iraqi Army. These operations were risky to mount as the Battle Group had to move through the City to get to the Desert. One operation saw a successful IED strike on a group of soldiers conducting dismounted drills. Fortunately, due to good training, equipment and care given by Sgt Lazarus and LCpl Walsh, their injuries were manageable.

In April 2008, Iraqi Security Services entered Basra to fight it out with the militias. Initial operations were bloody for the Iraqis, so we saw lots of casualties being evacuated to the hospital. Our Bulldog ambulances went out in support of all UK-supported operations, and eventually spread out of the city as far north as Al Qurnah. Some operations were exciting and eventful. Others spent weeks in the desert baking in the sun. Our doctor, Capt Caldwell, was the jinx that meant we'd be stranded in the desert for days or weeks on end. Overall, it was a good tour; mostly safe but with enough danger to prevent it from becoming boring!"



Mastiff variants on patrol in Iraq (source: Defence of the Realm BlogSpot)

Operation Telic 12 from April 2008-November 2008

GOC Multi-National Division (South-East) commanded 7 Armoured Brigade

3 (Close Support) Medical Regiment, under command of Lt Col AT Spooner, headed the UK Med Group.

Key operational events: consolidation of Iraqi Government control of Basra. Military Transition Team (MiTT) activities formed a central element of the work.

The problems of securing and filling the OET in advance of deployment were once again highlighted, as were difficulties in securing clinicians for the predeployment exercises, and the frequency of rotation of Clinical Directors. The experience of managing complex trauma in Afghanistan fed back into preparations of the Iraq Med Group.

The Mastiff Ambulance was adopted into service, and became acclaimed as the vehicle of choice for evacuation in rural and city environments. Operational work included support of the Strike Battlegroup, convoy support, prisoner care, and hospital care of casualties.

And from the Defence Intranet Fact Sheets:

UK medics support Amarah operation

"UK medics have been providing vital assistance to US troops operating in Amarah. The MiTTs from the United States Marine Corps have been supporting Iraqi soldiers in an attempt to remove militias from the town of Amarah,



Medics: Captains John Bell, Alice Parr MD, Sergeant Henderson, Lance Corporal Richardson, Private Wadworth, Signaller White and Lance Corporal Rorkes
[Picture: British Army]

approximately 80 miles (129km) north of Basra. As part of the operation they requested help from British medics based at the Contingency Operating Base at Basra International Airport.

The team from the UK Medical Group, Royal Army Medical Corps provided lifesaving treatment in support of Operation Herlad of Peace. Deploying to Amarah in Merlin Helicopters the medics met up with their US colleagues at Camp Condor before moving to a Forward Operating Base on the outskirts of Amarah itself.

The medics worked for 1st Iraqi Army Division and their US MiTTs. On the evening of the operation the atmosphere was tense, as Private Wandworth, one of the British medics explained:

"It was a busy time for everyone, whilst we set up the medical facility we could see the US MiTTs and the Iraqi Army preparing for the operation, I think everyone expected the militias to stand and fight and it was a nervous time for everyone."

Operation Herald of Peace was regarded as a success for the Iraqi Army and their US MiTTs. Amarah town was secured without loss of life and a number of militia leaders surrendered.

For Captain John Bell, the nursing officer in charge of the team, this was a chance to be part of something different:

"This was a fantastic experience. We deployed a Role 1 treatment facility at short notice by helicopter in support of a fast-paced operation. We were impressed by the professionalism of the US Marines and the Iraqi 1st Division who were living in pretty austere conditions and we couldn't have been made to feel more welcome or appreciated for our contribution."

Operation TELIC 13 from November 2008 – May 2009

Multi-National Division (South-East) commanded 20 Armoured Brigade

The UK Med Group was led by 22 Field Hospital with close support elements provided by 30 CS Med Sqn from 1 Med Regt in Germany. It was commanded by Lt Col RJ Heatlie, who reported that:

"Preparation was again a challenge, as the subunits were widely dispersed and at various stages in training cycles. Hospex helped develop a cohesive unit. Once again, a need was identified for a consolidated and centralised approach to the management of the OET and of the individual reinforcements.

The medical mission Main Effort for Op Telic 13 was defined as robust support for clinical timelines, and auditable redeployment of medical equipment and material.

Key operational events included a substantial reduction in insurgent activity in tandem with the improved effectiveness of the Iraqi Army. Medical capacity was progressively reduced with the reduction in size of the Operation, and preparations proceeded for a Relief in Place of US Units moving in to Basra. The Medical component of Op Telic was ultimately closed down in good order.

There were three general phases to the deployment, which were helped by a low level of clinical activity.

The "Deny" Phase was a staged reduction of capacity and the medical "footprint".

The Transition phase addressed the handover to US medical units, such that a seamless transition was complete by 1st May 2009.

The Redeployment Phase saw the recovery of the unit and equipment to home establishments, as part of the logistic Operation Brockdale.



Operation Brockdale in progress: the repatriation of equipment from Op Telic through ports in Kuwait at the end of Op Telic 13

Chapter 13b Resources and References

The UK Med Group Ops Telic 2-13
Source: operations.mod.uk/telic/med_gp.htm (2005)

Commanding Officers Post Operational Reports
(Courtesy Army Medical Directorate)

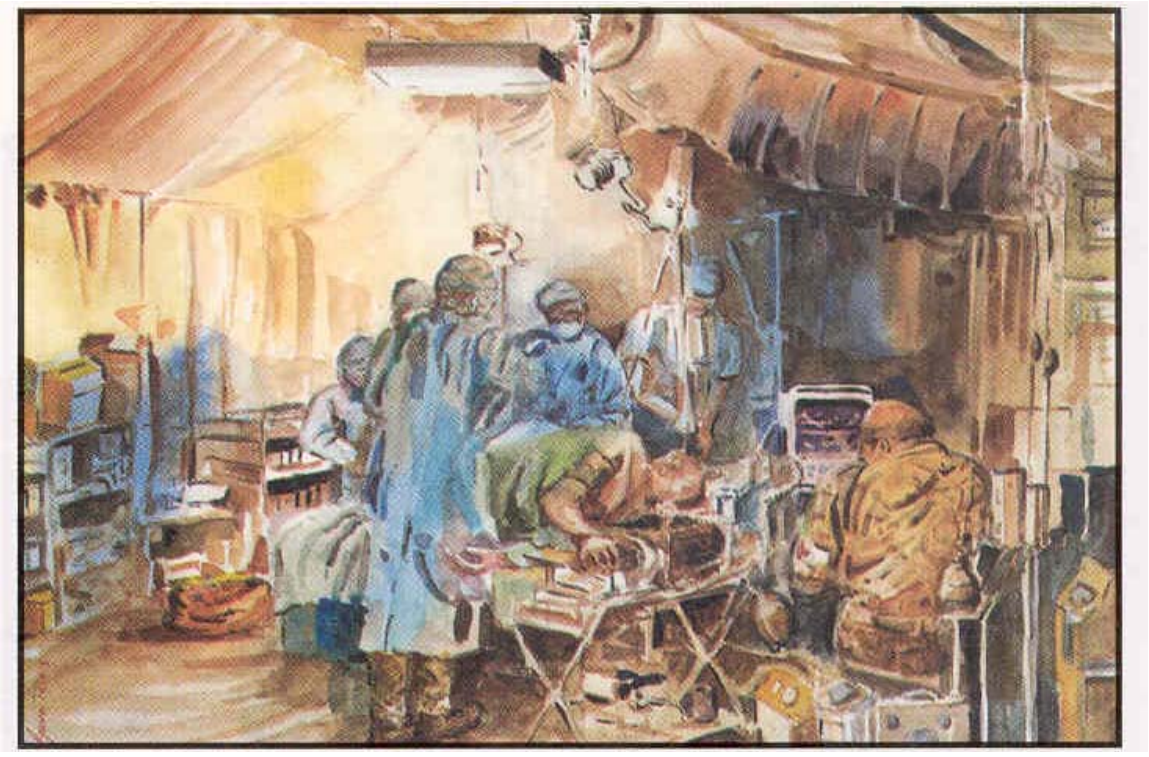
Unit articles in the Journal of the Royal Army Medical Corps,
Courtesy of Captain Peter Starling, Editor of the Journal.

Blood, Heat + Dust: Second Edition

Operation Telic and the British Medical Deployment to the Gulf 2003 -2009

Chapter 14:

An Introduction to The Field Hospitals on Op Telic 1



Painting: *The operating theatre*

Artist: Gora Pathak 2003

Introduction

Field hospitals have been a key element in expeditionary operations over two centuries. Their core functions and principles have changed little, but the technology, mobility and expectations have developed dramatically in recent decades. In 2003, the army was supported by three regular army field hospitals, and by 11 reserve field hospitals. The three regular units are 22 Field Hospital, based in Aldershot; 33 Field Hospital, based in Gosport; and 34 Field Hospital, based in York. The regular hospitals are cadreised, such that they only comprise a small number of staff during peacetime maintenance. They are staffed by regular personnel drawn when required from Ministry of Defence Hospital Units (MDHUs) in NHS hospitals and from the Royal Centre for Defence Medicine (RCDM) at the University of Birmingham. They create a rapidly deployable 25-50 bed hospital. Further expansion for major deployments such as Operation Telic requires reserve mobilisation to fill the posts. The three hospitals rotate the rapid readiness 'spearhead' capability on a three-yearly cycle.

The 11 reserve field hospitals are held at varying levels of readiness, and staffed to various levels of completeness. Their designations and bases are 201 (Northern, Newcastle); 202 (Midlands, Birmingham); 203 (Welsh, Cardiff); 204 (North Irish, Belfast); 205 (Scottish, Glasgow); 207 (Manchester); 208 (Liverpool); 212 (Yorkshire); 243 (The Wessex, Bristol); 256 (City of London) and 306 (Nationally recruited, York). Specialist staff are also held on the strength of the central manpower pool of the Army Medical Services, based in York Garrison. Thus, the staffing of 202 (V), 22, 33 and 34 Field Hospitals in the Gulf in 2003 included contingents of volunteers from many of the other units.

The resource of health professionals to man any one hospital on deployment is thus drawn from both regular personnel and from reserves, who are in turn employed principally by the National Health Service. No one unit is fully recruited in all disciplines, so the mobilisation of one complete unit for war draws upon personnel from many different peacetime units. This has the practical advantage of spreading the demand on health service staff across the country, and not unduly denuding one or a few NHS hospitals of key personnel. It has the disadvantage that staff may not have worked together until deployment.

Operation Telic I

In support of Op Telic 1, an entry Field Hospital was initially set up by a team from 22 Field Hospital, and expanded by a full Regular team under 33 Field Hospital at Camp Coyote in Northern Kuwait.

33 Field Hospital was relieved in place by 202 (Midlands) Field Hospital (V) just before the start of operations on 20th March 2003, and then held in reserve for a further three weeks before returning to the UK.

Meanwhile, 34 Field Hospital was training in reserve in Kuwait for a move directly to Shaibah logistics base in Iraq, where it set up under fire at the end of March 2003.

202 Field Hospital continued to function as a level 4 specialist facility until early May 2003, when it moved up to Shaibah to relieve the staff of 34 Field Hospital.

Meanwhile, the hospital ship RFA Argus was patrolling in the Northern Gulf, providing additional hospital capability afloat until she was withdrawn in late April.

During the quiet phase of operations from May to July 2003, the staff of 202 built an upgraded tented hospital at Shaibah to replace the war stock of tentage and equipment, before being relieved by 33 Field Hospital at the end of Op Telic 1.

The capabilities of Field Hospitals

Field hospitals are modular, transportable and temporary units which are set up for a particular phase of a campaign. They comprise the physical infrastructure and the personnel who man them. They are deployed to war zones to provide Level 3 care for injured military personnel and civilians. British Military Field Hospitals are organised and equipped primarily for the provision of early hospital care to the deployed military force and to battlefield casualties. They provide a temporary holding capacity for troops with transient medical problems who can be returned to duty, and for casualties with more severe injuries prior to their onward transfer to base hospitals. They are designed for short casualty holding capacity and rapid throughput, and not organised for the treatment of large civilian populations in areas under the control of the military, such as was initially the case in southern Iraq in 2003.

The field hospitals are a key link in the casualty evacuation chain from battlefield wounding to the UK. They are also the epicentre of many other medical services in theatre, including primary health care; short term dormitory accommodation for disease and non-battle injury patients with conditions such as heatstroke and gastroenteritis; minor casualties; environmental health management; vaccination programmes; an accident and emergency unit; and facilities for specialist outpatient care, including dental and ophthalmic patients. In practice, the trauma function of the field hospital is only a small component of its overall work.

Aeromedical and helicopter evacuation allows stable casualties to be moved at speed and in relative safety from the field hospitals to base hospitals in the UK and elsewhere. There is now little need for the large, deployed base and evacuation hospitals of the Second World War, or such as were planned to treat large numbers of casualties if the Cold War between NATO and the Warsaw Pact in Central Europe from 1945-1990 had ever turned hot. In this chapter, we consider the challenges of deploying and running a field hospital during modern expeditionary warfare. In later chapters, we look in detail at the work of the two main UK field hospitals, at Camp Coyote in Kuwait and Shaibah in Iraq, and consider how the flexibility and capability of the British medical plan - and of the individuals at all levels who made it work - allowed achievements far beyond those originally envisaged.

The capabilities of field hospitals during warfighting operations are a function of their bed and operating theatre capacity, of their equipment and - above all - of the capabilities of their staff. Bed occupancy is influenced by the speed with which

casualties can be evacuated out of the 'back door' of the hospital to other facilities. This changes as the campaign progresses, as, for example, in the freedom to repatriate injured PoWs.

More importantly, the numbers, capabilities and versatility of their staff are more significant than bed numbers alone. Multi-skilled and experienced staff prove to be a real 'force multiplier' as circumstances and patient populations change; for example, staff with paediatric skills can be used flexibly when children are admitted.

Field hospital capabilities at any one time and place are also determined by the provision of technical resources and supplies of consumable stores; by the provision of support infrastructure for a deployed staff of up to 700 personnel and a large transient population of patients; and by their geographic location, and access to evacuation routes.

Hospital mobility and military doctrine

Expeditionary warfare is characterised by speed of deployment and conduct of operations over long distances, in inhospitable territories, and with relative dispersal of personnel. Western armies no longer plan to fight the fixed, set piece engagements of massed ranks of troops of former eras. The modern field hospital must thus be relatively mobile and capable of rapid re-deployment in theatre. There is an inevitable tension between military practicalities and clinical needs in these circumstances.

The use of standard freight isocontainers, and the ease with which these can be moved around on 10-tonne container trucks, gives them much greater mobility than in the past. The use of modular framed tents allows the rapid packing and unpacking of hospital accommodation. The modular structure of hospitals in 25-bed units allows much greater flexibility in their deployment. For example, a 25-bed facility with one surgical team can subsequently be expanded into a full 200-bed hospital. This was shown by the experience of 34 Field Hosp on *Operation Telic*. The process of containerisation and modularisation still has some way to go, but it provides much greater flexibility to medical planners across a range of operational scenarios.

This mobility extends the reach of Level 3 facilities over long distances, as was the case in Iraq. It also allows for the rapid provision of medical resources for disaster relief - as for example in international relief efforts after the Iranian earthquake at Bam in late 2003, which included the deployment of US field hospital teams.

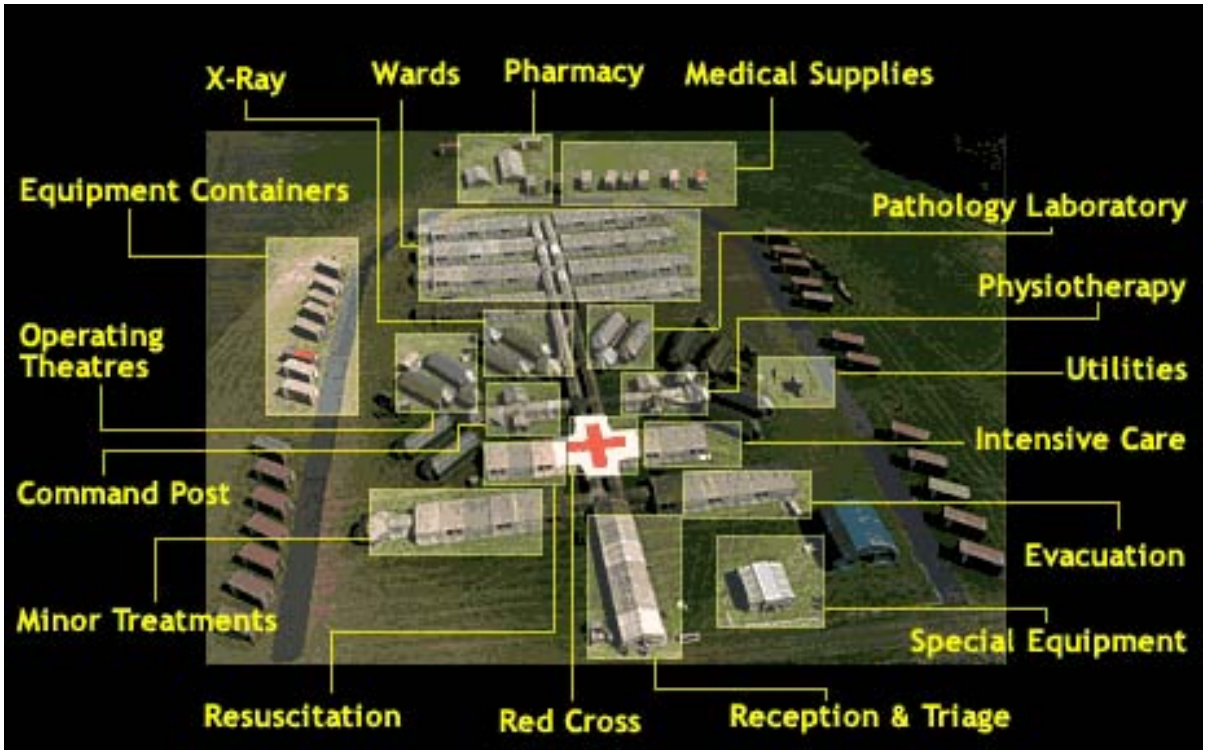
Field hospitals nevertheless need periods of immobility, during which patients can be held and treated safely. The Casemix and population of casualties and patients thus becomes the limiting factor to field hospital mobility. Where hospitals need to be redeployed in theatre, it is essential that other hospitals are in place to transfer and hold patients. The movement of a hospital is a major logistic exercise, in that it must be cleared of casualties who must be moved to other facilities before the hospital itself can be packed up and moved on. This process is leap-frogging, or movement 'with one foot on the ground'. Thus, even with modern logistic tools, the redeployment of a 200-bed hospital is not a project to be undertaken lightly.

This process was successfully tested in Iraq between March and May 2003. While 202 Field Hospital was operating in northern Kuwait, 34 Field Hospital moved into position at Shaibah airfield at the end of March. 202 Field Hospital then closed in early May, and its patients were transferred elsewhere: civilian patients were returned to Iraq and service personnel elsewhere. A small number of patients were moved to 34 Field Hospital. The infrastructure of 202 Field Hospital was then dismantled and the equipment was dispersed or returned to the UK for refurbishment. The personnel of 202 Field Hospital moved to 34 Field Hosp in Iraq in mid-May, performing a 'relief in place' of the staff of 34 Field Hosp, who returned to the UK.



The containerised field hospital: Palletised power packs and air conditioning equipment at 202 Field Hosp at camp Coyote, Spring 2003 (Author)

The general layout and components of a modular British Field Hospital, 2003



Typical layout of a British Military Field Hospital c2000: MoD

The Field Hospitals in the Gulf in 2003

British military forces on *Operation Telic* were directly supported by two deployed field hospitals and by one held in reserve in Kuwait. There were also hospital facilities afloat on the Royal Fleet Auxiliary ship Argus and the US Naval ship *Comfort*.

The final hospital plan in 2003 saw the deployment of elements of all three regular field hospitals. 22 Field Hospital provided an initial 25-bed capability at Camp Coyote in northern Kuwait and started to build the 200-bed hospital with engineer support before being withdrawn. 33 Field Hospital staff were mobilised to expand the hospital at Camp Coyote to 200 beds, and were then held as the Theatre Strategic Reserve hospital during warfighting. 34 Field Hospital was a composite unit of regular and reserve personnel. It was held in reserve during the initial phase of warfighting, and then moved to the Divisional and Brigade Maintenance Area at RAF Shaibah to provide forward hospital care as the operation progressed.

202 Field Hospital personnel were largely drawn form the mobilised reserves. They relieved 33 Field Hospital personnel at Camp Coyote and provided the principal trauma service in the first ten days of war. Thereafter, 202 Field Hospital became effectively a Role 4 specialist treatment centre for burns and orthopaedic cases among Iraqi combatants and civilians, while continuing its work in primary and secondary health care provision for troops in Kuwait. Units of the Kuwaiti Health Service provided additional support. The Iraqi civilian hospitals and infrastructure were rapidly restored under British and coalition military and civilian medical direction to expedite the post-war rehabilitation in southern Iraq.

The Physical Components of a Field Hospital

By their nature, field hospitals are temporary structures in the early phases of operations. Where deployments become stable or prolonged, tents are replaced with more robust and environmentally protected structures, or buildings.

The equipment of field hospitals is based on tented ward and theatre modules, and varies only in detail from one unit to another. All UK field hospitals are designed for linear working, and are laid out along a central spine or canvas corridor. The core structural element is the aluminium framed canvas tent, which comes in an expandable kit form with standard measurements of 18ft width and multiples of 12ft lengths. Standard wards, for example, occupy 18 x 96 feet of tentage. All tents can be readily assembled and dismantled by the staff who use them. Rubberised collective chemical protection (COLPRO) liners can be assembled within the tents, but these severely constrain the use of space and access. COLPRO liners have repeatedly proved to be quite impractical for use in desert conditions.



Standard tentage at Coyote Hospital, coated in windblown sand and dust

The detailed layout varies from one hospital to another, according to the specific tactical functions and the commanding officer's intent. The layouts at Coyote and Shaibah differed slightly, but the modular design and components were consistent throughout. The flexibility of the tented system allows for changes in layout according to operational need. At one end are the tented casualty reception, resuscitation and treatment tents, leading to the operating theatre and supporting modules: theatre reception, recovery, sterile supply, staff comfort areas. The corridor then leads to the ward area, including the surgical high dependency and intensive care ward, and a general ward area of 25-bed accommodation blocks.

The Accident and Emergency Department is the main entrance of the hospital, through which all ambulant casualties are admitted and documented. It is organised under the supervision of a consultant in A + E medicine, and staffed as in civilian hospitals by casualty doctors and nurses.

The resuscitation ward is organised in a tent with a separate entrance off the main corridor, through which serious trauma cases can be brought directly from the ambulance. Helicopter landing pads must be placed at a safe distance from the main hospital to protect it from dust, draft and noise, and the final leg from the landing site is thus often by wheeled ambulance.

Resuscitation areas can be organised to accommodate up to ten manned and equipped bays for two-wheeled stretcher trolleys known as 'Gurneys', and integral mobile X-ray equipment similar to a civilian emergency room.

The theatre complex is often laid out with two operating tables per 18 x 96ft tent. The tented theatres are very limited in their environmental controls. They are vulnerable to dust and wind, and 'mains' water supplies from holding tanks are limited to a cold tap, Hot water can be provided from electrical boilers and kettles in small volumes on demand. The theatres have a basic waste water plumbing system.





Theatre equipment for tented UK field hospitals remains basic. The operating tables are fixed frame, lightweight tubular aluminium 'McVicar' design, which accept a stretcher as the operating surface. They are easily assembled and taken apart for transport, but have significant limitations in their surgical utility when compared with modern adjustable operating tables. Theatre lighting systems are also basic, comprising standard fluorescent strip lights and bulbs.

Reception and Recovery: access to theatres is through a theatre reception tent, which doubles as a reception and 4-bay recovery area.



The old and the new: Xray imaging in a tented theatre at 202 Field Hosp (Author)

The Clinical Sterile Supplies Department (CSSD) tent is equipped with portable sterilisers, and its efficient running and management is among the most demanding and arduous of the hospital roles, given the heat of the working environment. Adjacent to the CSSD is a large assembly tent for theatre staff, surgeons and anaesthetists to wait and meet while on duty.

The Mobile Theatre Complex

A number of sets of containerised operating theatres were deployed on Operation Telic, and two were supplied to 202 Field Hospital. The Mobile Transportable Surgical Facility (MTSF) is a costly and fully self-contained system of an operating theatre, recovery and intensive care area and electrical, air conditioning and plumbing systems, built by Marshalls of Cambridge. The modules proved to be technically problematic, and required the attendance of the manufacturer's engineers. When working, MTSF provided an excellent, clean, environmentally controlled facility, but space and access within it was heavily constrained. MTSF was thus reserved as a clean facility primarily for neurosurgical and other specialist cases. In practical terms, its usage was marginal and did not justify the expense and logistical effort of its deployment.

Internal Logistics and Patient transfer through the complex

Civilian hospitals are run by large numbers of hard working ancillary staff, including cleaners, porters and general duties staff. Military hospitals are not deployed with such support personnel, so the hospital staff themselves were responsible for all general duties, including cleaning and portering of patients. One unforeseen problem arising from this shortage was the need to guard the PoW wards, a duty which fell upon the Highland and Lowland Bandsmen in 202 Field Hospital.

Intensive Care Unit (ICU) and High Dependency Unit (HDU)

The large field intensive care unit was perhaps the single most important clinical development in field hospitals on Operation Telic, although smaller field ICUs had been trialled since 1999 in Kosovo. Each hospital made full use of their teams of intensive care trained nurses and doctors, and a ward with capacity for up to ten specialist beds to look after a wide range of challenging paediatric and adult trauma cases - including patients with extensive burns and those requiring intensive resuscitation in the course of staged trauma care and surgery. The facility was equipped with modern, compact and robust ventilators and monitoring equipment. The illustrative and pioneering work of the 202 Unit has since been described in detail by consultant anaesthetist Lt Col Matthew Roberts and his colleagues.

Physiotherapy

Soldiers sustain many minor injuries in the course of their work. The provision of a team of physiotherapists and a well-equipped facility provided an important resource for the early care and rehabilitation of minor injuries, allowing soldiers to return to duty rather than enter the aeromedical evacuation chain.



Preparing a ward, 202 Field Hospital Photo: Author



A typical tented ward in a field hospital. This picture from 34 Field Hospital illustrates the tubular aluminium framed structure, and the pumped air ventilation system. Conditions are cramped, and beds are laid out obliquely to make extra central access space.



Commercial Air conditioning system for wards, 202 Field Hospital, Kuwait

Wards

There were eight fully equipped, staffed and occupied 25-bed wards at Camp Coyote Hospital during the warfighting phase. They were allocated separately for coalition surgical and medical cases, for Iraqi combatant casualties, for Iraqi civilian casualties - including women and children - and for infectious diseases, primarily gastroenteritis.

Wards were fully and appropriately staffed to peacetime standards according to skills mix, and worked normal but demanding shift systems because of the additional climatic and cultural burdens. In the absence of appropriate guard force manpower, military bandsmen and women were allocated the task of guarding and supervising PoWs in the Iraqi wards. In practice, there was no trouble whatsoever from these individuals.

Environmental controls for tents were never entirely successful during the early phases of the operation. Fly sheets and camouflage netting - including arctic white camouflage netting - are particularly effective at reducing ambient temperatures in the midday heat, when air conditioning systems are struggling to cope. However, the best that such systems can achieve is a relative reduction of temperatures by a few degrees in the midday heat.



Field dentistry at 202 Field Hosp





Refrigerated trailers for use as mortuaries at Camp Coyote

Supporting Clinical Services

Dental Services

A dental outpatients department is a valuable adjunct to the hospital service, as many troops present themselves to casualty with minor and more serious dental conditions. Equipment include standard facilities for common dental emergencies, including drilling, treatment of abscesses and temporary fillings.

Laboratory services

The hospitals were equipped with a basic but efficient suite of pathology, biochemistry and blood bank services. The environmental conditions tested the working of some laboratory equipment.

One particular and troublesome omission was a system for capturing and analysing tissue pathology specimens in the field. Thus, a number of individuals were inefficiently aeromedically evacuated out of Kuwait for diagnostic biopsies on skin lesions which might otherwise have been removed by surgeons in the field and air freighted back to base hospitals for rapid diagnosis.

The storage of dead bodies and body parts is a necessary consequence of hospital and medical work, pending identification, repatriation or forensic investigation. Bodies deteriorate rapidly in hot weather, and refrigerated isocontainers and trucks have proved useful for this purpose. Bodies, heads and faces can be very badly mutilated by war trauma, and the certification and identification of bodies by medical personnel can be a stressful and particularly unpleasant task.

Radiology and Ultrasound

The hospital has available a suite of vehicle transportable X-ray equipment, allowing static radiology for soft tissue and bone X-rays, and ultrasound equipment, including lightweight hand held ultrasound devices for use by clinicians.

There is a continuing debate about the provision of more advanced imaging equipment, including CT scanning, in field hospitals. There are perceived clinical advantages to the





Electrical power systems and engineering at 202 Field Hosp

deployment of such equipment in field trauma centres, but also severe limitations to the transport and operation of such delicate instruments in demanding environments. A compromise is to organise access to host nation equipment, as was occasionally the case for neurosurgical patients in Kuwait.

Technical support and engineering

A modern field hospital takes a lot of technical equipment to war, including electronics which requires regular and emergency maintenance. A technical workshop with electrical and mechanical engineering support provides an important and efficient service for sustainment. It also provides flexibility for the production of locally designed items. For example, a number of traction support frames were built locally when the need for sustained traction of large numbers of lower limb injuries, including children, became apparent at 202 Field Hospital.

The Primary Health Care Unit

The primary health care unit is attached to the main hospital complex to provide primary health care for the large population of hospital staff, and for other units in the vicinity. It also provides primary care for troops in transit to and from front line units, and for the continuing vaccination programme for deployed troops.



The Hospital Management Cell at 202 Field Hospital, showing the critical bed state board, through which patient locations and casualty flows are monitored

The Hospital Management Cell (HMC)

The Hospital Management Cell is the clinical operations centre within the hospital complex. It accommodates the hospital matron and her staff, the important bed state boards which allow patient tracking, and the casualty transfer and Air Liaison Officers, including RAF and US representatives. It also provides general office administrative functions.

Computing plays an increasing role in field hospitals, both for general and administrative functions, and as a link through satellite and other communications to other military and command units. This technology is still immature. A mainframe system with distributed cable links to all of the core modules was installed on a trial basis and maintained with considerable difficulty in the dust and heat. Distributed laptop computer and wireless systems will make hospital administration somewhat easier - and the work of the information systems staff much easier - as the technology matures.



The modular Paradigm satellite digital telecommunications system for the general use of deployed personnel: This one was deployed at Camp Coyote. Each booth contains telephones and computer terminals

The Internet

Satellite technology allows secure and insecure access to the Internet for field and deployed units. The miniaturisation of terminals has provided satellite communications from laptop-sized portable terminals, as widely used by the media and in specialist military applications, but not generally available to deployed troops.

The Internet has become a central tool of administration and communication in many lives. It offers considerable opportunities for efficiency gains in deployed field hospitals, and Internet services were used in embryonic form for both official and personal use during *Operation Telic*. It provides a rapid, standard and secure system for the transfer of official information, and allows staff to search for information of professional significance while deployed. It is also a huge asset for staff morale, as it allows staff to remain in e-mail contact with family and workplace, to maintain personal and domestic administration, and to continue off-duty work and projects, unconstrained by distance and time from home. The Internet also brings security problems, as it puts individuals in direct touch with the outside world, and one can envisage security issues arising from instantaneous reporting of events and distribution of images across the net as the provided bandwidth increases. There is no absolute solution to security if this resource is to develop, for which trust and discipline will remain important.

The *Paradigm* welfare system is a containerised package of satellite communications, telephone and computer equipped booths for personal communications which was deployed to the Middle East on *Exercise Saif Sarrea II* and on *Operation Telic*. It combines a vehicle dismountable satellite dish, power and electronics with banks of digital telephones and computers in vehicle-transported *Portakabins*. The *Paradigm* package nevertheless had significant limitations: its problems included insufficient facilities for

the forward field units, long queues for access as convoys passed through *Paradigm* locations, sand and dust in the computer drives, and low bandwidth limiting e-mail communications.

General administrative offices

The hospital Command Post (CP) is located outside the main hospital. It is the interface between the hospital and other military units and commanders. It handles all of the planning, logistic, communications and organisational functions for the commanding officer and his staff above the immediate clinical issues of running the hospital.

Social, domestic and welfare

A rapidly deployed reserve unit of 650 individuals creates considerable personnel administration needs. Issues of pay and finance are handled by the field administration cell, with its specialist clerical staff. Other welfare facilities include the SSAFA tent, where SSAFA personnel provide independent and social support services for deployed troops, and the all important Chaplaincy tent, where a range of multi-faith services, independent counselling and moral support are offered to all personnel. The mailroom and its environs rapidly becomes a social centre of the unit, and a barometer of morale.





The Command Post at 202 Field Hospital, and the modular, folding aluminium framed DRASH tentage used for the admin offices (Unit Photo)



The Highland and Lowland Bands attached to 202 Field Hospital, aka the *Conscript Labour and Guard Force*, working beyond the call of duty!

Manpower

A busy hospital creates a large demand for manpower to undertake a wide range of clinical support and general duties functions, including casualty movement, guard duties, washing, cleaning and maintenance of public areas, and support of the catering department. All personnel of whatever rank are called upon to support general duties to make up for the tight constraints on deployed manpower.

Accommodation and general living functions

650 people require a large volume of living space. Tented accommodation was provided for Kuwait-based units by civilian contractors, while shower blocks and 'portaloo' toilets ensured a high standard of personal hygiene. These facilities were not of course enjoyed by forward deployed field units, for whom living standards were much more basic and challenging. Living accommodation was basic but relatively comfortable for hospital staff in Kuwait, with all ranks accommodated in tents.

The Catering and Dining tent became an essential, versatile and central social venue for the hospital, hosting concerts, church services, competitions and other activities, while the tables were used for games, conversation groups and private contemplation outside mealtimes. As the campaign progressed, further accommodation was set aside for recreation, conferences, and social activities. A shaded 'café' under camouflage netting was a particularly valued social centre. A sports and games area and jogging circuit are also essential for troops confined to a camp for prolonged periods.

MT, logistics and transport

Field hospitals have a very limited allocation of vehicles, and are thus dependent upon the field medical units for casualty transport, on the Royal Logistic Corps for container and general lift capacity, and on engineer units for engineer equipment, such as bulldozers and trench diggers. Major personnel moves were supported by hired coaches, and a fleet of (luxury) coaches were in continuous use in Kuwait and even southern Iraq, shuttling personnel in convoys between garrisons. A unit of more than 600 people generates a significant demand for utility transport for command and support tasks, and hospitals need to be adequately supported with their own utility transport.



The 202 Field Hospital Fire Brigade at Coyote (Photo: Author)



Earthmoving equipment building a berm around 202 Field Hospital at Camp Coyote. Berms provide an important security perimeter for fixed site units



The value of heavy lifting equipment to move stores around the hospital site with a minimum of manpower, 202 Field Hospital, Camp Coyote



Fuel deliveries: 202 Field Hospital's own fuel delivery service does the rounds of the diesel generators

Clinical and professional challenges for modern field hospitals

Field hospitals are being modernised in response to three different sets of pressures. Changes in military doctrine and technology in the past few decades have influenced the circumstances of their use. Likewise, changes in civilian professional practice and the environment of public expectation and legislation (clinical governance) have compelled improvements in the quality and range of care provided by field hospitals, consistent with the local circumstances. Pressures towards specialisation in civilian hospital practice are changing the nature of the pool of skills which can be drawn upon, and there are significant implications for the manning and organisation of field hospitals.

The circumstances of war and the dislocation of populations may oblige a hospital to accept casualties with an unexpected range of medical conditions. For example, a large influx of PoW, civilian and paediatric cases can create substantial logistic and professional pressures and challenges.

Specialist and general skills in clinical service provision

There has been considerable pressure for change in clinical practice in the civilian sector, under the process of 'clinical governance'. This process has extended into military doctrine, and has been reflected in a change in demands for specialist rather than general professional skills in the staffing and equipping of field hospitals to achieve best practice consistent with constraints of war.

Each military hospital is staffed to a detailed pre-planned template, where each post has a 'line serial number', and a specific job description which must be filled by a regular or reserve professional with the skills appropriate to that post. This staffing template method has advantages and disadvantages. On the plus side, it ensures that the hospital can function as planned in advance, but on the minus side it reduces (in theory) the flexibility of the hospital if its role and the demands of its case mix change during an operation. Such a situation arose for both 34 and 202 Field Hospitals on Operation Telic in respect of child casualties. Fortunately, the breadth and depth of experience which the staff brought from civilian practice ensured that individuals could be rapidly re-roled to perform new functions safely and effectively. For example, many nurses, surgeons and anaesthetists had experience in the care of children.

Another potent example of specialisation in service provision is given in the provision of field intensive care facilities in both hospitals, as we describe later. Specialisation in service provision also affects decisions about the procurement of equipment and instruments to perform particular types of procedure. The provision of a wide range of specialist instruments increases logistic costs and must be matched by the skills to use the equipments properly. Specialist demands must be balanced against the benefits of having common instrument sets.

The personnel

Field hospitals are thus demanding of the skills and energies of their staff, who must provide both the clinical skills to provide high standards of care, and the energy and will to build, operate and dismantle the hospital at the end of long lines of communication where resources may be scarce and where flexibility and adaptability are essential.

Putting the Hospitals together

The staffing of field hospitals requires a complex process of mobilisation to achieve the planned deployed capability. Health service professionals have to be extracted from their civilian jobs with the least disruption, and have to bring the specific skills to meet the planning framework - or ORBAT (Order of Battle) of the unit - to civilian regulatory standards. This process relies upon excellent administration, staff work and data management during peacetime, and as much forward notice as possible for the individual reservists.

The efficient, economic and logistically rational solution to these needs lies in the process of phased - or rolling - mobilisation, through which reserves are called up as required. This process will be examined in greater detail in a later chapter. It caused

difficulties and disruption for individuals in 2003, but it did deliver the skilled personnel to where they were needed on time, and with least 'hanging about' in the pre-war phase.

The force generation of equipment and forward planning was somewhat more difficult for individual medical commanders. The political uncertainties and posture delayed necessary decisions in the logistic system to the last possible moment. Reserve field hospitals do not have significant intrinsic holdings of stores and equipment for expeditionary deployment - they rely upon those provided by the regular units. Thus, 202 Field Hospital inherited a hospital built by the staff of 33 Field Hospital at Camp Coyote in Kuwait.

The range of skills drawn upon on mobilisation is considerable. It includes doctors with a range of primary and hospital speciality skills; nursing and theatre staff across a range of disciplines, including intensive care; laboratory, technical radiology, pathology staff and other allied health professionals; managerial and clerical staff; and personnel for general duties, catering, data management and local protection. The system is nevertheless very lean and mean of personnel, and individuals of all ranks are responsible for general duties, including cleaning, portering and domestic duties.

The Management challenges of a Deployed Field Hospital

The challenges of management of a war hospital differ from those of a civilian hospital. In a civilian hospital, the management is focused on operational issues, and upon the management of personnel during their occupation of the workplace. There is very little control over employees in their activities, place of habitation or behaviour outside working hours.

The situation is very different in a deployed field hospital. The military employer has total responsibility and control over all aspects of the service employee's 24-hour day, and the security, freedom of movement and action of every individual. These boundaries and constraints are fully understood by service personnel on operations, and this understanding is reinforced by exercises, common training doctrine, morale, purpose, collective and personal discipline, and motivation. In general terms, the workforce of the deployed field hospital comprises self-selected individuals who are prepared to accept the deprivations which inevitably accompany warfighting.

Operational commanders have extensive powers of discipline and censure against individuals. The commander's authority in a complex multi-professional unit is nevertheless constrained in practical terms by social conventions, professional courtesies and relationships, by actions and decisions made elsewhere in the chain of command, and by political pressures exerted through parliamentary representatives on behalf of families and individuals. Leadership must therefore be by example, by engagement, by clear argument and by force of persuasion rather than by the arbitrary use of command and military law. Command and leadership functions are much more tested during the inevitable lulls and phases of post-operational boredom and uncertainty than they are when organisations and hospitals are fully stretched by

clinical activity. This is particularly so in the unusual circumstances of a field hospital, which is so rank heavy that there may be as many Lieutenant Colonels as private soldiers in the unit.

The field hospital management structure is in the gift of each commanding officer. It will be tested in peacetime and will be influenced by the calibre and aptitudes of the senior officers. In general terms, field hospitals are provided with two separate management structures for clinical and operational control, under common command elements. The non-clinical command organisation is responsible for running all matters of personnel, logistics, planning and security. The clinical management of the hospital is devolved to senior clinical and nursing directors. They are responsible for the day-to-day delivery of care and resolution of clinical issues within the specialist areas, such as surgery and anaesthesia. The hospital management cell provides administrative support to clinical activities, and also provides the interface with the general command structure and with outside agencies - for example for casualty transfer - and clinical liaison with other organisations.

The management of the entire organisation is lean and mean, and efficient communication is assured by its relatively compact size and internal lines of communication. The need to keep individuals occupied and tasked during quiet times also creates opportunities for the efficient multiple tasking of personnel in command and clinical roles.

Clinical Governance and Deployed Field Hospitals

General Louis Lillywhite points out in a personal communication that:

> Clinical Governance was only formally introduced into the Field Hospital sometime after I became DGAMS, following the seminal review by Freeman, Kennedy and Sowkolow (see chapter 30). There were major construction challenges of the various semi-permanent field hospitals, and in particular construction that was compatible with infection control. These problems included a lack of ward sluices, appropriate hand washing facilities, use of soft wood under metal surfaces, and floors that allowed bodily fluids to pool and be retained, as but examples. It is perhaps worthy of note that as SG, following the publication of the Health Care Commission investigation of the Maidstone & Tunbridge Wells excess deaths, I sent my lead infection control officer (Wng Comd Andy Green) to Theatre. As a result of his visit, significant additional recommendations were made to enhance infection control in the field.

Chapter 14 Resources and References

EX SAIF SEREEA II - The Field Hospital Clinical Report
MCM Bricknell, LA Wright.: J R Army Med Corps 2004; 150: 252-255

Outline: This paper places on record the clinical activity of the hospital facilities run by 22 Field Hospital on Exercise SAIF SEREEA II in Oman from August to November 2001. There were 1322 episodes of illness resulting in a hospital admission. The mean rate of admission was 1.96 patients per thousand per day (SD 13.62). The main causes of admission were gastrointestinal illness, conditions related to the heat and injuries. The reporting of health service utilisation data is an important duty of medical personnel during overseas deployments in order to add to the dataset available for the estimation of medical workload for future operations.

Command In A Field Hospital.
MCM Bricknell.: J R Army Med Corps 2003; 149: 33-37

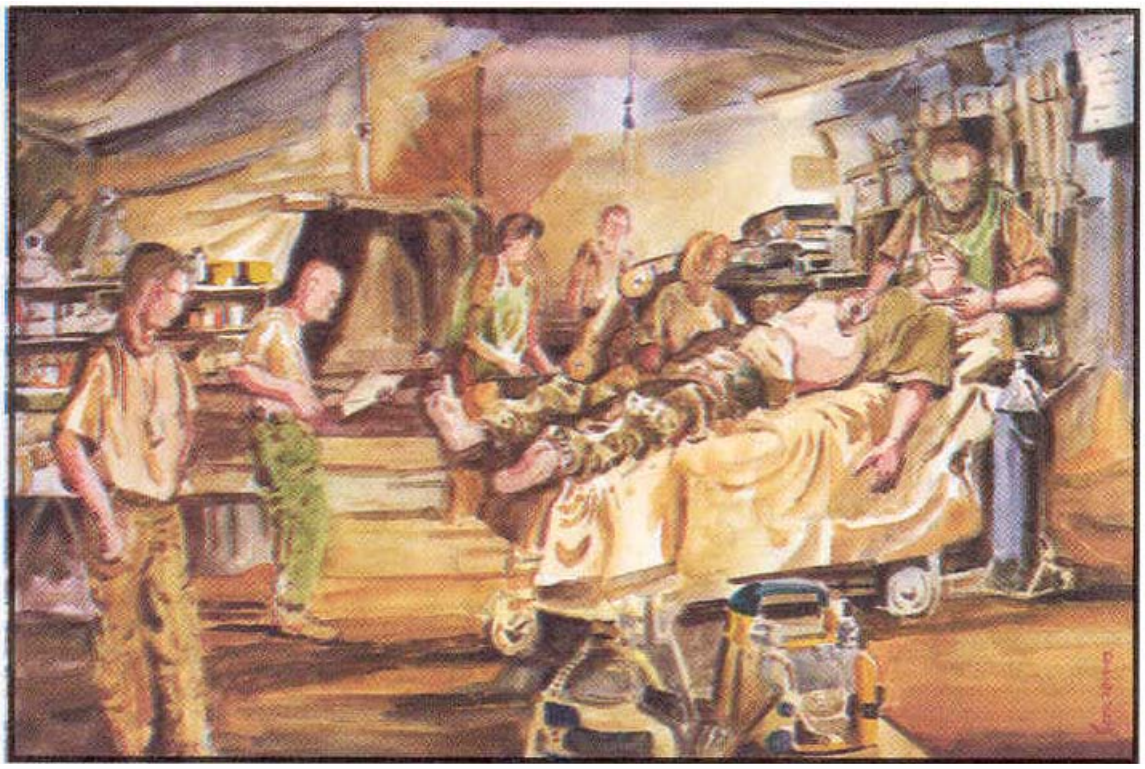
Outline: This paper examines the challenges involved in commanding a field hospital. There are frequent, dynamic tensions between the military culture that is based on a task-focussed, hierarchical structure and the clinical culture that is based on flat, process-focussed, multidisciplinary teams. The paper outlines the cultural environment of the field hospital and then examines the deployment sequence whereby a functioning clinical facility may be created from a group of disparate individuals. There are a number of tools that may assist with this including the personality of the Commanding Officer, individual skills, the creation of an organisational identity and the choice of command structure.

Blood, Heat + Dust: Second Edition

Operation Telic and the British Medical Deployment to the Gulf 2003 -2009

Chapter 15:

Coyote District Hospital – 202 Field Hospital in Northern Kuwait



Painting: *Casualty Reception*

Artist: Gora Pathak 2003

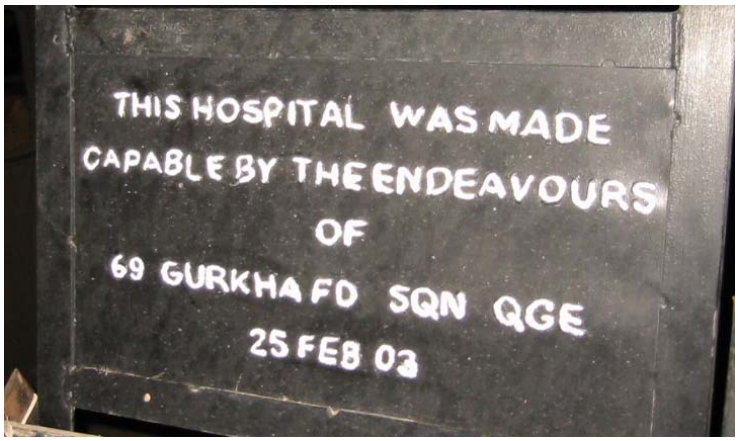
Coyote District Hospital

Northern Kuwait is a barren, empty, flat, dusty desert stretching north from the hazy waters of the Gulf to the impoverished towns of southern Iraq and the fetid marshes between the Tigris and Euphrates rivers. The landscape was still scarred in 2003 by the earthworks and detritus of the occupation by the Iraqi army in 1991. The northern Kuwaiti desert is pierced by a single modern highway running north from the outskirts of Kuwait City up the Mitla Ridge - made notorious in the devastation of the Iraqi retreat in 1991 - and towards Basra through the arid military zone which is otherwise occupied only by occasional camels, units and patrols of the Kuwait army.

From early 2003, the landscape was repopulated by tanks, bulldozers, trucks and chain gangs as the ground was prepared for a transient army of some 150,000 US and British troops. Camp Coyote was established in an area of empty desert of some 100 square miles alongside the main Kuwait-Baghdad highway. It was occupied by various divisional logistic and HQ units during the preparations for war. The site which was ultimately occupied by 202 Field Hospital at Camp Coyote in northern Kuwait was prepared by Gurkha Engineers in February 2003.



Camels in the Northern Kuwaiti desert near Camp Coyote



The ground beneath the main working areas and approaches was hardened with ballast, and the water tanks and sewage disposal pipes were assembled and dug in. Personnel of 22 Field Hospital thereafter built up the hospital as a 100-bed tented facility from a

25- bed unit. This was expanded to 200 beds in early March 2003 by reserve and regular personnel of 33 Field Hospital, who were subsequently disappointed not to use the hospital during the operational phase when they were retired to the operational reserve. 202 Field Hospital relieved 33 Field Hospital during the week of 11-18 March, a few short days before the transition to warfighting operations.

The field hospital was set up on a site of approximately one square mile of this desert with a defensive perimeter. Preparatory works included a large area of tented accommodation provided by Kuwaiti civilian contractors, and the installation of sewage and electrical systems, water tanks and hard standing for the key facilities. All water had to be shipped in by tanker. Power supply was provided through local generation, and included that needed for the air conditioning plant. Power supply remained erratic and unreliable for much of the campaign. Tentage and equipment was delivered on DROPS trucks by the hard working Royal Logistic Corps drivers in some sixty standard freight containers, including refrigerated equipment. Two separate sets of container based, modular and self-contained operating theatres were also delivered.

202 Field Hospital



Aerial Photo of 202 Field Hospital at Camp Coyote. In the foreground is the hospital complex and supporting facilities. In the distance is the accommodation area.

202 Field Hospital is a typical UK reserve hospital. It is based in Birmingham with outlying detachments in Oxford and other Midlands towns. It has a small regular staff with a volunteer reserve Command element structured to run a 200-bed hospital in war. In 2003, its change to wartime capability involved the assimilation of large numbers of reservists from around the country, many of whom had not previously met or trained together until assembled at the mobilisation centre or in Kuwait.

Staff planning templates were put together in late 2002, but mobilisation for 202 Field Hospital reservists did not begin in earnest until the last week of February and the first week of March, within two weeks of issue of the compulsory mobilisation orders.



Command personnel and Birmingham detachment members, 202 Field Hospital, Coyote, April 2003

Environmental conditions

Heat

The environmental temperatures in early March were a tolerable 28oC during the day, and up to 18oC at night. Temperatures could be substantially higher within the tentage during the day, where heat was trapped within the dark tunnels of canvas. Temperatures rose progressively to around 50oC by mid-May during the day, and up to 32oC at night. The gradual acclimatisation over this time allowed personnel to cope fully and comfortably with the demanding extremes of dry heat.

Temperatures rose to 42oC or more in the tents without air conditioning. High ambient temperatures affected the performance of radiological and monitoring equipment. The lack of reliable environmental controls and air conditioning in working accommodation, or of plentiful supplies of cold fluids and 'soak downs' during the day, placed considerable demands on the hospital staff. Makeshift air conditioning systems were set up in the principal working areas using cool air piped from hired industrial refrigeration insulation tents, which also helped deflect the worst of the heat. Curiously, an effective trick used at 33 Field Hospital in Al Jubail in 1991, using arctic warfare camouflage netting to reflect heat and cool tentage and working areas, was not tried in 2003. 202 Field Hospital never fully addressed the problems of heat during Operation Telic 1.

Dust

Weather conditions were variable, including wind and sandstorms, and even two days of heavy rainstorms. The windblown dust was intrusive and all-pervasive, and could not be fully controlled. Fortunately, it did not interfere with the working of major equipment or antiseptic controls in theatres.

Rain and storms



Desert living is not all heat and dust. Camp Coyote enjoyed several days of heavy rains early in the deployment



the central corridor of 202 Field Hospital, during an NBC alert

The Operational Layout of 202 Field Hospital at Camp Coyote

The 202 Field Hospital design allowed for rapid and logical casualty flow from arrival. The Accident, Emergency and Resuscitation department was immediately adjacent to theatres, with resuscitation teams supervised by an A + E consultant. Patients could be assessed immediately, augmented with mobile ultrasound and X-rays, and transferred to the operating theatre within minutes if appropriate. Two containerised modular operating theatres were reserved for neurosurgery and had minimal operational use. All other surgery was carried out using four field operating tables set up in two tented operating theatres.

Additional accommodation off the main corridor included the hospital management cell, a physiotherapy ward, wards for specialist treatment - including dental and ophthalmic care - and the diagnostic units of pathology and radiology. Outside the main hospital complex are tented areas for the various other clinical and administrative activities, including primary health, the chaplaincy, psychiatric care, engineering support, data management and the general command and quartermaster functions.

The transition to war

The pace of events obliged 202 Field Hospital to make an immediate and seamless transition to support for warfighting operations. This was achieved in the 48 hours from 18-20 March, through the rapid development of an effective management plan. This used the processes of mission command to build a management structure and get going without delay. Departmental directors were immediately appointed for all key functions. Regular 'orders groups' - known colloquially as O Groups or CO's Prayers - were held throughout the organisation to fine tune plans. Twice daily O Groups allow face to face meetings of all personnel, rapid adjustments, and feedback of comment, advice and opinion through the local command chain.

Real time rehearsals and simulated casualty flows are valuable tools for testing and adjusting the hospital design and working processes when time is available. Such exercises identify key deficiencies and problem areas. On this occasion, there was no time to exercise the system by simulated casualty flows. Plans were tested and modified in the light of experience. As we shall see, the key challenges of casualty care arose from the cultural, logistic and political issues of dealing properly with large numbers of Iraqi and non-Iraqi Arab combatants and civilians - including women and children - which had not been fully foreseen..

The Population at Risk (PAR) serviced by 202 Field Hospital

The hospital was intended to provide care for some 50,000 coalition combatants including British and US troops, and for captured Iraqi troops. As the hospital was based in Kuwait, it was not immediately obvious that it would receive a significant influx of civilian casualties from the local population of 1.3 million people, or that its very success and resource of specialist skills would attract such a complex mix of case referrals as later happened.

Casualties were delivered directly to 202 Field Hospital both by helicopters and wheeled ambulances. Casualty flow throughout the campaign, and particularly in the second phase, included a significant number of Iraqi civilians who requested help directly of forward troops and medical units. They included patients who had been discharged from Iraqi civilian hospitals or who had been unable to secure admission to a local hospital. There were reports that Iraqi hospitals were turning away patients with extensive burns because of the lack of facilities to treat them.



A reminder of the commoner risks: Trauma from a road traffic accident

Iraqi casualties were also regularly moved on to other coalition medical facilities by ambulance and helicopter, including RFA Argus and USNS Comfort, to make the best use of available resources.



Stretcher trolley (Gurney): a time honoured labour saving device in field medical units for moving stretcher casualties around the hospital, and for use as a stable platform when the legs are extended, as in this example

The wartime work of 202 Field Hospital

Phase One, 20th March to 1st April 2003

Between 20 March and 1 April 2003, 202 Field Hospital acted as the main Role 3 receiving hospital for casualties of both sides in southern Iraq. This was the period of primary support to warfighting troops. By 19 March, 202 Field Hospital was fully functional in the provision of primary health care and the inpatient care of disease and non-battle injury cases, while being prepared and cleared for war. Following the US attacks against leadership targets in Baghdad on 19 March, Kuwait came under random attack from surface-to-surface missiles, including Scud and anti-shipping missiles launched form southern Iraq.

Theatre-wide missile alerts caused a great deal of disruption to hospital staff, who were regularly ordered to put on NBC protective clothing and to take cover. In one unfortunate instance, staff of 202 Field Hospital were obliged to remain in NBC kit by the command chain for several hours in the midday sun during a series of missile alerts, thus incurring a number of avoidable but fortunately transient heat casualties.



attempting ward work under ballistic missile alarm conditions

The pre-war uncertainties about chemical and biological weapons had engendered a greater sense of insecurity and concern than was perhaps appropriate to the magnitude and reality of the risk posed by these weapons. In practical terms, the warheads carried by these weapons are relatively small, although they can do significant damage from kinetic energy alone at the point of impact.

The Iraqi missile attacks nevertheless had a remarkably beneficial effect in galvanizing a sense of operational awareness and unit cohesion which might otherwise have taken much longer to achieve. Fortunately, the missile alarms petered out over the next few days, and no real damage was done to life, limb or property in Kuwait. This was in

marked contrast to 1991, when twenty-eight US personnel were killed in one ballistic missile attack on a compound in Dhahran in Saudi Arabia.

Phase Two, 1st April to 9th May

From the 1 April to 9 May, the hospital was superseded in its primary casualty receiving role by 34 Field Hospital in its forward location at RAF Shaibah, southwest of Basra in Iraq. During this period, 202 functioned mainly as a specialist referral centre for burns casualties and for complex orthopaedic cases among Iraqi casualties requiring advanced surgical treatment. This aspect of the work of the hospital has been well reported in the television film *Battle Hospital*, made by the producer Oliver Lambert, and first shown on Channel Four in the UK on 27 February 2004. Throughout this time, 202 also continued to provide primary health care and Role 3 care to service personnel in the logistic area of Kuwait.



Poster prepared by the primary health team at 202 Field Hospital to celebrate their work

Primary health support

The 202 Field Hospital Primary Health Centre provided primary care for members of the hospital staff, and for troops in the operational and logistic area. This included the continuation of vaccination programmes which had begun on mobilisation. For example, the Anthrax vaccination requires three jabs spread over several weeks to be fully effective.

Many soldiers were also admitted for temporary and respite care with a variety of conditions unrelated to trauma. Most of these were returned to their units, but some required evacuation to the UK. In all, there were some 1800 separate patient episodes during the time in Kuwait, and a similar number thereafter in Iraq. In the latter case, much of the admission rate was related to the notorious Norovirus gastroenteritis epidemic.

There were also more than 1000 minor casualty treatments in Kuwait, including a significant number of eye injuries from flying dust and sand. Contact sport generates a large number of unwanted injuries during operations. Even volleyball generates significant numbers of hand and wrist injuries, such as fractures of the scaphoid bone.

Women's health issues in primary care

The care of the many female staff of the hospital, and of the many young female soldiers and officers who now make an important contribution to the field units, raises additional health issues. The quality of the young women recruited into the Armed Forces is remarkably high, and many will cheerfully take on demanding tasks in demanding circumstances to the equal of their male counterparts. Nevertheless, issues such as contraception, pregnancy, social and psychological support, and even breast cancer, all contributed to the rich diversity of clinical challenges among deployed troops.

Accident and Emergency

The Accident and Emergency department was led by a civilian A + E consultant specialist, trainees in A + E medicine and specialist nurses and documentation clerks. The A + E reception doubled as the main entrance to the hospital. More than 1000 minor casualties and ailments were treated in this department.

Trauma Reception

Major trauma cases and those needing significant triage and resuscitation were brought directly into the Trauma Reception tent, which was equipped with eight bays of basic resuscitation equipment and staffed with resuscitation teams augmented with surgical teams during major casualty intakes. A mobile X-ray unit provided immediate imaging.





Work in the Accident & Emergency tent, at busy and quiet times

Surgical and Trauma Activity

Surgical teams comprised three general and six orthopaedic surgical reservists, with valuable additional experience of children's general and orthopaedic surgery. The three general surgeons combined vascular, urological, abdominal, chest and head and neck experience. There were also specialist teams of two neurosurgical reservists and two plastic, one ophthalmic and one maxillofacial consultant surgeon from the regular army, with trainee support. There was no specialist obstetrician. There were 20 anaesthetists with a wide range of specialist skills, including four intensive care specialists. Surgical teams were supported by a full complement of operating theatre and nursing staff, radiology with image intensification, and laboratory support, including blood transfusion and microbiology. However, there was no histopathology support, and service personnel with even minor skin lesions were sent to Cyprus or the UK for diagnostic biopsies.



Work in a conventional tented theatre, 202 Field Hospital, *Operation Telic* (Photo The author)

The surgical workload has been reported in detail in the *Journal of the Royal Army Medical Corps*, (Kerr et al 2004), from which report this data has been abstracted. In all, 160 new patients underwent 323 operative procedures, which included primary and secondary operations and re-operations for a wide range of injuries and non-trauma problems. Most were Iraqi nationals. The table shows the numbers of these procedures by phase of the operation and by the type of surgery performed. Secondary planned procedures describe patients who were brought back to theatre for burns dressings, debridements and revision surgery. This workload increased significantly during April and early May. Many patients also had several major procedures under one anaesthetic, because they suffered multiple sites of wounding.

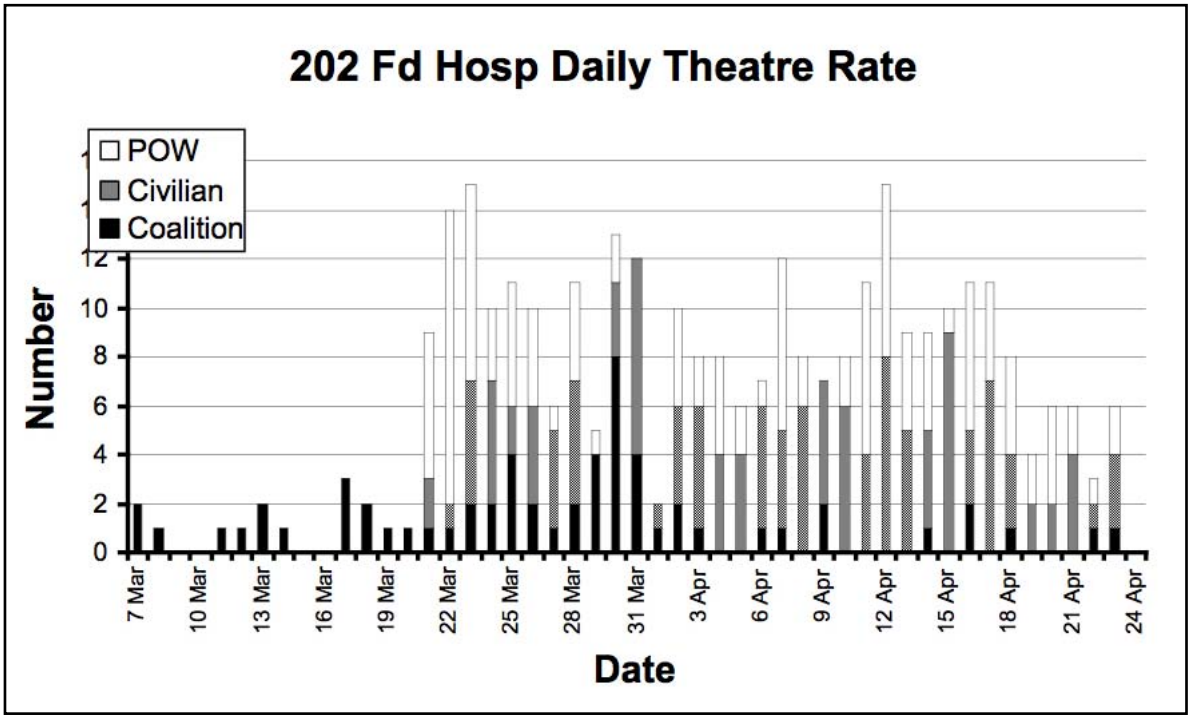
Type of procedure	Warfighting Phase	Specialist hospital phase
Casualties received	82	78
Primary procedures	82	78
Secondary Planned	28	118
Secondary Unplanned	6	11
Total operations	**116**	**207**
Total procedures	**163**	**220**

The surgical casualty flow never exceeded the capacity of the surgical unit. At busy times, surgeons worked on a sequential roster, sharing skills and experience as appropriate.

The patterns of injuries

It was often difficult to determine the precise mechanism of wounding in patients with ballistic trauma. Some 25% appeared to be due directly to bullets, and the remainder to

shrapnel fragments from shells and mines. Injuries to the chest and abdomen from high energy weaponry were rarely seen, as these are usually immediately fatal. High energy transfer wounds to limbs were survivable and recognisable by small entry but large exit wounds, and fragmented long bone fractures. Blast injuries were often seen in association with penetrating fragments; such injuries included traumatic amputation from land mines, and severe damage to eyes. Burns created a substantial workload, including those arising from military operations and from domestic and electrical accidents among the civil population, including small children.



Penetrating ballistic injuries of the upper and lower limb; brain and skull; head and neck; chest, abdomen and eyes were all treated surgically. Many procedures for multiple and complex wound patterns were undertaken jointly by teams of specialist surgeons and anaesthetists. Many patients had multiple and superficial penetrating injuries from small, low energy fragments which required minimal debridement or conservative treatment. However, most penetrating wounds of the limbs were managed by exploration and wound excision. All fractures and extensive soft-tissue injuries were stabilised using plaster, traction or external fixation devices and traction frames, which were constructed locally.

Burned patients

The 60 casualties who presented with burn injury posed the greatest management challenges. They included military flash burns and domestic heating accidents among civilian adults and children. Patients presented with burns of up to 85% body surface area. The initial plan for burns casualties had been to receive, treat and evacuate all casualties within 48 hours, but this foundered when it became apparent that burned

Iraqi casualties could not be rapidly or safely returned to Iraqi hospitals or evacuated elsewhere.

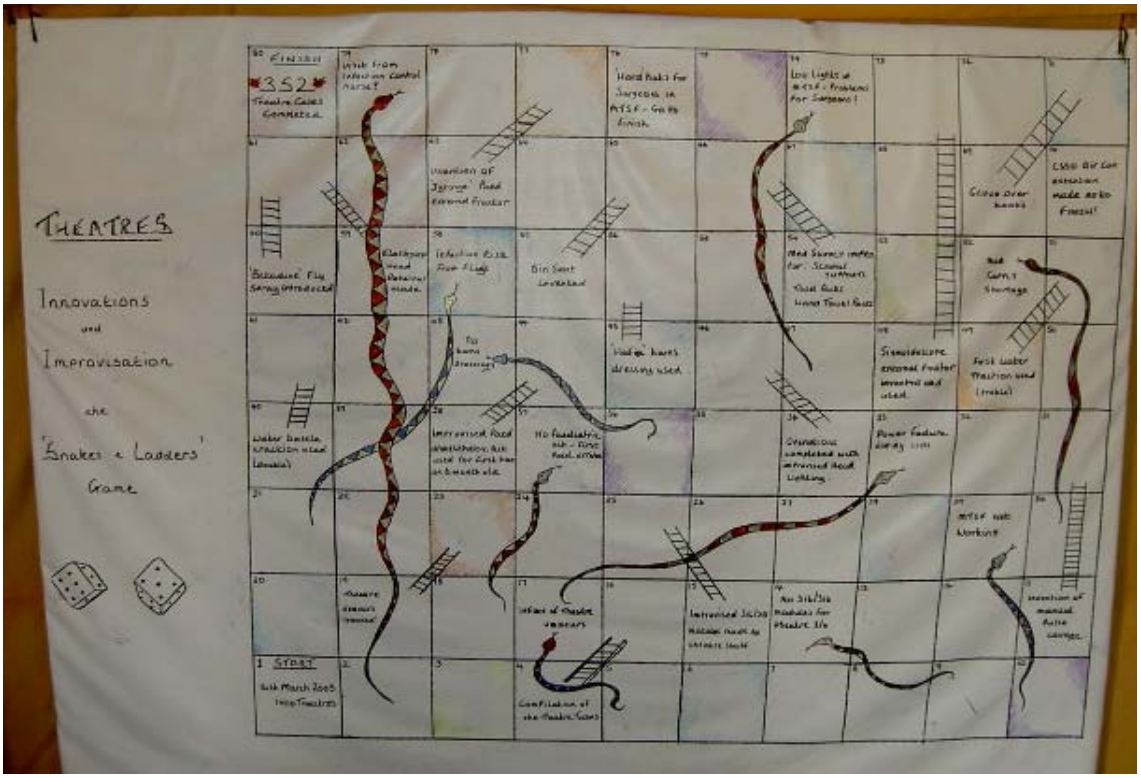
Allied casualties and a few Iraqi patients with extensive burns requiring complex reconstruction or intensive care management were evacuated to the UK after administrative, political, humanitarian and Geneva Convention issues had been addressed. The 202 Burns Unit managed the others, either conservatively or by excision and grafting as appropriate. Graft take was generally satisfactory. Burns treatment placed a significant burden on the unit, with from one to thirteen anaesthetic procedures for each casualty.



The 202 Field Hospital Burns Team at work (Photo 202 Field Hospital)

Operating times and theatre use

The operating times provide further useful insights into the complexity of the wounds and the workload of the experienced surgical teams. Of course, the times varied considerably with the type of operation. There were sixty-eight cases recorded as taking 100 minutes or more, including: fifty-three operations of between 100 and 180 minutes. One case of multiple injury in a British soldier took 450 minutes; with the remainder taking between 180 and 270 minutes. Up to four operating tables were in concurrent use, but resources were never stretched to the point of causing unplanned delays in surgical care. During the second phase, the burns workload demanded the full resources of at least one table daily.



Snakes and ladders: The operating theatre log of supply challenges and improvisation at 202 Field Hospital (Photo the author)

Complications and deaths

Significant infection of surgical cases was very uncommon. This reflected the absence of the gangrene-forming bacteria which live in wet soil. There were four deaths related to trauma within the hospital. They included one US soldier with multiple chest and abdominal gunshot trauma and one patient who arrived in extremis by helicopter transfer with an open abdominal wound following forward surgical intervention. One Iraqi soldier died during chest surgery immediately after arrival from massive blood loss caused by multiple shell fragments in his right chest. One deeply unconscious Iraqi soldier with a penetrating head wound and an irrecoverable injury was kept comfortable until he died.

Field Intensive Care at 202 Field Hospital

(Lt Col Matthew Roberts, Consultant Anaesthetist)

The ITU at 202 Field Hospital was equipped with eight beds, four of which had ventilators and were thus designated as ICU (Intensive Care) beds, and the other four were designated as High Dependency (HDU). A further four beds were in reserve in the clean MTSF Unit. The unit was staffed by a team of four consultant anaesthetists, all currently active in critical care practice, and twenty-one nurses, sixteen of whom had qualifications and at least two years' experience in critical care.

Admission and Discharge Policies

It was intended that the unit would provide for intensive care (ICU) patients - two or more organ impairment or advanced respiratory management - and high dependency patients (HDU) - one organ impairment not including advanced respiratory management. The strategy for managing ventilated ICU patients was either to continue resuscitation - in particular correcting hypothermia and hypovolaemia in order to allow early extubation - or to resuscitate and prepare for early repatriation by the CCAST. Iraqi prisoners of war (EPW) and civilians would be managed entirely within the theatre of operations with a potentially significant effect on length of stay and bed occupancy.

Patients could be admitted to the unit from one of four sources: directly from A+E for resuscitation prior to surgery; directly from the operating theatres/recovery unit (patients might deteriorate on the wards and need resuscitation or just a higher level of monitoring), or there would be direct transfers of critically ill patients from other medical facilities. The ICU consultants offered an 'outreach' policy of attending all major resuscitations in A+E to advise on the requirement for - and timing of - admission to the unit.

Similarly, there would be regular consultation with the anaesthetists in theatre and the recovery staff to ensure that all patients requiring further resuscitation - or more extensive monitoring than was available on the wards - were admitted to the ITU [Table 1]. The general wards of a field hospital are only staffed and equipped for basic nursing care and observation. There was no scale for continuous monitoring or the administration of oxygen, so from a cardio-respiratory point of view patients would need to be virtually 'street fit' before discharge from the ICU. It was accepted that this would have an impact on length of stay and bed occupancy.

The strategy was to use the ITU facilities to stabilise coalition casualties for early repatriation to the UK under the supervision of the Critical Care Aeromedical Support Team (CCAST), and to hold Iraqi casualties for as long as necessary to allow their proper repatriation. A small number of Iraqis with severe injuries were also sent to the UK, but this was a choice of last resort, because of the social, cultural and separation difficulties.

Patients were monitored using the Datex-Ohmeda S5 system [Instrumentarium Corp, Helsinki Finland] and were ventilated when required, with the T Bird VS [Bird Products Corp, Palm Springs Ca]. Supplementary oxygen was available from DeVilbiss oxygen concentrators [Sunrise Medical Respiratory Products, Somerset, PA] or cylinders. Syringe drivers were the Braun Perfusor Compact [B.Braun, Melsungen Germany)] and fluid infusions were delivered using iMed Gemini PC-2 infusion controllers [Alaris Medical Basingstoke, U.K.].

Warming and cooling where necessary was by means of the Bair Hugger [Augustine Medical Inc, Eden Prairie, MN] and Hotline infusion systems [Sims Level 1 Inc, Rockland, MA]. A pathology laboratory provided a limited range of biochemical, haematological and microbiological analysis. Bedside testing of blood gases and electrolytes was provided by the i-Stat system [Abbott Laboratories Ltd, Berks, UK].

Of the 1366 patients admitted to 202 Field Hospital between 19th March and 30th April,



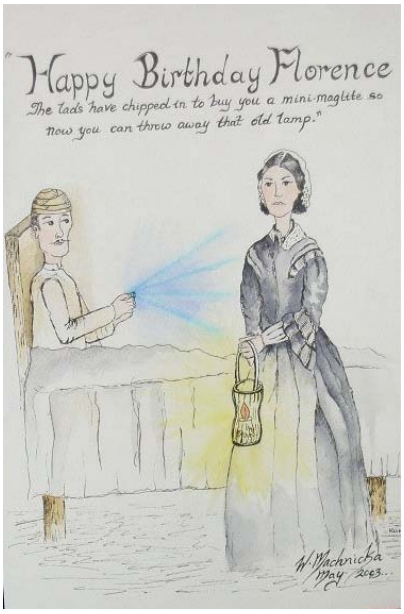
Ward 1 Nursing Staff, 202 Field Hospital

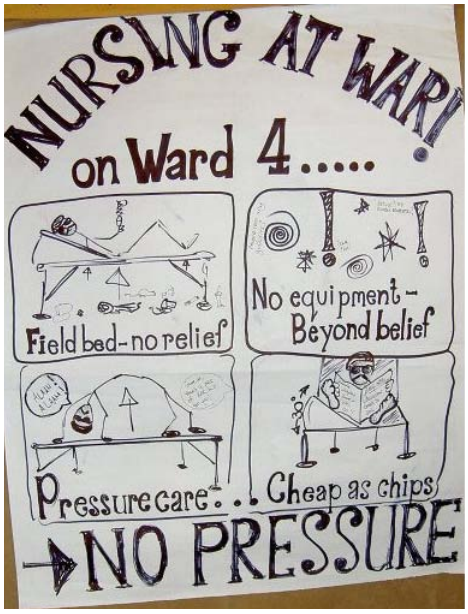
sixty-three were admitted to ITU. The details of this work have been reported in the Journal of the Royal Army Medical Corps in 2003 - see the chapter on clinical lessons. There were seventeen burns cases, including children as young as three months. This was particularly significant, as it seems that there was a local civilian policy in southern Iraq of not treating major burns cases aggressively before the arrival of UK Forces.

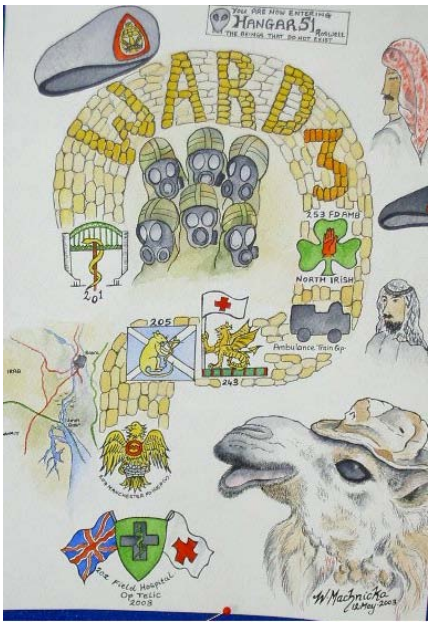
Burns nevertheless seem to have been a common problem because of the use of domestic gas and heating systems. The 202 Burns and ITU team in conjunction thus inadvertently created an advanced specialist service which generated its own momentum as the campaign progressed.

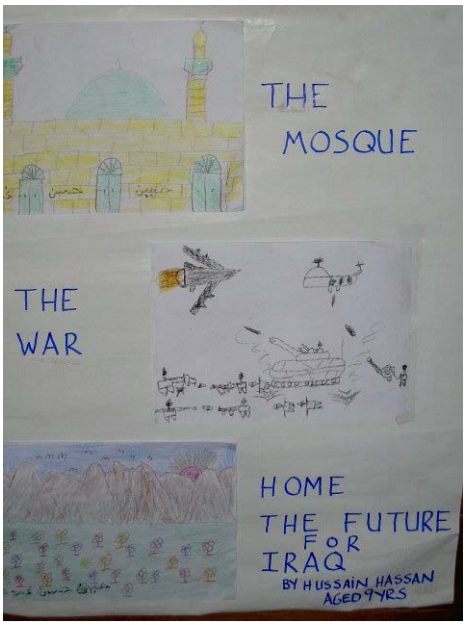
Nursing Care and Ward Work

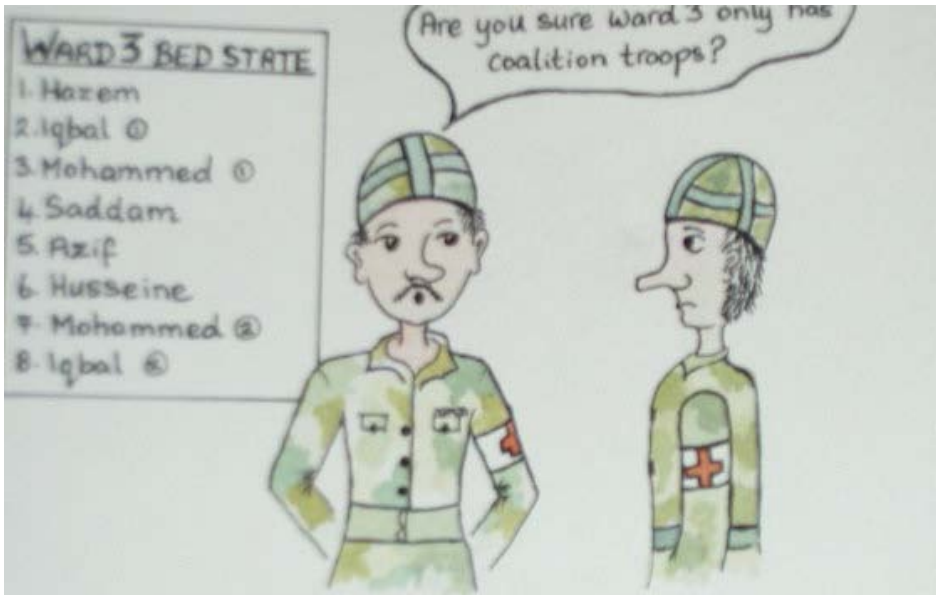
Just as the clinical and surgical teams had to adapt to very different working conditions, so did the nursing teams in 202 and 34 Field Hospitals. Under the direction of the senior nursing officers, nurses with a broad range of specialist and general skills were allocated to the Intensive Care, Coalition Trauma, General Medical and Infectious Diseases wards, the Iraqi Casualty wards, and later to the Women's and Children's ward. In the latter case in particular, this breadth of skills and experience proved an enormous asset. The provision of high standards of nursing care in cramped, hot and dusty conditions called for high levels of adaptability and humour, not least with the cultural and linguistic challenges of dealing with the Iraqi interns.

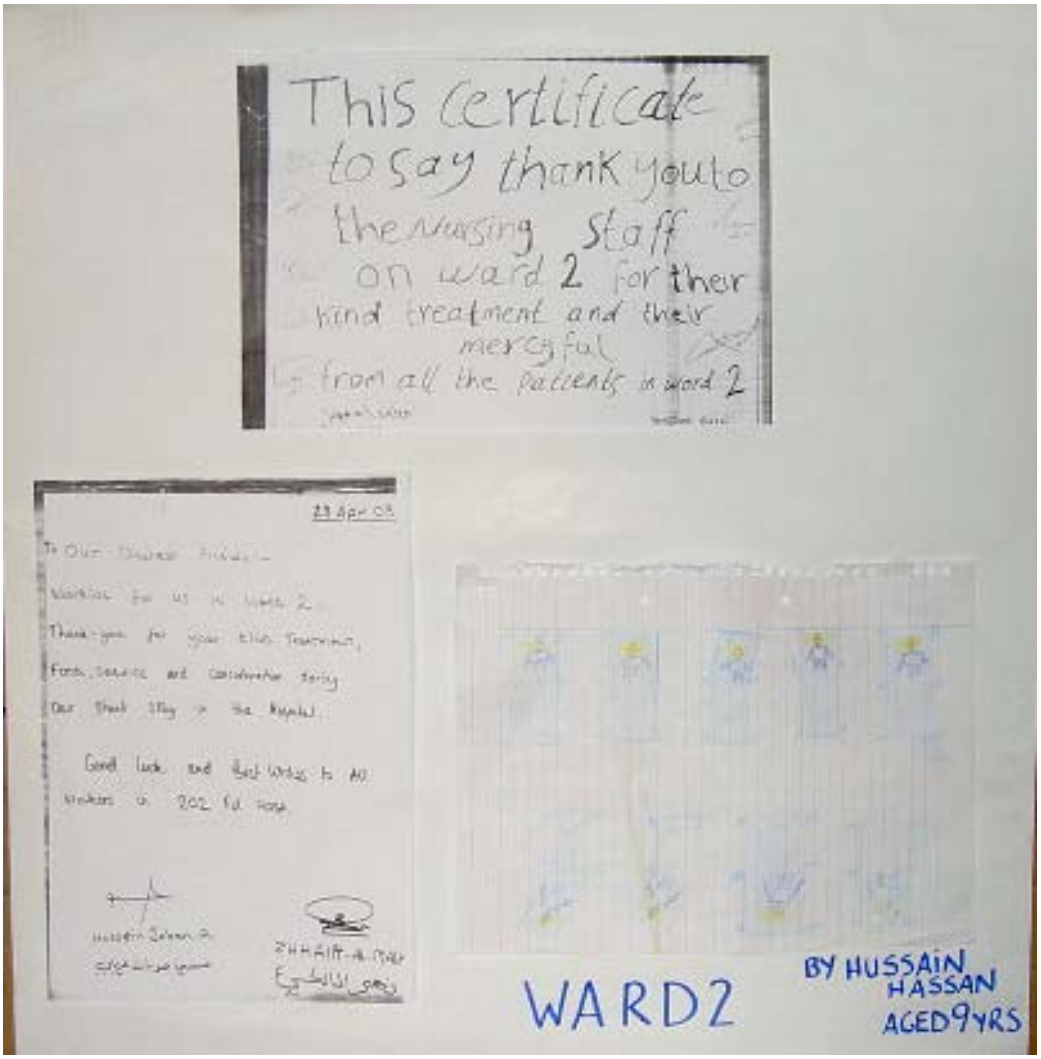

Happy Birthday Florence
The lads have chipped in to buy you a mini-maglite so
Now you can throw away that old lamp."


NURSING AT WAR!
on Ward 4.....
Field bed-no relief
No equipment -
Beyond belief
Pressure care...
Cheap as chips
NO PRESSURE


HANGAR 51
WARD 3
253 FD AMB
NORTH IRISH
205
249


THE MOSQUE
THE WAR
HOME
THE FUTURE FOR IRAQ
BY HUSSAIN HASSAN
AGED 9 YRS


WARD 3 BED STATE
1. Hazem
2. Iqbal
3. Mohammed
4. Saddam
5. Azif
6. Husseine
7. Mohammed
8. Iqbal
Are you sure Ward 3 only has coalition troops?





Posters celebrating the work of the nursing teams at 202 Field Hospital on display at a study day in early May 2003



Hangar 51: The Iraqi PoW Ward in Kuwait.

General Duties and Support Work

During the rapid transition to operational commissioning, a team of personnel had to be produced to undertake the many general duties tasks which sustain the clinical effectiveness of a hospital. LCpl Lorraine Burford, a Combat Medical Technician in the TA by trade, tells her story (abridged here with her permission from the *Royal Army Medical Corps Magazine*):

"I was mobilised in March 2003 with 47 members of 243 (The Wessex) Field Hospital (V) to augment 202 Field Hospital. For many of us it was the first time on Operations. The whole process came as a bit of a shock. Some of us had less than a week to sort out our affairs and say goodbye to loved ones and friends.

We arrived in Kuwait on 14th March and were taken by coach to Camp Coyote. After having only the weekend to acclimatise, we all gathered in the cookhouse to discover our departmental allocations. I had hoped for a clinical or ward based job, but I was to become part of Headquarters Troop, whose job it was to act as a General Duties troop. We renamed ourselves the Camp Maintenance Troop (CMT) and got on with the job. We were not happy about the situation at all, especially the 18 hour shifts, but that was changes after a couple of weeks to 12 hour shifts, which was much more civilised!

Those first few weeks were the worst, missing your family and friends. The prospect of guard duty for the next six months did nothing for morale! We watched BBC News 24 on satellite TV. The most memorable moment for me was the toppling of the statue of Saddam Hussein in Baghdad. I was proud to be part of it.

We then moved to Shaibah. Never in my life have I seen so many flies. Once in Iraq we started work on the National Vocational Qualification Level 3 in clinical care. This was not an easy task in the heat, but a task well worth the effort. I found working on the ward with the Iraqi patients very rewarding. I developed a lot of respect for them and it made me thankful for what I have and for the good health of myself and my three children.

The NVQ gave those of us who took it a sense of achievement, and a stepping stone to a career in nursing. My thanks go to the two course assessors, Captains Fiona Preece and Pamela Thomas-Garwood, who took the time to teach us, assess us and complete all the administrative work necessary to get it started and to make it the success it was.

On July 25th 2003 we had to say goodbye to the place that had been home to us for so long. It was a sad day. I had really enjoyed serving on Operation Telic but now it was time to return to normal life. The demobilisation process was unsettling. It was all rush rush rush. I was really glad to get home after that and seeing my children waiting at the station when I got off the train made it all the better. They were in tears; I was in tears. It was a very moving moment. We had a lot of catching up to do and they stayed very close to me for months after, afraid to leave my side in case I left again.

On reflection, Operation telic was a life changing experience for me. Would I do it again? Ask me in a few years!"

The care of Injured Iraqi Prisoners of War

Injured prisoners of war were given the full range of care, and treated to the highest standards attainable in the conditions. However, there were a number of issues which had not been fully foreseen and which required flexible adaptation.

The Iraqis were allocated their own wards and were guarded by armed military bandsmen and bandswomen outside each ward. This placed a significant strain on the personnel concerned, not least because guard duties are an inefficient use of trained paramedical skills and a serious drain on their enthusiasm. Most Iraqis were nevertheless very compliant and co-operative - initially out of fear of the unknown, but later from recognition of what was being done for them. Many patients were very helpful with ward duties and the care of other casualties.

The Iraqi soldiers were not a homogenous group. They included conscripts, regular army officers, and a few key individuals whose presence appeared to create a frisson of fear and uncertainty, and who were believed to be senior Ba'ath party officers. There were also a few non-Iraqi arabs on 'tourist' visas, whose presence in southern Iraq was believed to be connected with the irregular militias. All PoWs were necessarily interviewed on the wards by ICRC officials and by intelligence officers.

Nursing care also proved a challenge, not least because the Iraqis were unfamiliar with the cultural aspects of being cared for by female staff, and because of cultural attitudes to hygiene. Food was provided to suit local sensibilities.

The problem of language was particularly difficult for the hospital staff. Arabic skills were scarce, and there was considerable reliance upon a team of Kuwaiti interpreters who had no medical background and who had to climb a steep familiarisation curve of

Western medical terminology and culture. This made detailed communication with individual patients very difficult, and obliged caution in interpreting the interpretation. It also made the tracking of patients very difficult, as many would acquire various phonetic versions or transpositions of their names during their hospital stay.






Iraqi children at 202 Field Hospital, April 2003: Photo: The author

The care of Iraqi Children

The care of Iraqi children was the most rewarding aspect of the work for many staff. The workload arising from trauma to Iraqi children and teenagers was disproportionately demanding. Fifteen children aged 10 or under - including three babies under 18 months and nine teenagers aged from 11 to 16 - underwent operations for a variety of injuries, including burns, abdominal, limb and multiple trauma. The hospital was not initially equipped or resourced for children's anaesthesia or surgery, but an initial combination of improvisation and local sourcing allowed all to be managed safely. The intensive care facility was particularly helpful in the safe management of these children, many of whom required multiple procedures.

On the wards, children were cared for with their relatives where possible, and makeshift divisions to the ward space were created with sheets and blankets. Toys and sweets were liberally dispersed from the huge quantities that arrived in parcels from home, and one little boy who was admitted clutching a dollar note to cover the cost of his care eventually went home somewhat richer! A separate tented area was created in a corner of the hospital site for social and religious gatherings of the children and non-combatant casualties and their relatives.

The repatriation of Iraqi Casualties

The evacuation of Iraqi casualties was a major challenge for the 202 Field Hospital staff. There were severe constraints on the use of Iraqi civilian hospitals until late April, and special administrative considerations applied to the care of military prisoners of war and to the repatriation of Iraqi civilian patients under the Geneva Convention. A particular anomaly was that many Iraqis could not be repatriated north across the Kuwaiti border (despite their wishes and those of the hospital staff) because representatives of the ICRC were not satisfied with the local civilian care facilities in place in southern Iraq at the time. 202 Field Hospital was thus rapidly adapted as a Role 4 Hospital for the specialist care of these patients from across the area.



The problem of morale for Iraqi casualties (Photo 202 Field Hospital)



The ICRC visits 202 Field Hospital to provide independent assessment of the condition of Iraqi casualties: Photo: the author



Negotiating the return of Iraqi families to Al Zubayr from Camp Coyote (filmed by the Channel 4 documentary team)

The workings of the Geneva Convention thus produced a curious twist to the care of the Iraqi casualties detained in Kuwait. The convention obliges the detaining authorities to ensure that the care to which detainees are discharged is of a sufficiently high standard to guarantee their needs. This was not initially possible because of the prevailing circumstances the southern Iraqi towns, and because local political sensibilities would not permit the repatriation of Iraqis through the Kuwaiti civil system at that time. The ICRC regularly visited all detainees and took a great interest in their wellbeing.

Iraqi patients, their relatives and 202 Field Hospital staff alike were deeply frustrated at the necessary delays to repatriation in these circumstances. Eventually, a solution was engineered whereby all civilian detainees were spirited back to Al Zubayr hospital on buses, to walk through its back door and then disperse as they wished.





Repatriation of Iraqi casualties and families from Northern Kuwait to Al Zubayr

Follow up of repatriated Iraqi patients

Doctors wish to follow up their patients to check on progress and learn from the outcomes. This was not generally practical because of the circumstances of the patients' return to their homes in Iraq. All Iraqi casualties were kept in hospital until wounds were fully healed, or until satisfactory arrangements could be made for their repatriation to Iraqi civilian facilities or through the ICRC. There have nevertheless been some heart-warming stories of happy outcomes, and children have been traced back to their homes by troops on later tours to Iraq. For example:



Major Di Robertson Bell with Jasmin and her family in Safwan in late 2003

Personal Vignette:

Mrs Di Robertson-Bell is a Lead Nurse in Infectious Diseases at the Royal Free Hospital in civilian life, and a Major in Queen Alexandra's Royal Army Nursing Corps. From 1985 to 1987 she worked at the Sultan of Oman's Military Hospital and learned Arabic. During Phase 2 of Operation Telic - after the first post-war troop rotation - she served as a Regimental Nursing Officer with 40 Field Regiment Royal Artillery at Az Abaya port in southern Iraq.

> "Prior to deployment to Iraq, I undertook a refresher Arabic language training course at the Defence School of Languages in Beaconsfield. For this reason, I sometimes went out with patrols both to the Iraq-Kuwait border and to the town of Safwan. TA Unit colleagues who had served with 202 Field Hospital during the war contacted me about a badly injured girl called Jasmin whom they had treated, and who came from Safwan. They wondered if I could track her down and see how she was getting on.

I thought this would be like looking for a needle in a haystack. When I showed people in Safwan the address I had, this proved to be the case: nobody recognised it. However, following a council meeting in Safwan court, I drove around with the interpreter. We asked children and adults on the streets if they knew of a girl who had been treated at the British Military Hospital during the war. Eventually we were directed to her house. Much to my delight we found Jasmin, her identity being confirmed by the loss of her right index finger. Both she and her family were very pleased to see us, and very grateful for the care she had received during the war."







Dismantling 202 Field Hospital at Camp Coyote at the closure in early May 2003
(Pictures the author)

The redeployment of 202 Field Hospital to Iraq and subsequent operations

From early May, plans were affected for the relief in place of 34 Field Hospital in Shaibah by 202 Field Hospital. This would allow 34 Field Hospital personnel to be returned to the UK as part of the general redeployment plan. The hospital closed to admissions from 9th May, following which it was progressively dismantled, packed up into isocontainers and shipped back to the UK for refurbishment, leaving a small primary care facility at Camp Coyote.

202 staff and personal equipment were moved up to Shaibah by bus and hired transport over the following week, and the redeployment was complete by 15th May.



An incongruous hospital convoy leaves Camp Coyote for Iraq, May 2003.
Photo: The author

Managing the quiet times

War means waiting, and the confinement of staff within the boundaries of a field hospital over many weeks produces stresses of its own kind, particularly in phases when there is insufficient work to keep all staff continually occupied. The handling and avoidance of boredom in these circumstances is a leadership challenge at all levels, as inactivity rapidly produces frustration and rumour. In these circumstances, leadership and organisational qualities come to the fore, and hidden talents are discovered.

Continuing Professional Education

The coming together of individuals from many different professional, social and geographic backgrounds provides considerable opportunities for continuing education. For example, the clinical staff of 202 Field Hospital produced a nightly postgraduate meeting at which all members of staff were encouraged to make a presentation on a subject of professional or personal interest. Access to a laptop computer and a personal collection of digital slides, images and pre-prepared teaching material is to be strongly encouraged among all staff on future deployments.



Post graduate teaching at 202 Field Hospital: A moulage/study day for burns management.
Bottom right: preparation of the Haifa dressing, comprising jelonet gauze, a generous layer of flamazine cream and a gamgee base dressing.



Postgraduate education: Lt Col Andrew Jacks, Consultant Ophthalmic Surgeon, lectures on eye surgery at 202 Field Hospital

Social entertainment

By early April, the clinical workload of 202 Field Hospital was falling off, and the occupation of staff became a major challenge. A series of ad hoc entertainment committees and talented individuals created programmes of activity, which included music concerts laid on by the Scottish Highland and Lowland band; the creation of a shaded rest and relaxation area under camouflage netting, with a volunteer staff of 'coffee ladies; competitions, aerobics and games. These all help sustain morale and see off the damaging latent energies of inactivity.

Physical activity

The desert heat obliged some ingenuity in providing safe and effective physical training. This was often combined with a social element. Thus, on the day of the London Marathon, a 202 Field Hospital marathon was run, comprising teams of ten runners each covering 2.6 miles in the desert heat. A 'moonwalk' was held for charity to coincide with a similar event in London, comprising teams in fancy dress. There was a regular programme of evening runs, aerobics classes and even jive dance classes to keep the staff in good trim.



Recollections of the 202 Commanding Officer on Op Telic 1

Col Barry Smith is a consultant cardiac anaesthetist in the NHS in Birmingham. As the Commanding Officer of 202 Field Hospital, he was mobilised with a small team of regular officers and 650 reservists to the Gulf in mid-March 2003.

"As we turned up at the mobilisation centre at Chilwell, I had many doubts and concerns: this was not going to be a short-term deployment. We could be away from our families – and our civilian work and life as we knew it - for anything up to a year. It was a great deal to ask of volunteer reservists. Would all our planning

and preparations be enough?

We were challenged to find desert combat uniforms, chemical warfare suits and respirators, and we had to ensure the welfare of our families while we were away. To test us further, the deployment of the unit was brought forward, so that collective training and team building would have to take place 'on the hoof' in the desert during the transition to war. The first time that I saw many of the personnel under my command was in the Kuwait desert in mid-March.

A big challenge was the entertainment of the unit personnel within the confines of the camp and under operational constraints during off-duty time. However, the initiative was taken and quizzes, film nights, charity runs, a recreation area and parties were organised. We were particularly fortunate to have two Scottish military bands with a varied and excellent repertoire.

One thing that took me by surprise was the reliance that people have on instant communication. Mobile telephones and text messaging were in constant use. At the start of the ground war, all mobile telephones were withdrawn for obvious security reasons; what consternation that created - some individuals seemed to show symptoms of withdrawal from an addiction!

Despite the challenges, I was delighted at how efficiently all the work was carried out, both clinical work and all support functions such as catering, maintenance and supply. The problems of supply, of the environment and of the circumstances of war meant that ingenuity had to be used occasionally, but the problems were overcome. I was also pleased to find that our reserve unit was fully accepted into the military organisation, with no compromise.

Those who were with 202 Field Hospital during Operation Telic can take pride in their contribution to the achievements of the unit. Of course some things could have been better, but the whole team provided excellent medical care under extreme environmental conditions during the war and in the early months thereafter."

Chapter 15 Resources and References

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Blood, Heat + Dust: Second Edition

Operation Telic and the British Medical Deployment to the Gulf 2003 -2009

Appendix to Chapter 15:

Excerpts from the 202 Coyote Field Hospital Newsletter: "Coyote General"



Painting: *Set up and ready*

Artist: Gora Pathak 2003

Official military histories rarely capture the essence of the humour which keeps the British Armed Forces functioning in adversity. Throughout the Op Telic deployment, 202 Field Hospital had its own newsletter to keep a detailed and reliable record of it's operational history.

Major Doug Goodship, the editor, tells the story of the 202 Deployment through these newsletters, which would appear whenever morale showed signs of improving.

Publish and be damned

"Squaddie humour is universal and timeless. I produced a slightly anarchic unit newsletter on exercises for many years, on the unit Roneo duplicator. These publications were a success. People were collecting them as keepsakes. With the coming of the laptop age, production and distribution became easier and the newsletter went international on overseas camps.

I knew in January 2003 that I was likely to be mobilised as an Evacuation Officer. The last 20 years had been my preparation to produce an operational newsletter. There were a number of challenges. I would not be deployed with my own unit, so would know few of the personalities involved, and I didn't know what resources would be available. However, over the years a number of themes have occurred with uncanny frequency. These include equipment shortages and breakdowns, personnel shortages, apparent high level indecision, short notice changes of plan that are badly communicated, the queues and the "hurry up and wait" mentality of the army. It would have been negligent not to have taken on the challenge.

One new theme recurred throughout the tour…"it'll be available in theatre". I took the opportunity to sound out the Matron about the potential for the newsletter, and she proved to be most supportive of the project throughout the tour. We arrived in theatre on 14th March and took over the hospital from 33 Fd Hosp a few days later. We were running the hospital from Monday 17th March. The first newsletter was produced on 21st March and was left around to await reaction. I had identified a few potential assistants. The casualties were now real.

We coined the name Coyote General- The house magazine of Coyote General (AMS) Trust. Queues and waits were particularly prevalent in Kuwait. We were confined within the perimeter of the sand berm around the hospital for weeks on end. On the other side, only yards away were the staff of 33 Field Hospital, waiting for a redeployment which never came. The berm seemed to create a time warp, so while we were walking around in chemical suits and respirators in a high NBC state, they were playing volleyball in beach wear. The confusion around their continued role in theatre provided an ideal opportunity for some friendly banter.

The Coyote General newsletter ran to nine editions, until 8th May, when we moved forward as part of the advance party to Shaibah Camp. Shaibah was a fly ridden patch of baked earth in one of the most impoverished areas on the planet….and the toilets! Deep trench latrines were less than a short fly flight away from the cookhouse and the canteen, and every meal had to be shared with several hundred flies. The Shaibah Sentinel was soon in print. Themes continued to emerge, not least the building of the new hospital by the Gurkha Engineers and nearly 200 all ranks hospital from 202 Fd Hosp. It was opened by the General Officer Commanding on 28th June 2003.

Production of the Sentinel continued until we returned to UK on 24th July. Towards the end weariness was setting in and it became more difficult to find the motivation and the new material to produce the newsletters. The last publication of the Shaibah Sentinel was produced only hours before we left.

Writing the newsletters has been my personal therapy. There is a humorous side to life even in the most adverse situations and humour is a great way of overcoming the frustrations. The success of the newsletter suggests that many people agree."

In this chapter, we include a few edited highlights from each of the issues, to give some flavour of the war as it developed and as events were perceived by the rank and file.

Coyote General I: The House journal of Coyote General (AMS) Trust

Queue Forecast



Breakfast	Moderate to severe, queuing times up to 30 minutes.
Lunch	Light, generally minimal queuing.
Dinner	Generally severe queuing can be in excess of 30 minutes at times.
Toilets	Variable can be quite heavy at times, particularly after nocturnal missile alerts.
Laundry	Mild to moderate.
Postal	Variable, generally light.

There is a general alert for malignant queues. These tend to occur quite spontaneously and can become quite severe before they peter out as quickly as they begin. Try to avoid getting caught up in these. To minimise the risk of malignant queues forming, if anyone asks, 'are you the queue for.....' simply reply 'no I am an individual' and walk away. Remember, the Army considers you an individual, that's why they gave you your very own unique number.

From Coyote General II:

The Coyote General Hospital Improvement Programme

The management at Coyote General is committed to a programme of upgrade and improvement for the benefit of staff and patients.

The extension to the Hospital Management Centre is well underway and should be operational soon, offering extra space for the management team. Planning permission is being sought to demolish the rear areas of ward 4 to provide a Car Park for HMC.

The Psychiatric department is offering bereavement counselling to anyone suffering from the loss of their facial or head hair...

Investors in People

For those looking to gain new skills during deployment, you need look no further than the cookhouse; on the job training will be given that includes 'battlefield bin bag drill' and 'combat table decontamination'

Orders for collecting post

Due to the large influx of post recently, the process has been changed. Those with no post should queue first and those with lots of post should wait a while, that way the queue will move quicker and those with no post won't have to wait so long to be disappointed.

One of our more studious readers has noticed that there is a timeline that runs through the Kuwaiti desert, corresponding directly with the North-South berm that divides 202 from 33 Fd Hosps. This accounts for the 10 minute difference between Ballistic Missile alerts and all clears

Equipment and supplies update

A supply ship has recently arrived in Kuwait and is currently being unloaded for its cargo to undergo its statutory 3 months quarantine. Items soon to be available include a range of equipment ranging from the standard 1970's desert issue, the more modern, Desert Invader range and the retro Afrika Corps range which includes original goggles and leather desert mac. For ceremonial purposes only, the Knights Templar range includes Chain mail suit, Tabard and broadsword. Mounts are not yet available in theatre, but if you can find and tame your own nag, feel free.

A further load of supplies, carrying suntan lotion, sunhats and other essential equipment has now left England on the RFA Marie Celeste.



Sorting the post

In the next edition – Your horoscopes for the coming few months

From Coyote General III:

A big thank you to those that have handed in their mobile phones. These have now been sent forward for distribution to front line troops so that they can phone home on a regular basis.

There are rumours that as we have been in the regular army for nearly a month now, we will soon be considered mature enough to be allowed out on our own.

33 Field Hospital will soon be moving to Basra. There they will set up a Field Hospital complex, prior to handling over to 202, whereupon they will return here to drop the tentage.

As of tomorrow there will be escorted trips to the EFI for selected unit personnel as part of their continuing rehabilitation and personality development

Arrivals and departures

We would like to welcome a new doctor, Rachel, who was found wandering in the hospital complex at Strensall, lost and locked in for 10 days.

Would the owner of the left leg outside the ISO container please hop over to collect it from the QM.

Quote from the Padre in a tent full of QAs 'We'll never have a night like this again'.

Anyone finding a copy of Part 1 orders to report the incident to the RSM.

Uniform update. With immediate effect, Uniform must be worn at all times when taking showers.

Important notice. Please wear your Red Cross Armband the right way up.

Would season ticket holders for the trenches please collect their tickets from the Field Admin Office. There is currently a special offer on trench tickets, buy 3 get 4th free or ask for an instant upgrade to the portaloo end trenches.

Due to a shortage of blueys in theatre, they will now be issued at a rate of 1 bluey to two people. There is however no shortage of French letters, so no need to share these.

Your Horoscopes for April

Taurus Green is your colour of the moment. You'll be going somewhere warm and probably decide to stay there for sometime. Be prepared for a load of bull.

Gemini You are Hot! Make the most of it. Aquarius could quench you.

Cancer The new moon on 28th signifies turmoil disruption and disturbance to all those around you. Mars in Uranus could leave you in a bit of a mess.

Sagittarius There will be times when you find yourself in a bit of a hole. Just keep the sand out of your helmet.

Leo Be prepared for a lot of lion around. You have plenty of time to paws for thought.

Libra Your liberty maybe curtailed this month and things may seem intense. You may be in line for a slow perambulation.

Scorpio You'll feel like a fish out of water but be careful you don't end up in a stew.

Capricorn Communication with a loved one may be overdue, be patient, these are inhospitable times and they will soon come bluey on bluey.

Aries Try not to butt into too many queues you have a lot of time on your hands just now and you may find that you are going nowhere fast.

Aquarius Don't bottle it up. You are in great demand just now, because you are cool. You may feel quite wet at times, especially after taking naps.

Virgo With the ready availability of condoms in your location, you may find it difficult to resist temptation.

It has been brought to the attention of the editorial staff that some of the ladies are having erotic dreams from taking their NAPS. The editorial staff would just like to let it be known that we're here to help

Spot the difference competition.

Part 1 orders dated 20/03/2003 and Part 1 orders 27/03/2003, date excepted

A list is being taken of anyone who has not yet received a bluey so that they can write to each other. Names to psychiatric dept.

From Coyote General IV:

Efficiency experts recommendations to streamline the queues

Berms each side of major queues with signs indicating waiting times. Entertainment to be provided along the way and free iced drinks at critical points in the queue

What the padre should say:

'it is less of a leap of faith to believe in god than to believe that supplies will be available in theatre.'

Post

Following the recent successful trial of the new post system, there is to be a new method introduced each day. Tomorrow post will be given out in date of birth order, all personnel to parade, youngest at the front oldest at the back. The following day post will be given out in height order, followed the next day by weight order. The final day of the trial, the number of items of post will be divided by the number of personnel in the unit. Every person will then receive that number of items. To speed up the process, one representative to collect on behalf of their tent. Following this there will be a vote to decide the most effective means of delivering the post. OC governance to organise the vote

Supplies update

QM will now open daily from 0755 to 0800 Zulu and local.

QM now has the following items in theatre –

- Flipflops, size 2 and 13
- Pith Helmets, all sizes
- Snow shoes
- Right handed red cross armbands.

Unexpectedly available

There is a spare queue up for allocation. Anyone with a commodity that they feel deserves a queue please apply to the QM who will allocate it to the most appropriate cause.

Infection control update

In the event of an outbreak of infectious disease, especially of the highly infectious Nohope virus, all staff should observe the following procedure that has been designated OP KNEEJERK.

1. In the event of an outbreak, 33 Fd Hosp to be brought out of semi-retirement to construct a standalone 25 bed isolation facility in Iraq, well away from coalition forces and preferably in Iraqi held territory.

2. Royal Engineers will be tasked to dig a moat around this facility.

3. Med Stores to supply sufficient disinfectant to fill the moat.
4. Selected Ward Staff are to be entirely self-sufficient and responsible for security, command & control, admin, catering and any other aspects of the running of the unit.
5. All staff deployed to take 3 ration packs for themselves and sufficient for 3 days supply for their casualties, to be packed in preference to their personal kit.
6. Med resupply will be through the normal channels in the first instance. Due to the extended supply chain, staff may tap into the nearest Republican Guard unit if necessary.

Any donations of material and ideas for inclusion letters or cash, in an envelope marked 'What I would like to tell the film crew'. To HMC.

From Coyote General V:

More popular than Part 1 orders,
More truth than an Int Brief,
More taste than an MRE

With Christmas coming and latest rumours being that we're likely to be here until at least February next year, it's time to think about organising a pantomime. To start this off the RSM is looking keenly for some thespians. It doesn't matter how good or bad you are, the badder the better. The RSM will watch you at it and decide whether he wants you to to perform with him. Apparently he has a vast collection of thespian videos, so he knows what he likes. (I think my source said thespian, but there was a lot of background noise).

We're still working on the script for the panto, but possible titles are;

- Little Bo Beeeeeep, Beeeeeep Beeeeep. No trench too deep
- Peter Pan basher
- Ali Baba and the 40 people who never went to Kuwait for medical treatment.
- Harry Potter and the magical X-ray machine

International news

The problem of providing care for Iraqis on Kuwaiti soil has been resolved. We have granted them all British citizenship. Would anyone with a working knowledge of the British benefits system and a few thousand pounds to spare, please make themselves known to o/c clinical governance.

Hospital developments update

With the opening of the new paediatrics and veterinary wing we are pleased to be able to offer a truly broad range of facilities to a hitherto unrepresented minority. The canine dentistry and ophthalmology teams have already carried out their first surgical procedures. The true test will be when we start to receive larger mammals, such as camels into the complex.

We are also pleased to announce our latest initiative, the multi-centred hospital stay. Patients of all nationalities can join at any point on the itinerary, you will receive a part of your treatment, be moved to another facility for further treatment and then either move on to a third facility before returning or simply return to 202 for the completion of your treatment and care. Due to a special arrangement with the funding authorities, this is all at no extra cost to the patient. Unfortunately this arrangement only applies to human patients.

Letter to the Editor

Sir,

I have noticed that increasingly toilet seats in the portaloos are being left up. Ladies, please, please, please put them down after you've finished doing whatever it takes so long for you to do, especially in the middle of the night after missile alerts and there's a long queue of men waiting outside for you to finish.

Yours,

Mustapha Kerap, Lieutenant, Special Republican Guard .



The Marina at Kuwait City

Media Ops guide to the Middle East

Lt. Cdr Sue Lloyd RNR is the media ops officer accompanying the Channel 4 team She describes her experiences in the Middle East.

"My tour of the Middle East started in Bahrain with the BBC. Our initial stay was at the Holiday Inn which was very comfortable. There was an OUTDOOR POOL, INDOOR AND OUTDOOR GYMS and a bar which played very dodgy music at night, with plenty of Arabs enjoying the company of TCNs (third country nationals). It soon became apparent that the MOD had sent us to the wrong place! Coordinating the BBC documentary in theatre was a poison chalice because the COs of all the units refused point blank to have the BBC journalists embedded with them. We left for Kuwait and booked a suite at the Sheraton, a lovely apartment with TVS IN BOTH ROOMS, AND A MINI-BAR. A very pretty red and cream exotic flower was placed on my huge SUPER-KINGSIZE BED every evening by the maids. A few days later we moved to the Safir which was very nice, with a lovely en- suite LARGE SCREEN TV AND A BALCONY with a fantastic view of Kuwait's 2 landmark towers. There was a sky view restaurant with fantastic panoramic views, especially at night.

I was due to be sent to Qatar, and instead of the 45 minute direct flight I was to take a 2 hour taxi ride to catch a flight to Cyprus, wait there for 2 days and then catch another flight to Qatar. However once I reached the airbase, the flight had been cancelled so I went back this time to the 5* HILTON RESORT HOTEL in Kuwait. This is set in a green oasis and is built with marble to palatial standards. TWO OUTDOOR POOLS, SUN-BEDS WITH THATCHED

PARASOLS, TENNIS COURTS and FANTASTIC OCEAN VIEWS were on offer. The room was adequate, with OCEAN VIEWS, A FULLY TILED MARBLE BATHROOM, DOUBLE SHOWER AND BATH, AND LOVELY FLUFFY DRESSING GOWNS.

I was working in the press desk for 1700 journalists, organising military bus tours daily to Iraq with only 30 places available daily. Extra journos would simply pitch up to get on the bus and failing to do so, they would be verbally abusive. On return to the hotel we would have a fantastic 5* SPREAD OF ALL THE BEST FOODS AVAILABLE. We ate accompanied by a sophisticated French lady playing the harp every evening. The laundry was arranged by pressing a single button on the phone, within minutes a maid would pick it up, and return it neatly pressed and wrapped in cellophane.

My tour was short lived, three weeks in total, when I was abruptly sent to 202 Fd Hosp, I'm not sure whether this has anything to do with the Daily Mirror complaining about me and calling me a dragon. What a way to earn a medal.

It must be a sheer pleasure to be here at camp Coyote with us after the hardships and abuse you were subjected to down south, but I know I'd rather be here with our bands than with a French harpie any day, **Ed.**

Accompanying Lt.Cdr. Lloyd are Luke and Ollie (Channel 4 Documentary Team) to whom we offer a warm welcome, and we're sure that despite the war being nearly over by the time they arrived, (no they're not Americans), and the lack of coalition casualties, this will in no way impact on the quality of their documentary

Poets Comer.

An ode to 33 Fd Hosp

33 you're going home,
For that we'll shed no tear,
For long you've had the moan,
Loud ringing in our ear,
Of tentage built and complex made,
That could not run without our aid,
We took from you your promise of glory,
While you played sport, we did gory.
Your time is past, You have to go.
Who were you? I'd like to know.

By Maz age 13½

INTELLIGENCE Update

- Higher authority informs us authoritatively that it is going to get hotter due to a phenomenon known as summer. This was also announced during the CO's weekly parade on Monday. Once it appears in Part I orders, it can no longer be considered a rumour and protective headwear should be worn.
- Following hot on the heels of the RFA Argus, 202 to return to Strensall for a refit.
- BBC News 24 claim that on 7th April, 70% of Basra is under British control. That's better than Belfast (and Liverpool come to think of it).
- In keeping with Part I orders, there is to be a pornography amnesty. All pornographic material to be delivered to the padres, who will render it unuseable .. .eventually.

QM department update 09.04.03. Just in:

Decontamination slurry powder for Chemical Decontamination Area

Loads of barbed wire to make escape impossible

Two new pharmacists

Be a TWAT

Do you want to be a TWAT? Join The War Against Terror, a new and exciting organisation for like minded people. We need TWATs and we need them now. TWAT is a registered charity. Remember, the world is full of TWATs who don't yet realise what they are.

Come to Coyote General for all your surgery needs, we do prostatectomies, liposuction, facial tucks and transplants, mono or interspecies, while you wait. Just turn up at A&E.

Come to Crazy Coyote's Berm Emporium

We have literally thousands of berms at knockdown prices, many ordered for the Gulf but soon to be surplus to requirements.

Down at Crazy Coyote we're going absolutely Bermy and practically giving away berms at mad, mad prices.

Try our standard berms, great for general protection at 10$ a metre or, Extra high berms, great for keeping irritating troops away from valuable EFIs and telephones at $15 a metre.

Special offers;

Slightly eroded walked on berms, $5 per metre

Unsorted berms with unexploded ordnance, $1 per metre to clear- great for that French holiday home,

Call us for a quote on 0800-Berms are for life

Remember if you have any tales of indiscretion or interest to ordinary members of the unit, write it down and give it to a friend who can then pass it on.

From Coyote General VI:

More frequent than Part 1 orders,
More sense than an Int Brief,
More fibre than an MRE

- Is there any truth in the rumour that Mohamed Saeed AI-Safah the Iraqi information minister is alive and well in the CP. There's also a rumour that by popular demand, he's been approached to be the Honorary Colonel of 202.
- Names please of the MT driver who instead of picking up the Air Conditioning repairman recently collected a bewildered and confused Kuwaiti civilian and brought him into camp.
- With the Americans now in Baghdad, there have been reported sightings of a number of long absent people. So far reports are that, Elvis, Lord Lucan and the CO have all been sighted. The first two I can believe, but the latter must be sheer fantasy.

- **Two can rule.** Occupational Health have carried out a risk assessment and have issued a warning. Overdosing on tinned fruit will now be considered a self inflicted injury. No one is to eat more than two cans at a time. This does put paid to the masterchef's offer of a lump of cheese for anyone able to eat their own bodyweight in tinned pineapple and his ambition to build his own little shack out of the empty tins.

  This rule is not to be confused with the ***Two Can Rule Rule***, which the CO has declared illegal, with the RSM's permission, or the Toucan rule, which prohibits the keeping of Toucans in the accommodation due to the mess they make on the carpets.

Queues update.

The spare queue has now been reallocated to the telephones. Unfortunately, we are not scaled for the internet queue so that one will have to be overborne until it is written into the unit orbat.

The post office have split their queue to improve efficiency. This is not considered to be a new queue and therefore does not impact on the Q stores.

> The CEG for CMTs has decided to re-designate the trade from Combat Medical Technician to Camp Maintenance Technician. Duties to include guard, kitchen maintenance, emptying bins and other exciting and important duties.

Hospital update

Congratulations to those who noticed the alterations to the kitchen that were opened on 11th April. You would have been rewarded with breakfast. Anyone not aware of the alterations, you will recognise yourselves from the pangs of hunger that you will be experiencing and the fact that you are queuing in a newly designated no queue zone by the old entrance, the front entrance is now further to the rear of the complex. Anyone found queuing by the old entrance after 20th April will be towed away.

The temporary fire-station has now undergone a complete facelift and now resembles a welcoming oasis. Be reassured, they are still there and operational, despite appearances that suggest they are glued to their sun-loungers.

Finally the Coyote General Overseas Visitors wing has proven to be so successful that we are about to install bunk beds on all of the wards.

Occupants of tent 9 recently made an amazing discovery of potentially great archaeological significance (you try spelling archaeological correctly after a month in the field without alcohol, even with spellcheck). A rat that was being chased playfully around the tent was observed to run into a hole near bunk 23. Further excavation revealed a stairway leading down to a sealed entrance. A brick was removed and a candle furtively eased through the gap to reveal a hidden chamber. Full excavation of the chamber revealed the mythical Lost Iso of Telic, long thought to be on the high seas, but in reality right under our noses 'in theatre'. All unit charioteers, slings-men and spear-throwers to report to the QM tomorrow for issue of their desert kit.

Letter to the Editor

Deer Sir,

Please not that I am not 13½ . I am nearly 14 and consider myself one of West Life's more mature fans and I have a responsible after school job, answering the phones in a hospital. I don't know why you're picking on me. There's a girl in the band who's only 12. Here's my latest poem

A Warning to 34 Field Hospital.

Watch out 34,
We're at your door.
We took 33 without a fight,
Unleashing all our medical might.
We'll set up in Basra Zoo,
'cos our staff do animals too.
We're ready to move in to Iraq,
We'll give you 24 hours to pack

Yours Maz (nearly 14).

When is the QM going to get the unloading bays finished. They're a brilliant idea for men on a long tour, but no one is going to use them until he puts up Hessian screens and provides some suitable reading material. It's a shame that they weren't ready for Palm Sunday, the most important day of the year for followers of Onan.

Well done to all those who entered the 2003 Coyote Bite-size Snickerthon. . Channel 4 were not there due to the poor light, so this event will be rerun exactly as it was at 1200 hrs on Wednesday. The winners of the race will remain in theatre so that they can defend their title next year.

Classifieds

Sell or exchange. Two weeks holiday in Tunisia for 2 Mid August. Nice and hot resort 200 miles from coast. Reasonable offers accepted or will swap for a week cruise in the Arctic. PO Box -50C

Large Yacht available for weekend use in Kuwait. Suitable for stressed out senior managers. Apply Command Post.

For Sale. Hardback version of 'Nursing the British Soldier'. No longer required. Apply wards 2, 3, 4 & 6.

From Coyote General VII:

More frequent than Part 1 orders,
More sense than an Int Brief,
More fibre than an MRE

- Now that the war is more or less over and the Americans have stopped shooting at us and are concentrating on building bridges by imposing capitalist democracy on the poor unsuspecting inhabitants of Iraq, with the communications problems that we have experienced, the Army are reintroducing carrier pigeons. This effective means of communication was widely used in WWI until the Americans joined. The new pigeons will be issued with special I/D tags and body armour and will never fly more than 10 mins. away from their NBC kit
- There's a casualty on one of the wards who says that he was a tourist in Iraq when war broke out. You'll recognize him, his name is Asif.

Letter to the Editor

Dear Sir,

Thank you for publishing my last poem. I haven't writ another yet because I had a bad tummy the other day. My teacher says I should wash my hands after I've done dirty things.

Yours Maz (Age nearly 14)

p.s. I didn't do anything to the QM to give him his bad tummy, honest.

Post Office update

We all hope you enjoy the new self service parcel collection. Please remember, if it doesn't have your name on it, you should only take one. If it rains, please can we have volunteers to take the parcels back inside.

- Name please of the female who got into the shower with her head-torch still attached.
- And which pharmacist recently emptied out the last of his old shampoo bottle into a bottle of special shampoo, specially sent by his wife, without first checking the contents of that bottle. Apparently it didn't froth very well and smelt vaguely of port.
- Rumour has it that a letter was sent in requesting that a snorers tent be set up so that those affected could get some sleep. Apparently the request was denied as the QM doesn't have enough ear defenders to cope with the cumulative noise that would ensue.
- One of the padres was apparently asked recently to get a camel for one of the senior nursing officers, but the camel trader refused to trade until he'd seen her.

NBC Kit.

If you don't have it already, please report to the QM asap to collect your second suit and spare respirator. These items are due to be collected in imminently.

Hospital update

We are pleased to announce that the regional health authority have designated a new site for the hospital rebuild. This will be on a prime site in Southern Iraq- find out more

Casevac. Please note that anyone being aeromeded back to the CDM in Birmingham, must have 2 FMed 14s. The second copy must be written in English.

Of course, with large numbers of ladies living together in close proximity, body rhythms are bound to become synchronized. The CP will therefore be providing unsuspecting males daily warnings of which tents to avoid. The NATO approved method is the flying of a red signal flag outside the tent to indicate a synchronized hormonal event (SHE).

Obviously the combat pharmacist qualification is incomplete. A certain pharmacist, on receiving a bottle of shampoo, proceeded without carrying out the sniff test, to drain the contents from his old bottle into it. He then wondered why it wouldn't lather and his hair smelled of port.

IT lessons for RAF personnel. Your computer is inorganic and does not grow when you pour boiling water on it, even if it is switched on at the time.

On the subject of RAF, have you noticed how, since the war began, the number of flies in the area has increased significantly. This can be put down to the fact that for the last ten years, the RAF have maintained a no fly zone over Southern Iraq and Northern Kuwait. With the outbreak of war, they were diverted onto other duties and that's why the flies have returned. Unfortunately there was no such policy on mosquitos, so when we move north, be sure to take precautions.

They caught a snake on ward 4 the other day. The girls reckon it was about 5 inches long, but the blokes said it was anything between 9 and fifteen inches.

The high pitched whine coming from the CO's patio recently was apparently nothing more than a group of surgeons bemoaning their lost private income while serving over here. They were heard sympathetically. CO please return earplugs to QM soonest.

The Command Post has called in the RMP to interview all personnel to find out who stole the trenches.

The Easter Bonnet Parade was declared a success by the CO or one of his look-alikes. In one of his rare outings, he expressed his delight at the number of people in attendance and has decreed that if it brings in the crowds, then fancy head gear should be worn on his weekly parades, but no flowers or leather cowboy hats please

Wanted

Staff required in this forward thinking Fd Hosp to carry out guard duties. Must have recent Army Personal Weapons Test qualification and be able to play two musical instruments competently. Ability to speak Scottish preferred. Long hours guaranteed

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From Coyote General VIII:

More intellectual than Part 1 orders,
More Int. than an Intelligence Brief,
More cheesy than a packed lunch
The black and white edition

The unit requires that the number of personnel be reduced. Volunteers are being sought for consideration for aeromed back to the UK. Volunteers should choose a condition and then present themselves to the AELO with a $50 handling charge (non-refundable) for consideration. Once accepted in principle, they should present the AELO certificate of acceptance to Occ. Health with a further $50 processing fee (non-refundable). Recent acceptable aeromeable conditions include; cracked lip, pedis malodorous, portaloophobia, shaving cut, cat at home with a 7 day history of diarrhea, and 'nearly fell in the trench in the dark until I realized someone had nicked it when I recoiled, fell over backwards and hurt my coccyx'. Remember, just because your condition isn't on here yet, for a registration fee of $100 dollars, you can register and patent your own condition*.

Travel feature

For those of you yet to partake of the free offer of a day trip to Camp Doha, this is a worthwhile opportunity. The itinerary allows sufficient time for the mandatory queue in the PX and up to two subsidiary queues in the food hall. All of these queues are undertaken in air-conditioned luxury. While the PX queue is just another standard queue, the others proved more interesting. The KFC queue for example (50 minutes) never seemed to get any longer and once you had ordered, the food came out in random order, regardless of the order number. In the ice cream queue however, everyone starts talking to each other; The ice creams and milk-shakes are recommended despite the 20 minute plus queue. Once done with queueing, on your way back to the green-line bus, be sure to have your photograph taken in front of the sign that says no photography on camp Doha. The reaction of the residents is wonderful and the excuse, 'sorry I'm British' seems to work every time.

Survey results

Patients are most dissatisfied with; Patient satisfaction surveys

Hospital update

Temperatures continue to rise.

Our new catering contract comes into place soon. Expect an a la carte menu and a much improved whine list.

Plans to move to our brand new facility have suffered a setback as the construction is running behind schedule, but we still hope to move to a new site soon. After much negotiation, we have been allowed to take over the old communicable disease facility at BMH Shitenpukenall near Basra. Hopefully the trenches that were removed from this site will have been moved forward to our new location and will be ready for use as soon as we arrive.

Ward three has now been upgraded with its own hand washing urn and hot water urn and complete range of hand cleaning equipment. Please be careful that you don't mix the two urns. Drinking cold tea with scalded hands is one of life's less pleasant experiences.

Letter to the Editor

Dear Sir,

I am an SO2 in infectious and communicable diseases and I recently suffered one of life's less pleasant experiences. Having done my best to impose my uncompromising and unattainable standards on your hospital, I moved on to 34 Fd Hospital to do the same. There, I experienced one of the little blighters that it is my mission to eradicate. Duly, my world fell out of my bottom for a number of days,

Yours sorely

SO2 infectious and communicable diseases

Stores update

Anyone with spare unused Kleenex, please hand in to the tissue viability nurse.

We are now reaching the stage in the war where real casualties and equipment are becoming scarce. In order to preserve stocks, we are about to move to the notional phase of the exercise. Casualties will come in the form of envelopes delivered on a stretcher. The RAF recently cancelled their Aeromend flight to Cyprus as their only plane was busy. In future, notional flights will take place.

You will be aware that the dress for leaving the site is full dress uniform, correctly buttoned up. It has been noticed that other units are not dressing correctly, some are even wearing sports gear. If you come across any of these people, please obtain their names and units. On return to the camp, please give these details to the RSM so that he can inform the other units and they can take appropriate action.

The red and green story

For centuries, red and green have been used to signify opposites. Sailors use them to denote port and starboard (that's left and right), traffic lights use them to differentiate between stop and go and the portaloos on this camp have little indicators that show green for an unoccupied portaloo and red for an occupied portaloo. So here's a message from someone who's apparently pissed off at people trying to share their portaloo; **If it's showing red it's occupied**.



Camp Coyote Beach and Holiday Complex

From Coyote General IX:

More than Part 1 orders,

More regular than the post: (but not as regular as the patients on 5, 2 and 3)

Now in super monochrome

Zulu, Local and Delta Time Compliant

Int Update. Following the success of the US deck of cards of the most wanted Iraqis, JFLogC are to publish a UK version. Much smaller than the US deck, this deck will feature the 202 management and the 5 soldiers missing from duty for the last few weeks. The cards will have a photograph of the wanted person with a note of their name and position. If you see any of these, simply approach them , identify yourself and claim your voucher for 2 cans once we arrive in Iraq.

For those staff not forming part of the new orbat, the bad news is that there is a 4 week wait for air transport. The good news is that as a thank you, you will be taken to Umm Qas'r where you will be taken on to a returning navy vessel. The ship HMS Fantasia has just arrived in theatre with a fresh supply of R&R and desert combats. It will be fitted out with bunk beds in the ISO containers in its hold. The return cruise will take 6 weeks and call at Cyprus, Greece, Sardinia and Gibraltar. Anyone wishing to wait for the RAF to give their names to the FAO asap.

As we prepare for the closure of Coyote General, a number of spare amputated limbs have been found in one of the ISO containers. We are currently waiting for a decision as to what to do with them. Suggestions so far include selling them to the Tate Modern as a graphic and realistic representation of 21st Century warfare.

There can be no further excuse for not recognising the CO now that his photograph has appeared in Soldier magazine. Copies of the latest Soldier magazine are available in theatre.

Since kitchen duty has been implemented, a number of different styles have been noticed to be in operation. These seem to be divided along departmental lines. First we have the mental health approach; there's the bin, only you can take responsibility for your own actions, so put your dirty plates in them, then there" the general nurse approach; have you finished yet? put your plates in my sack, then move over while I clean your locker table. There's the A&E approach; 'Where's the camera?' Quickly shift those plates, get a dressing on that gravy before it bleeds to death, do you think the News of the World would like a photograph? And then there's the theatre's approach; One, two, three, four…….there's a plate missing. Everybody stop till we find the missing plate. The Aeromed way; 'I'll tell you again slowly, until I say that plate's going in the bin, it stays on the table', and finally the CP method, 'do it yourself it's not a CP responsibility'

Course update

A new in theatre course has been approved by the CO. The Sat-phone and sports equipment supervisor's qualification course (All arms SSESQ) is open to all ranks. The course is of six months duration for regular soldiers and _ day for TA soldiers. As an alternative, all TA personnel on exercise can opt to take the NVQ route by simply reading Part 1 Orders and carrying out a practical self assessment.

Disposable Items

Following a visit from the UK by our World Expert in Infection Control, all beds are to become en-suite units. Wash hand basins will be supplied in pairs so that staff may wash their hands before washing their hands and nursing staff will become single use disposable items. To facilitate this, the Defence Secretary has already started to mobilise the next 'batch' of TA nurses. To avoid waste, one used, the disposable nurses will be given to a third world country, the UK, to support their ailing health service. As doctors never knowingly wash their hands, this policy does not apply to them.

The entertainment committee are pleased to announce that agents for the tribute artiste, Geri Halliwell have confirmed that a concert will be given to the troops at the Oasis Coffee Shop in Camp Coyote on Saturday 24th May 2003. Tickets may be bought in advance from the promoter, Major Gerald Halliwell on the night. Prices, ladies $200, Gents FREE! Price includes an ice cream and a free drink. Due to the heat, the CO has decreed that the dress will be cut down combats and wet T shirts is compulsory for all sexes as the army is an equal opportunities employer.

It has been whispered that the adjutant has been caught in-flagrante behind the berm (with another, not on his own). Photos please.

Due to a lull in activities, the highly experienced burns team is now available for advice on prickly heat, sunburn and heat bumps. Cigarette burns, scald advice and croquet lessons are available at a small extra charge.

A senior anaesthetist recently took five attempts before he could open the unlocked male shower room door. He later denied that he was totally dependent on Combat Med Techs to carry out all of his menial tasks.

Management skills workshop on 'Rumour generation and control'

Top tips;

- Attend all O groups and briefings, read Part 1 orders daily, then totally ignore every official source cos 'what the hell do they know anyway'.
- In the mess tent, position yourself as close as possible to complete strangers (especially of a high rank), and eavesdrop on their conversation. Distort, twist and embroider every snippet of conversation that you may overhear, especially when taken out of context and tell your friend authoritatively, 'these are the facts'
- Employ confabulation at every opportunity. That is if you don't know or are not sure of the facts, make them up)at least I think that's what confabulation means, but I'm not sure). If you're not sure or just don't know, on no account let others know of your uncertainty. The more outrageous the rumour and the more confidently you tell it, then the more likely it is to be believed.
- When in the company of an official reliable source of information, look bored, chew gum, yawn and while avoiding eye contact, gently shake your head and mouth 'no, no, no'. Take care not to be seen.
- When in the company of a reliable unofficial source of information, do all the above, but be seen.
- Quash any counter rumours to your own by raising your voice, deepening your tone leaning forward and banging loudly on the furniture,
- Practice a smug, I'm in the know look,
- Frequently interject with 'I was talking with the CO and he told me....'

Stop press

Please note that the above workshop has been cancelled as the CO has state that without exception, all members of the unit are 'shit hot' at spreading rumours. Well done everyone. Remember that the First World War was started because a man called Archie Duke, shot and killed an osterich because he was hungry.

Our new hospital BMH Shaibah will be a foundation hospital. It will remain so until the ISOs containing the superstructure arrive in theatre and are located..

Movement plan

This is to be a Relief in Place. All personnel with experience of massage to report to the HMC where you will be assessed in your skills at giving relief. Names of volunteers wishing to be given relief in place to HMC. Applications accepted from any gender and rank, the army being an equal opportunities employer.

Due to lack of transport, ward 4 staff are to start on Saturday 10th May, pushing their casualties. This will be a sponsored charity bed push in aid of the 'Army Ambulance Appeal Fund'.

Remaining unit personnel to be stood down on Sunday 11th May. The first 250 pax to arrive at 34 location after 1200 Delta on Wednesday May 14th will be allocated a job and a bed space.

Due to delays in demobbing personnel at Chilwell, all staff returning to the UK will be demobbed at Shaibah. Any time then spent waiting at the transit camp for air transport back to the UK will count towards post operation leave and will be at the individual's own expense.

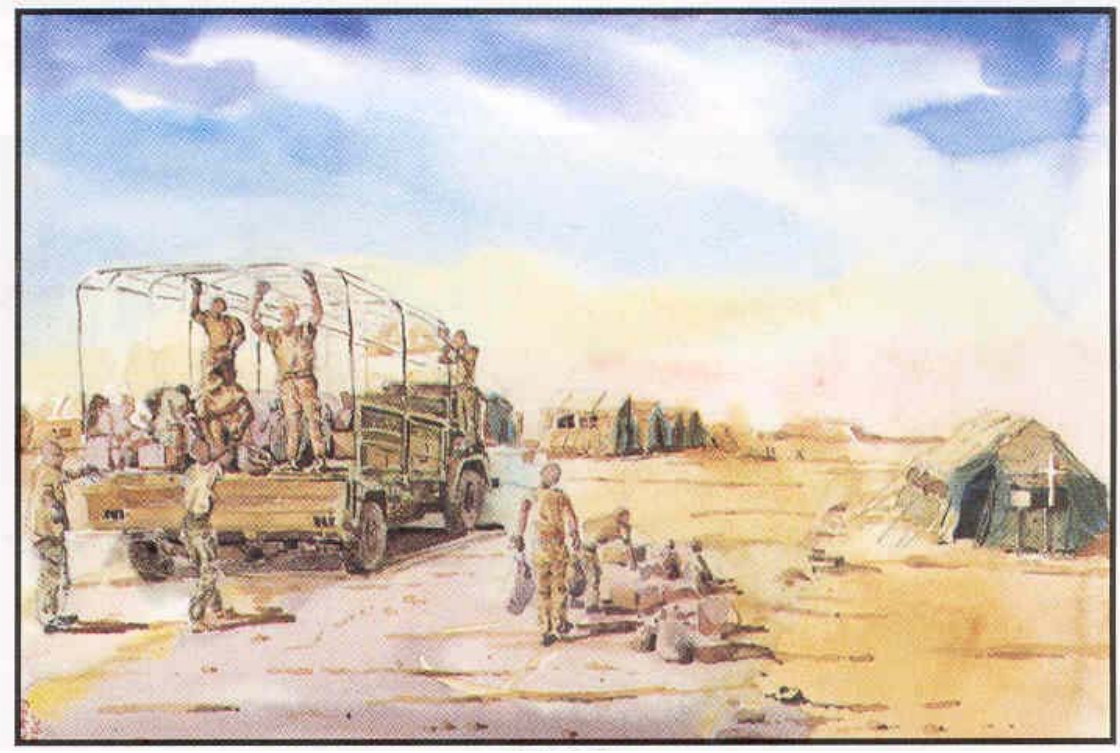
This is likely to be the last Coyote General, but in those immortal words uttered by our very own CO recently, ~~'who are all these people, so away and leave me alone~~,' 'I'll be back'.

Blood, Heat + Dust: Second Edition

Operation Telic and the British Medical Deployment to the Gulf 2003 -2009

Appendix to Chapter 15:

A Photoessay of 202 Field Hospital's deployment on Op Telic



Painting: *Basra Borough Council*

Artist: Gora Pathak 2003

During the deployment and operational work of 202 Field Hospital in 2003, many members of the Unit took large numbers of digital photographs which were subsequently made available as a collection on CDs. In this photoessay, we have put together just a few of the huge variety and range of images from this collection to tell the story in brief of the 202 deployment from March to May 2003, as seen entirely through the eyes of the members of the unit and their camera lenses.

The pictures take us through the mobilisation process, the deployment to Iraq, the preparations of the hospital for war and the activities of members of the hospital and work and during time off duty. They show many aspects of daily life and work, and hint at the humour that saw the Unit through the deployment. The challenges facing a filed hospital are somewhat different from those facing a field medical unit, by way of the large and diverse range and seniority of professionals committed to the task, and in the nature of their confinement to a single geographic location for weeks at a time. At one point, the CO of 202 Field Hospital had 28 Lt Cols and 27 Privates under his command, placing the onus on all individuals regardless of rank to pull their weight for all aspects of specialist and general duty, from cookhouse chores to real estate management and general labour.

For most reservists, the deployment provided a rapid and dramatic change in their life circumstances at very short notice, and this photo collection records both the unusual and the commonplace. Although the pictures are unique to the members of 202, the imagery will stir the memories of several thousand reservists and many regular personnel who passed through the system both at the time and subsequently.



Signing in at Chilwell, 5th March 2003

Many reservists arrived at Chilwell in early 2003 at very short notice, and with varying levels of personal equipment and documentation. The Chilwell reception system was designed as an efficient processor of large numbers of personnel, in respect of documentation, equipment issue, medical and forensic dental assessment and vaccinations, and financial arrangements over a 48 hour cycle



The luggage repository on reception at RTMC Chilwell, 6th March 2003



The Op Telic mobilisation was a very public and political event. This picture records the visit of Geoffrey Hoon, the Secretary of State for Defence, to Chilwell on 7th March 2003, during the processing of medical and other reservists



Chilwell Quartermaster's Stores: the first port of call for many reservists on 7th March 2003



No more home comforts and privacy: Transit accommodation at Chilwell, 6th March 2003. The pleasures of meeting up with old friends are offset by intimate acquaintance with new snoring partners



Training to make safe the AK47 Assault Rifle, as used by the Iraqi Forces, at Chilwell on 9th March 2003. Knowledge of the safe handling of weapons which might be brought in by Iraqi casualties is an important local safety and protection measure



Degassing outside the Grantham CS chamber, 10th March 2003. Predeployment training included respirator testing and confidence exercises.



Issuing, receiving, packing and sorting kit and rations in the Grantham Hangar on 11th March 2003, prior to redeployment to York for collective training

The deployment to Kuwait



Waiting for the flight to Kuwait at South Cerney in Oxfordshire on 14th March 2003. The basic facilities of the RAF Movements Centre for overseas troop deployments are a familiar port of all for service personnel.



The troopships of the skies: RAF and chartered aircraft on the pan at Brize Norton, on 13th March 2003, prior to boarding the night's quota of 202 reservists for transport to Kuwait.



Brize departure, 14th March 2003: Another group of happy holidaymakers on their way to the sun and sand



Arrival and baggage transfer at Kuwait City International Airport, 15th March 2003, for onward movement to Camp Coyote in Northern Kuwait.



To war in luxury. Coach transfer from Kuwait City International Airport to Camp Coyote, 15th March 2003



The contrast to Oxfordshire: Arrival and acclimatisation at Camp Coyote, 14th March 2003



Arrival at Coyote: The wait for accommodation 14th March 2003. Accommodation was allocated primarily in large tents in batches of 50 men or women, and in small tents of 6 for senior officers. One luxury not enjoyed by the mobile field medical units was the allocation of steel bunk beds from local civilian hire.



Accommodation at Shaibah, May 2003. The mosquito nets were essential protection against the continual irritation by flies.

The deployment to Kuwait

By tradition, regimental bandsmen and bandswomen have been allocated a war role as stretcher bearers and are secondarily trained as medical assistants.

202 Field Hospital was fortunate to have attached to it the Highland and Lowland Bands, along with their music, their instruments, their performing and dramatic talents and their muscle.

The Bands deployed to Kuwait in early February, where they were engaged in the construction of the hospital at Camp Coyote They then worked as guards on the Iraqi wards and undertook a range of general service duties, while retaining a sufficient sense of humour to run a series of evening concerts, church services and other musical events.



Bandsmen putting up tents for the Coyote Hospital, 19th Feb 2003



Bandsmen filling sandbags, Coyote Hospital, 22nd February 2003



Bandsmen digging trenches, 3rd March 2003



The finished product: Luxury, sandbag trimmed suntraps and social venues, Coyote Hospital, March 2003



The Band practising NBC decontamination procedures, Camp Coyote, 1st March 2003



Time off from trench digging, 8th March 2003



Putting up tents



Band concert in the mess tent, 29th March 2003



Ward guard duties, 12th April 2003



Pride in the job: The Highland and Lowland Bands photographed on 21st April 2003, on a trip to Um Qasr to play for the forward troops



Back to work: Band drill rehearsals on Shaibah airfield, 20th May 2003

The Hazards

Over the period of some 14 days from the outset of hostilities, the Iraqi Armed Forces launched a series of surface to surface missiles in the direction of Kuwait, seemingly at random and untargeted, but overflying the large troop concentration areas in Northern Kuwait, including 202 Fd Hosp.

A highly efficient early warning system of identification and tracking missile launches, and a Theatre wide alerting and radio broadcasting system, led to significant disruption of work each time a launch was signalled, and until the all clear sounded.

These missile launches raised the possibility of chemical weapons attack, although by far the greater risk came from the kinetic energy and explosive content of the warheads and missile fragments on terminal impact. In the early days, troops were kept for long and dangerous periods in respirators and chemical warfare suits, while the work of the hospital continued as best it could. The threat gradually diminuished and common sense prevailed.



NBC Alert, 202 Fd Hosp in the early days of the war



Hitting the deck on a ward during a missile alert, late March 2003



Joint US and UK trench occupancy manoeuvres during a missile alert, late March 2003.
Note the difference in procedures between US and UK personnel



Missile alert, late March 2003. Note the evolution of drills with the ditching of full NBC suits and the recognition that any chemical attack hazard would be from vapour only, along with ballistic injury from warhead and impact fragments.



Ward work at Coyote during an NBC Alert, March 2003. Disruptions were so frequent and the impracticalities of moving patients were such that staff just worked through the alerts wherever possible



Under cover in an Isocontainer during a missile alert, 27th March 2003



Preparing for war: 25th March 2003



Dust storm, 16th April 2003



Duststorm, Camp Coyote, April 2003

The hospital and its environs



A and E Entrance to 202 Field Hospital, 9th April 2003, during a lull in casualty flows



Casualty arrival at the A and E entrance, 202 Field Hospital



The mail tent, 202 Field Hospital, April 2003.



View across the Coyote Hospital stores and administration complex, 9th April 2003

Outside . . .



. . . and inside!: Hospital Stores, Shaibah, 20th May 2003



The Coyote Hospital complex, seen from the roof of an ambulance outside the A and E entrance, 19th April 2003



Kuwait Military Hospital, 3rd May 2003. 202 Field Hospital staff made occasional visits to Kuwaiti hospitals for specific stores or assistance. The contrasts in the working environments are clear!



Waiting for Parade, 7th May 2003. Parades remained an important focal point for collective meetings, briefings and general communication during the deployment

The clinical work of the hospital



Dental aftercare at 202 Field Hospital 24th April 2003



Surgery, 25th March 2003, during a missile alert (note helmets)



The Burns Tram at work, 7th April 2003



Working in Theatre, 14th April 2003

Work on the Wards



Ward work, Coyote. The nursing admin area and stockroom is a simple trestle table, benches and boxes in the centre of each ward. Staff and patients all contributed to general cleaning duties to keep the dust at bay



Ward work, Coyote Hospital, 6th May 2003



Ward Round, Coyote Hospital, 29th March 2003



Work on the Iraqi male civilian and families ward, 12th April 2003

The work of the hospital: Supporting activities

Casualty Evacuation



The Helicopter Pad, 202 Field Hospital, Camp Coyote



Iraqi casualties leaving Coyote for home, 23rd April 2003



CSSD: Preparing surgical instruments for use 21st March 2003



Disposing of clinical waste at an incinerator in a Kuwaiti hospital, 24th March 2003.
The Medical Services contracted this important aspect of hospital work to local sources.



At work in the pathology lab, Coyote, 19th April 2003



Logistics and replenishment of medical supplies: Delivering a cold storage ISOcontainer, 24th April 2003



Catering at Camp Coyote, 5th May 2003



Guard duties at the Hospital Entrance



ISOcontainers provide a versatile facility once emptied of stores



The Mobile Bath and Laundry Unit 5th April 2003



The sewage truck, 15th May 2005. We always knew when it had arrived



Ward 1 Team with a message for home



Ward group 19th April 2003



The Field Admin Office Staff at Shaibah, May 2003

Visitors



Camp Coyote, 5th March 2003



Desert Scorpion at Camp Coyote



Spanish Armed Forces Hue Medevac Helicopter and Channel 4 Documentary Team at Camp Coyote, 25th April 2003



Camels in northern Kuwait

Time off duty at Camp Coyote



On taxpayers' money, 26th April 2003



30th April 2003



Start of mini marathon at Camp Coyote, 13th April 2003



The CO of 202 discusses the finer points of marathon running with his sports advisers at the race marshalling point, 13th April 2003



Ward 1 team for the Midnight Walk Breast Cancer Charity Walk, 10th May 2003



Closing down party, 10th May 2005. The construction of a shaded recreational area and coffee lounge under camouflage netting provided a valuable social meeting place

Rest and Recreation in Kuwait



R and R at US Forces Camp Doha in Kuwait, 7th May 2003



Affluence in Jarah, Kuwait, 5th May 2003, to be contrasted with the destitution in Iraq a few miles further north.



An affluent Mosque in Jarah, Kuwait, 5th May 2003



R and R in Kuwait, 11th May 2003

Closing down for the move to Iraq



Taking down Coyote Hospital, 10th May 2003



The final hours at Coyote, 11th May 2003

Acknowledgements

We are grateful to the many members of 202 Field Hospital who have made their photographs available as a public resource,and to those who helped compile the source material. In particular, we thank the following members of 202 Fd Hosp, and apologise to any others whose photos we may have used from the public resource without specific acknowledgement.

Capt Gahan

Major Harries

SSgt Knight

LCpl Jasper

SSgt Longstaff

Lt Col Olver

Pte Friedlos

WO1 Titmuss

LCpl Price

Luke the Cameraman

Major Chapleo

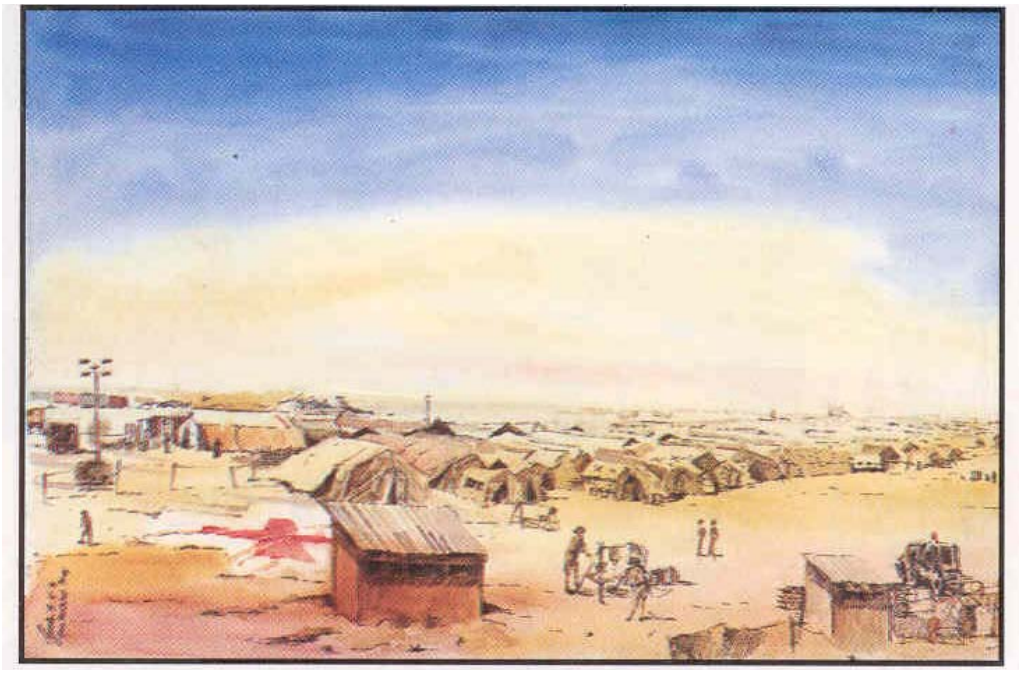
SSgt Morgan

Blood, Heat + Dust: Second Edition

Operation Telic and the British Medical Deployment to the Gulf 2003 -2009

Chapter 16:

The first Shaibah District Hospital
Op Telic 1
34 & 202 Field Hospitals



Painting: *34 Field Hospital deployed*

Artist: Gora Pathak 2003

Shaibah

Shaibah airfield lies some ten miles south west of Basra, and just northwest of the sprawling, impoverished, litter strewn town of Al Zubayr. Shaibah was built by the Royal Air Force in the 1930s, and it is still dominated by a huge old hangar of the design common on RAF wartime airfields. It was used and developed by the Iraqi Air Force in the 1980s, but its concealed concrete command posts and its wrecked, hardened aircraft shelters were abandoned to the desert dust after the precision bombing of the first Gulf War. Vintage aeroplanes, wrecked helicopters, trucks and gun emplacements still lie scattered around the taxiways. Miniature tornadoes whip across the flat, barren expanses in the evenings, and the sun scorches and bakes the hot concrete runways. Flies are ubiquitous. They thrive among the local rubbish dumps and sewage.

Its military history, facilities, airstrips and broadly defensible perimeters made Shaibah a natural choice for a logistics base in the centre of the British area of operations. It was taken in the first few days of the war. 34 Field Hospital set up a 25-bedded unit, and then a 200-bedded unit, and subsequently handed over a functional hospital to the teams of 202 Field Hospital in mid-May. In turn, 202 personnel built a more modern tented hospital, better equipped for the fierce environmental conditions of the desert summer. This hospital was subsequently taken over by staff of 33 Field Hospital returning from the UK in late July, and by a rotation of Regular and Reserve Field Hospitals since then.

34 Field Hospital

34 Field Hospital is one of the three British regular army field hospitals held at high readiness for operational deployment on an annual rotating basis. It is based near York, and staffed during peacetime by a cadre of regular personnel. At full wartime strength, it expands to 650 personnel drawn in similar numbers from regular and reserve sources, with a similar scale of equipment as described for 33 and 202 Field Hospitals.

Its recent history includes a deployment to Afghanistan in December 2001. It received unfortunate publicity in May 2002 when many members of the unit succumbed to the norovirus gastroenteritis outbreak.

Col Pat John, Commanding Officer of 34 Field Hospital during Operation Telic, describes the deployment of his unit.

Preparing 34 Field Hospital for war

The unit received a warning order to prepare for possible operations in Iraq in August 2002, and the Commanding Officer's Reconnaissance (RECCE) took place in January 2003. The unit deployed to Camp Fox in southern Kuwait in February 2003, and expanded to fully deployed strength with the integration of regular and mobilised reserve personnel. Its equipment sailed from the UK on 14th February, its regular manpower flew in between 28th February and 4th March, and its Reserves between 10th and 16th March.



Aerial Photo of 34 Field Hospital at RAF Shaibah, May 2003

"During March and until the outbreak of hostilities, the hospital was engaged in training and preparatory activities. The hospital then moved north with its personnel and equipment to a holding area at Camp Coyote.

The Deployment of 34 Field Hospital to RAF Shaibah during warfighting

"34's role was to move forward as conditions permitted to set up a forward field hospital for Role 3 casualty treatment in southern Iraq, succeeding 202 Field Hospital as the primary casualty receiving hospital.

"34 Field Hospital deployed into Iraq to provide forward medical support on G Day + 4, initially in the form of a 25-bedded mini-hospital. The command team conducted a forward reconnaissance of Shaibah airfield on G+2, 48 hours into the land offensive. The unit moved north from the holding area at Camp Coyote in blocks of 125 personnel to Shaibah between G+ 4 and G+7, along with sixty container loads of equipment and tentage.

"The 25-bedded complex was erected at night with Royal Engineer support while 7th Armoured Brigade conducted offensive combat operations around it, despite which the unit was open by the morning of 27th March. The 25- bedded trauma facility included four trauma bays, two surgical tables and four ITU beds."

The hospital was fully open on the evening of 3rd April. Col John attributed the success of this operational deployment to careful rehearsal and training of staff, so that the concept and sequence of events was fully understood, and so that the equipment and tentage could be assembled at night in difficult combat conditions under indirect artillery and mortar fire. This experience was fairly unique for a hospital in modern times, as such units are usually established well out of range of immediate combat actions. The airfield was not fully secure at that stage, and elements of the unit were under small arms fire but took no casualties of their own. It is unusual for a field hospital to set up so close to the combat action, and Col John commented dryly that he believed this to be the first declared example of a British field hospital used in the assault on an objective!

As the fighting moved on, 34 was developed into a 200-bed facility with a configuration very similar to that described for 202 Field Hospital. The move took place in four tranches over seven days, and the hospital fully opened to patients on 3rd April. It remained operational until mid-May, when a relief in place saw the progressive handover to 202 Field Hospital.

There were 2500 admissions to 34 Field Hospital up to 9th May. These included 228 surgical patients who underwent 420 surgical procedures. Seventeen casualties were dead on arrival at the hospital. The 10-bedded intensive care unit was heavily used. 3000 patients also passed through the Accident and Emergency (A+E) Unit, 7% of whom were children. 25% of those treated had minor eye injuries from the wind blown dust hazard.

Environmental hazards at Shaibah



The Shaibah dust devils and their aftermath (Photo 202 Field Hospital)

Shaibah brought a number of additional environmental challenges. The heat took a considerable toll of energy during the day as midday temperatures soared to well above 50oC. Tentage was frequently wrecked as the tornadoes raced through the camp, and caused significant injury and broken bones.

Temperatures rose dramatically from early May onwards, and remained in the high twenties and low thirties even at night. Fortunately, the dry heat is survivable for acclimatised troops, although life is made much more tolerable by good air conditioning, plentiful supplies of cold fluids and 'soak-downs' during the day.



Intensive Care at 34 Field Hospital

34 Field Hospital also deployed an intensive care unit for the first time on Operation Telic, manned by a team of four consultants, five trainees and twenty-seven nurses. They were equipped with six intensive care modules, each sufficient for one intensive care and one high dependency patient, giving a total capacity of twelve specialist beds. In the initial phase of deployment of the 25-bedded unit, two of these modules were deployed, with an expansion to ten specialist beds in the 200-bedded hospital. The unit admitted forty-seven patients, including eleven coalition soldiers, seventeen Iraqi soldiers and nineteen Iraqi civilians. Ten of these were under 15 years of age, and forty-two were trauma cases. On average, five beds were occupied at any one time, and patient stays ranged from one to nineteen days. Three casualties died on the unit.

The work of the unit was tested by irregularities in the power supply and air conditioning, by chemical attack alarms, and by challenges in the dispersal of treated local patients. Nevertheless, it was regarded as a significant success in the context of the treatment of patients who would otherwise not have had access to such care.

34 Field Hospital in the post operational phase

The hospital staff were redeployed to the UK in mid-May. A number of valuable lessons were learned and highlighted. The unit demonstrated how flexibly a hospital can be when deployed with adequate mobility and logistic lift, and how it can be broken down to operate as subunits. It also demonstrated how reserve and regular personnel can effectively be integrated. As with 202 Field Hospital, the requirement for forward planning for care of the indigenous population was highlighted, together with the importance of timely logistic support and resupply. The need for much better environmental control systems and their significance for efficient working and health maintenance at extremes of temperature were highlighted.



Entrance to 34 Field Hospital at Shaibah, May 2003 (Author)

Colonel Charles Cox kindly provided these whimsical recollections and extracts from the diary of his deployment with 34 Field Hospital, and subsequent visits to Iraq:

A TA Consultant Obstetrician and Gynaecologist's Recollections of 34 Field Hospital

"As an old style obstetrician and gynaecologist I had done three years of general surgical training and had recently attended the definitive trauma surgical skills course at the RCS (Eng) pioneered by Col Peter Roberts and Col Jim Ryan, who had both been Professors of Military Surgery.

"Two and half week warning of call up reporting date, a planned ski trip went ahead- despite several fairly spectacular falls attempts to do myself any serious damage were unsuccessful! So toYork.

"Pre-deployment was often interesting. We were co-located with members of the media ops group who were present in force. I think this means that it is serious!

"They taught us several things but the most important was that the first thing to do in any group is to spot the arsehole because if you can't it is probably you.

"Don't you just love just love military management! A couple of us had problems with our pistols because Grantham do not want to take them back but 34 Field Hospital don't want us to have them. As my colleague and I are to be stood down for 14 days safekeeping of weapon becomes quite an issue! Common sense eventually prevailed.

An ex-regular Navy officer believed the army when they said civvies clothes were not needed at York!!

While we were waiting at Camp Fox awaiting the move into Iraq we had a parade conducted by the Quartermaster. The vegetarians were told to put up their hands. It was the first time that our previously laid back psychiatrist had taken much notice of what was going on but he was now seen to be scanning the group keenly. When asked why, he said he was identifying his potential clientele.

"Man management RSM (RLC) style- we were all thrown out of the 'Recreation tent' which was empty at 7.30 because it does not become the 'Recreation tent' until 8.00

Lots of time for gossip- our padres were excellent but apparently this is not totally typical. Information passed on by very senior reliable sources is too sensitive for further comment.

"We have been instructed that if we are approached by the media with regard to our lack of desert combats we are to say that we are an odd shape. We were relieved that odd shapes did not seem to preclude senior officers looking very smart in their brand new desert kit back in Kuwait as they appeared on Sky TV.

"We have no access to hats or shamags even to buy. Goggles are provided by ourselves. The logos on the goggle elastics of the marines as they went into action suggested the Alps rather than the Middle East.

"We have been instructed to keep our three ration packs intact but we must remove the tissues and the matches!!! Makes you proud to be British.

I have serious worries about the mindset of one of the RSMs (this follows the report of American sergeant attacking his own troops and previously being described as acting strangely- no sunglasses on head in mess tent- Colonels cannot sunbathe. I was reminded about the film of the Jamaican bobsleigh team and the comment - I don't know what is wrong with you man, but it is not a small thing.

"RSM continues to maintain his hearts and minds campaign- only issue sun hats to be worn –problem most of us have not been issued sunhats-viz goggles etc!

"SA80 nicknamed the civil servant- you can't make it work and can't be fired

One hour NBC alert with mask on- RSM decides to punish us all by closing the mess tent as after the last NBC alert as it was left untidy-what job is he going to get in civvie street-traffic warden?.

"The daily briefing has now been renamed the G-string, revealing some items of interest but concealing the essentials.

"An RSM covers himself with glory again by sending corporal to tell us to move tents again without telling us where to move to. Sleeping on ground in a tent of 80+ but we are the advance 50 bedder so that is good.

"Not so good is lots of NBC false alarms which involves a lot of rushing about sometimes involving putting on all the IPE and running to a trench which has a notional roof on it- no I tell a lie that was Camp Fox. The trenches I think offer protection against ballistic and the tents offer protection against chemical and then there is gas – the more we practised these drills the more confused fed up and unconfident I become- this is obviously my problem!

"Interesting further insight into army logic: we are co-located with two other hospitals. Torches are banned in 33; 202 are in complete darkness but we have floodlights on in 34! I suppose it makes about as much sense as NHS waiting list initiatives and targets.

"Life became a lot better when we moved up to Shaibah where there was an outbreak of common sense (we had one very short NBC alert for the rest of the deployment).

The 25 bed hospital was erected in around 8 hours and took casualties after 10 hours.

The second group from hospital arrived the next day and we were told that some had said that they did not have body armour-the ones with body armour were instructed to sit on the outside seats of the coach.

"We were fortunate to have then Wing Commander Tim Whitbread as director of surgery with Col Robbie Patterson leading on orthopaedics. The obstetric and gynaecology workload was light! I was too late for a breech birth, much to the delight of our midwife. I put in a hormone implant and dealt with a bleeding miscarriage.

For the rest of the time I functioned as a low to middle grade surgical registrar and appreciated how privileged I was to be there at all.

Our first patient was a child-we had been assured we would not need paediatric kit as we would not be treating children.

"Life had got a bit boring recently- summed up by a surgeons comment 'I had an interesting shave today'

"At our previous camp smoking areas were marked out with mine tape At Shaibah we found some weeks later that areas marked with mine tape were suspected of harbouring Explosive Devices which came as interesting news to the smokers who had been huddling there!

"At dinner one evening we asked if there was any cold juice and informed no because of lack of man power! Hot water can be kept in the Norwegian containers but not cold ! We were previously told that we could not use our own mugs for tea because of the risk of infection-in fact it was because of a shortage of water and our mugs were much bigger than the disposable ones.

"Gora Pathak, our war artist in residence and an excellent orthopaedic surgeon has produced a fine selection of water colours covering the time of our deployment.

We visited Basra General Hospital, built by the British I think in the 20s,. nice cloisters. A midwife and I met two female obstetricians in full Muslim dress. One's father had been a pathologist in Newcastle other worked in UK. I asked 'may we look around'. The answer 'you have taken our country you can do what you like' which seemed fair comment! Our midwife went around labour ward while I waited outside. The severe lack of resources was obviously very frustrating for these first world trained Obstetricians.

"The brief on going home includes- you will be a cheap drunk, don't leap on your wife or girl friend straight away, and don't worry if the children or the animals take a while to get to know you again!

"For me the deployment was a life changing experience which has opened a number of doors professionally. I learned that we have excellent doctors, nurses and medics. Hardship and austere conditions bring out the best in a lot of people but not all.

"Home in May with time off. Found that one of my professional colleagues had gone to great lengths to take over my clinical practice. I was later to discover this was not an isolated phenomenon. A good point for me was that the locums employed had been of a variable standard so not too difficult to pick up the pieces.

"Several months later I gave a short presentation on our experience to a small group at the RCOG where the issue of lack of equipment was raised. One of the attendees was Mrs Sarah Brown. (unrecognised by me as the wife of the then Chancellor of the Exchequer). I might have edited my comments had I known- but perhaps not.

Return to Iraq

An Iraq Liaison Group had been formed at the RCOG and following this a meeting was held in Jordan with Iraq Obstetricians in early 2004. In April 2004 I found myself in Shaibah teaching an Obstetric course with Lord and Lady Swinfen of the telemedicine charity The Swinfen Charitable Trust and Prof James Ryan, Professor

of Conflict Recovery at UCH and previous Professor of Military Surgery.

The "Managing Obstetric Emergencies and Trauma" course was held on three separate weeks in Shaibah from 2004-2005 with the fantastic support and hospitality of the host units. The other supporters were The Leonard Cheshire Department of Conflict Recovery, The Advanced Life Support Group and the Royal College of Obstetricians and Gynaecologists (RCOG). Obstetricians, anaesthetists, midwives and the occasional surgeon were bussed in from several parts of Iraq.

"Sadly the security situation deteriorated and the third and last course was held in May 2005. In the interim a conference involving Iraqi doctors was held in Kuwait organised by the charity Baby Lifeline and supported by the ambassador's wife Dianne Wilton and members and fellows of the RCOG.

In 2008 I had the privilege of accompanying the great and good from the Royal College of Obstetricans and Gynaecologists to a conference in Erbil where I met two Obstetricians and Gynaecologists from the Southern States of the USA-Dr Randall Williams and Prof Marty Olsen.

Later that year I found myself in Baghdad 2008 rapidly followed by Basra, Kabul, Baghdad 2009 and Baghdad again May 2010 teaching, mentoring, renewing friendships and making new ones.

After 'Telic 1'I spent an enjoyable next few years in a fairly undistinguished TA career the high spot being involved with the hospital exercises at Strensall, and instructing on BATLS. I was very fortunate to deploy on 'Herrick 8a' and noted the tremendous strides which have been made with training and equipment since 'Telic 1'.

Lessons learned

Be sceptical of politics. Although Sky news was telling us that talks were going on to avoid the invasion, we were told on the ground that there was no doubt we were going in.

Pressure brought out the very best in the hospital team once we were on the ground.

We were woefully under-equipped. Whose fault? We were told equipment could not be ordered prior to the invasion because it would confirm that we were about to invade. We were told that we did not need helicopters because ambulances were just as quick and effective.

The Iraqi doctors who have stayed behind are immensely impressive. We have been in contact with the same people for six years. Some, both men and women, have been kidnapped and ransomed. Watching and assisting them operate emphasised to us their tremendous skills but heartbreaking to see that the vast amount of money pumped in does not end up in the sharp end of medical care.

For me 'Telic 1' was a wake-up call to a new phase of professional and military life. I am eternally grateful to those who made it possible-not many gynaecologists have had the good fortune and privilege to work with such impressive colleagues-doctors, nurses, radiographers other PAMs, medics, CMTs on the ground and now in Herrick with the excellent leadership and support from Medical Support Officers and other administrators".

The 202 Field Hospital Experience at Shaibah

Between 8th and 15th May, the 650 members of 202 Field Hospital were decamped from Coyote to Shaibah airfield to conduct a relief in place of the staff of 34 Field Hospital. Shiabah was rapidly developing as the Army's key forward logistic base in southern Iraq.

Clinical workload of 202 Field Hospital in Shaibah in the latter part of Op Telic 1

There was a continued flow of Iraqi and British casualties through May, June and July 2003. These included injuries from exploding ordnance among Iraqi civilians, trauma from continuing combat incidents during policing operations, and heat injury among deployed troops. The norovirus outbreak gradually subsided, but continued to affect staff at the hospital.

Iraqi casualties were gradually returned to the reviving civil hospital system. Requests from Iraqi civilians arriving at the gates of Shaibah were generally turned down so as to avoid creating a parallel and competing system with the local hospitals and conserve logistic supplies. This was occasionally distressing, as when young children with surgically correctable problems were turned back to the vagaries of the Iraqi civil hospital system.

Photoessay: The move of 202 Field Hospital to Iraq, May 2003



The move to Iraq, 8th May 2003. Personnel wear full ballistic protection and are seated facing outwards for rapid debussing in the event of ambush



202 Field Hospital moves into Iraq



The border crossing from Iraq back into Kuwait. The Kuwaiti-Basrah motorway transforms into poorly maintained track on the Iraqi side of the border, May 2003



Troop movement by coach on the Kuwait-Baghdad Motorway on the Kuwaiti side of the border, May 2003



A medical convoy in Southern Iraq ,21st April 2003. The throwing of sweets to children had to be stopped because of the high risk of injury to the children



Medical convoy approaching the entrance to Shaibah Airfield Garrison, 8th May 2003

The environment around Shaibah Camp: Destitution in Southern Iraq



Az Zubayr, 8th May 2003



8th May 2003



8th May 2003



8th May 2003

Az Zubayr, Southern Iraq: The environs of Shaibah Camp



8th May 2003



8th May 2003



May 2003



May 2003

Life at Shaibah Hospital Camp



The hospital's temporary accommodation area, 15th May 2003, baking on the asphalt of the old airstrip. These tents have subsequently been replaced by much better accommodation.



Building the Field Administration Office at Shaibah, 16th May 2003



Entrepreneurship at Shaibah airfield, 17th May 2003



Sunset at Shaibah Airfield 17th May 2003



Highland and Lowland Band practice at Shaibah

Post-war activities of 202 Field Hospital

From mid April onwards, the 1st UK Armoured Division was rapidly downsized to a Brigade, from 45,000 to under 15,000 personnel. Plans were implemented to downsize 202 Field Hospital from 650 to around 300 personnel, and around 100 beds.

This was a particularly difficult time for personnel management, as the downsizing of the hospital allowed some to go home, while others were rostered to stay. Where possible, volunteers were sought to fill the staffing needs of the smaller hospital, with the incentive of a six- to eight-week leave period back in the UK at the end of the tour in July. In other cases, lots were drawn within teams, and some individuals had to carry on in the heat. In late May, the first hundred personnel flew back to the UK via Cyprus and returned to their civilian jobs after a one-month period of recuperative leave.

Building the new hospital

Concurrently with the occupation of the hospital at Shaibah, the ground was being prepared alongside for a more modern and environmentally robust tented hospital which was freighted out from the UK. The staff of 202 formed up into off-duty teams and shifts and set to build and equip the new accommodation during the last week of May and the first two weeks of June. At the end of this phase of hot and physically testing work, a further 200 members were repatriated. The remaining 300 personnel continued to work the new 100-bed facility until late July, when the unit was replaced by the returning staff of 33 Field Hospital from the UK after a well deserved period of leave at home. Those who worked on this challenging project were particularly proud of their achievement.



Levelling the ground at Shaibah for the new hospital







Constructing the new BMH Shaibah Photos 202 Field Hospital



The new hospital at Shaibah before commissioning and occupation, June 2003
(Photos CO 202 Field Hospital)



Operating in the new theatre complex at Shaibah, July 2003



A Chinook bringing casualties to the new BMH Shaibah, late 2003
(Photo: Lt Col DJ Vassallo RAMC)

Demobilisation of 202 Field Hospital

The speed of mobilisation and operational engagement of 202 Field Hospital at the outset in February and March 2003 contrasted dramatically with the subsequent reduced tempo of events in April, May and June. It posed challenges of leadership to keep professional staff occupied while pressures were growing for their early release back to civilian jobs. Some staff were demobilised early on medical or personal grounds, and many of the clinicians and specialist staff returned at the end of May. The unit was reduced from 650 to around 300 by mid-June, and the remaining staff were retained on a voluntary basis wherever possible.

Once back in the UK, demobilising reservists were processed through the Reserve Mounting Centre at Chilwell, and afforded a generous allocation of post-operational leave at home. Particular emphasis was placed during the debriefing at Chilwell on the issues of post-traumatic stress, on the mechanisms in place for post-operational support, and on advice on social reintegration at home and in the workplace.



Intensive care at 34 Field Hospital. Gora Pathak 2003)

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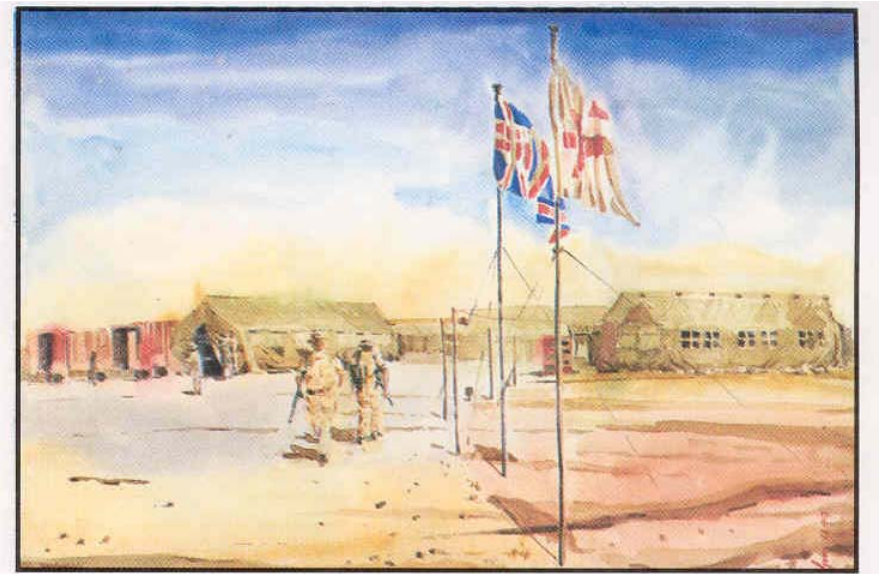
Blood, Heat + Dust: Second Edition

Operation Telic and the British Medical Deployment to the Gulf 2003 -2009

Appendix to Chapter 16:

The 202 Field Hospital Newsletters from BMH Shaibah: "The Shaibah Sentinel"

By Douglas Goodship



Painting: *A and E D and V*

Artist: Gora Pathak 2003

In early May 2003, 202 Field Hospital packed up at Camp Coyote, and moved to their new location at Shaibah Camp. The newsletter was reincarnated as the Shaibah Sentinel… The following excerpts and postings from the journal give some flavour of the challenges on a deployment which was very different from the comforts of Northern Kuwait.

The New Shaibah Sentinel

Incorporating 'The Daily Grind' and the 'Groundhog Gazette'

The hottest publication on the planet, from the hottest place on earth. May 2003

Because of the excessive heat, this publication has been typed in slow time to ensure that you do not tire when reading it

Hospital news

Following our relocation from our site in Kuwait, some of you may have noticed the dilapidated state of part of our present hospital. An immediate programme of improvements is being implemented.

The old Deep Trench Latrines are soon to become defunct with the successful commissioning of the new super portaloos. They will be left in place however while courting couples find an alternative location for their nocturnal rendevous. The portaloos were officially opened with a small ceremony, Matron having first use. She later allegedly said 'I'd barely held my breathe when I heard the splash and could breathe easy again, not like those horrid DTLs where the splash never came. With their marble effect plastic seats, they're just like home, I can open my bowels in confidence again, thank you Portaloo'.

Good news for those personnel on the work party building the new hospital. The CO has put in a successful bid for you to stay on and build the accommodation block. This contract starts immediately after the end of the current hospital build and is due to last for 6 months. Would all those who still have their 3 ration packs that were issued on deployment now please hand them in as they are required to provide foundations for the new hospital.

All personnel who have volunteered to stay until July are to attend the Occupational Health Dept. for a compulsory drug test and psychiatric assessment.

Any command staff who have not had a period of R&R on any of the wards, please see the RSM to book your illness.

Now that Harry Potter has finally left to start another term at Hogwarts, it can finally be revealed that he was the probable cause of the tornado that swept through camp the other night. He was alone in the male shower tent practicing with his wand when suddenly things got out of hand.

Coming soon to a unit near you- Q-endurance. Watch hundreds of soldiers queueing in the heat of the desert sun. Only the fit survive to receive their prize, a set of desert combats.

Summer Fete. Stands wanted for the unit summer fete. All funds raised this year will go towards refurbishing the air conditioning units in the hospital.

For sale. The latest publication from the AMS, 'Whining your way back home' free to all senior medical officers.

I understand that Combined Services Entertainments tried to book Kylie as a big name performer, but she felt that there were so many smart asses at JFLogC that she couldn't compete.

Origins of language

Tannoy. Abbreviation of let's make a load of intelligible noise jus' t' annoy everybody. Soon became more specific and abbreviated e.g. t'annoy the electrician. In the late 20th century with the invention of modern electronic systems, the word t'annoy was modified to Tannoy and copyrighted by the makers of large PA systems. Isn't language wonderful?

Message from the QM

Please do not wear your new desert kit. It is for issue only. Any breakages or wear and tear must be paid for on handing it back in at Chilwell.

It's a very different army when sunbathing becomes a 'light duty'. No doubt this activity is being carried out in issue underwear.

Quote- *'it's shit here isn't it?'* Reply, *'it's not that good'.*

For sale by informal tender

The MOD has one Field Hospital, soon to be surplus to requirements. Hardly used, only used once in combat. Potential purchasers may inspect the property at Shaibah Airfield. Of interest to military historians, S&M nightclub owners or could easily be converted into a conveyor belt bakery due to its thermal conducting main corridor. Sealed bids by 21st June to the CO, 202 Fd Hosp.

Use the remaining space to write your own amusing story from Shaibah:



BMH Shaibah: The early days: April 2003

From:

The Even Newer Shaibah Sentinel

Norovirus News

The GOC was overheard talking to the CO recently 'Colonel, I know we said this was to be a war of occupation, but I didn't mean your own hospital.

Following the successful renaming of ward 2 as ward 202, ward 6 is to be renamed Ward 202-too.

Top tip. Remember these are Iraqi flies that we're dealing with- they don't speak English, so learn a few Arabic swear words to try on them

Uniforms, floppy hats and red arm bands to be worn at all times while showering.

Fire orders

In the event of a fire, the best views and camera shots can be had from the ISOs in the QM's department. Tickets may be purchased in advance. Bids now being taken for front row seats.

In an effort to deal with the food outbreak on camp, all personnel who have eaten in the last three days are to report to the Occupational health tent to explain their dangerous behaviour that could be putting their health and the unit's budget at risk.

Which naughty girls were seen parading the COs underwear recently after accidentally collecting it from the laundry?

Quote:
'it's a good job the hospital's here or we'd have nowhere to put all our staff who are ill.

Hospital update

I'm glad that it was the CO and not me who asked the kitchen staff at 1945 the other night why the servery was closed. The response given was 'we close at 1930, it's on part 1 Orders sir'. Just because they're published in his name, it doesn't mean he reads them.

Would all personnel and outside units please note that in future the padres are not to be disturbed while they are receiving their regular massages, no matter how urgent the problem, otherwise you will be turned into a pillar of salt, your underpants will be infested with a plague of locusts and you will be condemned to spend eternity in hell (left off the flight home).

A special message for the ICNO. Don't worry that you've been left off the list for returning to UK. We'll make sure you get plenty of parcels.

We're obviously making an impact up at JFLogC in a recent report the Chief Of Staff noted that' ...the casualty was helicoptered to the UK 47th Field Hospital at Shaibah'.

Following complaints about the smell, the portaloos near the senior officers' accommodation were moved further away. Users of the toilets are now much happier.

With the recent amnesty on G10 equipment, would all personnel return sports kit to the QM and balls to the RSM.

Not only did the forces of the British Empire claim that Shaibah was the worst posting in the Empire, but our recently departed Iraqi major claims that this was also the worst posting in the Iraqi army.

To create your own personal souvenir of Shaibah, on discharge from the medical wards, complete your name in the certificate below and present it to the FAO. They will number your certificate and have it signed by the CO as your own personal memento in The War Against Terror

From:

The Newest yet Shaibah Sentinel

A special course is being put on for nurses on ward 4 entitled, 'how to make sure your electrical equipment is correctly plugged in'.

Which nurse on ward 3 asked when we were going to start repatronising the civilian patients?

And who asked on hearing that a baby had been brought into A&E, '...is it Iraqi?

It has been suggested that MBLU actually stands for Mobile Bar and Liquor Unit.

After the raffle the other night, it seems that while the CO has not rescinded his two can rule, as long as the drink is spirits and come out of a bottle, we're ok

Hospital update

The new BMH continues to be built. The state of the art flooring is down and ready to be covered with its protective tarpaulin the flushing toilets and plumbing to the sluice areas are progressing with, so far, no loss of any Ghurkhas. The estimated time for completion was given by the OC of the Engineers as '.. well it's not as simple as that it could be next week, but if the suppliers let us down it could be longer, we're off to another job now, we'll be back on Monday'.

Conditions continue to improve for staff too. The estimated completion date for the installation of aircon in the staff accommodation is early August.

It is rumoured that following a relief in place, staff of 202 will be flying out around 24th July.

One nurse asks 'Are people getting better looking the longer we're out here. Or is it just me?'

Identify yourself and I'll let you know, Ed.

Who had to spend 4 days on her back recovering from a 'day out' with the lads from a local unit recently?

Problem page.

In this new section, you write in with your problems and we get Doctor (Call me Mister) and the Padres to give you their advice.

I am currently a resident of Tent City, Shaibah. I am concerned at the amount of looting going on in the lines. Everyday beds and other items that people have legally stolen are going missing,
Concerned resident.

Dear concerned,

If your underwear were loose enough, then you could conceal your surplus items in them, alternatively you could hire a gunslinger to guard your tents. I believe that there is one living in your area. If that doesn't work, take 2 aspirins and phone NHS Direct. **Dr (Mr) John.**

Dear concerned,

KILL THE BASTARDS! They deserve to rot in hell and may a plague of locusts infest their underwear for all eternity. Love, **Padres**

I have recently been promoted from office junior to a more senior position . Mummy thinks I'm too young but I'm nearly 14 and I don't wear a vest anymore. Do you think I will cope?

Maz (nearly 14).

Dear Maz (nearly 14),

How brave you are to take on a big jobbie at such a tender age. Make sure that you change your underwear everyday and that it's neither too tight or too loose, keep your crayons sharpened always and make sure that you have a snack handy to give you that mid morning energy boost so vital for growing teenagers. Get mummy to give you an aspirin and phone NHS Direct.

Dr (Mr) John.

Dear Maz (nearly 14)

Young people often turn to the Church to cope with the pain and turmoil of life. We prefer alcohol. Come to Sunday school to learn more. Bless you my child.

Padres

It has taken a great deal of heartache for me to put pen to paper. I run a forward looking health trust that is just completing a major rebuild but I have a problem with retention. A few weeks ago, several of my senior staff jumped ship. Only the other day, just as I was about to make a rousing speech to boost the morale of the workforce, the whole of my building department left with hardly any warning and barely a farewell bar a surprise confession from one of the group. I feel a great sense of loss that my fabulously scripted speech was delivered to a much depleted and confused workforce. Am I being paranoid, I feel so alone! **Name and address withheld**.

Dear lonely,

It can be tough at the top, just when you think things are going right, something comes out of the blue to knock you down. Paranoid I would be! As far as your retention problem goes, there are a number of things you can do to relieve the pressure. Start by giving your staff air-conditioning before they leave, make sure they have access to plenty of freshly scented underwear, allow the Toucan rule, provide works transport from the accommodation when the new hospital opens and give them real Cornish pasties, served in Cornwall with real beer. In addition you should take 2

aspirins and phone NHS Direct. **Dr (Mr) John**.

Dear lonely,

Being men of the cloth, we can sympathise. For many years we have suffered dwindling number. You have our deepest sympathy, may the deserters rot in hell, a cold and wet place, where they will be forced to drink beer and sleep on comfy beds. We can think of no more just punishment.
Padres

An Ode by the Young Physicians

Shaibah's where they heal the sick,
Our doctors Rachel and Sue,
There's also a boy called Jamie,
Baby Medics of Gulf War II.

They've treated some odd diseases,
With some rare ones on the way,
From D & V to coughs and sneezes,
They've remained cheerful and gay.

On the ward with Sue as medical head,
She's able to get round by nine,
But Rachel prefers to stay in bed,
For her, a late start is just fine.

To wake us up, the answer we've found,
Is to have a couple of brews,
Then it's time, for another ward round'
This time it's a bit of a cruise.
At ten we break for a session,
To hear the latest brief,
To get the general impression,
Direct from Glynn our chief.

Hang around till lunchtime,
Then go and get our post,
'I've got more letters than you have',
Says the one that gets the most.
Then we join the lunch queue,
Salad's our usual food,
Noodles and soup are an option,
Choc's if you're in the mood.

Then back to the complex,
And Resus, where we all lurk,
Often in horizontal mode,
Just an excuse not to work
Patients can come at all hours,
And if there's an interesting case,
With Rachel , Sue or Jamie,
It can be a bit of a race.

At the end of the day when we finish,
We all go back to our tent,
To snack on a pack of Pringles,
And other things we've been sent.
So, that's all there is of us threesome,
About how we spend our day,
Asked would we return this time next year?
We'd reply 'No F*****g way.'

.Translated into English from the original by our team of experts

From:

Not another bloody Shaibah Sentinel

Infection control update

The House Journal of the Shaibah hospitals group incorporating; The Incredible Shrinking Hospital and the Hospital the Ghurkas built.

Part I orders this week.

RUNNING OUT OF CAMP.

As we are running out of camp, the QM's department has declared an amnesty on any camp that has been misappropriated. All personnel are to empty their trainers and bags of any sand that may have accumulated and take it to the QM's department. In addition, any gays who wish to come out are invited to donate any surplus camp that they have.

TANNOY TESTING

The Tannoy will be tested daily. In response to the message 'Hello, hello, can you hear me?', all personnel are to respond either 'Yes, I can hear you' or 'No , I can't hear you' in unison. The response will be co-ordinated by the SSM.

R & R PACKAGE.

The unit has secured a series of 1 day trips to Kuwait. All personnel wishing to go are to wear full uniform with CBA, helmet and IPE at all times. Swimwear may be carried.

BMH SHAIBAH

Once BMH Shaibah opens, only BMH Shaibah T-shirts are to be worn. The wearing of 202 Fd Hosp t-shirts is to cease.

COMMEMORATIVE PLAQUE.

A commemorative plaque is to be erected to celebrate the opening of BMH Shaibah. The wording of the original citation that was rejected read 'This hospital was built with no loss of life by the sweat and tears of health professionals from the AMSTA under the glorious direction of 69 Ghurka Sqn Royal Engineers, May-July 2003'.

And which very senior physician approached a nurse on ITU and asked, 'which part of Scotland are you from?' to receive the reply 'Liverpool sir'.

One of our Psychiatric Nurses was recently put on to light duties! What does this mean - she can only talk to slightly worried people? I'm sure the DMWS will have something to say about that.

Our sympathy goes out to the soldier who phoned home and asked his mother to send some bottles of holy water by Mr. Smirnoff. Six bottles of 'Evian' arrived the soldier and his tent mates were delighted, until he noticed the seals on the bottles had not been broken. It really was Evian water.

Due to the successful EH measures recently carried out, there is now a distinct shortage of flies. Anyone harbouring flies, please bring them to the back of the QM department where they will be stored for release on 25th July.

During a recent game of Monopoly in the welfare tent, one of the players was accused of being '...a lying, conniving bitch,' to which she replied, '...I don't lie'.

So the CCAST Aeromedical Team won the first Mobile Bath and Laundry Unit quiz night. I don't suppose that it's because they sleep in air conditioned luxury, sit around all day and when they do work, fly off to Cyprus or the UK for overnight drinking sessions.

The engineers were called urgently to Physiotherapy last Sunday as their hairdryers had blown the electrics.

The CO is looking for volunteers from the Lowland Band who wish to stay on for a further three months to assist the Locally Engaged Civilians and to obtain an NVQ level 1 in Camp Administration.

Following the visit by the National Audit Office, the war has been declared good value for money. Capital expenditure per hectare of land occupied is significantly less than the cost of the continued occupation of Scotland.

Fed up with the colour of your clothing? Then bring your clothes to the MBLU for our New colour treatment. Clothes dyed any colour as long as it's green. Offer dependent on availability of green sand bags.

Letters to DR (Mr) John and the Padres

Thank you for your recent advice. Mummy is very pleased with me as my work experience is going well. I even get to broadcast on the hospital radio occasionally and I get to wear my own clothes at work sometimes. I think things are going very well, **Maz** (nearly 15)

Dr (Mr) John replies.

Aren't you a clever young girlie. To ensure that you continue to improve your performance, you should invest in Nike gear and heed my previous advice on underwear. If you feel your performance is slipping try a couple of aspirin and phone NHS Direct whom I am told give excellent advice on all manner of problems.

The Padres reply,

My dear child, remember that pride comes before a fall. You must learn to walk before you can run. When you do start running make sure that you heed Dr (Mr) John's advice and invest in a good pair of training shoes by the Nike training shoe company.

Ode to Ward 4 Shaibah, incorporating Coyote General Ward 5

We arrived in theatre with trembling knees,[1]
Sweltering sun at 90 degrees,
Nervous and meek, unsure what to do,
We followed like sheep with ne'er a clue.
Two days in the country then straight to the ward,
Some were unlucky they had to do gourd,
(I meant guard really, but that didn't rhyme,
I really will try to do better next time).
We looked very anxious, what should we expect,
Life saving ops or drugs to inject,
Sadly our keenness dwindled away,
'cos all of the patients had rectal decay.
It seemed that the reason admission demands,
Is eating a meal without washing hands,
We set to our task of treating our ill,
By feeding our patients with potion and pill.
A word to the wise to make your life easy,
Don't do a job that makes you feel queasy,
We had to endure both aroma and stink,
Which put you off food and you don't want to drink.
Liquid and lumpy and all shades of brown,
It was all we could do to keep our stuff down.
Diarrhoea, trots, the wildies and shits,

Bum wee and ring sting, cooties and squits,
None were invincible, no-one escaped.
Just as we settled into a routine,
Chaos appeared where order had been.
A move up to Shaibah in enemy land,
Good news in the form of less bloody sand.
Good cheer was short lived, 'cos flies did abound,
Breeding in thunderbox, thousands were found.
Then tragedy struck the 202 crew,
No one could muster a fully formed poo,
With that and the vomit, it was really no joke,
When many succumbed to severe heat stroke,
As I come to the end of this little ditty,
A reminder that life isn't always this shitty,
At the end of July, we're all on a flight,
Headed for home, not a jobby in sight.

1. And some it seems had knee tremblers all the way through



From:

the last Shaibah Sentinel

New hospital update

The opening of BMH Shaibah went impressively well despite the GOC being late (did no one tell him he should turn up 5 minutes before the parade?). Instead of the usual boring speeches followed by the cutting of the tape, a blue light admission was arranged. During his subsequent tour of the hospital, he was impressed with the artwork outside ward 4.

In order to protect the new floors of the hospital, the CO has decreed the walking in of sand and grit on the soles of boots a prohibited action. In order to police this action a number of counter measures have been implemented. All hospital staff to wear flip-flops while on duty or visiting the hospital. Casualties will have their boots cut off at reception, placed in a plastic bag and stored in an ISO until discharge. Visitors will undergo a rigorous grit and stone inspection of their boots. Any boots with stones or sand found on them will be thoroughly cleaned. In addition, all staff patients and visitors on entering the hospital will make the following declaration, 'I have no grit, stones or other abrasive substances that could cause irreparable damage to the nice new flooring of BMH Shaibah, sir'. Anyone finding that they have inadvertently brought an abrasive substance into the hospital should hand it to the nearest head of department.

The Mobile Beer and Liquor Unit recently held a sponsored swim for their children. It was abandoned when the number of entrants reached 25. That number of people in one S tank does make it a little too intimate for anyone wanting a good dip.

Due to unforeseen circumstances, Shaibah Shanty Town has recently seen much movement. An expected influx of asylum seekers has meant the resident population having to move out of their middle class suburb into the council estate near to the old hospital. Residents of Crusty Villas too are being asked to share with a friend.

Helicopter recognition. The RAF has kindly provided us with a simple aide-memoire to help recognize the more common helicopters.

CHINOOK. That's the one where everyone stands outside the CP saying 'Cor, it's big isn't it?'

SEAKING. That's the one where they all stand outside of the CP saying 'it's not as big as a Chinook is it?'.

Another ode. This time from primary care

Kuwait in Coyote, we were there,
Two twelve by twelves called primary care.
Treatment room walls made up from sacking,
Made confidential problems with privacy lacking.
If you were lucky you laid on the bed,
If you were second, the stretcher instead.
Dust grime and sand everywhere,
Trying to clean it just wasn't fair.
Two nurses left, went home sick,
Got two more in pretty darn quick.
Advice, reassurance, dressings and feet,
Anthrax vacs turned up the heat.

We managed, got through it, just soldiered on,
By May to our new location we'd gone.
Our new med centre was at drash tent,
To the other side of camp, why was it sent?
It was big and roomy and really quite nice,
Space enough for us, and a family of mice.
Tables urns beds and tommy bins,
Made our faces wear big grins.
One major problem was we had no phone
So if someone was sick, we'd all start to groan
Distance to casualty was much too far,
We really needed our own car.
Had to make do with an ambulance instead,
That's ok you could lay on its bed.

We all had the shits, were really quite ill
Shigella was found and we all got the pill
Deep trench latrines were eventually burned
The flies grew less, the tables were turned.
Health was better morale not suspect
But lo and behold a hospital to erect.
Blisters back ach and a load of foot pain,
Work in the heat was really insane.
At last it's up and boy is it posh,
It must have cost a real load of dosh,
Primary care has a permanent place,
From Kuwait to Iraq we've now touched base

Our new department is incredibly nice
Thank goodness we didn't pay the price,
Our wish list was granted, all that we need
To provide a good service, keep doing
the deed,
We offer advice, do feet and are kind,
To keep you lot going your nose to the grind
So if you all need help we'll be there, a shoulder to lean on and lots of good care.

How sweet.

Problem Page

I am the managing director of a large organisation currently operating in the Middle East. Among my more pleasant duties are opening fetes and hospitals. I do wonder though if sometimes, in their eagerness to please, my subordinates stage manage events just to impress me. For example at a recent hospital opening, just as I was about to make my morale boosting speech, a well rehearsed blue light ambulance brought in a well made up, politically correct patient. While mildly irritated that it stole my thunder, it was mildly amusing. How do I stop these incidents happening in future or am I doomed forever to suffer these stage managed displays. p.s. Loved the graffiti outside ward 4.

Dr (Mr) John replies.

As one who is doomed to future greatness you have my deepest sympathy. If you like we could swap jobs for a while to give you a break. If you're not up for that, then take 2 aspirins and phone NHS direct.

Padres reply

You lucky bastard!!! What wouldn't we give for a captive audience that hangs on our every word and goes out of their way to impress you. How are you fixed for opening the church fete in August?

Dear Secretary of State for Defence

I am currently on one of your working holidays in Iraq. When I enrolled I was fully aware that it was a working holiday and that there would be a degree of hardship. The work camp to which we were initially assigned had the bare minimum of facilities. For the first two months we had no contact with the outside world. Despite being near Kuwait City we were unable to visit it. The only entertainment arranged for us was a day trip to a camp run by your sister company GI travel. The facilities at this camp were far superior to anything that had been laid on for us and they even had an ice cream parlour. By contrast we had an inflatable coffee shop and weren't even allowed to eat the same food as our visitors.

Part way through the holiday we were forced to decamp to another tented village in the middle of nowhere. Our main job here was to upgrade the facilities so that future holidaymakers will have better conditions including basics such as flushing toilets and air conditioning. While I have enjoyed making a positive contribution to the local community, the facilities provided by your company have fallen well short of what was promised and what has been provided elsewhere. I hope that you will agree with me that I have suffered undue hardship and look forward to receiving better compensation than the commemorative medal that you have promised

A. Camper

Dr (Mr.) John replies.

The facilities at GI Travel's camp are compensation for their being American. Remember, you were able to visit them and then leave, but they will always be Americans. As for having to move, there is often a premium to be paid for two-centre holidays such as you describe. I hope that you choose

to travel with this company. If you continue to have problems, take two aspirins which you will find are readily available in theatre.

Padre replies.

You think you've got it tough. First they send me off from the luxury of this camp to the fledgling dangerous adventure camp for a couple of weeks, and then when I get back, I find that my fellow padre has got his parole through and is being sent back to the UK. Remember that the grass is not always greener. You could be American. I am sure that you will find your just rewards for your selfless acts. I pray daily that the medal is a big and glorious one.

Dear All, I thought that I would write to let you know. I followed all your advice and my work experience went so well that they've given me a job and a promotion. Thanks for all your help, Love **Maz** (15)

Dr (Mr) John replies

I love a happy ending. (Sniff)

Padre replies,

Please enter your own reply. Best effort will be published in the Pyongyang Post.

I suppose it's appropriate that the end of tour party was a Bath Party. It was good to see the fire brigade doing something at last. Good too to see the CO letting his hair down. It's amazing how apparently drunk so many people can get on '2 glasses of wine'. Despite a few minor injuries that turned the S tanks red, nobody died, or at least if they did we haven't found the bodies yet. Did anyone see the wonderful water feature created around the MBLU and tents A1 and A2 as the S Tanks were emptied. Please QM, on future deployments could we have a couple of them as part of the welfare package?

Did anyone notice the House of Commons Defence Committee coming round the other day. They were the mildly disinterested group of civilians that toured the hospital, calculators in hand working out their expenses claim for this trip. I hope you remembered all that you were taught at Chilwell. Only give them the big 6 and anything else should receive the reply,' I cannot answer that question, sir (because your being a politician I'm not sure what you're really asking me or what your motives are, even if I understood the question in the first place).

Following a recent civilian admission, a weighbridge is to be built outside of A&E. Anyone exceeding the safe weight limit, yet to be determined will be sent on to the Czech hospital.

Wanted. One volunteer to accompany the unit's ISO containers. The boat will leave soon to a destination unknown, probably somewhere in Europe. The duration of the voyage will be between 4 hrs and 5 weeks. Make your own way at your own expense to Chilwell. Would suit anyone seeking a divorce or a meaningful relationship with a golden rivet.

Well, that's it for another war. All that's left to look forward to is our relief in place (yummy), then back to reality. No doubt we'll all be back together again someday. Until then just don't take life too seriously or you could end up in a newsletter near you.

Finally, don't forget the dress for the return flight is 'desserts'. 202 is a unit not to be trifled with.



Dusk at Shaibah: Photo Lt Wanda Machnicka

Blood, Heat + Dust: Second Edition

Operation Telic and the British Medical Deployment to the Gulf 2003 -2009

Chapter 17:

The work of the Field Hospital Squadrons, Operations Telic 2-13, 2003 -2009



A painting of the MOET (Managing Obstetric Emergencies and Trauma) course in Shaibah
Artist: Gora Pathak 2003



Introduction

The hospital contingent of Operation Telic was provided by a series of regular and reserve hospital units on six month roulements. Just over half of the 3,000 or so individuals involved in Operation Telic were regular serving personnel, while some 43% were reservists. A number of other augmentees were also involved, including a Czech surgical team and specialist nursing staff provided by the Frontier Medical Agency.

The Hospital Squadron was housed in four separate hospitals, vis:

- The original tented hospital at Shaibah, brought by 34 Field Hospital and subsequently occupied by 202 Field Hospital from May to July 2003
- The first new build field Hospital at Shaibah, put up with the labour of teams from 202 Field Hospital
- The second new build field hospital at Shaibah, commissioned in late 2004
- The field hospital at the COB, occupied in late 2006

In this chapter, we have sought to describe:

a. the sequence of unit deployments and experiences from the published record of the hospital squadrons;

b. The personal experiences of some of the participants; an eclectic collection of reminiscences from individuals of all ranks which say far more about the minutiae of life than can any official document.

We conclude with a detailed independent analysis of the casualty workload of the hospital squadron, the details of which are outlined in an appendix

There is also an appendix of the source hospitals and numbers of staff during each phase.

From Operation Telic 2 onwards, the command of the hospital squadron was integrated into the entire UK Med Group, and the CO of the "providing field hospital was also the Med Group Commander, or alternatively the CO of the "lead provider" Medical support Regiment assumed the role.

The hospital squadrons functioned on a much reduced scale of 100-120 personnel per deployment as part of the integrated Medical Group, with command of the Medical Group alternating between hospital and field medical commanders. The Field Hospital was redeployed to the Contingency Operating Base at the Airport with the hand over of Shaibah to the Iraqi Army. This began one of the more unpleasant phases for a deployed UK military hospital in living memory, as the COB came under relentless indirect fire attack from insurgents. This made living and working conditions extremely difficult and unpleasant, and casualties were sustained among the hospital staff.

Despite the small size of the deployed hospital squadron, as a 25 bedded unit, the productivity and capability of the successive units was remarkable, and very large numbers of casualties with major trauma were successfully treated, along with a large number of DNBI cases, most notoriously the norovirus gastroenteritis, which was subdued but never wholly eradicated.

Most importantly, the deployed hospital saw considerable and progressive investment and upgrading, and the ditching of old equipment. No surgeon will have been sorry to see the replacement of the old air-portable operating table frames and spotlights by modern theatre tables and lighting systems. The diagnostic radiology service was a particular beneficiary, with digital systems and a CT scanner replacing the old and cumbersome analogue equipment.



Configuration of the Field Hospital in Iraq, Operation Telic 2-13

By the time of 205 Field Hospital's deployment in May 2005, the Field Hospital at Shaibah consisted of: a Hospital Management Cell, an Accident and Emergency Department, a Radiology Department providing X-ray, Computer Tomography (CT) and Ultra-Sound imagery, a Laboratory to providing a Blood Bank, Blood Grouping, Biochemistry, Haematology and Microbiology, an Operating Theatre consisting of two Surgical Teams proving General and Orthopaedic Surgery, an Intensive Therapy Unit (ITU) of 2 ITU beds and 2 High Dependency Unit (HDU) Beds.

50 General Beds divided as follows: a Surgical Ward of 15 Beds, a Medical Ward of 15 Beds, an Isolation Ward of 20 Beds, a Physiotherapy Department, a Community Psychiatric Service, a Patient Welfare Service and a Mortuary.





The hospital was planned and resourced to serve a population of military personnel at risk figure of 10,000, although this was in practice substantially larger through the treatment offered to Iraqi civilians and security service personnel. Tasks included, maintaining an A&E Department capable of dealing routinely with around 20 casualties daily including 5 trauma casualties; maintaining a capability to admit routinely 10 patients per day and undertaking 20 X-rays and 5 CT scans per day whilst providing imagery in Theatres as required.





The Laboratory provided a Blood Bank of 60 Units of whole blood, Blood Grouping, Biochemistry, Haematology and Microbiology for 30 assorted samples per day. Theatres had to be able to undertake 2 major and 2 minor elective primary surgical procedures and be prepared to undertake 6 emergency surgical procedures per day. The Intensive Therapy Unit had to maintain 2 ITU beds and 2 High Dependency (HDU) beds. Ward beds had to be maintained with the flexibility to expand from 50 to 75 beds (3 Wards of 25 Beds).

These beds would care initially for 15 Surgical, 15 Medical and 20 isolated patients. In addition support services included Physiotherapy support to ITU, Wards and Out-Patients. Psychiatric Services to deal with on average 6 referrals per day and maintain Welfare facilities for patients. The Hospital Squadron had also to be prepared to receive a Major Medical Incident (MMI) of up to 50 casualties. The Hospital Management Cell provided the Command and Control, communication and information management for the Hospital Squadron.

The senior management team consisted of The Commanding Officer, who had overall command of staff and patients; a Clinical Director with responsibility for Clinical Standards; Second in Command Administering the Squadron, OIC Nursing (Matron) in charge of Nursing, Squadron Sergeant Major (SSM) security & discipline, Squadron Quartermaster Sergeant (SQMS) hospital infrastructure, Wardmaster for ward procedures and an Air Evacuation Liaison Officer (AELO).

"During March and until the outbreak of hostilities, the hospital was engaged in training and preparatory activities. The hospital then moved north with its personnel and equipment to a holding area at Camp Coyote.

Casualty Volumes

All significant casualties passed through the Shaibah/COB hospitals, and the work of the independent British Casualty Monitor website thus gives a rounded if not absolutely accurate picture of the monthly and cumulative morbidity and mortality data through the operation. This data is shown in an appendix at the end of this chapter.

Operation TELIC 2 from June 03 – Nov 2003

33 Field Hospital

It has not proved possible to source any specific information and insights relating to this deployment.

Operation TELIC 2 from June 03 – Nov 2003

22 Field Hospital Between November 2003 and May 2004.

PD Reavley and JJ Black reported the attendances at a field hospital emergency department during operations in Iraq on Operation Telic III in the J R Army Med Corps. 2006 Dec;152(4):231-5.

All presentations to the Emergency Department (ED) were clinically and demographically coded and entered onto an electronic database. Between November 2003 and May 2004, the emergency department dealt with 1455 new presentations of whom 75% were UK Armed Forces personnel. This represented a busy period in the field hospitals time in Iraq and offered valuable training to emergency medicine trainees in an unusual environment.

Operation TELIC 4 from April 2004 – November 2004

207 (V) Field Hospital (relieved in August 2004)

It has not proved possible to source any specific information and insights relating to this deployment.

256 (City of London) Field Hospital (V) Telic 4a August – November 2004

256 (City of London) Field Hospital celebrated the affiliation of one of its geographic squadrons "D" based in Mile End, East London to the Guild of International Bankers, following its return from Iraq.

Between August and November 2004 the Field Hospital at Shaibah Logistic Base outside Basra admitted some 700 patients, including 50 casualties resulting from Hostile Action with a variety of gunshot wounds, fragmentation and blast injuries. Disease and non-battle injury (DNBI) accounts for much of the workload: in the same period there were more than 5,000 primary healthcare attendances.

Colonel Martin Deahl L/RAMC, Commanding Officer 256 (City of London) Field Hospital reported that "The UK Medical Group comprised a tented 75 bed Field Hospital at the Shaibah Logistic Base outside Basra. The tented hospital covers an area of approximately 1 Km2 and when "packed" for transportation fills approximately 100 Iso-containers. The hospital uses large amounts of power and water, problematic resources at the best of times in a desert environment, and it is the job of the Med Group's Support Squadron to maintain life-support and essential supplies to the hospital as well as maintaining its infrastructure.

The hospital's capability provides crisis expansion to 150 beds for up to 72 hours. In addition to managing trauma the hospital provides a full range of services including elective medicine and surgery, a four bed intensive care unit, an infectious disease ward and assessment unit, a mental health team, physiotherapy, X-Ray, pathology departments and a Primary Healthcare Centre. Health promotion is also important business and there are highly successful smoking cessation and sexual health clinics. The hospital is currently being rebuilt, a CT scanner will be installed shortly although the new hospital will remain in tents the Operating Theatres and ICU will be rebuilt in hardened buildings.

In addition to the hospital the UK Med Group also includes a squadron of a Close Support Medical Regiment responsible for primary care, dentistry, and the provision of an emergency resuscitation capability throughout the UK area of operations: the "blue light matrix". Territorials make up 50% of the 400 strong UK Medical Group on OPERATION TELIC 4a".

Operation TELIC 5 from November 2004 – April 2005

33 Field Hospital: Life at the Shaibah Hospital 2005:

Anon from the MDHU Peterborough Web Site writes:

'Our man in Iraq ('No.1')' of Operating Theatres, MDHU Peterborough tells us a little about his time in Iraq working at the Multi-National Division Field Hospital at Shaibah Logistics Base. 'No 1' was deployed during Operation Telic 5.

Q. **When did you find out that you were off to Iraq?**

A. It was just after I arrived at Peterborough actually. I had just been posted back from an overseas tour in Sep 04, and I was on my induction course when I first heard the news.

Q. **What was the pre-deployment time like?**

A. In a word, 'busy'. I had never deployed with the army before, so a few things did seem a bit alien to me. Just a few days after I received the signal that I was going, I found myself being fitted out with all my kit at an army camp in Nottingham. I was actually very impressed by how smoothly the kitting went, and found that within hours I had received all my relevant clothing, kit and weapon accessories. I had even been passed by the medical centre, dental centre and admin people as being fit to go.

Q. **What about the actual pre-deployment training?**

A. This was all done over a 3 week period at a camp in Yorkshire. It was basically made up of 2 weeks getting you up to speed with fitness tests, APWT's etc, followed by a week of OpTag training. I have to say that I found the first two weeks interesting. Being in the RAF I had never fired on a range larger than 25 metres, so to get on a 300 metre range was an experience. The Basic Combat Fitness Test was also a bit of a shock! For somebody in the RAF to suddenly be told they had to do the full 8 miles ...well, lets just say that I passed it alright, but my feet were in absolute tatters afterwards!

Q. **Did you consider the training valuable?**

A. Absolutely! Never before had I been so sure of my weapon. The anti-ambush drills in particular were first rate! Q. Could you tell us something about the trip out to Iraq? A. It took a loooong time! From leaving my Home to taking off from Brize Norton took 19 hours alone! After that it was long flight to Qatar by Tristar, then a quick turnaround for a connecting flight into Iraq itself. By the time we arrived at Shaibah Log Base I would guess that we had been travelling somewhere in the region of 38 hours. Q. What were your first few days in Iraq like? A. Again, quite busy. We were accommodated in a transit area on SLB. During the first few days you re-zero your weapon, attend unexploded object (UXO) lectures, and generally have the idea 'be wary at all times' stamped into your consciousness.

Its at this point that you really start finding your feet as well. You'll be introduced to the welfare facilities on camp, and generally start to work out the 'feel of the land' around you. Oh, and you'll find yourself looking forward to the mealtimes. The food at the transit was absolutely first rate!

Q. **What about the rest of the tour?**

A. Well, it was interesting! We were a lot busier than I had though possible, mainly with RTA's and operations involving debridements. In the first few days we cared for a local Iraqi child who had stood on a land-mine. Unfortunately he lost his leg, but soon became a favourite with the hospital staff as he was quite a character! In fact, many of the patients that we saw were local Iraqis, something that I view as being a positive thing in the political climate.

Theatre was a bit of a strange place compared to the rest of the hospital due to the fact that at the time we were being reinforced by a Czech army theatre team. Although they offered a valuable service, and their knowledge was excellent, the difficulty in communication sometimes meant that the British team needed to be on-hand when the Czech team were covering call-outs, meaning that proper 'down time' from theatre was a bit difficult to get.

The period around Christmas was extremely busy. The tented hospital we had been working in had seen better days, and a new hospital site (featuring more hard-standing) had been set up by the Royal Engineers. The move between hospitals went seamlessly, until it stared raining and everything had to be moved back to its original site. Eventually though, in the early days of 2005 we were able to complete the transfer.

One thing that stands out in my mind about the tour was the local elections. Due to the fear of local reprisals at this time, many of the personnel from the hospital were redeployed to 'medical aid centres' within Basrah. This proved to be an exhausting time for all who went to Basrah, but also left the hospital relatively busy.

This was made obvious during the middle of January 2005 when a car bomb was let off at the front gates of SLB. Amazingly, the hospital had carried out a well received Mass Casualty Exercise just the day before, and as a result everyone involved in the incident performed superbly. It is probably the one time in my life when I have been able to look back on a situation and confidently state to myself that things could not have been carried out in a more efficient and organised way.

One thing that I have to mention is the accommodation. Apart from the first few days in the transit camp, we were housed in 'corrimecs'. These are basically small port-a-cabins which measure 3m x 6m x 3m in height. They are quite well made and sleep 2 people comfortably. They have both air-conditioning and a heater, so no matter what time of year you visit, you should be comfortable. They are also covered by solar shields, which keep the sun off in the summer and the rain off in the winter. I would recommend sealing up the 'joins' in the corrimecs' with some sort of tape. Whilst I was there people began discovering baby camel spiders entering through joins in the walls.





The 'corrimecs' are laid out as 'streets' so that everyone has a relevant 'address'. Very handy when you meet someone in the mess hall and want to know where they live so that you can pop around to their place for a chat later on in the evening

Q. **Any bullet-point items that you would offer to anyone going on tour to SLB?**

A. Sure, here goes:

- Be prepared to work hard. During my time at SLB we worked (including on-call) a 13-on 1-off system. And even then, that one day off could be rudely interrupted! You are basically working all the time as a result.
- Make friends quickly. You're going to rely on them quite a bit!
- The gym is pretty good. Make full use of it. I managed to shift quite a bit of weight whilst I was out there!
- Take it easy in the mess hall. The food in SLB is SUPERB. I really can't recommend it enough!
- Make sure you have a 'hotmail' account or something similar already set up when you go out. The Internet suite is officially only bookable for a little while throughout the day, but if you're willing to use it at awkward hours you should manage to connect O.K.!

Q. **Any items that you would suggest taking to SLB?**

- A Laptop. Or if you haven't a laptop, then a portable DVD player.
- DVD's. The welfare dept within the hospital has a certain number of DVD's available for free hire, but its always good to take some back-ups.
- Plenty of sports kit. If, like me, you went out to Iraq with the intention of coming back a bronzed Adonis, then remember that water is scarce, and all the laundry is sent to off-camp to be laundered! This means your laundry might be gone a fair while before you get it back! I would recommend taking 4 sets of sports kit if you are getting into fitness seriously.
- A radio. BFBS is played locally, and if you are lucky enough to own a DAB radio, I suggest you take that as well!
- Plenty of dollar bills. The local shops sell all sorts of merchandise, such as 'leathermans' or blank DVD's. They are worth a visit even if it is only to kill time.
- And lastly... a 'Comfy' box, filled with all the above. It may not arrive when you do, but it is worth trying to get some items of comfort out there. Oh, and when you send it back to the UK, have patience. Mine took over 10 months to hit Peterboroughs shores!

Note: The Czech military contingent also included a Czech surgical team (three doctors and three nurses), under the command of Major Dr. Ale_ KOP_IVA, which served in the Field Hospital until the end of 2005,.

Operation Telic 6 from May – November 2005

205 Field Hospital

205 (Scottish) Field Hospital (Volunteers) completed a six month tour from May to November 2005. The hospital was located in Shaibah and was staffed by 116 personnel, principally drawn from the National Health Service in Scotland.

The staff worked in austere conditions with summer temperatures reaching highs in excess of 52 Degrees Celsius. At the close of the deployment the Field Hospital had treated 2338 casualties and admitted 822 patients, of which 49 were from hostile action. We performed 139 surgical operations, undertook 54 CT scans and evacuated 268 patients out of Theatre, of which 7 required critical care support. The remains of 21 dead were repatriated, 5 of whom were British Servicemen.

The Hospital Squadron supported 3 Close Support Medical Regiment's mission in Shaibah. The Squadron was commanded by Lt Col IRJ Crowe RAMC.

Modernisation of the equipment continued, as for example recorded in the following press release: Source: bjhc&im September 2005

Computer-based radiography system for Basra

Berkshire-based Ferrania Imaging Technologies has won a contract from the British Army to supply LifeInVision computer radiography (CR) systems. The system's laser scanning ability, erasable phosphor plates and image management software mean the CR unit offers a flexible and multi-purpose imaging system that can quickly and easily produce high-quality images of any body part. The British Army will install one system in Iraq at the forward field hospital.

Up until now, the British Army has been using traditional xray technology at its facilities, with all the inherent problems of transporting the necessary chemicals and equipment, and the difficulty of keeping the chemicals stable in the Iraqi heat. The LifeInVision CR system can also be linked to a central PACS so that images can be reviewed, stored or archived easily.

Operation Telic 7 from Nov 2005 – April 2006

34 Field Hospital

We have been unable to secure any specific reports about life with 34 Field Hospital on deployment. Arul Ramasamy and colleagues described some of the clinical work at this time in the journal Injury.

Data was collected on all casualties of HA who presented to the British Military Field Hospital Shaibah (BMFHS) between January and October 2006. The mechanism of injury, anatomical distribution, ICD-9 diagnosis and initial discharge information was recorded for each patient in a trauma database.

There were 104 HA casualties during the study period. 18 were killed in action (KIA, 21%). Of the remaining 86 surviving casualties, a further three died of their wounds (DOW, 3.5%). The mean number of diagnoses per survivor was 2.70, and the mean number of anatomical regions injured was 2.38. Wounds to the extremities accounted for 67.8% of all injuries, a percentage consistent with battlefield injuries sustained since World War II. Open wounds and fractures were the most common diagnosis (73.8%) amongst survivors of HA. Improvised explosive devices (IEDs) accounted for the most common cause of injury amongst casualties (54%).

They concluded that injuries in conflict produce a pattern of injury that is not seen in routine UK surgical practice. IEDs had become the modus operandi for terrorists.

Operation Telic 8 from April 2006 – Nov 2006

22 Field Hospital, commanded by Lt Col Ashley C Boreham RAMC

In conjunction with the RAF Composite Hospital squadron;

The unit reported in the RAMC Magazine that "This has been a particularly challenging time for 22 Field Hospital We managed to get our Hospital Squadron out of the gates and out to Operation Herrick, closely followed by Regimental Headquarters and most of Support Squadron who disappeared out the gates on to Operation Telic 8.

Operation Telic 8 By Capt D Clifford QARANC

22 Field Hospital deployed straight from Predeployment training at Army Medical Services Training Centre (ASMTC) up in Strensall York onto Operation Telic 8 in May. Given the number of Royal Navy, Army and Royal Air Force personnel also deployed, we have a prime example of a tri-service working environment outside of a major Headquarters. Providing medical support to the outstations involves manning emergency treatment facilities along with providing clinics like dentistry, specialist health advice and physiotherapy. We were nobly reinforced by the RAF, who commanded the Hospital Squadron. We also received D (63) Sqn complete from 5 General Support Medical Regiment.

The accommodation had good air conditioning included as standard, and the general facilities made the time away from home that little bit more tolerable. The food was excellent; the communal facilities, including a big screen TV in the EFI, were extremely good. The welfare facilities available made it easier than ever to keep in touch with family and friends back home. Internet suites gave access to your usual Hotmail and Yahoo as well as Armynet, which included information on pay and it's own e-mail facilities. The E-Bluey system also made it quicker to send and receive mail and the telephone card system provided meant a voice from home was never far away.

The PT staff, on top of regular scheduled squadron sessions, kept us active with boxercise, arranged by our resident exchange Sergeant from the Australian Army

who claimed after all the sessions that we were still punching like a bunch of "pommie girls". There was a bums and Tums class and the padre gave instruction in Arabic Dancing for women only. You can only imagine what her sermons were like.

On top of activities in the gym the unit put a huge amount of effort into raising money for charitable causes: Whilst the majority of the unit were tucked up in our beds a team of intrepid marchers from UK Medical Group limbered up for a pleasant 22.5km morning march with our colleagues from the Danish battalion to raise money for the local community to buy school materials and sports equipment.

Exercise Dancon March, Shaibah by Pte J Smith RAMC

On Thursday the 27th July 06, ten runners took part in the Dancon march around Shaibah Logistics Base (SLB), which was a gruelling 22 km march that the Danish troops organised. The event started at 2300hrs to avoid the dangerous heat of the day and consisted of three, 7.5 km laps around SLB, starting at the Danish camp. When we arrived at the Danish camp, the Danish were flocking in their burly dozens to the weigh-in that ensured that there was no foul play. The minimum weight was 15 Kg not including much needed water and our rifles. After the weigh-in and the fixing of essential cylumes to our bergens, we made our way to the starting point, where we were briefed on the rules and of course the obligatory safety brief! There was a maximum of 5 hours to complete the march, which at the time sounded easy.

The whistle was blown. Most were marching at a reasonable Combat Fitness Test pace to conserve energy but there were a few, Capt Blake, WO2 Bartlett, and myself included who took it at a bit more of a hasty trot. Finally after the loss of a good 72 pints of sweat! We came to our finish and that marvellous overwhelming sense of achievement was finding itself all over my aching body. Medals and certificates were awarded to those who finished in the allotted time and thoroughly deserved they were too. Final times: Capt Blake- 3 hours 06

While some have taken to the road, others have taken to the water. One team in particular spent a whole twenty-four hour period rowing (in the Gym of course) the distance from Basra to Baghdad in aid of Cancer Research UK. After a lot of hard rowing had produced some sore muscles and a few people unable to sit down again for a while, the team managed to raise a whopping $4500. It would prove to be the inspiration for a number of charitable events including;

The Defence Fire Service (DFS) hosting a pirate themed fancy dress party in aid of the Hospital Welfare Fund, Charity stretcher push around Shaibah Logistics Base in aid of Breast Cancer awareness and a comedy moustache growing competition which was entered by staff with varying degrees of success. Finally our very own five-a-side football world cup competition mirroring the FIFA version saw teams from departments, including locally employed civilians, pitted against each other

in aid of The British Limbless Ex-Servicemen's Association (BLESMA). While the nation watched the real thing in disappointment the team from Primary Health Care took the accolades. In typical style though, they did not retain their prize of a widescreen television and DVD player, donating it to a local children's unit. All in all the unit has raised over $7500 for causes as diverse as "Walk the Walk Worldwide" to The National Autistic Society to Sport Relief. In completing the loop of good causes from BLESMA to the local children's hospital it provides another example that while charity may begin at home, it certainly doesn't end there. Our thanks go to Cpl Finbow RAF, Sgt Lamprey RAF and Sgt Fanning RAMC for all their efforts in organising and running most of the in house events.

On August 10th we conducted a mini relief in place for the RAF Hospital Squadron. It was a glorious day marking the mid way point in our tour for the rest of us!! We bid a fond farewell to the Officer Commanding Wing Commander Mike Cousins RAF and his team from Tranche 1, and an even fonder welcome to Wing Commander Phil Cushen and his new team.

Physiotherapy Dept Operation Telic 8 By Capt T Pitman RAMC.

Operation Telic 8 was a busy tour for us. A constant flow of patients kept the four theatre Physiotherapists and the Remedial Instructor from having time to get too nostalgic about home. We provided clinics in the far flung destinations of Al Amarah and Al Muthana not to mention Basra City broke the time up nicely and our frequent trips round theatre meant that we all knew the back of a Merlin helicopter intimately. The bulk of our work was foot and ankle related injuries. Ongoing projects included the implementation of hydrotherapy sessions once a week, in the only pool within Shaibah Logistics Base, at the Danish Battlegroup's Lines. This was organised by Sgt Collins the theatre Remedial Instructor. These sessions proved very popular amongst the patients. We can't think why?

The Operation Telic 8 Physio Dept members were from varying backgrounds. Major 'Geordie' Greener was a Reservist with 20 years military experience who had a nomadic existence between As Samawah, the Shat- Al- Arab Hotel and Shaibah Logistics Base. Capt Fiona Warnock from 253 (Northern Irish) General Support Medical Regiment (Volunteers) took the lead on all secondary care matters. Capt Tim Clarke, ex marine, and regular physio at Camp Abu Naji, remained unfazed by the frequent mortar attacks. Capt Jo Gibbs, Capt Clarke's, replacement for the second half of the tour also a regular physiotherapist, had a rude awakening to theatre by being mortared on her first helicopter trip to the APOD. Luckily Sgt Collins came to her rescue to 'remind' her of the correct drill for a mortar strike. Capt Tanya Pitman was the cadre Physio from 22 Field Hospital, heading up the team and was the regular provider of biscuits for Tea Breaks.

The Dept also made time for extra curricular activities. The general fitness of the department was improved by our commitment to the Horsley Lines running club. We dominated the hospital World Cup 5 a side football tournament, our secret

weapon being Sgt Collins who kept the hat tricks coming. Our volley ball skills in a Czech Republic tournament gave us last place. We were grateful for the non alcoholic beer. Two of our number sampled the marvels of Operational Stand down in Kuwait, returning with a tan a few shades deeper.



Walk The Walk team raising money for Breast Cancer Awareness



Photo Travelling Physio Team " L-R Sgt Collins RAF, Maj Geordie Greener RAMC and Capt Tanya Pitman RAMC.



Photo Mass Casualty Exercise “Only Mad Dogs and Englishmen go out in the Mid day sun.”



The Corrimec accommodation and shelters, later phases of Operation Telic

Operation Telic 9 Nov 2006 – April 2007

33 Field Hospital SQN commanded by Maj S Marshall QARANC

The following report by Capt M L Roden QARANC is taken from the RAMC Magazine

"Operation Telic 9 saw 33 Field Hospital take over the command element from the Royal Air Force at UK Med Group, Shaibah Logistic Base (SLB). Individual reinforcements (IRs) came from a staggering 57 units representing all 3 services and civilian agency nurses. Tour lengths were estimated at 6 to 7 months with the personnel on 9A arriving in Theatre on 31 Oct 2006.

Preparation commenced for the whole UK Med Group in October when The Commanding Officer, Lt Col Price-Thomas, ensured as many IRs as possible deploying with his unit attended the HOSPEX at the Army Medical Services Training Centre in York. During this exercise many key personnel such as the Officer Commanding Hospital Squadron, Major Lynn Adam, were introduced and working teams developed. On arrival in Theatre training continued with a 3 day Reception Staging Onward Integration (RSOI) package which consisted of an update and revision of some of the OPTAG topics and a chance to zero our weapons at the ranges.

The winter months brought the usual burden of the flash floods. This at times made walking around the complex in the dark an 'extreme sport'.



The first three months of the tour saw many high profile visits, including Conservative politicians David Cameron and William Hague, in recognition of the ever growing profile of the Defence Medical Services. It also saw the relocation of the UK Med Group to the COB at Basrah Air Station.

The Main Effort for Operation Telic 9 became the movement of the Field Hospital. At no time was our 50 bedded capability to be impaired. Planning commenced as soon as 33 Field Hospital arrived in Theatre. The move was broken down into 4 phases. The planned date in December was delayed to early January in part due to a rocket landing on the (empty) cookhouse at the COB. Staff were also required to return to SLB to pack away the remaining equipment and with minimal guard force left in that area it was a bit unnerving and unsurprisingly completed in record time.

Midway through the tour came Christmas. Xmas day began with carols over the tannoy, followed by the traditional Gunfire. Carol singing in body armour and helmets was memorable. Our Christmas dinner was temporary interrupted with a mortar attack that luckily landed somewhere in the distance but all remained merry even whilst on the floor.



This tour also saw a sharp increase in the tempo for the hospital. The new field dressing and tourniquet appeared to bring an increase in the number of casualties making it to our front door. The support our patients and staff received from Padre David Banbury and Welfare Officers Vivienne Palmer and John Middleton was invaluable.



Cpl McGarry assists a patient during an indirect fire attack during Operation Telic 9



The Contingency Operating Base, Basra International Airport

Personnel deployed to the Field Hospitals to Operation Telic 9

Derek Twigg, minister for Defence, reported in Hansard that: From the start of Operation Telic in January 2003 to Operation Telic 9 at the end of April 2007, 2,887 individual medical specialist and non-medical support personnel have served in field hospitals in Iraq, of which some 43 per cent were reservists, as shown in the following table:

(a) Serial	(b) Tour(5)	(c) Unit	(d) Total(1)	(e) Reservists(2)	(f) Percentage reservist
1	Op Telic (and Op Telic 2)(3)	22 Fd Hosp	90	0	0
2	Op Telic (and Op Telic 2)(3)	33 Fd Hosp	560	4	1
3	Op Telic (and Op Telic 2)(3)	34 Fd Hosp	650	275	42
4	Op Telic (and Op Telic 2)(3)	202 Fd Hosp	680	523	77
5	Op Telic 3(4)	Hosp Sqn 22 Fd Hosp	120	44	37
6	Op Telic 4(4)	Hosp Sqn 207 Fd Hosp	127	117	92
7	Op Telic 4a(4)	Hosp Sqn 256 Fd Hosp	127	108	85
8	Op Telic 5(4)	Hosp Sqn 33 Fd Hosp	116	37	32
9	Op Telic 6(4)	Hosp Sqn 205 Fd Hosp	119	92	77
10	Op Telic 7(4)	Hosp Sqn 34 Fd Hosp	112	26	23
11	Op Telic 8(4)	RAF Composite Hosp Sqn	96	3	3
12	Op Telic 9(4)	Hosp Sqn 33 Fd Hosp	90	8	9
		Total	**2,887**	**1,237**	**43**

(1) Includes personnel from all services (regular and reserve).

Operation Telic 10 from April 2007 – Nov 2007

This period was marked by a continuation of a high intensity of indirect fire attacks on the COB, and many rounds struck the hospital. The experience is captured in the following reports.

Catherine Philp wrote in The Times July 21, 2007

Welcome to Basra - get ready to hit the deck ten times a day

"Such is the intensity of 'indirect fire' attacks that the drill is taught to everyone who visits the British airbase. I was wandering over to the condiment table in the mess hall in search of a sachet of tomato ketchup when the siren sounded: a long, low wail. In a split second my fellow diners – camouflaged soldiers and civvy-clad contractors – had flung themselves to the floor or crawled under the nearest table, their arms held protectively over their heads.

A day earlier I had been talking to two medics as they relaxed under a camouflage net waiting for their next emergency call. As the siren came, they threw themselves on the ground with military precision while I clumsily fell off my chair and on to a pile of cigarette ash. The scenes can appear a little comic. But there is nothing funny about them for the soldiers who live day in, day out with rockets and mortar bombs – so-called indirect fire attacks – pounding the British airbase in Basra up to ten times a day.

The first that anyone on the base usually knows about it is from the siren, by which time the rockets or mortar bombs, mostly leftovers from Saddam's looted arsenal, are already well on their way from their launch several miles away. Their target is the air traffic control tower, the only structure tall enough in a sprawling base as big as a small city to be seen from miles away.

A sophisticated warning system picks up tremors created by the launch and triggers the alarm a couple of seconds before impact. Sometimes, though, the missile is quicker and you hear its whistle, or the "crump" of the rocket landing, before the alarm breaks into a wail. The drill is taught to everyone, military or civilian, who comes to the base. Throw yourself to the floor, and if separated from your body armour or helmet, wait three minutes from the last explosion before crawling to them, putting them on and seeking hard cover. Then you must wait it out, in armour, for the siren to sound "all-clear".

On the base you are never far from your body armour: during my week's visit I had to take it with me everywhere, even when I was not wearing it. Even on a 30-yard trudge to the lavatory block in the middle of the night.

Everything comes to a halt the moment an attack strikes. One day we were aboard a helicopter about to land at the Contingency Operating Base when the airfield came under attack. The pilot was forced to circle until the all-clear siren sounded. Mealtimes and the night are favourite times for attacks – just when soldiers are trying to relax. Some sleep in hardcover cabins, most in tents, where each of their

beds is protected by a little pen of breeze blocks inside which they live.

Some are lucky enough to have the new "Baghdad Bed", a bunk bed with a bulletproof top where the upper bunk would be. Others with camp beds simply put their mattress on the floor so that they do not have to roll out of bed every time the alarm goes off.

It gets tiring, mentally and physically. But the soldiers' tireless discipline is exemplary. While The Times photographer and I sigh and clamber off our chairs, they throw themselves down flat in the blink of an eye, even for the seventh time in a day.

"It's Pavlovian now," a soldier tells us as we sprawl on the – pleasantly carpeted – floor of a temporary building. Everyone from general to civilian must follow suit – except Tony Blair, who, with foresight, remained upright under mortar attack on a visit to Baghdad for fear that the press would snatch a shot of him sprawled on the ground and under fire in the country that he had helped to liberate.

Our driver, Radders, pulls out a notebook and starts scrawling down the date and time, and the number of missiles that have landed. How many have there been? "Have a look for yourself," he says, flipping through the densely packed notebook filled with dates and times, appended with little notes on particularly inconvenient moments: "In the shower".

The military does not release official figures of the number of attacks. In Radders's time here, the highest daily count has been 26 attacks, each comprising an average of three or four missiles. Most say that this month has been quiet but Christy Hooson, a medic, notes how much the attacks have increased since last year. "On my last tour I had three rockets and they were always a bit of a joke," she says. "Now these aren't a joke."

It is perhaps miraculous that the missiles do not more often cause the tragedy that they did this week, when three British servicemen were killed. A small crater in the concrete close to the helicopter launch pad, and the holes that shrapnel has dug in the blast walls and nearby corrugated iron roof, demonstrate what they could do to human flesh.

The military is highly adept at locating the firing sites. But launchers are often put on timers, so that by the time they fire, the assailants are long gone. And they are often fired from sites at which the attackers know the British will not retaliate, such as a football field where children play.

There is little to suggest that these circumstances will improve. Soon British troops will withdraw from Basra Palace, the main city base, and an even greater magnet for indirect fire attacks, to hand it over to Iraqi control. That will leave the Contingency Operating Base as the only target remaining for those who want to drive the British out.

This kind of attack, although rarely fatal, is a source of significant stress for troops. The enemy is faceless and distant. They cannot fight back. "It is frustrating," one soldier tells me, with a grimace of understatement. For many, the effects of being under constant attack last long after they leave the base. Craftswoman Hooson's tour will end in a month but the effect of the attacks will go on much longer. "My birthday's on Bonfire Night and I am absolutely dreading it this year because I've had about 500 rockets on my tour, and one hit ten metres away, and that really wasn't nice," she says. "I hate feeling scared."

As I wait in a tent for the Hercules to take me out of Basra to rocket-free Qatar, there is one last attack. Beside me a civilian contractor sighs and climbs slowly down, putting on his helmet before continuing with his crossword on the floor. "I've been here too long," he says.

The official line was to strike a more positive note, as the following report indicates:

MoD Report: Military medics continue to play vital role in southern Iraq

"Military medics serving in southern Iraq have to work in challenging and testing conditions. For all of them the chance to make a difference is what makes their work worthwhile. Report by Barry Shaw. 19th September 2007

In recent months the work of military medics on operations in Iraq and Afghanistan has rarely been out of the news. Working under pressure and in a challenging and difficult environment, their efforts have drawn much praise from those who benefit from their skills as well as those who have had the opportunity to see their work at first hand.

For the medics themselves their work keeps them busy. Flight Sergeant Susan Brown, aged 41, from Bolton, is an RAF nurse who is normally based at the Royal Centre for Defence Medicine in Birmingham, where she lectures in nursing practices. In Basra FS Brown is part of a team that provides complete, essential and life saving medical care to all deployed Service personnel on operations in the area.

Currently deployed at the Contingency Operating Base, just outside Basra City, FS Brown is serving as the Air Evacuation Co-ordination Team Leader. She is responsible for selecting the appropriate medical component to care for the sick and injured during their repatriation to the UK by RAF aircraft. She co-ordinates the team, which consists of four Flight Nurses and four Flight Nursing Attendants who tend to the injured during the flights back to the UK.

Corporal Elisa Riley, aged 28, is an RAF dental technician normally based at RAF Halton in Buckinghamshire. She joined the RAF in 2005 after completing a Dental Technology degree at Leeds University. After volunteering for service in Iraq, Corporal Riley has found herself deployed as a battlefield ambulance driver. She also assists the medics in dealing with the broad range of injuries and illnesses, from emergency casualties and their handling to domestic routine ailments.

When not deployed on operations, Corporal Luke Cullen, aged 26, is a member of 201 (Northern) Field Hospital (Volunteers), based in Newcastle. In his civilian life he works for the mobile communications company Orange as an Airtime Billing Analyst. His role in Iraq entails allocating accommodation to inbound personnel and any visitors to the Medical Group:

"I decided to swap from civilian life for six months and change into 'desert combats' to come out to Iraq with the UK Medical Group to gain experience from an operational tour," said Corporal Cullen. "I have settled into the role with ease and the Regulars I work with from 34 Field Hospital and from around the UK treat me as one of their own.

Captain Tom Clack, aged 27, from Lincolnshire, is the Regimental Medical Officer for 4 Rifles. On his first tour of Iraq Captain Clack is all too aware of the importance of his role: "As the 4 Rifles Regimental Medical Officer I am the equivalent to a SHO (Senior House Officer in a civilian hospital), but I am on call 24 hours a day.

"We are a team of 20 medics, including two trauma trained doctors, who run a primary care facility, several trauma bays and a minor surgery room, which comprise the Regimental Aid Post (RAP).

"Our work is mostly GP type primary care duties, with the standard skin complaints, musculoskeletal and gastrointestinal disorders. They are treated in much the same way as in the UK, but a closer eye can be kept on patients because they are a captive audience."



The hospital on the COB

34 Field Hospital Squadron on Operation Telic 10
By OC: Maj Jan Pilgrim QARANC

"By 19 May 07, 27 of the Hospital Squadron cadre staff from 34 Field Hospital had deployed to Iraq as the foundation for the UK Medical Group Role 2(E) hospital. After a week of Reception, Staging and Onward Integration (RSOI) in Kuwait the Squadron moved to the Combined Operating Base (COB), where we met up with the Individual Augmentees who would be the majority of staff within the Hospital. Our final strength was 118 personnel drawn from all three Services and from 21 different parent units. The Army provided most personnel, but one third were RN and RAF. We were also fortunate to have the services of nine experienced civilian staff from Frontier Medical and the Defence Medical Welfare Service. Over the 6 months of Operation TELIC 10, some 75 staff members would rotate through our hospital, providing a constant stream of new faces and personalities to get to know.

In our first 2 months alone ED saw 880 patients, both military and civilian. This workload affected every department in the Hospital, and 89 of those casualties as surgical cases. The Field Mental Health Team, Physiotherapy, Pharmacy and GU Medical department were also essential to the care of out patients

A day in the life of an Operating Department Practitioner on Operation Telic 10
By LCpl S Hall RAMC

"A typical day in the life of an Operating Department Practitioner (ODP) usually began early, either to the sound of my bleep summoning me to work or my alarm clock at 0540 hrs signalling Unit PT or a run around the COB. This was always followed by a hearty breakfast of quails eggs and larks tongues – or sometimes just a bowl of cornflakes.

Early morning routine in the Operating Theatre was; radio on, coffee brewing, then equipment checks. Intensive cleaning of the operating equipment was an essential part of our preparations to ensure that we were always ready to receive casualties.

Some patients were booked for routine or follow-up surgical procedures. There was always a theatre team on stand-by for a trauma call. As the first 'on call' ODP I reported to ED with the emergency and controlled drugs, to support the Anaesthetist in the care of the patient's airway.

Resuscitation calls often resulted in more than one casualty requiring surgery and this sometimes needed the opening of the second operating table. In this instance both theatre teams would work, sometimes into the early hours of the morning. Theatres and the Surgical Ward were very busy from the word go.

I thoroughly enjoyed working as part of a team that provided such a high standard of treatment to injured troops. It was exceptionally rewarding to know that the majority of the casualties made a full recovery and that my input had a significant part in their ongoing care and treatment.

34 Field Hospital Support Squadron on OPERATION Telic 10
OC: Maj A Findlay RAMC: RQMS: WO2 Henderson RAMC

Medical stores
By LCpl Dawleigh RAMC

"The Unit Medical Stores is part of Support Squadron, based in the main hospital. We were the unsung heroes of the hospital; our department was one of the busiest, receiving and issuing stores daily.

The Medical Stores were run by 4 Combat Medical Technicians and a Senior NCO Pharmacy Technician. The Stores provided kit and equipment to the Hospital departments, and to minor units within the COB. The whole Department worked during the day with an on call duty store person during silent hours. The Combat Medical Technicians within the store developed good recognition skills of medical equipment and an understanding of how the kit and equipment works.

Our accounting procedures were still manual rather than electronic. This created a lot of paperwork that required constant attention and updating. It was certainly both a mental and a physical challenge to serve in Medical Stores.

Visits to 34 Field Hospital on Operation Telic 10

The UK Medical Group must have been the most visited of all of the Units in Theatre, by politicians, the media, Generals and key military personnel from every member country of the coalition. There were 44 official visits in June and July alone. In July we were visited by a production team from Channel 4 led by Lt Col (Retd) Bob Stewart. He remarked that "I stand in here and forget I am in Iraq. I could be in any hospital in the UK, and a very nice one at that".

We also had working visits from our Allied Forces in Theatre, including the US, Iraqi Army and the Danes. In July, 8 officers from the 2515th Naval Air Ambulance Detachment flew in on Blackhawk helicopters. Under the direction of the CO, the Hospital also held monthly training sessions with medical personnel from the 10th Iraqi Army Division.

We also saw pass through Brady Lines: the Chief of Materiel LAND; the General Secretary of the Royal College of Nursing; Commander in Chief LAND; the House of Commons Defence Select Committee; Deputy Chief of Defence Staff (Health); the Minister of State for the Armed Forces and the Director of Medical Operational Capability, to name but a few.

Physical training on Operation Telic 10

A/LCpl A Power RAMC recounts that "Physical Training was an integral part to the lives of many personnel serving with the UK Medical Group on Operation Telic 10. It was an excellent way to take your mind off the stresses of the tour, mix with Unit personnel outside of your usual working environment and get rid of some of that pre-tour chub!

The physical training available, ranged from Body Conditioning and Core Stability Training to Ju Jutsui Martial Arts training by the Unit Padre, Capt Humphrey. There were Boxercise Circuits, Relay Circuits, Potted Sports and many more. We had three fine All Arms Physical Training Instructors (AAPTIs); and one Unit Rehabilitation Instructor, Sgt Dean Foley who also worked in the Physiotherapy Dept.

There were 2 gyms within Brady Lines, one for PT lessons and one with state of the art gym equipment. There was a vast array of CV Machines, Free Weights, Smiths Machines, Leg Press Machines and Multi Gyms, along with a running track around the COB and mountain bikes!

The Unit has held sporting events known as the Commanding Officer's Cup Events, which included a Volleyball competition, won by the Radio Detachment and a Tug 'O' War competition won by the Defence Fire Service. The Officers and SNCOs v JNCOs Rugby match was won resoundingly by the JNCOs, much to the RSM's distress.



The Unit was also invited to COB events, when we had our chance to rub shoulders in sporting battle against other Units and other Allied Nations on the base, including Iraq, Denmark, Czechoslovakia and Australia. We came 5th in the COB Volleyball Championships and 2nd in the COB Football World Cup.

The work of those unit personnel left behind in the UK is important to the continuity of the unit and to the care and support of the families and friends of those deployed on every overseas operation. This report from 34 Field Hospital gives some idea of the range of activities maintained among those who are missing out on the immediate operational action.

34 Field Hospital rear party
OC: Capt M Hunter RAMC

It was been a very busy period for those personnel on Rear Party. The work began in earnest even before the Unit left the UK, as we provided the administrative support for the Unit's PDT. All the necessary accommodation and catering contracts were put in place as well as the planning, coordination and implementation of the training programme for the United Kingdom Medical Group.

The Rear Party established its own working routine with regular physical training sessions taken by Cpl Dianne McKay, our resident Endurance Training Leader. The main task was the reconciliation of the Unit's 150 bed Unit Equipment and Medical Equipment Table items. The Quartermaster's staff continued the thankless task of transferring the Unit's manual accounts onto the Unicom computer system.

We also assisted by supplying manpower to HQ 2nd Medical Brigade for the Army Medical Services Territorial Army Patrolling Competition (AMSTAP). Volunteers from the Unit provided administrative support, acted as enemy and helped with transportation tasks.

A number of welfare activities were organised by Capt Chrissy Shorrocks for the benefit of the dependants of those deployed, including coffee mornings, pamper evenings and a families day with the Officers' and Sergeants' messes. A number of soldiers undertook resettlement training.

34 Field Hospital on Operation Telic 10: the Second Half
Abridged from a report by Lt Col TL Rowland

"Operation Telic 10 was a tour of two halves. During the first three months, the focus was on security and sustainment operations throughout our area of responsibility. Strike operations were frequent and intense.

The second three months of the tour were markedly different. Battlegroups were repositioned and Basra Palace was handed over to the Iraqi security forces. This marked a turning point and the level of direct and indirect fire attacks fell dramatically. It also allowed us to dedicate far greater resources to training the Iraqi Security Forces and encouraging their self reliance.

In September, we exercised the capability to operate from an alternate location should the main hospital become inoperable. In just a few hours the essential clinical departments had relocated to a pre-prepared location. We were joined by US military medical personnel from Tallil and Kuwait.

In October 2007, we were tasked to develop a sustainable pre-Role 1 military medical capability within the 14th Division of the Iraqi Army. We formed a training

team and conducted a number of US Combat Lifesaver Courses to train Iraqi soldiers to the standard of Team Medics. We also trained the Iraqis to become self reliant in medical resupply, and transferred a large quantity of equipment, including first field dressings, combat tourniquets, team medic packs and ambulance packs to the Iraqi army.

SSgt Rayner from Support Squadron adds:

"Rumours were circulating in September about a new operation that was to take place at the end of the month. Details were sketchy, but it seemed to involve our bed spaces. It involved the installation of an upgrade to the overhead protection, rearranging the high density blocks, adding a metal plate, and putting 40 sand bags on top of each bed. This increased the volume of minor injuries presenting to the Emergency Department, but also revealed surprising creativity in building, sandbagging techniques and equipment acquisition. The Operation was somewhat delayed by a lack of sand.

The pace of official visits continued, the highlight being that of actor Ewan McGregor.

Sunday 11th November was marked by a Remembrance Service at the memorial by the hospital entrance. We also held our village fete in November, run by Padre Robertshaw. Stalls were designed and run by the hospital departments, and there was a display of Morris Dancing by the QMs department, and a barbeque. The afternoon's proceeds went to various service charities.

We left Iraq in early December via Kuwait to Cyprus, which was cold, very wet, and excellent preparation for the English weather".

Operation Telic 11 from Nov 2007-April 2008

Jeremy Watson wrote for Scotland on Sunday from Basra on 20th January 2008:

Diving for cover at a base in Basra

"It was 12:30 and the cook room was beckoning when the siren went off on the "Royal Mile". As with everyone in the compound of the Scots Guards – where the narrow walkways named after Scottish landmarks are lined with head-high sandbags – all thoughts of lunch disappeared as we immediately dived to the ground.

As I crunched down into the gravel I scrambled to fix on the chin-strap of my hard helmet while checking that my protective body armour was in place. I lay prone, face down, surrounded by soldiers in their desert camouflage uniforms, waiting for the sound of impact.

Missile attacks – indirect fire or IDFs in the military jargon – are a constant reminder to the thousands of British troops contained on their base outside the southern Iraqi



Battle damage at the Med Centre: Picture Sam Potter

city of Basra that despite last month's hand-over of control to the Iraqi government they are still operating in a dangerous environment. Just a few miles away, in the city, dozens were dying as a Shia sect battled the Iraqi army, testing its ability to keep control without help from the British.

The threat to the UK base has receded to around three attacks a week, rather than the daily bombardments that had to be endured just a few weeks ago, but they are a threat nevertheless. Yesterday's high explosive rocket, fired from well outside the perimeter of the 20-kilometre long Contingency Operating Base (COB), landed harmlessly in a muddy patch of scrubby desert inside the British base.

Others have not been so benign, with a handful causing relatively minor injuries, but no fatalities since the hand-over in mid-December. Most have been ineffective stabs at the British presence, given the size of the base five kilometres from the outskirts of northern Basra. Even so, all of the 4,500 army personnel stationed on the base sleep on beds surrounded by low breeze-block walls and covered overhead with a heavy steel plate with sandbags piled on top. The theory is that even if the missile comes through the roof of the canvas tent the sleepers below will be protected. As one senior Scots Guard put it: "In your bed you should be in the safest place in Basra."

Caught out in the open, the drill after the warning siren is sounded is to dive to the floor and become intimately acquainted with the ground beneath. The incoming missiles are likely to have been picked up on radar and there will be attempts to

shoot them down. If they get through then where they land is sheer luck.

You lie hugging the ground for three minutes. A missile or mortar shell landing close by will explode and send shrapnel flying at a 30-degree angle up into the air and safely overhead. Then you rise and rush to seek better cover. The alert remains in place until the all-clear sounds.

Yesterday's strike was a rare daytime attack. Most take place after dark when the local Iraqis who work on the base have gone home and the IDF teams of insurgents can operate on the base perimeter with less fear of detection from British patrols.

Operation Telic 12 from April 2008 – Nov 2008

The early phase of Operation Telic 12 coincided with the Iraqi Operation Charge of the Knights and the subsequent UK support operations, which saw an increase in casualties passing through the hospital.

A local press release in Nottingham on Saturday, August 30th, 2008, captured the experience of staff at the COB Hospital during the summer of 2008.

From the Queen's Medical Centre to bullets of Basra

"In her everyday job, Kate Thornton is a hardworking nurse at the Queen's Medical Centre. She is one of 6,500 staff there, and has helped scores of patients to recover after surgery at the hospital, which boasts 18 gleaming operating theatres.

But for the last few months, the 29-year-old has been clocking in at an altogether different workplace: the medical facility at the British and US forces Contingency Operating Base in the southern Iraqi city of Basra.

Kate, from Gedling, is a corporal with the Territorial Army on her first tour of duty in the war zone. And she was first inspired to sign up after talking to a fellow worker who was also in the TA.

Kate, whose is a member of the B Squadron 212 based in Beeston, said the reality of serving in a war zone was made clear from day one. "I went along to an informal drill night, and they said you would almost certainly be called up. It wasn't just a weekend thing – it was almost certain that I'd come somewhere like this."

One might imagine that Kate's patients these days are very different to those she sees in Nottingham, due to the nature of the situation in Iraq. But the main cases are strikingly similar to here in the UK.

"I'm on the surgical ward, which deals with orthopaedic and trauma patients," Kate said. "Mostly we see people who have had accidents, such as in car crashes. People also come in having fallen over things."

This reflects the relative calm encountered by troops in the Basra area thanks to

increased political stability. But on the base there is the constant threat of indirect fire and missiles, launched by terrorists into the base. This used to happen five times a day but in recent months the number of attacks has decreased, with silence for weeks at a time.

Peter Barrett, chairman of Nottingham University Hospitals NHS Trust which runs the QMC, visited Kate's team as part of a trip to Iraq with Sabre – the organisation which supports Britain's reservists and their employers. He said he was impressed with the services available at the Basra base.

"The most amazing thing was the people who were staffing it – they were so dedicated and enthusiastic. It must give a tremendous feeling of reassurance to the servicemen and women that if anything happened, they should be looked after by such high-quality staff."

Operation Telic Tier 3 Accommodation at the COB Hospital

The National Audit Office reported in 2008 that the Contingency Operating Base in Basra became the main target for attack after a British base at Shaibah was closed down in 2007 and amalgamated with the base at Basra Air Station. The number of attacks on Basra Air Station increased steadily from May 2006 to summer 2007, and the Department decided that additional investment in accommodation was necessary to counter the risks to the safety of personnel and the risk of an attack causing a mass-casualty incident.

In June 2007, Permanent Joint Headquarters sent the Investment Approvals Board a business case for the construction of four hardened "tier 3" structures providing hardened kitchen, dining and communal welfare facilities for 4,500 personnel (tranche 1). Tranche 2 of the business case set out the proposal to construct a further four Tier 3 structures; one to provide a medical facility, and the remaining three to provide accommodation. The contract was subsequently let to KBR (UK).

During the second half of 2008, the security situation in Iraq improved considerably – though the base was still subject to attack, and the risk of a mass casualty incident continued, and the Department began planning for a change of mission and the eventual drawdown of troops. The Department, aware that money had already been committed for tranche 2, scaled back its plan to construct a fully fitted hospital and three accommodation blocks and instead opted to finish the construction of the four structures but leave them as empty shells. The Department plans to write off the tranche 2 facilities as constructive losses – and make them available to the United States (and is in discussion with the Foreign and Commonwealth Office as to whether they would wish to make use of part of one of the buildings). The four tranche 1 structures will be gifted to the United States – who will make use of them. In total the Department currently estimates that it has spent around £100 million building these eight structures.

The work of civilian recruitment agencies and "Frontier Medical"

The armed forces were obliged to recruit a small number of individuals with specialist skills from outside the Armed Forces, primarily through the agency "Frontier Medical". This programme was highlighted in the following report:

"The unique contribution of civilian nurses who have served and continue to serve with the Ministry of Defence in operational deployment overseas was recognised this week when fifteen nurses and a neurosurgeon received campaign medals for their services in Afghanistan and Iraq.

More than 60 civilian specialist nurses and neurosurgeons have so far taken short term deployment to support their military counterparts in the field. This is part of a collaboration that began in 2004 between Defence Medical Services and remote site medical specialists Frontier Medical. Frontier is contracted until 2009 to provide civilian health care professionals to work in operational military environments.

The medals were presented by Surgeon Rear Admiral Lionel Jarvis, Assistant Chief of Defence Staff (Health), who gave unequivocal praise to all who have taken part. He expressed thanks on behalf of the Defence Medical Services, the British Government and most importantly, the many patients who have benefited directly from the contribution made by the civilian team, including British and coalition party forces and Iraqi and Afghanistan civilians.

Rear Admiral Jarvis said: "We are now achieving outcomes in health care in both Iraq and Afghanistan that are second to none. This is in no small part due to the dedication, commitment and professionalism of Frontier Medical and our civilian medical colleagues."

Kate Clayton, a former A&E sister at St George's Hospital London, was one of the first civilian nurses to arrive in Basra with Frontier Medical in 2004. She was awarded the Telic medal for her services in Iraq and relishes her experience on the front line. "I loved working with the army, "confirms Kate, who came back from the field to train as a doctor. "It was a great experience and witnessing just how well things can be done when everyone works together with a positive attitude is truly inspiring."

Geoffrey Bellhouse, an A&E nurse at the Royal London, was awarded two medals having worked in both Iraq and Afghanistan. He says, "At first I was just looking for something different. I sent in my application and six weeks later I was sitting on a plane with a hard hat and a Kevlar jacket - definitely a big change. It's been a real privilege to be able to work with the guys in the field. You know you're making a difference and you're respected for it. I'm looking forward to heading back out to Iraq in October."

Currently an A&E nurse at St Georges Hospital, London, Tanya Ferrai also received two medals and is returning to support medical services in Afghanistan in December. "There's no doubt you need to be a certain sort of person, and not mind going without a few creature comforts, but the rewards are amazing," admits Tania.

"There's a fantastic camaraderie. I can't think of anywhere better to spend Christmas."

Several of the nurses who went to the front line on short term contracts with Frontier Medical have now subsequently joined the armed forces as a result of their experiences. Laura Williams swapped her job as medic on the set of Harry Potter for a trip to Iraq and, as a result, has taken a full time post with the Navy. After several trips to Iraq with Frontier Medical, Vanessa Miles came back to the UK to join the RAF. She says, "I saw what an amazing quality of care was being delivered in the field and I just wanted to be part of it."

Frontier Medical provides all field personnel with a comprehensive support structure, wherever they are located. Former Nurse, Judy Mason at Frontier Medical is in charge of managing the military nursing requirement and whilst she doesn't underestimate the challenges for civilian staff, she does believe the professional experience afforded personnel in field hospitals is second to none.

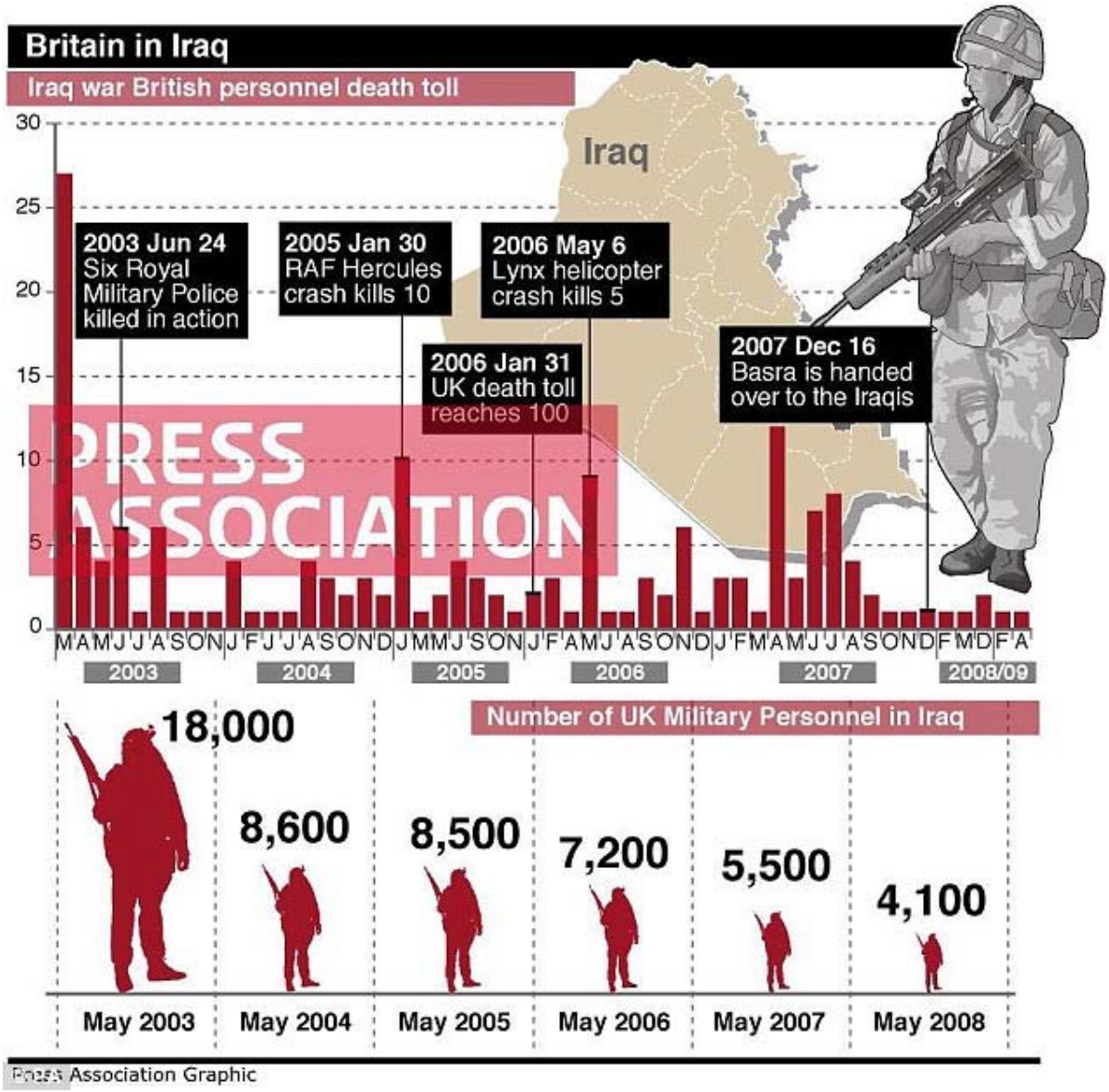
Operation Telic 13 Nov 2008 – May 2009

Operation Telic 13 was characterised by the preparations for the running down of the UK military and medical presence in Iraq, a process which was accelerated after the hand over of the COB to US forces on 1st May 2009.

The clinical workload was very light through this phase. We do not have any eyewitness accounts of this period to hand.

Appendix A to the Field Hospital Squadron Chapter

A summary of casualties on Operation Telic:



British Casualty Monitor: Tracking the war in Iraq

Duration of war to the end of 2008: 5 years, 10 months

Number of troops then in theatre: 4,100

Casualty data analysed to: Dec 31st

UK military fatalities: 178

UK military casualties in 2007: 1950

UK military casualties in 2008: 1202*

The following paper, compiled by the independent agency Casualty Monitor, documents UK casualties in Iraq throughout Operation Telic. It is important to note that

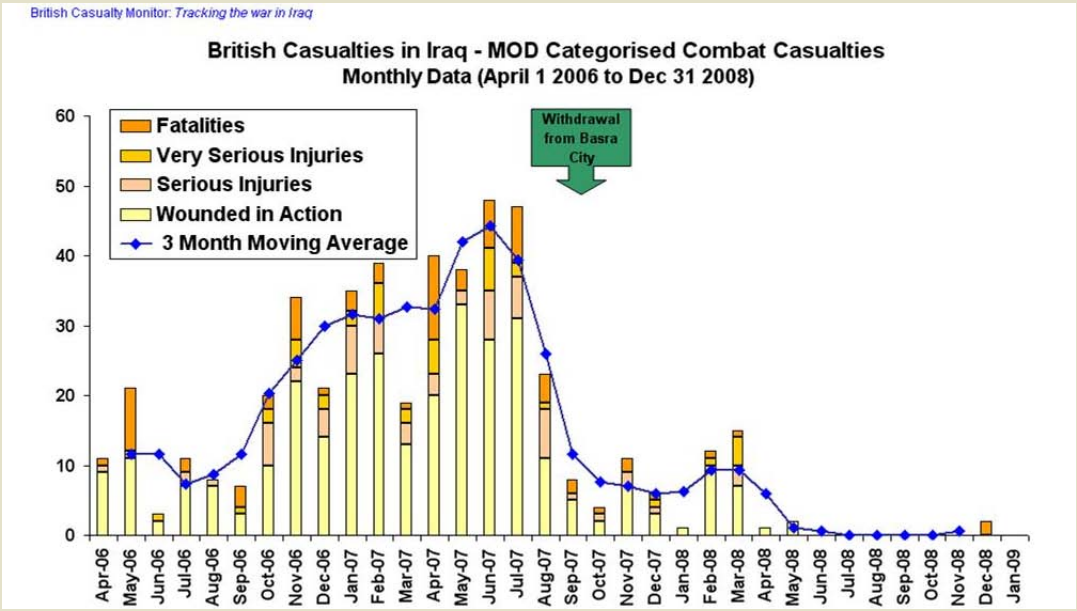
this data focuses on UK casualties, and not on the additional large workload of Iraqi locals. It reports:

"We present a series of graphs that show the available official UK MOD data on casualties in Iraq. We hope that making the data available in this format will aid people in understanding the casualty burden experienced by UK armed forces, provide an indication of the trends in the conflict, and show the continuing need for the MOD to provide full and accurate information.

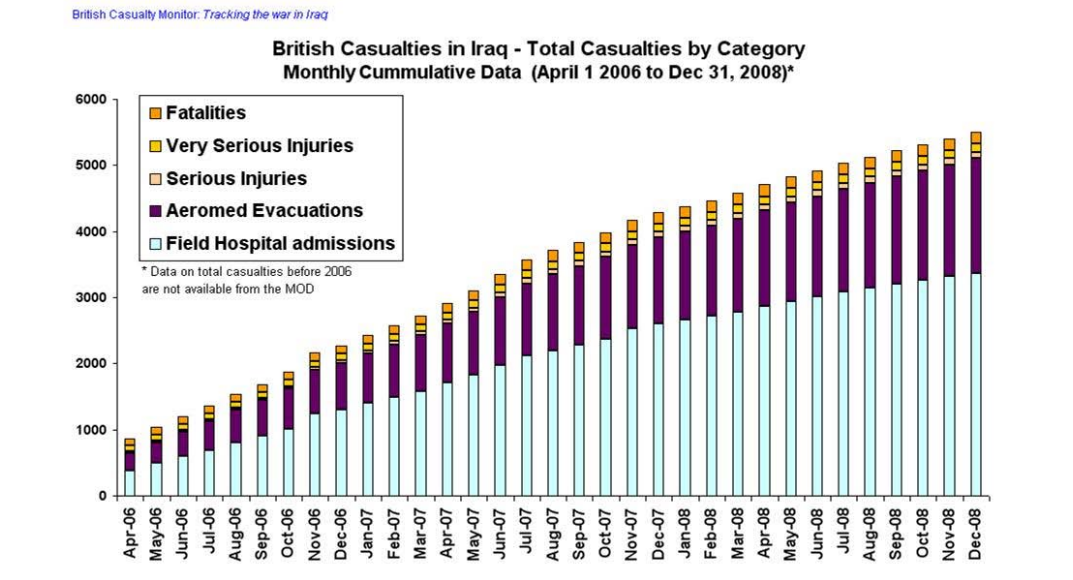
During the conflicts in both Iraq and Afghanistan, the British Ministry of Defence (MOD) has been reticent in publishing details of British casualties, as well as figures for casualties of other nationalities. Over the last five years there have been marked improvements in reporting and the MOD does now publish fortnightly updates of casualties for both Iraq and Afghanistan. However, there are still problems with the accuracy and incompleteness of the information they release.

*The figures for British casualties in 2007 and 2008 are the sum of fatalities, field hospital admissions and medical evacuations up to the end of the latest analysis period.

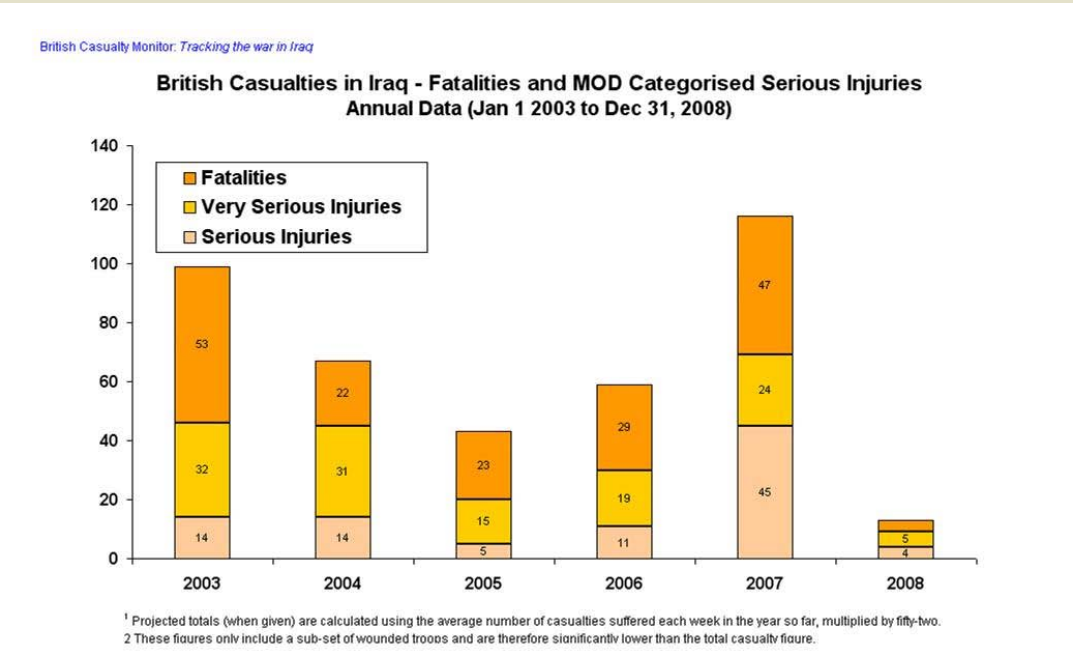
The first chart provides a monthly breakdown of casualties officially recorded by the MOD as being due to direct action, i.e. fighting. The absolute figures presented here should be treated with caution. However, these data are useful for assessing trends in the conflict. The 3 month moving average indicates a marked and steady increase in the intensity of the conflict from September 2006 up until the ceasefire and the withdrawal of British troops from Basra City in September 2007. British casualties rose steadily up until the withdrawal and then fell very sharply. There was a small peak associated with fighting in early 2008. Since then casualties remained very low with no combat fatalities reported since March 2008. As information was only made available on a monthly basis by the MOD from April 2006, the figures are shown from this date onwards.



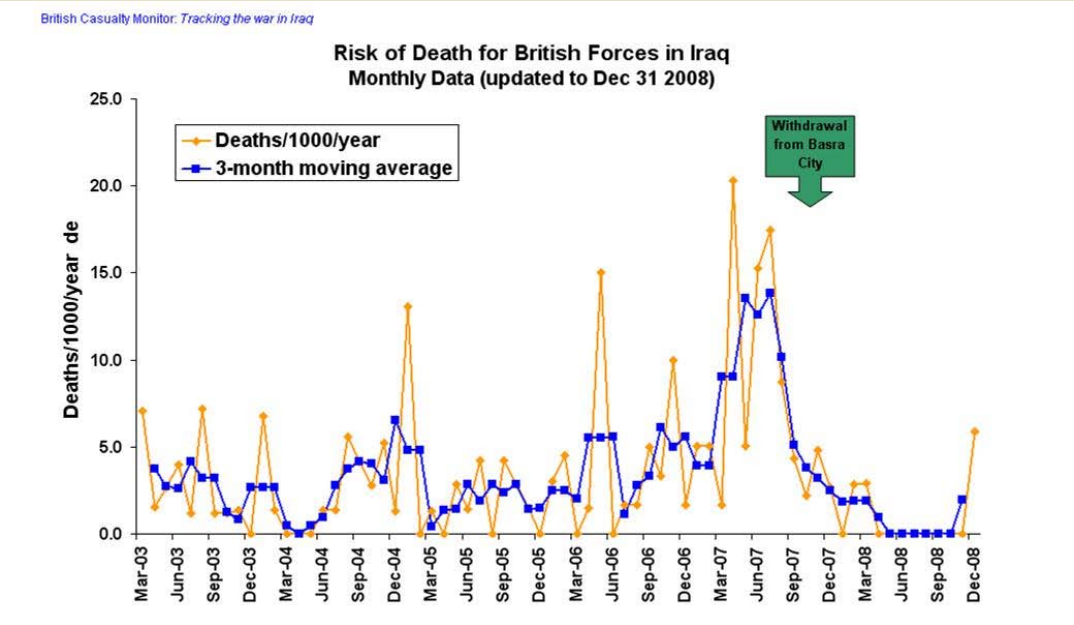
The second chart shows the figures for total casualties reported by the MOD. It is not possible to be sure whether, and to what extent, double counting may be occurring. For example, soldiers admitted to field hospitals may also be classified as serious or very seriously injured, and could also, in principle, be counted in the aeromedical evacuation figures. However, from the publicly available data it is just not possible to know and we therefore present the sum of the different categories. As such, the figures represent the upper range of the official total casualty count. Nonetheless, the data illustrate that from since the beginning of 2006 until now, total casualties may now exceed 5,000.



This is not necessarily out of the bounds of possibility - indeed, a figure of 6,700 casualties was previously reported for the period from the invasion up to March 2006.



The third chart summarises the available data on fatalities and serious injuries since the war began in March 2003. A marked decline in these casualties is seen following the invasion until 2005. The trend reverses in 2006 and accelerates during 2007. Casualties in 2008 have remained low. The last column of the chart, when included, shows the casualties projected for the current year. This extrapolation is simply based on the average number of casualties suffered each week so far this year, multiplied by fifty-two.



The last graph shows the monthly fatality rate suffered by British troops in Iraq since the invasion in 2003. The risk of death remained under 10 per thousand per year until 2007 when fatality rates climbed sharply, until the troops were withdrawn from Basra. The advantage of viewing the fatality rate, rather than just the absolute number of deaths, is that it represents the actual risk experienced by troops on the ground and is independent of the number of troops deployed. Data on troop deployments in Iraq was compiled from the MOD and Hansards.

The above graphs are updated at around 3 monthly intervals. For more real time information we recommend the "Coalition Casualty Count" website.

Updates of casualty data up to October 31 2008 have now been published for British forces in Afghanistan and Iraq.

Updates to these graphs are now being made at 3 month intervals. This latest analysis shows a continued low level of British casualties in Iraq in contrast to the recent summer surge of fighting in the Afghan war.

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Blood, Heat + Dust: Second Edition

Operation Telic and the British Medical Deployment to the Gulf 2003 -2009

Chapter 18:

Op Telic 1: Royal Naval and Maritime medical operations



Painting: *The Death of Nelson* by Arthur William Devis.

This picture, displayed on HMS *Victory*, illustrates the harsh realities of casualty care in the Nelsonian Navy of the early 1800s

Introduction

In the era of the aeroplane, unrestricted passage of the world's oceans remains critical to trade of raw materials and manufactured goods. In the context of expeditionary military operations, the bulk of equipment, vehicles and stores must still be delivered by ship. Naval vessels provide physical protection for the sea lanes and for transport ships. They also double as an offshore base for logistic and combat support in the theatre of operations, and a launching pad for marine operations in coastal waters - also known as the *Littoral*. Ships and submarines also provide a launch pad for guided missiles against land targets.

Sixty UK-chartered merchant ships carried more than 90% of the British military equipment deployed on *Operation Telic*. Sixteen major Royal Navy and Royal Fleet Auxiliary vessels travelled over 5000 miles, with 9000 maritime personnel ultimately deploying to the Gulf. Much of the national fleet was engaged in escorting duties along this route, as there was a credible risk of attack by small fast inshore attack craft en route and in the Gulf.

The Royal Navy's main task for *Operation Telic* was to deliver and support the Royal Marine actions, and included the provision of medical support both to the spectrum of maritime operations and to operations ashore. The aircraft carrier HMS *ARK ROYAL* was configured for helicopter operations alongside the helicopter carrier HMS *OCEAN*. There was naval gunfire support for amphibious operations: frigates and destroyers fired 156 rounds against areas of the Al Faw peninsula. There were mine clearance operations in the northern Gulf and the waterways of southern Iraq. There was also a threat to naval forces from floating sea mines and shore launched anti-ship missiles. Hydrographic surveys had to be undertaken to ensure navigational safety. The fleet also provided logistic supply to UK forces ashore and tanker support to the US Navy. The Forward Repair Ship RFA *DILIGENCE* allowed a number of warships to undertake maintenance at sea. Two RN submarines launched cruise missiles.

Naval forces need well-designed and efficient primary and secondary health care systems to maintain the effectiveness of maritime operations. It is thus instructive to study the implementation of the medical plan in theatre for the substantial maritime forces on *Operation Telic*.

Maritime health and medicine

Maritime operations produce a range of specific medical challenges to mariners, including primary and environmental health; the design of equipment to preserve life based on sound medical and physiological knowledge; and the special circumstances of Aviation Medicine for helicopter and fixed wing aircraft crews. Likewise, submarine operations; issues of Radiation Medicine arising from nuclear propulsion systems and the handling of nuclear weapons; and Diving and Hyperbaric Medicine. Submariners and divers run the risk of the bends, the treatments for which are studied in the science of decompression medicine. The medical remit is also geographically and environmentally broad, in that naval vessels may be deployed very widely around the

globe, and their operations may include aid to communities and operations on land. This exposes maritime personnel to a range of terrestrial health hazards and diseases.

Preventive Medicine and Maritime Operations

Preventive medicine and environmental health measures are particularly important in the confines of ships at sea. The design, construction and technology of seagoing vessels affect the health and wellbeing of their crews. The conditions of slave manpower on the ships of the ancient maritime powers set precedents for harsh and demanding conditions in ocean going vessels, and these attitudes persisted in the navies to the 19th Century. The advent of steam and other forms of mechanical propulsion alleviated the work and worst dangers to crews of sailing ships. Technical developments in the late 19th and 20th centuries brought new environmental health problems on ships and the new technologies of submarines, deep diving and flight - for example in the confines of engine rooms. The expansion of armaments and new equipment led to overcrowding. Ships spent long periods at sea in all climates, under wartime conditions of blackout and damage control. More importantly, new naval weapons, and in particular the torpedo, sea mine and aerial attack, brought havoc to shipping in the First and Second World Wars, causing epidemics of death through drowning in the world's oceans.

Diet and environmental health

Up to 1000 crewmen would be housed on the decks in crowded and unhealthy conditions on the large warships of the line of the 18th and 19th centuries. Scurvy was a serious occupational hazard of seamen for centuries: Vasco da Gama lost 100 of his 160 crew to the disease on his passage to the East Indies in 1497. In the mid-1700s, James Lind of the Royal Navy undertook a controlled trial of the use of the Vitamin C-rich juice of the citrus fruits to abolish the disease: his *Treatise on Scurvy* was published in 1754.

The provision of fresh water was improved by methods of filtration and distillation introduced by Lind. He also made huge contributions to uniform, command responsibility for health matters, and the preservation of health in general. Gilbert Blane pursued Lind's proposals for citrus juice, cleanliness, dryness, medicinal stocks, soap and ship design through to their logical conclusion with his powerful advocacy against a conservative Admiralty. Scurvy was virtually eliminated by 1794.

Health control measures afloat were matched by improvements in the care of naval personnel on land in the 17th and 18th centuries. The first naval hospital opened in Plymouth in 1689, and Haslar Hospital at Gosport in 1753. Developments in Naval health in the 19th and early 20th centuries were largely technical. There were advances in areas as diverse as fresh water storage, canning, refrigeration, fresh food supplies, ship's construction, statistical records and crew psychology, and their overall effects on maritime health were substantial. The death rate per thousand sailors fell from over 14 in the period 1856-1860, to 1.5 in 1925.

Infectious diseases

The crowding and unsanitary conditions on ships pre-disposed to the transmission of other infectious diseases, including lice-borne typhus fever and pulmonary tuberculosis (TB). Lind also connected these diseases with poor hygiene, and introduced a range of measures to improve the cleanliness and hygiene of crews. By 1830, TB was a major source of mortality in the Fleet. Trotter succeeded Lind as a reformer of naval health, and introduced vaccination to the Fleet following Edward Jenner's discovery of smallpox vaccination. Between 1919 and 1927, Dr Sheldon Dudley eliminated diphtheria through pioneering studies on immunisation and herd immunity at the Royal Naval Hospital at Greenwich, now the National Maritime Museum.

With scurvy and TB under control, other preventable and infectious diseases came to prominence in the early 20th Century as Royal Navy operations covered the world. For example, amphibious warfare and the establishment of naval bases and airfields ashore in malarious countries brought such parasitic diseases to naval personnel.

Hypothermia

Many tens of thousands of men and women have died on the oceans and on the coastal margins, from shipwreck, capsize and deliberate sinking; many of these deaths would have been avoidable with the application of current medical knowledge to the design of modern life-saving equipment. The sea kills primarily through drowning and hypothermia. The *Titanic* disaster of 1912 had highlighted the importance of proper sea survival equipment and the processes of rapid death in cold water from hypothermia, but it was not until the late 20th Century that materials technology and plastics allowed the development of effective immersion suits and liferafts that would give mariners a reasonable chance of survival in cold water after abandoning ship. The effects of cold water on immersion can be profound and rapid.

Sheldon Dudley was also widely quoted on the importance of the command and leadership function in environmental health matters, and his instructions to naval officers still resonate with military officers in all commands. For example:

> *"Executive and combatant officers must be taught that the enforcing of hygienic measures to preserve health, morale and fighting efficiency of their troops is as important as any other military duty.*
>
> *"One of the most important Fleet Orders issued during the war stated that Flag Officers and commanding officers were responsible for ensuring that protective and preventive measures are undertaken and rigorously enforced. The medical officer can only advise, as he has no executive authority over officers and ratings, except when they are on the sick list. There is a terrible curse on preventative medicine in that no one realises its necessity till a disaster arises as the result of its neglect."*

Extract from BR 2193 *Handbook for Royal Navy Medical Officers*



RFA *Argus* in the Gulf with a Chinook helicopter approaching (MoD)

Royal Marines





HMS *Ocean* near Cyprus on a training exercise on deployment to Op Telic, demonstrating landing capabilities for Royal Marine Commandos, and in transit to the Gulf (Photos MoD)



Commando Brigade hovercraft:
MoD picture



Royal Navy Sea King inserting Royal Marines in Southern Iraq (MoD)

Modern Naval Combat Medicine and the Roles of Care

The principles of structured casualty care apply to maritime as to land operations, but are necessarily modified. Specifically, helicopter evacuation and transfer is a key element of naval care, both from land operations to ships with treatment facilities at sea,

and between ships. Helicopters thus supplant the role of the general medical support matrix. The geography and distance of the warfighting operating area from the Forward Logistic site on land determines the precise casualty evacuation plan.

Maritime medical operations differ from those on land in detail, although not in principle. The roles of delivery of care are the same as for land forces, but the provision of medical support varies from one ship to another. For example, capital ships are fitted with operating theatres, and all ships and submarines have trained medical assistants on board.

First Line / Role 1 Medical Support on ships

At first line or Role 1, Medical Assistants (MAs) in ships provide day-to-day medical support and preventive medicine. Medical Officers (MOs) are only allocated to larger ships. In war, destroyers, frigates and larger ships and auxiliaries have a Medical Officer deployed. Dental Officers are also deployed to RM units, aircraft carriers, amphibious ships and task forces. First Line (Role 1) Support to Royal Marine commandos includes MAs and MOs at Regimental Aid Posts, for treating and holding casualties pending evacuation. This will usually be by helicopter to treatment facilities afloat.



HMS *Ark Royal* en route to the Gulf with Chinook helicopters Photo MoD

Second Line / Role 2 Support

In peace, an emergency surgical capability is maintained on aircraft carriers. A dormant Role 2 facility exists in HMS *Ocean*, and the Auxiliary Oiler Refueller ships of the RFA Flotilla. In war, additional surgical teams are deployed to the Medical Squadron of the Commando Logistic Regiment, 3 Commando Brigade and in some amphibious support ships. These Commando Forward Surgical Groups are lightly equipped and mobile, to provide surgical support to commando units close to the forward edge of the battle area. The work of these teams on *Operation Telic* is further described in the Close Support chapter.

Third Line / Role 3 Medical Support

Hospital ships are constrained by the Geneva Convention to declare their position and to make no contribution to the operational effort other than for casualty care. The SS *Uganda* was used in this way during the Falklands War in 1982. Modular hospital units can be built into other ships for specific operations.

The Royal Navy prefers to retain the operational flexibility and security of capital ships such as RFA *ARGUS* by designating them as Primary Casualty Reception Ships (PCRS), even where their primary role is a hospital function. In 2001, a Primary Casualty Reception Facility (PCRF) hospital complex was permanently installed into the No 1 aircraft hanger on RFA *ARGUS*, replacing the portacabin facility which had been in place since the first Gulf War. Argus now has a permanent 100-bed hospital unit on



Medical staff joining RFA Argus in the Gulf, early 2003

board and can be manned at short notice. She is designed for four fully equipped operating theatres, four orthopaedic and general surgical teams and a specialist head and neck team, along with accident and emergency specialists, physicians, anaesthetists, intensivists and GPs. Facilities include Intensive and High Dependency nursing units and a range of technical support including pathology, digital radiology and CT scanning. The 250 specialist medical personnel on full deployment are augmented by RM Band casualty handlers and RAF Aeromedical Evacuation Teams.

The work of RFA Argus in the Gulf in 2003

RFA Argus sailed with the Naval Task Force from the UK in January 2003. She was joined by the full complement of medical staff in transit to the Gulf on 5th February, and was declared operational on 17th. She was augmented by both regular and reserve health staff to its full operational scale, providing 100 beds and four surgical teams.

Between the 20th March and 9th April, Argus received forty-eight battle trauma cases, twenty of whom required a single operation, and eight of whom underwent multiple operations. Fifteen cases were brought by helicopter directly from the point of wounding, and thirteen from other medical units in the evacuation chain.



The outside of the hospital unit of the RFA *Argus* built into the hangar deck (MoD)



A ward on RFA Argus, illustrating the much superior accommodation to that attainable in field hospitals in the Gulf. The picture illustrates the excellent working conditions and environmental control which is achievable on board ship (MoD)



Exercising casualty movement on the aircraft lift on RFA Argus (MoD)



US Black Hawk inbound for casualty handling drills, RFA *Argus*



Casualty handling drills from US Black Hawk helicopters on RFA *Argus*



Casualty arrival on RFA *Argus* with a CCAST team following transfer from a forward hospital.



Casualty transfer of a young child to RFA Argus with mother in attendance



Rehearsing casualty handling procedures under NBC conditions, HMS *Ark Royal*



Loading a casualty onto a Chinook, RFA *Argus*



Care of Iraqi casualties on RFA *Argus*



Convalescing Iraqi casualties on RFA *Argus*



Convalescing child and nursing team, RFA *Argus*



Convalescence aboard RFA *Argus*



Chinook Helicopters on the flight deck of RFA *Argus*



USNS *Comfort*: Fleet hospital ship

USNS *Comfort*

The US Navy deployed one hospital dhip to the Gulf in 2003, although it was not declared as such under the terms of the Geneva Convention, so as to increase its operational flexibility. The USNS Comfort is one of two converted tanker vessels with a 1000 hospital bed capacity and a full range of diagnostic and treatment facilities. Comfort set sail for the Gulf from her home port in the US in early January 2003. She remained in the Persian Gulf for 56 days, and treated US military personnel, injured Iraqi civilians and PoWs. The ship conducted more than 800 helicopter deck landings to bring aboard personnel, patients and cargo. Comfort's workload included 590 surgical procedures, transfusion of more than 600 units of blood, more than 8000 radiographic images and nearly 700 patients treated.

US and UK maritime operations and the Navy Afloat Trauma System (NATS)

US naval maritime medical doctrine is very similar to that of the Royal Navy, with integral medical assets on the capital ships.

The US Navy deployed a number of helicopter carriers with medical facilities in Carrier Task Force 51 (CTF 51) in the Gulf, under the command of Admiral Marsh. These included the US ships Tarawa, Saipan, Nassau, Boxer, Bataan, Kearsarge and Bonhomme Richard.



USS *Tarawa*, one of a class of amphibious assault vessels equipped with medical facilities, and integrated into the NATS network (Photo US Navy)

These ships, along with RFA Argus, were linked in a sea-based hospital trauma resource known as the Navy Afloat Trauma System (NATS). This was designed to make maximum efficient use of the total bed capacity afloat, and to support military operations up to 100kms inland. It created a uniform policy under a single emergency

call system known as RAMPART, so that helicopters with casualties would be directed to the most appropriate ship and care facility, according to distance, time, capability and capacity. This network produced twelve surgical teams across the fleet, with a continuous receiving and operating capacity. There were 120 manned ITU and high dependency beds, and 1500 general beds afloat, along with supporting technical services.

Chapter 18 Resources and References

Royal naval web sites

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The Royal Naval Medical Service
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www.pro.gov.uk/ancestorsmagazine/issue13/story4.htm

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Blood, Heat + Dust: Second Edition

Operation Telic and the British Medical Deployment to the Gulf 2003 -2009

Chapter 19:

Tactical Aero-Medical Operations: Operation Telic



Painting: *Chinooks approaching the Al Faw peninsula, Iraq*

Chinook helicopters based at RAF Odiham approach the landing site on the Al Faw peninsula. Chinook helicopters played a major role in casualty transport during Operation Telic.

Artist David Rowlands Medium: Oil on Canvas

Aeromedical evacuation

The transfer of patients by air is a key element of modern military medical care. It shortens clinical timelines from the point of wounding to the best available care. It substantially extends the speed and distance over which casualties can be transported from the point of wounding to the best locally available care, either at Dressing Station (Role 2) or Field Hospital (Role 3) facilities, and then from intermediate care over strategic distances to hospitals in the home country. It minimises the need for scarce medical resources in the theatre of operations, or the deployed medical assets, while maximising access of casualties to the specialist civilian medical services in the UK. It also optimises logistic support, with the timely delivery of medical personnel and perishable stores into and around the theatre.

Aeromedical operations describe three different components.

Tactical Rotary operations describe the use of helicopters to move casualties from the battlefield to Role 2 and Role 3 treatment, and between medical facilities.

Tactical Fixed Wing operations describe the use of fixed wing aircraft such as the Lockheed Hercules and Transall freighters to move casualties around the theatre of operations, for example using temporary air strips near to field hospitals.

Strategic Fixed Wing operations describe the transfer of casualties using transport and commercial passenger aircraft from the theatre of operations to base hospitals such as those in Cyprus and the UK. This aspect of aeromedical operations in support of Operation Telic is addressed in greater detail in chapter 24.

A brief History of Tactical Rotary Casualty Evacuation

Helicopters first appeared in the closing stages of the Second World War, and military helicopter evacuation was developed during the Korean War (1950-1953). This included the transport of patients between ships at sea. Helicopter air evacuation reached maturity during the Vietnam War (1965 to 1973), where the Bell Huey Casevac helicopter became an icon. Helicopter aeromedical evacuation is believed to have been an important factor in reducing mortality in casualties reaching medical treatment facilities from about 4% in World War II to 1% in Vietnam.

Helicopters provide a fast and efficient means of casualty transfer around the battle zone. They allow medical facilities to be more widely and safely dispersed, while preserving the clinical planning time lines needed to optimise care. They have a range of several hundred miles at speeds of up to 150 miles per hour. US medical Huey helicopter 'Dust Off' pilots in Vietnam perfected a range of aggressive flying techniques to extract casualties under fire from the most testing situations, and their experience makes for fascinating reading. The US armed forces have long invested heavily in dedicated casualty evacuation helicopters, from the iconic Bell Huey of Vietnam vintage, to the advanced and specially configured Black Hawk helicopter. Other helicopter types available for casualty transfer now include the larger US Marine Sea Knight CH46 and Chinook CH47. .



US military Bell Huey Casevac helicopter, *Operation Granby (Desert Storm)*, 1991 (Author)



RAF Puma Casevac from a forward dressing station, *Operation Granby, Southern Iraq*, 1991
(Photo: Author)



A US 'Dustoff' Black Hawk UH 60 Helicopter on Casevac delivery to 202 Field Hospital, *Operation Telic*:
Photo Lt Col J Olver RAMC

The Aeromedical Plan for Operation Telic 1

The RAF provided support for strategic airlift between the UK and European mainland bases and the Gulf; and at the tactical level within the theatre of operations Tasks included:

- The deployment of medical personnel to support Role 2 and Role 3 field medical units,
- Tactical helicopter and fixed-wing aircraft support for casualty transfer from Role 2 to Role 3 units, and between field hospitals, maritime hospitals and the base hospital at RAF Akrotiri, Cyprus.
- Staffing of Aeromedical Evacuation Squadrons based at RAF Akrotiri and elsewhere in the theatre of operations,
- Provision of air liaison teams to the hospitals and reception teams at airheads to ensure efficient casualty transfer,
- The strategic transfer of patients to the UK and Germany,
- Provision of specialist casualty transfer teams for high dependency patients.

The RAF Tactical Aeromedical Task on Operation Telic

Forward Aeromedical operations

Tactical aeromedical evacuation was allocated to the Puma helicopter fleet within the British Joint Helicopter Force. This provided two aircraft on fifteen minutes' readiness day and night. Manpower for casualty care was provided by No 3 Casualty Evacuation Squadron, and the force was initially supplemented by three US Black Hawk helicopters. Chinooks and Sea Kings were also used for the transfer of patients to RFA Argus. Kuwait City International Airport (KCIA) was the hub of strategic aeromedical operations, with other hubs in Qatar, Jordan and Akrotiri.

During offensive operations, fifty personnel of 3 Cas were spread across eight locations, with two 2-man teams attached to 16 CS Med Regt, 3 RM Cdo Bde, Ali Al Salem Air Base and Safwan Hill. Each in-flight medical escort team comprised a doctor and a medical assistant, equipped with search and rescue equipment modules.

In all, the casualty force flew sixty-four Casevac missions in the warfighting phase between 21st March and 16th April 2003. It moved 133 casualties, including sixty-six British, sixty-four Iraqi and three US patients. No casualties died in transit. Nine ventilated patients were transferred under medical supervision. Fuel and communications for aeromed purposes were moved into forward locations by Tactical Supply Wing and 21 Signals Regiment.

Medical Tasking of Helicopters

Helicopters bring considerable capabilities to the movement of casualties, but there is still much debate about their use and equipment. The issues include the employment of

dedicated medical evacuation helicopters, or the use of the general helicopter fleet on a general opportunity-tasking basis, according to local availability and the priority of other tasks.

The British armed forces do not have a dedicated casualty evacuation helicopter fleet, as this is considered an inefficient use of a scarce asset. The Royal Air Force, Royal Navy and Army all have helicopter fleets. Casevac helicopters are an RAF resource, using Puma, Sea King and Chinook machines. Smaller helicopters such as the Army and Navy Lynx can be fitted with stretchers, but they are not generally used in this role. The UK helicopter force is tasked on an opportunity and availability basis.

Conversely, the US Army uses a fleet of dedicated machines marked with red crosses. However, they are vulnerable to ground fire, as they are soft skinned and the rotors are particularly easily damaged. The red cross does not necessarily provide protection: US red cross-marked Black Hawk machines were brought down by insurgency fire in Iraq during 2003.

In practice, on joint US-UK operations, all helicopters are used interchangeably on an opportunity basis for casualty transfer. For the first three days of Operation Telic, three US Black Hawk 'DustOff' helicopters were allocated to 1st UK Division, before being redeployed. The larger Chinook helicopters were particularly useful for mass rearward evacuations, for example from Field to Fleet hospitals.









An injured serviceman is transferred from a land rover ambulance to a US Black Hawk helicopter for a CCAST flight (Source)

The Limitations of Helicopters in the Aeromedical Role

Despite technical advances helicopters remain limited by the power-to-weight quandary. The last major improvement in this area was the change from piston propulsion to gas turbine engines which occurred with the Huey. Helicopters also remain highly vulnerable to attack; air attack can be minimised by gaining air superiority but the ground fire problem remains.

Ground fire does not need to be sophisticated to have a serious effect. In Afghanistan and Iraq the small arms threat covers the whole country and the threat environment has to be factored in. Terrain, topography and climate continue to influence the demand for helicopter, rather than ground, casevac despite the low medical benefit of indiscriminate use of helicopter evacuation even for trauma patients. Thus selectivity of use remains a problem and, despite much guidance, remains subjective.

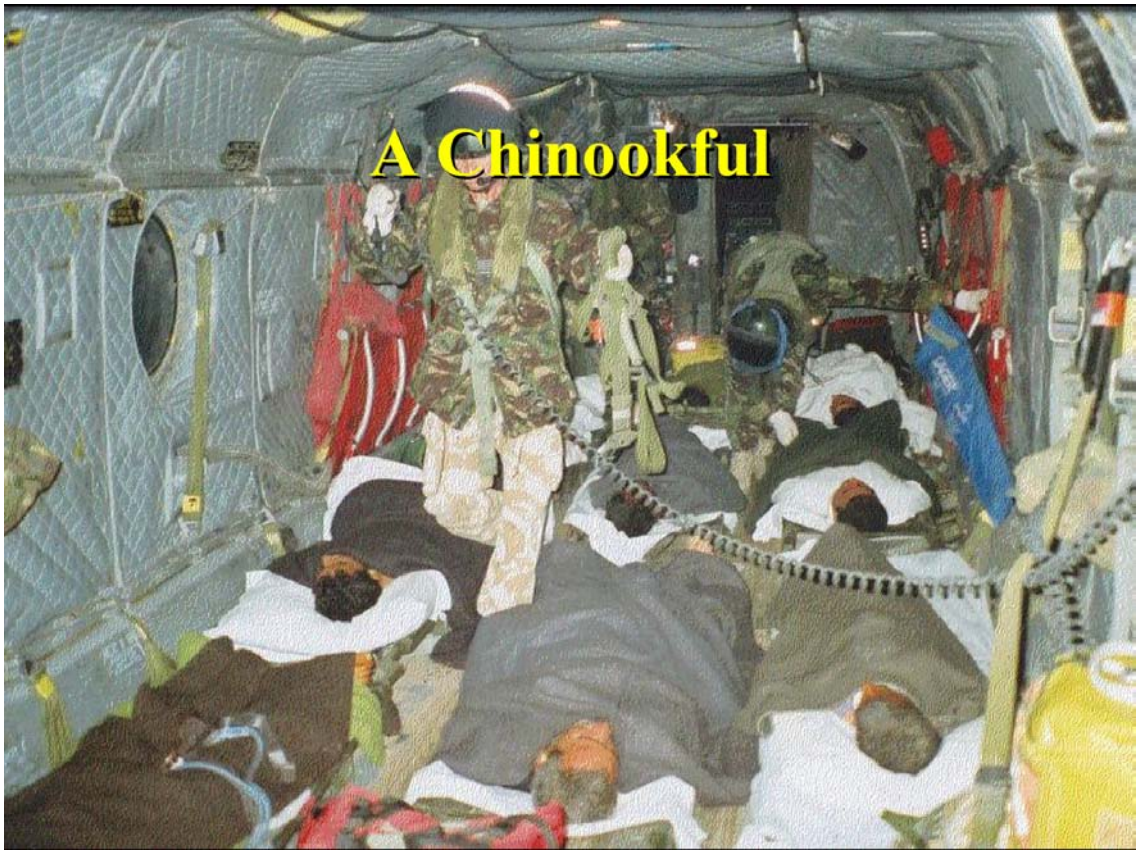
The renewal of expeditionary warfare in inhospitable terrain has caused a growth in reliance on helicopter casevac to the apparent exclusion or even consideration of alternative methods. This approach fails to take into account high costs and limited resources, a failing with an historic background. Ground troops, the media and the public are beginning to view helicopters as the only method of casevac where previously aeromedical evacuation was seen as an adjunct, albeit a very welcome one, to normal ground methods. There are renewed calls in the UK for dedicated casevac helicopters and much talk about the 'Golden Hour'. (Source: airpowerstudies.co.uk)



Cramped conditions in a Puma helicopter during a casevac flight

Helicopters are not the answer to all problems of casualty transport. They are handicapped by weather conditions, heat and altitude, and by the availability of suitable landing or winching sites. Dust and sandstorms are particularly hazardous to helicopter rotors and engines. Helicopters must always be seen as an unreliable luxury in planning terms, and all casualty evacuation plans must have a robust land component, however slow and primitive it may be.

The space, carrying capacity, vibration and noise place limitations on the amount of care that can be given during helicopter transit. Medical crewmen occupy space and create weight, reducing range and carrying capacity



Cramped conditions in a Chinook helicopter during a casevac flight



Puma casualty training 1 CSMR Op Telic 4

Tactical Aeromedical Operations Op Telic 2-13

Tactical Helicopter Casualty retrieval and transfer

In Op Telic all UK helicopter assets were available for casevac missions, but the casevac plan for 1(UK) Armoured Division relied on the traditional policy of backloading from forward medical facilities to field hospitals. Three Blackhawk air ambulances were initially provided by the US; when these moved north two UK Pumas were allocated for casevac.



Chinook arriving at Shaibah hospital 2004: Source: Ian Miller pbase.com/kissfoto/irag

Command and control of helicopter aeromedical assets

Tasking depended primarily on the judgement of the commander of the Joint Helicopter Force (JHF). The JHF commander agreed that a casevac sortie should include the collection of the casualty, delivery to the appropriate medical facility, and the recovery of the medical team and equipment back to their starting base. Requests for casevac were passed to the Patient Evacuation Team (PET), manned by RAF flight nurses, at HQ 1(UK) Armoured Division. Working closely with the helicopter tasking desk, PET made the decision to scramble. A medical officer advised HQ 1(UK) Armoured Division medical cell on bed availability which influenced the casevac destination. The average response time of the UK allocated helicopters was twenty two minutes, similar to that of the dedicated US Blackhawks.

The people of RAF Medicine during Op Telic

The Medical Branch of the RAF is the most recent of the military medical services. The RAF was formed at the end of the First World War, and a small medical and nursing service developed during the 1920s and 30s. The Second World War saw a huge expansion of the RAF and its supporting hospitals for injured aircrew. The wartime burns unit at East Grinstead Hospital hosted the pioneering work of Sir Archibald McIndoe and Sir Harold Gillies. Their teams developed complex re-constructive plastic surgery techniques for burned patients, and particularly RAF aircrew, who formed the famous 'Guinea Pig Club'. The only remaining RAF-run hospital in 2003 was The Princess Mary's RAF Hospital at Akrotiri in Cyprus.

RAF Medical Officers and civilian medical practitioners provide primary care at RAF Stations. The RAF medical services undertake research into aviation medicine and related disciplines. Advances in flight technology have brought new demands upon human physiology in the effects of acceleration, gravity and altitude; the G-forces experienced by a pilot; and hypoxia at altitude.

Other challenges include decompression sickness; noise, hearing loss and vibration; disorientation of pilots; the psychology of flying and air combat stress; the 'pilot-machine interface'; the effects of escape mechanisms such as ejector seats; survival equipment for the downed pilot; and manipulation of sleep-wake cycles for aircrew. The responsibilities of aviation medicine include the investigation of fatal aircraft accidents, including the autopsy examination of casualties (forensic aviation pathology).

Military aviation medicine must address the particular problems of flight and aircrew across the spectrum of aircraft performance and role. Thus, fast jet pilots must be equipped and trained to deal with the challenges of acceleration and deceleration and G forces during manoeuvres. Long-range transport crews must be equipped to deal with regular changes in time zone and body clock, particularly during high intensity operations. Helicopter crews must adapt to the climatic conditions and rigours of low flying by day and night.

The RAF Tactical Medical Wing

The medical contribution of the RAF to *Operation Telic* was founded on Tactical Medical Wing (TMW), based at RAF Lyneham, Wiltshire. TMW was formed in 1995 to provide medical and dental care to RAF deployments. It also provides pre-deployment training for medical and allied personnel. No 1 Air Evacuation and No 2 Air Escort Squadrons of the TMW are responsible for strategic aeromedical evacuation, while No 3 Casualty Evacuation Squadron (3 Cas) is configured and trained for rotary operations.

TMW is augmented in time of war by medical personnel from other RAF units and also by reservists, including members of the Royal Auxiliary Air Force. The two medical RAuxAF squadrons - both of which were involved in *Operation Telic* - are 612 Air Transportable Surgical Squadron and 4626 Aeromedical Evacuation Squadron.

Call-out of reserves for *Operation Telic* began in January 2003. The Wing provides, supports and supplies medical services to all RAF personnel deployed throughout the world. The Wing can call upon some 2000 personnel, comprising four regular squadrons with backup from two auxiliary squadrons.

Personal Recollections of RAF Medical Officers Deployed on Op Telic 1

Wng Cdr Al Holdcroft was one of two medical officers detached forwards as an air evacuation officer with the Marine Commando Group, 3 Casevac Det 2-FSG 3-Cdo Brigade, on Operation Telic. He recalls that:

"On the night that the invasion of Iraq started Cpl Gustar (Gaz) and I didn't sleep at all well in the shell-scrape at TA Viking. It was never comfortable but that night the air of expectation kept us awake. That evening we'd watched explosions in the Al Faw Peninsula from over the berm. I think (with CNN hindsight) that we'd seen the US Chinook with UK Marines on board go down in the border area, but we didn't realise it at the time. At about 0500Z hrs Gaz and I were told of an incoming 'Jungly' (Marine) Sea King Helicopter with wounded Iraqi EPWs on board from Al Faw.

As the RAF 'casuals' (we check-in, not dig-in) - it was accepted that meeting the helicopter was our job – we'd made a point that one of our roles was wafting the cyalumes at the helos and knowing how to approach and offload casualties safely. We went forward on the Loady's sign expecting to offload casualties but the helo was empty. A quick tête-à-tête revealed that their intention was in fact to pick a Med Team up for an unspecified casevac from Al Faw, so we uploaded our oxygen and kit.

We flew at low level at speed over the border and Al Faw peninsula; the highlight was a couple of flashes and an evasive 'jink' whilst over the water, the aircrew 'calling it in'. I remember noticing a half-sunken Iraqi gun-boat and Gaz's 'F*** me' expression, which I'm sure mirrored mine.

"We landed - I've no idea exactly where - though it looked like a Gas-Oil Separation Plant, and RM Medics ran towards us with two stretcher casualties – both Iraqis. The succinct handover indicated the Iraqi casualties had run through their own minefield, and the lower limb damage supported this brief history.

They had IntraVenous lines in place and analgesia and antibiotics all sorted, so without delay we loaded and lifted with the Loady hunched over the GPMG. We attached Propacs, titrated IV fluids and gave oxygen, but I think the most beneficial thing we did was to hold the Iraqis' hands and smile with a thumbs-up. They seemed to settle a little with that. We returned to the Forward Surgical Group and handed them over to the surgeons where limbs were lost but lives saved.

The officer in the tidier uniform was apparently Republican Guard; he said later that he'd expected to be shot rather than treated for his wounds. I think we made some small contribution to a favourable outcome overall. Some considerable time later I discovered that, albeit briefly, we had been the first Operation Telic RAF medical presence in Iraq".

Wing Commander Al Reid was the 2nd in command of the Aeromedical detachment, and an in-flight medical escort. He recalls an air evacuation flight on a Chinook helicopter:

"Just finished chatting with LK when phone went: need to collect a 'ventilated patient from a grid reference - get to the Chinook lines where the aircraft has just landed'. Well prepared, so grabbed Ryan and both drivers. Sanitised, got rounds and hopped into Landrover. Craig (driver) running as our 'walker', dropped his morphine autojet so had to stop. Chinook lines were busy with taxiing helicopters so which one was ours?

Found Command Post, sought guidance and jumped on aircraft just unloading personnel from Ark Royal – rotors running Hooked up and took off, much radio traffic regarding the slowness of getting clearance for the CASEVAC. Crew frustration illustrated by copious profanity. Loadie showed me a piece of paper with the same details as telephoned earlier. Guessed we were taking the patient to RFA Argus when life jackets handed out (also gave me clue as to likely injuries given Argus had the neurosurgeon and CT scanner).

Helped Ryan put on his lifejacket (pleased that I could manage my own). Nerve-racking ride followed as crew unable to raise the Sky Marshal to avoid being shot down (will think hard about advantages of being plugged into aircraft comms system next time). On Night Vision Goggles flying at 200ft avoiding wires, taking evasive action from other helicopters (three times), through the flares of burning oil wells (incredibly intense light, Dante-esque) to the Al Ramallah area (as I subsequently discovered). Landing strip marked by a T but we went round in

circles as there appeared to be two T's.- crew response to this was 'any tracer and we're out of here!' - no arguments from me!

"Landed and met by MAOT, taken to three Battlefield Ambulances. Met the surgeon, classic helmeted, shirt-sleeved, apron-wearing, bloody-gloved military surgeon. Informed that the casualties were from two CVRTs (British light reconnaissance tanks). Main patient was UK serviceman, head injury, unconscious, responding to pain. Also fracture mid-shaft of femur. He'd had three units of blood via two big intravenous lines and was being hand-ventilated on air with a mixture of morphine/midazolam every 5-10 minutes depending on blood pressure. Patient loaded whilst I was introduced to three UK P3 patients (shrapnel and burns).

Got all on Chinook (rotors turning still). Final check with anaesthetist and then we were asked to wait for a further P1 patient. Gave my assent - then saw Iraqi male with FM and one other clambering on. Gave the thumbs up to the loadie and lifted off on the 52-minute transit (not that I was counting) to Argus.

"Got Ryan bagging our patient. Monitor appeared to show Ventricular Fibrillation at one stage but O2 saturations were satisfactory so fiddled with leads and deemed all OK. However leads did not appear to be loose and I could find no other explanation and wondered whether there was interference from the aircraft.

Tactical lighting still sufficient to see patient but not for determining subtle changes in pallor. FM shouts in my ear 'ours is not well!'- response 'and you think mine is?'. Turns out he has an Iraqi Fedayeen with chest gunshot wounds and has DG with him (I hadn't recognised him - big smiles and thumbs up from DG). Tried several times but were unable to raise Argus to inform of inbound casualties, times etc. Also major problems trying to speak to the loadie on a different circuit from the rest of the aircrew.

Arrived and landed on deck - rotors shut down. Immediately loads of clean, well-dressed and fresh looking RM bandsmen with bright tabards rushed on. However, they were well disciplined and the off-loading was orderly, although their enthusiasm for doing the bagging instead of me was slightly disconcerting. On to the aircraft lift, waited what seemed a very long time for interlocks and other safety measures before descending into the bowels of the vessel accompanied by the rather eerie warning horn.

Straight down to the hospital deck and into a bright well-lit casualty receiving area, like a new hospital in the UK. Many keen and willing hands as well as friendly faces (other RAF personnel of my acquaintance) in the background. My handover wasn't the best as I hadn't re-read the notes (such as they were) on the trip - too much adrenaline. Dragged away from reception area and given drink but only after locating the aircrew (down in the flight deck ready room, consuming tea and sandwiches)".

Flt Lt RD (Bob) Tipping MB BS RAF, General Duties Medical Officer, No 2 Air Escort Squadron, Kuwait City International Airport (KCIA)

"I had just started an anaesthetic rotation in the UK when I was deployed on 9th February 2003.

"The RAF medical contingent met up at South Cerney. At this point, we were still in the dark as to our destination, and I never did get desert kit despite returning to the UK on Easter Sunday 2003! I bought a pair of desert boots from Silverman's (by telephone) during my time in Kuwait.

"The group I deployed with was a disparate lot: there were three separate groups allocated. A Critical Care Air Support (CCAST) Team would eventually work as an almost completely separate unit. There was a detachment of No 1 Aeromedical Evacuation Squadron (1AeVacS) and our much smaller group of No 2 Air Escort Squadron (2AES). 1AeVacS would eventually run the Aeromedical Reception and Staging Establishment at KCIA while 2AES would be responsible for accompanying the casualties in flight from Kuwait to Cyprus.

Eventually there would be three separate 2AES teams but the other two were initially deployed to Prince Sultan Air Base (PSAB) in Saudi Arabia and did not go out for a fortnight. Each 2AES team consisted of one Flight Nursing Officer (FNO) - a Sqn Ldr -, one General Duties Medical Officer (GDMO), a Flight Lt and eight other ranks, - roughly half Flight Nurses (FNs) and half Flight Nursing Assistants (FNAs), or Med Assistants/Admin. These were a mix from Sgt to SAC.

"When we arrived in Kuwait, no-one was expecting us. Initially it was assumed that as we were an RAF detachment we should be sent to Ali Al-Salem airbase, some distance south of the International Airport. On arrival at AAS, it became obvious that they were not expecting us either and could only accommodate us temporarily for one night. So it was (after much discussion and telephone calls) that we got back into the US school buses that had brought us to AAS the day before, and headed north for Camp Coyote.

"No-one seemed to know where Coyote was! One of our Cpls had a tourist map of Kuwait but that was it. Communications consisted of mobile phones. Security was provided by two RAF Regt lads in a hired Isuzu Trooper 4x4. We got lost. We had passed a turning for Abdaly Farms and took the opportunity to check where this was on the map as we were only 9km from there. It was on the border with Iraq! We had nearly reached the border and it subsequently turned out that we had been the furthest forward British servicemen, and would continue to hold that dubious honour for about another three or four days until a group of Defence Fire Service lads got even closer by accident.

"After at least a week in theatre, we moved back to KCIA. Our kit arrived some two weeks after us. All the equipment came on pallets, which were not cooled, and no equipment or drugs had been stored in a fridge since they were packed in the UK. It was therefore impossible to be sure that any of the drugs were still active, as the

outside temp had already climbed over 30oC at midday.

"We managed to 'acquire' a fridge for storing drugs, which was essential as we were also holding a stock of Anthrax vaccine for the Army Regimental Nursing Officer and his staff. We were often asked to provide primary care for people deployed with us, either from our own facility or the other British units at KCIA.

"The 2AES role was somewhat altered by the route that we had to take to get our patients out of theatre. The initial flight was by VC10 to Akrotiri in Cyprus where the patients were transferred to a 757 taken up from trade. The escorts were military on both legs, the teams handing over on the pan at Akrotiri. The VC10 (plus the 2AES team from KCIA) would then fly to PSAB and stay there for 24-36 hours before flying back to Kuwait. There were three teams doing this run (the other 2 were based at PSAB) and we were capable of running two flights per day (aircraft permitting) with a capacity of moving upwards of 100 people in any 24-hour period. Mercifully we never had to move this many people at one time.

"On one day, we had just got to the aircraft with about thirty patients when the air raid sirens went off (this happened over twenty-five times during the deployment). We rushed to the nearest shelter and the all clear was given quite quickly. We then went back to the aircraft and were just about to load the walking patients when we felt a rush of hot air and a gritty feeling over our legs and arms.

A Czech transport aircraft (an IL-76 from memory) had just powered up his engines, which had picked up some small stones from the runway and blasted them towards us: at KCIA the runways were not well swept and the aircraft were lined up nose to tail rather than side by side. These stones had broken the windows of the 4x4s that the movers were using to get around and the resultant glass was what we had felt against our legs. Unfortunately, the glass had gone into the engines of the VC10 we were planning to board and so we were grounded until another aircraft could be brought in, until when the patients were returned to the holding facility. There was a worry for a number of days that the VC10 was beyond repair as the engines are no longer being made and there are very few spares left, but fortunately the engineers managed to repair them and the VC10 was able to fly again".

And for **Dr Martin Ruth**, Aeromedical Evacuation Officer

"After spending a few days at Ali Al-Salem Airbase in Kuwait, Wng Cdr Bruce attached me to 16 CS Med Regt. My role was to evacuate, by helicopter, any ventilated patients from their surgical facility down to 202 Field Hospital. After a few days of briefings, parades (yes! I had to line up and be inspected by the RSM), we were off. I was placed with one of the Padres who had a trailer full of welfare supplies from hair clippers to sanitary towels. I'm sure I spotted a spin dryer at the bottom.

"Our first camp was set up in the shadow of a burning pipeline. It made reading easier at night. The setting up of camp was very quick and efficient. The Environmental Health (EH) Tech put me to work digging latrines. I must have been the most senior and best paid latrine digger ever.



'The morning after' Courtesy of Sqn Ldr Martin Ruth RAF

"Nothing much happened at the first camp in the Al-Ramalah oil fields. We moved further north and spent the night 'wagons-roll' style. There was a nasty thunderstorm with flashes of lightning which seemed like shelling getting closer and closer. I fell asleep to awake an hour or so later surrounded by water. Another soldier was wet and appeared hypothermic! I can't imagine there were many cases of hypothermia on Telic! In the morning it became clear that our Landrovers were in a shallow dry river bed which had taken all the rain from the surrounding area.

My own time was cut short in Iraq with the development of kidney stones (recently found to be because of primary hyperparathyroidism). The only symptom was haematuria, which occurred on the first night of the war. It was in moonlight and my urine looked really dark but I dismissed it as I was too busy trying to master shell-scrape digging for beginners. It was ten days later that when standing peeing next to a male nurse I had a stream of what I can only describe as a fine Burgundy. We both looked at the stream of red. I swore and he suggested I see someone about it. I got a sample and showed to the16 CS surgeon who referred me back to 202 Hosp. I was duly packed off for Blighty with 2 stones in my left ureter.

"We were in a coach waiting to board a VC 10 for home. The aircraft on the pan were lined up head to tail waiting to take off and the one in front, a Lockheed Galaxy, decided to test full thrust on his engines, thus blowing the windows out of a crewed land rover parked alongside the VC10. How I laughed as they rolled along the tarmac.



RAF Chinook collecting a convoy of Iraqi casualties from 202 Fd Hosp for transfer to USNS *Comfort*, Kuwait, April 2003

"From the casevac flight to Luton airport, I was listed for Luton and Dunstable Hospital. I wanted to get to RAF Halton, where I persuaded a colleague that I was fit enough to travel to Edinburgh by public transport. He arranged a nurse escort, whom I knew, and gave me a corporate credit card to go into Aylesbury to buy some civvies, as I was still in my combats. Two hours later, clad in a new pair of Levi's, boots and M&S's finest, we headed off to King's Cross. A First Class rail warrant got us window seats and a crisp tenner my first alcohol for several weeks. It's easy to forget what a green and pleasant land we live in until all you see is sand. That train journey was a great reminder.



Merlin and Lynx helicopters on Operations in Iraq (Crown Copyright)

Aeromedical liaison with the Field Hospital and UK Med Group

From Operation Telic 1 onwards, an aeromedical liaison cell was embedded in the field hospital (s) to coordinate casualty evacuation taskings. This work is captured by the following article, reported in the RAMC Magazine.

An RAF view of the UK Med Group on Op Telic 9

By Sgt Baker RAF and Sgt Owens RAF

"Op Telic 9 has brought with it many challenges. Trying to convince the Army that not all RAF personnel can fly aeroplanes and it is not our fault when their R & R flight is delayed, have probably been the greatest of all. On a serious note, moving a field hospital whilst continuing to maintain its capabilities during such a volatile period has proved to be a great achievement for all 3 services.

Although we are living in a predominantly green environment, the RAF still has an integral role to play (yes we really do!). Incorporated into the Field Hospital is the Aeromedical Evacuation cell that consists of an Aeromedical Evacuation Liaison Officer (AELO) and a Deputy Aeromedical Evacuation Liaison Officer (DAELO). Our main responsibility within the Field Hospital is to manage all evacuation requests and provide clinical advice to Medical and Nursing staff for all aspects of Aeromedical Evacuation. In addition, the AELO/DAELO categorises all Aeromed patients prior to flight into their priorities, classifications, dependencies and cabin altitude limitations. During this assessment all other additional factors are taken into consideration such as the identification of appropriate in flight care requirements, specialist equipment, team members and the requirement for specialist handling aids or transfer facilities.

Since the relocation of the Field Hospital to the COB, we have amalgamated our resources with the Aeromed cell at Waterloo lines. The AELO and DAELO are now responsible for the management and co-ordination of all aspects of Aeromedical Evacuation for Op Telic. The Aeromed in-flight team based at Waterloo Lines are now utilised solely for Intra-theatre transfers and Scheduled Aeromed flights to the UK. There are three in-flight Aeromed teams each consisting of a Flight Nurse and a Flight Nursing Assistant. The in-flight teams rotate between the hospital during pre-flight preparations, on standby for Intra-theatre moves and one team is usually on route or returning from the UK.

The relocation to the COB has enabled all Aeromedical assets to be controlled at one location and has eradicated the requirement of the intra-theatre move by air from Shaibah to the COB. This has also proved beneficial during times of major incidents when we have been able to emplane critically ill patients at short notice back to the UK or any other medical facility within theatre. In addition, the in-flight team now have the opportunity to care for their patients whilst working on the wards during their pre-flight preparations. This provides the patient with continuity of care throughout their transfer to the receiving hospital back in the UK.

This was a busy tour for the Aeromedical Evacuation detached personnel at the UK Med Group Field Hospital. With the increased operational tempo we like many others within theatre have had to utilise our capabilities to their fullest. Since the beginning of Op Telic 9 approximately 200 patients have been evacuated back to the UK for further treatment, which in itself illustrates the importance and necessity of the service we provide.

On a personal note, as much as we hate to admit it, we have integrated well into the Field Hospital and have been made to feel very welcome, crab jokes aside. We have forged a very productive working relationship with our Army and Navy counterparts. Despite the long hours and sleepless nights that affect all, we are confident in saying that patient care is never compromised. There is a genuine compassion for the injured soldiers that come through the Hospital, and we are only too happy to continue the high standard set into the air until they are back on home ground.

(From the RAMC Magazine)

Third Line / Role 3 Medical Support

The following account from April 2008 by Sgt. Martin Horton, published in RAF News, describes in general terms the work of the **Incident Response Team (IRT)**.

"I am currently deployed as one of a six person helicopter-borne medical emergency response team as part of the Incident Response Team (IRT) at Basra, Iraq. I have done this job in both Iraq and Afghanistan. The IRT consist of the aircrew, the medical team, the EOD (bomb disposal) team and have the facility to take a fire rescue team. The medical team is made up of an RAF Medic and an RAF Emergency Care Specialist Nurse. In addition, the team is regularly augmented by an RAF aviation medicine doctor based at the Contingency Operating Base (COB) Medical Centre. All the components are protected on the ground by a four man RAF Regiment team, in our case from II Sqn.

My role as the Emergency Care Nurse started after my basic nursing training with the Royal Air Force at the Royal Defence Medical College in Gosport. Following my training I showed a keen interest in Emergency and Immediate Care and undertook training within these specialities. In addition to the specialty examinations, the IRT nurses, and the medics, have to undertake numerous courses prior to deployment. The pre-hospital emergency care course is run by BASICS UK who train and govern doctors who work alongside ambulance services in the UK.

The military also expects qualification in the Battlefield Advanced Trauma Life Support Course along with Advanced Life Support and Major Incident Medical Management Training. All nurses and medics on the IRT are aeromedically

qualified by the RAF and have additional training for Rotary Wing aircraft. In addition to the medical training, courses at Tactical Medical Wing and the Enhanced Individual Reinforcement Training Course at RAF Honnington teach us the Force Protection skills required for operating in hostile landing zones.

Whilst in the UK, I work at the Emergency Department at Selly Oak Hospital, Birmingham, as part of the Royal Centre for Defence Medicine. Here my role is as one of the nurses that you would normally see when you visit the departments following a 'good night out' or a friendly game of rugby on a Sunday. Out here in Iraq the role is very different.

We deploy by helicopter responding to requests for medical support to our troops from Multi National Division (South East) (MND (SE)). Our role is to provide advanced medical and trauma care close to the point of wounding to enable the safe rapid transfer of casualties to a hospital. In Iraq, this means that a patient can receive advanced, consultant-led treatment, within 30 minutes from time of call and can be within an operating theatre within 45-60 minutes.

The shift pattern means that you undertake a 24 hour live period where you are on 30 minutes notice to deploy followed by a 24 hour standby period where you support the live team with re-supply and in case of major incident. In addition, ongoing training occurs regularly with both the live and standby teams. This occurs as a 48 hour turn around for the full 3 month deployment.

From a medical perspective, the most difficult areas when working within helicopters are the noise, vibrations and minimal lighting. Although all the medical team wear flying helmets and can therefore communicate between themselves and the crew, it is often difficult to talk to our patients, and so the ability to pick up non-verbal clues and make rapid skilful examinations becomes paramount.

In addition, the short flying times mean that we are often at the hospital before a full examination can be completed; this has its benefits and downfalls but never affects our mission to deliver the surgeon a live patient. In addition, the terrain and temperature means that fatigue is a constant factor within the team. Regularly, when walking into the Ops room, after a tasking and liaising with the same people that task you have the same conversation…'How are you?' from the Ops Officer…' knackered' replies the IRT!

Since being in theatre, the medical component has examined and treated patients from all of the three triage categories - we have managed patients with very minor soft tissue injuries to major head and chest trauma requiring advanced medical care in the air. We have treated patients from all of the nations within MND (SE) along with injured insurgents and combatants. The team is regularly flying to support the operations within MND (SE) and ensure that the best possible care can be provided to anybody injured within our area of operation."



Casualty transfer in the back of a Merlin Helicopter in Iraq

Citations for Bravery In Aeromedical Operations

The collection of casualties by helicopter from the hot zone of contested landing sites under fire or in line of sight of enemy weapons calls for considerable courage and focus on the task. Circumstances in Iraq were frequently hazardous for helicopter crew as and the incident response teams, and actions beyond the call of duty were commonplace. The following accounts of individuals whose work was particularly recognised illustrate these challenges.

Squadron Leader Dr Gavin McCallum was a Consultant Anaesthetist who had joined the Royal Auxiliary Air Force in January 2003 as a member of 612 (County of Aberdeen) Squadron in the rank of Squadron Leader. On 24th June 2003 he had been deployed to augment No. 1 Close Support Regiment, Royal Army Medical Corps, based as Al Amarah in southern Iraq, when a platoon from the 2nd Bn The Parachute Regiment requested reinforcement and medical assistance after coming under attack.

Squadron Leader McCallum joined reinforcements in a Chinook and flew to the scene. As they arrived, the attack was still in progress and the Chinook was hit by rocket propelled grenades and small arms fire. Four of the soldiers on board the Chinook were seriously wounded. Squadron Leader McCallum was also shot in the leg, but he ignored his own injury and, with support from the medical team on board, set to work to stabilise the casualties. The Chinook returned to base where the casualties received further treatment before being evacuated to a field hospital.

In recognition of his actions, Squadron Leader McCallum was awarded the Sir Andrew Humphrey Memorial Medal. The citation stated that he 'displayed outstanding courage, determination and exceptional skill under duress…undoubtedly his prompt actions saved the life of four soldiers.'

Squadron Leader Dr Sam Potter, the Senior Medical Officer at RAF Leuchars in Fife, won the Our Forces Hero category at the Daily Record Our Heroes 2008 awards ceremony which took place at the Hilton Hotel in Glasgow on Friday 9 May 2008.

Sqn Ldr Potter served in Iraq in 2007, at a time when attacks by rogue militias on UK troops had increased dramatically resulting in significant casualties. As the Medical Officer with the helicopter borne Immediate Response Team (IRT), he was regularly tasked to attend incidents in Basra City which involved delivering his life-saving care under hostile fire and a constant threat of surface to air missile and Rocket Propelled Grenade attack.

Sqn Ldr Potter received a Mention in Dispatches for his bravery and calmness while in Iraq. Three incidents in particular during his tour of duty in Iraq stand out. These include Sqn Ldr Potter attending the scene of a roadside bomb attack; the administering of life saving first aid (while under fire) to a number of RAF Regiment gunners during a fierce gun battle at the Al-Waki market near Basra and also providing emergency medical care to a number of wounded personnel following an insurgent rocket attack on the main base at Basra Airport which left three Servicemen dead and many others injured.



Merlin helicopter pilot Flight Lieutenant Michelle Goodman has become the first woman to be awarded the Distinguished Flying Cross (DFC).

Merlin pilot is first woman to receive top flying honour 7th March 2008

Flight Lieutenant Goodman was awarded the DFC on Friday 7 March 2008, for an act of courage during her deployment to Iraq in 1st June 2007, when as Aircraft Captain of an Incident Reaction Team (IRT) Merlin Helicopter she flew into an extremely dangerous area of Basra City to rescue a casualty.

In her own words:

"The crew was in bed asleep when a loud knock came at the door, 'Wake up you've got a callout!' I jumped up and dragged on my flying suit, grabbed my weapons and ran out to the aircraft. Sgt Steve Thomas was right behind me. Flt Lt George Williams and Sgt Chris Parker went to the Operations room with the medics to find out what was happening. The crew need to know how many casualties there are, what their injuries are and where we are going to pick them up. It was all very confusing as the site was still under fire, they came out to aircraft and we all waited for the instructions to come through on the radio. Within a couple of minutes we had learned that there was a seriously injured soldier with a shrapnel wound to the head in the centre of Basra city.

As we took off it was very dark and we were flying night vision goggles but even with them the visibility was very poor. We headed to the city at low-level, at this height you not only have to worry about the enemy but the wires and masts that are at a similar height. None of the crew had seen or been into the landing site before and the last time it had been used was several years ago.

On the approach we could see several flashes around us but chose to continue. At about 20 feet the dust was so bad that I could not see the ground, I was now relying on Sgt Steve Thomas to guide me safely to the ground. The time it would have cost to go around and re-do the approach was unacceptable to the casualty. On the ground the rockets were getting closer but the medics are highly proficient at what they do so within 5 minutes we were getting airborne again. As the helicopter rose above the roof tops 4 Rocket Propelled Grenades were fired in our direction.

15 minutes after the callout we were landing at the hospital so the soldier could get the medical care that was vital for his survival."

Flying on night goggles and under very heavy fire she landed next to the casualty and extracted him, despite mortar rounds landing nearby. Without the IRT, the casualty would have died within 15 minutes.

The citation for her DFC, which is awarded for 'an act or acts of valour, courage or devotion to duty whilst flying in active operations against the enemy', explains the incident in detail:

"The incident took place on 1 June 2007. At 2315 hours Flight Lieutenant Goodman was alerted that there was a serious casualty following a mortar attack on an isolated British location in the centre of Basra City. Landing an aircraft at this location is assessed to be very high risk and intelligence reports indicated a large, 'spectacular' attack would occur somewhere in Basra, with a helicopter being a possible target. Flight Lieutenant Goodman was fully aware of the elevated threat level.

"Alert to the high risk, but being fully conscious of the importance of providing unfailing IRT support to ground forces, Flight Lieutenant Goodman elected to fly her approach, whilst under intense enemy direct and indirect fire.

"Maintaining a firm control of the situation whilst flying tactically on Night Vision Goggles at very low level across a hostile city, she commenced a most expeditious transit and approach to an unfamiliar and dangerous landing site. "She continued her approach, undeterred by close friendly covering fire and even closer enemy fire which began to impact to the rear of the aircraft.

"Despite the most complex approach, with numerous obstructions and ambient conditions on the limit of aviation operations, she executed a landing with few visual references bringing the aircraft in next to the casualty. "The medics and Aviation Reaction Force left the aircraft as four mortar rounds landed in and around the location; however, she remained in full control of the situation and elected to hold the aircraft on the ground as the option with least risk.

"The top cover Lynx helicopter was by now reporting several substantial explosions in the area, which were believed to be either enemy mortars or Rocket Propelled Grenade fire. "With the casualties loaded, Flight Lieutenant Goodman departed the helicopter landing site just as further explosions occurred in close vicinity to the aircraft. Additionally, her aircraft detected a possible enemy missile engagement and automatically discharged flares as a counter measure. She departed the area, her path covered by very close friendly artillery fire to distract enemy forces.

"Flight Lieutenant Goodman flew rapidly from the area, making maximum use of the aircraft's performance, crew and supporting assets to achieve a safe transit clear of the area. The aircraft landed at the British Field Hospital just 14 minutes after launch.

"Many IRT sorties are high risk. However, on this occasion Flight Lieutenant Goodman had to instantly weigh up the risks against the importance of recovering a serious casualty, which would impact on morale throughout the coalition.

"Without the IRT, the casualty would have died within 15 minutes. Despite extreme pressure, whilst in the face of the enemy, she made the right decision. This was a bold and daring sortie which undoubtedly saved life."

Upon hearing the news of this historic award, Flight Lieutenant Goodman commented:

"I am truly honoured to be awarded a DFC, but without both my crew and all the engineering support personnel, the rescue would not have been possible. This is not an award just for me, but recognises all the soldiers, sailors and airmen, who, day in and day out, put their lives on the line for the British public to remain safe."

RAF Benson's (where Flight Lieutenant Goodman is based) Station Commander, Group Captain Paul Lyall, said:

"For the last two years, Royal Air Force Merlin helicopters have been hard at work moving our troops around southern Iraq. Flight Lieutenant Michelle Goodman showed great gallantry in flying her helicopter into a restricted area of Basra under

enemy fire to rescue a wounded soldier and speed him straight to our field hospital.

"She would be the first to say that any of her colleagues would have shown the same skill and courage. She is humbled to be the first female recipient of a Distinguished Flying Cross. All of us at Royal Air Force Benson salute her actions, and those of the other three crew members that supported her. Flight Lieutenant Goodman's actions were in the finest traditions of the Royal Air Force and we are very proud of her."

Flight Lieutenant Goodman was born in Bristol on 22 November 1976 and was brought up there before completing a degree in Aerospace Engineering at the University of Manchester. Her Royal Air Force career began in 2000 and, following Initial Officer Training at RAF Cranwell and Initial Flying Training at RAF Shawbury, she was posted to the Merlin Force at RAF Benson in 2004. A combat-ready pilot, Flight Lieutenant Goodman has completed three tours on Operation Telic in Iraq.

Helicopter pilots honoured with the RAF's highest award 10 March 2009

Helicopter pilots who braved fire during separate operations in Afghanistan and Iraq have been honoured with the RAF's highest award. **Flt Lt Kevin Harris**, from 28 Sqn at RAF Benson and **Flt Lt Alex Duncan** of 27 Sqn at RAF Odiham have both been awarded the DFC for saving the lives of their crew and troops on the ground and completing their missions under extreme combat conditions.

Merlin pilot **Flt Lt Kevin Harris** launched a dramatic rescue bid as the captain of an IRT team called in to lift three soldiers seriously wounded in a fire fight with militia fighters in Basrah. Flying in low visibility the cool headed Merlin pilot braved ground fire as he flew his team at roof top level into the city.

Unable to see the wounded soldiers Harris, under heavy fire at the landing site, was forced to lift off. Just seconds later he spotted the casualties and made another approach, facing down heavy fire while the wounded men were brought on board. In flying conditions described as 'minimal' he flew at low altitude and high speed across Basrah City to the COB.

He later led his team on five other evacuations lifting more than 30 seriously injured troops. He was awarded the honour for his 'gallantry, distinguished flying and leadership'."

Other awards

On the 29th April 2009, the RAF was given a Parliamentary Welcome Home for its personnel who had served on operations. On one of London's finest days of the year, 120 serving men and women of the RAF and RAF Regiment were greeted by Ministers and Members of the both Houses of Parliament as well as the Chief of the Air Staff, Air Chief Marshal Sir Glen Torpey.

Some of those honoured for gallantry and leadership were entertained to dinner in the House of Commons by the Chairmen of the RAF and Reserve Forces All Party

Parliamentary Groups and the Defence Committee, MPs and Peers with defence interests. Among those RAF personnel also recognised for their gallantry in Iraq were:

SERGEANT JOHN TAYLOR BAINBRIDGE QCB

On 19 July 2007 whilst on Operation Telic, Sergeant Bainbridge was amongst the first to arrive at the B Flight Accommodation following a rocket attack in which three of his colleagues were killed.

Sergeant Bainbridge immediately entered the building, aiding with the evacuation of injured personnel and fighting and extinguishing a fire directly above a casualty. Whilst organising a human supply chain for more fire extinguishers, Sergeant Bainbridge's efforts brought the fire under control and saved the life of a colleague.

For this courageous act, Sergeant Bainbridge was awarded the Queen's Commendation for Bravery.

FLIGHT SERGEANT WILLIAMS

(whilst not officially recognised by a State award, the RAF Regiment asked specifically that he attend the dinner to recognise his contribution)

During a highly demanding operational tour in Iraq in 2007, Flight Sergeant Williams RAF Regiment displayed great fortitude in the face of terrible adversity. An insurgent rocket attack directly hit his team's accommodation, causing 40% casualties. Although he was amongst those pulled from the flaming wreckage, despite his personal injuries, Williams refused further medical treatment and continued to carry out his duties, to great effect.

On another occasion, his unit came under fire during a major operation. Owing to poor communications his team became isolated with the rest of the patrol. Facing multiple firing points, they were pinned down by the sheer weight of fire. However, Flight Sergeant Williams skilfully directed his men to use their weapons to best effect and successfully extracted his men. Sadly, one man was killed during this contact, but through his flawless personal example, Flight Sergeant Williams was able to keep his team effective for the rest of the tour.

Despite the enormous pressures placed on him, he never lost his trademark sense of humour, or his well-earned reputation as an exceptional Senior Non Commissioned Officer. Throughout the period, he consistently placed the Service interest ahead of his personal considerations.

FLIGHT SERGEANT ANN CARTER MBE

During three tours of duty at the Basra Contingency Operating Base, Flight Sergeant Carter led her Immediate Response Team to deliver life saving medical treatment, frequently with the ever present threat of death and personal injury.

In one incident, Flight Sergeant Carter was deployed to extract a Danish soldier seriously injured by an Improvised Explosive Device. On arrival at the scene, she assessed the incident and rightfully declared it as a major incident. Personally

supervising the evacuation process and without regard for her own safety, Flight Sergeant Carter's clear direction to her team and guidance to the medical chain of command resulted in a successful and flawless evacuation. Flight Sergeant Carter repeatedly demonstrated this level of bravery and professionalism over three operational tours and is was recognised by the award of the MBE last year.

GROUP CAPTAIN PAUL BURT QCVS

Group Captain Paul Burt commanded Basrah Air Station from May to November 2007, providing support to Air and Land Operations throughout Iraq and providing assistance to the Iraq Government and the Ministry of Transportation in the management of Basrah International Airport.

During his six month tour commanding 903 Expeditionary Air Wing, comprising over 400 Royal Air Force personnel and attachments from the Army and Royal Navy, Basrah Air Station sustained over 700 rounds of Indirect Fire and numerous casualties and fatalities.

Under his command, the men and women of 903 Expeditionary Wings' exemplary performance has also been formally recognised.

For his own efforts, Group Captain Paul Burt was awarded the Queen's Commendation for Valuable Service.



Lynx helicopters over Basra

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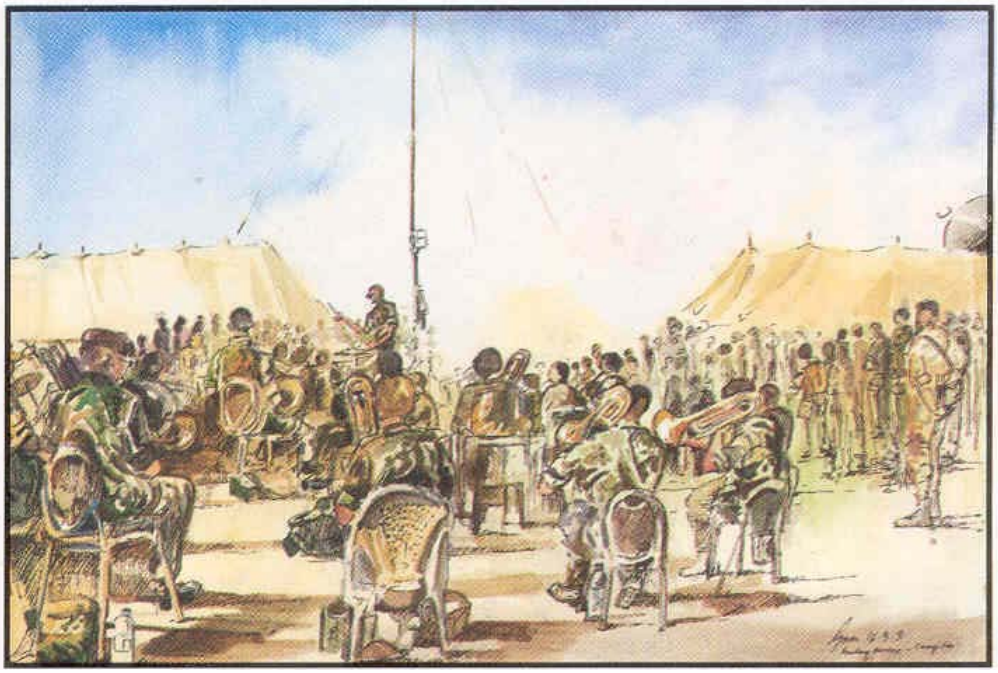
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Blood, Heat + Dust: Second Edition

Operation Telic and the British Medical Deployment to the Gulf 2003 -2009

Chapter 20:

Military healthcare support to the Iraqi civil community on Operation Telic



Painting: *Sunday Service*

Artist: Gora Pathak 2003

Introduction

It is now widely recognised that there was a serious deficiency in political foresight in the planning for the post war circumstances in Iraq, and a lack of anticipation of the extent to which civil order and administration would collapse following the decapitation of the Baathist regime.

During Operation Telic 1, the British military medical services were resourced primarily for the support of military operations, and were neither configured or resourced for a major healthcare aid effort to the populations under UK control. Herein lies an important lesson for the planning of expeditionary operations, as the Geneva protocols state that the organisation of health care needs of the civil population are the responsibility of the occupying power.

In the circumstances of growing chaos in and around Basra during 2003, there were a number of environmental and other factors which challenged the creation of a safe and healthy environment for the civil population. These included:

- Chronic underinvestment and lack of provision of safe drinking water and effective waste and sewage disposal
- Underinvestment in primary and secondary health facilities and politicisation of those which did exist and remain intact after the occupation
- Wide dispersal of weapons, munitions and mines
- Disruption of distribution networks, and looting of government facilities.

The following selection of articles gives a flavour of these challenges and the solutions as they evolved.

Early post war military medical and health operations

The release of Basra and the main towns of Safwan, Al Zubayr and Umm Qsar from Ba'ath party rule disrupted the existing structures of social discipline and order. British military medical planning in southern Iraq became focused on the restoration of civilian medical infrastructure and competent health administration to the region.

The prompt and effective restoration of primary and hospital based medical services, and of the infrastructure of fresh water, sewage and power was crucial to the military objectives of establishing the goodwill of the civilian population, and in the demonstration of the competence and motives of the occupying power.

International Law and the Geneva Convention also impose considerable obligations on the occupying military power for the care of civilians in the areas under its control. This responsibility may be delegated back to the competent civilian authorities at the earliest opportunity.

The end of military operations and the transition to civilian control in southern Iraq was not a clearly defined event. In Basra and the surrounding towns, warfighting continued against regime remnants and irregulars, while peacekeeping operations were being



RFA *Sir Galahad* unloading stores at Umm Qsar port, 2003

conducted. There was no clean surrender or handover of power from an intact Iraqi administration. The British and Allied armed forces could not immediately fill the power and administrative vacuum left by the collapse of civic authority.

Following the entry of British forces into Basra, the overall responsibility for civilian medical matters in the area passed to Col John Graham, the 1st UK Division's medical commander. His first task was to prioritise the allocation of resources, and to identify and preserve the existing civilian infrastructure wherever possible. The conduct of a formal health needs assessment for the civilian population would involve the full range of provision for environmental health including potable water; the infrastructure to support and improve civilian health; primary and community health care; hospital services; and logistic supply.

Fortunately, there were no mass movements of populations or refugees, nor were there any epidemics. Large stocks of food and medicines were found in Iraqi government warehouses, and others had been distributed in advance. The infrastructure of power, water distribution and sewage disposal was in a parlous state, but this was made much worse by general lawlessness, looting and sabotage during and after the collapse of the regime.

An example of military health needs assessment – visits to Um Qasr facilities

(This section is a precis of a paper, MedHNA1/4GS, written on 10th April 2003, and kindly provided by Lt Col Duncan Robertson)

"Visits were carried out to UM QASR Hospital on 9th April, and UM QASR Primary Care Centre on 10th April by a 4 GS Medical Regiment Health Needs Assessment (HNA) team of two medical officers and one nursing officer, a liaison officer and an environmental health officer.

"The team had a 50-minute meeting with the senior physician at UQH, Dr Al-Sheyhabi, who spoke very good English, and who was welcoming and helpful. UQH is a small 'cottage hospital' for some 30,000 inhabitants, with thirty-one beds away from the town centre. The health centre provided for 'mother and child', antenatal care and vaccination programs

Before the war, UQH employed six specialists and four general practitioners. Three doctors fled to Basra; three others in UM QASR worked independently. There were some thirty male and thirty female nurses sharing 8-12 hour shifts, and three qualified midwives who delivered 25-35 babies per week. A handful of medical orderlies were also employed to handle primary care problems. One radiographer, one laboratory technician and six technical assistants provided support.

During the visit, a volatile situation arose in which the senior clinician and hospital manager was accused of misdemeanours by other staff. The British officers brokered a compromise whereby the alleged miscreant - whose clinical skills were not in doubt - agreed to relinquish the management of the hospital but continue to provide a paediatric service. The CO of 23 Pioneer Regt subsequently addressed the hospital staff to 'forgive and forget' and to accept the new working arrangements."

Liaison with civilian and non-governmental organisations

Military policy was to hand over to the civilian medical agencies of the coalition governments, and to work with the aid agencies, non-governmental organisations, aid charities, and third nation government agencies wherever possible, when the military conditions permitted. Key agencies include the World Health organisation (WHO), UNICEF and the International Committee of the Red Cross (ICRC). These agencies bring a vast amount of expertise and commitment, and liaison with them has been refined in a number of operations across the world in recent years, such as in the former republic of Yugoslavia. However, civilian agencies lack the immediate force protection and the logistic lift available to the military in the early days of post-conflict operations. This balance changes with time as civilian logistic systems - including port, railway and road delivery - are restored.

Much preparatory work was done by the WHO on the possible impact of conflict on health in Iraq, as set out in its briefing notes in early 2003. These notes drew on a wide range of data from the Iraqi Ministry of Health, the WHO, United Nations agencies and other sources. The civilian health sector response to the events in Iraq was thus to be co-ordinated by the WHO through the Iraq Health Co-ordination Group.

Health Kits containing supplies for basic health care for half a million people for three months were pre-positioned in Iraq. Supplies in Government warehouses were also estimated to be the equivalent of three months' normal consumption. In surrounding countries, kits were pre-positioned to cover around 150,000 refugees for three months. Supplies for another 750,000 were available for deployment within a few days, as were 250 specialist staff and a number of fully-staffed civilian field hospitals and clinics.

Before the war, the UN Emergency Food Aid programme was feeding sixty per cent of Iraq's 22 million population. This programme was temporarily suspended during military operations, but was rapidly restarted after the war, with substantial injections of financial aid. However, significant population dislocation did not occur during the war, and food supplies remained adequate throughout 2003.

Environmental health operations

Sewage infrastructure - including pumps and their power supply - was either damaged or non-existent to many communities in the region, and there was a significant risk of epidemics, particularly of cholera. A brief outbreak of cholera was reported in Basra on 8th May, but was rapidly contained. Widespread looting of the Basra central laboratory and of the preventive medicine department handicapped public health surveillance.

Oxfam stated on 8th April 2003 in respect of its aid delivery, capability and intentions in Iraq that "Oxfam's prime concern is to deliver aid safely to those in need…...We do not wish to be led or co-ordinated by the military, or by any one party to the conflict, because that would compromise our independence and impartiality and bring danger to civilians and our own staff…. We will concentrate on jobs that give the maximum help to the most people, including the restoration of power supplies to water/sewage treatment plants and pumping stations; replacement of transformers, pumps and control panels where necessary; repair of pumping stations, and installation of temporary generators where available; the provision of treatment chemicals and payment for erators; repair of pipe leakages and breakages, and building hydrant connections and tap stands; erection of emergency water tanks; and provision of chlorine tablets.

Reports by a number of charities during April and May 2003 illustrate how the processes of civilian relief gradually took effect. The supply of fresh water in southern Iraq was under tight political control before the invasion, and some 500 tanker truckloads of fresh water were distributed each day under regime control. The immediate supply needs were met by laying the fresh water pipeline from Kuwait to Umm Qasr.

On 4th April 2003, Oxfam reported that 35,000-litre water trucks were getting through in Safwan and Az Zubair, and the pipeline built by military engineers from Kuwait was delivering drinking water to Umm Qasr. 90% of Basra reportedly had fresh water, after work on a water treatment plant.

The Virtual Information Centre reported on 2nd May 2003: "In southern Iraq, the UN Displaced Persons unit in Kuwait secured power generation equipment and a fuel pump for the emergency needs of a water-pumping/treatment station in Al-Zubair and a hospital in Nassiriyah. As a result, Al-Zubair's population of 400,000 now have access to potable water.

Oxfam reported on the 8th May that "two support bases have been established; an operational base with four staff in Nassiriyah and a co-ordination centre in Basra. The system relies on sweet water being pumped south from Nassiriyah to Basra where it is treated. Many areas further south rely on this water as much of the local water is saline.

"Massive damage in Nassiriyah has been caused to water/sanitation infrastructure by looters. Iraqi water engineers and technicians are doing what they can, but security makes it difficult and workers fear further looting. Warehouses full of tools and spare parts have been looted. There are twenty-one sewage pumping stations in the town but just six of these are working. The open sewers in the streets are building up with raw sewage because the electric de-sludging pumps which usually pump the sewage are broken.

"Oxfam engineers are scouring the markets of Kuwait to find replacement pumps. The team are investigating funding possibilities to buy several trailer-mounted pumps which could provide a short-term, immediate solution to pumping the excess sewage away."

Health Surveillance and the Risk of Cholera

On 14th May, the WHO stated that "the surveillance system is currently being restored. Our colleagues in Basra need to rebuild the central laboratory which was completely looted. It served Basra city and the four southern governorates… The department of preventive medicine has been completely looted, and all control activities, health education and food inspections have been disrupted. In the past, the Basra department of preventive medicine was running a very efficient cholera control program, including quality control of hospital laboratories, screening of food handlers and food items, routine control of quality of water, and screening of contacts.

"The municipal water systems in Basra city centre and Zubayr draw water from the Euphrates. The water is chlorinated and pumped into the municipal water distribution system… Illegal tapping of water has probably resulted in contamination of the system at times. Chlorination tests performed at outlets have showed that adequate chlorination levels are not present in water drawn in some parts of the city. Desalinated water is available as drinking water. Not all can afford to buy such clean water or bottled water. Tankers rented by UNICEF are delivering drinking water everyday to the city. However, it is suspected that non-controlled tankers are also selling water. The quality of water has not been subjected to routine bacteriological testing. Much of the population outside Basra city centre relies on river water from the Shatt Al Arab waterway, and this water is not treated before being drunk."

Restoration of the hospital infrastructure

The hospital infrastructure in southern Iraq was not significantly affected by the military operation, but suffered from widespread looting in the immediate aftermath. The staff remained in post, and the UK military medical authorities moved rapidly to identify the hospital leaderships and restore normal operations. Interviews were conducted with the directors and staff. In a few cases, hospital leaders and Medical Directors were replaced at the request of their own staffs for their complicity in regime activities.

In many other cases, hospital leaders were left in place. Indeed, a former senior Iraqi Army Medical Director was rapidly appointed as local minister of health for the respect in which he was held by the local doctors. One of the interesting observations of this process was the difficulty which Iraqis initially had in making and implementing decisions, after release from their previous highly politicised and authoritarian decision making structure.

Development of the civilian hospital base nevertheless caused problems. The nursing infrastructure was poorly developed, and there were considerable cultural differences in the culture and systems of provision, and in professional attitudes to patients engendered by the political, religious, ethnic and cultural situation in the province.

It was a key coalition objective to restore authority and responsibility rapidly to the civilian powers, and not to usurp their function by providing a parallel system of military field hospital care to civilians. A small number of Iraqi patients with trauma and severe burns continued to be treated in 34 and 202 Field Hospitals where local medical resources were inadequate or unavailable, but in general terms Iraqis were encouraged to seek treatment in civilian establishments, not least to avoid overburdening the relatively small military hospitals.

The provision of medical supplies and pharmaceuticals in the province before April 2003 was subject to rationing, and particularly to distribution under tight political control as a tool of coercion. Thus, key supplies such as cytotoxic drugs for cancer treatment were reported to be denied to anyone thought to be politically suspect. Nevertheless, the Iraqi government had stockpiled large quantities of medical supplies in the region, most of which survived the war intact. Stockpiles of drugs and medical supplies sufficient for six months' use were found in local warehouses, most of which had been protected from looting by their staff.

Medical interventions as tools of diplomacy

The provision of medical teams and supplies is a well-established tool of international diplomacy in disaster and war. Indeed, many governments and organisations which were vociferously against the war were nevertheless keen to establish an early post war foothold, for altruistic, political and commercial reasons. The WHO emphasises that donor resources and funds are usually better allocated to restore and augment existing hospitals. The provision of a field hospital, for example, may thus undermine local efforts, by diverting staff, supplies and patients. The situation in Iraq was quite particular. The country had large and sophisticated hospitals with well-qualified, western trained and competent staff. Most kept functioning throughout the war but were subsequently halted by looting, and lack of security, water, power and personnel. Temporary and specific shortages of medicines and equipment varied from hospital to hospital.

Explosive Ordnance Disposal and Demining



Old weapons cache in southern Iraq:
A serious environmental hazard for children in particular (MoD)

Live and unexploded munitions present a prolonged hazard to life and limb of the civilian population. The problems and risks from such the use of weapons in southern Iraq were compounded by the huge quantities of Iraqi army stockpiles of ammunition in poorly guarded bunkers and warehouses, and unstable stocks, some of which dated back to the Iran-Iraq War and the First Gulf War.

Landmines are a particular problem. They are indiscriminate, and they remain lethal long after hostilities are over. The problems of recording are compounded by their composition. Many mines are plastic and very difficult to detect. They are also often attractive to children as toys. There are no reliable technologies which will completely clear existing minefields or detect randomly scattered mines, and manual searches remain the most practical method of mine clearance at present. This may be conducted by military Explosive Ordnance Disposal (EOD) teams, or by trained civilians under the direction of specialist charities.

Education and awareness - and the collation of intelligence on the whereabouts of minefields and individual mines - are key elements in the avoidance of injury. Thus, British forces rapidly instituted a mine awareness educational programme in southern Iraq. This targeted schools to highlight the dangers of mines to children, and to tap local knowledge on the location of munitions and arms caches for disposal.



Mine awareness teaching, Southern Iraq, early 2003 (MoD)

The Post-war draw-down of British Military and Medical Operations

Within a month of the removal of the Ba'ath regime in Basra and the installation of the British Military Authority, most of the acute medical and health problems had been resolved in southern Iraq. This was achieved through local efforts, through the work of civilian aid agencies, and through restitution of logistics, power and water supply by military and civilian efforts. With the exception of a few isolated but widely reported incidents, the British did not meet the degree of resistance and hostility faced by US forces in central Iraq. The restoration of peaceful conditions was achieved by a combination of circumstances, which included the pre-existing political, ethnic and religious situation in southern Iraq, but which was substantially advanced by a pragmatic strategy of engagement with local people, and the political and religious authorities. This strategy has been refined over decades of experience in colonial and post-colonial operations, and in civil operations in Northern Ireland.

The British Divisional deployment was gradually reduced from 45,000 personnel during May, June and July to a brigade-sized deployment of some 15,000 personnel, as the security situation improved in the province. The combat units and headquarters were replaced by units of 19th Mechanised Brigade.

Clinical trauma workload rapidly tailed off by mid-April, such that plans for a draw-down of the medical deployment could safely progress. 33 Field Hospital personnel were withdrawn from Kuwait in mid-April, and RFA Argus sailed home with the fleet task force. The early withdrawal of 33 Field Hospital and RFA Argus to the UK caused adverse comment in the press, but these units were by now superfluous to immediate requirements.

34 Field Hospital personnel were withdrawn in mid-May from the Force Maintenance Area at RAF Shaibah, and 202 Field Hospital personnel took over the Shaibah hospital through a progressive transfer from Kuwait. Soon after, the conditions were judged safe to reduce 202 Field Hospital from a 200- to a 100-bed facility, and the unit was reduced in size to some 300 personnel by mid-June. The remaining personnel were withdrawn by the end of July and replaced by personnel from 33 Field Hospital, and from reserves. From that time, the medical facilities have been manned on rotation by regular and reserve medical units. Casualty flows of British and Iraqi casualties have continued since on a sporadic basis.

Training Iraqi Medics on Op Telic 3 (April – July 2004)

Capt AG Haldane, RMO, 1 A&SH

"I deployed in April 2004 as RMO to 1st Battalion Argyll and Sutherland Highlanders (Princess Louise's). The battalion had deployed in the January with the mission to support the development of the Iraqi Civil Defence Corps (ICDC) in order to allow transfer of civil powers to the Iraqis. The Argylls were given the task of training the almost 5000 men of the ICDC. This force, renamed the Iraqi National Guard on the transition of Authority (30 June 2004), were to form a major component of Iraq's indigenous security forces. Their primary responsibility was the security of rural areas, including main supply routes and key infrastructure.

The task included the raising of the ICDC 70th Bde HQ as well as training three large battalions. In addition to operational output, every aspect of the ICDC including administration, infrastructure and logistics had to be put in place.

ICDC Medical - planning, training and equipment - was no exception. Each battalion was to have a doctor, employed for the equivalent of two days per week alongside their duties for the Iraqi Health Authority. There would also be a medical platoon to provide immediate medical care.

The Argyll's embedded themselves alongside the ICDC wherever possible. This close working relationship rapidly built up the required trust and mutual understanding. A mentoring approach was adopted with training conducted on the job. This allowed the ICDC to make a contribution to the security situation right from the start. This played to the enthusiasm of the ICDC, and allowed responsibility to be transferred gradually as progress was made. It meant that the battalion was deployed with their ICDC mentees across the length and breadth of the UK area of operations.

Each Argyll company was detailed to mentor an ICDC battalion with a one-up process extending up and down the respective organisations (for example company staff mentoring battalion staff and RHQ staff mentoring Bde HQ staff). My role within the process as well as acting as medical advisor to the CO was to mentor the local doctors who had volunteered to act as battalion medical officers and also to organize the training of those ICDC "corpsmen" who had through choice or previous experience, opted to serve in the medical platoons. I was located with the battalion rear echelons at Shaibah and acted as a link between the battalion and its fluctuating in-patient population as well as working day-to-day in the Primary Healthcare Centre there.

The UK CMTs and RMAs that had deployed with the battalion, both from the med centre in Canterbury and individual reinforcements from 16 Close Support Medical Regiment had been divided up among the companies to provide an integral medical capability as well as day to day mentoring of the Iraqi medics – a task that seemed to be all of enjoyable, challenging and frustrating.

I was tasked to continue work, that had been begun by other medical officers, of increasing the level of medical training of the Iraqi medics so they could be expected to operate at either platoon or company level. A basic battlefield first aid course- suitable for all ICDC personnel - had been designed and delivered previously by the 2 PARA battlegroup. I set about designing a course that could be delivered easily, ideally by the Iraqi battalion doctors themselves; with an equal measure of theory and practical sessions culminating in a practical "field exercise" validation.

The course itself was based strongly on both the shorter military medical courses (for example BATLS and Exercise Black Serpent) and the BASICS pre-hospital care course, which I had been fortunate to have been able to attend prior to my deployment. I had at my disposal a faculty consisting of myself, the ICDC battalion

doctor and the UK company medics. Group lessons delivered en-masse interspersed with skills station round-robins and interactive sessions were a format familiar to the UK medics and this helped with the course conduct.

A generous stock of training equipment had been provided by MND (SE) as part of the SSR process. In fact more medical training equipment was distributed around the ICDC Brigade than I had seen in my entire time as a medical student, house officer and GDMO; numerous airway mannequins, IV cannulation arms, spinal boards, splints and medical modules all for training use. This mirrored the large amounts of money being spent on other ICDC equipment and vehicles. In parallel each of the ICDC battalions was equipped with a full scaling of medical modules, team medic kits and ambulance equipment and medics were required to be proficient in its use. It is however to note that only the company medics carried tourniquets in their kit (one Samway-anchor and one Velcro fastening!).

Working with the aid of interpreters my medics and I delivered the training to the ICDC battalions at their three main locations in the British AO (Camp Abu Naji in Maysan, Camp Campbell in Basrah North, Camp Chindit in Basrah South), a chance to look over the battalion company locations and a welcome break from the Shaibah logistics base routine.

The role of mentor was an interesting one. In addition to the regular duties of an RMO, it was a chance to meet other health professionals and gain an insight into the workings of the fledgling Iraqi security forces as they began their transition back to civil authority. The doctors were a mixed bunch, only one had previous military experience and he was a gynaecologist! My overriding impression was how keen the medics were to learn and how proud they were of the medical training that they had already received; always ready to demonstrate their knowledge and skills.

MOET in Iraq: enabling Iraqi doctors to develop a teaching model for obstetric emergencies and trauma

Professor Jim Ryan and colleagues described in "The Obstetrician and Gynaecologist" how,

"In April 2004, an international group of health professionals travelled to Shaibah airbase in Southern Iraq to deliver courses on emergency obstetrics and trauma, based on the principles of the MOET (Managing Obstetric Emergencies and Trauma) course, to Iraqi doctors and midwives. This trip was the culmination of a year's efforts by various members of the team and other interested parties. Following the success of the initial visit, a second trip was arranged to deliver a Generic Instructor Course and a third MOET course.

One of the founders of MOET (Managing Obstetric Emergencies and Trauma), Charles Cox, is a member of the Territorial Army; he was called up to serve in Iraq in early 2003.While he was there, he had the opportunity to visit one of the local

maternity hospitals and realised that the local medical professionals might benefit from the type of courses run by MOET in the UK and Europe. On his return to the UK, he contacted

Matt Carty, who was Senior Vice President of the Royal College of Obstetricians and Gynaecologists, with a view to delivering emergency obstetric training in Iraq. Dr Carty was already involved with the Iraq Liaison Group (ILG), a group of Iraqi doctors domiciled in the UK aiming to find ways in which the College could support the rebuilding of maternal health services and develop mechanisms to improve teaching and training of obstetricians and gynaecologists in Iraq.

Delivery of a MOET-style course was discussed at meetings of the ILG at the College in October 2003. One of these meetings was attended by Professor James Ryan of the Leonard Cheshire Centre of Conflict Recovery at University College London. Professor Ryan subsequently visited Iraq and has made a detailed report on the needs of the health service. Andrew Mathieson, who was serving in Iraq as Team Leader of the Coalition Provisional Authority (CPA) health team in the south of Iraq, Professor Ryan and Charles Cox exchanged ideas about the delivery of emergency obstetrics and trauma training in Iraq.

In February 2004, Charles Cox, Andrew Mathieson and Dr Niamh McCabe, a MOET instructor, attended a meeting on the current status and requirements of obstetrics and gynaecology in Iraq, held in Amman, Jordan, which was also attended by Professor William Dunlop, President of the College. The provision of training in emergency obstetrics was recognised as a very urgent priority at this meeting. At that meeting, Charles Cox, Andrew Mathieson and Niamh McCabe met with Lord and Lady Swinfen of the Swinfen Charitable Trust.

Over the next 6 weeks, the complicated administration and negotiation was undertaken and the team managed to beg, borrow and 'acquire'all of the other equipment required to set up the course. Sponsorship was secured to purchase the obstetric and neonatal manikins needed. MOET course manuals were donated by the RCOG.

The team of instructors was international – the leaders were James Ryan and Charles Cox. Our anaesthetist was Winston de Mello, who grew up in Tanzania, and we were accompanied by two Iraqi consultant obstetricians, Muhannad Zakaria and Rahim Haloob. The other obstetricians were Niamh McCabe, from Northern Ireland, Rob Smith, and Kusnah Mohammed, a Malaysian working in the Northeast of England. The team was completed by midwife Cara Macnab, a South African working in London. We were joined by Lord and Lady Swinfen. The operations director for MOET in Iraq was Andrew Mathieson.

All team members gave their time freely, often taking holiday leave. They each carried any extra expense, including travel fares, telephone calls, purchase of equipment and hire of transport. The team immediately set up for the first course, at the teaching centre in the Multi-National Division (SE) Field Hospital.

The MOET and Generic Instructor courses are run through the Advanced Life Support Group (ALSG), which is responsible for educational content, quality control and course development.

Two complete courses were run, with 16 candidates taking part in each. The candidates were mostly obstetricians and gynaecologists (trainees and consultants), although four midwives attended each course three anaesthetists also attended. We decided to run a third course combining adult and neonatal life support, trauma management and emergency obstetrics for interested British Army personnel. This was run over three days, in the afternoons after the main courses, and was greatly appreciated by the candidates. Course One presented unique difficulties.

Candidates, mainly from the Basrah hospitals, assembled in the city at around 5 a.m. to be driven to the course location, assembled, registered, searched and allowed to enter the base. This resulted in a significant time penalty. They had to depart at 2 p.m. to return to Basrah. This required a reorganisation of course timings and resulted in the first course lasting four days instead of three. Niamh McCabe and Cara Macnab (MOET instructors) displayed their unique skills in 'hot planning'. All candidates successfully completed the course.

The lessons learned from Course One enabled a course structure reorganisation, which resulted in Course Two being run over 3 days. Sixteen candidates attended the second course. Of these, 12 were from Basrah, three from Nasiriya and one from Al-Muthana. As with Course One, all candidates successfully completed their course assessments. The MOET team was impressed with the high level of knowledge and experience of all candidates.

Their high levels of skill and clinical competence were particularly evident in practical skills and clinical role-play sessions. Candidates noted to have instructor potential were flagged to be candidates on an instructor course planned for late June. For many reasons, not least the absence of pre-course reading material, it was decided not to apply pass/fail criteria in final assessments, the usual practice with MOET courses in UK. Nevertheless, all candidates were put through standard MOET moulage (clinical role-play) sessions as a further teaching and learning activity. MOET's regulating body, the Advanced Life Support Group (ALSG), has agreed, in principle, to use an existing mechanism to upgrade candidates to full accreditation at a future date. All candidates were given certificates of attendance.

The original intention was for the team to visit as many Iraqi medical colleagues as possible in their places of work, to get first-hand experience of their difficulties and priorities. It was also hoped to carry out detailed hospital and maternity unit visits. However, the security situation deteriorated significantly and prevented all outside visits by team members. As a consequence, senior Iraqi colleagues visited the faculty at Shaibah airbase, which was an arduous and risky undertaking for them, and which was greatly appreciated by the MOET team.

All the students agreed that the skills and knowledge learned during this course

would allow them to save the lives of women who previously could have died. This, in the opinion of the team, validated all the hard work involved in the preparation, organising and delivery of this course and should in itself justify future course funding.



Following the success of our initial visit, a second Trip was arranged to deliver a Generic Instructor Course and a third MOET course. Following our first visit, we made a recommendation that links with other Royal Colleges should be forged and we were very fortunate to be able to include representatives from the Royal College of Midwives and the Royal College of Psychiatrists on the second visit.

Generic Instructor course

We invited 12 of the candidates who attended the first courses to join us for a Generic Instructor course. This ran over two long days and covered aspects of adult learning, theory of education and practical instruction in giving lectures, teaching skills and running scenarios. The course strongly emphasises the role of positive feedback and focused critiquing. Although this form of teaching is unfamiliar to the Iraqi doctors, they all did well and all passed the course.

The Third MOET course

Having completed the Generic Instructor course, we invited five of the best candidates to join us in teaching a MOET course, the third to be run in Shaibah. We had 19 candidates in all, mostly obstetricians and gynaecologists of varying grades, but also midwives, anaesthetists and even a surgeon. Again, we were impressed by the standard and commitment of the candidates.

They all successfully completed the course, including the multi-choice examination.



As a result of feedback from the first two courses, we added in repair of third- and fourth-degree perineal tears to the MOET course. This consisted of a lecture and a skill station, and the candidates found it very useful. We gave the Iraqi instructor candidates more responsibility than would be expected of them on a UK course, but they rose to the challenge and were outstanding as instructors. All five of them were passed as capable of being independent instructors after the course.

All of the teaching was done under very difficult physical circumstances – the weather was exceedingly hot, the air conditioning temperamental and even the lighting failed us on occasion when the generators went down. The value of the courses was brought home to us by one of the returning candidates, who informed us that she had been able to save a woman's life as a result of learning 'cut-down' vascular access on the first course.

The deterioration in the security situation precluded any visits off the base, but we were honoured by two visits from Professor Hamdan, the Dean of the Basrah Medical School. He expressed his thanks to the group for our efforts and to the RCOG for its support. We were invited to run a further course in Basrah Maternity Hospital in the autumn, should the political circumstances allow it.

Due to the generosity of our sponsors, Johnson & Johnson, we were able to leave behind a large amount of equipment in the form of obstetric and neonatal manikins, Kiwis, Rusch balloons and defibrillators.



While the equipment would not be sufficient to run a complete MOET course, it will allow the instigation of 'skills and drills' teaching in obstetric emergencies.

There are now five trained Iraqi MOET instructors and we identified many more potential instructors. Our long-term aim is to enable the Iraqi doctors to run the courses with minimal physical support from us but with continuing quality control assistance from ALSG. To this end, it will be necessary to run at least one more General Instructors and one more MOET course for the doctors in the Basrah area. In addition, we feel it is essential for the doctors and midwives in the rest of Iraq to have access to this sort of training.

"To this end, we would like to run a 'VIP'course for senior obstetricians, who will be responsible for training and development in Iraq in the future. The unstable political situation would prevent us running this course in Baghdad; Amman in Jordan may offer a reasonable compromise, as this would be safe for us and relatively easy for the Iraqis to reach. We are also giving consideration to running a programme similar to that run in Shaibah in the Kurdish controlled area in the north of Iraq. All our future plans depend on obtaining adequate funding and we are in the process of applying for grants from various agencies".

Further MOET courses were not run, for reasons which were becoming self evident in this report. The difficulties in engaging with Iraqi civilians became progressively

greater and more dangerous for the participants. Low level unit training activities continued through 2005-2007, but significant re-engagement with the Iraqi population was not practical until after Operation Charge of the Knights in early 2008.

British medics train Iraqis to save lives: An MoD Report of 2nd November 2007

The first Iraqi soldiers trained up by UK military medics and nurses are ready to apply what they have learned to real-life situations in the field.

The Iraqi soldiers qualified as 'Platoon medics' after they received training and equipment from a team from the UK Medical Group, based in Basra. The training now entitles the soldiers to treat their injured comrades and potentially save lives.

Trainees were selected from different Iraqi army units around the country. They will now return to their Platoons with the life-saver qualification and brand new medical kit bags.

Major James Watson from the Royal Army Medical Corps ran the Combat Life Saver course along with Major Hamid Kubar, the Iraqi Army's regional Senior Medical Officer.

Speaking on behalf of the UK Medical Group at Headquarters Multi-National Division (South East) based in Basra, Major Watson explained the significance of the training:

"The course we have run alongside Major Hamid and his medical team is our first step in the mentoring and training of the Iraqi Army medical units," he said. "The course, run over three days, has been a great success. Major Hamid's team have proved that with a little further mentoring, they will soon be able to conduct this course for themselves and provide a sustained capability."

Major Kubar agreed the course had been a success:

"The soldiers have gained many more medical skills and are very happy with the training. When we cooperate with the British medics, it's more interesting and valuable for our soldiers than if it is done just by the Iraqi Army. We need more of these courses."

12 Iraqi soldiers, drawn from units across Iraq, including the Baghdad area, passed the course this week. As well as Major Watson, who is a physiotherapist by trade, a total of five UK personnel are involved in the training - two from 34 Field Hospital in York and three from 3 Close Support Medical Regiment based at Topcliffe. In addition to running these courses Major Watson is also in charge of the (considerable) physiotherapy department located at the Field Hospital at the Contingency Operating Base in Basra.

"The soldiers have gained many more medical skills and are very happy with the training. When we cooperate with the British medics, it's more interesting and valuable for our soldiers than if it is done just by the Iraqi Army."

Major Hamid Kubar: One of the Iraqi instructors involved in the course, Murtadha Raheem, is a medical assistant working with the Iraqi Army:

"The training has been very important, and we'll feel very happy to be able to help our injured colleagues in the future. Working with the British medical forces has been very useful, not only for the training but also for the equipment they have given us. We would like to thank them for this opportunity."

WO1 Louis Hall added: "After a slow start, when we gradually built up their trust, they warmed to us and we've achieved a huge amount. I've really enjoyed doing the course. The Iraqi soldiers can now cannulate, perform life-saving procedures and will be an asset to their units."

In order to make the training consistent across the country, US troops are now teaching the same course and issuing the same equipment in their area of operations.

This latest success by UK troops shows how Iraqi and multi-national forces are working together to improve the training and qualifications of Iraqi soldiers, and they continue to build a professional and credible Army.

Iraqi security forces heal old divisions on medical supply run

The MoD reported on 1st January 2009 that "another positive step towards autonomy and joint Iraqi Army and Police operations was achieved in Basra when members of the Iraqi Security Forces (ISF) delivered two tonnes of medical supplies from the Contingency Operating Base (COB) to Basra Hospital.

The operation was initially planned by members of the Multi National Division Headquarters (MND(SE)) staff working on the COB. The detailed planning and execution of the operation was then handed over to the ISF working in the newly formed Provincial Joint Operations Centre (PJOC) that opened in central Basra in November of last year. The PJOC brings together all the various district security and emergency forces allowing them to combine and co-ordinate their command and control from one central location.

In a highly successful operation the Iraqi Army and Police personnel worked in unison to deliver the medical supplies that had been donated by the US Forces operating from the COB. Two truck loads of supplies left the COB and headed for the Basra Hospital under the mentoring of the US Forces 21st Military Police Company and members of the RAF Police who have been helping to train the Iraqi Police Service

US Support for reconstruction operations

The MoD reported on 1st January 2009 that "another positive step towards autonomy and joint Iraqi Army and Police operations was achieved in Basra when members of the Iraqi Security Forces (ISF) delivered two tonnes of medical supplies from the Contingency Operating Base (COB) to Basra Hospital.

Reconstruction work in the South of Iraq was progressively supported by US funds and technical assistance, as the following stories illustrate.

US Army Engineer Sees Hospital as 'Once in Lifetime' Project

John Connor reported for the American Forces Press Service on January 30th, 2008 that "The Basra Children's Hospital project can get its hooks into people.

Army Lt. Col. Kenneth McDonald is an area deputy commander in the Gulf Region Division of the U.S. Army Corps of Engineers, and he leads the Basra Area Office in the division's southern district.

Part of his job is overseeing the Basra Children's Hospital project, one of the highest-profile, most complex and potentially most rewarding projects undertaken by USACE in its four years in Iraq. McDonald extended his tour in Iraq to two years from one to help bring the project to a successful conclusion.

McDonald taught in the civil and mechanical engineering department at the U.S. Military Academy in West Point, N.Y., before coming to Iraq in 2006.

The hospital is designed and being built as a 94-bed paediatric tertiary-care-referral hospital with a focus on paediatric oncology. Intended to support the population of southern Iraq, including Basra, the country's second-largest city, the facility also will be a training centre capable of improving and expanding the training of health professionals throughout Iraq.

The imperative of caring for children is widely shared across the Basra community. There were rumours in the city in 2006 that the hospital job site was a CIA headquarters, and the word was out on the street that an attack was imminent. But local citizens and religious leaders of several faiths rallied, and Iraqi flags were flown. No attack came then or later -- even when British troops battled militants near the hospital.

"The mothers and wives leverage real power," McDonald said in recounting how popular sentiment has rallied behind and protected the project. "Not once has the hospital ever been attacked."

McDonald arrived in Basra just as the hospital project was being revived after stalling out. USACE was selected to lead the effort to get the project restarted and completed. He was greeted on the way in by an improvised explosive device.

"My first day after arriving in Tallil and then driving to Basra, we were hit, but sustained minimal damage," he recalled, adding that he wondered what he'd gotten himself into. The city has more than its share of indirect fire attacks, with more than 1,000 mortar rounds landing on Contingency Operating Base Basra over the summer.

"The surreal becomes normal," McDonald said of the attacks, which in his time have seen four rounds land directly in Camp Blackadder, the USACE compound in Basra. He said the attacks have "bonded the team" and that the USACE contingent in Basra is "very proactive in procedures" to avoid casualties. "No one does not do the drill," he said.

The motto at Camp Blackadder, "Living the Dream," captures the spirit of a team proud of its mission and aware of its circumstances. The slogan can be uttered on occasion with that particular wryness to be found in a combat zone. Some British soldiers in Basra have adopted the slogan, which adorned their shirts at a recent five-kilometre race.

McDonald has no doubt the hospital will be completed successfully and that it will be "a jewel in the crown of Basra." The hospital project is being conducted in conjunction with partners including Project Hope, a nongovernmental organization, and the United Nations Development Program, which is managing a $21.75 million contribution by the Spanish government. The project will have state-of-the-art equipment. U.S.-funded construction is 77 percent complete.



Workers take a lunch break at the Basra Children's Hospital, a U.S. Army Corps of Engineers project in Iraq's Basra province. Photo by Mohammed Aliwi

Basra hospital gets new wastewater treatment plant

A. Al Bahrani, reported on April 15th, 2009 for the US Blackanthem Military News:

“For more than 15 years a Basra hospital has been discharging its raw sewage straight into the Shatt al-Arab River. With the assistance of Iraqi officials and Coalition Forces that situation changed this month.

During a ribbon cutting ceremony on April 2nd, the director of al-Sadr Teaching Hospital officially opened the hospital's new $1.9 million wastewater treatment plant. The modern 40-cubic-meter-per-hour facility serves the needs of the 487-bed hospital and replaces a non-functioning system that had been inoperable for 15 years.

"Today we celebrate the completion of this critical project that will benefit everyone in our community," said Dr. Mahdi al-Jumaah. He praised the partnership that made it happen - the efforts of the contractor, Basra Health Directorate, city leaders, and the U.S. Army Corps of Engineers.

Sadr Teaching Hospital is a 487-bed facility where approximately 500 patients are treated daily. "More than 100 people with life-threatening emergencies are rushed here daily for immediate care," he noted.

Taha Mohammed al-Qurashi, chief of Basra Environmental Directorate, said the new 40-cubic-meter-per-hour treatment facility uses modern technology and is an important step toward a cleaner, healthier community. "In general Basra Province suffers from sewage problems and this plant demonstrates what is needed to reduce that pollution," he added.

"The hospital's old wastewater treatment plant was non-operational," said Mustafa Hamdan, a Basra Health Directorate representative. "This is the first hospital in our area to get this kind of modern equipment," he pointed out. "The hospital is now discharging treated water - a great improvement for everyone."

Since 2004 the U.S. Army Corps of Engineers has completed more than 4,500 projects, valued at nearly $7 billion. Among those are 570 completed water treatment and sewer projects and another 39 ongoing. More than 5 million people are benefiting directly from these projects.

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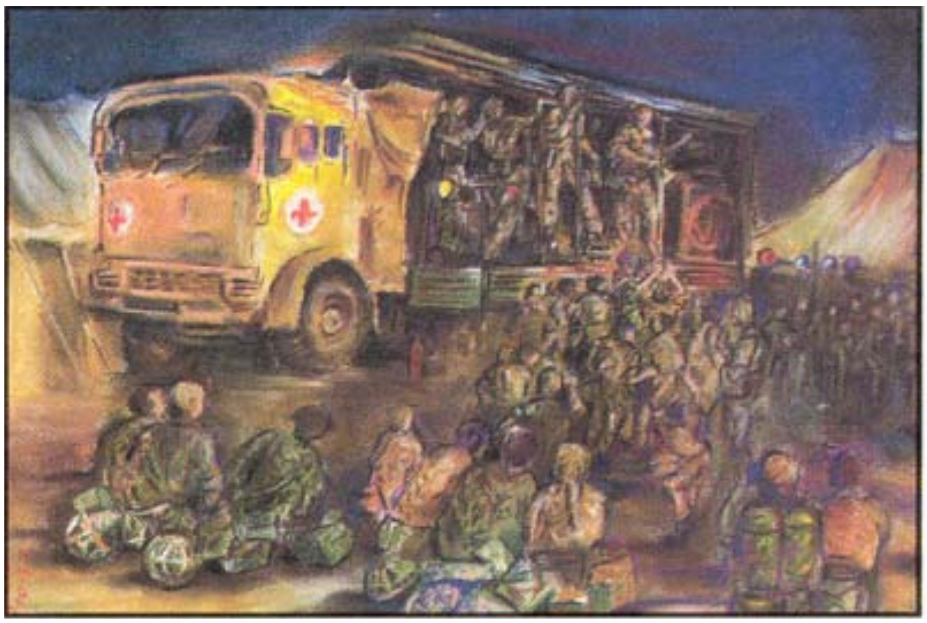
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Blood, Heat + Dust: Second Edition

Operation Telic and the British Medical Deployment to the Gulf 2003 -2009

Appendix to Chapter 20 Lessons learned from Humaritarian efforts around Basra: A declassified report to the Chilcot Enquiry: 26 March 2007



Painting: *Band Night at 34 Field Hospital*
Artist: Gora Pathak 2003

The Establishment And Operation Of The Basra Provincial Reconstruction Team (Prt), April 2006 – January 2007: Lessons Identified

Scope of the Paper

This paper, commissioned by the Post Conflict Reconstruction Unit (PCRU), reviews the establishment and operation of the Basra Provincial Reconstruction Team (PRT) and identifies lessons. The paper first summarises key findings before describing the political and operational context for them; and describes their genesis in detail in separate themed sections. The conclusion – from which these findings are derived – follows.

The acronym 'PRT' is no more than a label for coherent effort; and there are hence fundamental and salutary lessons to be drawn from the PRT's experiences in 2006 that are of much broader application than the mere assembly of similar teams in future. It is HMG's ability to create a unitary approach – with civil-military integration at its heart – that is reviewed. Only the most dogged optimist would say that it is a skill that Britain has wholly mastered.

Summary

- *A cross-government review should be undertaken to examine lessons identified in Iraq (and other relevant theatres)*; and to recommend the requisite changes to HMG structures, practice and procedures in order to enhance coherence and integration.
- *Departments, necessarily driven by largely Departmental imperatives and generally lacking post-conflict experience, are not best suited to lead broad state building endeavours*; and should rather be responsible for the provision of niche Departmental expertise to a broader structure, expressly designed for the purpose.
- *State-building is a national endeavour and should be spearheaded in theatre by supra-Departmental authority - an individual - to whom constituent Departmental effort is suborned.*
- *A similarly unambiguous locus for supra-Departmental analysis and decision making should be established in London to which that individual would report*, and preferably a Minister.
- *Fragmentary reporting on Departmental lines produces a fragmented view, and militates against coherence. This is particularly marked where key staff undertake short tours. A single integrated report is required to which all major players subscribe.*
- *A whole-of-government approach implies procedural and structural change at all levels if it is to be successfully undertaken.* No integrated body can function properly without commensurate contextual integration – in theatre and in capitals.

  Where this is lacking, the very breadth of an integrated body (like the PRT) will be its most grievous weakness - politically and administratively - because it presumes a collaborative unity that does not exist.
- *Integration is not divisible, and neither can it be imposed: it is a function of systems and procedures, and the intellectual and practical investment in such preparations should not be under-estimated*. The civil-military relationship is particularly important – indeed, integration of this kind fundamentally hinges on it

  - and cannot easily be fashioned *ad hoc*. The requisite structures and associated planning and policy should be integrated prior to arrival in theatre: elaborate a

doctrine; analyse its implications for its constituent components, for procedures and equipment; practice it repeatedly and in depth; and apply it. Once this is done, civil-military co-location, while desirable, is not essential.

- *Integrated execution is as important as integrated planning. The same rigour must be brought to both.* In SE Iraq in 2006 HMG had neither the one nor the other.
- *The ability to mount complex joint media and influencing operations in theatres like Iraq is a specialist area of expertise in which HMG is deficient.* Sophisticated campaigns of this type are an essential component of successful state-building.
- *Key staff should be held to a minimum of 1 year tours, with the requisite adjustments for welfare and travel.* The repeated and cyclical loss of experience in SE Iraq 2006 was damaging.
- *Where integrated bodies such as the PRT are raised in future, they should be recruited or sub-contracted by a single authority and to a single contractual template,* with clear procedures established for grievance and misconduct. Ideally such groups would train together - and particularly with major partners – and move to theatre as a formed body.

That single authority would also be financially and administratively responsible for the operating requirements of the group.

Caveats, Definitions and PRT Background Detail

This review presents the personal experiences of the team-leader of the Basra PRT April 2006 – January 2007.

It is assumed in this paper that the benefits of an integrated approach are accepted and require no further justification.

'HMG' is used throughout for convenience, though it remains a difficult quantity to define - hence the quotation marks - and being so, can mislead. Ironically, the absence of central 'HMG' direction was among the most striking features of the period. Basra is among the largest cities in Iraq. The city and its province, together with the three provinces around it - Muthanna, Dhi Qar and Maysan - comprise the area known as SE Iraq for which the UK is responsible. This paper confines its observations to this area and predominantly to Basra; and deals primarily with the British effort there rather than that of our Coalition partners. It is designed to be a stand-alone document and does not assume substantial prior knowledge.

The PRT was based in a UK Consulate compound in a larger Basra Palace enclosure that included the U.S. and Danish offices and a single British army battle-group. The Consulate was run by an FCO Consul General, with an embedded but largely autonomous DFID office. The PRT was re-located to Kuwait for security reasons in November 2006, where it principally remained for the rest of the period under review. Military headquarters (HQ) – both Divisional and Brigade – were located some 15 miles west of Basra Palace at the airport.

Finally, the PRT did not reach its design strength of 44. It consisted, at ceiling, of 34 multi-national staff provided by the UK, U.S. and Denmark. Constituent partners comprised: (UK) – MOD, DFID; (U.S.) – D.o.S, USAid, U.S. Army Corps of Engineers, Research Triangle Institute ['democratisation'], Iraq Reconstruction and Management

Office (IRMO); (DAN) – MFA, DANIDA. Operating costs were met by FCO-DFID MOD in the first instance and later shared between partners. Programme funds of 40 MUSDS were allocated by the U.S, and disbursed by the PRT and the Basra Province Council (PC) collaboratively.

The PRT also had access to smaller sums of money, particularly DFID's Governance Development Fund (GDF).

Political and Operational Context

HMG was persuaded by its American allies in late 2005 to establish a PRT in Basra as part of a broader Coalition PRT programme - which initially foresaw such teams in each of Iraq's provinces - coordinated by a U.S.-led National Coordination Team (NCT) in Baghdad. HMG, impelled chiefly by concern that the U.S. would establish its own team if HMG did not, and its supposed adverse impact on existing HMG institution-building programmes, agreed. One DFID paper of the time spoke of the 'tsunami-effect' of any such initiative; and a measure of distaste for the project - and occasional hostility – was evident among the three main UK Departments (DFID, FCO and MOD) tasked with creating it.

The politically awkward birth of the PRT and its effect on Departmental sensibilities tended to preclude measured examination of the underlying concept, which - if properly executed - appeared to provide an operational capacity-building framework of unassailable logic and improved efficiency, and one consistent with development doctrine. Its core tenets were that the PRT should be multi-national, reflecting the Coalition's composition in the region; that it should be civil-led, but bind both civil and military actors; that it should incorporate all main players in a single practical and – so far as possible – doctrinal construct; and that it should follow a plan agreed by these major stakeholders in full consultation with the Iraqis. In these aims, many of the persistent problems faced by the Allies in Iraq three years post-intervention were implicit: that key Coalition stakeholders were neither integrated nor even adequately coordinated; that the civil-military relationship, particularly, was not just inefficient but often at cross purposes;

- that no over-arching plan had been articulated by HMG; and that these deficiencies, in aggregate, impeded progress to the point at which, taken with a steady and marked deterioration in the security climate, overall failure in Iraq appeared possible.

The reluctance to weigh fully the implications of this new initiative for UK interests appeared the more illogical given the demonstrably fragmentary and ill-coordinated British effort of the time. Work on key areas such as governance, rule of law, economy and infrastructure was ostensibly divided between the three UK Departments: the FCO oversaw political policy and aspects of the rule of law, and DFID governance, infrastructure and aspects of economy. While security in its narrowest sense fell unequivocally to the UK-led Multi-National Division (SE) [MND-SE], the Division also carried out governance, infrastructure, and key aspects of the rule of law. Confusion hence existed on the ground about how these efforts meshed, where each properly stopped and the other began, and - most crucially - who exercised final responsibility, and who was in charge. Responsibilities overlapped or failed to meet, objectives were unclear, timelines inconsistent with one another and leaders transient.

Notes:

- The UK FCO Consul General in Basra told a PRT Deputy in March 2006, for example, that he 'wanted nothing to do with it' (the PRT). DFID's Basra representative saw the MOD as the 'senior partner' in the venture; while the latter saw the oft-touted 'civilian-led' PRT as a predominantly civilian affair. MND SE meanwhile pushed for a Memorandum of Understanding that sought to prescribe the Team's remit.
- The cyclical disbursement of substantial sums of U.S. Commanders' Emergency Response Program (CERP) funds, for example, tended to encourage short-term and rapid military expenditure in a manner that precluded the proper exercise of nascent Iraqi governance structures at provincial level.
- The increasingly constrained security climate forced daylight helicopter flights between Basra airport and Palace generally to cease in May 2006; and the use of civilian armoured 4 WD vehicles in Basra city followed suit in November 2006.

The central plank of the PRT concept was it was designed to incorporate or replace preexisting Departmental structures rather than merely duplicate them, and to entwine, integrate (and supplement) existing effort; and to make sense of the PRT whole, each constituent player had therefore to cede ground and influence for the utilitarian good of 'HMG' - the major regional player in the SE - and its partners. But this, in the curious absence of central and supra-Departmental direction, proved a painful and protracted business as consultants negotiated the PRT concept forward piece-meal with the very Departments who had just employed them to carry it out; while the latter, palpably reluctant to be in Iraq and apparently concerned that the PRT might further ensnare them, largely shunned responsibility and hoped that another Department would assume it. Yet a UK-led PRT clearly could not succeed as a concept unless the UK assumed a substantial part of the burden; and tensions hence arose between Departments who had either significantly under-estimated or ignored the implications of formally establishing an inter-agency approach, and a PRT unavoidably cast in the role of *demandeur* if it were to implement the programmes assigned to it.

What became rapidly clear as PRT staff and assets began to assemble in Spring 2006 was that, in the absence of this unequivocal support, the Team's very scope and breadth of composition made it an orphan; conceived as a multi-national, inter-agency mechanism, It lacked an obvious counterpart in theatre and in capitals, and hence a forum for the broad-based and forward-thinking policy decisions it required to prosper. Its partners in theatre, as members of government Departments, were motivated almost entirely by Departmental imperatives and policies; and few were in Iraq long enough to take a broader view. The PRT thus spent much of its time arguing for its own existence with an ever-changing cast of people, and in administrative dispute with Departments that were neither minded nor configured to assist.

From this single important misjudgement – dropping a complex cross-Departmental body with a two-year development plan into the existing and somewhat haphazard mosaic of British effort without recognising that the one must, logically, integrate with the other – flowed the bulk of the other difficulties that loomed in the reporting period, as a plethora of largely autonomous Departmentally-sponsored systems, locked in unwanted embrace with a nascent PRT, vied with one another – unwittingly

or otherwise - for political visibility, facilities, staff, money, and scarce transport resources.

Creating the PRT required, in short, a deal of prior homework about the manner in which the UK and its partners conducted its Iraqi business – how they planned, operated, and reported; and, above all, how best to conjoin civil-military effort. This was not done and one can only speculate as to why. Among the causes is probably operational *naiveté* – a broad lack of operational experience of mounting an integrated effort in Whitehall despite the experience of other theatres where similar principles had applied. A second is, perhaps, best described as 'departmentalism'.

Each Department resembled Greek city states: surprisingly autonomous, with their own discrete theologies, rituals and routines; and one or two appeared to have their own foreign policy. None appeared to see a causal link between the situation in Basra and decisions taken, perhaps because none had been charged with the role of long-term and comprehensive analysis; and, despite a clear deterioration by any measure in the situation in SE Iraq, external advice tended to be drawn upon only reluctantly. A third was undoubtedly the fact that the PRT was seen as an American creation – actually an imposition; and one that the British, who perhaps felt implicitly criticised, were initially minded to consider as a short-lived political gesture of limited practical utility.

(*Note:* The ten-month period examined in this paper saw three Consul-Generals, three Divisional commanders, three heads/acting Heads of DFID (South), and three Brigade commanders in Basra. (UK staff only).

Speculative these root causes may be; but the key deficiency in HMG effort in SE Iraq, whatever the rationale, was quite clear. It was the business of ownership – no single locus of responsibility in Whitehall had been identified to embody integrated effort of this kind; and no over-arching theatre authority existed to steward Departmental effort, despite an abundance of empirical evidence that transient and ad hoc approaches were not working.

A mere aggregation of determinedly minimalist Departmental policies proved no substitute for an integrated effort, and could not alone amount to a comprehensive approach.

Planning and Implementation

Among the key problems of 2006 was that HMG lacked an over-arching campaign plan for SE Iraq that included all major actors - whether civil or military - ascribed objectives to them, and measured progress against time. Rather, each Department and agency had its own 'plan'; and this was particularly the case with the UK-led Division. A wide variety of initiatives was underway: police mentoring, police training, capacity-building in prisons; governance initiatives in Basra and the other three provinces of SE Iraq; infrastructure projects; economic programmes; media campaigns; political work; intelligence gathering; and so on – the list is merely illustrative. While coordination between each would occur, it varied in quality and frequency; and each reported discretely up separate chains to Departments, where staff members or teams would effectively 'run' this strand of effort in absentia. Given that no theatre forum existed in which such information might be shared, collated and policy set, British effort tended to occur as a scattered archipelago of endeavour, islands in which staff

worked hard – and sometimes bravely- but without reference to the whole.

Indeed, there was no definable 'whole'. Lacking a template for action based on comprehensive, regular and over-arching analysis, British effort lacked clear goals and particularly a matrix of interlocking objectives that amounted to broad strategy; and without these, progress became impossible to define or quantify except by brandishing statistics that, without context, were logically meaningless – of money spent, police trained, schools painted, conferences held. British effort resembled a scattered flotilla of vessels, whose principal common characteristic was that they had put to sea. Each vessel's crew and its sponsors had set views about course and speed, and manoeuvred accordingly; but no more detailed instructions for the flotilla existed, and no convoy commander had been appointed.

This operational deficiency and the confusion it engendered made the simplest thing very difficult: requests for staff and other resources, for example, could not be easily justified because that justification must necessarily be subjective - no over-arching plan existed against which to measure them. As the security situation deteriorated, Basra Palace was subject to increasing levels of rocket and mortar attacks. Understandably anxious for the welfare of its staff, the Foreign Office would ask at intervals each team of experts -Police, Prisons, PRT and the like – to justify its presence in an over-crowded compound.

Each, predictably, fought their corner using necessarily subjective argument. A comprehensive plan would have suborned existing effort to a single template of objectives; weighted and prioritized activity; created savings by eliminating duplication; and allowed scarce strategic resources – space and transport assets – to be slaved efficiently to national intent. Risky vehicle journeys into the city were additionally assessed on whether they were 'mission essential' – but no clear mission had been articulated. The effect of existing work could not be quantified because mechanisms to do so had either been created and ignored, or not created at all.

This policy gap affected all strands of effort, though not equally; and proved particularly awkward for an multi-national inter-agency PRT tasked with developing a two year plan for governance, rule of law, infrastructure and economy because the team's ambit was sufficiently broad to demand substantive analysis and direction, and to make duplication with existing work inevitable if structures and methods were not altered to accommodate its presence.

The idea that the team would merely create its own strategy in these key areas and pursue it regardless was absurd. The problem proved more deep-rooted even than this. No integrated UK plan for SE Iraq existed in 2006 because, as previously noted, no properly integrated structure at the requisite level existed to create one. It was not clear who was in charge; rather, the three principal HMG Departments existed in awkward condominium with one another. This absence of a theatre decision-making body constituted to review events - and set policy - was a surprising gap in British capability three years post manoeuvre war, given the priority accorded to 'succeeding' in Iraq; and its effect was to encourage an essentially ad hoc and cellular approach. 'All hands' meetings took place daily in the British Consulate in Basra, but they tended to be used for security and welfare purposes and their very breadth precluded policy discussion; and the Divisional commander would meet at irregular intervals with the Consul-General, but without representative staffs present.

Statistically it was unlikely that either would have been in theatre longer than six months, or have worked in Iraq before; and the inherent dangers of this were clear. There was simply no SE theatre forum in which branch heads - civil and military - reported on developments, analysed their import, and took decisions; ironically, it is a common feature of daily life in British Embassies. Departments continued to operate departmentally, and would rarely consult externally, preferring to formulate policy in house even where it demonstrably affected a wider majority. This logically meant that decisions were often taken without access to the salient facts; or that decisions required were not taken because there was no process by which that requirement could be recognised.

The Southern Iraq Steering Group (SISG) - comprising CG, Divisional Commander, DFID Office, Chief Police Advisor, PRT and U.S. and Danish Offices - was created in mid-2006 (after lobbying by the PRT)15 - in order to become that forum; but it became rapidly clear after initial meetings that the underlying malaise concerning direction persisted - it had no plan to steer and hence no binding purpose, becoming by default a briefing meeting in which each present briefed on 'their' portfolios rather than subscribing to a unitary view.

Particularly problematic was distinguishing between 'civil' and 'military' matters, largely because the roles of each had not been properly delineated. Consul-General, General, Brigadier alike would, for example, meet the Iraqi Governor of Basra at intervals, and generally without conferring; and this was also the case with the Basra Province Council. Division, PRT and DFID all 'did' Governance; and all three had some responsibility - whether mandated or assumed - for infrastructure. The PRT had a measure of responsibility for Rule of Law, but no authority over what remained an FCO portfolio. It appeared that no-one at all was yet 'doing' Economy when the PRT was established; though all agreed with the notion that employment generation was of central importance, particularly given the effectiveness with which the Sadrist military wing had co-opted the angry poor.

Note: Division had a media plan but it was military only. Each component advertised its 'successes' – a subjective quantity – for largely UK domestic political purposes, although it was clear that true success could accrue only to a UK whole.

Meanwhile, all reported on generally incompatible communications systems to 'their' civil servants in London; who then issued instructions to 'their' teams and organisations. Reporting of all kinds proliferated but was rarely shared.

It appeared unlikely that this approach would prove the most effective in addressing a situation in Iraq of burgeoning danger and complexity; indeed, it had already failed over the years since sovereignty particularly to secure the tangible evidence of 'eye-catching' and 'iconic' advances in Basra which London craved, and demanded more regularly as the prospect of a 2007 hand over to Provincial Iraqi Control (PIC) in Basra approached.

Notes: The Southern Iraq Donor Group (SIDG) was a UN-led gathering of donors that met irregularly and was limited to governance issues, but was a forum for information exchange rather than policy formulation. These largely ceased after the UN's departure in Summer 2006.

- Specifically in the PRT Cabinet Office and Departmental paper 'Basra Provincial Reconstruction Team (PRT): Challenges and Opportunities', 17 May 2006 and in the 22 May 2006 Cabinet Office meeting that followed.
- It appeared that no economic study of Basra had been carried out since the dissolution of the Coalition Provisional Authority (CPA) in mid-2004.

The opportunity to address some of these difficulties arose in late summer '06 with the 'Better Basra Action Plan'. Initially an FCO-driven Whitehall call for high-visibility projects, it was re-worked in theatre by Consulate and PRT staff to become a more valuable document – a matrix of activities and goals that sought to encompass much of the breadth of civilian effort.

Led by the Basra Consulate, it foresaw seven 'Pillars' of effort and ascribed leads: Political (FCO), Security (MND SE), Governance (PRT), Rule of Law (PRT), Economy (PRT), Infrastructure (PRT) and Media (FCO). The plan profited both by the presence of a PRT sufficiently broad-based that 4 of the 7 coordination lead functions might be allocated to it; and by the fact that the PRT had already submitted a detailed plan comprising these four key pillars to the NCT and London in May 2006, and was hence well-placed to assist.

Note: MND SE had separately concluded that a new security plan - 'Salamanca' - was required for Basra to arrest a steady increase in violence, and particularly to take action against the Sadrist military arm. Typically, this planning process and 'Better Basra' had been initiated in parallel. It was agreed post-facto that the two plans - civilian and military - would merge. 'Salamanca' would become the security pillar of 'Better Basra', aimed at delivering an environment conducive to the implementation of the remaining six. The newly-formed Southern Iraq Steering Group (SISG) would steward the overall effort.

Yet substantial tensions between the two sponsoring systems remained, because no merger of this kind can function without the creation of a system to underpin it. Cultures differed substantially; planning and decision-making processes were dissimilar; communications systems were incompatible; and the capacity and resources of the military dwarfed those of the civilian component. Indeed, the military's staff resources were always such that civilian aspects – including the key function of civil authority - risked being submerged altogether.

No foundation existed on which to build a complex joint structure - particularly between two groups at 15 miles distance, bridged only by a frail air-link. Questions of fundamental importance remained. What were Britain's core objectives in the SE, how were they to be achieved and when?

What were the proper limits of action for civil and military components of the British effort? What improvements to British method were deemed necessary given UK's experiences since Iraq's re-assumption of sovereignty in 2004? What processes were required to satisfactorily mesh the range of disparate effort that characterised the Coalition's endeavours in 2006? These questions were not so much unanswered as unasked; perhaps because no single part of the British effort had been mandated with that responsibility.

Iraqi reluctance to endorse a security plan that appeared to target Shi'ia militia forced

'Salamanca' to mutate in order to gain Iraqi Prime Ministerial sanction; and to become, not the muscular security template that allowed the implementation of 'Better Basra', but 'Sinbad', a civil action plan predicated on short-term assistance to Basra's districts, and the expenditure of large quantities of CERP money on high-visibility projects such as date-palm planting, and other means of temporary employment generation.

Its political and economic impact in Basra was arguably over-sold at the time and remains hard to gauge; but its effect on a Whitehall starved of positive developments in Iraq, and increasingly anxious about the hand-over of Basra, was striking. 'Sinbad', born of an initiative to provide the environment in which 'Better Basra's' initiatives might take place, and championed by an impatient military force on a six-month cycle, now supplanted the longer-term civilian plan it was first designed to enable; and short-term imperatives increasingly eclipsed the long-term institution-building for which the PRT had been constituted.

The PRT was hence ill-suited for the task of creating the 'iconic' and 'eye-catching' initiatives which HMG sought as it overhauled the 'Better Basra' plan; and only limited economic or infrastructure work, particularly, had been commissioned by HMG in preceding years that might by now have created these visible advances.

Notes:

- The NCT, and - separately- FCO, DFID and MOD, reviewed the plan and agreed it.
- This would naturally include long-range consideration about how best to prepare for PIC in Basra.

Administrative Support - General

The absence of clarity regarding ownership of the PRT caused substantial administrative difficulty, for the PRT disposed of no assets of its own and no single Department believed itself responsible for it. From this, as elsewhere, the vast majority of the PRT's problems flowed.

Unlike other PRTs in Iraq, the UK-led team was assembled in large measure from existing effort – and at least half of the Danes, Americans and British who gathered had been working elsewhere in Basra compound beforehand. While this conferred valuable operational momentum and expertise on a new team it significantly complicated administration, because the team had to merge a wide array of existing contracts, leave schemes, equipment, security procedures and cultures while lacking any defined mandate to do so.

The administrative world which the PRT was thus forced to inhabit was always difficult, and verged in the early months on Kafka-esque. An FCO car in the Iraq support team at Kuwait airport would not pick up the inbound PCRU-contracted PRT office manager – or book her hotel - because she was 'not an FCO responsibility'. A harassed FCO Management Officer, asked for information on a PRT equipment order, responded that she 'did not have time to deal with another Department'. Military members of the team were not allowed in UK civilian armoured vehicles. Civilian members of the team were not allowed in UK military Land Rovers. The U.S. State Department Deputy was not allowed in either vehicle. Any member of the team, including the team leader, had a lower priority than any member of a UK government department for aircraft seats.

Neither PRT military staff nor Danes were allowed in UK transit accommodation. Joint activity – the raison d'etre of the PRT – was hence practically impossible. While the FCO agreed in mid-year that all PRT staff would be treated as FCO staff henceforth, regardless of origin, a subtle caste system nonetheless remained.

These essentially Departmental views of what one might assume to be a national effort created inefficiency. This was particularly the case in terms of the allocation of accommodation and other facilities. Such resources were scarce – and this encouraged an essentially adversarial view among those components of the British effort required to bid against one another for them. Lacking a plan, these bids lacked rationale, and encouraged fragmentation; and lacking the requisite operational objectives encouraged an insular impulse rather than a more desirable unitary identity.

Staffing. Nowhere were the PRT's difficulties better illustrated than in the vexed issue of staffing. The MOD seconded seven staff at the outset, though none were from the British Division. DFID seconded two consultants.The FCO seconded no-one. Those strands of British effort that the PRT was designed to help unify hence remained largely outside the team's confines. This was particularly true of MND SE.

The manner in which the PRT was gathered constrained the formation of a unitary team. In the British case, for example, the commercial company 'Enterplan' fielded the bulk of consultants for DFID; which in turn seconded them into the PRT. Perhaps understandably, the consultants that made up the team tended to look to either or both of their original employers for guidance and recourse; and this divided loyalty persisted because UK Departments, upon whom the PRT concept had largely been forced, were lukewarm about the idea and seconded none of their civil servants into the Team, preferring to retain separate Departmental structures. This made the creation of a distinctPRT 'brand' difficult.

It also made dealing with cases of misconduct complex because it was unclear where responsibility for a consultant properly lay, and there existed no defined procedures. While this undoubtedly exposed companies such as 'Enterplan' to risk - after all, it was they who were contractually bound to individuals - it also allowed them undue influence in theatre and allowed the possibility that conflicts of interest might arise. In the only instance of the period in which misconduct proceedings were initiated these difficulties became obvious.

The PRT consisted, at peak, of staff on seven different kinds of contract. DFID consultants were, for example, variously recruited to terms of six weeks on, two weeks off; four weeks on, two weeks off; and three weeks on and two weeks off. UK military staff, variously, arrived for three months en bloc and departed in the same manner; or for six months with an intervening two-week break. A number of PCRU staff were on single8 week contracts; and others worked 'back to back'. PRT teams such as economy and infrastructure were necessarily composed of a range of such contracts; and the cumulative effect of managing these leave schemes, together with a range of other frictions, was to make the maintenance of momentum almost comically difficult.

The sheer throughput of staff exacerbated this difficulty. This tended to be because parent agencies and departments tended to move 'their' people in and out of theatre without reference to PRT management, with none feeling a sense of responsibility to the PRT 'whole'.

Notes: Three of whom were regular soldiers and the rest reservists, increased to 5 in Autumn 2006. 'Enterplan' consultants were encouraged to brand their work with a company rather than PRT logo.

PRT staff varied widely in calibre and disposition. Some clearly found service in Iraq stressful. One or two were demonstrably unsuitable for team endeavour or lacked cultural sensitivity. While the four-day UK Hostile Environment (HEFAT) course satisfies the minimum security requirements for theatres such as Iraq, the rigours of the kind of implementation with which the PRT, for example, was tasked, demand an enhanced training and selection procedure, together with individual profiling to assess suitability. A regular reporting and performance review procedure should also be instituted.

The Post Conflict Reconstruction Unit (PCRU) contribution of core staff such as a communications and IT expert and office manager proved invaluable.

Reporting and communications. It is worth re-iterating the obvious truth that integrated operations are difficult without integrated communications; and doubtless the provision of such hardware, when it comes, will make unitary endeavour a deal easier. In its absence, it is nonetheless clear that no inter-agency body can exist in isolation either intellectually or administratively from the bodies it purports to represent, and that communications systems, reporting and procedures are hence key to undertakings of this kind. Such systems, however, depend overwhelmingly on human culture and procedure rather than on electronics.

In this matter of sharing information, the PRT ascended a number of false crests. It was clear that British effort would be made more efficient by a plan and a body to steer it. On establishing the one and convening the other, it was clear that their formation would inexorably demand joint working and joint reporting; but that culture, habits, discrete experience and Departmental theology now tended to form the primary obstacles to achieving unitary effect. Departmental tensions are neither new nor distinctly British, but their effect in SE Iraq was notable. Access to communications systems in this environment would alone change little – the key was to be involved in Departmental policy debate, and to help shape and unify it through demonstration of the efficacy of the PRT concept. The best way of achieving this would have been to leaven the PRT with civil service staff, who would thereby import their systems and social networks, ensure their interests were represented, that reporting of the kind they sought was implemented, and perhaps most importantly, lend credibility to the enterprise in Departmental minds.

This may have made the business of bidding for communications systems easier, but, more importantly, might have proved effective in breaking down the Departmental approach that lay at the heart of most of the PRT's problems.

Finance. The PRT's operating costs were jointly financed by the MOD, FCO and DFID. PCRU's ability to finance the PRT in its early months while this was resolved was a valuable tool, and the subsequent arrangement worked well. However, accounting procedure was unwieldy. The Team was required to order its equipment through the Management Office of the FCO-led Consulate, who held the Team's account and ran it. It would be preferable to have established the team as a self-standing business unit

charged with running its own account, and this would also have reduced the work-load on Consulate staff.

Conclusion

The UK has espoused the 'whole of government' or 'Comprehensive' approach for years and regularly exercises its function. This review of the 2006 operations of the UK-led

Provincial Reconstruction Team (PRT) in SE Iraq illustrates the disparity between theory and its practise; and underlines anew the principle that there cannot be coherence without over-arching control. HMG lacked an integrated plan, and a single line of authority to prosecute it. The PRT could not but illustrate these fundamental deficiencies because it required both to operate; and mere aggregation of disparate Departmental postures provided no substitute. This vacuum had substantial consequences for the structure and function of the PRT, and made integrated planning and execution of longer-range institution-building – the role for which the Team was constituted - virtually impossible. 'PRT' is no more than shorthand for integrated effort; and it is HMG's ability to undertake this that is accordingly reviewed.

Ironically, it was 'HMG' itself that appeared to be missing in SE Iraq in 2006. The PRT's partners were, overwhelmingly, individual Departments; and the Team was forced to negotiate separately with each. This, in the absence of theatre consensus or the plan that might have substituted for it, proved particularly burdensome; Iraq, too, was an unpopular cause, and Departments feared the PRT might further embroil them. It was, in the end, American pressure that forced Departments to create the PRT, an apparently unitary impulse to which none genuinely subscribed; and, as the Team assembled with such difficulty and that American pressure diminished, so the support implicit in theseDepartmental commitments diminished with it. No UK supra-Departmental authority intervened.

In its stead the PRT created its own policy and plans - under difficult administrative conditions and in the face of some hostility - in support of a two-year development mandate. This was revised in early 2007 by an HMG in pursuit of 'iconic' and 'eyecatching' projects of political value which, lacking the investment and longer-term operational posture that might rationally have produced them, may yet prove elusive.

HMG's effort in SE Iraq has so far failed to achieve its potential; and this shortcoming springs particularly from the fragmentary nature of its application and damagingly limited planning horizons. It is tempting to ascribe this simply to the lack of an overarching plan, and the objectives and procedures that might underpin it; but these deficiencies, though grave, are the effects of a lack of what one might term 'central' control - in theatre and in Whitehall - and not the cause. This created, by default, over-reliance upon Departments, who, animated predominantly by Departmental imperatives, are not best configured for the 'national' endeavour of broad-spectrum institution building.

This is particularly true of theatres such as Iraq and Afghanistan, where the civil-military partnership is of such central importance and the political stakes so high. An integrated approach cannot be pursued in isolation – this is arguably what the PRT was forced to attempt. A unitary posture is necessarily indivisible: logic demands that its successful prosecution requires an integrated structure - a braided rope - that runs

vertically and unbroken through the decision-making and analysis cycle.

The strands of this rope include *unitary* analysis, planning, execution, reporting and administration; and hence, clearly defined *supra*-Departmental focal points in theatre and in Whitehall - nested among complementary and bespoke structures and the procedures to fit – are required for these purposes in order to meld national effort.

Where these are missing, the efforts and activities of a great many staff in theatre – consultants and civil servants alike – will be fatally hampered, absorbed by the substantial frictional losses and internecine politicking inherent in an inefficient system. State-building undertakings tend to be formidably difficult, time sensitive and unforgiving of error – and an unvarnished Departmental system is ill-suited to its demands.

It is thus difficult to agree with the argument that integrated approaches are best led by Departments, if only because the evidence from SE Iraq appears to suggest the opposite: that where Departments lead no genuine integration is possible, reducing efficiency, prematurely eroding UK power - political and military – and tarnishing its prestige. The solution lies in formal study of British procedures and practices in light of present performance. The question is simple enough: what changes are required to HMG's conflict architecture, systems and procedures in light of our experiences in Iraq and elsewhere?

The answer will require detailed analysis and reflection. Without risking prejudgement, the need for a more *dirigiste* Cabinet Office appears self-evident, strengthened for its task by specialist staff; and if these are to come from the Post Conflict Reconstruction Unit (PCRU) or other body, the argument that such units cannot do their job while embedded in Departments must have considerable force.

Blood, Heat + Dust: Second Edition

Operation Telic and the British Medical Deployment to the Gulf 2003 -2009

Chapter 21:

Modern weapons systems and physical force protection



Painting: *Wanda Doesn't Want to Play Today*

Artist: Lt Wanda Machnicka, Nursing Officer, 202 Fd Hosp 2003

The defences against modern weaponry in Iraq

Planning for entry operations into Iraq in 2003 covered the entire spectrum of modern weaponry, including conventional weapons, of which the Iraqis had abundant stocks; and weapons of mass effect (WME), including chemical, biological, nuclear and (dirty) radiation weapons.

WME were a key concern in the planning of operations on Op Telic 1. Once the military occupation was established, the key force protection challenges arose from the use by insurgents of improvised explosive devices (IEDs), which grew in sophistication and effect during the campaign. The types of IEDs and their use in Iraq are considered in greater detail in Chapter 5 on the insurgency.

Given the intensity and accuracy of weapon use by both sides on the modern battlefield and in insurgent conflict, considerable effort must be devoted to the protection of personnel, both through tactics, dispersal and concealment, and through physical protection of combatants.

The experience of Operation Telic forced numerous improvements in the technology and tactics of force protection, and in the physical protection of individuals (body armour) and vehicles.

The Science of Wounding

Weapons are designed to cause wounding and death. Death from wounds may arise immediately (minutes), soon (hours to days) or late (days, weeks, months, years). Immediate causes of death include massive blood loss, asphyxia from airway obstruction or damage, or massive brain damage.

The body has evolved mechanisms for dealing with limited injury and compensation for some blood loss, airway or brain damage, but cannot cope with overwhelming damage to one or multiple systems or organs. Skilled professional intervention can offset some damage - for example by controlling the airway, stopping bleeding, replacing fluids and blood, and repairing or removing damaged structures.

Weapons that wound rather than kill tie down far greater medical resources. Massive energy transfer events from blast, burns or flying materials are unsurvivable, and may destroy bodies beyond recognition, or through decapitation or incineration.

The science of wounding is not a static art. Iraqi insurgents and coalition forces were involved in a continual cat and mouse game of low and high technology as the capabilities of IEDs evolved and as new methods of detection and pre-detonation were developed, as reported in Chapter 5 on “The Insurgency”.

Conventional Weaponry

The weaponry of war varies from the brutally primitive to the technologically advanced. At its crudest and most brutal, war brings injury and death from close combat by

bayonet, sword, knife, machete and rifle butt. Such wounds include blunt and crushing injuries, and penetrating injuries from cold steel which damage vital organs and usually cause death by bleeding. The inhumanities of man to man at close quarters also include the full spectrum of torture instruments, hanging, strangulation and electrocution, such as were practised by the Iraqi security forces in various establishments under the Baathist regime and beyond.

Through the ages, non-explosive weapons - including knives, swords, spears, machetes, arrows, stones and shot – have accounted for countless lives. 'Conventional weapons' is a term which is generally used to describe those means of killing and wounding which use a chemical explosive to generate heat, blast and the kinetic energy of flying metal and fragments. They include the rifle, machine gun, mine, artillery, cannon and mortar shell. These weapons can produce an immediate effect, or a delayed effect with fuses, booby traps and timers.

Other conventional weapons include napalm, delivered by flame throwers or bombs, and technologies such as laser weapons which can be used to blind pilots attacking ships. At the extreme scale of effects, some volatile fuel air explosive blast-effect weapons produce damage equivalent to small nuclear weapons. The kinetic and thermal energy of a fully fuelled civilian airliner crashing into a tall building also produces devastation on this scale.

The mechanisms of injury from modern weapons

Penetrating Trauma

Modern weapons cause a complex range of wounds from penetrating and blunt trauma, blast, thermal and chemical injury. Penetrating trauma includes that induced by single projectiles, low or high-energy bullets, ricochets or shell fragments.

Multiple penetrating trauma arises from a range of antipersonnel and fragmentation weapons, which include mortar and artillery shells, hand grenades, rockets and antipersonnel mines, and from the tumbling end ricochet effect of bullets within bodies.

Blast

Exploding warheads and mines also produce blast. This can cause primary injuries from the pressure effects of the blast, particularly to the brain and chest, and secondary injuries from the flying fragments which invariably accompany a blast. Some weapons, such as the fuel air explosive and the US parachute dropped MOAB bombs, are designed to maximise blast and pressure waves from the sudden expansion of gases during the explosion. These weapons can cause massive lung injuries.

Thermal injury and burns

Exploding weapons also create a thermal or heat wave, which can cause burns to exposed skin. These weapons also cause secondary fires. For example, during an assault on a building near Basra, a team of Royal Marines was caught in the explosion of a Calor Gas cylinder after a grenade was thrown during a house clearance operation. Contact with caustic compounds - including phosphorus, a common constituent of grenades -

will cause chemical burns. Temporary or permanent blindness may arise from explosions, or from the more sinister use of battlefield laser weapons.

Refinements in modern conventional weaponry and new challenges

The use of plastics in scatterable and fragmentation weapons reduces the chances of detection of mines and unexploded ordnance. The power of weapons is increased by modern explosives with enhanced and accelerated blast or thermal effects. Powerful lasers can produce irreversible damage to exposed eyes and retinas

Weapons of Mass Effect

The clichéd phrase 'Weapons of Mass Destruction' (WMD) is less useful than the phrase "Weapons of Mass Effect. These 'unconventional' weapons include nuclear, chemical and biological types.

Nuclear weapons have hugely destructive explosive power and radiation effects on property and flesh, and are precise and predictable. The Baathist regime was known to be developing them in the 1980s, but the programme never reached completion.

Chemical and biological weapons have no destructive power whatsoever against property, and their effects when operationally deployed are very unpredictable.

The production, storage and use of chemical weapons is a major undertaking for any state. They are complex technologies which require systems of manufacture, security, control and the means of delivery. The Iraqis had an advanced chemical capability which was used effectively in the Iran-Iraq War of 1980-1988

Biological weapons can be produced in small laboratories using commercial sources, organisms and components, and can be dispersed by simple technologies such as crop spraying aircraft.

Radiological Weapons

Organisations without the capability to build and use true nuclear weapons can nevertheless cause severe disruption with dirty radiological bombs. The source of radioactivity may be any civilian source of high grade radioactive waste, such as is often found in medical equipment. This is packed around the explosive, which thus scatters radioactive material over a wide area. Such weapons may not kill anyone immediately from the dispersal of radiation, but they may have profound strategic effects, causing huge economic dislocation and panic if used against a city because of the evacuation and clean-up costs. The reactor accident at Chernobyl and the subsequent spread of radioisotopes across Europe with the subsequent quarantining of large tracts of the Ukraine, and more rcently the post-tsunami Fukushima disaster in Japan, are the most dramatic example of a dirty radiological effect.

Biological Weapons

The term 'Biological' describes the use as weapons of naturally occurring or genetically modified bacteria, viruses, parasites or their toxins. They are intended to produce disease in unprotected armies, civil populations, animals or crops. Many infective organisms have been studied for their possible military and strategic uses, and there are many historical precedents for biological warfare. These include the tossing of diseased corpses into cities under siege to spread contagion in mediaeval times.

In theory, biological weapons are very potent instruments of human destruction. Many pathogenic organisms target the human body and can multiply within organs and tissues to cause disease and death. Many biological agents are easily manufactured; a single 100-litre fermenter can be used to produce ten thousand million infectious doses of anthrax spores within a week.

A modern biological weapon comprises the biological agent and the means of dispersing it. Delivery systems include cluster bombs, missile warheads, and a variety of simple spray devices which may be mounted in aircraft, unmanned aerial vehicles, land vehicles and ships. Portable devices may also be used clandestinely to spread the agents in aerosol form. Dispersal in food or water is also possible.

Living biological agents multiply in the body and cause the symptoms of their characteristic disease. The incubation period will depend on the agent and the dosage; it may be of the order of a few days for plague or several weeks for other agents. Toxins are complex chemicals that produce their effect within minutes or a few hours: they are used most effectively in assassinations.

Examples of biological agents and their effects

Iraq was known to have a complex biological capability, with many civilian industrial processes capable of militarisation. Agents which caused particular concern as possible weapons included Anthrax and the Plague.

Category	Disease	Effect
Bacteria	Anthrax	Incubation period of 1-6 days after which respiratory distress normally develops rapidly. Shock and death usually follow within 24-36 hours.
	Plague	Following 2-3 days of incubation, fever, coma and respiratory failure occur, leading to death in 48 hours.

Biological weapons have little practical military value other than as area denial agents and as terror devices. In the latter role, the use of a few envelopes containing Anthrax spores in the postal attacks in the USA in 2001 caused very few deaths, but a huge disruption to civil life for many days.

Mankind has fought natural wars against biological agents from time immemorial. The bubonic plague, smallpox, influenza, cholera and AIDS have decimated populations, but we have survived as a species with enhanced immunity through the brutal effectiveness of natural selection.

The greater risk to many military campaigns through history has arisen from conventional infectious diseases and their effects on non-indigenous personnel. Such was the case during an epidemic of norovirus enteritis among British troops in southern Iraq in 2003, as described later. The natural world also produces very effective means of dissemination of potent diseases by animals, parasites and insect vectors.

Medical Countermeasures and Support: A number of practical precautions were nevertheless taken against biological attack. Immunisation provided protection against anthrax and plague. The whooping cough vaccine (Pertussis) speeds the development of immune response as an adjuvant. Biological Agent (antibiotic) Treatment Sets (BATS) offer antibiotic prophylaxis against bacterial agents.

Chemical Weapons

Chemical agents are compounds which produce incapacitating, damaging, or lethal effects on people, animals, plants, or materials when suitably disseminated. People are vulnerable through inhalation, ingestion, or absorption through the skin. Most chemical agents are liquid and tend to act within a few minutes to a few hours. They can be made and dispersed easily, but quantities of approximately one tonne of chemical agent per square mile are required for an effective military capability. Chemical agents can be dispersed in most meteorological conditions, but their effectiveness will be determined by the weather conditions and by the terrain features in the area of the target. Chemical weapons can be delivered by aircraft, including crop-spraying light aircraft; by artillery shell, or by covert means. However, to achieve massive and immediate effect on the battlefield, massed artillery or rocket barrage is the preferred option.

A Brief History of Chemical Weapons



World War I first saw the use of chemical weapons on an industrial scale, including chlorine, phosgene and mustard agents. Some 125,000 tonnes were used on the battlefield and caused 1,300,000 gas casualties, of whom over 90,000 died. casualties.

In March 1915 the Germans again used T-shells on the Western Front. April 1915 saw the first large-scale use of gas by the Germans against the French salient at Ypres, from cylinders containing 268 tonnes of chlorine. September 1915 saw the first British use of chlorine at Loos.

In July 1917, mustard gas was first used by the Germans at Ypres. The UK, USA and France all developed chemical weapons munitions in response and used them frequently. Mustard gas was the preferred agent, because of its persistent and greater incapacitating qualities.

In the interwar years Italian forces used chemical agents in Ethiopia in1935-36, mainly mustard gas delivered by aircraft spray. From 1937-43, Japan used chemical and biological weapons against Chinese forces during the Sino-Japanese war, and the Japanese BW Unit 731 conducted notorious human trials. The major powers of Germany, Italy, Japan, France, the UK, US and Russia all produced and stockpiled chemical weapons, but there was no confirmed use.

The experience of the First World War has conditioned our thinking and preparation ever since. Fears of the use of chemical weapons during the Second World War, when the Nazi regime had control over a sophisticated chemical industry and the ruthlessness to use the products were never realised.

The UK abandoned the production of chemical and biological weapons in the 1950s other than for research purposes, but the USA and the Soviet Union maintained large programmes. In 1979, the accidental release of Anthrax from Soviet Military Compound 19 in Yekaterinburg caused a large number of deaths. During the Iran-Iraq War of 1980-88, chemical weapons were used extensively by the Iraqis; an Iraqi chemical weapons attack on the Kurdish civilian target of Halabja using mustard and nerve gas in March 1988 caused many casualties. The Japanese Aum Shinrikyo sect researched biological and chemical weapons and means of delivery, and Sarin attacks against civilian targets took place at Matsumoto in June 1994 and on the Tokyo underground in March 1995, but fortunately there were relatively few deaths.

Modern Chemical Weapons

A modern chemical weapon comprises the agent and the means of dispersal. Chemical agents are liquids or gaseous substances which cause harm when ingested, inhaled or otherwise make contact with the body. They are classified in a number of ways, which include:

- their liquid or gaseous state
- persistent (non-volatile) or non-persistent (volatile)
- by overall effect, fatal or non-fatal (incapacitating)
- by clinical effect, including nerve agent (eg Sarin), hallucinogenic agent (eg LSD), sedative (as used in the Moscow Theatre Siege in 2003), choking (chlorine, cyanide gas), blister and burn (mustard agents).

Dispersal may be from a shell or a mine, or an aircraft delivering missiles, bombs, or spray. Ballistic missiles may also be used, but they have too small a payload for military tactical effect. Volatile agents vaporise on dissemination and may be carried on the wind for some distance from the point of release. Agents with low volatility - or persistent agents - remain in the liquid state for long periods, and thus may be used as area denial agents on high value static targets such as ports and airfields.

Category	Agent	Effect
Choking agents	Phosgene	These attack the lungs which fill with fluid. Can be fatal.
Blood agents	Hydrogen Cyanide	These act by interfering with the transfer of oxygen from the blood into the tissues. Can be fatal.
Incapacitating agents	Adamsite	These produce violent sneezing and vomiting. Can be fatal.
Vesicant agents (blister agents)	Mustard, Lewisite	These attack the skin producing extremely painful and slow healing blisters. Can be fatal.
Nerve agents	Tabun, Sarin, Soman, VX	These interfere with the nerve pathways between the brain and the muscles producing muscular spasms and paralysis. Can be fatal.
Mental incapacitants	BZ	These disorientate the mind producing hallucinations and irrational behaviour.

Chemical weapons and Iraq

The Iraqi chemical arsenal was known to include the nerve gases; the mustard gases and choking gases. The putative possession of WMD by Iraq was used as a key causus belli for the 2003 invasion. Iraq developed capabilities in all of these disciplines during the 1970s and 80s, mostly with the help and acquiescence of Western companies and governments, such that there was very serious concern about their use by the time of the first Gulf War in 1990. A mixture of these weapons was used to dramatic effect against Kurdish civilians by the Iraqis in the Anfal campaign in the late 1980s, and against unprotected Iranian troops on the Faw peninsula at the end of the Iran - Iraq war in 1988.

Intensive efforts were made during and after that war to ensure the destruction of all of these weapons programmes, both by military means and through peaceful inspection and controlled elimination.

After 1991, UNSCOM nevertheless destroyed or made harmless one 'supergun'; 48 Scud missiles; 38,000 chemical munitions; 690 tonnes of chemical agents; 3,000 tonnes of

precursor chemicals; and biological and chemical warfare-related factories and equipment. The International Atomic Energy Agency (IAEA) also found a nuclear weapons programme far more advanced than suspected, and dismantled it.

1995 saw Iraq's first admission of an extensive chemical weapons programme. This included the production and weaponisation of VX nerve agent. In 1998, independent experts advised UNSCOM that Iraq had not yet met the terms of UNSCR 687. The Iraqi Government refused to co-operate further with UNSCOM, claiming that Iraq had met its obligations. In December 1998, Operation Desert Fox sought further to disrupt the Iraqi programme by military means. In 1999, a disarmament panel established by the Security Council reported that Iraq had still not complied with UNSCR 687.

It seems from what we now know that these programmes had been almost entirely successful by the end of the 1990s, but uncertainties about the extent of this success, distrust of Iraqi statements (and the mindset of the Iraqi leadership not to lose face over the issue), created the conditions where a causus belli could be said to exist based on perceptions during 2002 and early 2003.

Chemical weapons are nevertheless limited in their practical value in desert warfare conditions. To produce military effect, such agents must be delivered rapidly to the target in large concentrations. It is very difficult to deliver clinically effective doses of agents to the point of intended use in 'economic' and efficient ways. Their efficacy drops off rapidly against protected troops, in hot weather and in windy conditions. Dust is a very powerful absorbent and decontaminant of liquid agent. They present huge logistic problems, put own forces at significant risk, and must be delivered by large numbers of artillery systems.

The fear of their use is far more degrading than their actual effect, as a single surface-to-surface missile cannot deliver effective volumes. This lesson was often overlooked by commanders in the Gulf, where the use or misuse of cumbersome chemical protection equipment caused serious problems of degradation and heat injury. In the Iraqi Scud assaults on Israel in 1991, the only attributable deaths were reported to be from suffocation through the misuse of gas masks.

British strategy of defence and protection against chemical weapons in 2003

The mere threat of use of biological and chemical weapons substantially affects the planning of military operations.

Force Protection measures include:

Detection and Identification: UK forces were equipped with the FUCHS survey vehicle, the hand-held Chemical Agent Monitor (CAM), and the Nerve Agent Detector (NAIAD). Personnel carried chemical liquid detection papers and Residual Vapour Detector (RVD) kits.

Physical methods protect the respiratory system, eyes and skin against biological and chemical agents. They include a respirator, a protective suit, gloves and boots. A simple oro-nasal mask protects against most respiratory or digestive biological agents.

There are many important design features to this protection, such as the inclusion of an activated charcoal lining. The NBC or 'Noddy' suit has been refined over several generations, along with various personal items of detection and decontamination kit, for which use drills are regularly rehearsed. Importantly, the respirator can be used independently when there is a vapour hazard but no risk of direct contact with droplets of chemical agent.

Medical Protection Measures included Nerve Agent Pre-Treatment Sets (NAPS), containing pralidoxime and taken in advance of an attack, offer protection against the anticholinesterase agents. After a nerve agent attack, ComboPen® injectors, which combine atropine and a benzodiazepine, counter the effects of nerve agents.





Training at Grantham for the use of autoinject Combopens



Full NBC Kit worn at 202 Field Hospital during a missile alert on *Operation Telic 1*



Typical personal protection equipment on Operation Telic, including Respirator, Autoinject Combopens, Autoinject morphine, Ciproxin (antibiotic), NAPS (pyridostigmine) and antimalarial tablets, Fuller's Earth pads and powder bottle, and dust mask (Photo Major Duncan Gray)



NBC Training at Grantham: Practising a suit change in contaminated conditions

The Medical Response to Threats of NBC Attack in Desert Conditions

The characteristics and utility of personal Chemical Protection Equipment change dramatically in desert conditions, with the practical consequences and real risk of serious thermal injury and major functional degradation of personnel in short order.

The defence of personnel against a wide range of chemical agents and poison gases and liquids is underpinned by the issue of the protective suit for overwear - and a rubber respirator - as described in Chapter 3. NBC suits have a fundamental limitation in hot weather, in that they soon become a risk to their wearers through overheating. Indeed,

the thermal properties of NBC uniform make it virtually unwearable for all but very short periods of a few minutes in desert temperatures before the onset of heat injury. However, in many circumstances, chemical warfare suits are used inappropriately and without intelligent appraisal of the total risk in desert conditions.

Chemical warfare protection must include a proper understanding of the uses and limitations of chemical agents in the desert. The misuse of NBC equipment causes considerable and unnecessary force degradation, particularly in desert conditions, and puts troops at considerable additional personal risk. However, desert conditions also render liquid agents impotent by virtue of their volatility in the desert heat, and because the ubiquitous ground dust of the Arabian peninsula is the very best absorbent and dispersant of chemical fluids.

The only realistic and practical hazard that chemical weapons pose outside the immediate blast vicinity of a missile or shell is a transient vapour, for which the respirator alone provides adequate protection, and for this a new set of procedures and drills may need to be adopted. Current respirator drills in any case allow for protection within nine seconds of the sight or awareness of the immediate proximity of chemical attack, so there is no practical purpose to obliging troops to wear full chemical warfare clothing - or even a respirator - other than under direct and self- evident attack.

Film of correspondents and television anchormen giving interviews in respirators during general air raid alerts would be laughable but for the quite unnecessary panic and confusion which they convey, with serious psychological consequences for an uninformed public. The wearing of full NBC clothing in desert conditions can thus be a misguided and dangerous strategy in all circumstances other than in the immediate vicinity of an actual chemical strike or incident with persistent nerve agent, because of the serious risk to troops of heat stroke.

These considerations are particularly important in respect of the threat from the launch of non-nuclear armed ballistic missiles. The principal threat from such weapons is to those directly in line of the descending warhead and missile fragments, and within the immediate vicinity of the blast of the relatively small 70kg warhead carried on such missiles.

Therefore: Top Tip: **The disruption caused by the mass donning of chemical suits is quite disproportionate to the risk to personnel from these missiles, for which cover from the blast is the most important protective response. The principal chemical risk is from a vapour hazard in desert conditions, and this is present only when a warhead has been seen or heard to explode in the immediate vicinity.**

The Casualty Decontamination Cell

Casualties who survive chemical attacks need to be passed along the chain of evacuation for treatment. This runs the risk of transferring chemical contamination to the medical facilities, and in particular of persistent liquid nerve agent and of liquid mustard agent. The decontamination cell is a dedicated, isolated area where casualties can be freed of contaminated clothing and equipment before transfer into the dressing station or hospital complex. The teams who conduct decontamination need to be protected from contamination themselves, and primarily from a vapour hazard. The liberal use of





Casualty decontamination cell and Training, Camp Coyote, *Op Telic 1*

absorbent powders (Fullers Earth) and liquid bleach are valuable tools for decontamination, while full NBC clothing and gloves severely limit activity. .

The formal techniques are time consuming, exhausting and clumsy for these teams, and it is perhaps fortunate that they were not needed in the desert heat, as substantial modifications to current procedures would undoubtedly have been necessary

Collective chemical protection equipment (COLPRO)

These observations extend to collective chemical protection equipment, in which the military has made a substantial logistic, training and operational investment. Pressurised, chemical proof rubber liners which fit inside standard aluminium framed tents are widely deployed, along with their filtration equipment. They require complex procedures and drills to ensure their safe use in contaminated chemical environments. They also suffer from the serious drawback of becoming intensely hot in the desert, to the point of unusability, but on the other hand they can be used to produce excellent environmental control and cooling with a reliable air conditioning unit.

Lessons in NBC Procedures

The following comments are based on the author's experiences and observations of behaviours and operational disruption during ballistic missile attacks on Operations *Granby* and *Telic*. They are intended to help minimise anxiety and disruption if such circumstances arise again, and to suggest improvements in the command response to ballistic missile threats.

Non-nuclear ballistic missiles pose a primary threat to troops, equipment and buildings by virtue primarily of the kinetic energy of their components, which will produce highly energetic impacts and point damage. They are primarily psychological weapons. The explosive warhead is relatively small (<100kgm) and will cause less damage at the point of impact than an aircraft delivered bomb. The primary defence is ballistic protection from kinetic fragments, blast and burn - body armour, trench refuge or substantial overhead cover.

The carrying capacity of a chemical warhead is so small as to have negligible practical tactical value, although it may have profound strategic effects. Repeated theatre-wide alarms of incoming missiles will cause huge disruption of activity among troops who put on NBC IPE which are disproportionate to the overlying threat. The nine second rule relates to the time to masking from direct observation of an impact or suspicious cloud/mist/vapour event. It makes no sense to don respirators unless an Surface to Surface Missile (SSM) impact has been directly observed in the immediate vicinity, and the practice of total IPE to the point of force paralysis must be resisted.

A further observation is that the risk posed by chemical and biological weapons is probably significantly less in the real world of weather and variable environmental conditions than in controlled experimental conditions: we have seen how heat and dust further reduce the risk to appropriately equipped troops in the desert.

This observation is important in civil defence preparations against future possible homeland terrorist action. Observations of the responses of trained troops and commanders to NBC threats in warfighting conditions suggest that the panic element in public response to even a small event involving an unconventional device will be disproportionate to the absolute risk, and create more danger to others than the event itself. Hence it is essential that all involved in the official response to such incidents understand the limits to the risk posed by the device itself, and that the response of the emergency service personnel is appropriately conditioned to understand the limits of the risk.

Terrorism and Weapons of Mass Psychological Effect

Terrorism recognises that certain actions and weapons will have a disproportionate effect on mass psychology. In the context of terrorist operations, conventional weapons can be seen primarily as 'Weapons of Mass Emotion', and this effect may be as raw as that elicited by the direct decapitation of a hostage.

Terrorist actions are intended to produce mass responses and political consequences. A dramatic example of the effect of WME was seen in the Madrid train bombings of March 2004, leading to the altered course of an election in Spain and to the rapid withdrawal of Spanish Forces from Iraq.

Conversely, the use and filming of beheadings by insurgent groups had a profoundly counterproductive effect, in that it prompted mass revulsion among the general population of Iraq.

"Unconventional" CBRN IEDs

The threat exists that toxic chemical, biological, or radioactive (dirty bomb) material may be added to a device.

Improvised Chemical Device – Chlorine liquid has been used with IEDs in Iraq, using hijacked chemical delivery tankers and industrial gas cylinders.

Improvised Nuclear Device – A device incorporating radioactive materials designed to result in the dispersal of radioactive material or in the formation of nuclear-yield reaction. Such devices may be fabricated in a completely improvised manner or may be an improvised modification to an acquired nuclear weapon.

Improvised Biological Device – A device incorporating biological materials designed to result in the dispersal of vector borne biological material

Improvised Radioactive Device – This is a device incorporating radioactive materials designed to result in the dispersal of radioactive material. Such devices may be fabricated in a completely improvised manner or may be an improvised modification to an existing nuclear weapon. These weapons are also called Radiological Dispersion Devices (RDD) or "dirty bombs".

Primary Injury Prevention to military personnel on Op Telic

Personal Protection and Body Armour:

Prior to 2003, personal body armour was not a standard item of personal kit issue. Combat Body Armour (CBA) comprised the Kevlar jacket or waistcoat, which was deemed effective against low energy fragmentation. Enhanced Body Armour (EBA) included additional ceramic armour plate inserts to cover the heart (front) and the mid spine (back).

Ceramic plates were delivered in bulk for Op Telic 1 did not reach all forward troops in time for the commencement of operations. A considerable amount of voluntary redistribution of body armour and of ceramic plates in particular was necessary in Theatre. This gave rise to considerable disquiet among deployed troops, which found public voice in the media over the death of St Steve Roberts.

Sam Knight and PA news reported in The Times on December 15, 2006 that:

Soldier killed without body armour talked of 'disgraceful' lack of kit

A British tank commander who died in Iraq because he had been ordered to give up his body armour described British military supplies as "disgraceful" and "a bit of a joke" in the days before his death, an inquest heard today.

Oxford Coroner's Court heard the voice of Sergeant Steve Roberts, recorded on tapes he made for his wife in March 2003, criticising his commanders for failing to properly equip troops or give them signs to distinguish them as friendly forces to their American counterparts.

Sergeant Roberts, 33, was killed by 'friendly fire' on March 24, 2003, as he manned a checkpoint outside the southern Iraqi city of Az Zubayr. An Army Board of Inquiry found that his death could have been prevented at five different stages.

Initially he was attacked by an Iraqi man wielding a stone but his pistol failed when he tried to defend himself. Sergeant Roberts died when a British Challenger tank intervened, opening fire inaccurately at close range. A pathologist found that he

would have survived if he had been wearing body armour that he had been ordered to hand in because of equipment shortages.

Today, coroners heard that Sergeant Roberts was painfully aware of the supply problems affecting his regiment and in a series of recordings he recounted how pleased he was to have brought some of his own clothing and equipment to Iraq.

In the end, Roberts was given Enhanced Combat Body Armour (ECBA) but ordered to hand it back in three days before he was shot."

Osprey body armour

In consequence of these early experiences, body armour became a personal kit issue, and a crash programme of development led to the issue of the heavy but highly effective Osprey Body Armour for front line troops.

The maximum marching load for a fit soldier is approximately 45% of his body weight. With the average soldier's weight standing at 71 kg, the equipment should not weigh more than 32 kg although operational situations may demand that greater loads are carried. The Mark 6a combat helmet that gives outstanding ballistic protection while allowing the soldier to wear a respirator, ear defenders, goggles and a radio set, as necessary.



Osprey body armour went on general issue to troops deployed in Iraq and Afghanistan from mid-2006. The Osprey body armour system offers greatly improved protection to personnel over the previous issue CBA. The armour system is modular, consisting of a vest which covers the torso, upper arm protectors, and collar pieces which are issued in two sizes. Every piece of the system contains a soft armour insert to protect from fragmentation.

There are 22 pieces issued, including soft armour inserts and covers as separate items. The vest consists of a front and rear soft armour panel, which join with the aid of hook & loop fasteners and press studs at the shoulders and waist sides. On both the front and rear panel cover there is a zip-fastened section in which the trauma plates are contained. Front and rear plates are different sizes, with the rear plate covering slightly more area than the front. The plates are roughly an inch (25mm) thick, and have a rubber edge strip to protect the material being compromised from side impacts through everyday use.

The effectiveness of the Osprey system is illustrated by the experience of LCpl Matt Croucher. Although this incident occurred in Afghanistan, it deserves repetition in this context.

Thomas Harding, reported in the Daily Telegraph on 18th April 2008:

Heroic marine throws himself on grenade

"A Royal Marine saved the lives of his comrades by throwing himself onto an exploding grenade in Afghanistan. Lance Corporal Matt Croucher amazingly survived the incident despite shrapnel peppering his helmet during the explosion.

His extraordinary courage came after a tripwire booby-trap was stepped on during a night-time mission outside the town of Sangin, Helmand province. A live hand-grenade was released threatening to blow up L/Cpl Croucher, 24 and the rest of the patrol.

The marine shouted "grenade" and as his friends dived for cover L/Cpl Croucher lay with his back on the lethal device. The patrol commander, Corporal Adam Lesley threw himself to the ground and another man got behind a wall, but one marine had frozen and was still standing when the grenade detonated.

"My reaction was, 'My God this can't be real'," said Cpl Lesley. "Croucher had simply lain back and used his day sack to blunt the force of the explosion. You would expect nine out of 10 people to die in that situation."

With fuses that can last several seconds the men waited for what "felt like a lifetime" before the grenade blew up. The marine's backpack, thought to contain ammunition, was thrown more than 30ft and sent a burning radio battery flying through the air. L/Cpl Croucher, who suffered a bleeding nose and shock, was saved by the special plating inside his Osprey body armour. He almost certainly saved the life of Marine Scott Easter who had "just completely frozen".

"All I could hear was a loud ringing and the faint sound of people shouting 'are you ok? Are you ok?'" L/Cpl Croucher, a reservist from Birmingham, told the News of the World. Then I felt one of the lads giving me a top to toe check. My head was ringing. Blood was streaming from my nose. It took 30 seconds before I realised I was definitely not dead".



L/Cpl Croucher's backpack was thrown more than 30ft in the explosion

Despite these improvements, developments in personal protection continue apace, as the following extract from an article in the Times illustrates.

Michael Evans reported in The Times on November 3rd, 2008, on how

Troops to get new hi-tech body armour after criticism over poor protection

"The wars in Iraq and Afghanistan have led the Ministry of Defence to revise its approach towards protecting British troops on the battlefield with plans for a new combat outfit and hundreds of better-armoured vehicles.

A total redesign of military fatigues will give soldiers a head-to-toe integrated uniform, with all parts of the body being given new or additional protection against threats from high-velocity bullets and blast noise to mosquitoes.

As part of the new integrated uniform programme, called Project Pecoc (personal equipment common operational clothing), the current ear plugs and large ear defenders — which soldiers often refuse to wear in battle because they block out the sound of the human voice — will be replaced by a high-tech gadget.

Project Pecoc, which started in 2004, will include a new helmet and fragmentation jacket and better eye protection. It is expected to be available for training purposes in 2010 and ready for operations in early 2011.

The new helmet, made of composite materials, is being styled on the American model, with a flatter top and better all-round visibility. It will also have a fragmentation flap at the back to protect the neck.

One of the crucial lessons learnt by the Americans in Iraq when they were fighting insurgents in Fallujah was that soldiers were vulnerable when they were stationary. The enemy discovered that the armour had no protection around the sides and they would aim their shots at this part of the body. The Project Pecoc armour will have all-round protection. The ceramic plates, capable of stopping a high-velocity round, will be thinner than before but the weight will remain the same.

Vehicles: Road Traffic Accidents in Iraq

Road traffic accidents (RTAs) are a major source of morbidity on operations, where operational psychology, perceptions and needs affect the use of key safety devices such as seat belts, as the following two papers demonstrate.

Major N J Ward, RAMC analysed RTA admissions to BMH Shaibah with respect to seatbelt usage, position in vehicle, age, type of injury and mechanism of injury, using a retrospective analysis of discharge summaries and hospital notes.

An analysis of road traffic accident admissions to BMH Shaibah from August 2003 to January 2004

There were 315 reported RTAs, 3 fatalities and 47 inpatient admissions. 87% of admissions were male; in 32% of cases the vehicle had rolled and 28% of individuals admitted had been ejected from the vehicle. 85% of individuals had not been wearing seatbelts, and none of the ejected individuals had been restrained. 92% of those ejected were travelling in the rear of the Landrover. Of those ejected, 38% suffered more than one type of injury and 62% suffered a fracture. Standing Orders stated that seatbelt use is mandatory, but compliance was poor.

Nnaemeka C E Okpala, Nicholas J Ward and Anthony Bhullar reported in Military Medicine in 2007 on the value of vehicle restraints (seatbelts) in reducing injuries on operations.

Seatbelt Use among Military Personnel during Operational Deployment

The effectiveness of seatbelt usage in reducing mortality and morbidity rates among motor vehicle crash victims has been well established. Standing orders for British forces on operation in Iraq state that the wearing of seatbelts is mandatory (including rear passengers) in all vehicles that are equipped with them. During 2002-2003, RTAs accounted for 40% of all service deaths (76 personnel); 70 service personnel were medically discharged as a result of their injuries.

Driving during operational deployment often presents special challenges. Troops may be driving in dangerous environments, where they are likely to come under enemy fire. Other risk factors include poor road surfaces, poor traffic control, local civilians, traffic law enforcement, and apparent lack of speed limits; these also increase the likelihood of accidents. The ongoing operational deployment in Iraq provides similar challenges. Traffic laws are variably enforced.

The Land Rover is the vehicle most frequently used by British service personnel in Iraq. It is used for transporting personnel and patrolling. For patrolling, it is modified with anti-roll bars fitted over the rear seating area, with caging attached to the sides for protection from thrown objects. Soldiers can then stand in the rear, facing outward, to provide flank observation and protection; this is known as providing "top cover." The "Discovery" Land Rover is also used but only for transporting personnel.

Questionnaires were given to 250 British Forces personnel serving in Operation Telic in Iraq in units whose personnel regularly made trips as drivers or as patrolling crews. 237 were properly completed and returned. 78% of respondents stated that seatbelts were to be worn always. The biggest perceived threats while driving were bad roads, speeding, security dangers, and Iraqi drivers.

52% of drivers said that they always wore their seatbelts when driving, as did front

seat passengers. Seatbelt usage was much less in the Land Rover, compared with the Discovery vehicle

The two main reasons for not wearing seatbelts were inhibition of exit and weapons. Lap belts in the back of the Land Rover were often reported as not available and broken. Less than half of the commanders of vehicles insisted always that the occupants wear seatbelts. Of those who did not, most thought that it was an individual responsibility.

With full military kit, including webbing and body armour, seatbelts can be very cumbersome to wear. Seat Belt restraint is nevertheless invaluable both in conventional impacts and when the vehicle is struck by blast waves.

Vehicle Survivability from Deliberate Attack

Vehicle design has become a critical issue of force protection in the defence against insurgent weaponry. No vehicle can ever be designed to withstand and attack with sufficient force. And the best defence against IEDs lies in their detection and neutralisation by other technical means.

Nevertheless, the events of 2003 to 2009 have been transformational in equipment design matters, as vehicles, weapons of cold war and Northern Ireland legacy were shown to have critical weaknesses against buried and off route mines. The nature of the insurgency and the intelligent, sophisticated tactics of the Iraqi insurgents in probing the limits of our equipment, brutally exposed the protective limitations of body armour and of military vehicles which had been designed for other purposes and other theatres of war.

A number of problems became apparent with soft skinned vehicles and particularly the fleet of “Snatch” land rovers that were brought from the streets of Belfast to the alleys of Basra. These also included;

- the vulnerability of armoured vehicles such as Warrior to underbelly attack by buried mines;
- and the effectiveness of side attack copper cone penetrators against all forms of armour, including that on Challenger II battle tanks.

Lessons about vehicle protection which were learned during the Second World War; by the Rhodesian Army in the 1980s and subsequently by the South African Army in Namibia, both in the African Bush; and even by the British Army in the 1990s in the Balkans, were relearned at substantial human cost after 2003, as they will be again by future generations. By 2009, almost all deaths in Afghanistan were due to Improvised Explosive Devices, for which old defences and design remedies find new urgency and application.

It is important to rehearse the relationship between weapon effects, force protection and patterns of injury and death. The design of equipment in the particular operational

environment had a profound bearing on tactics and upon the nature, patterns and nature of injuries. It is crucial that detailed records of the circumstances of injuries are kept and analysed, and that medical expertise is integrated into the design cycle.

The importance of equipment and vehicle design and optimisation is thus of great significance to medical planners and clinicians, and early and continual engagement is essential through the life of the vehicle as the associated patterns of trauma emerge.

Commentary in the Blogosphere

As the insurgency gathered pace and attacks on troops and vehicles increased, it became evident that the soft skin vehicles and tactics, which had been used to good effect in Northern Ireland, were excessively vulnerable to IEDs on operations in Iraq.

Responsible commentators on Internet blogs and in the national media highlighted the situation, as the following report on the loyalist but vociferously and constructively critical EUreferendum Blog: of Sunday June 18, 2006 illustrates.

> "As at 28 May 2006, 113 British Forces personnel have died, while serving on Operation Telic since the start of the campaign in March 2003. Of these, 84 are classed as killed in action, including as a result of hostile action.
>
> Of those 84 dead, at least 23 – more than a quarter – have been killed riding or patrolling with unarmoured or lightly armoured "Snatch" Land Rovers, the most common cause of death being the improvised explosive device (IED), better known as the "roadside bomb".
>
> "Collectively, the Land Rover incidents are the single most common cause of death for our soldiers in Iraq, yet - in our view - they are largely preventable. In today's





Sunday Telegraph, based on research carried out by this Blog, Christopher Booker explains why they are allowed to happen.

"One reason why British troops continue to be killed and injured in southern Iraq", he writes, "is that they are expected to patrol in lightly-armoured Land Rovers which give them no protection against roadside bombs and rocket-propelled grenades." He continues:

Meanwhile their American counterparts walk away unscathed, even when their RG31 armoured patrol vehicles are hit by the same explosives, because these are designed to protect them against precisely the same dangers. Yet the Ministry of Defence has not seen fit to equip the British Army with the RG31, even though it is built by a British-owned company.

That self-same RG31 is pictured on page 24 – taken at Camp Taqaddum, Iraq on 7 January 2006 by a photographer from the 8th Engineer Support Battalion, 2nd Marine Logistics Group. It is resting on its front axle after an improvised explosive device detonated under the vehicle the day before. The IED detonated directly under the vehicle; however, because the vehicle was an RG-31, the blast was pushed outward instead of straight up due to the unique v-shaped undercarriage. Of the five service members in the vehicle, two received concussions and two others received minor burns.



Defence of the Realm Blog: Sunday, 16 December 2007: How we got it wrong

The "Snatch" Land Rover, is an ill-protected vehicle. The effect of this, in terms of the number of casualties, is well recorded, but there was also another important effect – the restriction on tactical mobility. Commanders on the ground regarded vehicle patrols as an essential part of their armoury, to which effect they has basically three options – the Snatch, the Warrior and the Challenger Main Battle Tank. Clearly, the workhorse was the Snatch but, once – as appears to be the case – the insurgents started targeting this vehicle – it changed the tactical dimensions.

One of the responses was to provide Warrior escorts for the Snatches, tying up equipment and manpower simply to get the patrols to the area where they could carry out their tasks. Then, as the attacks intensified and casualties mounted, the vehicles were withdrawn altogether, limiting the options of commanders and severely restricting their ability to commit forces where needed.

In other words, through the lack of an effective protected vehicle, the Army found it needed more men to do the same job (routine patrols) and, in addition, was less able to dominate the ground as the mobility of its patrols was hindered.

This, as one would expect, had knock-on effects. One of the main purposes of sending out patrols was to deter and, where possible, interdict the indirect fire attacks on the Army's bases, no more so than in al Amarah where the volume of fire eventually led to the camp at Abu Naji being abandoned. In other words, by using IEDs against vulnerable vehicles, the insurgents scored an easy tactical victory in

their own campaign of harassing Army bases…In effect, therefore, the Army was lacking the essential equipment which could have allowed it to take the war to the enemy.

For sure, the Army has at last begun to recognise the value of properly protected vehicles – with the introduction of the Mastiff into theatre, and the promise of 4x4 protected vehicles, to be called the Ridgeback – but it was political intervention that forced this issue rather than any Damascene conversion on the part of the Army. Only now is it being admitted how much of a lifesaver the Mastiffs really are".

Michael Evans wrote in The Times on February 20th, 2008

And Warrior: Troop vehicle's armour was no match for bomb, says coroner

"The safety of troops transported in the Army's Warrior armoured personnel carrier was called into question by a coroner yesterday, when an inquest heard that four soldiers were killed after an explosive device ripped through the underside of the vehicle.

David Masters, the Wiltshire Coroner, said that he would be urging the Ministry of Defence to improve the armour fitted to the Warrior as quickly as possible. He said he would be seeking confirmation "from the top" that something was being done.

Alan Hepper, an armour expert, told the inquest at Trowbridge that the MoD had already ordered improved protection for the underside of the Warrior and other vehicles. The armour on each side of the Warrior is more resistant to bombs and mines.

The dead soldiers were: Second Lieutenant Joanna Dyer, 24, of the Intelligence Corps, who was at the Royal Military Academy Sandhurst with Prince William; Corporal Kris O'Neill, 27, and Private Eleanor Dlugosz, 19, both of the Royal Army Medical Corps; and Kingsman Adam Smith, 19, of the 2nd Battalion The Duke of Lancaster's Regiment. They were killed while returning from a patrol in southern Iraq in April last year.

Mr Masters, who recorded verdicts of unlawful killing, said that he would be meeting Bob Ainsworth, the Armed Forces Minister, this week to discuss the armour issue. The inquest was told that the explosively formed projectile (EFP) device that was detonated by a command wire ripped a large hole in the bottom of the Warrior.

The coroner said the Warrior's armour was no match for the bomb, which left a 3ft crater in the ground. "The armour could do nothing to combat the force of the explosion," Mr Masters said".



What a difference a year makes Saturday, 22 December 2007

A report from AP gives news of a "UK troop carrier hit by Iraq bomb". Television footage (and picture, see left) showed the vehicle on fire, with thick, black smoke billowing from it. British troops could be seen securing the site, east of Basra Airport. UK military spokesman Captain Finn Aldrich said there were no injuries.

The midday ITN news report referred to the vehicle as a Mastiff – the only specific reference to the vehicle type. From what we can see in the picture – although it is indistinct – it could well be.

Only a year ago after a horrendous year of death and injury of soldiers riding in Snatch Land Rovers (as well as Warriors), the good news now is that a "bomb in Basra" is virtually no news at all.

Given the impressive performance of the Mastiff, to have set it on fire in the way depicted (if it was a Mastiff) suggests it must have been hit by a huge bomb. Had it been a Snatch, there would almost certainly have been coffins going home for Christmas.

However, this should be a warning to the Army. As reported by The Sun today – and confirmed by the MoD, the Taliban in Afghanistan are now using six stacked land mines in an attempt to take these vehicles out.

This is very predictable – the response of insurgents to heavier armour is always to use bigger bombs and, if they keep trying, one day they will get lucky. Heavier armour, therefore, is only part of the raft of measures which are needed to defeat the scourge of the mine and roadside bomb.

Addendum: The value of constructive comment and criticism in the Blogosphere

Colonel Richard North, Author of the Defence of the Realm and EU Referendum Blogs writes:

> **Five million down; Saturday, October 18, 2008**
>
> "It was on 5 March this year we turned the magic four million, and now we've done 5,000,000 – over five year's of blogging to achieve what the BBC achieves on its website on a bad day. That is a measure of our success, if you take numbers alone as a guide.
>
> The numbers are, of course, meaningless. What counts is that mystical word, "influence", which cannot be measured, except in results and sometimes not even then. In one particular way, however, we can measure what we have done.
>
> The counter you see, with the magic figure reproduced, is linked to two blogs, this one and our sister blog, Defence of the Realm … Earlier this year, this blogger was invited down to the MoD for a press reception, to meet the Secretary of State, Des Browne.
>
> One blogger, there with a press pass, amongst all the high-flying defence correspondents of the major nationals, and the hangers-on. There were several "big names" that we recognised.
>
> After a few glasses of an execrable cheap red wine, I was taken over to meet the Secretary of State, who was then surrounded by the "great and the good" of the media, deep in conversation. When I was introduced, he turned and addressed the throng, declaring a loud voice, "this is Richard North. He runs the blog Defence of the Realm. And he has had more influence on defence procurement policy than the rest of you put together."
>
> I have never seen so many pissed-off hacks in my life. It was truly a moment to savour, and one that was well worth the fare down to London and the hundreds of hours I've put into that blog".

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Blood, Heat + Dust: Second Edition

Operation Telic and the British Medical Deployment to the Gulf 2003 -2009

Chapter 22:

Challenges of Heat Stroke and Diarrhoeal Illness on Operation Telic



Painting: *Gas Gas Gas*:
Artist Gora Pathak 2003

Introduction

The maintenance of the health and well being of troops in challenging environments such as Southern Iraq demands excellence in planning and provision in a range of disciplines.

There are those factors which relate to the environment itself, including:

1. the physical matters of the dominating heat in the summer months: In the matter of the health consequences of excessive heat, there is little new to report, and Martin Bricknell's following paper gives a clear synopsis of our experience in the cauldron of Mesopotamia over the past century, updated with information about current best practice and equipments.

2. the local microbiology, flora and fauna; Diarrhoeal illness is no stranger to expeditionary armies in this region. The virulence of the norovirus epidemic nevertheless proved to be a major challenge to operational effectiveness in 2003, and was never fully eradicated, as graphically illustrated in Mark Bailey's writing.

This chapter highlights these two early environmental health challenges during Operation Telic through the writing of two RAMC doctors.

Prevention of Heat Illness in Iraq:
A NATO Research and Technology report 2004 by Col Martin Bricknell L/RAMC

During World War 1, the commission on the British Army campaign in Mesopotamia was critical of the preparations taken to protect the health of the force:

> 'We do not wish to be thought to belittle much good work done by the medical authorities in combating epidemics. Mesopotamia is a hot-bed of ravaging diseases. Plague, small-pox, cholera, malaria, dysentery and typhus, if not actually endemic, are always menacing in this swamp-ridden and unsanitary country. Each one of these diseases appeared amidst the forces, and any one might have decimated them. On every occasion the efforts of the medical authorities were successful in circumscribing the epidemic and limiting its incidence. These are not despicable results for a large force of British and Indian troops accompanied by a horde of oriental camp-followers and whose headquarters was a Turkish town of some 80,000 inhabitants. But the indictment against the authorities is not a lack of courage in dealing with disease so much as a lack of foresight in dealing with the predisposing conditions of disease. In such matters as water-supply, sanitation, diet, mosquito and sun-protection, et cetera the evidence before both Commissions teems with instances of the failure to take up sufficiently early the weapons which existed in the armoury of modern science against the onslaught of disease Our opinion is that, though the protection of the Mesopotamian Expedition against disease was by no means ineffective, it might and ought to have been a good deal better, if the matter had been earlier taken in hand on a proper scale'.
>
> Matters improved, and the official history of World War 1 records 'Heat stroke

stations were authorized on the scale of ten to a division and a varying number for each hospital centre, base or post on the lines of communication according to their size. These stations were usually constructed of reed matting with the sides open to allow a free current of air, the roof being double and in some cases treble, with a considerable overhang to provide shade. They were placed at suitable positions in corps, divisional and other areas and were provided with canvas baths and other equipment. Ice was supplied daily on a scale of 40 Ib. per station. They proved of great value during the period of intense heat in the summer months.

Other measures were also adopted with a view to preventing heat stroke. The troops were relieved of duty as far as possible between 10 a.m. and 4 p.m. They were given an abundant supply of drinking water and each man had a one-gallon canvas water bottle (chagul) in which the water was cooled by evaporation. Special instructions were issued in army orders on individual measures for mitigating the effects of heat and warning men of the risks of alcohol and other predisposing conditions. Billets and huts for troops "were supplied as far as possible with electric fans, and tents were protected with matting.

Hospitals were equipped with an ample supply of electric fans and ice, and arrangements were made for special wards for the treatment of heat stroke. Patients suffering from other diseases with a tendency to hyperpyrexia were covered with damp sheets and placed in the coolest parts of the ward under a fan. Leave to India and the United Kingdom was opened in the summer, leave to India being given freely.

Every division and formation arranged amusements for the men. A light meal was prepared in the middle of the day, and dinner was given at an hour in the cool of the evening when the men were most likely to enjoy it in comfort. This system was doubly useful as the cooks had not to work during the heat of the day. Fatigues and parades were carefully regulated but in certain places, especially on the Samarra line, defensive work involving hard physical labour had to be undertaken. Regulations regarding dress were relaxed'.

The heat threat on Op Telic

"The UK Armed Forces were fully aware of the risk from the heat in the Middle East in 2003. The predicted environment temperatures showed an average daily maximum temperature of 40ºC or more from June to September – and the existing guidelines for military operations in the heat precluded any physical exercise above an environmental temperature of 32ºC. In addition, the military threat required our soldiers to wear military protective clothing including helmets, heavy clothing, body armour, and military loads. This both increases physical work and reduces the effectiveness of cooling by the evaporation of sweat.

The clinical picture of heat stroke

Heat stroke describes the clinical syndrome associated with overheating of the body core. It can occur in normal people who exert themselves in a hot humid

environment. It is the leading heat-related condition experienced by members of the UK Armed Forces. In hot humid conditions heat stroke can occur with normal sweating and in the absence of exercise (classic as opposed to exertional heat stroke). The diagnosis of heat stroke is usually easy: a history of collapse with disturbed consciousness during exertion in a hot environment and the presence of a high body temperature (around 41C) and hot dry skin.

Water depletion heat exhaustion results from inadequate fluid replacement in a hot environment. Acclimatised personnel are at risk because of the increased production of more dilute sweat, which occurs with acclimatisation. Salt depletion heat exhaustion develops insidiously, particularly in unacclimatised personnel who lose relatively more sodium in sweat. One of the topics central to the management of the risk of heat illnesses in Iraq is the role of active salt supplementation to reduce the risk of this condition. Both water depletion heat exhaustion and salt depletion heat exhaustion may be followed by heat stroke.

Heat injury control measures

There are a number of well-recognised control measures that can be put in place to reduce the risk of heat casualties. It is possible to build the necessary infrastructure to move military personnel from austere tented accommodation to living accommodation contained in air-conditioned shelter systems. Unfortunately this takes time and engineer resources and so many UK military personnel spent the hottest part of the summer in 2003 living in primitive conditions. The environmental temperature frequently exceeded 32ºC for much of the day and military operations could not be stopped completely.

Sedentary duties associated with prolonged heat exposure such as guarding or driving were also high risk activities. Therefore more pragmatic direction was given to commanders to aim to treat heat casualties quickly and effectively. All UK military personnel arriving in Iraq were briefed to drink frequently and to 'pee clear at least once per day'. Many soldiers purchased their own 'camelbak' water containers to aid continuous intake of water and indeed the Army purchased a bulk order for issue in early summer.

Acclimatisation is a well recognised physiological adaptation to the hot environment that provides considerable reduction to the risk of illness from heat exposure. Newly arrived troops were directed to undertake a period of acclimatisation in Kuwait for 8-14 days prior to moving North into the operational area. Although the majority of personnel were expected to adjust to the new conditions an increase in the number of heat casualties was anticipated. Additional medical resources were deployed to reinforce the medical unit in the acclimatisation camp.

Treatment capabilities

"The medical services have a vital role in the treatment of heat casualties and in the training of medical staff. All medical personnel receive training on the treatment of

heat casualties during their basic training. This was reinforced by specific study periods in Iraq for medical staff. Early assessment and resuscitation in primary care centres is the most important element of the overall treatment system. Electric fans are a life-saving item of equipment in medical units. Seriously injured casualties may need rapid evacuation to hospital and to an intensive care unit. All personnel who had a serious episode of heat illness or who had 2 admissions to hospital were evacuated back to the UK., to be followed-up with a work-in-heat test at the Institute of Naval Medicine to detect true heat intolerance.

Results of the study

There were 849 cases reported up to 2nd September 2003 with 766 admissions to hospital and 161 patients evacuated to UK. There was a low threshold for treatment of heat casualties. Many medical officers reported heat casualties based on soft symptoms such as lethargy, exhaustion, headache, nausea etc that could not be attributed to any other condition. There were two deaths where heat might have been a contributing factor but neither case occurred as a result of failed preventive measures.

There was significant increase in the incidence of heat casualties in June as a result of the rotation of troops. There was another increase in the number of heat casualties in August associated with periods of substantially raised humidity in spite of constant environmental temperatures. This matches the anecdotal reports from World War 1 that described these periods as 'dog days' when any form of physical activity was high risk.

Medical officers were required to note any known pre-disposing factors that were present in the patient. Recorded associations included: lack of acclimatisation, failure to replace fluids, previous heat illness, sleep deprivation, concurrent dehydrating illness, medication and lack of physical fitness. A typical case report from a patient investigated at the Institute of Naval Medicine is shown below courtesy of Dr Howard Oakley. It shows that clinical cases present a much more complicated pathophysiological picture than that described in the textbooks.

'Previous history – had problems in Cyprus a couple of years ago, but no follow-up investigations.

Arrived at Basrah in May/June, then bussed down to Kuwait for one week acclimatisation. The first day of acclimatisation went fine, but as he started to work more, he began to feel unwell in the heat of the day, and very tired by early afternoon with nausea. Was told to add salt to food and to drink plenty of fluids, but found it increasingly hard to eat normally.

Needed to rest, cool and rehydrate (oral dioralyte) in medical tent on 3rd day. Felt rapidly better, but felt unwell in the heat of the next day, when he was given further sachets of dioralyte and told to drink water with added salt. Selected for the advance party to move North. Acclimatisation curtailed and moved to Al Amarah where temperature some 5-10 degrees higher.

He felt unwell soon after arrival in the new location. Rested in cool and felt better. Advised to add more salt to food and to drink water with added salt. On third day, when working in heat, felt dizzy, nauseated, very unwell, had bad muscle cramps and tingling in his fingers, and then vomited and collapsed.

In the local medical facility, he was cooled and given IV fluids. He started to settle and was transferred to the Field Hospital. On admission he was slightly hyponatraemic and had a low potassium. He felt much better in air-conditioned areas, but over the following days he was unable to return to the heat and could only go outside at night. Evacuated back to UK. Quite well on return. Slowly building up physical exercise.'

Hyponatraemia

"Clinical staff reported a number of cases of low serum sodium. Indeed one case of central pontine myelinosis, an extremely rare condition attributable to over rapid correction of low sodium, has been reported (personal communication, Dr M World). A cases series from one of our field hospitals showed 6% of admissions had hyponatraemia as a primary diagnosis. Clinical staff reported that these patients were clinically the same as other heat casualties with normal blood sodium levels.

It is also possible that some of these cases were actually water intoxication rather than hyponatraemia but distinguishing between the two conditions on biochemical analysis is quite difficult. Our primary care doctors were concerned that some mild heat casualties with significant biochemical abnormalities might have been retained at unit level. It is planned to investigate the use of near patient testing to assist with the identification of patients who require evacuation to hospital in spite of mild symptoms. Although this proposal seems simple, in practice there are concerns over the reliability of near patient biochemical analysers when used in hot environments that exceed the product specification.

These concerns led to debate about increasing dietary intake of sodium to replace sodium loss. Many senior officers remembered being issued salt tablets during the 1950s and 1960s and wondered whether this would be advisable. Our initial medical advice was that salt should be actively added to food.

Conclusions

"The numbers of soldiers requiring medical assistance is an indication of the irreducible risk from the heat. The medical system was able to cope with this surge in demand. There were only 15 cases admitted to intensive care and no deaths attributed to failed prevention measures.

Patients who had one significant hospital admission or 2 minor hospital admissions were returned to UK. This led to a large number of personnel being evacuated, which caused concern amongst the operational staff. We took a deliberate medical policy decision to apply a 'safety-first' principle. Operational staff need to be aware of the numbers likely to be evacuated and consider a plan for replacing these personnel with reinforcements.

Heat Stroke and Hospital Care

For those patients with advanced heat stroke requiring hospital admission and high dependency care, Lt Col Matthew Roberts, Consultant Anaesthetist, provides the following report:

The Management of Heat Stroke in Southern Iraq in the Summer of 2003

"I shall not soon forget the streams of patients in June and July who were hurried to the bath-house, nor the occasion when nearly a dozen stertorous patients lay in the open air along the creek, many of whom went to make up the sixteen funerals that left our hospital the next day."

Major G Grey Turner, RAMC (TA): Notes from Mesopotamia. BMJ July 1917

Introduction

During World War 1 in Mesopotamia 1914-1918 there were 9813 admissions of British servicemen to military hospitals with heat illness; the situation in July 1917, as described by Grey Turner was particularly dire with 2949 admissions (an incidence of 74/1000) and 425 deaths that month alone. In the Second World War the incidence in the same region peaked in 1942 at 88/1000 of the service population at risk. It was thus predicted that heat illness would again be an issue on Operation TELIC, particularly during the high summer months of June and July. For operational reasons, this coincided with the relief in place of invasion troops with fresh units from the United Kingdom.

To confront the challenge of heat illness during the relief in place, which was conducted between the 8th June and 11th July, a 7 to 10 day acclimatization process was put in place. This was conducted at a camp in northern Kuwait with troops undergoing orientation briefings, incremental physical training, range and driver training, prior to their deployment into the field in Iraq. It was never anticipated that this would eliminate heat illness but that heat casualties that did present might do so earlier and in a location with immediate access to a medical facility; the acclimatization center was provided with a well staffed primary care medical center with enhanced resuscitation facilities and skills. The estimated incidence of heat illness among the 5128 servicemen who arrived in theatre during this time was 58/1000. It is not possible to directly compare this incidence to those quoted for WW1 and 2 as the criteria for diagnosis and admission may well have been different.

At 202 Field Hospital at Shaibah, Southern Iraq, there were 336 admissions for heat illness during the relief in place and a total of 662 during the period from 14th May to 19th July. Of these 15 were admitted to the intensive care unit. There were no deaths in hospital although there was one death prior to arrival at 202 Field Hospital.

Despite similar if not higher temperatures in summer 2003 compared to 1917, clearly there has been a significant improvement in outcome. This can most probably be related to the greater speed and ease at which the soldier of today can

be removed from the heat of the day and rapidly cooled; rapid evacuation to hospital, the availability of intravenous fluids and the presence of a sophisticated level of care in the emergency department and intensive care unit of field hospital also contribute.

Heat Illness – syndromes and risk factors

Heat illness has been classified in different ways, the following categories seem useful:

Heat syncope - the patient vasodilates in the heat and faints, there is no ongoing impairment in level of consciousness. *Heat cramps* – the patient complains of cramps related to activity in the heat, this is probably related to depletion of salts. *Heat exhaustion* – here the patient has become significantly dehydrated and salt depleted, whether salt or water depletion predominates depends on the extent of acclimatization, if any:

On *Operation TELIC* the majority of the unacclimatized troops presenting with heat illness could be classified as suffering from heat exhaustion characterized by significant salt depletion, hyponatraemia and hypokalaemia were common findings. This was compounded by the clear instruction to new arrivals to drink plenty of water without any initial advice on increasing salt intake. The core temperature in heat exhaustion may be normal.

Heat stroke can be defined clinically as a rise in core temperature to above 40C, hot dry skin and central nervous dysfunction from confusion to convulsions and coma. In these cases the rising core temperature has overwhelmed the body's ability to thermo-regulate. Bouchama and Knochel have alternatively defined heat stroke as "A form of hyperthermia associated with a systemic inflammatory response leading to a syndrome of multiorgan dysfunction in which encephalopathy predominates". This reflects the pathophysiology and the clinical course that develops in severe cases.

Heat stroke is further subdivided into classic (non-exertional) heat stroke and exertional heat stroke. Most of the experience of heat stoke in United Kingdom military medicine related to exertional heat stroke where previously fit individuals exercise strenuously in hot weather, often in military clothing that restricts the loss of heat. It should be noted that the ambient temperature need not be extreme, as in these cases the rise in core temperature is chiefly caused by the excessive endogenous heat production that overwhelms the body's ability to lose heat by evaporation of sweat. Concurrent febrile or dehydrating illnesses, recent alcohol, obesity, lack of physical fitness and lack of acclimatization are known to increase the risk of exertional heat stroke.

In classic heat stroke the temperature rise is due to excessive exogenous heating occurring at extreme ambient temperatures. Dematte's report of the 58 admissions

to intensive care during the Chicago heat wave of 1995 suggests that chronic ill health is a major risk factor in heat stroke as is the use of certain medications including diuretics and phenothiazines. There were also a significant proportion of patients (57%) with concurrent infection. In the military population those at risk of classic heat stroke are the unacclimatized who are unable to get any respite from very extreme environmental temperatures; additional factors will be dehydration, fatigue, recent alcohol intake (conditions that are ubiquitous amongst troops deploying overseas) and any concurrent febrile illness.

Pathophysiology

"In post-mortem examinations made in Mesopotamia oedema and general hyperaemia of the brain and leptomeninges were observed, and cloudy swelling of the liver, kidneys and myocardium was found; petechiae of the skin and mucous membranes were seen in some cases."

Dr WH Willcox, Formerly Consultant Physician with the Mesopotamian Expeditionary Force: BMJ March 1920

Bouchama and Knockel describe the development of heat stroke as an extreme exaggeration of the normal response to heat stress. In this regard it is similar to the body's overwhelming and inappropriate response to any naturally unsurvivable injury; certainly the clinical appearance of patients with heat stroke is one of systemic inflammatory response.

Normally the body responds to heat stress by diverting blood from the core to the periphery and increasing sweating, thus dissipating heat from the body surface chiefly by evaporation of sweat. This mechanism is controlled by a thermoregulatory center in the hypothalamus. It requires a significant increase in cardiac output which may explain why persons with cardiovascular disease are at increased risk. Acclimatization is the body's next line of defense resulting in an increased capacity to sweat accompanied by salt conservation in sweat glands and in the kidneys.

Another aspect of the thermoregulatory response is an increase in minute volume; this is also exaggerated in heat illness, with many patients exhibiting hyperventilation and a respiratory alkalosis as one factor in their abnormal acid base profile. The rate of evaporation can be enough to rapidly result in dehydration and, particularly in the unacclimatised individual, electrolyte depletion. It is easy to see how dehydration resulting from diuretics, alcohol or febrile illness will result in an increased risk when exposed to high temperatures.

The corollary of this diversion of blood to the surface is splanchnic vasoconstriction which, in the extreme case, may result in gut ischaemia, hyper-permeability and resulting endo-toxaemia. The latter has been demonstrated in heat stressed rats and primates.

Another normal response to heat stress is the cytokine mediated acute phase reaction coordinated to produce a controlled inflammatory response and healing. This process becomes exaggerated in severe heat stress, in the same way that the systemic inflammatory response syndrome is the eventual result of a wide variety of severe insults. It is possible that endo-toxaemia is in part responsible for the increased cytokine response in severe heat stress.

The clinical similarity of severe heat illness and sepsis led medical officers, struggling to understand heat stroke during the Mesopotamia campaign of WW1, to argue over whether there was in fact an infective aetiology; sand fly fever and malaria were invoked. Although we now know this is not the case, it is important to note that infection can accompany heat illness as a predisposing condition or by coincidence; the serviceman serving in the heat and high humidity of West Africa is concurrently at risk of malaria, enteric diseases and heat illness.

Another response to heat is the cellular production of heat-shock proteins which confer a degree of protection against further heat stress, perhaps by preventing denaturation of proteins. Rats that have induced heat shock proteins exhibit protection against the onset of heat stroke. Blocking the production of these proteins makes cells particularly susceptible to heat stress. Inadequate expression of heat shock proteins under stress may predispose some servicemen to the development of severe heat injury in comparison to their piers: In the future it may be possible to delineate some individuals prone to heat illness prior to deployment.

Clinical Features of Heat Stroke (a 1914 case)

"The patient, a soldier aged 32 was in Egypt in October 1914, and after a 26 hours' journey by train with his regiment marched to barracks, a distance of about a mile. The men wore sunhats, thick serge uniforms, and carried their full equipment on their backs. The temperature was 109F in the shade. Shortly after his company had been dismissed he was found lying outside a barrack-room, deeply unconscious. He was at once admitted to hospital, where he was seen to be comatose, flushed, with stertorous breathing and with occasional irregular clonic epileptiform movements. His body temperature was 109.2.

For a week it remained high, varying between 100 and 103. During this time he was profoundly unconscious and nasal feeding was resorted to. Some ten days from the onset he began to show signs of recovery, but his sentences were mere gibberish; he was childish, and incontinent of urine and faeces. By Dec. 10th he had improved considerably and sphincter control was normal. He was then noted as having developed a spastic paresis of the legs, with marked ataxia of all four limbs. A careful examination on his admission to a military hospital in England in April, 1915, showed that the condition was one of spastic paraplegia, with double extensor response, lateral nystagmus, extreme dysarthria, involuntary movements of the limbs more or less athetoid in type, ataxia in voluntary movements; in addition he was childish and distinctly emotional, laughing in a silly manner."

Dr RM Stewart: Reported in the Lancet Oct 1918

Management of Heat Stroke in 202 Field Hospital's Intensive Care Unit

Of the 15 patients admitted to the intensive care unit of 202 Field hospital between the 14th May and 19th July 2003, 13 exhibited the cardinal manifestations of classic heat stroke with disordered central nervous function and a temperature >40 degrees Celsius (typically the core temperature was 42 C). The central nervous symptoms vary from severe agitation and confusion to coma. Damage can be permanent as in the case described by Stewart in 1918; in the series published by Dematte 76% had some degrees of permanent impairment, 33% being judged moderate or severe. The cerebellum is particularly vulnerable.

Hyperventilation is a common feature; at least one patient in the 202 Field Hosp series exhibiting carpopedal spasm. Respiratory alkalosis is the predominant acid base disturbance in the early stages of classic heat stroke, in exertional heat stroke there is a mixed picture, with a degree of lactic acidosis. Eventually, in both classic and exertional heat stroke, a metabolic acidosis predominates related to the degree of shock and tissue damage. Cases in WW1 were described as exhibiting the air hunger typical of a severe metabolic acidosis.

All the 13 patients with classic heat stroke were tachycardic and vasodilated, most were hypotensive exhibiting a hyperdynamic circulation consistent with systemic inflammatory response syndrome (SIRS); two required noradrenaline to maintain mean arterial pressure despite adequate filling.

Pulmonary oedema was apparent in 5 cases. This was associated with enthusiastic pre-hospital fluid replacement in a few cases but not in all; notably the two patients requiring noradrenaline both also exhibited pulmonary oedema. The impression was that there was more to this than simple fluid overload and that perhaps an increase in pulmonary capillary permeability related to the systemic inflammation was in part to blame. Negative pressure pulmonary oedema developing prior to adequate airway control may also have been a factor. Willcox reported pulmonary oedema as the terminal event in fatal cases of heat stroke in his series from Mesopotamia in WW1.

Cardiac arrhythmias and ECG changes are reported in the literature including conduction defects, QT prolongation and ST changes. Transient myocardial ischaemia and even infarction can occur even in the presence of normal coronary arteries. None of these features were noted in the 202 series; however in retrospect myocardial dysfunction may have contributed to the development of pulmonary oedema.

Vomiting was common and combined with the reduced level of consciousness and airway control was a factor in the decision to intubate. Watery diarrhea was frequently apparent at presentation; this was usually not associated with prior enteric disease but would seem to be a feature of the heat illness itself.

Renal impairment can be a major problem with both exertional and classic heat stroke and can be attributed to poor renal perfusion, rhabdomyolysis, disseminated intravascular coagulation or even direct thermal injury. In the 202 Field Hospital patients there was a moderate increase in urea; this, and the urine output, responded to simple fluid resuscitation and no patients went on to develop renal failure. Creatinine kinase (CK) was moderately elevated in 9 ICU patients but myoglobinuria was not detected: Although rhabdomyolysis is more often associated with exertional heat illness, it has been reported previously as a cause of renal dysfunction in classic heat stroke and needs to be considered in all such patients. The presence of an elevated CK did not predict severity of illness as many patients with heat cramps alone had a significantly raised value.

Disseminated intravascular coagulation is a feature of both exertional and classic heat stroke, its presence being associated with a higher mortality and develpement of acute lung syndrome. The primary event if likely to be thermal injury to the vascular endothelium resulting in platelet aggregation and triggering of both the coagulation and fibrinolytic cascades. In the servicemen with classic heat stroke at 202 Field Hospital, there were no cases of bleeding, however the platelet count was observed to fall significantly the nidus being on the second day after presentation. Other clotting indices remained within normal limits.

A moderate leucocytosis occurs in most patients with severe heat illness. Hyponatraemia and hypokalaemia are common features particularly when unacclimatized troops are diligently replacing fluid losses with water but not salts. As with all other laboratory tests available in the field hospital, there was no correlation between the degree of electrolyte derangement and the severity of illness as judged by the requirement for admission to the ICU.

Treatment in the Intensive Care Unit

"Heat hyperpyrexia demanded immediate applications of measures to reduce the temperature. Thus, the stripping of the patient and constant application of a spray of cold water, or rubbing with blocks of ice, were essential until the rectal temperature fell to 102, the patient being under a fan during the process."

Dr WH Willcox, Formerly Consultant Physician with the Mesopotamian Expeditionary Force: BMJ March 1920

Patients presenting to a field hospital with reduced consciousness and markedly abnormal physiology due to heat illness, present potentially complex management problems similar in many ways to intensive care patients with a severe systemic inflammatory response to other insults. As with most ICU patients, treatment is chiefly nonspecific and aimed at supporting organ systems. However, the key to the successful treatment of heat stroke is rapid cooling by whatever method; in fact cooling to below 38.9C within thirty minutes of presentation has been demonstrated to improve survival.

The clinical problem can be compounded by the environment within the hospital that is less than ideal, with variable air conditioning and temperatures ranging from 30-45 C. To simplify decision processes and therefore achieve rapid resuscitation and control of body temperature, an ICU management protocol was developed as experience was gained in this area. The driving principles involved are, cooling, protection of the airway, cerebral protection, correction of fluid and electrolyte disturbances.

A Protocol for the Intensive Care Management of Heat Stoke in the Field Hospital:

I. The patient is rapidly cooled using a water spray and fanning; this has been shown to be very effective and more comfortable than immersion in cold water which is also much less practical in the field hospital. It is essential that one member of the team is dedicated to this task without distraction. There is no evidence that any pharmacological agents will assist in cooling and therefore improve outcome.

2. Initially treat seizures with benzodiazepines. Subsequently anticonvulsants are unlikely to be required.

3. The casualty is intubated with rapid sequence induction if is there is any risk to the airway. A policy of caution is recommended with casualties being intubated if there is any decrease in level of consciousness, particularly in the presence of vomiting. Although there is evidence in the literature of an association between malignant hyperpyrexia and a susceptibility to heat illness, this is rare and not strong enough to rule out the use of suxamethonium as a muscle relaxant if the situation otherwise demands its use.

4. Sedation and ventilation for the first night post injury. Short acting sedatives such as Propofol and Alfentanil are recommended, in anticipation of an early wean from ventilation the following day.

5. Mild hyperventilation to a low/normal carbon dioxide tension.

6. Nursing in a 30 degree head up position. These two suggestions are aimed at minimizing any cerebral oedema and rise in intracranial pressure.

7. Place an arterial line in all ventilated patients and a central venous line if fluid balance is complicated or vasoactive drugs required. The former allows blood gas analysis to be performed and the latter will help particularly in the management of coincident pulmonary oedema, peripheral vasodilatation and renal hypoperfusion.

8. Early placement of a urinary catheter. Some patients with classic heat stroke are not in fact severely dehydrated, having been diligently drinking vast quantities of water. Added to this enthusiastic pre-hospital intravenous fluids and there is a recipe for overload. By placing a catheter on admission in the emergency department and seeing a good flow of clear urine it is possible to avoid compounding the issue with further excess fluid.

9. Fluid replacement tempered by urine output, central venous pressure and base deficit. Once any respiratory alkalosis has resolved with control of ventilation, a metabolic acidosis may be revealed indicating hypoperfusion or tissue damage. At 202 Field Hospital, Hartmann's solution was used for maintenance fluid and colloid for fluid challenges.
10. Use vasopressors to maintain mean arterial pressure if low despite adequate filling. In a population of previously fit servicemen, the low cardiac output and increased systemic vascular resistance observed in a subgroup of civilians with heat stroke is perhaps less likely but should be considered; if present inotropic support may be necessary. All patients in the 202 Field Hospital were in a high output state.
11. Promote diuresis with frusemide if pulmonary oedema present
12. Be vigilant for the development of rhabdomyolysis and myoglobinuria; if present encourage diuresis.
13. Replace potassium guided by serum levels and any metabolic alkalosis.
14. Allow hyponatraemia to correct slowly. This is to avoid central pontine myelinolysis, subdural haemorrhage and cardiac failure. If possible restrict the rise in the sodium concentration to a rate of 5-10 mmol/litre/day.
15. Awaken and extubate only when:

    Temperature controlled, *Electrolyte within normal limits*
    Cardiovascular stability maintained, *Pulmonary oedema resolved*
    No evidence of poor gas exchange.
16. Be suspicious of and treat any underlying infective condition e.g. Malaria.

Mortality

In the civilian experience, the mortality from heat stroke has been reported to vary between 20 and 50%, however, the recent experience in Iraq amongst UK servicemen was a hospital mortality of nil; most patients on the intensive care unit were extubated within 2 days and discharged to the ward. There are obvious differences in the populations, those at risk of heat stroke in civilian life tend to be elderly, deprived and isolated, and there is therefore a high incidence of infirmity and poly-pharmacy that contributes to a poor outcome. Also these individuals have fewer resources both financial and physical to draw on in times of unexpectedly high temperatures and so are less able to control or escape from the heat.

The military has the advantage of, on the whole, deploying fit individuals into a predictably hot environment with the anticipation of heat illness being a threat. Attempts can therefore be made to minimize the situation, by education and operational planning; cases that do present, present early and can be removed to medical care rapidly. With rapid evacuation from the heat and efficient cooling a good outcome can be anticipated in this fit population, on the other hand, delays in

either will inevitably result in increased mortality and significant permanent disability as the experience of WW1 demonstrates.

Diarrhoeal illness

Management of the Norovirus Outbreak at Shaibah, Op Telic 1.

Infectious diseases have been the scourge and demise of many expeditionary armies throughout history. Indeed, it was only when the Japanese Army introduced systematic preventive health measures in its war with the Russian Army in 1905 that casualties from fighting exceeded casualties from disease. In the Gulf War of 1991, British disease casualties were negligible, through rigorous enforcement of basic hygiene measures to the extent of using disposable plates and cutlery at all meals.

In the heat and relatively unsanitary conditions in the initial occupation of southern Iraq, many hundreds of soldiers were struck by a rapid and fierce outbreak of norovirus gastroenteritis, as shown on the graph.

The noroviruses cause acute viral gastroenteritis. The infection produces self-limiting episodes of general malaise, vomiting and diarrhoea which vary considerably in severity and intensity from patient to patient, and begin from a few hours to 48 hours after contagion. The infection is highly contagious where large numbers of people are living and working together.

The importance of the virus is the way in which it strikes enclosed communities, for example military camps, cruise ships and holiday camps. It displays a variable penetration in the population. Some patients can be re-infected and suffer several rounds of infection. Patients continue to shed the virus after symptoms have settled. The outbreaks only appear to occur in humans in confined populations

Prevention relies mainly on personal, food and environmental hygiene. No effective vaccine is available for its control. The virus is abundant in stool and vomit, and may be transmitted by direct contact through the faecal-oral route, or by insect vectors from contaminated stool to freshly prepared food. As few as a hundred viral particles may cause infection. Treatment is by expectant management with rehydration and intravenous fluids where possible, along with all reasonable measures to close down the source and cause of transmission.

From 2nd April to 29th April, there were more than 1300 admissions of patients with viral gastroenteritis, and more than 1600 bed days of admissions, most lasting for less than two days. Many patients (36% of total admissions) were members of staff of the hospital itself, with some patients requiring several admissions. Some eighty members of 2 Close Support Regiment of the Royal Logistic Corps; fifty from1 Close Support Medical Regiment; fifty from 2 Royal Tank Regiment and forty members of the Black Watch were also admitted. For a short period, the illness thus had a significant effect on the combat efficiency of the division. More than 380 out of 500 hospital staff reported in a survey at the time that they experienced the disease to some extent, of whom only 60%

sought medical advice. However, some 800 work days were lost through staff time off work. There were no clear patterns in the population affected, although female staff under 40 years of age seemed to be disproportionately affected.

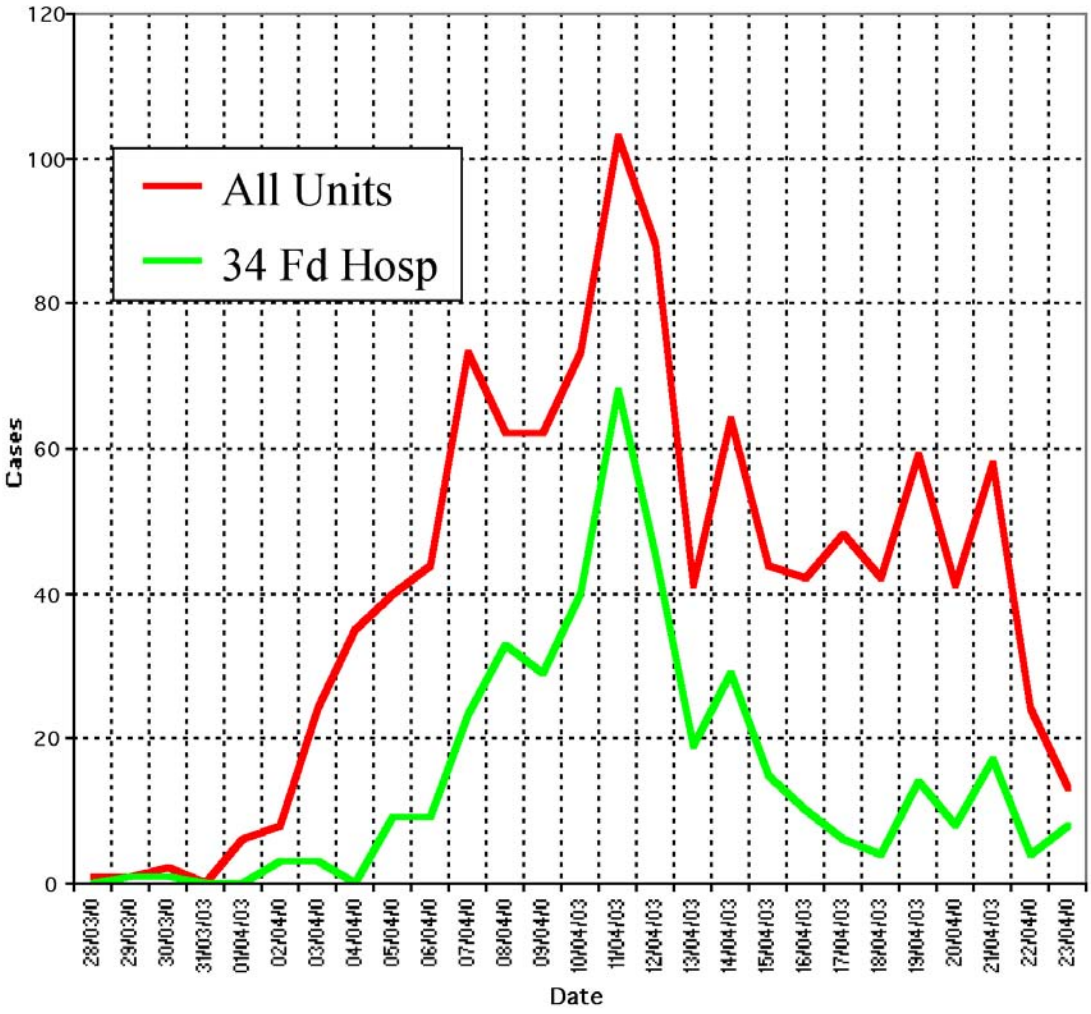


Figure 1. Plot of the outbreak of norovirus gastroenteritis at Shaibah, 28th March to 23rd April, showing the large number of staff affected.

In the particular circumstances of the Iraq operation, the virus threatened to have a very significant impact upon operational effectiveness. Intensive medical intervention and investigation is unnecessary and counter-productive, as it exposes more staff to the risk of infection. The formation of a separate tented area to isolate affected personnel helped simplify the management of the outbreak. This became known as the 'vomitorium'. It reduced the risks to nursing staff through self-caring of affected patients. The health problem was made much worse for casualties by the intense heat, and the difficulty of controlling the large fly population which circulated between the latrines and the cookhouse. The outbreak was finally contained when the deep trench latrines were replaced with contractor-serviced toilets, and when the catering facilities were moved away from a suspect sewage source.

The Shaibah experience of Norovirus is instructive, because the disease can suddenly strike any community, and because it has important commercial consequences, for

example on cruise liners or in hotels and holiday camps. For most patients, it proved sufficient to provide rest, relative isolation and self-care with access to good washing and toilet facilities. Intensive medical investigation is wasteful of resources. Intravenous fluid replacement may be necessary in severe cases.

Up to 25% of the hospital staff were themselves incapacitated by the affliction and the heat at any one time. The closure of the primitive deep trench latrines, their replacement with modern sanitation systems and sewage contractors, and control of the fly population thus became a priority. Tracking down a source of sewage contamination near the kitchens helped control the problem but never fully eliminated it.



The Shaibah fly infestation and deep trench latrines



The 'vomitorium' complex at Shaibah

The following extracts from the paper by Mark Bailey and colleagues for the Centre for Disease Control set out the details of the 2003 Norovirus outbreak.

Gastroenteritis Outbreak in British Troops, Iraq

Mark Bailey and colleagues reported how "Gastroenteritis affected many British military personnel during the war in Iraq. In the first month, 1,340 cases were seen; 73% of patients required hospital admission and 36% were hospital staff. In a survey of 500 hospital staff, 76% reported gastroenteritis, which was more likely in clinical workers. Investigations showed only caliciviruses.

Infectious diseases are a frequent problem in military campaigns and usually cause more casualties than battlefield injuries. Even when they do not have a high death rate, the illness caused may still diminish operational effectiveness. Military deployments are often affected by gastroenteritis, in particular viral gastroenteritis. Norovirus gastroenteritis affected troops during both the Gulf War in 1991 and the Afghanistan campaign in 2002. Caliciviruses (which include both noroviruses and sapoviruses) are well adapted to cause such outbreaks because of their high infectivity, multiple routes of transmission, pre-symptomatic and post-symptomatic viral shedding, high survivability in the environment, resistance to disinfectants, and poor long-term immunity after infection.

British troops invaded Iraq on March 21, 2003, and lived in minimal hygiene facilities for several weeks. During the first week of the conflict, they ate individual ration packs only, but centralized catering and locally produced fresh rations (including salads and fruit) were introduced during the second week. A 200-bed British military field hospital was established in Iraq on March 26 for 2 months. During this time 26,000 British troops were in the area, and ≈50% were close enough to visit the hospital with illnesses such as gastroenteritis. A large outbreak of gastroenteritis affected many British units, including the staff of the field hospital. We reviewed the outbreak in patients from local units and assessed its effect on the field hospital.

The Methodology of the Study

Data from hospital records were collected from March 28, 2003, when the first gastroenteritis cases were observed, until April 29, 2003, when the number of gastroenteritis cases decreased to <20 per day. A subsequent retrospective survey of hospital staff was carried out from April 19 to May 3, 2003, when the number of cases began to decrease. The survey used a face-to-face structured questionnaire designed to study possible risk factors and outcomes associated with gastroenteritis. Gastroenteritis was defined as having >2 of the following: diarrhea, abdominal pain, nausea, vomiting, and either myalgia, headache, or subjective fever. The presence of more than one of the last three symptoms was counted as one symptom overall.

Because of the situation and number of cases, conducting fecal investigations for all patients was not possible. Instead, investigations were targeted at the most severe

or atypical cases after clinical assessment on daily post-admission ward rounds. Fecal samples were collected within 24 hours of admission. Ova, cysts, and parasites were sought by microscopy with standard wet-preparation techniques and staining with iodine where indicated.

Enteropathic bacteria, including *Campylobacter* spp., *Salmonella* spp., *Shigella* spp., and *Escherichia coli* O157, were detected by standard microbiologic culture techniques. We tested for *Vibrio* spp. where clinically indicated. Eight refrigerated fecal samples were sent to the United Kingdom reference laboratory for enteric viruses (Centre for Infections, Health Protection Agency), where enteropathic viruses were sought by electron microscopy and reverse transcription–polymerase chain reaction (RT-PCR). These studies were reviewed and approved by the field hospital ethics committee.

During the first month of the conflict, 2,065 patients were seen at the hospital, of whom 1,466 (71%) were managed by internal medicine physicians. Among these, 1,340 (91%) had gastroenteritis; 975 (73%) required admission. The epidemic distribution of gastroenteritis patients who came to the hospital is shown in Figure 1. Admission rates were initially 93% but gradually decreased to 13% during the study period. Mean length of stay in the hospital was 1.65 days, which resulted in 1,608 bed-days occupied, and bed occupancy rates reached >90%. Hospital staff accounted for 36% of all gastroenteritis patients seen. Medical units and armored units appeared to be most affected.

Five hundred (77%) of 648 hospital staff were surveyed when the number of cases began to decrease. Among these, 382 (76%) had gastroenteritis, of whom 202 (53%) had diarrhea that persisted for >48 hours longer than their other symptoms (range 2–14 days).

Overall, 292 (60%) of the hospital staff surveyed visited the hospital for medical care, and 192 (39%) were admitted because of gastroenteritis. Those affected required a mean (SD) of 2.1 (1.7) days off work; 796 work days were lost in the 77% of staff surveyed.

Gastroenteritis was more likely in clinical staff and women, but no association was found between gastroenteritis and age, blood group, or reported contamination of living areas by vomit, faeces, or both.

Faecal microscopy and culture were conducted for 69 patients during this 2-month deployment. No parasites or bacterial pathogens were found during the first month when the initial outbreak occurred. Only 2 faecal samples (collected during week 2 of the outbreak) arrived at the UK reference laboratory. Both samples showed caliciviruses by electron microscopy and had the classic appearance usually associated with sapoviruses rather than noroviruses. They could not be identified by RT-PCRs for noroviruses, sapoviruses, or astroviruses.

Subsequently, the norovirus was identified by cDNA sequencing as an unusual strain with 96% identity to NV/Idaho Falls/378/1996/US (GenBank accession no.

AY054299) and designated NV/Shaibah/2003/IQ (Figure 2). This strain does not group within any of the 15 previously identified norovirus genotypes but is similar to novel strains identified in US military personnel during this same period.

The Conclusions of the Norovirus Study

"Gastroenteritis was the major cause of illness in hospital cases during this operation and probably diminished the operational effectiveness of those units affected. Admission rates were initially high because of exhaustion, dehydration, and poor living conditions during the first month of the conflict. Viral gastroenteritis is readily transmitted in healthcare settings and confined living spaces, which may explain why medical and armored units were most affected. Environmental health measures planned for this deployment had high standards, but they were not fully implemented in time to prevent this outbreak, which coincided with the delivery of fresh rations.

The survey of hospital staff indicates the scale of the problem faced by the field hospital, but this may also be an underestimate since cases were still occurring while data were collected. Since gastroenteritis was more common in clinical workers, infection control at the hospital may have been inadequate. Hygiene standards for the hospital were also high, but they were not fully implemented in time to prevent the outbreak among hospital staff.

The wide epidemic distribution suggests a prolonged period of disease transmission, rather than a single point source outbreak. Although this outbreak fulfills the criteria of Kaplan et al., which suggest that a calicivirus was responsible, data were insufficient to determine the cause. However, a similar outbreak on a Royal Navy hospital ship occurred during this period when locally produced fresh salad was taken on board; several enteric viruses were subsequently identified.

This outbreak in Iraq would have had an even greater effect if it had been caused by a virulent species of *Salmonella* or *Shigella*, which are common foodborne pathogens in this region. We believe introducing fresh rations during a military operation, before adequate health and infection control measures were fully implemented, was inadvisable. In contrast, Royal Marines based on the Al-Faw Peninsula were not supplied with fresh rations during this period, and no outbreaks of gastroenteritis were reported (S. Bree, pers. comm.). More rigorous, prospective studies are required to understand the epidemiology and effect of gastroenteritis in deployed military personnel.

Top Tip: We recommend that improvements be made in implementating environmental health and infection control measures during operational deployments. Military units should avoid fresh rations during military operations until adequate hygiene measures have been fully implemented and inspected. Further studies and changes to working practices are required to prevent and control similar outbreaks in the future".

In a further paper for the JRAMC in 2008, Mark Bailey and colleagues sought to discover what lessons could be learnt from the suspected viral gastroenteritis outbreaks that have occurred in deployed British troops during 2002-7.

Epidemiological and laboratory data from identifiable outbreaks were reviewed, including epidemic curves and the results of PCR testing for enteropathic viruses.

The epidemic curves of outbreaks varied predictably in accordance with the size of the population at risk and whether this population was constant or expanding. Of 11 outbreaks identified, 10 (91%) had a proven viral cause and 10 (91%) occurred in Iraq. Of 84 enteropathic viruses identified, 61 (73%) were noroviruses and these included both unknown strains and those that were common in the UK and Europe. Of the 10 viral outbreaks, 3 (30%) occurred in medical units, 5 (50%) were associated with large-scale relief in place (RiP) deployments and 5 (50%) involved >3 different viruses, which is strongly suggestive of food or water contamination.

Footnote from Dr Mark Bailey

"I am sure everyone at 34 Fd Hosp during Operation Telic will be delighted to know that we now have a new strain of norovirus named after us - NV/Shaibah/2003/IQ ! However, the senior service have gone one better and now have two gastroenteritis viruses named after their hospital ship. Well done to everyone and especially those people responsible for sending us locally-produced salad during the early stages of a war-fighting campaign. Will we never learn?

Another classic shot in the foot was setting up a 'vomitorium', but not adequately resourcing it. Hence it got the lowest score of the whole hospital in an infection control audit and nursing staff were posted there on a rotational basis thereby ensuring that they all got exposed! Another classic was positioning the isolation latrines in the opposite corner of the hospital site from where the isolation ward was. The resulting obstacle course was often undertaken at night with no lights allowed and the consequence was often rather messy! I guess nobody thought that commodes would be so important in a field hospital for fit young soldiers."

A General Commentary on Infection Control Measures in deployed field hospitals

General Louis Lillywhite highlighted the challenges of infection control in the deployed, tented field hospitals on Op Telic, and their implications for standards of clinical governance, in his Director General's Medical operational Capability Report, which is covered in greater detail in Chapter 30.

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Blood, Heat + Dust: Second Edition

Operation Telic and the British Medical Deployment to the Gulf 2003 -2009

Chapter 23:

The Clinical and Organisational Lessons of the Field Hospitals during Operation Telic



Painting: *Surgical Ward, 34 Field Hospital*

Artist: Gora Pathak 2003

Introduction

Operation Telic was unusual in recent British military history, in that it involved the participation of British armed forces in the invasion of a sovereign state for political ends. Such an action brings specific responsibilities in respect of medical provision for the indigenous population, both morally and under the terms of the Geneva Convention.

By default rather than by design, the responsibility for care for the indigenous population became the main focus of clinical effort during the early phase of operations in southern Iraq in March and April 2003, until the local health services could be reorganised and re-provisioned. Provision of medical aid to the civilian population can bring disproportionate political, symbolic and tactical benefits, and adequate planning and provision for civilian needs must be considered in the military medical planning process.

Operation Telic witnessed a transformation in UK military hospital care. We moved from a philosophy of minimalist, simple and multi-purpose provision of military medical skills, resources and equipment in the field (as symbolised by the McVicar operating table), to a well equipped and well prepared field hospital service with sophisticated field equipment, including modern operating tables, CT Scanners and Field Intensive Care. The lessons re-learned as to the limitations of tented environments for static medical facilities in enduring operations were applied to good effect on Operation Herrick after 2007, with the opening of the "Tier 2" Hospital at Camp Bastion in January 2008.

Lessons were continually learned in respect of the best use of specialist resources; and the best provision of clinical equipment and material resources for such environmentally challenging deployments. Technology changed continuously, with improved communication and information exchange. Systems of onward evacuation for seriously injured casualties were refined. The provision of trained Critical Care (CCAST) teams to the helicopter and air transport fleet also allows the safer and speedier transfer of casualties over long distances.

The development of operations in Afghanistan from 2005 onwards, also led to a significant and indeed a deliberate mixing of the clinical streams to ensure that clinical lessons learned in either Theatre of Operations were rapidly transferred to the other Theatre. The RCDM, and the Academic Department of Emergency Medicine under the energetic direction of now Col Tim Hodgetts CBE, Military Professor of Emergency Medicine, played a central role in these developments.

The Hospital Clinical Experience in Iraq was characterised by two phases:

- The Entry Operation of March to May 2003, when 202 and 34 Field Hospitals deployed at short notice in support of front line operations, with a substantial throughput of Iraqi civilian and combatant casualties; and
- Stabilisation Operations from May 2003 to April 2009, when the Hospital went firm, initially in Shaibah and subsequently on the COB, in the care of coalition casualties.

The configuration, staffing and equipment of the deployed hospitals merits particular attention. The field hospitals on *Operation Telic* achieved far more than might have been expected from their peacetime planning templates, through flexibility, improvisation and strength and depth of expertise across the spectrum of health care professionals. They must be prepared to provide care for a full range of civilian casework, including paediatric and maternal welfare, where civilian healthcare resources are disrupted.

A number of important lessons were learned and relearned, or thrown open for further debate, from the *Operation Telic* experience. The numbers of casualties were not large by historical measures. Nevertheless, the focus on quality rather than quantity of care, and the need to provide prolonged care of complex Iraqi casualties, provided opportunities for critical evaluation of a number of systems.

Hospital based Primary Health Care on Op Telic 1.

A field force deployed in austere and demanding environmental conditions generates a significant amount of demand for care and support among troops for minor medical matters which would normally cause no problems. The field medical and hospital units need to provide a significant general practice and temporary bedding down capacity for personnel with minor ailments who can be rapidly returned to their units. For example, 202 Field Hospital dealt with some 1500 short-term admissions and made a significant contribution to 'human resource maintenance'. Within this flow of minor cases are patients with more complex medical problems, for which the presence of experienced physicians, including paediatricians, brings significant advantages.

The Role of the Physician In Modern Military Operations: 12 Months Experience In Southern Iraq

A paper by Surg Lt Cdr Chris Grainge and Col Mary Heber described in detail the hospital workload and casemix in the first year of Op Telic. They reviewed admission records to the Field Hospital in Shaibah during the first 12 months of military operations in Iraq.

> 62.5% of 4870 admissions were under the care of physicians. Of these 1531 (31.4%) were due to diarrhoea and vomiting (D&V) and 764 (15.7%) due to heat illness. The incidence of heat illness rose with ambient temperature, but soldiers were more likely to be admitted with heat illness shortly after arrival in theatre than when fully acclimatised. There was also a steady flow of admissions with a broad spectrum of medical pathology requiring the clinical skills of a general physician.

They observed that a general physician remains a necessary part of the clinical team in modern conflict.

Field Intensive Care at 202 Field Hospital

This section is abstracted from the draft of a paper published in JRAMC in 2003, and kindly provided by Lt Col Matthew Roberts RAMC (V), Consultant Anaesthetist to 202 Field Hospital

"Operation TELIC was the first major conflict in which the Army Medical Services have deployed a significant critical care facility in order to deal with battle casualties. A similar level of sophistication in terms of equipment had been deployed on Operation AGRICOLA 1999 (Kosovo) but on a much smaller scale.

Experience on that and other peace support operations did not inform as to the scale of ICU utilisation to be expected during a major war fighting operation. The expectation at the outset, that patients would primarily require a high dependency rather than an intensive level of care, was in the event an underestimate of the intensity of the workload; the proportion of intubated and ventilated patients (44.5%) was significantly higher than expected. In particular it was not appreciated that significant numbers of patients with peripheral ballistic trauma would require a period of post-operative ventilation while they underwent further resuscitation.

"High dependency patients were still in the majority (55.5%). Within a temporary field hospital, the general wards are cramped areas equipped only to allow simple nursing care and the maintenance of an intravenous infusion. The requirement to maintain the capability of the A+E department and the onward flow of patients through the operating theatres dictated the role of the HDU. It should act as an area for continued resuscitation and stabilisation, pre- and post-operatively, for those patients unfit for admission to the general wards.

Unlike peacetime practice, outreach by the intensivists was to encourage admission, as the default, from A+E and theatre recovery; unless the admitting clinicians actively decided the patient was fit for care in a general ward. As a result, free flow of patients through the operating theatres and recovery ward was maintained in contrast to experience on previous operations (cf 32 Field Hosp 1991). This practice also resulted in there being very few subsequent admissions from the general wards – see Table 1.

"The mechanism of injury and the age of our patients differed markedly from civilian practice. There is a significant difference between the 202 Field Hospital case load and recent military medical practice in other theatres of operation. The proportion of ballistic trauma amongst ICU admissions is in stark contrast to experience on peace support operations in the Balkans where blunt trauma from road traffic accidents, mine injuries and medical admissions predominate. In the later phase of Operation TELIC (15th May – 20th July), the intensive care admissions changed in line with this more familiar pattern.

Patient source for ICU admission		
Operating Theatre	34	(54 %)
Forward Medical Units/A+E	23	(36.5 %)
Wards	6	(9.5 %)

ICU Patient Demographics		
Male/Female	54/9	
Coalition Military	11	(17.5%)
Enemy Prisoners of War	18	(28.5 %)
Iraqi Civilian	33	(52.4 %)
Non Iraqi Civilian	1	(1.6 %)
Age		
Mean	26.8	
Range	6 months-67 yrs	
Number under 12 yrs	9	
Range	6 months-11 yrs (14.3 %)	

Discharge from 202 ITU to:	
Ward	45
Aeromed UK	9
Hospital Ships	5
US Military Hosp	2
Kuwait Civilian Hosp	1
Died	1
Total	63

"Most ballistic injuries were to the limbs; there was nevertheless often massive blood loss both prior to and during surgery, associated with hypothermia, acidosis and coagulopathy.

As to patients with open head injuries from ballistic or bayonet wounds, all did well. All patients were conscious on admission, and were thus self-selected for good outcome.

"Isolated blast injury was not seen. However, several cases of mixed blast /fragment injuries with pneumothoraces, haemothoraces and pulmonary contusions were admitted. Most required surgery for other injuries and all of these required a period of post-operative ventilatory support for up to 36- hours.

Thereafter, adequate gas exchange was achieved with a simple face-mask and inspired oxygen concentrations of up to 60%. There were occasions when patients not requiring intubation, but with significant pulmonary blast injury would probably have benefited from Non-Invasive Positive Pressure Ventilation (NIPPV) or Continuous Positive Airway Pressure (CPAP) - however this was not available.

"27% of all admissions were patients who had sustained burns, seventeen patients with an average of 35.2 % BSA, range 3-85%. Most were Iraqi civilians who had acquired their injuries in non-battle related incidents. It seems that prior to the outbreak of hostilities there was a policy of not treating major burns in southern Iraq. Once an alternative to this policy was provided by 202 Field Hospital major burns were attracted from all over the region. These patients presented a very significant workload to the ICU, often presenting several days after their initial injury in a metabolically deranged state. This situation was further exacerbated by the necessary debridement, escharotomy and in some cases amputation. The challenge was to prevent acute renal failure (which we were not equipped to treat) prior to transfer to a definitive burns centre. This was straightforward for coalition troops who were all resuscitated, debrided, dressed, and evacuated to the UK within 36 hours of wounding. However, for the Iraqi casualties this was a major problem in that, as well as their late presentation and poor condition, no effective evacuation plan existed. Each evacuation had to be negotiated on a case-by-case basis either to the UK or within the Middle East.

"Typically, Iraqi casualties needed longer management on ICU until fit for transfer to the general ward than did severely injured coalition casualties, who were repatriated earlier in their illness by the CCAST. This had a significant effect on the ITU bed occupancy.

"Children under 12 (range 3 months – 11 years) constituted 14.3% of the workload on the ICU/HDU; all were trauma cases, mainly burns and ballistic trauma. It was fortunate that there was significant paediatric experience within 202 Field Hospital, both medical and nursing, but there was no paediatric equipment until suitable items could be obtained from the UK.

"Ambient temperature control in a tented, poorly air-conditioned facility was difficult. In particular, the burns patients all exhibited hyperpyrexia, which was exacerbated by the heat of the day. We used cooled IV fluids, the ambient setting on Bair Huggers, and tepid sponging in combination with fanned air. Despite air-conditioning, the midday temperatures within the ITU were often above 33oC, reaching a maximum of 42oC when the air conditioning failed altogether. Several patients with systemic inflammation required increases in their noradrenaline infusion rate during the heat of the afternoon and it became routine practice to increase maintenance fluids as the temperature increased, as otherwise the urine output noticeably decreased. Conversely, some patients were even hypothermic on admission.

"The ICU environment was extremely dusty. During sandstorms, ventilator testing

was stopped to avoid unnecessary exposure of the ventilators to sand. Noise was a major problem, from air-conditioning and generators, and particularly from the tentage during high winds. In these conditions clinical examination involving auscultation was impossible, leading to a greater reliance on X-ray examination.

"It proved impossible to keep flies off the patients, and off burns and blood stained dressings. Mosquito nets could have been used to advantage, but were not available until later in the operation.

NBC Issues and field intensive care

"NBC alerts were degrading for patients and staff. On hearing an alert and in the absence of Collective Protection (COLPRO), the air-conditioning was turned off, and staff were obliged to dress in full NBC suits and masks (Romeo 4). During one of the early alerts, in the absence of NBC casualty bags, a patient with asthma and pneumonia was draped in his NBC suit and had an oxygen mask applied externally to the inspiratory canister of his gas mask. Although this solution maintained adequate oxygen saturations, it was noticeable that anxiety exacerbated the patient's respiratory distress. The ICU is not currently scaled for a NBC proof ventilator - the T Bird does not have a NBC inspiratory filter available. In order to allow ventilation of a patient's lungs in an NBC environment, two ComPAC 200 ventilators (Pneupac, Luton England) were acquired; these draw in ambient air through an NBC filter and oxygen can be supplemented from a low flow cylinder supply(4). Subsequently it was assessed that the main chemical threat while undercover of tentage was of a vapour agent.

"In this case the priority is protection of the respiratory tract so the measures described would have been adequate, but only for casualties in possession of their own respirator. There was no immediate solution for the protection of civilians or Iraqi prisoners from vapour; the ideal would have been the provision of chemical casualty bags or the use of collective protection. In the event our defence against these threats was not tested.

"Ballistic alerts inevitably interfered with patient care. Clearly protection was not afforded for a direct hit, but even protection from fragmentation injury was not universally available. Whilst the staff had their own helmets and flack jackets, these were not available to the Iraqi casualties or indeed to coalition casualties transferred without their personal kit. This inequality had a disturbing psychological effect on both patients and carers.

"Supplementary oxygen is usually supplied in the field hospital by floor standing oxygen concentrators due to the difficulty in re-supplying oxygen cylinders. This influences the choice of ventilators. The T Bird VS has an internal compressor and is therefore not dependant on a high pressure gas supply. Low flow oxygen is supplemented at a port on the rear of the device. The maximum FiO2 available from these ventilators supplemented by oxygen from concentrators was approximately 55%.

If supplemented by cylinder oxygen flowing at 10 l/min, the maximum FiO2 obtainable was greater than 70%, depending on the minute volume. The only ventilator available capable of pressure controlled ventilation (T Bird AVS) was located in the MTSF but it was wasteful of available oxygen. Even for patients with poor lung compliance, the T Bird VS was quite adequate. Where oxygenation was a problem, we used increasing PEEP, reversed inspiratory/expiratory ratio (by decreasing inspiratory flow) and small tidal volumes. This lessened the risk of barotraumas and reduced the use of cylinder oxygen supplies.

"Drainage of fluid or air from pleural cavities was achieved using the Portex Ambulatory Chest Drainage Kit (SIMS Portex Ltd, Hythe UK). This was effective in the acute phase of resuscitation and for transfer, but the device could not readily demonstrate an air leak, nor connect to low-grade suction. A simple underwater seal drain would have been more useful in the hospital.

"The only effective airway humidification was by intermittent nebulisation, or the use of heat and moisture exchangers (HME). This was a particular problem in the two patients who had tracheostomies.

"There was no provision for renal replacement therapy on Operation TELIC. Therefore, unit protocol was to ensure adequate fluid replacement even if this may have resulted in fluid overload and transient pulmonary oedema. Although haemofiltration units have been assessed for use in the field, their role if any has not yet been defined. Their use if deployed should be limited to short episodes of filtration prior to evacuation by CCAST to UK in patients unlikely to survive transfer otherwise.

As the service offered by the RAF CCAST is on the whole prompt, and most cases of acute tubular necrosis develop over days rather than hours, the need for haemofiltration is limited. It also needs experienced nursing staff. The most likely time this treatment mode will be used would be when there is a delay in repatriation, for example when the theatre CCAST is already away or is based in UK. Therefore, any filtration equipment and trained staff should be intrinsic to the field hospital and not the CCAST, as has been considered in the past.

"Inotrope and vasopressor usage was minimal. Only severe burns patients exhibiting signs of severe systemic inflammation required infusions of the noradrenaline sufficient to maintain an adequate mean arterial blood pressure and adequate urine output. The unit was not equipped for invasive cardiac output monitoring but, although there is no evidence that this adversely impacted on outcome, such monitoring would have been useful to guide therapy in those vasodilating burns patients. It is possible that a non-invasive system such as the oesophageal doppler might be suitable for field use.

"During the initial phase when blood was potentially at a premium and with a predominately young and previously fit population, it was unit policy to accept haemoglobin concentrations in the range 7-8 g/dl, assuming that haemorrhage had

been controlled. However, in those patients requiring aero-med evacuation, higher haemoglobins were sought in view of the potential for unpressurised flight. Initially platelet transfusions were not available. This led to the use of fresh whole blood transfusion in one case to treat profound thrombocytopenia and coagulopathy. Subsequently platelets become available from the host nation. Recombinant Factor VIIa was not available at 202 Field Hospital but was used, apparently to good effect, in other deployed medical units; this is an issue that might be addressed prior to future deployments.

"Near patient blood gas and electrolyte monitoring was hampered by the failure of the iStat to function at temperatures in excess of 30oC. Despite placing the device in the outflow of the air-conditioning system this device would not function during the hottest four hours of the day. This variability in availability was an inconvenience rather than a major problem and, considering the proximity of the pathology department, it could be argued that near patient analysis was not really necessary and that these sensitive items should be maintained centrally in the laboratory.

"The Datex S5 monitors were impressive in their reliability; despite showing a screen temperature alarm suggesting potential failure when >33oC, even at ambient temperatures in excess 42oC they continued to function satisfactorily.

"Power cuts were relatively infrequent (less than once a day) and most equipment had been selected for the ICU equipment modules in part because they had battery backup, two notable exceptions being the air-conditioning and oxygen concentrators. The first was mostly inconvenient, the second required strict attention to cylinder availability.

"The MTSFs had not been fully trialled in a desert environment, were extremely unreliable and usually not available for use. When an MTSF was used for neuro-surgical cases it was a very pleasant although cramped environment. However, it was isolated from main ICU and so created an extra drain on manpower. These containerised units were designed to be rapidly deployed and redeployed and probably do not have a role once the main field hospital complex has been erected.

"The provision of Intensive Care and High Dependency facilities within the Field Hospital was highly effective in maintaining the capability of both the Resuscitation and Operating Theatre areas. This was achieved by allowing prompt decanting of seriously ill patients into an area with highly quality equipment and medical personnel skilled in critical care. Whilst army medical doctrine indicates critically ill patients should be rapidly evacuated, as soon as conditions permit, this is not always possible, particularly for civilians. The equipment scales should recognise that the facilities for rapid evacuation may not always be in place. Paediatric casualties are very likely and the ICU must be adequately equipped to treat children of all ages and sizes. Notwithstanding these observations, the ICU/HDU arrangements on Operation Telic were effective, and in combination with excellent support from the CCAST evacuation team, prevented any unavoidable mortality."

Lessons from the management of Orthopaedic cases at 202 Field Hospital

Col Jon Clasper, Consultant Orthopaedic Surgeon to Frimley Park Hospital and subsequently Military Professor of Orthopaedic Surgery, kindly provided the data and the drafts of three papers in 2003 for the first edition of this book.

Biological Weapons

1. The Role of Internal and External Fixation of bony trauma from war injuries

"Limb wounds are common during armed conflict, and account for some 70% of all survivable wounds. The lower limb is most commonly injured. Many of these wounds are high-energy wounds, and half of the injuries are associated with an open fracture.

"The principles of early wound care are surgical debridement and adequate lavage, stabilisation of the limb, and the use of appropriate antibiotics. The best method of stabilisation of fractures has been a matter of debate for some years. Conservative methods such as plaster are possible, but war wounds are often associated with severe soft tissue injury, multi-fragmentary fractures, and multiple injuries. Internal fixation with plates or the use of intramedullary nails has been reported to have a high complication rate, particularly infection. "External fixators combine metal bars and frames with pins which fix the metalwork directly to intact bone around the fracture site.

"Lt Cols Jon Clasper and Sara Phillips reviewed the treatment of fifteen patients, with sixteen external fixators, who had sustained penetrating ballistic injuries. One patient had two fixators applied, such that one fixator was placed across the wrist, and another was applied between the pelvis and forearm to stabilise a severe blast injury to the wrist. This was associated with a severe soft tissue injury treated by a groin flap.

"Follow-up was available for fourteen of these patients (fifteen external fixators). One patient with multiple injuries from blast was transferred out of the hospital within 24- hours of external fixation of an open tibial fracture, and no further information was obtainable.

"Some fixators were applied at 202 Field Hospital, and some at forward surgical locations. Two different types of fixator were used. They were the Centrafix external fixator (Central Orthopaedics Ltd, High Wycombe, UK),and the Hoffman II fixator (Styrker). Both devices are manufactured and packaged for military use, with one sterile package containing four self-drilling, self-tapping pins, one bar, and pin-to-bar connectors.

"All pins were inserted by hand, and following application weight-bearing through the affected limb was restricted. Daily pin site care was carried out by nursing staff to remove any crusting and prevent fluid accumulation.

Problems with External Fixation

"Thirteen of the fifteen fixators required early revision or removal due to complications of the injury or the fixator itself. Instability caused problems with ten fixators. Pin loosening was noted in five fixators, involving twelve pins. Significant pin track infection developed at 14-pin sites on three fixators.

"Complications: Seven fixators (2 Centrafix, 5 Hoffman frames) required early removal at between one and nineteen days; three when the limb required amputation; two due to multiple infected pins, one due to multiple infected loose pins and one patient in whom it was felt that external fixation was inappropriate on review. Six fixators (5 Centrafix, 1 Hoffman frames) required early revision at between one and twenty-two days. Five were revised at the time of definitive wound closure due to instability at the fracture site and one bridging knee fixator was revised to a tibial fixator due to instability and loss of fracture reduction. Following revision, follow–up was possible for a further twenty-one days (range 5-35) without any further complications.

"Instability: this was a problem with ten fixators which had been applied to stabilise the fracture site to optimise soft tissue recovery. Seven fixators were revised and three were removed. Revision was carried by removing loose pins, inserting additional pins and the placement of additional bars. Three frames were removed and the patients managed by different methods of stabilisation. A radial fracture was subsequently managed by plaster and one femoral fracture was managed by skeletal traction. The third patient needed above-knee amputation for an unsalvagable vascular injury, along with removal of the external fixator.

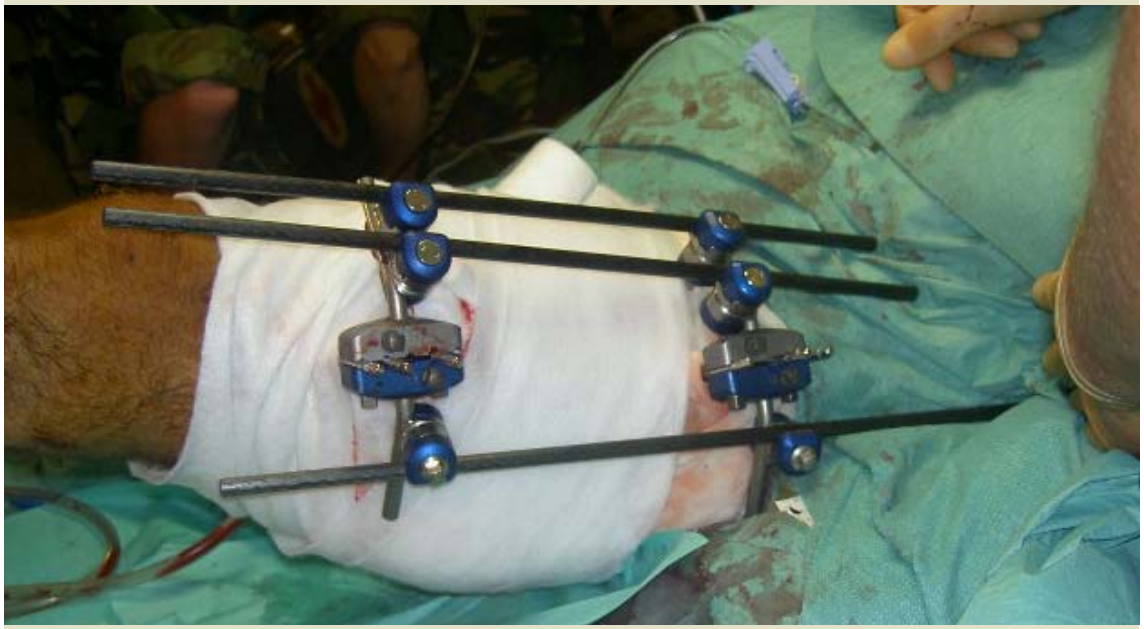
"Pin loosening: this was noted with five fixators involving twelve pins; 4 Centrafix pins (two patients) were noted to have stage III loosening (considerable motion between pin and bone) after one day and 8 Hoffman pins (three patients) were noted to be loose. Of the Hoffman pins, stage II (slight motion noticeable between pin and bone) loosening was present with two pins, and stage III loosening was present with six pins, all of which were infected.

"Only two fixators did not require early removal or revision. Both patients had multi-fragmentary injuries, one to the ulna and the other to the carpus. Follow-up was possible for thirty and thirty-two days, with no complications and new bone formation evident on radiographs. It was anticipated that external fixation would be continued for a total of 6-8 weeks.

"Amputation was required for four limbs. Two patients had major infection in association with instability at the fracture site. One amputation was carried out for a failed vascular repair in association with an unstable frame.

A summary of the Lessons of the External Fixator Study at 202 Field Hospital

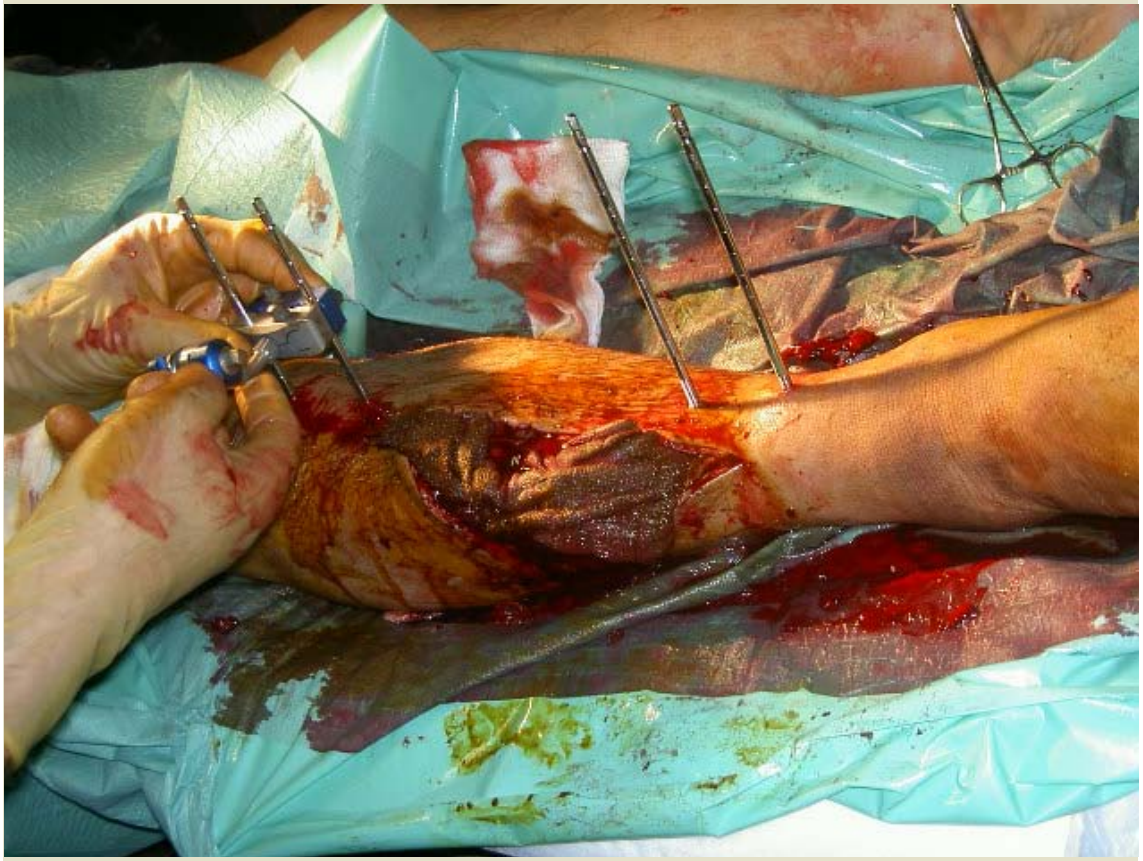
"Fixators bridging joints proved very unstable in the 202 Field Hospital series, and cannot be recommended to stabilise such ballistic injuries. Fixators of the femur also had problems, and skeletal traction may thus be a better method of stabilisation wherever possible. Delayed application of the frame, at the time of definitive closure of the wound, may be more appropriate, and would reduce initial operating time and morbidity. When external fixation is required, multiple pins and bars must be used. Bridging frames should be avoided. More radical surgical measures, including acute limb shortening and amputation may also be necessary on occasion."



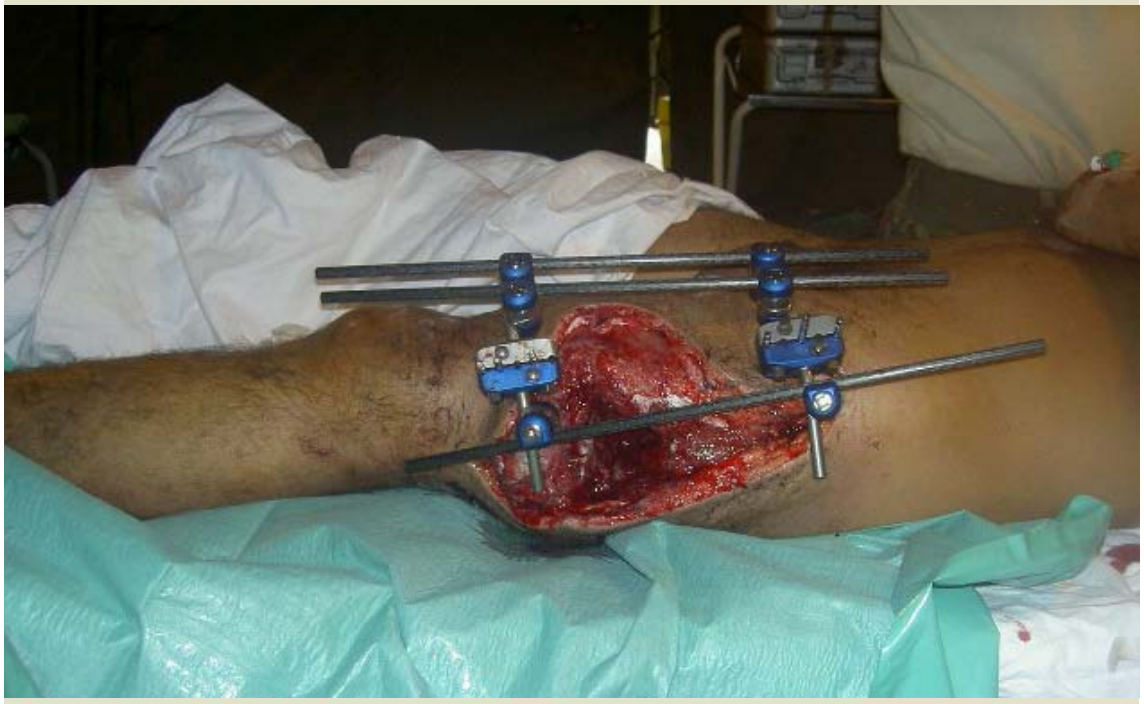
Examples of external fixation seen at 202 Field Hospital: femoral shaft fixation



Forearm stabilisation with an external fixator



Use of an external fixator to stabilise a lower leg GSW



Stabilisation of a femoral shaft GSW



Examples of X-rays of external fixation from 202 Field Hospital. Left: A distal fixator used to bridge a comminuted fracture with fibular bone loss. Right: Unsatisfactory use of an external fixator in the field to bridge a complex open fracture of the upper femoral shaft

2. A study of the classification of Ballistic Fractures

Major P Rosell and Lt Col Clasper also reviewed the 202 Field Hospital surgical experience in respect of methods of classifying ballistic fractures. These help categorise the severity of the injury, assist in determining the optimal treatment, predict outcome and provide an accurate database for evaluation of the results.

"Various classifications have been developed using cadaveric and animal studies; including ballistic models consisting of a composite of bone and tissue encased in standardised gelatin blocks; and studies on actual gunshot wounds. X-rays show that fractures following gunshot injury can be considered complete or incomplete, depending on whether some bony continuity is maintained. However, X-ray studies do not describe the soft tissue injury. The widely used Müller-AO classification and other civilian classifications also fail to take account of the soft tissue injury, and the consequences of high-energy transfer.

"Conversely, the ICRC Wound Severity score better describes soft tissue injury from ballistic trauma, but is less useful for bony injury, as it contains no anatomical information on the location of the fracture or the relationship of the injury to joints, which carry a particular morbidity.

"Some classifications require the energy of the weapon to be considered when categorising the wounds. There is in any case a major problem when dealing with war wounds, as the ballistic energy prior to impact is almost impossible to calculate. Rather than treat a patient on assumptions of kinetic energy transfer, it is more helpful to recall the maxim 'Treat the wound, not the weapon'.

"The 202 Field Hospital experience indicates that the existing classification systems of ballistic injuries are inadequate. A classification which took into account all prognostic factors, including the anatomical site of the injury, its position within the bone, joint involvement and the soft tissue injury would become too complex and unwieldy to use in the field."

3. Limb stabilisation and the Thomas Splint in the Management of Battlefield Injuries

Capt TK Rowlands and Lt Col J Clasper reported their experience of managing both ballistic and closed femoral injuries using Thomas splints, and restated the view that the Thomas splint is an essential tool in the management of ballistic injuries of the femur in Field Hospitals.

"The Thomas splint was developed for the stabilisation of femoral fractures at the end of the nineteenth century. Colonel Sir Henry Gray, an RAMC surgeon noted a substantial reduction in mortality in France in 1917 from use of the splint. There have been discussions about abandoning this device in favour of more modern, lightweight splints such as the Sager splint". which are easier to apply by paramedical staff in the field.

"Seven patients with penetrating or closed injuries to the femur were initially managed by stabilisation using a Thomas splint, with longitudinal traction using a traction pin inserted into the proximal tibia. Five were subsequently evacuated, while two remained as in-patients and were managed throughout by traction.



Improvisation in the early phase of Op Telic: a traction frame built locally by engineers to specification at 202 Field Hospital



Thomas splint traction for an open fracture of the femur at 202 Field Hospital, using the locally built frame

"In one case, a 15 year old girl sustained a high-energy gunshot wound to the left thigh, associated with a multi-fragmentary fracture of the femoral shaft and extensive soft tissue and bony injury. This was treated by thorough debridement of foreign and non-viable tissue, antibiotics and traction pin insertion with a Thomas splint. 4kg dynamic traction was provided using bottles of drinking water as weights.

"She was evacuated two days later. The stabilisation was modified to provide fixed traction by securing the traction cords to the end of the splint. This permitted easy and comfortable movement.

"In general, plaster is the optimal method of stabilisation for ballistic fractures, but it is not suitable for injuries associated with extensive bone or soft tissue injury. Internal fixation of such fractures is associated with a high infection rate. It is difficult to achieve stability with femoral fractures using external fixation, especially in proximal or distal injuries. It is also associated with a high complication rate when used for ballistic injuries. The Thomas splint still has significant advantages in these circumstances. It allows for comfortable reduction of the fracture, ease of transport and changes in wound management strategy for both open and closed injuries.



Figure: A typical XRay image of a high energy gunshot wound to the lower leg

Extremity Injuries and the experience of 34 Field Hospital In Iraq, 2003

Major Ramalingam reported on casualties who had surgery for battle-injured extremities at 34 Field Hospital between the 26th March and the 8th May.

Sixty eight of the 124 casualties who underwent surgery did so for battle injuries to extremities. 58% of all operating theatre episodes and 53% of all surgical procedures undertaken were for battle-injured extremities. Fourteen major limb amputations were carried out on 87 battle injured limbs that had surgery.

The Management of Burns at 202 Field Hospital

"Between March 20th and May 8th, the Burns team at 202 Field Hospital managed a large number of civilian and military casualties with major burns, as reported in Chapter 11. This workload arose from the designation of the hospital as a specialist burns referral unit by virtue of the presence of the burns team, and was advanced by the presence of multi-disciplinary clinical teams and by the capability of the field intensive care unit in particular. ITU allowed stabilisation and multiple staged procedures on burns patients of all ages.

"The burns workload was sustained by multi-consultant working and by major contributions from all members of the burns team, working to standard protocols and with standard, simple methods and dressings which achieved high success rates with low morbidity. These practices were passed on to other clinicians and nursing staff during a training day before the burns team was withdrawn from Iraq, so that the field hospital sustained a burns capability.

"The principles of clinical management involved early and aggressive resuscitation, debridement of all dead tissue, and escarotomies. Split skin grafts were meshed to maximise cover, and all wounds were covered in Haifa dressings. These are a layered dressing comprising liberal use of flamazine cream on a jelonet/ tulle gras base, a Gamgee cotton dressing and support from a net-elastic vest or limb wrap.

Burns cases 17 March – 30 April at 202 Field Hospital	
Total burns admissions 202 Field Hospital	62
Burns admissions ICU	17
Coalition	3
Iraqi	14
Intubated	11
Mean length of ICU stay (LOS, days)	3.1
Range	1-8
LOS Coalition	1
LOS Iraqi	3.5
Average % BSA burn	35.2

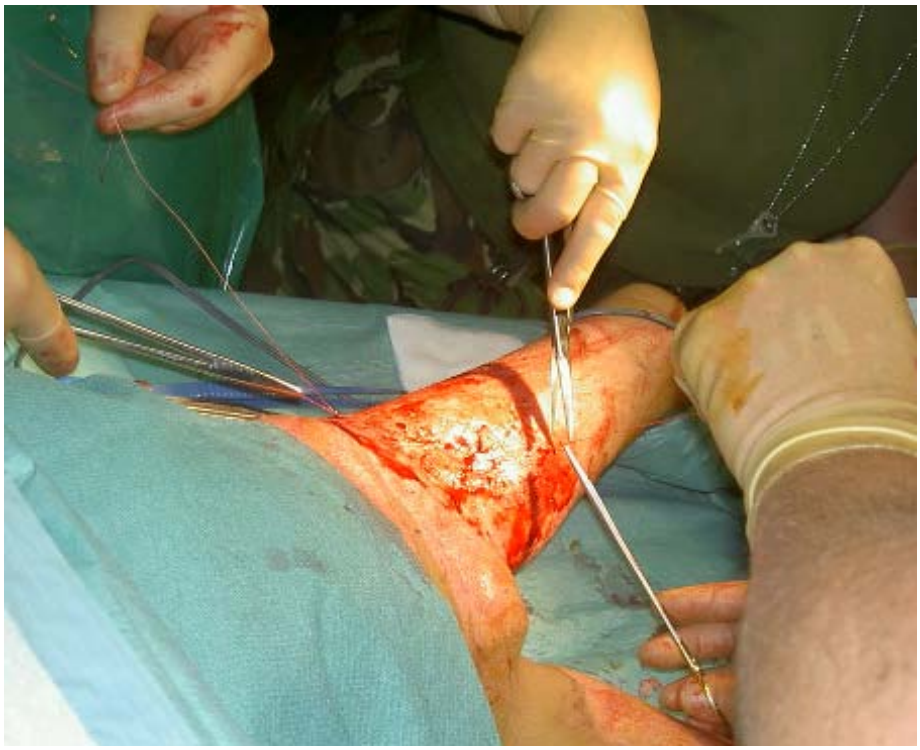
"There were nevertheless limitations to the provision of specialist care in field hospital conditions. The general strategy was to evacuate UK service personnel as quickly and safely as possible to UK hospitals, along with a small and selected group of Iraqi casualties for whom immediate local facilities were judged inadequate by virtue of the patient's age or extent of burns.



Full length escarotomy, 202 Field Hospital



Split skin grafting to full thickness burns to chest wall and breasts following a domestic accident, Iraqi civilian patient



Split skin grafting of a domestic burn on an Iraqi child





Primary closure of a severely disrupted scrotum form a penetrating GSW. The wound healed well without infection

Sepsis and working conditions

"Hospital infection control was necessarily crude both in theatres and on the wards, because of the difficulties with environmental control in tented accommodation, and the limited availability of disposable supplies in theatre. Significant wound infection rates among trauma patients were nevertheless very low, in consequence of the dry clean environment, the lack of bacterial contaminants in the dry dusty landscape, and the constant fresh warm air circulation. Infection rates might have been much higher in a wet, cold environment, and the Operation Telic experience should not induce complacency about infection rates in more demanding field conditions."

Paediatric Casualties attending 34 Field Hospital during OP Telic I

In a paper in JRAMC, Capt I Gurney described an audit of all paediatric attendances (<16-years-old) to 34 Field Hospital Accident & Emergency (A&E) Department from 27th March 2003 to 1st May 2003. He reviewed the A&E attendance register, A&E clinical records, and A&E trainees' logbooks.

78 children were treated, mean age 7.9 years. 65.4% were male and 34.6% female. Children accounted for 2.9% of all patients (total attendances 2720) and 32.9% of non-coalition patients (non-coalition attendances 237). 44 (56%) children had burns as the principal injury; 7 (9%) had shrapnel injuries, 5 (6%) had blunt trauma from a road traffic accident.

Only one child presented with a GSW. 17% of attendances were related to 'medical' complaints rather than trauma. 78% of children required transfer to a specialist facility.

The paper reinforced the importance of planning for paediatric casualties and for training and equipping deploying military medical units.

Lessons from the Field Hospitals on professional organisation

The MACE Programme

Colonel TJ Hodgetts Defence Consultant Advisor & Professor Emergency Medicine,

reported that the Major Trauma Clinical Effectiveness audit programme had been under development since the mid 1990s. The war fighting phase of Operation Telic 1 (Iraq, 2003) provided an opportunity to test it on a major operation.

Staff were trained across the deploying Role 3 units (Primary Casualty Receiving Ship RFA Argus and 22, 33, 34 and 202 Field Hospitals) to collect the trauma data and performance indicators in a standardised manner. Data continued to be collected in the enduring operation and was used to stimulate regular trauma clinical case conferences. This allowed discussion of the strengths and weaknesses of clinical care in near real-time, and populated a Trauma Register at the Royal Centre for Defence Medicine. The capability to manage the trauma data to improve operational effectiveness had improved substantially by the second half of 2005, with the establishment of a Trauma Research Nurse and Military Data Manager to support the Trauma Nurse Coordinator. Opportunities to collaborate with our allies to pool and compare outcomes are now being actively exploited.

Staffing and the Professional Skills Mix

The range of trauma cases seen at 202 Field Hospital and 34 Field Hospital was similar to the experiences reported in other recent conflicts. In general terms during war, those casualties surviving to hospital care will be a fortunate and self-selecting group, with a high chance of survival if offered competent care. Limb injuries form a large proportion of the survivors, as casualties with serious chest and abdominal wounds do not often appear to survive to reach hospital care. This has implications for the staffing and professional skills mix of field hospitals, in that surgical casework will be predominantly orthopaedic.

Anticipation and flexibility in planning

On deployment, the hospitals were staffed, equipped and configured to templates which were drawn up long before *Operation Telic*, primarily for operations in central Europe, and refined by the experience of the First Gulf War, of *Exercise Saif Sarrea II*, and of annual 'dry run' exercises and camps. The unforeseen surge of "specialist" Iraqi casualties caused particular and urgent pressures on the logistic chain for specific items, for example burns dressings and children's airways for anaesthesia. Fortunately, the breadth and depth of experience of the clinicians and nurses, combined with the foresight of individual doctors in bringing items of paediatric equipment in their personal kit, afforded a range of capabilities to the hospital which had not been foreseen by the planners, and crisis was avoided.

The *Operation Telic* field hospital experience teaches how military planning must take much greater account of the care and repatriation of civilian casualties, including young children and women and expectant mothers. Hospitals may also have to act as a recovery and holding centre for the duration of a conflict, until safe conditions can be guaranteed back home.

Planning must also take into account the administrative challenges of dealing with displaced populations, and resource this area adequately with personnel and

translators. The complexities on *Operation Telic* of repatriation of Iraqi civilians were particularly challenging in the case of young children for whom it was difficult to track down adult family members. A small number of patients were also transferred to the UK for specialist care, for example those with extensive burns. This caused considerable difficulties both for the authorities and for the Iraqi families concerned.

Multidisciplinary case management

The key to clinical success at the field hospitals and across the medical deployment was the co-operative working between healthcare professionals at all levels. This drew upon a breadth and depth of cross-speciality expertise from civilian life. The needs of the situation demanded flexibility to achieved the best clinical outcomes, and a degree of improvisation with personnel, skills and equipment which was well known to our predecessors in civilian practice, but which is now less familiar to the intensively regulated working environment in civilian NHS practice. Simplicity of approach and equipment works well in austere environments.

The organisation of supporting and diagnostic services

There is a tension between the need to provide as full and useful a range of diagnostic services as possible to clinicians in field hospitals, if early diagnosis and treatment is to be optimised; and the military constraints of logistics and service support. The field environment is not conducive to the care and maintenance of complex and delicate electronic instruments, and the desert heat and dust is particularly disruptive to the efficient working of laboratory equipment. Conversely, the provision of a robust range of services ensures optimum clinical care, and is an aid to efficiency.

One example of a clear deficiency on Operation Telic lay in the lack of a simple and reliable diagnostic histopathology system which would allow preserved tissue specimens to be sent back to base laboratories for analysis. For example, a significant number of troops with relatively minor skin conditions were sent back to Cyprus for diagnostic biopsies, when a simple courier system would have allowed them to have their biopsies in theatre field hospitals.

Areas for greater debate include the provision of advanced diagnostic imaging systems. The problems faced by 202 Field Hospital in getting its MTSF equipment to work suggests that the deployment of equipment such as CT scanners would have been fraught with technical difficulties, and pragmatic solutions involving host nation diagnostic facilities would be preferable where these are available.

Specialisation and Peacetime Training for Wartime clinical practice

The challenges of clinical management of complex trauma and disease patterns in war are difficult to replicate in peacetime. A broad range of clinical and nursing skills, experience and judgement can only be acquired over many years and from a range of different jobs. Over the past century, and particularly since the Second World War, there has been progressive specialisation in trauma management - for example, in the separation of general and orthopaedic surgery. This process continues across the surgical skills spectrum. Until the past decade, most general and specialist surgeons

were specifically trained for breadth of experience over a range of disciplines, and this training served the field hospitals very well when staff were confronted with a broad range of civilian problems.

Modern professional practice in the UK and elsewhere is now focused to a much greater degree on sub-specialisation from very early on. For example, it is highly unlikely that the country will continue to produce general surgeons who have spent at least six months training in all of the disciplines of surgery, including plastic, head and neck, orthopaedic, soft tissue, urological, vascular, gut and abdominal surgery. In particular, peacetime surgeons in the UK get very limited exposure to penetrating trauma and severe burns, which severely limits the scope for training surgeons for conflict trauma. In other parts of the world such as Africa where interpersonal violence remains endemic, the opportunities for experience are broader, and surgeons from Western Europe may need to work in such countries on a regular basis to broaden their experience.

War and conflicts will nevertheless continue to produce a need for surgeons, anaesthetists and other specialists able to work to high standards in testing environments and to undertake a broad range of procedures, with limited resources and no immediate backup. Modern armies are unable to train and retain all of the specialist surgical personnel in peacetime who are needed to provide cover and to meet modern expectations in wartime, and they must call upon civilian reservists as needed. Changes in civilian training and specialisation - and in the civilian legislative environment - are thus bound to influence the practice of military surgery. There will be a much greater dependence upon larger teams of sub-specialists. The 202 and 34 experience illustrates how such teams can work well together to deliver relatively complex specialist care in austere conditions. Here the collocation of plastic and orthopaedic teams allowed for complex reconstructive and revisional surgery for injuries involving soft tissue loss, with minimal delay to casualties for whom immediate evacuation was otherwise impractical.

The continued and appropriate training of specialists to provide appropriate care for combatants and non-combatants in war is essential. Future UK military deployments will be supported primarily by surgeons training and working in civilian hospitals. Civilian clinical and technical skills will need to be supplemented by education and training in the specific doctrines and experiences of military surgery, which might include formally accredited courses, distance learning aids and pre-deployment refresher courses. The success of the medical services on Operation Telic testifies to the effectiveness of such common training strategies and to the flexibility and adaptability of individuals from diverse professional and geographic backgrounds.

Military clinical practice will continue to make specific personal demands of individuals, who must be able, adaptable and prepared for the circumstances of war. These skills and team-building need to be honed through regular military training and operational deployments, which in turn make demands upon the goodwill of civilian employers and colleagues.

The *Operation Telic 1* medical experience thus confers useful lessons for clinical provision

in future conflicts. It demonstrates that surgical and high dependency care can be delivered effectively in an austere environment in an era of progressive civilian surgical specialisation. It illustrates how field medical units, staffed with a broad mix of experienced and well trained individuals, can be assembled and delivered at short notice and perform to high standards of clinical governance in the demanding circumstances of distant expeditionary warfare. The team building approach to consultant working and the development of an esprit de corps served the Defence Medical Services well on *Operation Telic.*

The clinical experience from Op Telic 2 onwards

The principal data repository for hospital admissions during *Operation Telic* has been maintained at the Royal Centre for Defence Medicine.

As reported by Major Paul Reavley and Major John Black, during Operation Telic 3 the emergency department at BMH Shaibah dealt with 1455 new presentations (Figure 1). UK service personnel (UKS) made up 75% (1034) of all presentations; of these 29%were from combat units, 15% from combat support units, 49% from combat service support and 2% from the RAF. No status was recorded for the remaining 5% or their status was unclear from the records. There were 109 trauma calls.

Lt Col J Ollerton and colleagues reported from the Academic Department of Military Emergency Medicine at the Royal Centre for Defence Medicine during the period 01 March 2003 to 30 June 2007 30,195 casualties were seen in serial UK field hospitals on *Operation Telic*. This 52 month period covers the concentration phase in Kuwait prior to war fighting, and all subsequent attendances to the UK field hospital in Southern Iraq at Shaibah Logistic Base.

A number of other papers addressing specific aspects of care and of mental health have appeared in the peer reviewed literature, and in particular in the Journal of the Royal Army Medical Corps (JRAMC or JR Army Med Corps), as referenced at the end of this chapter.

There has also been an important series of generic publications on Conflict Trauma in the JRAMC, integrating the clinical experience of both Iraq and Afghanistan.

One particularly symbolic paper of the changes in the resourcing of field hospitals during *Op Telic* was that written by Sqn Leader David O'Reilly and Gp Capt J Kilbey on the first 100 CT scans performed in a UK Field Hospital. On 15 March 2005, a Phillips Brilliance 6-slice CT scanner (Koninklijke Philips Electronics NV, Netherlands) was installed at the MND(SE) Hospital at Shaibah Logistic Base. A picture of this instrument forms a fitting end piece to this chapter.



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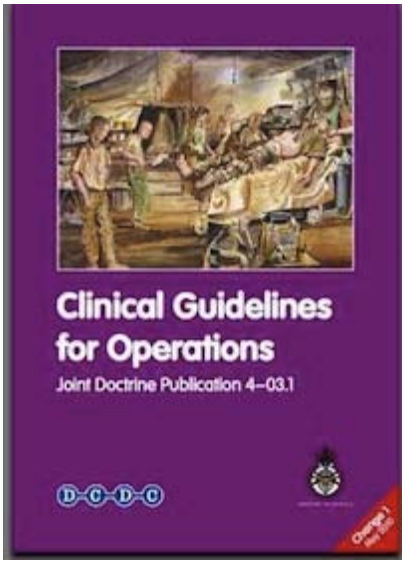
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Blood, Heat + Dust: Second Edition

Operation Telic and the British Medical Deployment to the Gulf 2003 -2009

Chapter 24:

The Academic Foundations of Military Medicine during Operation Telic



We have already seen in this book how a transformation in the delivery of clinical trauma care emerged during Operation Telic, through the eyes of the front line medical teams.

The Defence Medical Services have always been underpinned by an academic strategy, which has included the work of the departments of the Defence Professors of Medicine and Surgery; of a number of defence clinical research institutes, including those for Aviation and Naval Medicine; and of Porton Down.

The first decade of the 21st Century was been characterised by a systematic re-examination of the fundamentals of military operational trauma management, driven in particular by the energy and enthusiasm of key individuals, and by a high standard of academic enquiry and publication output.

The systematic academic approach has included:

- A re-examination of individual and collective clinical training and preparation for operational deployments, including the Battlefield Trauma Life Support (BATLS) training programme.
- Optimisation of front line immediate aid, through improved first aid training of all personnel; through appropriate equipment (tourniquets, chest seals); and through formalised protocols and pocket "flip chart" aides memoire for practical use
- training of clinicians to a high standard, through specialist course such as the Definitive Surgical Trauma Skills Course at the Royal College of Surgeons of England, and its progeny, the Military Operational Surgical Training (MOST) Course
- development of the collective hospital trainer at the DMS Training Centre near York
- development of a rigorous operational data collection system (The Operational Emergency Department Register, OpEDAR, and the Joint Theatre Trauma Registry)
- Development of a virtuous process of clinical audit, exemplified by The Major Trauma Audit for Clinical Effectiveness (MACE)
- a systematic study of operational trauma from the point of wounding to forensic and post mortem examination
- expansion of the academic infrastructure, with new professorial and Senior Lecturer appointments
- engagement with civilian NHS, academic and international health agencies, and with coalition military health institutions
- horizon scanning for novel interventions, tools and therapeutics, and the implementation of systems to fast track their safe adoption.
- examination of systems for the rapid dissemination of knowledge and experience to operational and deploying teams. These have included weekly inter-theatre telephone case conferences.
- Changes to the arrangements for clinical and trauma governance, as explained in a later chapter by Lt General Lillywhite

In consequence, there have been radical changes in the multidisciplinary approach to

trauma care in the Defence Medical Services; in the scientific approach to the understanding of management of the pathophysiology of trauma; in the provision of appropriate equipment for the task; and in the training of personnel to understand and apply the new techniques and approaches.

The Royal Centre for Defence Medicine

A decision was taken during the 1990s to consolidate Defence Medicine in Birmingham. This led to the development of two component institutions, which are now subsumed into the Royal Centre for Defence Medicine, RCDM:

1. The clinical Service

Selly Oak Hospital became the principal clinical unit for acute trauma cases returning from operations from 2003 onwards. Some 110 military medical personnel were working within the MOD Hospital Unit at the University Hospital Birmingham NHS Trust (UHBT) by 2009. UHBT also became the focus for the MoD's aeromedical evacuation capability, superceding the NHS RAMP casualty distribution strategy, which was in operation at the start of Operation Telic.

The Defence Post Graduate Medical Deanery, which was located in Portsmouth, is now also based in Birmingham. From September 2001, military nurse training also progressively transferred from Portsmouth to the Defence School of Healthcare Studies at the University of Central England in Birmingham, in order to deliver all nurse training at the University of Central England by academic year 2006–07".

2. The Academic Infrastructure

The Academic Centre for Defence Medicine was formally opened and became operational on 2 April 2001. It was renamed the Royal Centre for Defence Medicine in April 2002. It replaced the Royal Defence Medical College that was located in Gosport and was formally closed at the end of March 2002. The Operational Health Research Division was created in April 2004 in Birmingham.

RCDM gradually expanded as various of the academic units and professors relocated to Birmingham during the period of Op Telic

The Academic Department of Emergency Medicine, ADMEM

ADMEM became an early driver for change under the enthusiastic direction of Colonel Professor Tim Hodgetts CBE, Professor of Emergency Medicine, and research driven colleagues.

The achievements of ADMEM are summarised in the following section, which is abridged from the paper published in JRAMC in 2007 by J Smith, T Hodgetts, P Mahoney, R Russell, S Davies, and J McLeod.

Trauma governance in the UK Defence Medical Services

"Clinical governance is concerned with the application and enforcement of good clinical practice and the management of military trauma patients is no exception. To this end, a framework of governance has been implemented to facilitate best practice, and to ensure that Service personnel who are seriously injured on deployed operations receive exemplary care. This paper describes the processes in place to capture data, interpret the data, and audit the process of trauma management in the UK Defence Medical Services.

The Major Trauma Audit for Clinical Effectiveness (MACE)

"MACE is a cyclical process of continuous quality improvement through clinical audit. Data on all seriously injured casualties treated by UK Defence Medical Services (UK military, coalition forces, detainees, civilian population) is collected by the deployed Trauma Nurse Co-ordinator and returned to the Joint Theatre Trauma Registry (JTTR) maintained by ADMEM at the RCDM in Birmingham. JTTR holds continuous data on this cohort from 2003, coinciding with the start of hostilities in Iraq. Returns are electronic (where deployed IT systems allow), with hard copy accompanying UK military patients evacuated to RCDM for definitive care.

The default entry criterion for UK JTTR is a casualty who triggers trauma team activation in a deployed field hospital or Primary Casualty Receiving Facility afloat (Role 2 Enhanced and Role 3).

Evaluation of outcomes

All injuries are coded using the Abbreviated Injury Scale (AIS) and patients are then scored on the basis of injury severity, using Injury Severity Score(ISS), New Injury Severity Score (NISS); the "A Severity Characterisation of Trauma" (ASCOT) predictive tool; and the The Trauma Injury Severity Score, TRISS.

Standards for individual aspects of clinical care are measured by performance indicators (PIs), which are based on best available evidence. 68 PIs are currently captured in the following nine domains: prehospital care; emergency department resuscitation; operative care; critical care; post-operative care; ward care; follow-up care; and burns.

The entry criteria to MACE were expanded in 2007 to include all trauma patients returned to RCDM for definitive treatment, irrespective of whether a trauma team response was mandated. The continuous improvement of care is thus related to two distinct processes:

i. A systematic evaluation of outcomes, performance indicators (PIs) and the analysis of all deaths, that are published as internal reports.

ii. Near-real time clinical feedback from RCDM through weekly Joint Theatre Clinical Case Conferences (JTCCC), conducted by telephone.

All UK Service deaths from trauma are also subject to post mortem (pm) examination on repatriation. A representative of ADMEM attends all pms and records the detailed findings within JTTR, subject to confirmation on receipt of the formal report of the Home Office Pathologist.

Education and the MACE process

"Education is an essential component of the MACE process. The accuracy of JTTR is entirely dependent on the quality of data collected by the Trauma Team Scribe and the deployed Trauma Nurse Coordinator (TNC). Education for deploying TNCs is undertaken within HOSPEX, the hospital exercise that forms part of pre-deployment training for operational medical units.

Day-to-day feedback on clinical outcomes and post mortem findings is provided from ADMEM to deployed TNCs by phone or e-mail. Regular in-theatre Trauma Clinical Case Conferences have been encouraged since 1999, but these have been succeeded by the weekly JTCCC. This telephone conference has proved to be a powerful driver for immediate change.

Critical event reporting

Critical event reporting and analysis of both clinical practice weaknesses and emerging injury trends have been used to trigger organisational change. Reporting is by patients returned to RCDM and by deployed clinicians. Formal academic review is used to shape policy, pre-deployment training and operational clinical doctrine and practice. Examples have included the provision of topical haemostatics, the effectiveness of battlefield analgesia, the competencies of the Medical Emergency Response Team (MERT) and a timelines review in relation to outcomes.

Clinical effectiveness in managing the individual patient is assessed by:

i. Identification of unexpected survivors and unexpected deaths using TRISS and ASCOT scores.

ii. Peer review of all deaths and peer review of all unexpected outcomes. Unexpected deaths identify system weaknesses, whereas unexpected survivors identify system strengths that require reinforcement.

Benchmarking of system effectiveness against military allies delivering combat casualty care and against NHS standards is an important component of trauma system quality assurance. Benchmarking tools include the Standardised Mortality Ratio (SMR); the number of unexpected survivors in a matched trauma population, performance against specific clinical performance indicators, and clinical timelines.

Operational trauma reports

As a product of MACE, trauma registry analysis reports have been periodically produced for specific phases of deployment. These serve as a summary of the

epidemiology of injury and an aid to planning of future resource use. JTTR analysis informs changes to equipment and clinical practice, and providing the necessary background to support proposals for both clinical and protective systems research.

There is close liaison with Defence Analytical and Statistical Agency (DASA) in the preparation of reports to ensure consistency in published data (Killed In Action, Died Of Wounds, Wounded In Action, Casualty Fatality Rate) and expert advisory support from both Defence Science and Technology Laboratories (DSTL) and Defence Clothing Implementation Project Team (DC IPT).

The Operational Emergency Department Attendance Register (OpEDAR)

This is a log of patients who have attended the Emergency Department (ED) of a Role 2 Enhanced (R2E) or Role 3 (R3) facility on operations. It is described in detail in a paper by R Russell and colleagues from ADMEM and the Defence Analytical Services Agency, which is abridged as follows:

"OpEDAR was started in February 2003 by the staff of 22 Field Hospital in Kuwait prior to war fighting in Iraq (Operation Telic 1). Before this there was no audited record of activity within a deployed Emergency Department (ED) to guide plans for manning, equipment, organisational processes and training.

It began as a hand-kept record in a paper register that was completed by the duty ED doctor at the end of each ED patient episode. This facilitated a more accurate representation of the diagnosis than relying on the presenting complaint recorded by the medic or nurse in the ED Reception register. Successively deployed Emergency Medicine (EM) Consultants have delivered the doctors' parallel register created during their tour to ADMEM at the Royal Centre for Defence Medicine.

The ED Reception registers from serial field hospitals have historically been forwarded to the Ministry of Defence Central Health Records Library. Data for the concentration phase (11 February-26 March 2003) and war fighting phase (27 March to 01 May 2003) of Operation Telic were independently analysed by Defence Science and Technology Laboratory (DSTL) in 2003 to underpin an internal casualty modelling exercise required for future manning assumptions.

Support from the Defence Analytical Services Agency (DASA) in 2006 allowed the creation of an electronic database, which coincided with the development of electronic capture of OpEDAR data in Iraq and Afghanistan.

The database is maintained by the ED staff with the EM Consultant and Trauma Nurse Coordinator taking overall responsibility and providing weekly returns. This article describes the data cleansing and validation techniques used in the creation of OpEDAR and looks at the headline results from the combined attendances recorded during Operation Telic 1-8.

Validation of data held on OpEDAR against four other data sources shows that OpEDAR is accurate, but that accuracy can be further improved. 26,746 ED

attendances recorded on Operation Telic from 19 March 2003 to 11 November 2006. 21,112 (78.9%) were UK military personnel. 43.5% were admitted from ED. Attendances peaked during Operation Telic phase 2 (422.9 per 1,000 troops deployed), but settled to around 200 per 1,000 troops deployed in later phases.

Ophthalmology rates peaked in Operation Telic 2 to 20.72 per 1,000 and later fell to a stable 10 to 15 per 1,000. This suggested that preventative measures that were introduced for eye injuries were ineffective or incompletely used.

Rethinking trauma care

Professor Hodgetts and colleagues discussed in the Journal Emergency Medicine, how the "ABC" of ATLS has now been replaced by "<C>ABC", where "<C>" stands for "catastrophic haemorrhage"

"Military practitioners have been uncomfortable with the ABC of ATLS, because external peripheral haemorrhage is the leading cause of combat casualty death. Champion et al estimated that 10% of all battlefield deaths are caused by haemorrhage from extremity wounds. On analysis of data from the Vietnam War, the Wound Data and Munitions Effectiveness Team identified that bleeding from limb wounds accounts for more than half the potentially preventable deaths in combat, and that 7% of combat deaths may have been prevented by using a limb tourniquet. The Israeli Defence Force confirms the importance of external haemorrhage control in managing ballistic casualties, as does ongoing US and UK experience in Iraq.

The UK DMS introduced several novel haemostatic products after April 2005. These are a new field dressing, a self applied arterial tourniquet and active haemostatic agents (Quikclot and HemCon). The continuing operational analysis of these products by military clinicians in Iraq and Afghanistan repeatedly identified lives saved.

Battlefield Advanced Trauma Life Support (BATLS)

This has previously adhered closely to Advanced Trauma Life Support (ATLS) principles, but has moved to <C>ABC for the management of military casualties with blast and ballistic injuries. When control of catastrophic haemorrhage has been achieved, ABC is dealt with along the conventional trauma paradigm.

BATLS defines four stages of military trauma care:

- Care Under Fire,
- Tactical Field Care,
- Field Resuscitation (care at a regimental aid post by a primary care doctor and military medics) and
- Advanced Resuscitation (by a team of consultants at a field hospital).

In these successive stages, BATLS also recognises that care needs to be modified according to the tactical threat. Although this sounds self evident, the authors have all

experienced situations in which prehospital providers have become fixated with carrying out a procedure (often intravenous access or spinal immobilisation) rather than moving to an appropriately safe location first.

Other Academic Projects in Defence Medicine during Operation Telic

Mild traumatic brain injury

The Ministry of Defence released details of its project looking into the effects of mild traumatic brain injury (mTBI) on military personnel serving on operations in January 2008, in response to concerns that mTBI can result from relatively minor head injuries or exposure to blast, and can arise in a wide variety of circumstances, occurring in both military and civilian life.

The Defence Medical Services were already screening for symptoms and signs of brain injury all those personnel with multiple injuries admitted to MoD's main rehabilitation centre at Headley Court.

Recognising the need for further research, Surgeon General Louis Lillywhite, initiated a project in June 2007 to investigate the historical, clinical and laboratory context of mTBI and make recommendations concerning future management, clinical care, education and research. The project team noted that civilian evidence suggests 80% of Traumatic Brain Injury (TBI) is mild and 80% of cases will be symptom-free within three months of the injury occurring.

The Royal Centre for Defence Medicine identified 585 cases of casualties with TBI (whether mild, moderate or severe) out of a total of some 36,000 attendances for any injury to deployed UK operational emergency departments since early 2003 - the majority of which were for minor ailments with no requirement for admission or further treatment. This represents 0.5% of the deployed UK military population.

The project provides a baseline for further work that is already in hand. A four-level protocol is being established, education material for all personnel on operations has been developed and an assessment questionnaire has been introduced to help medical staff identify mTBI cases at the time of injury and to enhance surveillance and research".

Collaboration with the Defence Analytical Services and Advice (DASA): Improvements to Patient Tracking and Analysis

The MoD was sensitive to accusations that it is concealing casualty data, and adopted an open approach to publishing reliable and validated casualty figures for Operation Telic on a fortnightly basis.

For the period from 1 January 2003 to 31 December 2005:

Limited data was available. Centrally sourced records showed that 33 UK military personnel were categorised as Very Seriously Injured from all causes excluding disease, and 78 were similarly categorised as Seriously Injured.

The data for later phases of Operation Telic were much more complete.

For the period from 1 January 2006 to 15 March 2009:

315 UK military and civilian personnel were admitted to UK Field Hospitals and categorised as Wounded in Action, including as a result of hostile action. 3,182 UK military and civilian personnel were admitted to UK Field Hospitals for Disease or Non Battle Injuries. 40 UK personnel were categorised as Very Seriously Injured from all causes excluding disease. 70 UK military and civilian personnel were categorised as Seriously Injured. 1,835 UK military and civilian personnel were aeromedically evacuated from Iraq on medical grounds, whatever the reason.

The more open and inquisitorial approach to operational health care data led to a closer cooperation with DASA. The Defence Patient Tracking System (DPTS) became operational on 8 October 2007. Data are compiled by the Defence Analytical Services with input from the DPTS, which was set up to capture in situ data for aeromedically evacuated patients along the care pathway. Since October 2008, the figures presented include Armed Forces personnel that have returned on routine flights and subsequently been referred to DMRC for an operational-related injury or illness.

The DPTS runs in parallel with other medical records systems. Personal medical records are held on the Defence Medical Information Capability Programme. Welfare records are held in single Service welfare databases. Personnel and demographic details, these details are held on Joint Personnel Administration system.

The following DASA report provides statistical information on Armed Forces personnel returned to the UK from Iraq and Afghanistan as a result of an injury or illness that have been treated at the Royal Centre for Defence Medicine (RCDM) and the Defence Medical Rehabilitation Centre (DMRC) Headley Court.

Between 8 October 2007 and 31 December 2007, 121 patients from Operation Telic were treated at either RCDM or DMRC. 66 were Battle Injuries, 38 were Non Battle Injuries and 17 were Natural Causes.

Between 1 January 2008 and 31 December 2008, 281 patients from Operation Telic were treated at either RCDM or DMRC. 73 were Battle Injuries, 122 were Non Battle Injuries and 86 were Natural Causes.

Between 1 January 2009 and 30 June 2009, 164 patients from Operation Telic were treated at either RCDM or DMRC. 42 were Battle Injuries, 80 were Non Battle Injuries and 42 were Natural Causes.

Key events analysis from Operation Telic using the OpEDAR Register.

In a paper presented at the UK Tri-Service Emergency Medicine Conference 2009, and published in JR Army Med Corps 155(3): 226-232, D Hunt, P Page and JE Smith

charted the relationship between key events during British military operations in Southern Iraq and battle casualty numbers. Data were gathered on all battle injuries from British Forces since the start of Op Telic 1 to February 2009. Non-battle injuries were excluded. The results are shown in the following Figure.

Conclusion: Higher battle injury numbers occurred during the war fighting phase [1] and the highlighted handover period [2]. Points 3-5 illustrate the fluctuating nature of unconventional warfare with peaks and lows corresponding to the highlighted events.

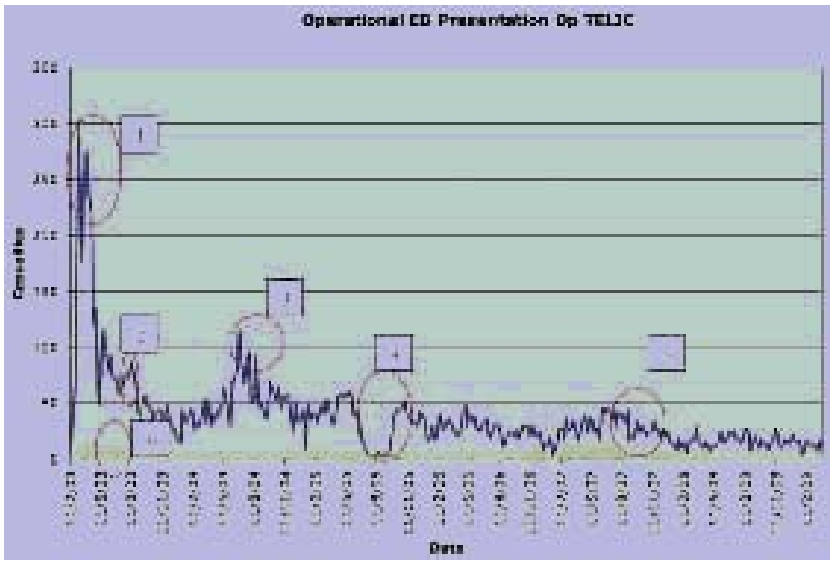


Figure: Operational ED presentation on OP TELIC Key: Blue – OpEDAR; Yellow – JTTR]. 1. February-May 2003 - war fighting phase. 2. July-August 2003 - 1 UK Armoured Division hand over to 3 [UK] Division in Basra. 3. June-August 2004 - sovereignty transfer from Coalition provincial authority to Iraqi government, the Defence of CIMIC House in Al Amarah, and the trial of Saddam Hussein begins. 4. June-November 2005 - few offensive operations, the Basra Prison incident, further activity in the Hussein trial, build up to Iraqi elections. 5. May-September 2007 - provincial handovers throughout MND[SE], handover of Basra Palace, Jaish AlMahdi ceasefire. 6. June 2003 - closely spaced attacks in Majar Al Kabir.

Joint Doctrine Publication (JDP) 4-03.1: Clinical Guidelines for Operations (CGOs)

Joint Doctrine medical publications provide an important vehicle for the standardisation of best practice and for the dissemination of clinical lessons learned to an audience of military health professionals from a wide range of clinical and organisational backgrounds. CGOs replace Casualty Treatment Regimes (CTRs) that were produced in 1986 and 1993.

CGOs are designed to provide a logical and consistent approach to emergencies in operational medicine and are to be used to guide critical decision making. The publication also guides those responsible for developing medical capability across the Defence Lines of Development (DLOD)

Independent appraisal of improvements in governance standards in the DMS

In the spirit of critical inquiry and search for improvement, Surgeon General Louis Lillywhite invited the Health Care Commission to appraise the work of the DMS in the context of modern governance standards.

The Armed Forces healthcare review was published in April 2009.The review identified several areas of exemplary practice and areas for improvement. It recommended that DMS initiatives were shared with NHS and independent healthcare providers.

Under Secretary of State for Defence, Kevan Jones, said: "We are committed to delivering first class medical care for our people - that is why we invited the Healthcare Commission to provide this first-ever independent assessment of our practices. I'm very pleased that the commission has described our key services for those injured on operations as exemplary. Now I want to ensure that this glowing assessment is matched across the Defence Medical Services. Where areas for improvement have been identified, we are all determined to see changes made. I have asked the Surgeon General to take forward our detailed response to this review, beginning immediately."



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Operation Telic and the British Medical Deployment to the Gulf 2003 -2009

Chapter 25:

Strategic Aeromedical operations from Iraq



Medical staff and ambulance staff wait at Birmingham airport for the Tristar to taxi to a halt:
[Picture: SAC Andrew Seaward]



RAF Tristar trooping aircraft on the flight pan at RAF Akrotiri, May 2003 Photo Author

Introduction Strategic Fixed Wing Air Evacuation

The Strategic Aeromedical transfer and evacuation of casualties has been a central element in the advance in standards of trauma care over the past decade in Iraq and elsewhere.

Fixed wing aircraft allow the rapid movement of patients under medical supervision between treatment facilities over hundreds or thousands of miles by air. Aeromedical evacuation imposes a number of practical problems, arising from the limited space on most aircraft; from the conditions of flight, including noise, vibration, pressurisation and depressurisation; from the need for dedicated aeromedical attendants; from the distance and time over which the casualty is isolated in the aircraft from land based medical resources during flight; from the physiological constraints of the human body in flight; and from the unpredictable risks of flight, including diversion to alternative landing sites where suitable medical facilities for continuing care may not be available. In general, the benefits should outweigh the risks, the destination facility should offer higher standards of care than the originating facility, and the standard of care in the air should be as good as the originating facility.

There is no medical condition that absolutely prevents aeromedical evacuation. However, there are many diseases that can be adversely affected because of the special characteristics of air travel, and their effects on body function and physiology. These include gaseous expansion with depressurisation at altitude; hypoxia, motion sickness, anxiety, fatigue, cold and dehydration.

It is difficult to perform even simple medical procedures on an aircraft. Patients should thus be in the most stable attainable state before flight, and all eventualities must be anticipated for necessarily unstable patients, with an experienced medical team in attendance.

A brief history of strategic aeromedical operations

Aeromedical operations have been central to the success of the military medical operations as to many other aspects of warfare over the past century. The technology is relatively new to the history of warfare, but is now well established and relatively mature. Future improvements in aeromedical operations seem likely to come from better communications and updating of systems management rather than from improvements to airframes and core equipments.

In 1909 in the United States, two army officers, Capt. George HR Gosman and Lt. Albert L. Rhoades, built the first air ambulance. The pilot was also a doctor, who sat beside the patient. On its first powered flight the machine crashed into a tree. The US War Department was unimpressed, and the cause of dedicated air ambulances was not immediately advanced.

During World War I, casualties were generally flown in unmodified aircraft. However, the French experimented with modifications that would allow stretcher patients to be carried. In 1919, the Royal Air Force carried casualties by air in DH-9 aeroplanes during the Somaliland campaign, and in 1923 in Kurdistan.

Large-scale aeromedical evacuation was developed by the Germans during the Spanish Civil War (1936-1938). Casualties were taken 1600 miles on a 10-hour flight from Spain to Germany in JU-52 aircraft, configured to carry ten stretcher patients and up to eight ambulant cases. On a route crossing the Mediterranean and the Alps at altitudes of up to 18000 feet oxygen was available, but the aircraft did not have heating systems.

During World War II, most warring states developed organised systems for aeromedical evacuation over tactical and strategic distances. For example, the British used light aircraft in jungle clearings in the Burma campaign, while the DC3 Dakota was a ubiquitous transport. Fixed wing aeromedical evacuation increased exponentially through the period, as in evacuation from forward to rear hospitals in North Africa, Italy and North West Europe.

By late 1945, the US Army Air Corps had transported over 1.25 million patients. The growth in jet travel massively advanced the range, payload and sophistication of civilian and military air casualty transfer operations. The development of rugged short take off and landing (STOL) aircraft - ranging in size from small, single-engined aircraft to large transports such as the Lockheed C130 Hercules and the C17 Globemaster - extended this concept into less accessible parts of the world.

The speed, reliability and casualty friendly technology (warmth, electrical power, pressurisation) of modern jet transports has also allowed casualties to be moved much sooner after the point of wounding, and in a much more acute state than in the past. Thus, much casualty movement from Iraq and Afghanistan, including that of severely injured, ventilated and intensively managed patients, has been within the first 24 – 48 hours after injury, rather than in the convalescent phase.

This has allowed a substantial increase in the sophistication of care, in that severely wounded casualties can be treated in base hospitals with a level of material input and

sophistication that is not achievable in forward hospitals. It has also allowed forward surgical teams to treat much more complex injuries, in the knowledge that there will be early follow through from base hospital teams with access to a wide range of specialist tools and skills.

Medical and Health Challenges for Aircrew

Military aviation medicine must address the particular problems of flight and aircrew across the spectrum of aircraft performance and role. Thus, fast jet pilots must be equipped and trained to deal with the challenges of acceleration and deceleration and G forces during manoeuvres. Long-range transport crews must be equipped to deal with regular changes in time zone and body clock, particularly during high intensity operations.

Through the ages, non-explosive weapons - including knives, swords, spears, machetes, arrows, stones and shot – have accounted for countless lives. 'Conventional weapons' is a term which is generally used to describe those means of killing and wounding which use a chemical explosive to generate heat, blast and the kinetic energy of flying metal and fragments. They include the rifle, machine gun, mine, artillery, cannon and mortar shell. These weapons can produce an immediate effect, or a delayed effect with fuses, booby traps and timers.

Other conventional weapons include napalm, delivered by flame throwers or bombs, and technologies such as laser weapons which can be used to blind pilots attacking ships. At the extreme scale of effects, some volatile fuel air explosive blast-effect weapons produce damage equivalent to small nuclear weapons. The kinetic and thermal energy of a fully fuelled civilian airliner crashing into a tall building also produces devastation on this scale.



RAF Boeing C17 Globemaster in flight: Photo MoD



Medical team transfer in a C17 Globemaster: Photo: Lt Col Paul Parker

The Strategic Casualty Evacuation Plan for Iraq

The strategic Aeromedical plan was based on the transfer of casualties to the UK in two phases. The plan had to adapt to the restrictions on the entry of commercial airliners into the war zone, and limitations on access of these aircraft into controlled military airspace. The solution adopted was to make the strategic evacuation in two stages. RAF VC10s and Lockheed Hercules medium range transports from the Middle East to Akrotiri in Cyprus; chartered commercial Boeing 757 aircraft, fitted for up to twenty stretcher bays per flight, then made the further transfer to the UK.

Elements of 1 Aeromedical Evacuation Squadron (1 AEvacS), 2 Aeromedical Escort Squadron (2 AES) and an intensive care team from 612 Air Transportable Surgical Squadron deployed to an airhead in Kuwait to effect the transfer of patients from medical facilities in the theatre of operations to RAF Akrotiri. In addition two Critical Care Air Support Teams were deployed to the airhead to effect the transfer of those requiring intensive care.

The RAF chartered 757s from Britannia and Monarch Airways. These aircraft were converted to the aeromedical role. The stretcher fits were convenient and relatively comfortable, and the volunteer aircrew from Britannia and Monarch airlines adapted well to the role.



A Boeing 757 of Britannia Airlines such as those used for aeromedical evacuation (Photo Britannia Airlines). Monarch Airlines 757s were also used.



20-bed 757 stretcher fit, Operation Telic.
Photo: Sqn Leader Giles Becker RAF



Aeromedical evacuation flight in a converted Boeing 757 during Operation Telic.
Photo Sqn Leader Giles Becker RAF



Preparing stretcher fits in a 757 in April 2003 (Dr Norman Carr, RAF Reserve, consultant pathologist at Southampton General Hospital)



The aeromedical operations room at RAF Akrotiri, Operation Telic (Dr Norman Carr).



RAF VC10 Stretcher fit (Photo Bob Tipping)

Strategic aeromedical evacuation flights

The RAF personnel on aeromedical flights include Medical Officers, Flight Nursing Officers, and Flight Nursing Attendants. It was possible to give 'intensive care in the air' to seriously ill casualties in a one-bed Intensive Care Unit, equipped with monitors and ventilators. Each intensive care team included an Anaesthetist, an Intensive Care Specialist Nurse, a Flight Nursing Attendant, and a Technician. One such patient needing this level of care was an Iraqi man who had allegedly washed his car in (very cheap) petrol, then sat in it and lit a cigarette. The resulting burns were so extensive that he was evacuated back to the UK for treatment.

There were also several 'sea-level flights'; penetrating head trauma was the most common reason. Although this is a simple matter to arrange, it requires more fuel as the aircraft has to fly lower and slower than conventional flights.

RAF Akrotiri

The Princess Mary's RAF Hospital at RAF Akrotiri on the south coast of Cyprus was the aeromedical interface of casualty transfer during Operation Telic. It has a major airfield and is a fully equipped hospital with operating theatres, radiology and pathology departments, and a helicopter landing pad. In peacetime only a few wards are open, but its facilities can be expanded to support operations as required. The co-location of medical facilities near airstrips offers considerable advantages, since the aircraft, the patients, the medical supplies and the logistic support are all in the same place.

Most UK service patients returned home to the UK or to bases in Germany through Akrotiri. Most arrived by tactical aeromedical flights from an airfield in Kuwait, and later in southern Iraq. RAF VC10s made regular flights between Akrotiri and these forward positions. A few patients arrived from elsewhere in the Middle East, often in Hercules aircraft, and there were some 'locally generated' patients from the Cyprus base.

On arrival at RAF Akrotiri, the patients would be moved to The Princess Mary's Hospital if their stay was expected to last more than six hours. Transit patients were otherwise housed next to the airfield in a hangar known as 'the shack'.

The aeromedical evacuation team at RAF Akrotiri could evacuate up to fifty patients every twelve hours. Fortunately, at no time during the conflict did the demand approach this capacity. The busiest 24-hour period saw fifty-eight patients evacuated. During the period of hostilities some seventy patients were evacuated per week, with an average of twenty per flight. Some 10% of these patients had battlefield injuries; a further 10% were psychiatric cases. The remainder included casualties of road traffic accidents, and patients with general medical conditions, including backache and piles. One evacuee had been picked up and thrown forty feet by a mini tornado, and another was thrown to the ground when the vehicle he was standing on was struck by lightning.

On arrival in the UK, patients who did not require hospital treatment were discharged at the airhead back to the care of their Unit Medical Officer. Any patients requiring

hospitalisation became the responsibility of the NHS. Civilian ambulance teams and doctors would be waiting at the airfield ready to receive patients and distribute them round the designated NHS hospitals. Aeromedical evacuation flights landed at a variety of different regional airfields during Operation Telic, and hospitals throughout Britain were used.

Flt Lt Caroline Dadds, a nursing officer in Accident and Emergency at the Royal Centre for Defence Medicine, records that:

> "On 5th March 03, a flight of ten regular Royal Air Force personnel were deployed to RAF Akrotiri on strategic Aeromedical Evacuation duties, to work alongside three flights of reservists from 4626 RauxAF Squadron. The flight consisted of one doctor, five nurses and four paramedics. There was a variety of aeromedical experience within the flight, some personnel having had no prior experience at all: this made for a challenging and interesting tour. Through sharing experiences, teaching and practicing scenarios with 4626 personnel, the flights prepared for their duties. These continued until 12th May when they returned to the UK, leaving a small contingent of the 4626 RauxAF Sqn personnel behind.
>
> "During the two months the flights escorted patients on a rotational basis from RAF Akrotiri to various locations in the UK, including Birmingham, Liverpool, Bristol, Luton and Edinburgh. On one occasion the flight collected patients directly from Kuwait.
>
> "We flew in chartered 757's which were hired for thirty days at a time. The aircraft capacity was twenty stretcher and approximately thirty sitting patients. They were extremely comfortable, good to work in and reliable. Occasionally RAF aircraft were used, including the C130 Hercules. On average the teams flew 1-2 times per week and escorted up to forty patients.
>
> "The tour was a successful one with the flights working well together, learning much and taking British military personnel home speedily and in comfort".

In all, some 1200 patients were 'aeromed' between 1st March and 31st April 2003, on thirty-five military and thirty-eight civilian flights. There were no deaths in transit. Battlefield casualties continued to arrive at Akrotiri after the official end of combat operations on1st May. By October 2003, over 2000 patients had been evacuated from RAF Akrotiri.



Makeshift system for the transfer of stretcher casualties from RAF VC10s to civilian airliners at RAF Akrotiri: Photo Sqn Leader Giles Becker



An Air Escort Team from 4626 Sqn RAF Volunteer Reserve (Photo Giles Becker)

Critical Care Air Support Teams

Wing Commanders Simon Turner and Martin J. Ruth from Tactical Medical Wing, Royal Air Force Lyneham reported on the work of the CCAST team in a paper for the NATO Research and Technology Organisation given to the NATO Human Factors and Medicine Panel meeting in Siegburg, Germany 2-3 December 2008.

"Critical Care Air Support Teams (CCASTs) operate within the United Kingdom Military Aeromedical evacuation chain to transfer critically ill patients to definitive care.

The Royal Air Force (RAF) first undertook significant aeromedical evacuation (AE) in Somaliland in 1919 using a DH9 aircraft modified to carry a stretcher and attendant. The fuselage opened coffin-style to allow the patient complete coverage with the attendant standing fore of the patient with his back to the pilot (Figure 1).

In the modern theatre of war the Royal Air Force (RAF) operates a tactical Medical Emergency Response Team (MERT) that may augment the paramedic/nurse team with a doctor and evacuate patients from the point of wounding. Critically ill patients are returned to the UK using the Critical Care Air Support Teams (CCASTs).

At any time two CCASTs are immediately available for tasking. The in-theatre team (the tactical team) is used to move patients around theatre and the strategic team (based at RAF Lyneham, Wiltshire, UK) is tasked to return patients to the UK or other host nations. A third team is available at 6 hours should another mission be raised while the strategic team is tasked.

The CCAST Team Composition

The RAF provides the CCAST, which comprises of the following specialist personnel:

1. Two Flight nurses trained in intensive care, one of which is the Team Leader.
2. A medical devices technician to maintain the equipment.
3. A Consultant Anaesthetist (and often a trainee anaesthetist)
4. A Flight Nursing Assistant (FNA) who assists with patient interventions, patient transfer and logistics.

Each individual member has a specific role, but the strength of the team lies in the flexibility with which team members cross-cover each other, thus reducing the fatigue associated with long transfers. The team may have to collect additional patients upon arrival into theatre, which may have been generated while the team was already in transit.

CCAST Training

Each member of the team undergoes specific training according to his or her trade. For the Medical Staff this involves Aviation medicine. For the medical, nursing and equipment technicians, there is an intensive, 2 week training course on the equipment used in-flight. All trades undergo a course in aeromedical evacuation and learn the duties of the others. This covers the administrative and safety aspects of missions

including aircraft familiarisation and emergency drills. This is particularly important in team building.

The medical and nursing staff split their time between periods of CCAST duty and work in Ministry of Defence Hospital Units (MDHUs). These are hospital wings attached to National Health Service (NHS) district general hospitals. In this way clinical skills are maintained at a level where the CCAST can deliver critical care, during a transfer, at a level expected in the NHS. This is particularly important for the medical staff as they are also tasked with other anaesthetic/critical care duties when deployed.



Modern CCAST multi-patient lift onboard a C-17 Globemaster

CCAST Equipment

Suitable equipment is central to the operating capability of CCAST. For the RAF, this equipment needs to be portable and independent of aircraft power and oxygen supplies. This maintains the maximum flexibility that allows a high level of patient care to continue in the face of unexpected changes in route and aircraft serviceability issues. A rolling system is used whereby equipment is stored in modular form to allow a second strategic team to operate independently of the first team.

A typical set of kit for a single patient transfer weighs in excess of 500kg. Twenty four hour batteries are used to allow the ventilators and monitors to work independently of the aircraft power system. All equipment has to pass stringent air-worthiness checks. These assess the equipment for its potential to interfere both physically (eg chemicals)

and electronically (eg radio waves) with the aircraft. While this is clearly important it can have the effect of delaying the introduction of newer pieces of kit. The additional stresses of flight and field conditions place extra demands upon the kit, dust and extremes of temperature being particularly damaging. Dry ice packs are carried to reduce the heat stress on the monitoring equipment and ventilator.

Civilian standards for patient transfers are aimed for in many respects but certain environmental differences ensure that enhanced vigilance is important at all times. For example in the noisy environment of an aircraft the clinician cannot rely upon audible alarms. Visual signs may be difficult to elicit in a poorly lit cabin or particularly in tactical darkness. Vibration and the electromagnetic fields of aircraft equipment may cause monitoring artefacts.

A typical CCAST mission

Pre-activation:	Normal daily activities
Zero hours:	Activation of team
03 hours:	Arrival at departure airport
05 hours:	Take-off
13 hours:	Arrival at refuel point
14 hours 20 mins:	Take off
16 hours 45 mins:	Arrival at destination and emplaning of patient
18 hours 15 mins:	Take off
27 hours 15 mins:	Arrival at UK airport. Load to road ambulance
27 hours 50 mins:	Arrival at Role 4 hospital
28 hours 50 mins:	Patient care handed to receiving doctor
29 hours 30 mins:	Return to unit
31 hours 30 mins:	Arrive at unit
33 hours:	Stand down from task

Airframes for Strategic Aeromedical Evacuation

Assets available to the RAF during Op Telic included:

The Boeing Globemaster C-17 This is the latest addition to the RAF's Air Transport (AT) fleet. This has had an impact on how we operate, specifically in regards to how patients are loaded onto the stretcher stanchions. We use a multi-point harness that is tested to 9G with the patient in a head-first position. The position of the emergency oxygen fittings have, however, resulted in a feet-first loading pattern. There are 2 avenues that we currently exploring in order to overcome this problem.

This aircraft's huge load capacity allows us to carry CCAST and AE patients alongside cargo and passengers. Where other passengers are carried, privacy is maintained with a curtain fit which is about to formally enter service.

The C-17 is equipped with power outlets and liquid oxygen (LOX), but these are not used by the CCAST in order to maintain our independence from external sources.

The C130 J/K Hercules The Hercules in its many variants has been a major workhorse of the RAF AT fleet and whilst still heavily tasked is also used for tactical patient moves by the CCAST. The noise levels pose additional problems especially for team communication. A communication solution for the team is being evaluated at present.

The VC-10 The VC-10 remains the fastest passenger aircraft in-flight today. The narrow width of the aircraft can make emplaning patients difficult but all-round access can be achieved with a centre fit and removal of the surrounding seats.

The Lockheed Tristar The three different variants of Tristar (C1, C2 and KC1) are capable of use by CCAST. The stretcher fit allows excellent all round patient access and a privacy fit allows patient care to be undertaken with passengers on board.

Leased Civilian Aircraft When necessary, the RAF can use civilian air ambulances/private jets/commercial flights to meet its strategic requirements, including the Boeing 757 airliner.

CCAST Research Programmes generated by the Iraq experience

Fatigue of CCAST Crews

Crew Resource Management (CRM) is an essential component of aircrew training and within it lies the recognition of the effects of fatigue on performance impairment. While there are strict regulations covering the number of hours aircrew can work, this has not yet transferred to the CCAST environment. Indeed frequently CCAST missions are extended due to the requirement to change aircrew. This is being addressed in two main ways.

Firstly since the first Gulf War in 1991 there has been a progressive expansion in staffing levels, particularly of medical staff. This has allowed the frequency of duties to be reduced. Trainee medical staff are now a routine part of the team as are two members of nursing staff. Secondly there is a research study about to commence specifically looking at the impact of fatigue on clinical judgement and capacity. This is being driven by Clinical Governance and undertaken through the Centre for Aviation Medicine in order that we may see if there is evidence of a decrease in performance, specifically, of medical staff working with critical care patients in the rear compartment of an aircraft.

Enteral Feeding of Casualties

There is recognition of the importance of early enteral nutrition and its potential to improve patient outcome following major trauma and burns. At the present time we are not feeding CCAST patients in-flight. The intention is to start enteral feeding (via the naso-gastric route) at the Role2/3 setting in theatre and continue this throughout AE back to the Role 4 in the UK. There is however the concern that CCAST patients may be at an increased risk of micro-aspiration and hence the development of nosocomial pneumonia. This increase in risk may arise from the inability to raise the patient's head (due to the stretcher harness and any spinal injury) and due to stresses of flight ("G"

forces, coarse and fine vibration and the effects of barometric pressure on air filled spaces – endotracheal cuffs and the gastrointestinal tract.)

In order to determine if CCAST patients are at any increased risk of micro-aspiration we aim to assay tracheal aspirates for pepsin. This will allow samples taken as part of routine clinical care to determine whether we can safely feed patients during transfer. If deemed safe to start feeding, we intend to repeat the study to determine whether there are any additional risks posed by the feeding itself.

Audit: The CCAST teams use data collected from patients and the 'incident reporting system' to audit the whole process, so as to improve safety.

CCAST Workload

For the period from 1 January 2003 to 31 December 2005:

Centrally available records show that:

- 33 UK military personnel were categorised as Very Seriously Injured from all causes excluding disease.
- 78 UK military personnel were categorised as Seriously Injured from all causes excluding disease.

Work continues to verify and validate data for aeromedical evacuations and field hospital admissions in both Iraq and Afghanistan prior to January 2006. Once this data is compiled it will be added to the website.

For the period from 1 January 2006 to 31 July 2009:

Centrally available records show that:

- 315 UK military and civilian personnel were admitted to UK Field Hospitals and categorised as Wounded in Action.
- 3,283 UK military and civilian personnel were admitted to UK Field Hospitals for Disease or Non Battle Injuries.
- 40 UK personnel were categorised as Very Seriously Injured from all causes excluding disease.
- 71 UK military and civilian personnel were categorised as Seriously Injured from all causes excluding disease.
- 1,971 aeromedical evacuations have taken place for UK military and civilian personnel injured or ill in Iraq.

(Reference: Operation Telic Aeromedical Statistics (MoD Factsheet, November 2009)

Onward Casualty Management in the UK: Operation Telic 1

Arrangements for casualty reception in NHS hospitals during the first Gulf War of 1991 were based upon the intention to disperse casualties around the country so as to distribute the workload. This led to a certain competitiveness between overly enthusiastic NHS units, and a number of anecdotes circulate of NHS hospitals sending reception teams "on spec" at the outbreak of hostilities. This dispersal process was known as the RAMP system

The care and rehabilitation of injured and incapacitated service personnel on return from Operation Telic was an NHS responsibility, with support from the Defence Medical Service hospitals and convalescence facilities in the UK, with political liaison between the Department of Health and the Ministry of Defence, so as to ensure:

- The highest standards of care for casualties, including those with complex injuries
- The minimum disruption of NHS services and units in the treatment of returning casualties
- Flexibility in the plan to accommodate both low and high casualty flows
- Care for casualties as close to their homes as possible

These objectives were initially met by a plan which was instituted in January 2003, whereby returning casualty evacuation flights from RAF Akrotiri and elsewhere were directed to regional airports and designated NHS hospitals to spread the potential burden over four military hospital units and forty NHS hospitals. In practice, casualty flows were small and the system was not heavily stretched. This Reception Arrangements for Military Patients (RAMP System) was co-ordinated through HQ LAND as this was a core operation. There were various levels of RAMP, from 1 to 4, depending on actual or potential numbers of casualties, resulting in distribution of casualties to Birmingham (RAMP Level 1) through to throughout the UK (RAMP Level 4)

Sqn Ldr Sarah Charters, a senior nursing officer from Hampshire with 4626 Aeromedical Evacuation Squadron, Royal Auxiliary Air Force, recalls:

> "My first experience of the RAMP was in Liverpool. The sight of a fleet of civilian ambulances and military liaison staff was extremely welcoming, but was marred slightly by the news that the media awaited our arrival from the vantage point of the air traffic control tower. The carriage of an Iraqi baby and the British victims of a friendly fire incident intensified the media interest, in which one of their colleagues was killed outright and one was still in intensive care. Careful positioning of the aircraft between the waiting ambulances and the press pack sheltered our patients from intrusive photography.
>
> "We commonly enjoyed 24 hours in the UK before repositioning flights to Akrotiri, a situation that created a 'double life' feeling of being a civilian for the day before our return to the military existence. This mismatch of identity was particularly highlighted when we passed anti-war campaigns in shopping centres and we saw the strength of feeling which some individuals had against an event in which we were personally involved".

Orthopaedic surgeons W Eardley and Gora Pathak summarised the aeromedical figures between 1st March 2003 and 30th June 2004 in a paper for the Journal of Bone and Joint Surgery.

1924 patients were evacuated by air to the United Kingdom. In the first three months (immediately before, during and post conflict) 830 patients were evacuated, an average of 280 per month. Of these, 2.8% were as a result of battle. In the three months following the conflict (incorporating the Iraqi summer) 471 troops were evacuated - an average of 157 per month. Of these, heat illness accounted for 28%. In the following ten months 621 troops were evacuated, averaging 62 per month. During the post conflict period, Battle injuries accounted for 5.6% of those evacuated.

Aeromedical evacuation arrangements after Op Telic 1

The development of Birmingham as the reception centre of first resort led to abandonment of the RAMP dispersal plan for returning casualties. Thereafter, East Midlands Airport became the principal receiving airport, from where casualties were transferred to Selly Oak Hospital.

The casualty reception and transfer system became progressively organised around the return of casevac flights to Birmingham International Airport, from where casualties were discreetly transferred to civilian ambulances under escort, to the various specialist units of the Birmingham University Hospitals group. A flavour of this arrangement is given in the following two articles. With the expansion of Operation Herrick, the casualty flows from Iraq and Afghanistan became admixed, as the following report illustrates:

Strategic Aeromed: A report posted on the NHS Website in 2007



"Torrential rain lashes the runway as the Tri-Star aircraft comes to a halt by Birmingham International Airport's air cargo terminal, followed closely by a C-17 Globemaster, one bleak day in 2007.

The aircraft, part of the RAF's aeromed service, are bringing back 20 injured soldiers (eight from Iraq and 12 from Afghanistan), several of whom are on life-support machines.

Four NHS West Midlands paramedic ambulances were waiting on the tarmac with a large military ambulance, nicknamed a jumbulance; a coach for the walking wounded; and police escort vehicles.

Co-ordinating the operation from the ground is Sergeant Nigel Tye of the Royal Air Force, head of the aeromed cell at the Royal Centre for Defence Medicine (RCDM) in Birmingham. In his three years of arranging the transfer of patients from their point of arrival in the UK to Birmingham hospitals, Sergeant Tye has seen nothing like this airlift.

He hasn't slept much in the past 24 hours. He was at the RCDM until 3am the night before preparing for the arrival and was back in the office at 7am. To complicate matters, it's the height of the widespread flooding of 2007. Many roads are closed and emergency services are stretched to the limit.

Having been given 10 hours' notice of the incoming flights, it was a race against time to make all the necessary arrangements for the patients' onward journey.

"My role involved reserving ambulances, registering patients, confirming beds, allocating medical staff to meet casualties at three hospitals, making family welfare arrangements and keeping everyone informed at all times," says Sergeant Tye.

It was an operation requiring the combined efforts of the military, Selly Oak, Queen Elizabeth and Birmingham City Hospitals, West Midlands ambulance and police services and Birmingham airport authorities.

"They were the busiest 24 hours I've had yet," says Sergeant Tye. "But being ready at short notice and adapting to last-minute changes are part of the job."

Another critical moment was when thick fog prevented an aeromed flight from landing at Birmingham in January 2009. The flight, carrying 10 casualties from Afghanistan, was unexpectedly diverted to Derby.

A convoy of nine vehicles, including four ambulances and a jumbulance, was ordered to move out of Birmingham International and head to East Midlands Airport. "We still got there on time," says Sergeant Tye.

MoD Press release: A busy year for aeromed teams

Heidi Mines reported on 5th November 2007 that:

> "This year has been the busiest so far for British military aeromedical evacuation teams with British forces incurring the highest number of battlefield casualties since 2001. During 2007 the number of battlefield casualties has been higher than sick patients. In July, 171 casualties were evacuated back to the UK by aeromedical teams. This is so far the highest figure in one month seen so far, even higher than the period in March 2003, when the 'spike' was 128 casualties.
>
> Squadron Leader Kenny Duffy, the aeromedical liaison officer at the Royal Centre for Defence Medicine at Selly Oak, stated: "Between January and December 2006, 331 people were aeromedically evacuated from Operation Telic; 154 due to disease and 65 suffered battlefield injuries. The remaining 112 were non-battlefield injuries."



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Operation Telic and the British Medical Deployment to the Gulf 2003 -2009

Chapter 25:

Casualty care in the UK during Operation Telic



Selly Oak Hospital 2007

Introduction

In this chapter, we look at the how the care of casualties from Iraq changed over the six years of Operation Telic, from their arrival back in NHS Hospitals, principally Selly Oak Hospital, Birmingham, and through their early rehabilitation, principally at RAF Headley Court.

Over the second half of the twentieth century, the UK Armed Forces suffered a steady flow of casualties from conflicts around the globe, but in relatively small numbers at any one time, even following the 1st Gulf War of 1991 and during operations in the Balkans through the 1990s. The contraction in the size of the Armed Forces was paralleled by the contraction in the hospital base of the Armed Forces, and the progressive downsizing and closure of many revered establishments in the UK and abroad

The Birmingham connection

In parallel with this process, progressive specialisation and technical sophistication in the NHS made it impractical for the Service Hospitals to replicate the skills and investment found in the NHS. Instead, service clinicians and DMS staff were allocated for training and clinical service purposes to a number of Military District Hospital Units, MDHUs, affiliated to NHS hospitals in Plymouth, Portsmouth, Peterborough, and Catterick/North Allerton.

The award of a contract to the University of Birmingham and its associated teaching hospitals in the late 1990s to develop a clinical research base for the Armed Forces led to the foundation of the Royal Centre for Defence Medicine, with an academic unit, and developing clinical links to Selly Oak Hospital in Birmingham.

Many had questioned and challenged the decision to move from the remaining independent military hospitals, such as the Royal Hospital at Haslar with its magnificent buildings and grounds overlooking the Solent, into mixed NHS and Military hospital units. However, an unanswerable case was made for the breadth of specialist care at the University Hospitals of Birmingham.

General Louis Lillywhite observes:

> "It is instructive to recap the decision on locating the Royal Centre for Defence Medicine in Birmingham and the military engagement with Selly Oak Hospital. The 1998 review by Rear Admiral Tim Laurence recommended the closure of RH Haslar, which in effect meant the closure of the academic base. Therefore, the MOD undertook a competitive exercise to find an academic partner to form an academic base for the DMS. In due course the applicants were reduced to a shortlist of three (Birmingham, Guys/St Thomas's, and Newcastle) from which Birmingham was chosen, as reported in Hansard. There was recognition that the Birmingham academic base would act as a tertiary referral centre for Servicemen, but there was no specific intent initially of using it as the definitive NHS Role 4 unit.
>
> This was due to the traditional responsibility for combat casualties in UK. During

and after the Second World War, under the auspices first of the Emergency Medical Services and thereafter the NHS, the civilian medical services have been responsible for treatment of returned casualties. The concept was that uniformed medical personnel would be needed for support overseas (and the plans for WW3 envisaged the closure of all Army and RAF hospitals in UK following the deployment of their personnel overseas) with only RN hospitals remaining to care for casualties evacuated directly from ships afloat around the UK.

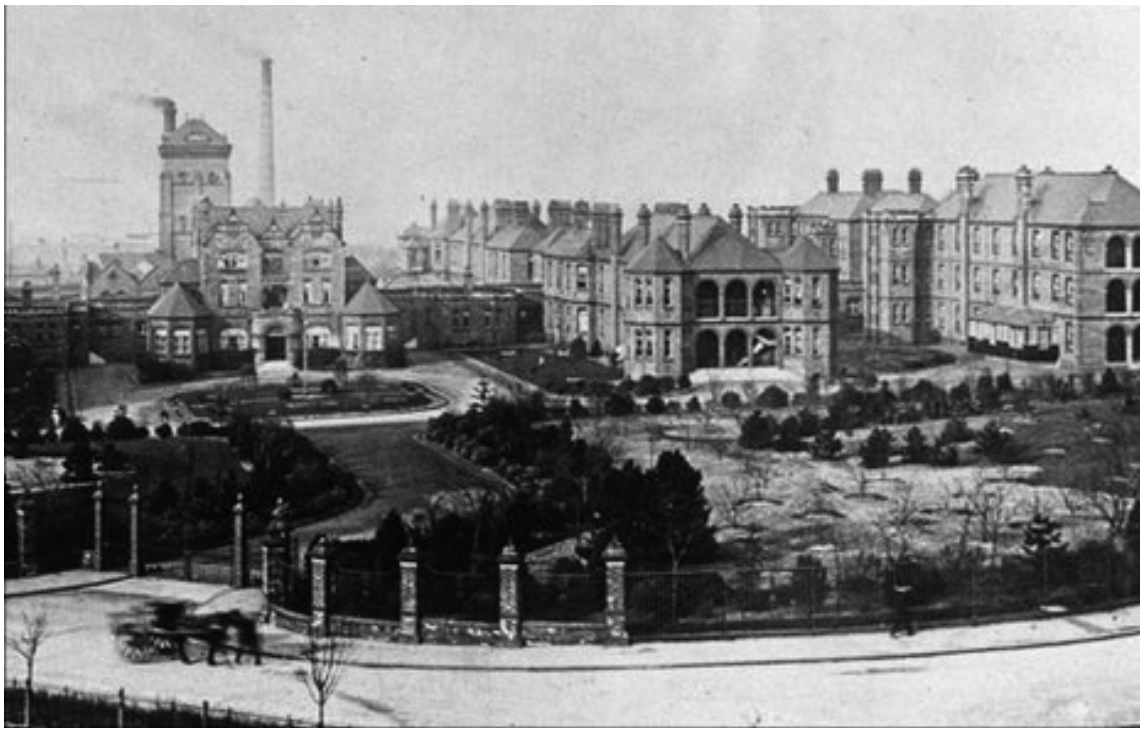
"As the DMS responded to the changes arising from the end of the Cold War, so did the Department of Health. The original plans for a war in Europe ('Joint Theatre Plan 201') envisaged some 80,000 casualties been returned to the UK via the channel ports. At the Ports the Voluntary Aid Societies assumed responsibility for reception and (in conjunction with British Railways) distribution by rail to NHS hospitals which would be designated at the time, taking account of civilian casualty load in the UK. With the ending of the Cold War, it was no longer necessary to rely upon shipping. As demonstrated in the Falkland Islands, even if ships were used the final journey was likely to be by air. The DH thus made use of existing plans for a major incident at airports. These major plans were based on incremental recruitment of hospitals in the vicinity of the airport, initially close to, then in the wider NHS Region and, if necessary, nationally. The ideal airport was one in a major conurbation as in such a conurbation there are always a significant number of hospital resources. The DH chose the West Midlands, and the West Midlands SHA selected Birmingham International as the main reception airfield. It designated University Hospitals of Birmingham (which incorporated the old Birmingham Accident Hospital , where (until the 1980s) military surgeons often undertook part fo their training, and now within Selly Oak) as the primary reception hospital. It was thus serendipity that resulted in both RCDM and Selly Oak being collocated.

"As a consequence, initially the DMS had no responsibility for patients evacuated to Selly Oak. This was exacerbated by the single Services insistence following the DCS 15 changes not to adopt the historic approach to in-patients who came under command of the hospital. The single services felt uncomfortable about ceding command to a hospital which was not of their Service (MDHUs belonged to the Centre). As the story evolves in this chapter, whilst objectively there were no clinical safety issues with the care within Selly Oak, Selly Oak was not able to meet the welfare, cultural, family or psychological needs of Servicemen. The shortcomings were further exacerbated by those within and outside the Service who wished for a return of Service Hospitals and by a media that saw shortcomings in care of Servicemen as a means of attacking the Government.

"Over the period of Operation Telic, there were two developments and trends. First the welfare, cultural, family and psychological needs were met by various means. Secondly, DMS clinicians became increasingly involved in the care of Servicemen.

This latter was in part due:

- to a need to provide confidence that the care was indeed appropriate; in part (mainly through nurses) to provide a military presence that was clearly valued by military patients who thereby did not feel abandoned, particularly if they had had life changing injuries;
- to the increased workload that required clinical reinforcements;
- to the clinical governance needs of the casualty evacuation and treatment system from point of wounding to recovery;
- to the realisation that expert rehabilitation advice was required early ;
- to the increased expertise of DMS clinicians as a result of multiple tours in Theatre;
- and to a belief amongst many DMS clinicians that they had a duty towards 'their' brethren in uniform".



Selly Oak (Kings Norton Infirmary) Hospital in the early 1900s

In our historical continuum, the history of Selly Oak Hospital is in itself instructive both for its links to our military medical past, and to the thought and anticipatory preparation which the Victorians gave to hospital provision for war, for which I am indebted to the 1914-1918 war and the wartime memories projects.

A brief military history of Selly Oak Hospital from 1909 to 1918

The main hall of the University of Birmingham, in Selly Oak, was, in 1909, equipped as a 520-bed hospital in the event of future war. Plans for the equipping and supply of the

hospital were made - and carried out to the letter in August 1914, some 5 years after the original planning was done. The first convoy of 120 casualties arrived on September 1st 1914.

By Spring 1915, more University buildings had been taken over, providing up to 1,000 beds. Summer 1916 saw a further expansion at "HQ", adding another 570 beds. At the peak, the hospital could cater for 130 officers and 2357 other ranks. In May 1915, the old Poor Law Infirmary on Dudley Road was also taken over.

By the time of the Somme battle in mid 1916, it had been expanded to 1,560 beds. In May 1917 the Dudley Road facility was separated as a hospital in its own right, adopting the title 2/1st Southern General Hospital. At this time, there were in total 8827 beds in the city.

Staffing the Birmingham hospitals during WW1

On mobilisation, there were 92 staff belonging to the Territorial Force Nursing Service in the city. In May 1915, nurses and auxiliaries of the Voluntary Aid Detachments joined the staffs of the hospitals. By 1918 there were 578 nursing staff.

By Spring 1919, some 130,000 military casualties had been treated in the Birmingham hospitals. The majority had suffered wounds or sickness on the Western Front, but this total included men coming from all of the theatres of war, plus Belgian and Serbian troops, men from the navy, and prisoners of war. By March 1919, 233,000 patient-journeys had been made, in 43,300 car journeys in Birmingham alone. 762 ambulance trains had been unloaded in the city.

Developments at Selly Oak from 2003 onwards

The proximity of Birmingham International Airport to the developing military medical facilities there advanced the case for centralising and consolidating the treatment of patients at Selly Oak Hospital in the geographic centre of the major conurbations in the UK. However, in 2003, this process of consolidation was incomplete.

By default, military casualties were treated in mixed NHS and military facilities at Selly Oak Hospital, which managed adequately with the relatively small numbers of casualties passing through up to and even after Operation Telic 1 in 2003. However, the growth of the Iraqi insurgency through 2004 and 2005 led to increasing numbers of increasingly seriously injured and complex cases reaching Birmingham, outwith the capacity and plans to manage them properly, and in the face of public hostility to the war and its participants in some quarters.

By 2006, reports were starting to appear in the press of serious problems and shortcomings in the management of individual casualties at Selly Oak, relating primarily to the cultural and psychological needs of the wounded servicemen. These complaints were initially from concerned parents, and which were later upheld in a series of damning commentaries both from within the MoD and briefed to the Press by outraged senior officers and politicians. This forced the situation to the front pages of the newspapers and on to the television screens for a year or more.

In consequence, a number of steps were taken to address the problems, and the long term resolution is judged to lie in a military wing in the brand new University Hospital of Birmingham, which opened in 2010.

The impact of the Op Telic Campaign upon workload at Selly Oak Hospital

The reorganisation of the Defence Medical Services Hospital Estate (see appendix A) was largely complete by the onset of the Iraq war in 2003, but Selly Oak had not been properly tested as the primary receiving hospital. Indeed, the NHS casualty reception arrangements in 2003 were planned around a distribution of casualties and incoming flights around the UK directly to a range of regional hospitals.

The very low casualty rates of Op Telic 1 and the general view that the war had been won by mid 2003 probably induced further complacency in the resourcing of the Birmingham hospitals. However, from 2005 onwards, a combination of joint operations in Iraq and Afghanistan; a rapidly increasing casualty flow; a greater complexity in the injury mix; and a loss of focus and ethos in hospital wards which were now shared jointly between military casualties and routine NHS elective patients led to critical problems, and particularly in the failure of recognition of the cultural and psychological needs of wounded servicemen. Visits by senior operational commanders provoked severe criticism of the situation at Selly Oak at the highest level in the Armed Forces, and these criticisms were soon picked up and echoed in the national press, as the following articles illustrate.

Sean Rayment reported in the Sunday Telegraph on 16th September 2006 that:

Injured troops put into mixed civilian wards

"Soldiers injured on operations in Afghanistan and Iraq are being treated alongside civilian patients on mixed wards in National Health Service hospitals, it can be revealed. The Ministry of Defence's policy of treating wounded soldiers in designated military wards has been officially declared "unsustainable" because of the growing number of troops being injured in combat and a lack of military medical staff.

The Sunday Telegraph has learnt that severely injured troops with bullet wounds and amputated limbs are being treated on open wards in beds next to civilian patients, including pensioners and mentally ill patients, at the Selly Oak NHS hospital in Birmingham. Senior officers and MPs have branded this a "disgrace" and want the Government to reinstate the special military wards immediately. They are concerned that it is detrimental to the treatment and recovery not only of the troops but also the civilian patients.

Liam Fox, the shadow defence secretary, called the crisis a "shocking indictment of the Government's attitude to its Armed Forces". One soldier recovering from a gunshot wound has described how he spent three weeks in a bed next to a mentally handicapped man who was unable to care for or clean himself.

Another soldier at the hospital recalled one of his comrades who had lost a leg screaming in agony because the morphine had worn off. The pain was so intense that the soldier fainted twice during the 45 minutes he had to wait before a doctor could be found to administer more morphine. The soldier said that civilians on the ward, many of them pensioners, had been deeply upset.

It is also understood that servicemen traumatised by seeing comrades killed in action have waited up to five weeks before they being offered any form of psychiatric counselling. One soldier said: "When I was evacuated from Afghanistan I was assured I would be treated on a military ward, every soldier here was told the same. The circumstances at Selly Oak are degrading for civilian patients and soldiers alike. Every senior officer who has visited us has told me that the situation is disgraceful and has apologised."

An MoD spokesman said: "The Secretary of State believes that improvements could and should be made to the overall healthcare package currently on offer to troops who are wounded while on operations. His view is that, where possible, military-managed wards within NHS hospitals offer an ideal environment…Therefore he has asked officials to look into this and further details will be announced in due course."

Mark Townsend and Ned Temko subsequently reported in The Observer, Sunday 11th March 2007:

The fresh agonies of our returning soldiers

They served their country in Iraq and received terrible injuries. Now back in hospital in Britain, an appalling picture of their treatment has been uncovered by an Observer investigation into a growing scandal.

Jamie Cooper begged for his colostomy bag to be emptied. In all, he asked three nurses. One said she had no idea how to help. Another promised to pass on his request. His parents watched the plight of their wounded soldier. He may as well have begged for his dignity.

The Royal Green Jacket rifleman remains at Selly Oak Hospital, the sprawling NHS complex in south Birmingham where the most serious of Britain's returning wounded are treated. The lucky ones arrive at ward S4, where nurses attend to two six-bed bays in a 'military-managed' unit. Some are treated alongside civilians, removed from the camaraderie of wounded colleagues.

Six months after the heated row over the suitability of placing wounded troops in mixed-civilian wards, Selly Oak is facing far more serious allegations. Letters obtained by The Observer have been called into question the treatment afforded to Britain's injured troops. The claims have provoked fresh consternation over how Britain treats its war-wounded and uncomfortable questions for a government embroiled in two bloody conflicts.

Weeks after the scandal surrounding shoddy conditions at America's flagship military hospital, the Walter Reed Army Medical Center in Washington, the British government faces its own crisis over a hospital where hundreds of wounded service personnel have arrived since the Iraq invasion four years ago.

An extraordinary sheaf of letters sent to the Ministry of Defence and the NHS and passed on by military sources to The Observer chronicles a series of alleged failings in basic care and services given to UK soldiers. Among them are claims that troops have been denied pain relief after wards ran out of supplies. On one occasion, wounded soldiers were allegedly forced to wait more than 12 hours for pain-relieving medication.

Twenty days from now, the last of Britain's military hospitals will close. Little more than a decade ago, Britain had eight such institutions. During the First World War, there were 20, with at least 9,200 beds reserved for soldiers.

'We will be the only country in the civilised world without a dedicated military hospital', said Hampshire councillor Peter Edgar, who is campaigning against the imminent closure of the Royal Naval Hospital Haslar in Gosport.

The withdrawal of MoD funding comes as casualties steadily mount in Afghanistan and Iraq. Four British soldiers have been killed in Helmand in the past eight days. So far, more than 5,500 wounded have been airlifted back to Britain for treatment. About 800 are understood to have passed through Selly Oak.

Cooper's misery was compounded by his isolation in a room with no television or radio for distraction. 'We would, if possible, have taken our son into private care. However, if we had done so, then he would have been classed as AWOL,' his parents wrote.

Sometimes, though, company can prove troublesome. The Oxfordshire parents describe how their son was rudely disturbed one night in Selly Oak. 'It is outrageous that an injured soldier should be disturbed at night by a disorientated geriatric trying to get into his bed in error.'

Isolation can sap a soldier's spirit. In a letter dated 5 March to Prince Charles and senior commanders, a parent from Doncaster claims that her son is suffering after being sent to an NHS hospital in Putney, rather than the military's rehabilitation centre. The woman recently gave up her career to look after her seriously wounded 22-year-old son, who is in 7 Parachute Regiment, Royal Horse Artillery.

One soldier concludes: 'We've just spent four months fighting in the chaos of another world, where every day you risk losing your life at any moment. There's no way we would ever ask for sympathy; that is not our style. All we ask for is understanding'.

Alex Berry took up the story in the Daily Telegraph on 12th March 2007:

Military 'betrayed wounded soldiers'

The military's most senior doctor pledged to improve the standard of care for wounded service personnel after the publication of a series of complaints about their treatment by the NHS. Lieutenant General Louis Lillywhite, the Surgeon General, defended the way casualties were looked after but said: "If we need to do things better, we shall."

His statement came after leaked complaints from soldiers and their families graphically described the dire state they were left in after being injured while serving their country. Liam Fox, the shadow defence secretary, said their treatment represented a "betrayal" while Lord Guthrie, the former defence staff chief, told one Sunday newspaper: "The handling of the medical casualties from both Afghanistan and Iraq is a scandal."

The complaints, leaked to the newspaper by military sources, centre on Birmingham's Selly Oak Hospital.

Lt Gen Lillywhite said a survey of military patients at Selly Oak rated their treatment as "excellent, very good or good". But he added: "When any members of the armed forces, or their family, are unhappy about their treatment then we will investigate with the NHS on their behalf. The treatment of our serious casualties is complex, and if we need to do things better, we shall. All three of the Service Chiefs have committed themselves to making the military managed ward in Selly Oak work."

He rejected the idea that soldiers should be treated at independent military centres rather than within the NHS. "Creating an independent military hospital is not the best way to look after our people," he said. "Serious casualties from Iraq and Afghanistan need and receive advanced levels of care across a wide range of medical disciplines that can only be found in a major trauma hospital.

"Our numbers of casualties would not sustain a separate military hospital with the modern specialist equipment and skills of medical staff needed to give them the treatment they deserve. Even when we had the Military hospitals, service personnel were still treated in specialist NHS facilities, and civilians were admitted to military hospitals, because all patients deserve to be treated where their clinical needs are best met.

"As soon as our patients are able, if their condition requires it, they move from hospital to the dedicated Defence Medical Rehabilitation Centre at Headley Court or one of our defence regional rehabilitation units for their continuing recovery."

The complaints came on the same day that Ministry of Defence figures revealed more than 2,100 troops have suffered psychiatric problems after returning from Iraq since 2003. But many of them are waiting up to 18 months for NHS treatment, a delay branded "scandalous" by Combat Stress, the services mental health charity.

The charity, which runs three treatment centres for veterans with post-traumatic stress disorder (PTSD), warned it was in danger of being overwhelmed.

Matthew Hinckley reported in The Daily Mail on 17th August 2007:

Demand for military hospital grows as UK's only war ward struggles with casualties

Demand for a dedicated military hospital grew yesterday amid an overcrowding crisis at the country's only ward set aside for soldiers. MPs and veterans spoke out as rising casualty rates put intolerable pressure on the single NHS ward at Selly Oak Hospital, Birmingham. It has just 14 beds - yet, in the last month alone, 145 personnel have been flown back from Afghanistan and Iraq for treatment.

Officials admit the unit is too small for the numbers of battlefield casualties, and the overflow has had to be treated on ordinary mixed NHS wards. The revelations come amid claims from the Royal British Legion that Britain's "military covenant" - which supposedly guarantees fair treatment for fighting troops - is being broken.

But at Selly Oak, one soldier described waking up to find himself surrounded by "old women and drug addicts", while there were reports of a Para being confronted by a Muslim man who accused him of "killing my Muslim brothers".

The head of the Army, General Sir Richard Dannatt, declared mixed military-civilian wards to be unacceptable.

Falklands veteran Simon Weston said yesterday: "We should build a bigger unit for these people, and ideally it should be a separate military wing or building. "If in years to come we no longer need it, then fine - give it back to the NHS. But our boys shouldn't be living off the crumbs from the NHS like this."

Major General Patrick Cordingley, who led the Desert Rats in the 1991 Gulf War, said: "When I visited Selly Oak recently, I found there was no space for wounded men to sit together and 'decompress', as the military call it - to let off steam as soldiers do without worrying about offending anyone, to share their experiences and draw strength from each other.

Andrew Johnson Terri Judd and Leonard Doyle wrote in The Independent on Sunday, 26 August 2007:

Our boys deserve better than this: Families demand a dedicated military hospital

"Serving soldiers, their relatives and retired generals are among 30,000 people who signed a petition calling for action on casualties as the argument over honouring the Military Covenant, first reported by this paper, rages on.

The Government faces an unprecedented revolt among rank and file soldiers, hundreds of whom have signed a petition along with more than 30,000 mothers, friends and families, calling for a dedicated military hospital.

They argue that the Military Covenant, a unique agreement between soldiers and the Government that they risk their lives in return for fair and decent treatment, is not being honoured – an issue first highlighted by The Independent on Sunday.

The petition, now submitted to Downing Street, has been circulated among soldiers in Afghanistan, Iraq, Germany and Britain via the internet. The signatories say wounded troops have particular needs, which make normal NHS hospital wards unsuitable for their care.

Inquiries by the IoS last week uncovered a shocking picture of soldiers waiting months on NHS waiting lists, paying for private medicine, or not receiving any treatment at all. There was also continued concern over soldiers being placed on mixed wards with civilians at Selly Oak Hospital in Birmingham, an NHS hospital which is the first stop for wounded soldiers evacuated from war zones.

This is why a growing campaign has been joined by the British Legion as well as the Conservative party leader David Cameron in calling for the Covenant to be honoured.

On Friday, speaking at Brize Norton, Mr Cameron said: "There is a document – the Army doctrine – written down in plain English that needs to have a far wider understanding and appreciation throughout our country. In it is the Military Covenant. Are we fulfilling it today? I believe we would be hard-pushed to answer 'yes'."

Carol Jones, of Military Families Against the War, whose son Sergeant John Jones was killed by a roadside bomb in Basra in 2005, said: "The worst injury of all is mental damage. These flashbacks. It's something you can't see. It's swept away. But they see some terrible things over there."

The MoD says that the number of wounded soldiers does not justify the cost of a specialist hospital, but there are as many beds in the NHS as soldiers who need them for as long as they need them. When they are evacuated to the UK they are taken to Selly Oak Hospital in Birmingham, where there are just 14 designated military beds. These are at the end of a public ward which is curtained off from civilians. If more than 14 soldiers need treatment, however, they are put on public

wards. If fewer, then a civilian may take the spare bed. If the soldiers are transferred to a specialist burns or neurological hospital, they will be on pubic wards.

An army study has also revealed that 35 per cent of Iraqi war veterans have been treated for PTSD. Here the lack of a military hospital is a "disgrace", according to retired top brass.

Major General Julian Thompson said: "I've signed the petition. Just planting them around the country is not good enough in my opinion. Part of the covenant is that they will be looked after. And that is not being fulfilled."

Former head of the army, Field Marshall the Lord Bramall, added: "Their actual treatment by doctors and nurses at Selly Oak is pretty good. But when they get discharged they go out and get in the NHS and that's when they get lost in the system. This has been a shambles. It's an absolute disgrace."

An Inquiry by the Defence Select Committee of 2007

The issues surrounding the Selly Oak media coverage were examined at length to the Defence Select Committee in its 7th report on the Defence Medical Services.

Clinical care and welfare services:

Prior to our inquiry, there had been considerable, often adverse, press coverage of the standards of care at Selly Oak Hospital in particular. This included allegations that patients had been asked to remove their uniforms for fear of causing offence and had been verbally abused by visitors who opposed the war in Iraq. We asked Ms Moore, the Chief Executive of University Hospitals of Birmingham Foundation Trust (UHBFT), if there had been any complaints related to the stories highlighted from a number of newspapers.

These included a report in the Daily Telegraph that an injured paratrooper had been verbally abused by a Muslim visitor, a story in the Daily Star that an injured Servicemen had been told to remove his uniform for fear of causing offence and an article in the Mail on Sunday that a soldier at Selly Oak had been accosted by a group of Muslim women. She confirmed that the trust had received no complaints. She went on to tell us that scrutiny by the press had placed considerable demands on the Trust:

The time taken to deal with this has been quite considerable. The senior nurse in charge of the ward at one time said she felt she was doing organised visits round the ward instead of looking after patients, and that cannot be right.

Her written memorandum on behalf of the Trust highlighted the same concern.

My concern is that these debates [over the standard of care] were played out in the press rather than by considered discussion between those concerned and senior hospital staff. This sustained negative press campaign has had a significant demoralising effect on clinical staff, NHS and military, I am sure it has affected the morale of deployed troops and their families and it has certainly affected our reputation with our own population and patients.

The evidence from UHBFT, that the negative press coverage had not been based on accurate representations of factual cases, echoed what we had been told by the MoD.

The Committee stated that **"It seems clear that there has been much inaccurate and irresponsible reporting surrounding care for injured Service personnel at Birmingham, and that some stories were printed without being verified or, in some cases, after the Trust had said that they were untrue. We condemn this completely. Editors have a responsibility to ensure that their newspapers report on the basis of verified fact, not assumption or hearsay. The effect of such misrepresentation on the morale of clinical staff and Service personnel and families was considerable. We consider the publication of such misleading stories as reprehensible."**

We asked the Minister about progress on the Military Managed Ward when he appeared before us in November 2007. He explained that there were around 39 military nurses at Selly Oak, a Regimental Sergeant-Major ward manager to deal with discipline and matters relating to Service life, and two liaison facilities who maintained links with patients' parent units. He concluded:

There were also criticisms of the welfare and support services provided at Selly Oak. When we spoke to representatives of welfare organisations in June 2007, they assured us that the clinical care at Selly Oak was of a very high standard, but that, in the words of one witness, "support for people who visit and for the individuals whilst there in terms of providing basic essentials is currently provided by charities which some […] suggest is perhaps not appropriate". Among the issues identified were travel assistance for families of injured Service personnel, provision of toiletries and basic clothing for Service personnel who had been separated from their possessions, and accommodation for relatives of patients. Improvements were taking place, but some of the slack had been taken up by welfare organisations. For example, the Army Families Federation had paid for the temporary refurbishment of flats originally built for doctors and nurses so that they could be used by patients' families.

One significant development which bridged the gap between clinical care and welfare was the appointment of a Standing Joint Commander (Medical), who was an experienced infantry officer. His role has been to take responsibility of command and control issues and to coordinate the care pathways for casualties brought into Birmingham. Lieutenant-General Baxter stressed the importance of this appointment: "an experienced soldier is going in there, he knows the issue in the operational theatres, he knows what it is like looking after soldiers".

We acknowledge the progress which has been made at Selly Oak in terms of creating a military environment, to take advantage of the healing process of being surrounded by those who have been through similar experiences, to make patients feel comfortable and give them familiar surroundings. The MoD has made substantial efforts in this regard, and we look forward to hearing of further progress in the response to this report. The MoD must make sure that the issues of welfare for patients and families are central to its planning in developing its medical facilities in and around Birmingham.

However, we also underline the fact that many of the improvements set out above are relatively recent, and there has been a great deal of change over the past 18 months. The MoD should not be complacent: they have had to learn important lessons and it is clear that the picture at Selly Oak was not always so positive. Nor should progress now stop, but the MoD should continue to learn lessons from its experiences in treating injured Service personnel at Selly Oak. "

Improvements at Selly Oak Hospital after 2006

In response to the vociferous public criticisms, a number of important changes were made to expand capacity, improve military staffing levels and support the families of injured service personnel.

These included:

Managerial improvements:

- The appointment of Brigadier Chris Parker to manage the military interests at Selly Oak
- Drafting in of large numbers of additional military medical and nursing staff. Military nursing numbers on the military allocated ward increased from 12 to 39, and part of the ward was partitioned off for military patients.
- Improvements to accommodation and physical space
- The construction of accommodation for visiting relatives
- Reorganisation of professional working practices to accommodate the increasing complexity and volume of major trauma cases.

General Louis Lillywhite also points out a number of important clinical advances, including the improvements in pain control for casualties. This became one of the Surgeon General's 'Main Efforts', which he acknowledges was advanced by the enthusiasm and energy of Lt Col Dominic Allington, and through his partnering with his US colleague Lt Col Buckemier. A whole system approach was used, which led to changes throughout the whole treatment and evacuation chain, including within Birmingham. Organisational changes enabled analgesia to be sustained during transit, where previously, different methods required changes that led to break through pain

which was then difficult to control. Techniques were introduced to allow patients to be managed by non-specialists, including indwelling analgesia catheters for use by aeromedical nurses, and novel methods such as ultra-sound guided indwelling catheters.

Plans were announced for a new ward within a wholly rebuilt Queen Elizabeth Hospital Birmingham, although this would not be complete before the conclusion of Op Telic.

The Selly Oak Liaison Officers

The following report on the NHS website highlighted the morale and welfare role of these seconded personnel:

"Sergeant Mark Sutcliffe works at Selly Oak Hospital supporting injured military personnel. Three years ago he was a patient there himself when he lost a leg in Iraq.

Sergeant Sutcliffe, 29, from Peterborough, joined the army at 17, becoming a member of 2nd Battalion, The Royal Anglian Regiment. He worked in Cyprus, Afghanistan, Northern Ireland and Sierra Leone and was then posted to Iraq in 2006.

On July 18 2006, Sergeant Sutcliffe was on foot patrol in Basra when a rocket-propelled grenade (RPG) was fired at him. An RPG is an anti-armour weapon, primed to detonate on hard impact.

"The RPG hit me directly in the back of the lower left leg and took the leg clean off," says Sergeant Sutcliffe. "Luckily, it didn't detonate. As I fell backwards on to the ground I saw my boot flying through the air with my foot, so I knew it had gone. The RPG carried on and unfortunately seriously injured an Iraqi boy."

The troops scrambled to give Sergeant Sutcliffe morphine and apply a tourniquet. "I remember seeing my sergeant stopping the bleeding with his hands before the tourniquet was put on. He saved my life," says Sergeant Sutcliffe.

After three days in critical care at the field hospital in Iraq, he was evacuated to the UK. His arrival at Selly Oak Hospital, Birmingham, was the start of a four-month stay. "My parents came into the ward shortly after I arrived and it was really good to have that first contact with them," he says.

There were other injured service personnel on the ward, and a military liaison officer visited daily to make sure they and their families were looked after. "The military presence on the ward was massively important," says Sergeant Sutcliffe. "I needed someone in uniform who I could relate to and have a laugh with; people who knew what I'd been through."

Sgt Sutcliffe had nine operations to save as much of his leg as possible. During his time in hospital, he experienced flashbacks and nightmares. He saw the attack as though it was on film. "I would see the RPG hit me in the back and detonate on my

body armour. I'd wake up screaming," he says. "It wasn't nice. But I was offered all the help I needed."

After he lost his leg in combat, two goals helped him through the long months of recovery: "I wanted to walk again and get back into uniform because they're the things I did before," he says. With expert care and hard work, he has achieved both.

After psychological assessments he was judged to be well. "It's natural to have flashbacks and they started to subside," he says. "I don't have them at all now."

Learning to walk again

In November 2006, Sergeant Sutcliffe moved to Headley Court. His amputation is through the knee. "Functionally, a through-the-knee amputation is better than above-the-knee because you've got a longer stump," he explains. "This gives you better walking ability and you can bear weight on it."

With the physical challenges of surgery behind him, he put all his determination into walking again. At first it felt strange having a prosthesis. "It was hard. You're learning to walk all over again and putting your trust in a piece of metal," he says.

Despite this, he achieved his goal of walking out of Headley Court for the Christmas holiday. "I was on crutches and all over the place but I was walking," he says. "My parents had dropped me off in a wheelchair four weeks earlier, and the next time they saw me I was on my feet. It felt so good." Walking with a prosthesis is now second nature. "I can't remember what it's like to walk with two legs."

He spent four months at Headley Court, learning walking techniques and working hard at physiotherapy, such as swimming, to regain his fitness. Soon he progressed from two crutches to one. "That's when I realised things were really going to get better," he says.

By June 2007, nearly a year after his injury, he was able to walk without a walking stick. Headley Court's limb-fitting centre offers top-of-the-range prostheses, and Sergeant Sutcliffe now has five: two walking legs, one running leg, one shower leg and one skiing leg.

"I'm still working on my running technique," he says. "I've been skiing twice to Colorado with the British Limbless Ex-Service Men's Association (BLESMA) and that was awesome. I fell over a lot and I'm not showing the same finesse I used to on the piste but I get down one way or another."

He is now at ease with his prosthetic leg and is used to the attention he sometimes gets. "I don't mind people looking because that's human nature," he says. "Kids make me laugh. I'll be pushing a trolley in the supermarket and a little kid will ask her mum why I've got a metal leg, and her mum will say 'Shh!', but I don't mind. I'll show my leg to them. If I don't want to get attention, I wear long trousers not shorts."

Sergeant Sutcliffe is still a proud Poacher but is now attached to Selly Oak as one of five military liaison officers.

Technical Developments in Limb Prostheses

There have been significant technical developments in surgical strategies and in the development of advanced, computerised and motorised limb prostheses.

Suzanne LaBarre, reported in the US Metropolis Magazine on March 18th, 2009, that:

Military amputees now find themselves on the front lines of prosthetics research

"The Iraq war has produced thousands of wounded veterans, propelling research into the ultimate ergonomic challenge: the perfect prosthetic. Military amputees now find themselves on the front lines of prosthetics research, with each new development promising more than mere mobility.

"I lost one limb in Iraq," says Garth Stewart, a 26-year-old Army veteran, reclining on the futon of his dorm room at Columbia University, a glint of metal peeking from his trouser leg. "And in return I've gotten at least twenty." A blast outside Baghdad in 2003 made pulp of his left foot, forcing doctors to sever his leg seven inches below the knee. Stewart, like many military amputees, now finds himself on the front lines of prosthetics research, with each new development promising more than mere mobility.

He has had a leg for running, a leg for swimming, a leg for grappling. He's had gray legs, flesh-colored legs, legs with balls, computer-programmed legs, plastic legs, carbon-fiber legs, and titanium legs too.

He has had a leg for just about every occasion. (Indeed, Stewart has been photographed drinking beer out of at least one of them.) Today, the ex-gunner marches around -campus, where he's a senior studying history, in a sim-ple mechanical contraption that mimics the J-shaped curve of a human foot and feels, as he describes it, completely natural. "I really capitalized on my investment," he deadpans.

According to a US 2004 Senate report, amputees make up 6 percent of the Iraq war's wounded, compared with 3 percent in previous wars.

About $50 million from the Defense Advanced Research Projects Agen-cy has gone toward developing intelligent upper limbs. Soon, amputees will be able to sense and manipulate objects as they would with a real hand. They will wield mind--controlled Luke Arms (so named for Luke Sky-walker). They will traipse about on electronically powered feet that make the wearer feel as if he's floating on air.

In a corner of Room 213 at Walter Reed Army Medical Center, in a gym behind the dismal concrete face of the nation's largest military hospital, Sergeant Kevin Brown lumbers over to a weight machine. He wears a prosthetic Power Knee on his right leg. The Power Knee is hailed as the world's first powered bionic knee. It propels the user forward, compensating for the extra energy above-the-knee amputees expend walking (58 percent more than able-bodied people). Power Knee weighs about ten pounds—more than twice as much as a standard prosthesis—and its battery lasts just three hours.

For every technological breakthrough, there are plenty of deficiencies. Arms have been particularly vexing to prostheses designers. This is partly a matter of markets: because leg amputations are more common in the general population, companies have more incentive to replace them. Thus a 1912 -invention—a pair of hooks controlled by a harness—remains the industry standard. A funding bump after World War II gave way to the myoelectric hand, which uses electrodes instead of a harness, but did little to advance amputees' range of movement. Lifelike hand coverings (detailed down to a patient's veins) are ubiquitous now, but they diminish agility.

In 2007 the U.K.'s Touch Bionics introduced the "first fully articulating and commercially available bionic hand," to quote from the company's Web site. The $50,000 i-LIMB has movable plastic fingers that mimic the human hand's assorted curls and flicks through electrical impulses in the muscles of the residual limb. It has been heralded as the first major breakthrough in artificial-hand design since World War II. But in early tests, the i-LIMB proved too delicate

Touch Bionics has since modified the limb, strengthening tendons in the fingers, adding aluminium support to the thumb, and flattening the fingertips for better gripping. Sergeant Juan Arredondo, who lost his left hand in 2005 in an IED blast, brags that with the i-LIMB, he can play basketball with his son, shoot rifles, and, most unexpectedly, eat grapes (which tend to burst in the grasp of clumsy hooks). For heavy-duty tasks such as yard work, though, he still straps on the metal claws.

Otto Bock, the world's largest prosthetics manufacturer, has updated its microprocessor-controlled limb, the C-Leg, to make it easier for military amputees to return to active duty. Accord-ing to Gizmag.com, the new C-Leg will have ten programmable modes (walking, riding a bicycle, etc.) and faster response times to changes in walking speed and direction. War amputees represent less than 1 percent of Americans who have suffered limb loss, and diabetics increasingly dictate the market's trajectory. Wars might refine the prosthetics industry, but they don't sustain it.

An Overview of Military Trauma Care from Birmingham in 2009

Professor Sir Keith Porter is a senior civilian orthopaedic and trauma surgeon at Birmingham, who was closely involved in the clinical service development at the RCDM through Op Telic and Op Herrick. He was knighted for this work in the New Year's Honours Lists of 2010.

He kindly provides this brief overview of his observations of the treatment of casualties following resuscitative surgery in the field hospital::

"Major transfusion protocols have been developed and adopted based on the recent experiences of US and UK military in Afghanistan and Iraq. Activation of the major transfusion protocol results in blood bank automatically issuing a pack containing four units of O negative or type specific packed cells and four units of fresh frozen plasma. Hypotensive resuscitation is used aiming for a systolic of 90 mm hg. Blood, fresh frozen plasma and platelets in a 1:1:1 ratio is administered, often with factor VIIa until surgical control of haemorrhage can be achieved.

"The patient is rapidly transferred to the intensive care department and at all stages attempts are made to avoid the lethal triad of hypothermia, acidosis and coagulopathy. Arrangements are then made to transfer the patient to Royal Centre for Defence Medicine (RCDM) at University Hospital, Birmingham. This usually occurs within 24-48 hours of wounding using a fully equipped transport aircraft with full intensive care facilities. Frequent communication between RCDM and Camp Bastion allow the following day's clinical priorities to be determined and appropriate resources to be allocated.

"On arrival in Birmingham the ventilated casualty is taken directly to intensive care and usually will be taken to theatre with two hours of arrival. A team of Consultant surgeons from all relevant specialties will then review the patient's injuries in theatre. A further thorough debridement of wounds will be undertaken by an experienced consultant surgeon at this "planning visit" and multiple tissue samples are sent for microbiological assessment, including for fungal species. Further discussion will then take place amongst the relevant specialties to determine priorities for further treatment and how this will be achieved.

The first trip to the operating theatre in the UK allows treatment of unexpected and expected injuries and a plan for future surgical management. A twice daily theatre planning meeting, chaired by the Professor of Clinical Traumatology, takes place for all patients. All relevant medical specialties, as senior nursing and physiotherapy staff are present. Treatment plans are agreed and a daily military ward round takes place for all injured service personnel. The planning meeting was introduced in response to the needs of the complex cases, which often require many return trips to theatre. It provides flexibility and efficiency in the use of theatre time and human resources.

Patients are nursed on a military managed ward. Facilities are available for relatives to stay on site, given that many will have travelled considerable distances. Regular

feedback to the field hospitals provides helpful audit and feedback to those involved in the patient's initial management through the Joint Theatre Trauma Registry (JTTR) and telephone conferences.

Clinical Lessons Learnt at the Role 4 hospital at Selly Oak

Meticulous wound debridement with (temporary) skeletal stabilisation is essential in the management of high energy extremity injuries. Wound debridement is an acquired surgical skill and competence is directly proportional to experience. Blast injury wounds are highly contaminated with debris extending along tissue planes far from the anatomical location of the injury.

Patients frequently require multiple wound debridements prior to definitive fixation and soft tissue closure. Three or four trips to theatre before wound closure is common and several patients have required more than 20 trips to theatre. Amputation stumps are routinely left open to allow repeat assessment of tissue viability. Definitive closure of an amputation stump is deferred until all remaining tissue is healthy and viable. These complex injuries should be assessed and managed jointly between orthopaedic and plastic surgeons with an interest and experience of such injuries.

Topical negative Pressure dressings are routinely used following debridement of wounds to manage exudates and to isolate wounds. Early use of appropriate antibiotics is essential and wounds should be definitely closed as soon as possible after adequate debridement.

Good communication between the field hospital and base hospital surgical teams is essential. Physiotherapists, occupational therapists, dieticians and mental health specialists are engaged as soon as a patient arrives at RCDM. Likely rehabilitation requirements are anticipated. Patients are subsequently transferred to Headley Court for an intensive customised program of rehabilitation.

Organisational Lessons Learnt at Selly Oak

Patients are surviving injuries previously considered unsurvivable in previous conflicts. Military clinicians are currently exposed to high volumes of major trauma over short periods of duty. Lessons are rapidly learnt and clinical skills are quickly developed. Knowledge and experience are quickly passed on to both trainees and to clinicians new to the service. The organisational requirements to optimally manage large volumes of multiple trauma have to be identified and met. Centralising all major military trauma to the RCDM in Birmingham has allowed a continual evolution and improvement of care of the multiply injured military casualty. It has also allowed welfare, regimental and other support networks for patient and family to develop.

The care of these critically injured patients obliges senior clinicians to be involved from the moment the patient arrives in hospital. This has had implications for staffing senior

clinical posts and on call rotas. The traditional model of one consultant caring for one patient has evolved into a multidisciplinary process.



Moving on from Selly Oak: The New Queen Elizabeth Hospital, Birmingham, containing a Military Wing, opened in June 2010



Headley Court (Photo The Daily Mail 2008)

Early Rehabilitation and the Headley Court Story

Prior to Operation Telic, serious operational injuries had been relatively infrequent for some decades. Along with the contraction in the military hospital base, there was an assumption and arrangement that individual casualties would be treated by a combination of NHS provision and specialist rehabilitation services at Headley Court and elsewhere in the Service system.

Indeed, there were specific standing instructions that service personnel would NOT receive preferential care in the NHS, and the severely injured could expect medical discharge from military employment. To make matters more difficult for them, compensation for major injuries was woefully poor, at a time when outrageous financial settlements were being made in the civil courts for relatively trivial compensation claims.

From mid 2003 onwards, a steady increase in disturbing press reports began to highlight the failings in the long term care and rehabilitation for severely injured as the flow of casualties returning from Iraq threatened to overwhelm the system, and individual servicemen suffered serious privations. Public indifference turned to real anger as families told their stories, and the media spotlight and indignation were focused on the various component problems, as illustrated by the abbreviated article from the daily Mail as late as 21st October 2007.

In consequence of the growing numbers of casualties, the complexity of their injuries, and growing public concern about the seemingly lost tribe of the severely wounded in action, a number of very positive events had emerged by the end of Op Telic.

There was a much greater public awareness of the needs of material and psychological casualties; of the inadequacies of the compensation available and of the capacity and processes within the rehabilitation services.

As with so many other aspects of military health care, Op Telic was to prove pivotal in the transformation and modernisation of the system and services to casualties.

One other dramatic factor which emerged from the adverse coverage of the problems in the rehabilitation system was the extent of the public support that developed, and of the charitable instinct that was aroused through the various service charities and particularly of the phenomenal growth of "Help for Heroes".

In this section, we follow the development of rehabilitation, charitable support and compensation issues for the seriously injured through the decade of Op Telic, and record how public pressure in the media led to massive charitable fundraising for the rehabilitation programme. We consider the work of a range of long established service charities, and the remarkable growth of the "Help for Heroes" movement, which we can but hope will produce a more financially secure and rewarding future for the most badly injured.

Kim Sengupta, writing in "The Independent" on Monday, 23 June 2003, reported that:

Injured troops are forced to go private after defence medical services are cut

"Soldiers injured in the invasion of Iraq are having to pay for expensive private medical treatment to avoid long delays on NHS waiting lists. Government policy stipulates that service personnel should get no better access to medical care than civilians unless for urgent military operational reasons.

This, combined with shortages in the Ministry of Defence's medical staff, means

that many are taking recourse to private health care. In the latest issue of the RAF's newspaper, a sergeant writes: "It took two months [from] my referral to the NHS to get a date for consultation that is a further four months away. I will then have to wait approximately another six months to receive an operation and together with recuperation I will have been (medically) downgraded for close to 18 months.

"I find this whole situation unacceptable and as a result I have decided to pay for private treatment," he wrote. "We are paid to be 'fighting fit' and should be ready at any time for deployment."

Nick Triggle BBC News health reporter writing on Tuesday, 5 July 2005:

The long road back to fitness

“Thousands of military personnel are injured each year while they are serving. After hospital treatment, they often need help regaining their fitness before going back to active service. For the first time, the military's rehabilitation HQ has opened its doors.

When Sergeant Michael Brennan regained consciousness in hospital he was not aware he had been injured in combat. "I though I had flu," he said. But the truth was very different. The 25-year-old had been hurt in a suicide bomb attack and lost the bottom of both his legs. "My biggest fear was that I was going to be on my own because my wife would leave me," said the father-of-three. "I was not the same man I was when she married me.”But she has been a complete rock. I don't know what I would have done without her and the rest of my family."

Sgt Brennan was attached to a bomb disposal team supporting the Black Watch at Camp Dogwood, near Baghdad, last autumn when the attack occurred. Now - nine months on - he still does not remember exactly what happened.

Instead, he is looking forward. At the end of the month he will undergo an operation to take muscle from his back and place it at the end of what remains of his legs to allow him to walk on prosthetic legs without his skin ripping. He will then face months of rehabilitation at the Defence Medical Rehabilitation Centre as he tries to get used to his new legs.

Sgt Brennan, who has been receiving physiotherapy and doing exercise programmes at the Surrey base over the last few months, is just one of 1,600 patients admitted each year after receiving hospital treatment. Another 4,000 military personnel are treated as outpatients and hundreds more treated in outreach clinics.

The centre was first started after World War II for RAF personnel, but in 1996 became the main UK military rehabilitation centre for all three armed forces. Only 7% of the inpatients are admitted for combat related injuries - a recent one of whom

was Private Johnson Beharry, the soldier awarded the Victoria Cross for his service in Iraq.

The 220 staff at the centre, based in the grounds of a stately Victorian home, spend most of their time treating men and women injured in road crashes or who have suffered muscle and bone injuries from sprained ankles to broken limbs.

As well as having trained consultants and physiotherapists, the Ministry of Defence-funded centre also has psychologists and social workers on hand to help treat depression and other psychological problems that can develop following injuries sustained while in service. The unit also has specialist neurology facilities and from the autumn will become the armed forces' main base for dealing with amputees such as Sgt Brennan.

Major Andy Neaves, who is in charge of the day-to-day running of the 170-bed centre, said the aim was to provide a centre of excellence for military personnel who have lost limbs. "Historically, they have been treated in NHS institutions, but that is changing. We want to make sure personnel are treated and given all the support they need by the military. It is a duty of care."

All patients - except the ones with the most serious limb and neurological injury - undergo daily exercise programmes often involving 10 half-hour sessions in the gym, pool and exercise hall.

This tactic has certainly helped Corporal Scott Garthley, 37, who was injured in a scud attack just south of the Kuwait border at the beginning of the Iraq war. He said: "I suffered also sorts of injuries, shoulder, stomach, spine, and head. When I regained consciousness I couldn't move.

“I have spent the best part of two years here doing remedial, occupational therapy and physio and together the three have been great. I am now a normal human being again, although I still do have a little pain, but when you compare that to the injuries I received it is amazing."

Developments at Headley Court and the origins of “Help for Heroes”

The achievements of the forward medical and surgical teams were also returning increasing numbers of “unexpected survivors” with double and triple limb amputations, severe head injuries, and extensive and disfiguring soft tissue injuries.

Each type of injury calls for different types of care, and the MoD has traditionally worked closely with the service charities to make provision. We record elsewhere how charities such as Combat Stress address the problems of mental health arising from war. In this chapter, we hear the story of some of the survivors of horrendous physical injuries, and chart the evolution of a better resourced, kinder, more supportive, publicly engaged rehabilitation system.

While there are many charities involved in the specifics of rehabilitation care for service personnel, the work of BLESMA is particularly important and uplifting in this field. Changes in public attitude have also been important, with recognition and acceptance of the disabilities of the war wounded. Many of the limbless have partaken in adventure sports and physical challenges with extensive media interest.

One of the most important media driven charity appeals has been that of Help for Heroes, and the writer and broadcaster Jeremy Clarkson's concern and interventions have been invaluable in raising the public profile both of this charity and of the cause of rehabilitation in general.

The issues apply equally to service personnel injured on Ops Telic and Herrick. For the purposes of narrative in this book, I have sought to focus on stories specific to Iraq and Telic casualties, although certain experiences, such as that of young Ben Parkinson who was severely wounded in Afghanistan, are an inescapable part of the narrative.

Through 2006 and 2007 there was growing awareness among the general public of the inadequacies of rehabilitation provision for severely injured military personnel.

Ed Caesar Wrote in The Sunday Times on September 30th, 2007 that:

Saving the soldiers we neglect

"A new charity is going to the aid of soldiers injured, many grievously, in wars such as Iraq and Aghanistan who are slipping through the care net when they return to Britain

Headley Court is the first target of a new charity, Help for Heroes, to be launched tomorrow with the backing of The Sunday Times. The charity has been set up to raise extra funds for the Ministry of Defence (MoD) to "directly support the wounded from the current conflicts" in Afghanistan and Iraq.

Help for Heroes' first goal is to raise between £5m and £8m for a new gym and swimming pool at Headley Court. Its patrons will be Jeremy Clarkson, the Sunday Times columnist, and his wife Francie.

The property is housed in a Jacobean mansion in the Surrey countryside, once owned by a governor of the Bank of England. The facilities at Headley Court, according to Wing Commander Steve Beaumont, its commanding officer, help patients to be "rehabilitated in a way that encourages team spirit and a military way of thinking".

It has gyms, a hydrotherapy pool, outdoor pitches where the patients can play sports and wards divided into "ambulant" and "high-dependency" patients. It has 66 beds and sees 4,000 outpatients a year.

There is a world-class prosthetics department, where ex-aircraft engineers adapt and modify artificial limbs for amputees. The most advanced computerised arms and legs - which cost £10,000 each - can be moved wirelessly by a Bluetooth controller in the patient's pocket.

Satisfied as most of the patients are, the facilities are not perfect. There is, for instance, no swimming pool - the patients take a half-hour bus ride to a public pool in Leatherhead - which means those who cannot do load-bearing movements have limited access to cardio-vascular exercise.

The Help for Heroes charity is the brainchild of Bryn Parry, 51, a cartoonist and former member of the Royal Green Jackets, and Sarah-Jane Shirreff, wife of General Sir Richard Shirreff, former commander of British forces in Basra.

Through its website it will also allow the public to "help a hero" in any way they see fit - perhaps by offering tickets to football matches or funding a meal out. Already this aspect of the appeal has been kick started by retailers - Dixons has donated 1,000 MP3 players and PC World has provided a number of combined television-computers.

The Clarksons became involved in the cause of Britain's war wounded last year when they met Lance Bombardier Ben Parkinson at Selly Oak hospital. Parkinson's case highlighted the poor treatment often accorded to veterans by the authorities. He was awarded just £152,150 from the Armed Forces Compensation Scheme - a sum intended to cover medical costs for the rest of his life.

A review of compensation, partly prompted by outrage at Parkinson's treatment, is under way, although the MoD would not confirm last week whether its changes would be retrospective to include Parkinson.

Jeremy Clarkson wrote about what he found at Selly Oak in a column last year in which he called on Tony Blair to find the money for military-only wards and more accommodation for families. Clarkson found himself in tune with a large section of the British media and the Royal British Legion's high-profile "Honour the Covenant" campaign.

The legion has made significant progress by reminding the government and the country of the military covenant, the understanding by which soldiers, in return for risking their lives, are promised appropriate service and respect at home by the government and the country.

"It's important to realise that these people, our troops, have been to hell and we need to make their passage back as smooth as possible," said Clarkson. "I've got involved with Help for Heroes because our soldiers do something extraordinary and we should give them something extraordinary in return.

Near Headley Court, the Soldiers, Sailors, Airmen and Families Association (SSAFA) provides accommodation for 12 visiting relatives, despite having first to overcome planning objections from local residents.

Parry, whose son has just joined the army, sees Help for Heroes as a charity "with no political edge". After the Headley Court appeal, he says it will move on to other

causes to ease the plight of the wounded and other service personnel and their families.

"At the moment people say, 'I don't approve of the war but I want to help'," he said. "We can either give direct, to a place like Headley Court, or we can give to a service charity. Once we've raised money for the swimming pool and gym, I hope we can go on and tackle other problems. I want us to become like a fire extinguisher, putting out fires where they emerge."

There are many fires to extinguish. Research by the Army Benevolent Fund has shown that generosity to service charities has waned. During the Falklands war, the South Atlantic Appeal for service charities raised £11.5m. Special appeals in the Gulf war of 1990-1, meanwhile, raised £3.5m. So far, appeals by service charities for the Iraq war have raised less than £500,000. The money is needed more than ever.

Margarette Driscoll wrote in The Sunday Times on December 2nd, 2007:

Clarkson's hero: How Jeremy Clarkson's outrage over a wounded soldier led to this year's Sunday Times Christmas appeal

"Here's Jeremy Clarkson; You might think that being married to him would present something of a challenge. Followers of his column in News Review are used to his forthright, blokey views on everything from Britishness and the nanny state to binge drinking (it's good for you). As the presenter of Top Gear, he presides over a cheerful mayhem of explosions, stunts and screaming tyres. Top Gear is estimated to have more than 350m viewers worldwide and his books seem to have acquired a permanent slot in the bestsellers lists.

The power of his punchy humour was brought home to them in the most unexpected way this time last year, a few months after they had been invited to dinner near their Oxfordshire home and met Major-General Richard Shirreff and his wife Sarah-Jane. Shirreff was about to take command of our troops in Basra.

"The next thing I heard from Richard was a call from Iraq," says Francie. "One of his soldiers, Lance Bombardier Ben Parkinson, although not serving in Iraq at the time – actually serving in Afghanistan – had been badly injured. He'd had both his legs blown off, his spine was badly damaged, his arms were badly damaged, he had terrible injuries and he was in a coma in Selly Oak hospital."

Another soldier had been hit by a sniper and was paralysed from the neck down. It would be months before he reached the top of the queue for physiotherapy.

The Clarksons were determined to continue to do what they could to help. Their friends had shown that there was a well of goodwill out there towards the soldiers that was at yet untapped. What they didn't know was that Bryn Parry, a cartoonist

and former member of the Royal Green Jackets, had also visited the wounded soldiers and come up with an inspired idea: a new charity, Help for Heroes, which is now part of The Sunday Times Christmas Appeal. It aims to channel that goodwill into the provision of better facilities for men such as Parkinson.

When the Selly Oak soldiers were fit enough to leave hospital, many were transferred to Headley Court, a military rehabilitation centre in Surrey which has specialist facilities for amputees. Headley Court is run on military lines. One soldier said that after weeks as a hospital patient, the day you are wheeled into Headley Court is "the day hope begins".

At Headley Court no one is allowed to feel sorry for himself. "They call it beasting, but they look after each other, pull each other up," says Francie. "There's lots of laughter and a feeling that they are among their own."

The centre is publicly funded but its facilities are far from lavish, which is why Help for Heroes is raising money for it. One of the gyms where amputees are put through their paces is effectively a tent.

Troops were being bussed to nearby Leatherhead where they have to share the pool with members of the public, to the dismay of both sides. Boys who had been blown up or shot had to reveal their stumps and scars in front of gaping onlookers. As recently as 10 days ago there was an altercation when two women told the troops they should get out of the water as they were "scaring the children".

"It's happened so many times that that one didn't even get reported up the chain," says Francie grimly. Neighbours have also objected to accommodation being built for soldiers' families at Headley Court, she adds: "If I got their names and addresses I'd have them all tried for treason. These soldiers are prepared to do something none of us is prepared to do. And we owe them, big time.

Help for Heroes, of which Jeremy and Francie have become patrons, was launched in The Sunday Times in September. It aims to raise £5m to build a swimming pool and gym complex at Headley Court. It has already raised £1.8m, including more than £100,000 from Sunday Times readers.

Official Responses and Developments

In the light of the shortcomings in the arrangements for rehabilitation of the severely injured, a new structure was put in place, as set out in the following extract from the official report commissioned by the Deputy Chief of Defence Staff (Health) in 2007:

"The Defence Medical Rehabilitation Programme began with an investment of £16 million in financial year 2002/03 to develop enhanced Primary Care Rehabilitation Facilities (PCRF) at military units and to create Regional Rehabilitation Units

(RRUs) to provide an intermediate care capability. The aim was to reduce the numbers of patients being referred to the Defence Medical Rehabilitation Centre (DMRC) at Headley Court and NHS orthopaedic outpatient departments where there were sometimes long waiting times.

The concept of the programme was that Service personnel with musculoskeletal conditions would have access to high quality, effective and timely advice, assessment, diagnosis and treatment at the appropriate level to enable them to return to operationally deployable levels of fitness. This approach was based on the following principles:

a. Understanding the needs of the patient population.
b. Use of multidisciplinary teams.
c. Integration of specialist and generalist expertise.
d. Integration and coordination of care across organisational and single Service boundaries.
e. Avoidance of unnecessary visits and admissions.
f. Provision of treatment, where possible, in the least intensive settings and as close as clinically possible to the patient's unit.

The programme is underpinned by a three-tiered approach comprising:

a. Primary Care Rehabilitation: PCRFs provide the first tier at unit level. Wherever possible, access to a detailed assessment by an experienced Medical Officer and/or physiotherapist is to be within two working days of presentation. Ideally, the patient is managed locally with appropriate treatment and rehabilitation.
b. Intermediate Rehabilitation: RRUs provide intermediate rehabilitation to a tri-Service population within a defined catchment area crossing single Service boundaries. They provide a multi-disciplinary injury assessment clinic that aims to establish a firm diagnosis where this was not possible at the PCRF and identify the most appropriate care pathway. They also have a treatment role that involves physiotherapy and group exercise therapy.
c. Specialist Rehabilitation (Secondary and Tertiary Care). DMRC (Headley Court) provides complex rehabilitation for the more substantially injured/ill Service personnel, including amputees and brain-injured patients, delivered by multidisciplinary clinical teams. DMRC is the only medical rehabilitation centre run by the Armed Forces, and provides a high standard of care with no equivalent in the NHS.

The process is supported by contracts with independent providers and NHS trusts to provide rapid access to imaging and orthopaedic fast-track surgery when this is clinically indicated.

The Defence Medical Rehabilitation Programme (DMRP) also plays an important role in operational medical care and provides an end to end patient care pathway for operational casualties with musculoskeletal and neurological injuries. A surge plan exists to ensure that Defence Medical Services have the capability to deliver medical rehabilitation in the event of a surge in casualties if Headley Court's capacity is at risk of being exceeded. The plan comprises greater utilisation of RRUs and the use of specialist NHS centres for more seriously injured patients."

The Defence Medical Education and Training Agency Annual Report of 2007/2008

It was thus possible for the DMETA Annual Report of 2007/2008 to declare the following:

The Defence Medical Rehabilitation Centre

"The Defence Medical Rehabilitation Centre (DMRC) Headley Court has continued to be very busy throughout 2007/2008. Admissions and outpatients have increased by 10% and 14% respectively from the previous year. During 2007/2008 Headley Court provided 4,825 appointments to out-patients and 1,885 episodes of treatment to in-patients, including both new referrals and review visits (of which an individual patient may have many). The opening of a new temporary ward annexe in May 2007 (at a cost of about £1.7m) increased the DMRC ward bed capacity by 30 to a total of 66 beds. Headley Court continues to demonstrate the enormous benefit of bringing together Service personnel, both those wounded on operations and those injured in training, which contributes significantly to the astonishing recovery that so many of our patients have been making.

Amputee and Podiatry Provision: Throughout the year there have been enhancements to Service amputee provision, including the expansion of the prosthetics contract to employ additional staff, the establishment of a dedicated fitting suite for prosthetics and podiatry, and the commissioning of IT infrastructure for casting and socket manufacture. These enhancements have led to a reduction in casting and production times. The total new patient episodes for amputees in 2007/2008 were 26, with the Prosthetics Department receiving 831 build tasks. A podiatry service has also been introduced for the single Services where local provision is limited.

Welfare: There have been considerable enhancements to the Social Work Department to manage better the increase in case load and changes in case mix. The department has seen a 108% increase in patient contact compared with 2006. During the year there has been increased liaison with single Service welfare agencies and close consultation with the Sailors, Soldiers and Airmen's Family Association (SSAFA) on the provision of Norton House which opened in February

2008. The house is located three miles from DMRC and provides welfare accommodation – a "home from home" – for patients' relatives, supplementing the accommodation that the MOD had already provided.

Clinical Improvements: Enhanced liaison with RCDM has achieved better management of patients through the care pathway. The appointment of a Rehabilitation Liaison Officer at RCDM and a Complex Trauma Manager post at DMRC have ensured timely, accurate referral of patients to DMRC, with improved communication. Following the successful work of a vocational occupational therapist in the re-integration of patients back into military duty, a further such post has been established.

mTBI: A new Mild Traumatic Brain Injury (mTBI) Team has been located at DMRC. The programme was established to treat patients with concussive brain injury who would respond to an education-based rehabilitation programme. Those mTBI patients who need in-patient care are being admitted in two week blocks to DMRC, with the first course starting on 1 July.

New Facilities at Headley Court: We have started to build this year a new 58-bed temporary accommodation block for patients and staff, at a cost of about £4m. On 6 May 2008 the Defence Secretary announced that the MOD would make a further £24m available for investment in new facilities at Headley Court. The decision on additional funding followed the completion of a review of defence rehabilitation which confirmed that DMRC should continue to be the specialist centre for rehabilitation, and recommended further improvements so that it can continue to deliver first class care.

The £24m is being made available over the next four years to maintain and enhance DMRC's capabilities. This investment will enable us to replace the current temporary ward annex by extending the Peter Long Unit, and incorporating into that extension an expanded prosthetics facility, treatment areas, and imaging facilities; and to replace progressively over the next few years all the existing 180 non-ward bed patient and staff accommodation.

Charitable bodies have contributed generously to the work of DMRC and its predecessor organisations since Headley Court first opened its doors to RAF patients shortly after the Second World War. The estate is owned by a charitable trust, which has itself contributed generously to the improvement of facilities on the site. Last year a new charity, Help for Heroes, generously offered to raise funds for a swimming pool and gym, which would together form part of a new rehabilitation complex. Work has now started on this project on which JMC will be working closely with Help for Heroes. The aim is to start construction before the end of 2008.



The new Headley Court Pool, as pictured in The Sun Newspaper, 2nd April 2010

The Defence Select Committee (DSC) Report of 2008

The DSC was thus similarly able to report the following assessment of Rehabilitation and aftercare within the Defence Medical Services by early 2008.

"The MoD's Defence Rehabilitation Plan operates a tiered approach to the delivery of services. The first point of contact is one of 70 Primary Casualty Receiving Facilities, which treat around 80% of problems. The PCRFs, in turn, can refer patients to one of 15 Regional Rehabilitation Units (RRUs), staffed by multi-disciplinary teams including doctors, physiotherapists and rehabilitation instructors, which concentrate on the assessment of musculo-skeletal injuries and sports medicine. The MoD's memorandum claimed that the RRUs allow the treatment more than four-fifths of patients through physiotherapy and rehabilitation alone.

The final link in the rehabilitation chain is the Defence Medical Rehabilitation Centre at Headley Court in Surrey, which we visited in June 2007. The Centre, which was opened in 2004, deals principally with patients suffering from polytrauma and brain injuries. It has 220 staff, half military and half civilian, with 156 patient beds, 36 of which are ward-based. It provides physiotherapy and rehabilitation for complex musculo-skeletal injuries and specialised neuro-rehabilitation for patients with brain injuries. Since June 2006, it has also been home to the Complex Rehabilitation and Amputee Unit, and has a contract with a private company for the production of prosthetics. These are manufactured on site and individually tailored to the patients' needs.

The Centre aims to return patients to functional independence, and, where possible, to active military duties. Historically, around 95% of patients have returned to military duties, but this has fallen to 85-90% in the recent past, given the increasingly serious injuries with which patients are presenting. Only around half of those patients with serious brain injuries tend to return to military duties.

The facility had been requisitioned from Lord Cunliffe by HQ Canadian Forces during the Second World War, after which it was bought by the Estate Agents and Auctioneers Institute (now the Royal Institute of Chartered Surveyors) to endow as a rehabilitation unit for aircrew in memory of the deeds of RAF aircrew during the War. It remains governed by a trust, the deeds of which include the rehabilitation of all Armed Forces personnel.

The MoD told us that there was an ongoing review of Headley Court, to look at future anticipated needs and development of the site, and that Mole Valley Council had been involved in discussions about the process. The Minister maintained that Headley Court was currently "very fit for purpose", but added that the MoD "want[ed] to look at the longer, short to medium term future in terms of any developments that need[ed] to take place".

There had been some press comment suggesting that some of the facilities available at Headley Court were insufficient to meet the demand placed upon them. Specifically, it had been alleged that the lack of availability of the hydrotherapy pool had forced the Centre to take patients by bus to Leatherhead public swimming pool. It was further alleged that there had been an incident in which members of the public had expressed dissatisfaction with this arrangement on the grounds that the presence of obviously injured personnel might distress other users of the pool, especially children.

We put this allegation to the Minister in November 2007. He explained that it was in part founded on a misapprehension of the purpose of different types of pool. The hydrotherapy pool at Headley Court was heated to a relatively high temperature, and was not suitable for those with cardiovascular issues. For those patients, a standard swimming pool was more suitable. Therefore, it was not the case that the hydrotherapy pool was unable to deliver the required capacity, but rather that some patients had different requirements. The Surgeon-General added that the administration at Headley Court had at no point suggested that the arrangements to use the public swimming pool in Leatherhead were ineffective, inadequate or inappropriate, complaints to which the DMS would have responded.

The DSC concluded in their report that “We readily acknowledge the extraordinary work which is carried out at Headley Court and have nothing but praise for the staff, who have had to cope with an increased tempo of operations and treat patients with injuries which, only a few years ago, would have been fatal. We regard this as a good example of the Government and charities cooperating to provide those services which they can most appropriately deliver.

We were astonished by the ability of some gravely-injured Service personnel to be successfully treated, and to return to active military duty. However, we are concerned by reports of problems with the local community in terms both of developing the facilities at Headley Court and of using local authority amenities. If it is true that some local residents objected to the presence of Service personnel, we find that attitude disgraceful. The Government should make the outcome of the current review into the facilities at Headley Court fully available, and should explain what planning it has done to account for the increased operational tempo and its implications for Headley Court".

The Modernisation of the Defence Rehabilitation Services

By the end of Operation Telic, the rehabilitation services had undergone a major modernisation. Developments and investment at DMS Headley Court Rehabilitation Centre have been paralleled by a robust review of all rehabilitation services, and the creation of 15 Regional Centres in the UK and Germany, to address the large volume of non-operational and less headline catching injuries.

By early 2009, there had been dramatic improvements throughout the system. Servicemen and women who would formerly have been discharged after serious injury were being kept in employment and rehabilitated. For those with irreconcilable injuries, the compensation available had been improved, though arguably far from enough. For those with lesser injuries, the system was much improved to return them to full physical health at the earliest opportunity.

Commission Praises "Exemplary" Trauma and Rehabilitation Services for Military Personnel Hurt In Battle

In an article dated 3rd March 2009, The Healthcare Commission praised the British military's "exemplary" trauma and rehabilitation services for personnel injured in battle. It published the first ever independent review of the Defence Medical Services (DMS), which is responsible for providing healthcare to defence personnel and their families in the UK and overseas. The independent watchdog conducted the review at the request of the Surgeon General, Lieutenant General Louis Lillywhite.

It praised the care provided to casualties of war, highlighting systems to reach and treat casualties quickly, innovations in the treatment of major injuries, the training of staff, design of field hospitals, clinical audits to feedback important lessons and rehabilitation for injured personnel. It also identified a range of areas for improvement.

Sir Ian Kennedy, Chair of the Healthcare Commission, said: "By asking for this review,

the Surgeon General has thrown the spotlight on these services in a way that has never been done before. He has invited us to report publicly on the good and the bad. That is something for which he deserves a huge amount of credit: indentifying where problems exist is the first step to getting them fixed.

"There is absolutely no question that personnel injured in battle have a better chance of survival than ever before. That is entirely due to efficient and innovative care, delivered under exceptionally difficult circumstances. The NHS' urgent and emergency services could learn a lot from how the defence service plans care, trains staff and constantly seeks to learn and improve trauma services.

Sir Ian added: "By the services' own assessments, they still have some way to go before they can tell all their patients - in all parts of the armed services - that standards are in place to provide high quality care wherever they get treatment. By commissioning this review, the DMS has taken the first step towards achieving this important goal. The results provide a clear agenda for action.

"Away from the frontline and the spotlight of war, the DMS must give urgent attention to the maintenance and cleanliness of buildings. It must also improve awareness that 16 and 17 year-olds are still legally children - military personnel or not - and healthcare workers have a responsibility to act on any suspicion of bullying or abuse."

The review involved self-assessments by reference to the 24 core standards set out by the Department of Health for the NHS. The Commission received declarations from 153 DMS units or regions encompassing a number of units. This included military hospitals, rehabilitation centres, dental services, community mental health services and general medical services. This was followed-up by inspections at 53 units in the UK and overseas. The review also incorporated 500 comments from current and ex-service personnel, family members and organisations that work with the DMS.

The Commission praised the following areas of exemplary practice:

- Trauma care is exceptional and has greatly increased the chance of survival and recovery for injured personnel. Trauma care is delivered to personnel injured in war zones, with an aim to save life, stabilise the patient's condition and transport them for further treatment. A helicopter can be airborne within minutes of receiving a call, transporting highly trained clinical staff to the casualty on the frontline. Casualties are assessed and treated very quickly, greatly improving their chance of recovery. They are then transported for further medical treatment, in a field hospital or in the UK. Aeromedical evacuation teams provide treatment in-flight and can transport injured personnel from the frontline to the UK within 24 hours. The field hospital inspected in Iraq was well-planned and extremely clean.
- Rehabilitation services are excellent. Services are provided at Headley Court rehabilitation centre and regional units in the UK and Germany. Some personnel described services as "outstanding" and "first-class".

- Innovative "patients' diaries" aid recovery for those with memory loss. Patients' diaries are kept for personnel recovering from injury in military hospitals who may suffer from memory loss. Staff record important milestones in recovery and visitors also add messages. This helps patients to fill in time lost from their memories and aids recovery.
- Clinical audits of services for trauma and rehabilitation mean care is continuously improving and innovating. Clinical experts closely examine all aspects of a patient's treatment, from when a person suffers a major trauma, through to rehabilitation. They then feedback lessons weekly to the field hospitals.

Chapter Appendix: MoD Hospital Closures in the past 30 years

In 2009, the MOD retains two military hospitals (both overseas): the Princess Mary Hospital at Akrotiri, Cyprus, and the Princess Royal Medical Centre, Gibraltar.

The table shows those military hospitals, both in the UK and overseas, that have closed during the last 30 years. Subsequent use is indicated where known.

Country	Hospital	Closed	Subsequent use
UK	Royal Victoria Military Hospital, Netley. Main hospital closed in 1958.	1978	Demolished: grounds purchased by Hampshire County Council in 1979.
	RAF Nocton Hall, Lincolnshire	1984	US Air Force took it over; closed 1995. Buildings derelict
	Princess of Wales RAF Hospital, Ely	1992	Sold for redevelopment
	Royal Naval Hospital, Stonehouse (Plymouth)	1995	Sold for redevelopment
	Queen Elizabeth Military Hospital, Woolwich	1995	New NHS hospital built on site
	Cambridge Military Hospital, Aldershot	1995	Buildings derelict
	Princess Alexandra RAF Hospital, Wroughton	1996	Sold for redevelopment
	Princess Mary RAF Hospital, Halton	1996	Buildings derelict
	Duchess of Kent Military Hospital, Catterick	1999	Continued as psychiatric unit until 2003 (see below)
	Duchess of Kent Psychiatric Hospital, Catterick	2003	Taken over by NHS
	Royal Hospital Haslar, Gosport	2007	Partnership between MOD and Portsmouth Hospitals NHS Trust until final closure in 2009

continued over

Country	Hospital	Closed	Subsequent use
Germany	BMH Munster	1991	Closed: n/k
	BMH Hannover	1992	Closed: no longer standing
	BMH Berlin	1994	Still in use as civilian hospital
	BMH Iserlohn	1994	Closed: n/k
	BMH Rinteln	1996	Closed: n/k
	BMH Wegburg	1996	Closed: n/k
Cyprus	BMH Dhekelia	1978	The Princess Mary Hospital at Akrotiri remains in operation.
Gibraltar	Royal Naval Hospital, Gibraltar	2008	Medical care provided by the new purpose-built Princess Royal Medical Centre.
Falkland Islands	Military Wing at King Edward VII Memorial Hospital	2000	Civilian hospital still in use
Nepal	BMH Dharan	1989	Still in use as civilian hospital
Hong Kong	British Military Hospital, Kings Park	1996	Closed: n/k
Malta	Royal Naval Hospital, Mtarfa	1979	Closed: n/k

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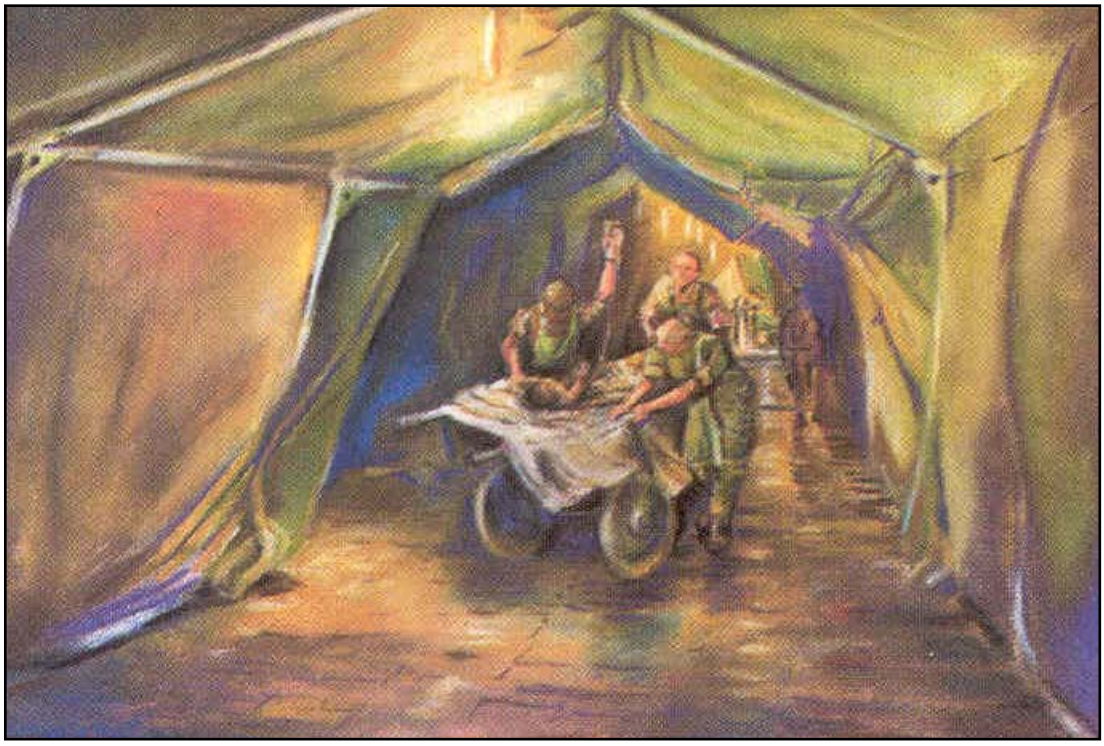
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Blood, Heat + Dust: Second Edition

Operation Telic and the British Medical Deployment to the Gulf 2003 -2009

Chapter 27:

Long Term Care and Charity for Op Telic Veterans



The Long Corridor

Artist: Gora Pathak 2003



Introduction

The events in Iraq in the first decade of the 21st century will give British social and military historians plenty of food for thought. A military operation which was perceived to be wrong and politically ill-judged by a large proportion of the population, and which produced massive pre-war protests in London and in cities across Europe, produced a wave of public and media support for the British soldiery which has transformed the long term prospects for the injured and distressed; which has transformed official and political attitudes to military welfare; and which has spawned the extraordinary phenomenon of the Charity Help for Heroes, which has generated some £50 million of donations in less than five years to mid 2010.

The long term care of the physically and mentally wounded is of course nothing new. Society has looked after huge numbers of veterans of the First and Second World wars in the past century, and previously for as long as conflicts have been recorded. What has been different about this past decade? In the comfortable and prosperous decades of the late 20th century, the acute brutalities of war were largely overlooked and forgotten in the UK, despite the annual Poppy Appeal and Remembrance Day Ceremonies. The almost continuous expeditionary operations of the UK Armed Forces produced relatively few long term casualties, even from the Falklands War and the "First" Gulf War of 1990-1991.

Public and political attitudes to military veterans became flabby. The dramatic imagery and media coverage of the plight of returning veterans, which is covered at some length in this book, shifted the public mood dramatically. A very clear line was drawn between hostility to the political dimension of the Iraq (and Afghan) campaigns, and support for the troops, highlighted by the wealth of charitable giving.

Provision for the welfare of serving military personnel and for the care of veterans has evolved as the responsibility of a complex admixture of official and voluntary organisations and charities

In this chapter, we consider the various forms of welfare support for Op Telic veterans and others.

The long term care and support of casualties

The first edition of this book, which was published in early 2005, predated the wave of public concern and political awakening on welfare matters. I wrote:

> "For the badly injured, the war continues for a lifetime, and long after history has moved on. Incapacity impairs employment and social prospects for a lifetime, and provides a minute-by-minute reminder of the causative event. Concerns have been expressed in the US press over many years at the treatment of the long-term disabled after conflict, and many great Hollywood movies have developed the theme.
>
> The care of the casualties of war encompasses the immediate and long-term medical needs, along with emotional support, physical support for the disabled, and the financial support of those who may be unable to provide for themselves after the event, or who find themselves in substantially impaired material and emotional circumstances in consequence of their injuries.
>
> In the USA, the Veterans administration provides a huge infrastructure of primary and hospital care for former service personnel. In Britain, the medical functions are now largely subsumed by the NHS, along with specialist military rehabilitation centres such as Headley Court. Further specialist services are provided by official charities, such as the British Limbless and Ex-Service Men and Women's Association (BLESMA).
>
> **Service and Affiliated Charities**
>
> "In Britain, the voluntary sector service charities and regimental associations provide a wide range of additional support to service personnel, both for specific and general purposes. Many of these are official and affiliated to military bodies, including SSAFA and the Royal British Legion. Others have a general charitable function which is not exclusive to military personnel. Some civilian organisations provide advocacy and act as pressure groups on behalf of particular groups of individuals, such as the First Gulf War veterans groups.
>
> A number of other charities deal with the problems of service veterans in different ways and according to various criteria. BLESMA is a national charity for all who have lost the use of a limb or limbs, or one or both eyes, and their dependants and widows. The Army and Royal Air Force Benevolent Funds raise and distribute money to supplement state assistance to deserving individuals. The Ex-Services Mental Welfare Society (COMBAT STRESS), exists to serve the casualties of battle

shock, PTSD or from any other psychological disability as a result of military service. Activities include home visits and support from a national network of welfare officers, and provision of rehabilitative care at three treatment centres. The Society takes some 600 veterans onto its books each year of all ages.

Regimental and Service Associations

"Service personnel have known for generations that comradeship and association with fellow servicemen and women is a powerful antidote to the stresses and isolation of return to civilian life. All regiments, ships and squadrons maintain veteran associations, as do the Royal Air Force and the Royal Navy. This support is lifelong, because the sense of community and the need to share and disgorge the intense experiences of war are a lifelong experience for many. These associations are an important long term link in the chain of moral and spiritual support for service personnel.

Charitable support for the Physically Disabled

For those casualties of Op Telic who have made it through the acute phase of injury and treatment, and the early phase of rehabilitation, there remain massive challenges of adaptation and adjustment to a new and productive life without limbs or sight. These challenges will last a lifetime.

Public pressure and common decency have obliged a major rethink in our approach to long term support of severely injured service personnel, to ensure adequate financial compensation, and to maximise the chances of functional recovery.

The strategy has involved the established service charities, such as the Royal British Legion, BLESMA, St Dunstan's and Combat Stress; newcomer charities such as Help for Heroes; initiatives from within the MoD such s Battle Back, and secure medium term employment for those who want it; and the action of government departments and the Treasury to ensure fairer levels of compensation and financial support.

In this chapter, we highlight a number of those initiatives for the physically disabled.

The work of BLESMA and the Physical Rehabilitation Charities

Charitable support has been an important element in the rehabilitation of amputees, both in providing financial, moral and technical support for individuals, and in developing institutional momentum and investment.

BLESMA (British Limbless Ex Service Men's Association) is the national charity for limbless serving and ex service men and women and their dependants and widows. Blesma started as an idea among wounded soldiers living in Glasgow in 1920, but was not formed until 1932. After World War II it had 115 branches, but slowly shrank to the



24 remaining today. It is also closely involved with personnel who have lost limbs in road and training accidents.

Its publicity material states: "BLESMA is the charity that directly supports all our service men and women who lose limbs, the use of limbs or eyes or the sight of an eye in the service of our country and we are with them all whenever we are needed for the rest of their lives. Our work starts with rehabilitation - proving that there is life after amputation. Our work is about amputee helping amputee - the fellowship of shared experience. Our work is about life long welfare support, about campaigning for what they deserve and about being there when old injuries come back to haunt. Our youngest Member is 19 and our oldest is 99.

The complex range of issues that must be addressed in caring for this population is also set out. BLESMA sought to raise nearly £2M 2009, in order;

- to provide effective rehabilitation for those who have suffered amputation or loss of use of limb.
- To provide permanent residential care and respite convalescence at the BLESMA Homes in Blackpool and Crieff in Scotland.
- To make grants to ease the effects of disability and hardship.
- To provide a comprehensive welfare service for all Members and Widows, including advice on war pensions, compensation and care and disability allowances.
- To make individual and collective representation to government departments and local government officers on behalf of Members and Widows, and to represent them at War Pension and Armed Forces Compensation Tribunals.

- To provide a counselling service pre and post amputation.
- To ensure prosthetic provision meets the requirements of our Members.

In 2009, Blesma supported the Disabled Sports USA/Wounded Warrior project and their Winter Sports Extravaganza at Breckenridge, Colorado for the third time. 15 disabled serving and ex-service Members took part, including 11 Members injured in the current conflicts in Afghanistan and Iraq. Blesma promotes the strategy of "Amputee teaching Amputee" as they regain their self confidence and esteem."

The Battle Back to Fitness Programme for Op Telic Veterans

The improvements in the rehabilitation regime; the huge media coverage and publicity of the various charities, but particularly "Help for Heroes", and the encouragement given to injured service personnel, provoked a whole series of official and personal initiatives to develop activity programmes and fund raising "spectaculars.

Within the MoD, the "Battle Back" programme set out to identify, facilitate and encourage adaptive Adventurous Training (AT) and Sport opportunities for wounded Service personnel, as described in the following press releases:

Battle Back is a new Tri-Service initiative which aims to improve and formalise the use of AT and Sport in the aftercare of wounded Service personnel in order to aid their rehabilitation and return to an active life. It was endorsed by the Service Personnel Executive Group (SPEG) on 20th March 2008. The Army have taken the lead on behalf of Defence, with Headquarters Land Forces (HQ LF) resourcing a co-ordination office in Headley Court from July 2008.

The use of Sport or outdoor activities has a proven track record to aid successful physical and psychological rehabilitation. 16 veterans of the Second World War took part in the very first Stoke Mandeville Disabled Games, which had been set up specifically for wounded servicemen – the precursor of the modern Paralympic Games.

Battle Back was the brainchild of Lt Col Fred Hargreaves. It aims to encourage and facilitate adaptive adventure training and sport for all those who are seriously injured. He coordinated a team of representatives from the three Services, the Royal British Legion, BLESMA and the British Paralympic Association, which was set up to investigate sport as an aid to rehabilitation, and see more of the Services' talented disabled athletes entering the Paralympic games.

"I used the skiing exercise as a pilot programme to prove the benefits and the ease at which this could be achieved".

"There wasn't anything in place like this before," explained Lt Col Hargreaves. "Until now, some wounded Service personnel have managed to arrange their own activities through existing programmes but there has never been a 'bespoke' approach. Battle Back gives us a single point of contact.



Private Rory Mackenzie RAMC takes part in Battle Back's first event - Exercise Snow Warrior Adaptive, during March 2008 [Picture: SAC Dominic King, RAF]





Injured Service personnel take part in Exercise Snow Warrior Adaptive
[Picture: Dominic King, RAF]

Battle Back is manned by two full-time officers based at Headley Court. It is a single point of contact for wounded personnel seeking sports and adventure opportunities. It is also for instructors or prospective event organisers looking for policy guidance, clinical or relevant Service charity contacts, and general advice on setting up any adventurous or sporting activity for post-trauma Service personnel.

"Battle Back is important for three reasons," said Lt Col Hargreaves. "Equality, Morality and Ability: Equality because it provides seriously injured Service personnel the same Adventurous Training and Sport opportunities as their able-bodied colleagues; Morality because Defence has a moral obligation to ensure that the aftercare of its wounded is of the highest possible standard; and Ability because when one is first coming to terms with a life-changing wound, it is vital to understand what one is able to achieve – focussing on one's ability rather than on one's disability – which is fundamental for cognitive rehabilitation."

Battle Back works with the major Service charities. The Army Benevolent Fund paid for the partners of two wounded soldiers to visit the skiing exercise in March

2008; BLESMA offers opportunities for personnel to attend their activity weeks such as sailing, skiing, and water sports; and Help for Heroes have provided funding toward a number of Battle Back's activities".



Blindness among Op Telic Veterans and St Dunstan's Charity

Blinding is a particularly cruel injury of war, and a number of Iraqi veterans have suffered from it. The St Dunstan's charity focussed on blinded servicemen. It has residential centres at Ovingdean and Sheffield, and acquired during Op Telic a former private hospital in North Wales for conversion into a modern residential centre. St Dunstans provides a wide range of support services for severely sight impaired service personnel, and has an active fund raising programme.



The new St Dunstan's residential home in Llandudno, North Wales, acquired in 2009

The Royal British Legion and Operation Telic Veterans

The RBL has made a major contribution to the Welfare of UK Service Veterans for more than a century. It has a major fundraising function, and is closely associated with the annual Poppy Appeal and Remembrance Day events. It also has a major campaigning role in matters relating to the welfare of service veterans.

The treatment and welfare of service personnel returning from Iraq became a major political issue and matter of public interest, as we have seen in relation to Selly Oak Hospital and developments at Headley Court. The concept of the Military Covenant,



which embodies Society's obligations to service veterans, came into focus in the media and through the high profile work of General Sir Richard Dannatt during Operation Telic.

The RBL set out its views on the future in this (abridged) Policy Briefing document in September 2007.

Health and Welfare support for serving personnel: The Military Covenant

"A career in the Armed Forces differs from all others. Service personnel agree to sacrifice certain civil liberties and to follow orders; including orders to place themselves in harm's way in the defence of others. In return, the Nation promises to help and support people in the Armed Forces and their families when they need it most. This mutual promise is enshrined in the Military Covenant, which is acknowledged by all Services.

The Military Covenant does not have the force of law, but has been enshrined through convention, custom, and contemporary application, and it represents the Nation's moral commitment to its Armed Forces.

While we acknowledge that significant efforts have been made in recent years, we believe that certain aspects of the Military Covenant are not being delivered and that the Nation must now bring about change to ensure that our Service people and their families get the support they deserve.

The responsibilities detailed in the Military Covenant include providing physical

and psychological care, and related welfare services, to personnel who are injured on military service. As the Chief of the General Staff (CGS) General Sir Richard Dannett, stated at the MOD Tri- Service Welfare Conference in April 2007 "Our servicemen and women have a right to expect fair treatment in return for their sacrifices".

The government is keen to stress that there is no "quick fix" on health and points to recent initiatives such as the Reservist Mental Health Programme and 'decompression' as evidence that they are working to improve support. The Legion recognises these steps but remains concerned that some of the health care needs of in-Service personnel are going unmet or are not being dealt with in the most effective way.

Statistical evidence and personal reports support the fact that the medical treatment and care being provided in field hospitals is of the highest standard. There are (nevertheless) concerns that the welfare needs of families of injured personnel are not being met by the government, in respect of matters such as:

- the accommodation provided for families, particularly at the RMRC at Headley Court.
- Help for families of seriously injured personnel with the cost of travel and accommodation, both in the UK and overseas.

Health surveillance

The UK Statute includes combat immunity for the Crown for injuries or illnesses that have resulted from armed conflict. This means that personnel cannot claim remuneration for losses incurred during war time (outside of the Armed Forces Compensation Scheme or Criminal Injuries Compensation Scheme (Overseas).

The government has a responsibility to look after the health and wellbeing of all Service personnel wherever they are deployed. One method of doing this is to ensure that occupational health problems are detected early.

The King's Centre for Medical Health Research (KCMHR) is currently undertaking in-depth health surveillance for personnel on Operations TELIC. This on-going research has identified an increase in psychological symptoms and problems at home during and after deployment among personnel who have been deployed for 13 months or more in a three year period.

The Op TELIC health surveillance was also able to detect, early into the deployment, an increased rate of mental health problems among Reservists when compared with Regular Service personnel. This was directly responsible for the introduction of the Reservists Mental Health Programme (RMHP) in 2007. This is a clear demonstration of the benefits of this type of research.

Alcohol related problems

The Legion believes that this type of health surveillance should be mandatory for all Service personnel, whether or not they are operationally deployed. The Defence Health Programme 2007-2011 sets out targets for occupational health surveillance. Linked to this, the alcohol consumption of all patients is to be recorded on the new Primary Health Care Information System (PHCIS), by August 2008.

It is likely that personnel deployed for longer periods of time are using alcohol to help them cope with other emotional and psychological problems. Many patients with PTSD misuse alcohol in an attempt to cope with their symptoms. Treatment of PTSD symptoms will help reduce alcohol use. However, if a Service person has developed a dependence on alcohol, this will need to be treated before they can benefit from treatment for their PTSD.

Post Operational Stress Management (POSM)

The POSM programme consists of a 36-hour "decompression" period in Cyprus for personnel following deployment to Iraq or Afghanistan. This gives them the chance to mentally and physically unwind and talk to friends, colleagues and superiors about their experiences.

Trauma Risk Management (TRiM)

TRiM is a new approach to mental health assessment being pioneered by the Royal Marines. TRiM differs from traditional debriefing in that it is not delivered by mental health professionals, but by serving military personnel following training. It stays firmly within military culture and does not involve anyone from outside the unit. It is not always directed towards emotional expression but towards assessing who might be at risk of developing later problems.

Medical downgrading

Currently, between seven and 10% of all Service personnel are medically downgraded, or are awaiting a decision on medical downgrading (KCL, 2006). The presence of mental health problems may contribute to personnel being downgraded for longer than is necessary or eventually medically discharged, which impacts on the overall capability of the Armed Forces.

The Legion believes that this group of vulnerable individuals require additional attention. The government needs to introduce comprehensive health surveillance for medically downgraded personnel to quantify the extent of psychological illness among those with physical injuries, particularly for those with chronic physical injuries or those who come under the Sickness Absence Management (SAM) programme.

Health monitoring for Service families

The Legion believes that the government should operate a system of voluntary health monitoring for Service families during and after active deployment. This will identify people who are struggling with the pressures of prolonged deployment and need extra support.

Medical discharge

Service personnel who have an injury or illness which prevents them from working within the Service are medically discharged. Around 1,000 people are medically discharged from the Services each year (MOD, 2006), compared to a total discharge figure of around 24,000 (DASA, 2007).

The Legion believes that there is a lot of room for improvement in the process of medical discharge, particularly the transfer of medical care from the responsibility of the military to the NHS. Under the current system too many ex-personnel are experiencing difficulties accessing the NHS services they need on discharge. The MOD plans to connect the DCIMP system to NHS information systems by 2010, which the Department hopes will simplify the transition to NHS care and allow medical records to be exported to GPs on medical discharge or retirement (MOD, 2007).

More needs to be done to make it easier for GPs and other NHS staff to access the medical histories of personnel who have been medically discharged.



Help for Heroes

From The Sunday Times September 30, 2007

A land fit for heroes

"In his speech to Labour's conference in Bournemouth, Des Browne, the defence secretary, urged delegates to show their appreciation and gratitude for the efforts and sacrifices of Britain's armed forces. He was met with muted applause. Lord Guthrie, former head of the armed forces, castigated the prime minister for barely mentioning the services during his speech. Our soldiers, sailors and airmen put their lives on the line for us. When they return home, sometimes physically injured or with severe mental scars, it is our duty to ensure they are properly cared for.

This, as the British Legion has reminded us, is the military covenant between the nation, the government and the armed forces. Today that covenant has been broken.

We break that covenant when we give soldiers pathetically inadequate compensation for desperate injuries… With the closure of dedicated military hospitals, soldiers who need treatment often find themselves at the end of NHS queues. Some of those at the top have done little for the country, let alone been prepared to give their lives.

Help for Heroes, a charity, will be launched tomorrow with Jeremy Clarkson, the Sunday Times columnist, and his wife Francie as its patrons. They were horrified by the conditions that exist for injured service personnel and were inspired to act. The charity, aimed at servicemen and women injured in Iraq and Afghanistan, is intended to provide better facilities, particularly at Headley Court, the military hospital in Surrey. A charity cannot fill all the gaps in what should be publicly funded care for the casualties of war. But it is a way of demonstrating that our military heroes are not forgotten. This newspaper is supporting it. We urge you to do so, too. It may even shame the government into fulfilling its duty."

And by September 2008:

Help for Heroes was rapidly accepted by the MoD, as the following (abridged) official press release of 10th September 2008 indicates in a report by Lorraine McBride:

"Help for Heroes has grabbed the headlines by raising millions for Headley Court. Its remarkable founder Bryn Parry does for injured soldiers what Bob Geldof does for starving orphans. Bryn, an ex- Army officer turned cartoonist, aims to provide support for troops injured in frontline operations. In just eight months, he has already hit the jackpot, raising £6m needed to build a new swimming pool at Headley Court, the tri-Service rehabilitation centre in Surrey.

Since he launched the appeal in October 2007 Bryn has drawn support from Chief of the General Staff General Sir Richard Dannatt, Princes Harry and William ("Every time you see them in Hello, they're wearing our wrist-band,") David Beckham, Jeremy Clarkson, James Blunt and VC holder Johnson Beharry. The cause has even been adopted by two national newspapers.

From the outset, Bryn stressed that Help for Heroes has no political agenda. He was inspired to set up Help for Heroes last July when his brother talked him into doing a sponsored bike ride from London to Paris. When his wife Emma met him in Paris, the couple vowed to raise money for wounded troops. A dinner party hosted by General Richard Shirreff led to an invitation to Selly Oak Hospital where he met wounded soldiers.

Bryn is 51 and a Northern Ireland veteran. He recalls one of his men being shot in





Bryn Parry: Picture: Allan House

the spine in 1981. His battalion lost seven soldiers. Yet curiously he never visited injured soldiers and admits that he was shocked:

"When you think about a hospital, you imagine patients sitting under white sheets, all looking rather clinical," he explained. "The reality was hustle and bustle, girlfriends and mums sitting around with guys in boxer shorts and T-shirts. A lot of them were amputees. One young man was severely injured when a rocket exploded beside his bed and his whole body looked like a giraffe - only covered in shrapnel holes."

As Bryn chatted the soldiers' plight suddenly became enormously real. A week later he was introduced to General Sir Richard Dannatt and when Dannatt told him that Headley Court desperately needed a swimming pool, Bryn made it his goal.

From day one, Bryn refused to comment in the press over compensation rows, rights and wrongs of Iraq or even why there isn't a swimming pool: "We just accept there is no pool, they need one and we will raise money," he said firmly.

Since launching the fund, over half of the donations have come from troops. The area of generosity that has given him the most satisfaction has been 100,000 school children signing up to Facebook. Touchingly they have donated their pocket money, sending it to the office run by Bryn, Emma and his tiny team of military WAGs.

When Bryn launched the appeal, he was resolute it wouldn't become "another boring military charity". It has just organised a sponsored bike ride for 300 riders through the battlefields of Northern France where historians retraced great battle scenes.

Bryn has clearly created a runaway juggernaut: "It feels like surfing a very big wave, clinging on for dear life. It's the most exhausting time of my life," he said with feeling.

But it's been far from easy. The media, and indeed MOD's press and PR operation, took some convincing but have since become powerful allies, granting access to

wounded soldiers and printing their stories:

"Initially people didn't know whether we were going to achieve anything. I think now, we are an unstoppable force. Headley Court is a fabulous place," he says at one point. "Get journalists in, let them look around. They won't be sniffing around looking for dodgy stories. They will realise that this is a story about a bloke who has no legs yet is pumping iron on a weights machine - and my God I am constantly amazed that if you put a Serviceman in front of a camera, they are brilliant and eloquent."

"Clearly I'm motivated by a cause," Bryn agreed. "It's been very easy for me to get passionate about Help for Heroes. But I'm a hopeless manager. I'm a bloke who sets direction but I get bored quickly. I don't hug people or praise them enough. I say: 'This is the cause, I'm working bloody hard, you should be working hard - so let's go for it.'"

What's next? Bryn dreams of a place where soldiers leaving Headley Court realise their potential and accept their injuries. He talks of a universal reaction when injured soldiers declare: 'I don't care what I do as long as I stay in the Paras.'

Now, Bryn is looking to going back to his day job because for months he has given up cartoons and devotes seven days a week to the campaign:

"It would be great if Help for Heroes was still going in ten years time and I could come back and enjoy a glass of champagne," he said, a tad wistfully. "But I doubt that I'll be the boss because, hopefully by then, I'll move on to something else."

However, reaching his landmark doesn't mean he'll be letting up the pace: "We want to go on and do other things," he said draining the dregs of his coffee, ready to head back to his cause. "It's not a question of stopping now."

The Army Benevolent Fund: The Soldier Charity

The Army Benevolent Fund will be known as ABF The Soldiers' Charity under a new strategy to help injured soldiers.

The charity, which was set up in 1944, aims to double its income to £14m a year in the next five years to meet the expected rise in demand for help.

Caroline Wyatt, BBC Defence correspondent, reported on Tuesday, 6th October 2009, that:

"The Army Benevolent Fund is launching its annual appeal to boost coffers and says demands on its services are rising.

Trooper Stephen Shine recently returned home from a tour of duty in Afghanistan. The 25-year-old was determined to serve alongside his comrades from the 2nd



Royal Tank Regiment despite losing his left leg to an improvised explosive device in Basra in 2007. He also suffered severe injuries to his right leg. He is one of many younger soldiers - as well as older former servicemen - who are increasingly turning to military charities for extra help.

In Stephen's case, it was funding for an accessible shower to be installed in his parents' home in London, where he lives when not on duty.

"I was in a wheelchair when I came home at first, and it was a nightmare. I couldn't get it through the door, and we had all these steps in the house, and I couldn't get into the bath without hanging off the sink," he says.

His family had tried dealing with the local authorities first, who suggested putting a board across the existing bath and installing a shower overhead.

At the suggestion of his regiment, the Shine family turned to the Army Benevolent Fund, which helps serving soldiers, veterans and their families. It says it has seen an increase of 20% in requests for assistance in the last year alone.

Its controller, Major-General Sir Evelyn Webb-Carter, highlighted the increasing need amongst veterans and serving soldiers for public assistance and support.

"It's our job to ensure that soldiers get the help they need is offered - but we need the public's help to be able to do that. We envisage the increase for assistance will continue to rise, which is why we're asking for help now. "

Stephen's mother Frances says one of the hardest things for many families whose sons or daughters have been injured in the line of duty is finding out how and

where to get the right assistance. Too many have to face complex bureaucratic hurdles at their most vulnerable point. “I had to find out everything for myself, and I'm still finding out because there's so many different charities. They're all willing to help - if only you know how to access them," she says.

"Charities are good at looking after the soldier - but there is always a family as well, and they need to be helped too, because they are the ones looking after the soldier."



The Defence Medical Welfare Service (DMWS) and Op Telic

The DWMS is a branch of the Order of St John and Red Cross organisation. It dates back to World War II. Its staff work in base and deployed field hospitals to help meet the welfare needs of personnel on admission.

An MoD Press release of12th June 2008 highlights the work of DMWS personnel on Op Telic, as reported by Karen Thomas.

“There is a bunch of non-uniformed, true professionals who voluntarily risk the dangers of front-line operations to care for injured and sick Servicemen and women confined to hospital. Patients can turn to them for a sympathetic ear and practical help knowing that their worries are completely confidential and won't be passed up the chain of command.

These welfare officers are trained in counselling skills and bring valued comfort to those who are traumatised by their injuries and who are concerned about what happens after they are evacuated.

DMWS volunteers are also on hand for family and friends, talking through emotional problems and helping with practical arrangements. And they have a broad shoulder for the medics who need to unburden the effects of dealing with war's stark realities.

Grandmother and Army wife Eileen Jones found herself on Operation TELIC 11 with 4th Mechanised Brigade as a volunteer. Based in Osnabrück, she had already acted as a crutch for the brigade's personnel admitted to German hospitals. Her experience proved invaluable for her first three-month DMWS tour:

"I think it helps that I have an understanding of what families at home go through. I know what soldiers are talking about and I can sense when they're trying to pull the wool over my eyes."

She spoke from the tranquillity of the Basra field hospital's welfare room, which is

open 24/7 to anyone in or out of uniform and of any nationality. But arrival in Basra still held a few nasty surprises.

"Within six hours of arriving on the contingency operating base we came under indirect fire. That was a real eye-opener and a shock to the system because no matter how good your training, it does not prepare you for what happens out here."

"Within six hours of arriving on the contingency operating base we came under indirect fire. That was a real eye-opener and a shock to the system because no matter how good your training, it does not prepare you for what happens out here."

"During the wave of attacks we were extremely busy. It was an emotionally trying time, not only dealing with patients but also talking to the staff and making sure they were OK. But it made you realise how worthwhile you are and how people do rely on you.

SSAFA Forces Help and Op Telic

The Soldiers, Sailors and Airman's Families Association, now rebranded as SSAFA Forces Help after amalgamation with the Forces Help Society in 1997, is another national charity which provides a wide range of voluntary support services for serving personnel and veterans. SSAFA. It also provides contractual health services to overseas commands, which has included the placement of welfare staff in deployed field hospitals.

Financial issues and compensation for the casualties of Op Telic

In the first edition of this book, we were able to write that:

> "Many of the financial and support functions and responsibilities have been brought together in the government's Veterans Agency, particularly in respect of War Pensions. Other financial support is available from official charities, which have the material and financial support of the MoD.
>
> Casualties of war and their dependants must survive on incomes which may be a fraction of their earning potential before injury, and following which their material lives may be profoundly changed for the worse.
>
> UK War Pensions are administered from Blackpool. Veterans of more recent conflicts such as the Falklands in 1982, the Gulf War 1991, Bosnia, Kosovo and Afhganistan continue to be administered by this sytem. The War Pensioners' Welfare Service (WPWS) was started in 1948. In 1991 the War Pensions Directorate was launched, becoming the War Pensions Agency in 1994.
>
> Premature death pro patria is never glorious, infrequently truly heroic, and is always a tragedy for those involved. Families have to make do on fractions of the income which they would have enjoyed if their breadwinner were alive, and

practical financial compensation for these lost lives often falls far short of that awarded in the courts for relatively trivial and fractious civilian claims.

The provision of adequate financial safety nets to service personnel is as much a practical and pragmatic imperative as a moral one. The problems for service personnel in obtaining adequate life and personal insurance are now a matter for public recognition and debate It is possible to envisage a generously resourced public insurance fund for regular and reserve service personnel killed on active service, which would make such provision. This would have significant benefits for recruitment and retention, as would-be volunteers were relieved of the burden of financial concern for their family's wellbeing during deployments.

After Op Telic 1, in parallel with pressures to improve rehabilitation services, there has been a high profile media driven campaign to improve the compensation for the severely injured, for reasons which the following articles make clear.

Ned Temko wrote in The Observer on Sunday 2 September 2007 that:

Disabled soldier's pay-out victory

"The government bowed last night to the outcry over its 'insulting' compensation plans for a young paratrooper horrifically injured in Afghanistan. The Ministry of Defence has signalled for the first time that it will review the case of 23-year-old Lance Bombardier Ben Parkinson, whose injuries have left him disabled for life.

The case of Parkinson - who was offered £152,150 compensation, half the maximum that could be paid - was first revealed in The Observer last month. A 'general review' of the rules governing multiple-injury victims such as Parkinson's was launched several weeks ago. But MoD sources repeatedly said it was 'highly unlikely' to be retrospective.

Diane Dernie, Parkinson's mother, has said she might have to sell the family home to pay for treatment for her son, who lost both legs after a landmine exploded under his vehicle.

But last night a senior MoD source said changes that could lead to higher compensation for Parkinson and other similarly injured soldiers were now being considered. The source said: 'Mrs Dernie's views and experiences will be considered as part of the review.'

Despite the apparent change of heart, the government faced growing pressure yesterday for an across-the-board increase in compensation for seriously injured soldiers.

As the move over the compensation controversies becomes clear, it can also be revealed that the law firm representing Parkinson's family has sent a letter of intent to Defence Minister, Derek Twigg, outlining plans to press for a judicial review of the compensation scheme. It seeks changes not only in compensation for multiple-injury victims such as Parkinson, but for others seriously disabled from battlefield wounds.

Lawyers insist the current £285,000 maximum compensation must be raised to the £500,000 limit for the most serious civilian criminal-injury cases.

The shadow Defence Secretary, Liam Fox, last night joined calls for a complete overhaul of the scheme. He said the government was failing in its 'moral duty to look after those who have made so great a sacrifice for our country's security,' adding: 'It is urgent and essential that people in the armed forces are looked after in the same way as civilians compensated for serious injuries.' Adding to pressure on the government, the former head of the army, General Sir Mike Jackson, said that the government had to do more to support soldiers. 'Everything starts and finishes with the soldier,' he said. 'I would love to have been able to persuade the MoD to understand that.'

Jackson added: 'Not much over £1,000 a month for the private soldier on operations is hardly an impressive figure. And some of the accommodation we provide is still, frankly, shaming.'

There were signs last night that other compensation controversies too were escalating. The father of Private Jamie Cooper, at 18 the youngest British soldier injured in Iraq, said that unless there was a change in the rules - under which a maximum of three separate injuries is considered, with a scale of seriousness calculated for each - his son was likely to receive a total of just £70,000.

Injured in a mortar blast near Basra, he suffered a serious stomach injury that has left him relying on a colostomy bag. 'Jamie is having a further operation on his stomach, which we hope will improve things,' his father, Philip Cooper, said.

Disabled veterans also receive a tax-free annual income payment. But the amount is linked to pay level and, in cases like Parkinson's, it is around £20,000 a year. For Cooper, his father said, it will be even less. 'He was a young private making barely minimum wage, about £12,000 a year,' he said.

Another young British soldier, Martin Edwards, was also reportedly facing the prospect of compensation well below the maximum for a serious head injury he suffered when shrapnel from a roadside bomb tore through his visor in Iraq. Because he was not a 'multiple injuries' victim, it is believed he was told to expect about £100,000 in compensation.

Parkinson, of the 7th Parachute Regiment Royal Horse Artillery, was injured when his Land Rover hit a mine in Afghanistan's Helmand province nearly a year ago.

'To get the maximum you need what are called three "level-one" injuries,' his mother told The Observer. 'Essentially, this means losing all your limbs, being blinded and being in a persistent vegetative state.

The system doesn't take account of the need of soldiers with very serious multiple injuries like Ben who have made courageous sacrifices.'

Paul Stokes wrote in the Daily Telegraph on 12 Oct 2007

Ben Parkinson assured of full compensation



Lance Bombardier Ben Parkinson, before and after the attack that left him paralysed

"Ben Parkinson will now receive the full £285,000 in compensation for his appalling injuries and not the £152,150 previously awarded. His mother has been assured in a telephone call from Derek Twigg, Defence Minister, that the maximum amount will be paid under the new rules.

The original award was assessed under a tariff scheme which gave him: 115,000 pounds for the loss of both legs (100 per cent) and 34,500 pounds for a blast injury to the brain (30 per cent) and 2,650 pounds for an open fracture of the left elbow (15 per cent).

Under both scheme a further 34 injuries he sustained were not taken into consideration. His case is now currently being reassessed with his traumatic injuries and fractured vertebrae taken into account as the third injury rather than his damaged arm.

Andrew Buckham, his solicitor, said that although those three main injuries could all now attract 100 per cent pay-outs of £115,000, they are likely to be set at a level to give a total of the upper limit of £285,000. An index-linked guaranteed income of £19,000 a year for the rest of Ben's life will remain unchanged under the new scheme.

In contrast, an RAF typist was recently awarded £484,000 after developing a repetitive strain-type injury in her thumb. The unnamed woman, believed to be in her 20s, was injured inputting data on to a computer and also developed depression after she was unable to work.

The MoD said the woman had been diagnosed with de Quervain's tenosynovitis, which causes a painful inflammation of the tendons at the base of the thumb. It said the onset of her symptoms had coincided with her working more. The payout was a mixture of compensation and legal costs.

A spokesman said: "Medical experts also agreed that the claimant would be unlikely to return to part-time or full-time work. The claimant also developed associated depression."

A soldier returning from war suffering from "permanent severely impaired grip in both hands" would be awarded £16,500, while a one-off payment for depression would be £28,750-£2,625.

But:

Robert Winnett wrote in the Daily Telegraph on 19th April 2008:

Fury at new troop injury compensation deal

"The family of a British soldier left crippled by fighting in Afghanistan has attacked a new Government compensation deal for injured troops and may continue legal action to secure a higher payout.

Des Browne, the Defence Secretary, today announced changes to ensure that the most seriously injured soldiers are eligible for more money. But the Ministry of Defence stopped short of offering soldiers the same compensation payouts as those on offer to civilians, who are eligible for payments of up to £500,000. Payouts to troops remain capped at £285,000.

Diane Dernie, the mother of Lance Bombardier Ben Parkinson, who was disabled for life after his Land Rover was hit by a mine, said the new deal was nowhere near enough to provide for her son's future needs.

"I think timing, public pressure, these are the things that have forced this change, not any feeling of responsibility," she said. "They [soldiers] are simply figures on a balance sheet."

Mrs Dernie thanked Mr Browne for the changes he has made but said the upper ceiling is nowhere enough to provide the housing adaptations and other specialist needs which her son will need for the rest of his life.

The new guidance means those hurt in the line of duty will now receive payouts for all the injuries they suffer in a single incident. At the moment, payments are only made for the three most serious injuries.

The MoD was forced to make the changes to the scheme following a public outcry over the level of some payouts, with some troops receiving far less compensation for horrendous injuries than civilian workers suffering more minor complaints.

The Defence Secretary also said that the changes would be backdated to cover all those injured since April 2005. The money will continue to be paid tax-free.

Sean Rayment wrote in the Daily Telegraph on 20th September 2008:

Defence chiefs warned not to become reliant on service charities

"Defence chiefs have been warned that the military's policy for compensating troops injured in battle is "confused" and too reliant on service charities, The Sunday Telegraph has learned. The Army's most senior generals have also been told that compensation levels for the most seriously-injured troops are still too low when compared to civilian payouts, even after a recent doubling in the maximum tariff.

The warnings emerged as rugby stars from around the world lined up at Twickenham yesterday for the Help the Heroes Challenge Match, which aimed to raise £1 million to support wounded servicemen and women. Gordon Brown praised the sportsmen's efforts last week and told them: "You are doing it for the greatest of causes."

Whilst such fund-raising appeals are warmly welcomed by the military, concerns have been voiced within the Army that injured troops should receive fuller compensation by right, rather then being left to rely on charitable donations.

Fears are now emerging within the Ministry of Defence that unless compensation levels are increased substantially, injured troops will be forced into taking legal action against the government.

Under current rules, a soldier seriously injured in a road traffic accident in an operational theatre such as Iraq or Afghanistan, or even in the UK, could, if they can demonstrate negligence on the part of the MoD, be entitled to greater compensation than a colleague sustaining similar injuries in battle.



Charity Help the Heroes recently held a rugby match. Photo: GETTY

An Army document obtained by The Sunday Telegraph, entitled Claims, Compensation, Criminality and Criticism, states that: Many within the military community regard compensation levels as "insufficient".

The document, recently presented to the Executive Committee of the Army Board, also suggests that it is unacceptable for compensation paid to seriously-injured troops to be subsidised by charities.

The document highlights the case of an Iraqi civilian who was accidentally shot and wounded by a British soldier, and was awarded £2 million.

"Steps have recently been taken to raise the level of compensation, but are they adequate? Is it appropriate in the current legal/political and social climate for injured servicemen to receive or rely upon charitable donations? Do the compensation schemes compare to, say, provision for a fire officer or policemen killed or injured on duty?"

Many senior officers now believe that despite increases in the size of pay-outs, many injured servicemen and women will become dependent on service charities for financial hand-outs later in life. The Royal British Legion, the biggest of the service charities, raised around £88 million last year, of which around £54.2m was spent on the ex-service community".

And in a continuing debate at the end of Op Telic, there remained much to be resolved:

A Leading Article in the Daily Telegraph on 3rd January 2009

Time to stop insulting Tommy Atkins

"Few trends have undermined society more in recent years than the establishment of what has come to be termed "the compensation culture". Sometimes, this culture has enabled undeserving cases, and their lawyers, to become rich on the back of the taxpayer, with the payment of huge sums for relatively trivial injuries, whether physical or psychological.

We highlighted the case a month ago of a civilian typist for the RAF who received £484,000 for a repetitive strain injury to her thumb. That disgrace becomes even more apparent when measured against the limit, confirmed yesterday by Des Browne, the Defence Secretary, of £285,000 for members of the military with substantially more horrific injuries. The thinking behind this scale of compensation is simply unfathomable.

There was a time when injuries, however severe, sustained by members of the Armed Forces were considered to be part of the warp and weft of Service life. They were an occupational hazard of going to fight for one's country.

After the First World War, the Star and Garter homes and other provisions through the Royal British Legion were developed to help the most severely disabled. Other charities helped where they could, and still do. No one could possibly diminish the contribution of these magnificent organisations: but the climate has changed.

It is hard to see why those called on to do the dirtiest jobs of all on behalf of their political masters should be compensated, in the very worst cases of disability, at not much more than half the rate of someone who has braved the far less treacherous terrain of the typing pool.

If the Government is to subscribe to, uphold and fund the compensation culture, then it has to include within it the most obviously deserving cases for the state's bounty. It will no longer wash to tell the Armed Forces that getting blown to pieces is merely part of the job. That takes no account of the realities of life for the disabled ex-Serviceman and his family. It also drives away potential recruits.

Much has been written about the broken covenant between the Government and the forces. This unjust tariff is a further element. It is all very well to use our Servicemen and women for political posturing, as Gordon Brown did last week when he went to Iraq, but these are real people with real family lives that are often wrecked by the wounds they sustain.

The Government uses our heroic Servicemen abominably while wasting a fortune elsewhere. Soon, the public will become entirely unforgiving".

Official long term strategies for the welfare of Op Telic Veterans

The Defence Select Committee Report of 2007-2008 on the care for veterans and Service families, summarises a number of important developments in the welfare of service personnel and veterans, in a range of areas:

Priority access for veterans

Medical care for ex-Service personnel is the responsibility of the NHS. However, since 1948, there has been an entitlement to priority access for war pensioners to treatment for conditions relating to their service. On 23 November 2007, the Government announced that this priority access would be extended to all veterans for conditions which were believed to derive from service. This followed a pilot project run by Hull Primary Care Trust, and the Health Minister estimated that it would extend priority access from around 170,000 veterans across the UK to a figure in the region of 5,000,000.

The new system will rely on self-identification by veterans, some of whom may be reluctant to make their status known. This seems to present a fundamental problem. Even assuming the seamless transfer of medical records, a clinician will

not automatically have any way of knowing that a patient has served in the Armed Forces, let alone that his or her condition may be related to the period of service. This is all the more problematic given that some conditions can show symptoms months or years after the patient has left the Armed Forces, particularly in relation to mental health.

Transfer of personal health records

An issue which goes hand in hand with priority treatment for veterans is the transfer of medical records from the military to the civilian clinician. The system as it was explained to us is that those leaving the Armed Forces, after having a medical examination, are given a summary of their medical history to present to a civilian general practitioner upon registering. The GP can then, if necessary, request the full medical records of his or her patient from the MoD, relating to the period of service in the Armed Forces.

We remain concerned that medical records do not transfer as seamlessly from the Armed Forces to civilian life as they could. Too much is left to the initiative of the patient, and on our visits we heard that the existing system often works imperfectly. We recommend that the MoD re-examine its procedures with regard to medical records and examine ways in which there could be an automatic transfer of records and a more effective safety net for those who, for whatever reason, do not take the initiative in transferring or requesting records. We also ask the MoD to give us an update on the progress of its IT system, the compatibility with the NHS National Programme for IT, and its anticipated schedule for implementation of the new system.

The wider implications (of effective care for Op Telic Veterans)

The care of veterans is important not just in terms of making sure that first-class healthcare is available swiftly and easily to those who have served the country. It has a wider impact on the perception of Service life, both in terms of Service personnel and their families, and in terms of the community at large. We have already expressed concern over the issue of recruitment and retention of personnel by the Armed Forces.

We believe that providing first-class healthcare for veterans, and making sure that people have confidence that they will be able to access and will receive such treatment, is an integral part of the debt which society owes to those who serve in the Armed Forces, and, as such, has an impact on recruitment and retention.

In conclusion:

Welfare and Charity for Veterans: The long term duty of Care

At the time of writing in May 2010, operations in Afghanistan continue, and the numbers of seriously injured from the expeditionary operations of the Noughties,

the first decade of the 21st century, continue to rise. There are now several hundred young men and women from Operations in Iraq and Afghanistan with serious and disabling injuries, including many double and triple amputees, wrecked genitalia, head injuries, deafness and eye injuries, who will have a life time of physical dependency, reduced earning potential and impediments to normal career progression in the work of civilian and military employment. The psychological burden will only be measured with the passage of time, but we can be sure that many of these damaged lives will be shortened for many reasons, including suicide, alcohol abuse and depression.

Expeditionary operations are voluntary political affairs, with a terrible price to be paid by those to whom the immortality of youth, and imperviousness to bomb, bullet and blast proves to be illusory. We who have survived these operations unscathed but have done our best to keep these young people alive have a collective professional and moral duty of care for the duration of their lives. We must ensure that when public attention moves on and media interest fades, the funds, the kindness and the understanding remains to allow each and every casualty to achieve their fullest residual potential; and when depression and despair set in, to know that they have not been abandoned.



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Blood, Heat + Dust: Second Edition

Operation Telic and the British Medical Deployment to the Gulf 2003 -2009

Chapter 28:

Stress, mental health and psychological issues from Op Telic



Painting: *The Sergeant Major's Packet*

Artist and text: David Rowlands Medium: Oil on Canvas

28 March 2003: Recovering the injured during the attack on the Ba'ath Party HQ in Az Zubayr - by Falcon Squadron 2nd Royal Tank Regiment and D Company, 1st Battalion The Light Infantry, supported by medics from 1 Close Support Medical Regiment.

Introduction

We bring our children up to be decent citizens. We do our best to protect them from the brutal realities of life throughout childhood, even though the technical wonders of the internet age, the digital camera and 24 hour news coverage expose them to the darker truths at an early age. We maintain the fiction of the 9 o clock watershed on TV, And then, in their late teens, we package them up in body armour, with Mad Max vehicles and weaponry. We send them off to fight brutal counterinsurgency wars in alien lands and among utterly alien cultures, where blood feuds run for generations, where women are spirited away at puberty under total subservience to male members of the family; and where every street, lane and culvert may hide an IED, ambush, or horror of horrors, a human suicide bomber, the insurgents most effective guided missile. And then, after a six month tour of duty, during which their closest friends and colleagues may have been blown to bits in horrific circumstances, we expect them to return to normal behaviour in a usually indifferent and uncomprehending civil society.

War leaves its mark on its participants in many ways. Long after the guns have stopped firing and soldiers have returned to civilian life, the flow of disturbed and distressed individuals continues to trickle through the psychiatric clinics and social services offices. The camaraderie of war is replaced by the loneliness of peace, and the normal stresses of civilian life become magnified, refocused and set against the traumas of war.

For those who have witnessed the death of friends and companions in war, or the horrors at the extremes of human behaviour, the cause of shock and disturbance may be immediate and clear. For many others, including those who may appear to have weathered the immediate traumas of war without effect, the consequences may nevertheless be prolonged, subtle, insidious and disruptive. We know something of the public face of this readjustment crisis from the great post-Vietnam era Hollywood films. Nearer to home, some of our greatest soldiers have found great difficulty in adjusting to the demands and constraints of peacetime life, and there is a widespread, under-reported and recorded range of problems met by many individuals of all ranks on return to peacetime life.

Following the two world wars, the public engagement and social disruption in war had been so complete that most veterans were readily reabsorbed into their communities on their return. Most had shared similarly in the stress and dislocation of war, and thus could identify with it. In modern times, the experiences of troops returning to Britain from expeditionary warfare are altogether lonelier. Most of their civilian friends and family find little identity with the experiences, and public interest in the detail of each operation soon drifts away, as the veterans of the Falklands, the Gulf, Kosovo, Bosnia and many smaller operations will testify. The experiences of war are best shared with those who have also served.

The consequences of war live on longer in the minds and lives of service personnel than the media headlines. Many of these individuals come to the attention of doctors in the fullness of time.

Following the First Gulf War, there was huge public and media interest in an alleged "Gulf War Syndrome" in the US and UK, which was extensively investigated by various independent enquiries. The condition was unsubstantiated. Nevertheless, Gulf War syndrome raised further interest in the issues of post-traumatic stress, and in the need for detailed surveys and observations of the "at risk" populations of service personnel deploying to war.

There are many important issues and questions around psychological welfare and mental health of individuals who have been deployed on operations in Iraq, as elsewhere. The pressures are many and varied, as are the personalities who make up military teams, and the domestic, professional and operational circumstances in which they find themselves;

The triggers can range from the severe acute and profoundly shocking experiences to the seemingly trivial event. They can be a single event, such as a traumatic bomb blast or firefight, or a prolonged series of stressful experiences.

Is it possible to identify individuals who are particularly vulnerable to the dislocation and stressors of operations? From time to time, tragic personal stories surface in private and in the media, of individuals whose lives have become profoundly disturbed. Can we spot these personality traits or patterns of personal circumstances which might provoke such reactions in advance, and screen susceptible individuals out of military service?

War produces intense experiences of fear, elation, camaraderie and personal achievement in adversity, which are rarely replicated in civilian life. A brutal counterinsurgency war such as that faced by relatively small numbers of troops in Iraq over a period as long as the Second World War can be expected to have produced a vast number of challenging memories, to be set against a background of considerable public antipathy to the Campaign. Many of those involved will have wondered why the sacrifices were being made, as for much of the campaign a successful outcome was by no means certain. We have read something of the experiences of those involved, and it is not difficult to understand how many will be affected in various wars for years to come, both by the physical injuries and by the less visible mental effects.

The return to the "normality" of civilian life after a hard fought campaign produces dramatic contrasts and often a wall of apparent indifference for those who have not been involved. The unsettling effects can take years to work themselves out, and readjustment is made all the more difficult by alcohol, drugs and relationship breakdowns, which can produce a vicious circle of problems. The effects are usually mitigated within the security and cocoon of unit friendships, bonding and discipline, and exacerbated in the cold competitive world outside the Armed Forces.

All personnel who have deployed to Iraq are at risk of the insidious effects of readjustment disorder. No life can be quite the same again after the experiences of war, although the personal response to those experiences varies from the positive, career and life enhancing approach to the destructively negative effects.

Gulf War Syndrome (Op Granby 1991) and its relevance to Operation Telic

There was concern that there would be a repetition of "Gulf War Syndrome" during Operation Telic.

The debate on the existence of a unitary *Gulf War Syndrome* has caused considerable controversy since 1991. *Gulf War Syndrome* describes a complex spectrum of symptoms and complaints by individuals - many of whom were a long way from action - during the First Gulf War. Extensive investigations have failed to demonstrate a consistent physical pattern to the symptoms, or conclusive links to the alleged causative factors, including the range of vaccinations and chemical prophylactics offered against biological and chemical warfare agents. They have also failed to prove any significant and consistent differences between the complainant and at-risk groups of Gulf service personnel, and an age and health matched civilian population. Nevertheless, the Defence Medical Services have rightly come to recognise that there is a group of vulnerable individuals for whom the physical and psychological consequences are very real, whatever the explanation. The early identification and care of the psychologically vulnerable is an important element of primary care and in pre-empting later problems.

"The MoD position on *Gulf War Syndrome* has been formulated on research by a number of independent bodies. It is that some veterans of the 1990/1991 Gulf Conflict have become ill. Many people believe this ill health is unusual and directly related to service in the 1990-91 Gulf conflict. Sometimes they refer to this phenomenon as *Gulf War Syndrome*.

"There is now good scientific evidence that UK 1990-91 Gulf veterans report more ill-health than other comparable groups. The pattern of this ill-health, however, is not unique to 1990-91 Gulf veterans. The same symptoms are seen in UK military personnel who did not deploy to the Gulf in 1990-91. The difference is that veterans of the 1990-91 Gulf conflict report more of the symptoms and are suffering more severely from them. Some Gulf veterans have recognised medical conditions, but a large number of non-specific, multi-system, medically unexplained symptoms have also been reported.

"Specific diseases, disorders, abnormal conditions and medical syndromes all have common features such as a set of physical signs or symptoms that distinguish them from other medical conditions. However, 1990-91 Gulf veterans do not present with a distinct and identifiable pattern of symptoms or signs. The consensus of the international scientific and medical community is therefore that there is insufficient evidence to enable this ill-health to be characterised as a unique illness or syndrome.

"A team of British and US civilian and military psychologists, psychiatrists and Public Health specialists reported a study of post-combat syndromes from the Boer War to the Gulf War in the British Medical Journal in 2002. They wished to discover whether post-combat syndromes have existed after modern wars and what relation they bear to each other. Records for 1856 veterans were randomly selected from war pension files awarded from 1872 and from the Medical Assessment

Programme for Gulf war veterans. Characteristic patterns of symptoms were related to the given diagnosis, to predisposing physical illness, to combat experiences; and to the personal attributions of the post-combat disorders.

"Three varieties of post-combat disorder were identified. There was a 'debility syndrome', which was associated with the wars of the 19th and early 20th centuries; 'somatic syndrome', which was related primarily to the First World War; and a 'neuro-psychiatric syndrome' which was associated with the Second World War and the Gulf conflict. They concluded that all modern wars have been associated with a syndrome characterised by unexplained medical symptoms. The form that these assume, the terms used to describe them, and the explanations offered by servicemen and doctors seem to be influenced by advances in medical science, by changes in the nature of warfare, and by underlying cultural forces.

Service in the Gulf war of 1991 was associated with an increased rate of reported symptoms and worsening subjective health measures, but these were not unique. Post-combat syndromes have been described after most modern conflicts from the US Civil War onwards. There seemed to be no single post-combat syndrome but a number of variations on a theme. Reported symptoms are subject to bias and changing emphasis related to advances in medical science or the discovery of new diseases, and the characterisation of individual syndromes has to be treated with caution. Attributions by servicemen are generally consistent with symptom characteristics, but there seems to be a growing reluctance to consider the stress of military service as a cause.

"The Medical Research Council addressed this in May 2003 and came to the same conclusion. The Ministry of Defence's approach is guided by these findings".

There were nevertheless concerns that *Gulf War I Syndrome* might emerge in a similar or new form as *Gulf War II Syndrome*. Measures were thus instituted to reduce the likelihood of such problems arising during the second Gulf campaign and future operations. For example, vaccination policies are now voluntary and educational rather than compulsory. Demobilising troops are given a formal debriefing and a returnees' awareness package, and are offered a range of support and counselling services and contact points for future use.

With greater understanding of the limitations of the "stiff upper lip" and of the requirements of the duty of care to service personnel since the 1990s, much greater effort has been put into mental health risk reduction strategies.

The early effects and management of psychological distress from combat

Psychiatric casualties and Battle Shock

The management of what is colloquially known as Battle Shock is a particularly important aspect of primary health care for operational personnel. Battle shock describes the reaction of some individuals to the appalling psychological traumas and

stresses of war. Events affect different individuals in different ways, and fairly minor events for one individual may represent serious psychological trauma for another who is already under stress.

Battle shock is characterised by consequential loss of normal mental function and discipline. Experience teaches that battle shock is best treated as a normal if severe response to the events of war, rather than as a psychiatric or disciplinary process. Battle shock is thus best managed and minimised within the affected soldier's own unit and among his own comrades as far as possible. These individuals are best not processed through the medical chain of evacuation, and the effects are minimised if the casualty is returned to 'normal' activity as soon as circumstances permit. The deployment of forward psychiatric teams to provide the supportive care necessary at the dressing stations and field hospitals is an important part of this process, and battle shock is now well understood and recognised throughout the chain of military command.

Trauma risk management

TRiM is a relatively new tactic for protecting mental health and reducing stigma. A non-medical person from each unit is trained to be a point of contact and support, particularly after a traumatic event. They can assess whether someone is at risk and arrange for further help if needed.

"The basic principle is that a TRiM practitioner, while they're still a peer and a colleague, has some training in recognising where there's a problem and addressing it in the unit. This means that when someone is in distress we don't simply fly them off away from their friends and their unit," says Surgeon Commander Neil Greenberg, senior lecturer in military psychiatry at the Academic Centre for Defence Mental Health (ACDMH) at King's College London."

Decompression

Decompression is another technique that's used to help personnel returning from operational duties to cope with the process of coming home. Decompression involves a unit spending around 36 hours together between leaving the combat zone and going home. This gives them the chance to think and talk about their experiences.

Currently, for most units, decompression takes place in Cyprus. This provides relaxation time for troops who would otherwise travel from an operational theatre to home in a matter of hours.

The longer term: Post Traumatic Stress Disorder (PTSD)

Post Traumatic Stress Disorder (PTSD) is a complex diagnosis, which has been popularised in recent years and applied to a wide range of causes other than battle shock. During the early 1800s military doctors began diagnosing soldiers with 'exhaustion' following the stress of battle. This 'exhaustion' was characterised by mental shutdown after individual or group trauma. The treatment was to bring the afflicted soldiers to the rear for a while then send them back into battle.

In 1876 Dr. Mendez DaCosta reported cases of US Civil War veterans with symptoms such as startle responses, hyper-vigilance, and heart arrhythmia, known as 'Soldiers Heart'.

During WWI the psychological response to battle trauma became known as 'shell shock'. The overwhelming mental fatigue was known as the 'effort syndrome', the forerunner of 'Chronic Fatigue Syndrome'. Some 60,000 British troops were diagnosed with the problem and 44,000 of these were retired from service.

In WWII, the term 'combat fatigue' was adopted to describe the syndrome. The term 'Post Traumatic Stress Disorder' was adopted after 1980 when the third edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM) was published by the American Psychiatric Association. PTSD is also known as 'stress response syndrome', caused by a 'gross stress reaction' to extraordinary events.

The syndrome became a particular source of attention after the Vietnam War, when many returnees were clearly severely affected and maladjusted to their experiences, leading to a high suicide rate. The professional perspective had by then changed, such that PTSD was recognised as both a short-term self-limiting syndrome and to a singular illness with longer term consequences.

PTSD was thus defined as a psychological condition experienced by a person who had faced a traumatic event which caused a catastrophic stressor outside the range of usual human experience. This would include an event such as war, torture, rape, or natural disaster. This definition separated PTSD stressors from the 'ordinary stressors' or 'Adjustment Disorders' of life, such as divorce, failure, rejection and financial problems.

PTSD is thus described as occurring when the patient experienced, witnessed, or was confronted with an event or events that involved actual or threatened death or serious injury, or a threat to the physical integrity of self or others; the response involved intense fear, helplessness or horror; the traumatic event is persistently experienced in recurrent and intrusive distressing recollections of the event, including images, thoughts, perceptions, bad dreams, flashbacks and abnormal psychological or physiological responses.

The Diagnosis of PTSD

This is not easy, and there is considerable professional debate about the best approach to diagnosis and management. One school of thought is that the disorder should not generally be diagnosed unless there is clear evidence that it arose within six months of a traumatic event of exceptional severity. A 'probable' diagnosis might still be possible if the delay between the event and the onset was longer than six months, provided the clinical features are typical and there is no alternative identification of the disorder, such as an anxiety or obsessive-compulsive disorder, or a depressive episode.

This is a complex area of clinical diagnosis, but it is important for professionals to be aware of the problem and to provide mechanisms of supportive care at any time, even years later. Care starts as near to the front line as possible, and is thus an important responsibility of personnel in the medical support units.

Combat stress in medics and health professionals during Operation Telic

The career experience and the professionalism with which medical services personnel approach their duties might be expected to mitigate such stresses, but this cannot be assumed. Health care personnel are in fact at particular risk for a number of reasons, from the most junior medic to the most senior clinician and commander, for reasons which include:

- the fact that the junior medics will invariably know and have a close working relationship with those whose wounds they are suddenly obliged to treat
- that they are part of a regimental team and family with particularly close and intense loyalties
- that the severity, frequency and immediacy of the trauma is often in excess of anything met in UK domestic hospital practice
- that care is often given under fire, and that even hospitals and ambulances are targetted by an insurgency which has no recognition of the rules of conventional war
- that medics (and chaplains) have unique tasks in the handling and certification of dead bodies

Much effort is now being put into the early recognition and mitigation of the traumatic stresses of combat, as in general education of commanders and individuals at all levels; in the introduction of practices such as TRIM and the development of a network of trained mental health specialists visiting units around the battlefield; and in public awareness of the pressures upon troops through the media. There is also a busy academic programme of research into the effects of stress both globally on deployed forces and in the aftermath of deployments, and the formation of a robust independent research programme.

The late effects of the psychological stress of combat

Demobilisation and demob syndrome

The deployment to war can be a life changing and mind expanding experience for an individual taken from humdrum civilian life and returned to it thereafter. War is theatre and infotainment for the general public in the modern media and information age. People cheer the home side while the match is on, but attention and interest soon wander after the match is over. Reservists returning weeks or months later should not expect interest or enthusiasm for their experiences. Work colleagues may well resent their absence - or have taken advantage of it. The lives of social contacts will have moved on. Civilian friends may well not understand the intense bonding, teamwork and satisfaction which develop during a well conducted military operation. Public perceptions of the returning 'war heroes' will be distorted by media coverage and attitudes.

Service returnees are thus subject to personal and emotional effects which may be very subtle or very overt, which may become immediately apparent or take a long time to

emerge. The reservist will perceive hostility from 'ungrateful' civilian contacts, and many other emotions. Often, the only source of discussion and recollection of military experiences, however trivial, will be with military friends from the same deployment, or through unit and regimental associations.

Service personnel of all nations and cultures understand this situation. In recent times, it has emerged after the Falklands War and First Gulf War among British personnel, as among US soldiers after Vietnam and Russian troops after Afghanistan and Chechnya. Service and other charities carry some of this burden, but more can be done to educate the public and employers of its realities and pervasive effects.

Mental health issues arising from the Iraq campaign

Post traumatic stress and, readjustment disorders among Op Telic service personnel were increasingly reported in the national media. We should not lose sight of the fact that military combatants are only part of the story of mental health problems arising from military operations in Iraq. The anonymity of the internet allows many to open up in ways which they might not otherwise do in person and in public. Problems were also reported by family members, and by civilians, as illustrated in the following accounts.

2005: Personal accounts of traumatic stress from civilians, combatants, families and friends caught up in military operations in Iraq

In September 2005, The BBC News website ran an open forum exploring what happens when the fighting stops - but the trauma continues. Its five-part series assesses the effects of the Iraq war on those affected by it, and what is being done to help them. Here are some of the selected postings from respondents who believed themselves to have suffered from operations in Iraq.

My experience with the war was mentally troublesome for me and my family. On the morning of the 7th of April 2003, the Republican Guards began shelling us with heavy artillery, it continued for two hours, being civilian veterans of Basra from the previous Iraq-Iran war we understood what that meant, these two hours seemed like a lifetime. Me and my family, including my two infant daughters, hugged together for the next three days! We did not move for three days so we did not know that the government fled. Our house, car were badly damaged and an unfortunate neighbour's corpse and limbs where scattered up to the house roof. Two weeks ago, sitting in a cinema in Amman, Jordan and watching The War of the Worlds I just couldn't stop crying. My daughters still get nightmares of the artillery shelling whenever they hear a loud bang or if anything falls to the ground.

Haider, Baghdad, Iraq

As a Iraqi-British physician, the issue of mental health in Iraq has always interested me. I think Iraqi civilians are who we should be most concerned about because many don't have the access to counselling and mental health staff that the troops do. Also, they often don't have the option of leaving things behind, because they happen to live in a battle-zone which is one of the strangest and unconventional in history. All this after years of fear, torture and repression from Saddam's Baath regime, which would have been detrimental to their mental health even without the current situation. I think Iraqis are quite strong mentally and tend to use a lot of humour to combat difficult situations. However, when you have children seeing their parents shot in front of them or a huge suicide attack with body parts strewn all over the place, any normal human being would become psychologically disturbed. They need the expert help and resources to be provided sooner rather than later.

Dr H Al-Najjar, Sheffield, UK

I am from Iraq, and since I was six years old, I have experienced war. From falling rockets to air raids, to the stress of losing your family members continuously and for reasons you have nothing to do with. Iran, then Kuwait and the 12 years of sanctions. This made most Iraqis fearless of death, because they basically do not have a life for a long time. During that time, you will have to worry about every aspect of living as a civilian, from gas to water to food etc... And this left me and most of my generation in a constant state of worry, trying to plan for everything and seeing only the dark side of life. I think this is the least that can happen after being subjected to such a brutal lifestyle.

Marwan, Norway

I went ashore at Umm Qasr in 2003 at the start of the conflict. I was 11 months out of university. Yes, people are bound to be traumatised, war is a terrible thing. But to be honest it is possible to deal with the conditions you were under, it is possible to carry on. I think a factor of this PTSD is the fact that individuals who are mentally fragile are being sent to do jobs they should not be doing. War is hard, as well as brutal but to be honest so are we.

Anonymous

I worked in Baghdad for nine months on a international development funded project. The first thing I would like to say is that talking about the post traumatic stress of returning soldiers does not need to detract from the trauma experienced by the Iraqi people. Secondly, while all soldiers have consented to be sent to war this does not mean we should expect them to be unaffected or not give the affects they experience the attention it deserves. I am concerned that the British military does not train its soldiers enough to deal with death, grief and fear and the horrors that they will encounter. I am also not sure if any human is able to come out unscathed after months of killing, causing, witnessing, avoiding and cleaning up death.

Emily Reilly, London, UK

The same person that left for the Army just three days after graduating high school, is certainly not the same person that returned home after serving in Iraq. My son has completely cut himself from his family. We receive no phone calls, no emails or no visits. When we are fortunate enough to reach him by phone, his conversation is extremely limited. His personality prior to the Iraq War was jovial and upbeat. He would kid around and always make you laugh. Now he only says 'I'm OK'. You can hardly get more than that out of him in any conversation. Please somebody, anybody tell me how to get persuade him to seek help with PTSD?

Laverne Williams, Palm City, FL USA

I served for six months in Iraq as a TA on mobilised service. When I came home I had changed in ways I never even noticed, over the following months I became more aggressive, angry, scared and emotionally dead. It ended up costing me my girlfriend and my job, I was diagnosed by my GP as having PTSD, and when I went to the army for help they said it wasn't their problem. Twelve months later and they still have offered me no treatment and even though I am slowly rebuilding my life the army is threatening to discharge me from the TA, so the only true support I get (from people I know) will be taken away. One day I hope the nightmares will stop.

Anonymous

My partner spent six months in Iraq from serving in 3 Para. Six months living in holes in the ground that he had to dig out everyday, listening to artillery shells going off and explosions all around him. Did he kill anybody? Probably. Would he talk about it? No way! I spent weeks being woken by his nightmares and sweating fits. I soothed him when he screamed out and I cuddled him when he cried. He never talked about it, not even now. The MOD offered him counselling as part of his eight-man team - but what man wants to pour their heart out in front of seven other men, even if they are their band of brothers? I called Combat Stress, they couldn't help because he was still a serving soldier. So he pushed it to the back of his mind and carried on. I think the MOD should be doing more for their men on their return to the UK, everybody should be assessed individually and treated as a person in their own right and helped accordingly.

Anonymous, Kent, UK

My brother is in the Black Watch and served two tours in Iraq in the recent Gulf War. Although he has shown us pictures taken by him while he was there he will not talk about what he saw or the things he did. He doesn't sleep well and is often walking around the house in the wee small hours while everyone else is asleep. The British Army has a responsibility for the ongoing care of their soldiers.

L, Dundee, UK

My dad is in the British army and was away in Iraq during the invasion. I know it was difficult for him when he first got back, he seemed to have lost most of his 'normal' social skills and would become very moody quickly and ultra irritable. I know he had problems telling us what it was like because he felt there was no way he could explain in ways we could understand or grasp and all we had seen was pictures on the news. He was working long busy hours eating, breathing and sleeping at work so coming back to a quiet house with the family who were getting on with their normal business took a while to get used to again. My Mum found it very difficult, first being alone for the six months then having to put up with him when he got back (that's what it became, dealing with the mood swings and anger fits) so they spent some time apart. It seemed to work as it's all good now and he's back to his pre-Iraq ways.

Sam, London

In our concern for the mental health welfare of UK military personnel, it is easy to overlook the effects on civilians and non-combatants caught up in the dislocation and fear of war. There is a very large literature on this subject. For our purposes, a single article from the Guardian newspaper will suffice to bring focus to the problem.

Ghaith Abdul-Ahad wrote in The Guardian on Wednesday 2 March 2005 that:

2005: Iraqi Civilians: The forgotten psychiatric casualties of Conflict

"As the violence in Iraq continues, the number of people traumatised by the conflict grows. Yet little or no psychiatric treatment is available to them - and what there is can be terrifyingly crude.

Hafid al-Qadhi is one of the most precarious places in the new Baghdad. Gangs, brothels and piles of rubbish fill its dark, unelectrified alleys, where kids play around lakes of green sewage. It has been known for decades as the crazies' neighbourhood, not only for the eccentricities of its inhabitants, but also because since the late 50s it has been home to the country's most celebrated psychiatrists.

One of Baghdad's best-known shrinks has his clinic in a crumbling, two-storey building there. The stairwell leading to his clinic is a dark, sinister space. Lighters in hand, visitors tread carefully on the steps, plaster falling in big lumps on their shoulders as they climb to the upper floors. The letters on the doctor's nameplate have been lost a long time ago. In the small waiting room, men and women crowd around a small table where a young woman struggles in the darkness to find patients' history in three big volumes of names and details. An old TV sits idle in the corner, and a piece of cloth separates the waiting room from a small, stinking toilet, lit by a candle.

Beneath the doctor's British diploma hanging on the wall, Fatima Aziz, a thin, tall woman in her 40s, is sitting with her sister on a pair of threadbare green armchairs. Her black scarf is falling back from her head, her hand held firmly by her sister and

her eyes fixed on the floor. The doctor, an old man in his 60s, pleasant, soft and reassuring, sits behind a big wooden table. The only light in the room comes from the big window behind him, making his white hair glow and giving him the air of a genie. He glances at the white card passed to him by a male nurse and whispers "ECT".

Iraqis these days like to look back and tell each other stories of the good old days when everyone was happy and people weren't at each other's throats over every issue. Clearly the memory is a rosy one, but there is no doubt that depression and psychiatric illness are on the increase in today's Iraq. The worsening security situation has led to more and more people with serious mental health problems, though the withdrawal of the UN and international aid agencies means information about the scale of the problem is elusive; both the International Red Cross and Médecins Sans Frontières say they have no data on the psychiatric effects of the war and its aftermath on Iraq's population. (A 1999 report by MSF into psychological damage in Sierra Leone after a period of intense violence found that 99% of respondents showed levels of disturbance equivalent to severe post-traumatic stress in Europe.)

With limited availability of medicines and counselling therapies, some doctors are increasingly relying on electroconvulsive therapy, or ECT, to treat Iraq's mentally ill. This involves passing an electric current through the brain to induce a fit and in the UK is used, under general anaesthetic, only to treat severe depression and psychiatric illness, and then only after other treatments have failed. The irony is that in Iraqi cities, with their intermittent electricity supplies, even this therapy is not always available.

"So Fatima, tell me what's wrong?" asks the doctor in a fatherly manner. Her sister answers on her behalf. "She is not sleeping very well. She speaks harshly to everyone. She remembers old quarrels and picks fights with everyone." Fatima is looking at the floor.

"My daughter," asks the doctor, "do you feel that people are talking about you? Every time you go to bed do you hear someone whispering in your ears?"

"Yes," says the sister. "She won't have any food cooked in the house, she says we are trying to poison her." Fatima is still looking at the floor.

The doctor starts writing something in a white notepad and says: "She is suffering from an acute depression." He looks at Fatima again. "Fatima, my daughter, do you tell yourself that maybe if I die things will get better?"

Still looking at the floor, she speaks for the first time: "Yes, but then I look at my kids and say no."

"Doctor, every time the door is knocked, she starts screaming and fighting," adds her sister

"Why is that my dear?" asks the doctor in his soft voice.

"It is all these things around us," says Fatima. "The Americans, the booby-traps. No security, I can't let the kids go play outside because of car bombs and fighting." She raises her head for the first time, looks at the doctor and says: "Doctor, you are a learned man. Why can't you stop these car bombs and explosions?"

The doctor giggles and looks at the ceiling, raising his palms. "But how can I? I am like you, scared of these things."

Ibn al-Rushud is Iraq's psychiatric hospital, built in the late 70s with oil-boom money. The hospital, a white concrete modernist structure with long slit windows, is squeezed into a cul-de-sac with a Presbyterian church.

Dr Hashim Zaini, the hospital's director, is bald, spectacled, slightly eccentric, and clearly a little despairing. "We have 74 beds and two doctors," he says. "We receive 250 to 300 patients a day and we are supposed to serve a nation of 25 million people." He is followed by half a dozen people as he walks to inspect the wards - patients looking for more tranquillizers, a contractor who's here to fix the hospital's generator, a couple of employees asking for leave. They follow him into his office as he continues to sign papers and write prescriptions pushed under his nose by colleagues.

In a conservative society with strict moral codes, visiting a shrink or having any psychiatric consultation is anathema. Having a mentally disturbed person in a household can mark an entire family as damaged, prompting gossip to spread rapidly through extended family networks. People with psychiatric illnesses such as depression or acute anxieties will often be told to read the Qur'an or pray more, or will be threatened by a husband, father or family members. "Psychiatric consultation is so stigmatised here, it is only when the family cannot tolerate the patient any more that he will be brought here," says Zaini. "This is why it will take a long time to figure out the real impact of violence and war on the people."

But according to Zaini and other experts, it is children who are experiencing most acutely the impact of Iraq's descent into violence. "We are witnessing a gradual change in the psychology of the children - they are living in a state of constant fear. When the teacher comes every few days and tells the children, 'Don't come to school tomorrow, there is a terrorist threat,' what do you think will happen to those kids? This is why the best business in town is the market for toy guns.

He would love it, he says, to be able to spend more time listening to his patients and forming a proper diagnosis, instead of turning to electric therapies after five minutes' consultation. "But for us Iraqis, tired and impatient, and especially for the families who want to see a direct result, we can't stop using ECT. For them it is an effective way to calm down the patient, and it is a speedy fix."

And so back in the darkened surgery in Hafid al-Qadhi, the doctor calls to his nurse, "Mustafa, prepare for an ECT." The nurse goes outside, and after a few minutes the muffled roar of a generator comes from the balcony. A faint current of electricity, enough to light only a few bulbs, flickers into life. The nurse comes back and opens a door leading to a small adjacent room smelling of burning plastic. "Doctor, I don't want to go through this again," says a visibly agitated Fatima. "But you want to get well, right?" he says, leading her to the other room as her sister holds her firmly.

They lay her on the leather bench, and take a metal headset from where it has been soaking in an aluminium bowl filled with water. Two wires lead from the headset to a brown wooden box. The doctor switches a plug on the wooden box. Her eyes close tightly as she starts to fit, shaking and trembling. Her sister holds her feet; the nurse puts his thumb under her chin to stop her from biting her tongue.

Back in the room and behind his desk as Fatima lies unconscious next door, the doctor is inspecting the white card of another patient. "The conditions in the surrounding environment, the fear, the anxieties of war and violence and the deteriorating security situation - all work as a pressure factor, that keep chipping away people's resistance."

He opens the door to let in the next patient. "Of course, some people are already neurotic and have a low threshold of tolerance. People like Fatima, who break faster than others."

Richard Allen Greene reported for BBC News on Friday, 12 August 2005 that:

2005: Psychological trauma in UK troops after deployment to Iraq

“Tens of thousands of US soldiers - and untold numbers of Iraqi veterans and civilians - are suffering psychological trauma from the war in Iraq. The numbers of UK troops showing signs of post-traumatic stress disorder (PTSD), anxiety and depression are much lower. But experts warn that they may only be the first of many.

Martin Hazard's Iraq experience might not sound so bad on the face of it. A communications officer, he worked gruelling 30- to 36-hour shifts, and people often depended on him for their lives. He regularly had to stay at his post, even when his camp was being shelled, because his work was so critical. But he saw little in the way of face-to-face combat, and came home to the UK in August 2003, before the insurgency gathered steam. Even so, he often has to drink himself to sleep, two years later.

Little things prey on his mind, he says. He suffers from nightmares, and has become confrontational, his wife Sara adds. His symptoms are the classic ones of PTSD - a

psychological condition that can affect people who have been through difficult experiences.

Campaigners and mental-health experts who work with soldiers say cases like Martin Hazard's are going to become more common among British troops who served in Iraq.

Little information about the mental health of UK troops in Iraq is available yet - but a major study should be published later this year or early next year, says Dr Amy Iversen of the King's Centre for Military Health Research. Some 75,000 UK troops have served in Iraq since March 2003 - many of whom have done multiple tours. Neither pre- nor post-deployment mental health screening is standard in the UK armed forces.

About 10% of UK troops airlifted out of the war zone between January and October 2003 suffered primarily from psychological problems, according to a study published in the British Journal of Psychiatry. Dr Anne Braidwood, a medical adviser to the UK Veterans' Agency, says British troops may show lower levels of psychological trauma than their US counterparts because their situations are different.

Another small scale-study suggests a successful deployment can actually be good for a soldier's mental health. But its author, Jamie Hacker-Hughes of the King's Centre, says the troops he studied were professional soldiers on successful, short-term missions.

Sean Rayment, Defence Correspondent of the Daily Telegraph, wrote on 11th March 2007 that:

2007: British troops in Iraq face risk of mental illness

"Thousands of British troops are facing permanent psychological damage after fighting in Iraq and Afghanistan, the mental health charity Combat Stress has warned.

The threat from roadside bombs, the intensity of the combat and the fear associated with fighting a hidden enemy are all factors said to be leading to large numbers of troops returning from operational tours with serious mental conditions.

New Government figures reveal that more than 2,100 soldiers have returned from Iraq since 2003 suffering from some form of mental illness.

Psychiatric conditions suffered by service personnel include post traumatic stress disorder (PTSD), manic depression, and drug and alcohol dependency. But it has also emerged that up to seven service personnel have committed suicide either during or after active duty in Iraq.

Combat Stress has seen a 26 per cent increase over the past year in the number of troops seeking help. They include 160 veterans of the wars in Iraq and Afghanistan seeking help for mental health conditions, many of which were not diagnosed while they were serving in the forces.

The MoD's figures show that of the 2,100 troops diagnosed with a psychiatric condition, 904 had developed adjustment disorders, where sufferers have difficulty readjusting to their normal way of life after a traumatic experience.

Up to 328 servicemen and women returned from Iraq with PTSD, which can lead to manic depression, and another 227 were diagnosed with other neurotic disorders. The figures also stated that 188 had taken part in so-called psychoactive substance misuse, including alcohol and drug abuse, and the abuse of antidepressants.

Leigh Skelton, the head of Clinical Services at Combat Stress, said that "We receive 1,000 referrals a year from veterans suffering from mental health problems. The long-term number of psychological casualties is going to be much higher than what we have seen before."

The psychological health of Reservists

Regular forces personnel are able to adjust to a considerable degree to the stresses of war, as their communities are self-sufficient and self-supporting. They also have continuity of employment in the professions of arms after each operation is over.

Mobilised reservists leave civilian communities and lives - and return to them at short notice - and do not enjoy these adjustment mechanisms. These communities are not adjusted to the needs of professionals at arms, and indeed may have no particular empathy with the military cause. Reservists and their friends and families must adjust to these realities, and many will tell stories of changed lives and relationships - often for the worse in the short-term - on their return to civilian life. Anecdotal reports indicate a high level of marital and relationship problems after Operation Telic, and there is a need for formal and practical support in the longer term for individuals faced with such problems on demobilisation.

The Charity Combat Stress took a lead in profiling these cases, in fundraising for resources and in engaging with the Government to direct progress. The following news stories illustrate the extent of the problem, and the response of Combat Stress and other military charities.

2005

Richard Allen Greene reported for BBC News in August 2005 that: "If you're not doing what you're trained to do, or you're a reservist, or Territorial Army (TA), it is more difficult," he says.

Toby Elliott of Combat Stress says TA soldiers are seeking help in disproportionately high numbers - although only 10% of the troops deployed to Iraq have been from the TA, 50% of those in treatment at Combat Stress are. That could be partly because TA veterans do not have access to Ministry of Defence medical services, he says.

They may also have more difficult readjustment problems than regular army soldiers, who tend to remain in a military environment - often among the same group of people they served with - after Iraq. TA troops return to their civilian lives.

Peter Mahoney was one such TA soldier. He served with the Royal Logistic Corps, and found the transition back to civilian life unbearably difficult. Before going to Iraq in 2003, he was "a party animal, a happy-go-lucky bloke," his wife Donna says.

When he returned, he "became like a recluse", she says. He was argumentative and racist, and would disappear for hours alone on his motorcycle. A year after his return, he killed himself. "His enthusiasm for life had dwindled," Donna says. "He wasn't nice at the end. He wasn't the same man."

The Daily Mail and the BBC reported on16th May 2006 that:

2006: 'A Quarter of British soldiers in Iraq suffer mental illness'

"British Army reservists fighting in Iraq are to get better mental health services following a shock new report. The study, by a team at King's College London, found 25 per cent of part-time soldiers deployed to Iraq suffered common mental disorders such as anxiety and depression, compared with only 19 per cent of regular soldiers.

Now the Government has said that reservists found to be suffering from post-traumatic stress disorder (PTSD) or similar problems will be treated by Ministry of Defence medical services, like their full-time counterparts, instead of relying solely on the NHS.

Researchers found no evidence of "Iraq war syndrome", with no sign of the big increase in illness which followed the 1991 Gulf War. More than 10,000 British military personnel who served in the 2003 Iraq war or were deployed on subsequent tours of duty were questioned in the study.

The researchers looked for symptoms similar to those reported in the aftermath of the 1991 Gulf War, including PTSD, common mental disorders such as depression and anxiety, physical aches and pains, and fatigue. Their health outcomes were compared with those of personnel who had not been to Iraq.

As well as mental health problems being more prevalent among reservists, 15 per cent reported physical symptoms compared with 12 per cent of regular soldiers. Rates for PTSD were 6 per cent for part time and 4 per cent for regular soldiers.

Professor Mathew Hotopf, who led the research, said: "This is clearly important, because reservists are being used increasingly in Iraq." He thought many reserve

soldiers might not be getting adequate support, either at home from families and employers or in Iraq from their regular army colleagues.

There were also differences in the way health and welfare services were provided for reservists and regulars, with regular soldiers being looked after by the Ministry of Defence medical services while part timers had to rely on the NHS.

The Ministry of Defence, which funded the research, has announced that in future, part-time soldiers diagnosed with PTSD or related problems will be offered outpatient treatment by the Defence Medical Services. It said the announcement was linked to the Lancet study, which called for further research.

The study also found that British soldiers sent to Iraq coped with the psychological stress of war far better than their American brothers in arms. PTSD affected up to 20% of US personnel returning from the war zone, compared with just 4% of British troops. This was put down to the fact that US forces had been involved in more fighting and that British soldiers tended to be older and more experienced in warfare.

In addition to the difference in common mental disorders, such as anxiety and depression, the survey found TA soldiers had higher rates of post-traumatic stress disorder, fatigue and physical symptoms such as chest pain, shaking, bowel and sexual performance problems.

A second study by King's College researchers looked at data on the health of 3,642 men who had served in Iraq in 2003 was compared with 4,295 who were in service at that time but who were not deployed. The researchers found small slight rises in irritability, forgetfulness, feeling distant or cut off, chest pain and night sweats among those who served in Iraq in 2003, compared with peers who did not go.

The team, led by Prof Simon Wessely, looked at the physical and psychological health of 3,600 British regular soldiers deployed in the 2003 Iraq war and 4,300 non-deployed colleagues. The results were then compared with data collected after the 1991 Gulf War.

Prof Wessely said: "Is there an Iraq war syndrome? The answer is no, at least not yet."

The researchers said the better health of Iraq war veterans remained a mystery, although better health surveillance, improved communications, and changes in the way vaccinations and other medical counter-measures were used in the Iraq war may have had an influence. Both studies were published online yesterday by The Lancet medical journal.

But the striking differences seen between those who served in the 1991 war and military personnel who were serving then but did not go to the Gulf were not evident, the researchers said. They suggest the difference may be explained by changes in how immunisations were administered - and an awareness that more interest was being taken in the health of serving personnel.

Martin Fletcher wrote in The Times October 13, 2007, that:

2007: The lonely death of Private Dave Forshaw: the Territorial soldier in turmoil

"He lived his dream with the Army but could not readjust to civilian life and decided his best times were behind him

One afternoon last month Dave Forshaw drove his Land Rover to a woodland park in Esher, Surrey. The 32-year-old Territorial Army volunteer removed his shoes, reclined his car seat and closed the windows. He then started a chainsaw and lay there while the fumes killed him.

He was seen in his car the next morning by people walking dogs, but they assumed he was sleeping. When he was still there the next day they summoned help. The police found his army identity card inside the car and a letter from an Australian colonel commending his conduct after his vehicle was hit by a roadside bomb in Basra in July last year. Private Forshaw was unscathed, but his three passengers were all injured. "I was astounded at David's composure as he went about the business of comforting his comrades," the colonel wrote.

On the night that the body of her son was found, Janet Dawes, the mother of Private Forshaw, discovered a note that he had left in a wardrobe in his bedsit in Mitcham. He was dyslexic, so she believes he must have spent many hours writing it. He asked for the flag of St George to be draped over his coffin, for Everybody Hurts, a song by R.E.M., to be played at his funeral and for his ashes to be scattered at the Emirates stadium of his beloved Arsenal football team.

Mrs Dawes told The Times that her son, a decorator, had always wanted to join the regular Army, but was barred by his dyslexia so joined the Territorials instead. In October 2005 he was sent to Iraq and served two six-month tours with only four weeks off in between. When he returned home in November 2006, "he was the happiest I'd ever seen him, he was at his absolute prime", she said.

Then the decline began. He could not settle back into civilian life. He drifted from one job to another, ran up debts and stopped attending training sessions with the Territorials. He became moody. Some days he would hide himself away. He began eating alone and visited his mother less. All he wanted was to return to Iraq or Afghanistan, but his efforts to go back as a soldier or private security contractor were repeatedly frustrated. "He could not go on living the kind of pointless life he felt he was living. He wanted to live a life of real purpose but it wasn't there," said Bobby Stevens, who was his landlady for 11 years. So he ended it.

The military did not send an official representative to the funeral of Private Forshaw and he will not appear on the official list of Iraq war casualties. He may or may not have been suffering from post-traumatic stress disorder (PTSD), but he was, in his own quiet way, a victim of that conflict, and in that he is not alone.

"At least one other reservist is known to have committed suicide after serving in Iraq. In 2004, 13 months after returning from a stint as an ambulance driver for the

TA, Peter Mahoney, from Carlisle, put on his uniform and medals and asphyxiated himself in his car, surrounded by photos of his four children.

Experts believe that hundreds more reservists have returned from Iraq with psychiatric problems and that many are isolated, bewildered, depressed and in need of help. They say that reservists suffer more than regular soldiers because the transition from military to civilian life is so abrupt, that they are less prepared for the horrors they encounter and lack the same support networks. Also, specialists such as medics and engineers in the Territorials are often sent to Iraq individually, not as part of a unit.

A study by the King's Centre for Military Health Research concluded in 2006 that as many as 6 per cent, about 700 in all, of the 12,000 reservists who were deployed in Iraq could be suffering from PTSD, and that reservists suffered higher rates of depression than regular soldiers. A follow-up study revealed that they found it harder to adjust to being back home and said people did not understand what they had been through.

Shaun Rusling, vice-chairman of the National Gulf War Veterans and Families Association, says that his organisation receives more than a hundred calls a year from reservists with mental health problems.

Ed Caesar wrote in The Sunday Times on 30th September 2007 about the issues for casualties with mental health problems.

2007: Saving the soldiers we neglect

"The number of troops with posttraumatic stress disorder (PTSD) and other psychiatric problems has risen steeply. Many slip through the net.

When Lance Corporal Justin Smith was medically discharged from the ColdStream Guards last August suffering from PTSD, he felt abandoned. On his second tour of Iraq, Smith saw his best friend, Ian "Molly" Malone, killed in front of him and has since suffered nightmares and flashbacks.

On discharge from the army, he was faced with an unsettled housing situation - the expensive temporary house for which he paid £177 a week was so mouldy and damp-ridden that it was barely habitable - and inadequate medical care.

"I see someone from the NHS about every two months," said Smith, who has relied partly on more effective help from the legion. "I haven't had therapy for over a year. I'm still working as a labourer, but it's been a struggle. I'm short-tempered with my kids and my relationship with my wife has suffered. I sleep on the settee. Sometimes I'll get three hours' sleep. On a good night I'll get five."

After Smith harangued Tony Blair on the West Country Live programme on ITV in

February this year, he was moved into more suitable accommodation. But he still feels, like many PTSD sufferers, that he has been "stuck on the scrap heap".

Dr Walter Busuttil, medical director of Combat Stress - which is part-funded by the MoD - believes the NHS does not know how to deal with military trauma. But with the demise of psychiatric centres for the forces, the NHS is the only option.

"I have heard cases of ex-servicemen who have been put in NHS group therapy sessions," said Busuttil. "When they have tried to talk about their experiences in Afghanistan or Iraq, they have been told, 'You can't talk about those things. You'll traumatise the other patients'."

Cash raised by Help for Heroes may also be directed to PTSD-related causes in future. Money, though, will not cure everything. A frequent complaint against the services is that they are capable of gross insensitivity.

Lianne Seymour - whose husband Ian, an operator mechanic with 3 Commando brigade, was killed in a helicopter crash on the first day of the Iraq war - knows this better than most.

Lianne, an accountant, was 27 when she became a widow with a three-year-old child. Her first experiences with the MoD after her husband's crash would set a pattern that has continued to this day. "I received a letter from the army which said that because my husband had died 10 days before pay day, he had been overpaid in error for 10 days' work," she said. "They said I would have to repay that money. I was shocked but I didn't initially do anything about it. But I told a friend who got in touch with her MP - the matter was raised in parliament and the demand was very quickly retracted."

Glenda Cooper, wrote in the Daily Telegraph on 26th November 2007 that:

2007: "Nursing the mental scars of war"

"The Government is unveiling a new scheme to help soldiers suffering from post-traumatic stress disorder. But for one widow, it is too little too late, Glenda Cooper finds

'Imagine your worst day and multiply it by a thousand," was how Captain Ken Masters described his time in Basra to his wife Alison. "In Bosnia and Afghanistan I felt I was doing some good. Here it's different."

Four days before he was due to leave Iraq he walked into his small barrack room at Waterloo Lines military camp and hanged himself.

"He was out there looking after his men; why was no one looking after him?" his wife asks now.

Capt Masters is one of 17 serving personnel posted to Iraq and Afghanistan who have committed suicide; one in 10 of those who have died in these two conflicts have taken their own lives.

According to the Ministry of Defence's own figures, of 1,158 serving personnel who developed mental health problems - such as post-traumatic stress disorder (PTSD), stress-related disturbance and depression - between January and March in 2007, 499 had been in either Iraq or Afghanistan. Other figures show that the number of reservists sent to Iraq who suffer mental problems has doubled since 2003.

The last military psychiatric hospital, the Duchess of Kent in Yorkshire, was closed after a review in the 1990s. The MoD says it is accepted as best practice to treat service personnel with mental health disorders in the NHS in conjunction with the Priory group of clinics.

The story of Capt Masters and others like him raises profound questions about whether the military establishment recognises the invidious nature of anxiety disorders, PTSD and their manifestations, ranging from suicide to violence. In one case a former soldier fired a crossbow at his wife after experiencing a flashback.

"If you have a guy who has been hit by an RPG [rocket-propelled grenade] then something simple like a metal bin lid falling to the ground can set off a flashback," warns Ed Tanner of the mental health charity Rethink.

Dr Mark Salter, a consultant psychiatrist in London, reported that: "About one in four soldiers will experience some form of mental trauma. This can appear as night sweats, night terrors, self-harming. We may associate self-harming with women but you find it in veterans, too - whether hurting themselves with knives or just failing to look after themselves - not washing, not keeping themselves fit, anaesthetising themselves with alcohol and drugs."

Many experts now believe that while warfare has always exacted a toll, recent developments have exacerbated the problem.

"Because the Armed Forces are under more pressure, in the past you might have had one six-month tour in three years; now it's not unusual to have two tours in 18 months," says Tanner. Rethink is opening a new facility in Wiltshire offering accommodation for up to two years for veterans suffering mental trauma.

There is also another factor. In civilian life, a new therapy culture encourages us to talk about our feelings - but not in the military.

"The problem," says Prof Simon Wessely, director of the King's Centre for Military Health Research, "is that the things that make people good soldiers - stoicism, resilience, bravery - make them bad patients. It's a circle that is very difficult to square. Soldiers need to control their feelings, emotions and fears in order to go into battle and hence it is difficult later on to admit to weakness, fears and doubt."

Too much is unspoken. Alison Masters felt her husband, who committed suicide due to depression, was not able to articulate all his feelings. They had met when she was just 18 and he was 22. "He was my first love," she says.

Capt Masters worked for the Special Investigation Branch (SIB) - part of the military police - and, with Alison and their two daughters, Kirsten, now 16, and Hannah, 14, was posted all over the world.

He had worked in Northern Ireland, Afghanistan and Iraq, but when he arrived in Basra in April 2004, British forces were facing damaging allegations of abusing Iraqis. By the time he came home in late July, for 10 days' rest and recuperation, he had lost a huge amount of weight and was not sleeping.

Alison persuaded him to see the doctor back in Basra, but felt she could not voice her concerns to his bosses in case it damaged his career. "Ken insisted it would all be OK," she says. Yet her husband's mental health deteriorated very swiftly.

"At his inquest one officer talked about coming in and seeing Ken rocking back and forth on his chair, just staring at a blank screen," she says. "Why did no one say anything?"

In 2008, the Daily Telegraph chose to highlight the work of "Combat Stress" for its Christmas Charity Appeal. Cassandra Jardine wrote on 10th December 2008:

Combat Stress in 2008: Fighting another battle after the war

"At the Edwardian country pile of Tyrwhitt House in Surrey, a group of former soldiers are drinking tea. They are a matey bunch, joshing with the ease of men used to the camaraderie of the Armed Forces. But they are also the "hollow men" of whom T S Eliot wrote, shells of their former selves, haunted by memories of what they saw, did and sometimes failed to do. Their talk is of relentless, nerve-shattering grenade attacks and of comrades who died next to them and sometimes instead of them because, at the last moment, they had swapped duties.

Behind them they trail broken marriages and self-obliterating drinking habits, haunted nights and reality-shattering daytime visions of being back in the thick of combat. They feel safe talking about those painful matters now, but only because they are with others who understand, as only other ex-combatants can. "If it hadn't been for this place I would have topped myself by now," says one. The others agree. They say it is better to work through, rather than suppress, their nightmares and self-loathing. Unless they do, symptoms can get worse and worse.

Feeling that you have been let down by others is a common cause of PTSD, as is feeling that you have let down your comrades — many of those who come to Combat Stress were involved in "friendly" fire. Never knowing who is friend or

foe, who you can trust, is another predictor of long-term stress problems. Northern Ireland was bad for that. So are Iraq and Afghanistan.

Those who have been psychologically damaged by these latest conflicts are just beginning to contact Combat Stress, which has seen a 53 per cent increase in referrals over the past three years. Last year alone it took 1,100 new cases. Its good news that the average length of time before someone seeks help is coming down from the current level of 14 years but, as demand increases, the charity needs to expand the numbers of beds in its treatment centres and extend the outreach service that helps people in their own homes.

Cassandra Jardine wrote in the Daily Telegraph on 25th March 2009 that:

March 2009: How Telegraph readers helped tackle the mental health problems of our servicemen

"Today Combat Stress will receive over £300,000 from Telegraph readers. Since the Telegraph took up Combat Stress as one of its 2008 Christmas charities, the issue of mental health problems among former servicemen has risen in profile. Three weeks ago, Lance Corporal Johnson Beharry, 29, Britain's youngest holder of the Victoria Cross, joined those calling for better treatment of the psychologically wounded.

Depression and post-traumatic stress disorder (PTSD) among ex-servicemen and women lead to divorce, homelessness, excessive drinking and drug use. Nine per cent of our prison population – some 8,500 people – is made up of former combatants. They are also three times more likely to commit suicide than civilians.

Over the past three years demand has risen by 53 per cent. Last year 1,200 new cases were presented to Combat Stress. Unfortunately, the more people who come forward, the thinner resources will be stretched. At present, only half the charity's budget is met by the Ministry of Defence, leaving £3-4 million a year to be raised from the public".

The problem with suicides continued to the very end of Op Telic, and tragically even on operations. Indeed may well have increased because of the relative boredom, inactivity and introspection following the end of combat operations, as the following report suggests.

Rupert Hamer wrote in the Sunday Mirror as late as 29th March 2009 that:

2009: "Suicide watch at Basra after three soldiers kill themselves"

"A suicide watch has been launched at Britain's main base in Iraq after three soldiers killed themselves. Posters have been put up urging troops with any suicidal thoughts to get help immediately. Officers have been told to look out for anyone with signs of depression or post-traumatic stress disorder.

The campaign follows fears of an explosion of mental problems among troops who have served in Iraq and Afghanistan and seen comrades killed or survived attacks. A senior source said: "These apparent suicides all happened within a 10-week period. This in itself is unusual and commanders are keen that everyone is alert to signs of depression or mental problems.

The campaign was launched after Pte Wrathall, from 1st Battalion, The Princess of Wales Royal Regiment, of Surbiton, Surrey, was found dead from a gunshot. L-Cpl Wilson, from 9 Army Air Corps Regiment, of Huddersfield, and Cpl Churcher of 20 Armoured Brigade died the same way.

One poster says: "Never let your mate fight alone. Worried about someone in your team? Be willing to listen. Not all wounds are visible."

Official actions to address mental health issues for service personnel:

The Reserves' Mental Health Programme (from 2006 onwards)

"Reservists who developed psychiatric disorders after being demobilised had to rely on the NHS until late in 2006, which had limited experience with problems arising from conflicts. After the report by the King's Centre, the MoD began the Reserves Mental Health Programme in November 2006. This offered mental health assessments at the Reserves Training and Mobilisation Centre at Chilwell, near Nottingham, followed by treatment in military facilities, if necessary.

The Programme was open to anyone who has seen active service as a volunteer or reservist since January 1 2003; who is now demobilised, and who has mental health problems that might be linked to service on operations.

Between November 2006 and May 2009, the RMHP was contacted by around 300 individuals. The majority received the help they needed simply by contacting the professional team members, but 92 individuals attended to be assessed.

Reservists can ask their GP for a referral. Referrals from civilian psychiatric services are also accepted. Individuals can contact the assessment centre directly. Individuals with a combat-related mental health condition, outpatient treatment is offered at one of the MoD's 15 military Departments of Community Mental Health (DCMHs)".

The Defence Select Committee (DSC) report on Defence Mental Health, 2007-08:

"Mental health is a key aspect of healthcare for Servicemen and women. In 2002, the MoD published the conclusions of its Medical Quinquennial Review, as a result of which there was a reconfiguration of mental health services it provided. These were based on the principle of community mental health and carried out primarily through 15 military Departments of Community Mental Health (DCMHs), with satellite centres overseas. These are staffed by mental health teams comprising psychiatrists, mental health nurses, clinical psychologists and mental health social workers. The MoD's aim is to treat personnel who present with mental health needs as out-patients where possible.

For in-patient care, since the Duchess of Kent Psychiatric Hospital at Catterick closed in April 2003, the MoD has used a central contract with the Priory Group of hospitals to treat Service personnel in psychiatric units. It claims that this allows patients to be treated much closer to their parent units than was the case when the Armed Forces operated its own psychiatric hospitals. There is close liaison between local DCMHs and Priory units to manage the in-patient care of Service personnel. There are agreed communication protocols between the Priory Group and the MoD at admission, after 48 hours, at 14 days if further inpatient stay has been requested, and at discharge.

In terms of preventative measures, we heard on several occasions about efforts to provide opportunity for 'decompression'—that is, for personnel returning from front-line duty to have an opportunity to recover in a group setting and absorb their often traumatic experiences before returning to their families and friends. The Minister noted that this was a problem made more acute by reduced travel time.

The Royal Marines have formalised a comparable arrangement known as Trauma Risk Management or TRiM. The Minister described this as "a sort of a buddy system led by warrant officers in terms of talking through their issues or concerns with each other", and noted that it seemed to be working well.

We heard some criticism of the contract with the Priory Group. Dr Christopher Freeman, a consultant psychiatrist at the Royal Edinburgh Hospital and a Fellow of the Royal College of Psychiatrists, said that he was not convinced that the Priory's clinicians had the relevant expertise, and that they lacked the ability to relate to the experience of Service personnel.

The DSC concluded that the MoD provides adequate mental healthcare for serving members of the Armed Forces. We have been told on visits that there is a culture of individuals 'bottling things up' inherent in the Services, but we note with approval the steps which have been taken to attempt to prevent problems through 'decompression'. This should be an integral part of the procedures for all personnel returning from operational tours. It is also important that the problems which can arise are recognised throughout the Services, so that early warning signs can be spotted and dealt with before problems get worse. We believe it is sensible to approach mental healthcare from community-based provision, delivered in conjunction with local military units, in-patient treatment being a last resort. The MoD should also review its contract with the Priory Group to assess its effectiveness".

Mental healthcare for veterans

The DSC noted that one of the problems in dealing with the mental health needs of Service personnel arising from traumatic experiences during combat is that the effects can remain hidden for many years and only become apparent when they have left the Services. The MoD cooperates with the Department of Health and the Ex-Services Mental Welfare Society (Combat Stress) to bring Combat Stress services into alignment with current best practice and to achieve greater integration with the NHS services.

Shortly before the Ministers, Derek Twigg and Ben Bradshaw, appeared in front of us, the MoD and the Department of Health announced the establishment of six two-year pilot schemes in Camden, Stafford, St Austell, Newcastle-upon-Tyne, Cardiff and in Scotland for mental health for veterans, at the initial cost of £500,000.

There are two major challenges facing the MoD and its partners in dealing with mental healthcare for veterans. The first is making sure that there are adequate resources to manage demand. The second is identifying those veterans with mental health needs and directing them towards the appropriate treatment.

Combat Stress said that major reports in 2003 and 2005 had found the provision of healthcare for veterans with mental health issues was inadequate. Combat Stress acknowledged that those veterans were a group with which it was difficult to engage, and noted that younger veterans were also starting to become much more prominent in its treatment centres, bringing new challenges.

Commodore Elliott, Chief Executive of Combat Stress, expressed his organisation's difficulties to us. “We have had a very large increase in the number of referrals. In the past three years we have had a 27 per cent increase, or nearly 1,000 referrals a year. For a small organisation like ours that is causing us a great deal of overstretch.

He explained that referrals to Combat Stress came from three different sources: 10% came from the NHS and social services, 30% came from ex-Service organisations such as the Royal British Legion and SSAFA, but most were self-referrals.

Combat Stress received money from the Veterans' Agency and from the war pension treatment and travel allowance. However, this was in itself problematic, as a very small proportion of those whom it treated (around 2% in 2006) were in receipt of a war pension. Commodore Elliott explained that "we do not turn them away; we worry about them first and how the hell we are to fund what we are doing for them comes second".

The MoD announced in November 2007 that it was increasing the fees it paid to Combat Stress from £2.5 million in 2006-07.

“We welcome this additional funding, and pay tribute to the work which Combat Stress is doing. The MoD is right to engage with private organisations such as Combat Stress where that is appropriate, but it must continue to ensure that the organisation is adequately funded and has the clinical capability to deal with the patients who are referred to it. The MoD should also think more strategically about, and explain in their response to this report, their relationship with private and charitable organisations, and the extent to which they should provide services on behalf of the Government.

Long term mental health care issues for Veterans

The NHS bears much of the burden of mental health needs arising from service in the Armed Forces because they can take many years to emerge. Combat Stress told us that the average period between leaving the Services and developing mental health problems was around 15 years. Dr Freeman was particularly critical of the lack of proactive NHS provision of mental healthcare for veterans.

Commodore Elliott identified a similar shortcoming in the NHS, telling us that veterans' problems were not always understood by civilian clinicians. A veteran who had undergone a traumatic experience in battle could find himself referred to a Post-Traumatic Stress Disorder (PTSD) support group with people who had been in car accidents or had suffered traumatic childbirths. This, he argued, was inappropriate: "when it comes for him to talk about his experience […] either he bottles out and leaves the group straight away or reduces the group, including the therapist, to tears. He traumatises the group. They just do not fit in."

This problem requires a twofold solution. First, it is only possible to treat veterans with mental health needs if there is a robust system for tracking and identifying patients who have served in the Armed Forces. Second, the NHS has to be able to respond to the particular needs of veterans, and be aware of the symptoms with which they may present.

Derek Twigg told us in November 2007 that only between 25 and 30 Service personnel each year were discharged with PTSD, but "that is not in any way belittling the fact that for those people that is a tremendous difficulty and is affecting their lives".

We are concerned that the identification and treatment of veterans with mental health needs relies as much on good intentions and good luck as on robust tracking and detailed understanding of their problems. If the NHS does not have a reliable way of identifying those who have been in the Armed Forces, then it already has one hand behind its back when it comes to providing appropriate clinical care. We repeat our belief that there must be a robust system for tracking veterans in the NHS, and this should feed into enhanced facilities for addressing their specific needs.

Defence mental health facilities in the UK 2001-2009

A review of defence mental health in 2001 resulted in treatment moving from inpatient to community-based services in the form of military Departments of Community Mental Health (DCMH).

In 2007, staff at these departments assessed more than 5,600 personnel and diagnosed 3,930 with a mental disorder. This is around 2% of the military population.

There are 15 DCMHs across the UK, as well as sites in other countries including Cyprus, Germany and Gibraltar. They offer specialised psychiatric services similar to NHS community health teams, and include psychiatrists, community psychiatric nurses, clinical psychologists and mental health social workers.

Inpatient care in the UK is provided by the NHS, contracted by the Ministry of Defence (MoD), with close liaison between military mental health professionals and the NHS. In 2007, the armed forces had 249 new inpatient admissions.

For personnel who are on operations abroad, Field Mental Health Teams, made up of mental health professionals, visit all operations, liaising with unit commanders and seeing anyone who needs help.

The Medical Assessment Programme (MAP)

There are around five million military service veterans in the UK, whose healthcare transfers to the NHS when they leave the Services.

The Medical Assessment Programme (MAP), based at Guy's and St Thomas' Hospital in London, along with six Veterans Mental Health pilot projects, improve care for veterans.

Only 0.1% of regular service personnel are discharged annually for mental health reasons. Of these, only 20-25 are diagnosed with post-traumatic stress disorder (PTSD).

For those who leave the forces without a medical discharge, most make the transition to civilian life without difficulty and seek help from their GPs if they need to, like everyone else.

There are some veterans who develop mental health problems. Around 100 veterans a year approach the MAP.

"Some veterans believe that their symptoms are part of having been in the armed forces and experiencing combat," says Dave Hill, director of operations at Combat Stress, a UK charity supporting people with service-related mental illness.

"What seems helpful for ex-service personnel is to draw it all together so that they've got a document. If they're having trouble telling their story to a health professional they can show it to them and say 'read this'," says Professor Palmer. "At the MAP a lot of time is spent with veterans trying to encourage them to engage in therapies and services."

Anyone caring for a veteran can also contact the MAP if they have concerns about the mental health of someone in their care.

Mental health problems arising from physical injuries

Personnel with physical injuries who are receiving medical treatment automatically receive mental health assessment.

Susie Hines is senior nurse in the mental health team at Selly Oak Hospital in Birmingham. The team provides support to injured personnel and their families, and can identify individuals who aren't adjusting normally to their situation.

"For those who have been injured, there may follow a number of sensory and emotional

reactions in the early days," she says. "These might include nightmares, re-living the experience, irritability, anger and relief. However, these reactions generally settle down within the first week or so."

If they don't, the mental health team works closely with the patient, doctors and nurses to find out why and to provide treatment. "We can refer people directly to military mental health services if required," says Hines. "In the two years I've been working here, the number requiring this has been very low."

For anyone who thinks they need help, whether they're a regular, reserve or veteran, the key is to tell someone.

"The biggest myth is that nothing can be done," says Commander Greenberg. "The worst thing you can do for yourself is not to ask someone for help. There is much that can be done and getting help really makes a difference to you, your colleagues and your family." (web posting 18th June 2009)

Veterans Mental Health pilot projects

Since 2007, six pilot projects have been set up across the UK to give NHS staff the appropriate understanding and support to help veterans. The aim is to provide veterans with a service that tries to understand what they need and provides a link between the NHS and the military so that they'll feel more comfortable coming forward.

The MoD, UK departments of health, Combat Stress and clinicians have worked together to design these pilot projects. Each has a Community Veterans Mental Health Therapist who offers understanding of the issues, including combat, that might affect ex-services personnel. They also build links with local veterans' organisations to try to identify people who aren't getting the care they need.

Staff might provide treatment or arrange for referrals, such as to community mental health services, social services or for specialist assessment and treatment elsewhere. This can include Combat Stress residential centres.

"These pilot projects are trying to understand what's special about what veterans need," says Dr Palmer.

Early evidence shows that veterans will see and engage with therapists who have no military background, provided the therapist shows interest, honesty and understanding, and acknowledges that there will be issues they don't understand.

The pilot projects are being evaluated for two years by the University of Sheffield, and the lessons will be established throughout the rest of the NHS if they prove successful. Currently, they're located in Stafford, Camden and Islington, St Austell, Cardiff, Newcastle, Bishop Auckland and Edinburgh.

Veterans can contact a pilot scheme directly (see Veterans in NHS Choices links) or can be referred by a GP or veterans' organisation.

Progress with Military Mental Health Support by 2009:

An official press release on the Defence in the Media on 2nd March 2009 responded to calls for more help for mental trauma.

"There has been widespread media coverage of calls from Lance Corporal Johnson Beharry VC for more medical help and general support for troops suffering from mental trauma. Defence Minister Kevan Jones said: "We recognise mental illnesses as serious and disabling conditions but also ones that can be treated. Our dedicated psychiatric teams based in theatre provide the very best diagnosis and treatment of psychological illnesses both during and after deployments. However, this is just one part of the huge amount of work we are doing in this area.

Support systems in theatre such as the Trauma Risk Management (TRiM) empower non-medical staff to spot those who might have been affected by traumatic events. 'Decompression periods' in Cyprus allow personnel to begin to unwind after their operational tour. We have awarded a new contract to the NHS for the provision of inpatient mental health services, and we have recently introduced mental health pilots across the UK. We have commissioned research from King's College London into mental health conditions; and expanded our Medical Assessment Programme (MAP) at St Thomas' Hospital to include assessment of veterans with operational service from 1982."

Academic Studies On Military Mental Health In Relation To Gulf Service

Dr (Lt Col) Noel Scott, a Consultant Psychiatrist in the NHS, reported the work of the Psychiatric unit (Field Mental Health Team –FMHT) of 202 Field Hospital from 18th March until 7th May (61 days) in the Journal of the Royal Army Medical Corps..

Psychiatric Casualties treated at 202 Field Hospital during Op Telic 1

"A policy of 'open' and 'self' referral was encouraged, through 'informal' approaches - directly by individuals, or indirectly by hospital staff, colleagues and others. This was encouraged on as confidential a basis as possible, without formal registration or permanent note keeping. Serious problems would be registered as a hospital 'case'. The 'footprint' of the FMHT thus extended far beyond the 100 reported episodes.

"Mental health nurses worked a 24-hour rota, so that at least two nurses were on duty at all times. One consultant psychiatrist was on duty, or available on-call. There was no 'outreach' service from the unit. Ninety-two individuals were seen, eight on two occasions, or 100 consultations in all. Of those seen on two occasions, five were medically evacuated, after having been returned to their own military unit (RTU'd).

Diagnosis	N
Adjustment reaction	70
Theatre-related	52
Home-related	18
Depressive episode	10
Deliberate Self Harm (sharp object)	5
Somatoform disorder	5
NBC phobia	2
PTSD flashback	1
Dissociative disorder	1
'Other' ("conscientious objector")	1

Clinical Outcomes for Psychiatric Casualties treated at 202 Field Hospital

"The two relevant outcomes were (1) whether the person was fit to safely return to their unit, RTU (63 cases); or (2) required medical evacuation (medevac) - usually to the UK (37 cases), and specifically to the Duchess of Kent Military Hospital at Catterick in Yorkshire, where the military psychiatric services are based.

"Three main FMHT tasks emerged. These were psychiatric triage; psychological support of hospital staff; and liaison with welfare and pastoral care.

"Any person who was dysfunctional in his or her role, or displayed a degree of risk to self or others causing concern to senior command - due to a mental disorder which was unlikely to be successfully treated in theatre - was sent back to a UK psychiatric facility for further evaluation. This decision was only made after careful consideration, and with some reluctance, after the casualty had had proper rest.

"The main aim of care was to resolve the distress to the individual through well-established principles of brief psychotherapy and casework. These include rest, respite, sleep, ventilation, and focused reassurance and explanation. By such means most fears were quelled. They built upon the person's sense of duty to comrades and unit, motivation and resolve to see the matter through.

Education: "This lay in suggesting ways for ward nursing staff to deal with psychological distress in their physically ill patients, such as in cases of disfiguring injury.

Restoration: "Ward staff were helped to deal with their own stress and doubts in the course of work tasks, which were liable to be often taxing and sometimes morally ambiguous.

De-Briefing: "This was to be provided on request, such as after a major incident, but no such de-briefing need arose.

"Welfare issues included the need for contact with persons at home or to ensure that family needs were being met. In many cases, padres were involved. Every opportunity was taken to re-direct concerns into non-psychiatric areas.

"Our psychiatric management model was built upon established military medical doctrine. As experience was gained, RTU rate improved. There seemed little point in seeking to formally deploy this management approach elsewhere in theatre. The main effort seemed to us to be most efficiently focused on the Field Hospital."

The work of King's Centre for Military Health Research (KCMHR)

The academic study of the problems of military mental health was subcontracted to civilian academics, and particularly to the King's Centre for Military Health Research (KCMHR).

KCMHR is primarily a research centre with three academic themes: war and health; war and psychiatry; personnel issues and social policy. The reputation of the Unit has grown out of its work on the investigation of "Gulf War Syndrome" following Op Granby, which in turn prompted the establishment of long term studies of those service personnel deployed on Op Telic.

KCMHR is a joint initiative of the Institute of Psychiatry (IoP) at the Maudsley Hospital, Denmark Hill in South London and the Department of War Studies at King's College London, incorporating the Centre for Defence Mental Health. KCMHR for research into war and health, war and psychiatry and personnel issues and social policy. One major study is a prospective investigation of the physical and psychological health of a random sample of UK service personnel, some of whom took part in Operation Telic and others that did not; these form a comparison group.

The Centre was led by Professor Simon Wessely (IoP). Professor Christopher Dandeker (War Studies) was the Co-Director. The 'flagship' study for the Centre has been a prospective investigation of the physical and psychological health of a random sample of UK service personnel, some of whom took part in Op Telic (the war in Iraq) and others that did not; to form a comparison group. This is also the platform for a longer-term study of a cohort looking at physical, social and psychological aspects of military service in the 21st Century.

The KCL unit previously hosted the Gulf War Research Unit, which was funded by the US Department of Defence (DOD), the US Centre of Disease Control (CDC), and the US Navy; and the UK Ministry of Defence (MoD) and Medical Research Council (MRC). The main body of research was based on a series of studies of over 4,000 Service personnel from the 1991 Gulf War, compared to similar numbers of those who served in Bosnia on UN Peacekeeping duties, and to similar numbers of those in the Armed

Forces in 1991 who went on neither of these deployments.

Grants were awarded to KCMHR in July 2003 to study the physical and psychological health of a random sample of UK service personnel who took part in Op Telic; and for a longer-term cohort study looking at the physical, social and psychological aspects of military service. Further matters under study included the culture of the modern military organisation; the nature of military training; the history of war related trauma; the prevention of psychiatric injury; the role of a "good employer" and the duty of care; the links between combat injury and "work stress"; the treatment of war veterans; the role of pensions and compensation; the problems of prediction and screening; the role and ethics of military psychiatry; the training of the military psychiatrist and psychologist; the lessons of Vietnam; the comparison of problems between war fighting and peacekeeping; the particular stressors of Northern Ireland; and psychological preparation for chemical and biological warfare.

The KCHMR Health & Wellbeing of UK Armed Forces Personnel Study

The study was the first part of a prospective investigation of the physical and psychological health of a random sample of 20,000 UK service personnel, some of whom took part in Op TELIC (the 2003 War in Iraq) and others that did not. The study also provides a platform for a longer-term looking at physical, social and psychological aspects of military service in the 21st Century.

The first wave of this study was conducted from 2003 until 2006. The main two outcome papers are outlined below:

Academic Paper 1

Oded Horn and colleagues asked in the Lancet in 2006:

Is there an Iraq war syndrome? Comparison of the health of UK service personnel after the Gulf and Iraq wars:

The group compared the health of 3642 male regular UK armed forces personnel deployed to Iraq during the 2003 war with that of 4295 of their colleagues who were not deployed, and compared these findings with those from our previous survey after the 1991 war. Data were obtained by questionnaire.

They could not demonstrate an increase in prevalence of symptoms equivalent to that observed after the Gulf war. Fatigue was not increased after the 2003 Iraq war but was greatly increased after the 1991 Gulf war. Personnel deployed to the Gulf war were more likely than those not deployed to report their health as fair or poor; no such effect was found for the Iraq war of 2003. Increases in common symptoms in the 2003 Iraq war group were slight, and no pattern suggestive of a new syndrome was present.

Academic Paper 2

The health of UK military personnel who deployed to the 2003 Iraq war: a cohort study

Prof Matthew Hotopf and colleagues compared health outcomes in a random sample of UK armed forces personnel who were deployed to the 2003 Iraq war with those in personnel who were not deployed. Participants completed a questionnaire covering the nature of the deployment and health outcomes, which included symptoms of post-traumatic stress disorder, common mental disorders, general wellbeing, alcohol consumption, physical symptoms, and fatigue.

"The participation rate was 62·3% (n=4722) in the deployed sample, and 56·3% (n=5550) in the non-deployed sample. Differences in health outcomes between groups were slight. There was a modest increase in the number of individuals with multiple physical symptoms. No other differences between groups were noted. The effect of deployment was different for reservists compared with regulars. In regulars, only presence of multiple physical symptoms was weakly associated with deployment, whereas for reservists deployment was associated with common mental disorders and fatigue. There was no evidence that later deployments, which were associated with escalating insurgency and UK casualties, were associated with poorer mental health outcomes.

They concluded that for regular personnel in the UK armed forces, deployment to the Iraq war has not, so far, been associated with significantly worse health outcomes, apart from a modest effect on multiple physical symptoms. There is evidence of a clinically and statistically significant effect on health in reservists".

Academic Paper 3

The KCHMR group have also looked at subsets of the Op Telic study, including factors affecting deployed medical personnel, and vaccination.

Margaret Jones and colleagues asked whether medical services personnel who deployed to the Iraq war have worse mental health than other deployed personnel?

The study participants' main duty during deployment was identified from responses to the main study questionnaire and verified from Service databases. Psychological health outcomes included psychological distress, post-traumatic stress disorder, multiple physical symptoms, fatigue and heavy drinking.

479 out of 5824 participants had a medical role. They found that there was a small excess of psychological ill health in medics.

Academic Paper 4

Dominic Murphy, Matthew Hotopf, Simon Wessely studied the relationship between multiple vaccinations, health, and recall bias within UK armed forces deployed to Iraq.

They wished to assess the relation between the self reported number of vaccinations received and health, and between numbers of vaccinations recorded from individuals' medical records and health.

They identified a subset of 378 personnel whose vaccination records were accessed from the 4882 randomly selected military personnel deployed to Iraq since 2003.

Psychological distress, fatigue, symptoms of post-traumatic stress disorder, health perception, and multiple physical symptoms were assessed.

They found that multiple vaccinations given to personnel in the UK armed forces in preparation for deployment to Iraq are not associated with adverse health consequences when vaccinations are recorded objectively from medical records. Adverse health consequences associated with self reported multiple vaccinations could be explained by recall bias.

What do these findings tell us about multiple vaccines and earlier studies on illness after the 1991 Gulf war? Important differences exist in the administration of medical countermeasures between the two wars. In general, vaccinations administered to UK service personnel deployed to Iraq since 2003 were administered before their deployment; this was not the case during the 1991 Gulf war when many personnel received vaccinations while on deployment. Pertussis was not offered to service personnel in 2003 but was used as an adjuvant for the anthrax vaccination in 1991 and was proposed as a possible cause of symptoms. The total number of vaccines reportedly received in UK Gulf war veterans was considerably higher than in 2003, and most of the studies were not limited to total vaccines received on a single day but before and during deployment. In these earlier studies many participants reported receiving six or more vaccines, and the association was concentrated in those in this extreme group. Furthermore, while there was a health effect to be explained after the 1991 Gulf war, there was no evidence of a new "Iraq war syndrome."

Academic Paper 5

N Jones and colleagues from the Academic Centre for Defence Mental Health at King's College, London, describe in the JRAMC in greater detail in 2008 their

Studies on the operational mental health consequences of deployment to Iraq for UK forces.

"Using data gathered from deployed Field Mental Health Teams, a random sample of UK based non-deployed Community Mental Health Teams and services dedicated to mobilising, de-mobilising and to de-mobilised Reserve Forces, they explored the current mental health burden for UK Forces.

"At present, operationally related psychological disorders did not appear to be a substantial concern for Regular Forces, although for the minority that suffered such problems they were both distressing and of occupational relevance. There was no evidence of an epidemic of mental health problems amongst either Regular or Reserve Forces veterans of the Op Telic deployment.

Mental Health and Operational Deployment – The Scope of the problem

"Concern about operationally related psychological disorders among Service personnel is a recurrent theme for the media. Radio and television coverage has helped to maintain public awareness. Claims and counter claims are made in public forums, yet few examine the details of the issue, preferring to focus upon eye-catching banner headlines, such as 'MoD 'deserts' teen soldiers scarred by Iraq' (The Sunday Times March 18, 2007), 'Rising mental anguish of troops forced back to war zones too fast', 'Dispatches from Hell' (Daily Mail Friday August 3 2007) and 'Iraq Troops suffer stress and alcoholism' (The Guardian Friday August 3 2007).

"Media speculation of this kind is often based upon ill informed judgements. This paper addresses the problem of operationally related psychological disorders by examining data from a range of sources with a focus on current operations in Iraq. It does not address the broader question of mental health after deployments.

Epidemiological Data on psychological disorders in the UK Armed Forces

In a large random sample of UK Armed Forces (n= 10272), KCMHR compared health outcomes in personnel who deployed on Op Telic and subsequent follow-up operations with those who did not (Hotopf et al. 2006). The results showed little difference in the mental health status of those deployed other than a modest increase in the number of individuals with multiple physical symptoms in those who had deployed, and slightly increased rates of Posttraumatic Stress Disorder in reservists and those involved in combat. The claim that recent war-fighting operations in Iraq have produced large numbers of psychological casualties is not supported.

However, the situation on the ground in Iraq has undergone change since this study was conducted and many have been redeployed to Iraq, some on a number of occasions. A follow-up study by KCMHR is planned for autumn 2007, the results of which will help to further illuminate the current mental health status of UK Forces.

Mental health during deployment

What is the visible burden of mental ill health in Service personnel that manifests during deployment on operations? The data collected during Op TELIC 1 is currently being and reviewed. 287 Service personnel were assessed by deployed Field Mental Health Teams (FMHTs) between 1 Feb and 31 Jul 2003.

The most common diagnostic category was that of Adjustment Disorder (n=138). 81 of the Adjustment Disorder cases (58%) were recorded as being attributable to a known cause. Of these, 49 (60%) were specifically attributed to operational or theatre related factors. Could these have been early presentations of developing PTSD? There were no cases of PTSD recorded amongst the FMHT referrals during Op TELIC 1.

Other Academic Papers relating to mental health and Op Telic

Mark Turner and colleagues, writing in The British Journal of Psychiatry studied the reasons for psychiatric aeromedical evacuation from Iraq from the start of build-up of UK forces in January 2003 until the end of October that year, from the field and in-patient psychiatric assessments of 116 military personnel evacuated to the UK military psychiatric in-patient facility in Catterick Garrison.

They found that evacuees were mainly non-combatants (69%). A significant proportion were in reserve service (21%) and had a history of contact with mental health services (37%). Only 3% had a combat stress reaction. In over 85% of cases evacuation was for low mood attributed to separation from friends or family, or difficulties adjusting to the environment.

Chapter 28 Summary

Modern life has many complexities, and the old certainties which formed our attitudes, behaviour and expectations of public service, family and personal relationships, risk and reward have disappeared. The armed forces provide an important role in shaping the destiny of the nation, but they must recruit among a citizenry for whom voluntary service to the state competes with many other demands upon life and time. The responsibility to those who serve and have served is lifelong, as the experiences, teamwork and camaraderie of war and conflict find few parallels in safe civilian life

The needs and the care of serving personnel and would be volunteers and recruits change with time. The spartan, robust attitudes of earlier centuries are no longer sufficient. There is a need for a continuing process of adjustment, modernisation and investment in those who serve. For these people military service to the crown is a commitment to organisations and ideals which have served the people of Great Britain with pride and dignity over the centuries. Through the period of Op Telic, a much moiré enlightened and informed approach to these issues has evolved.

Chapter 28 Resources and References

Op Telic 1

SSAFA Forces Help: This website provides links to many other UK service charities and agencies
www.ssafa.org.uk

"Gulf War Syndrome": the MoD perspective
www.mod.uk/issues/gulfwar/ (updated 08.04.2004)

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British Medical Journal February 9th 2002, page 321)

Scott N. Psychiatric casualties in 202 Field Hospital
Personal Communication May 2003

British fatalities on OP TELIC (MoD website)
operations.mod.uk/telic/casualties.htm

Richard Holmes. Acts of War - The Behaviour of Men in Battle.
Cassell Military Paperbacks 2004. ISBN 0 304 36700 1

Jonathan Glover. Humanity – a moral history of the twentieth century.
Pimlico 2001. ISBN 0 7126 6541 2

Samuel Hynes. The Soldiers' Tale – bearing witness to modern war.
Pimlico 1998. ISBN 0 7126 6632 X

Op Telic 2-13

Reservist mental health problems

The lonely death of Private Dave Forshaw: the Territorial soldier in turmoil
timesonline.co.uk/tol/news/uk/article2648621.ece

timesonline.co.uk/tol/comment/leading_article/article2648698.ece

"Suicide watch at Basra after three soldiers kill themselves"
Source: images.mirror.co.uk/upl/article/13298887/2008/06/13/12255319

Personal accounts from civilians, combatants, families and friends
Source : news.bbc.co.uk/1/hi/world/middle_east/4138272.stm

Press Release: 'Quarter of British soldiers in Iraq suffer mental illness'
dailymail.co.uk/news/article-386403/Quarter-British-soldiers-Iraq-suffer-mental-illness.html and bbc.co.uk

British-troops-in-Iraq-face-risk-of-mental-illness
telegraph.co.uk/news/worldnews/1545187/British-troops-in-Iraq-face-risk-of-mental-illness.html

Saving the soldiers we neglect
timesonline.co.uk/tol/news/uk/article2558222.ece

Christmas-Charity-Appeal-Combat-Stress-is-giving-troops-a-fighting-chance
telegraph.co.uk/news/telegraphchristmasappeal/3545833/

How-Telegraph-readers-helped-tackle-the-mental-health-problems-of-our-servicemen.html.
Source: telegraph.co.uk/news/telegraphchristmasappeal/5012333/

Defence Select Committee Report 2007-2008
publications.parliament.uk/pa/cm200708/cmselect/cmdfence/500/50002.htm

NHS Live Well Website and mental health issues
nhs.uk/Livewell/Militarymedicine/Pages/Mentalhealth.aspx

Academic research into military mental health issues

Is there an Iraq war syndrome? Comparison of the health of UK service personnel after the Gulf and Iraq wars
Oded Horn and colleagues Lancet 2006; 367: 1742–46

The health of UK military personnel who deployed to the 2003 Iraq war: a cohort study.
Matthew Hotopf, Lisa Hull, Nicola T Fear, Tess Browne, Oded Horn, Amy Iversen, Margaret Jones, Dominic Murphy, Duncan Bland, Mark Earnshaw, Neil Greenberg, Jamie Hacker Hughes, A Rosemary Tate, Christopher Dandeker, Roberto Rona, Simon Wessely. Lancet 2006; 367: 1731–41

Do medical services personnel who deployed to the Iraq war have worse mental health than other deployed personnel?
Margaret Jones and colleagues, The European Journal of Public Health Advance Access published online on May 8, 2008, doi:10.1093/eurpub/ckn031

Multiple vaccinations, health, and recall bias within UK armed forces deployed to Iraq: cohort study.
Dominic Murphy, Matthew Hotopf, Simon Wessely
BMJ 2008;337:a220, (Published 30 June 2008)

The operational mental health consequences of deployment to Iraq for UK forces.
N Jones, N Greenberg, N T Fear, M Earnshaw, P Mcallister4, G Reid, S Wessely JR Army Med Corps 2008 154(2): 101-105
kcl.ac.uk/kcmhr/information/publications/articles/telic/101OpMentalHealth%20(2)

Acute military psychiatric casualties from the war in Iraq
ma. turner, mathew d. kiernan, andrew g. mckechanie, peter j.c. finch, frank b. mcmanus, leigh a. neal. The British Journal of Psychiatry (2005) 186: 476-479.

Guardian report: 'We are living in a state of constant fear'
guardian.co.uk/world/2005/mar/02/iraq.ghaithabdulahad

Pre-Operational Stress Briefing: Does it have any Effect? A Comparison of Royal Naval and Royal Marine Personnel Receiving a Pre-Operational Stress Briefing with a Group of Personnel who did not.
Sharpley, J.G.; Fear, N.; Greenberg, N.; Wessely, S. (2006) In Human Dimensions in Military Operations – Military Leaders' Strategies for Addressing Stress and Psychological Support (pp. 17B-1 – 17B-6).

Meeting Proceedings
RTO-MP-HFM-134, Paper 17B. Neuilly-sur-Seine, France: RTO. Available from: rto.nato.int/abstracts.asp.

Going to war can be good for you: Deployment to war in Iraq is associated with improved mental health for UK personnel.
Hacker Hughes, JGH, Cameron, FJ, Eldridge, R, Devon, M, Wessely, S and Greenberg, N (2005). British Journal of Psychiatry, 186, 536-537.

This was a study of the paratroopers of 16 Air Assault Brigade which showed, paradoxically and contrary to predictions, that when engaged in short, focused military operations for which they had trained and for which there was a positive outcome (at least in the short-term) there appeared to be a positive effect on mental health on follow-up.

The use of psychological decompression in military operational environments. Military Medicine, 173, 6:534.
Hacker Hughes, JGH, Earnshaw, NM, Greenberg, N, Eldridge, R, Fear, NT, French, C, Deahl, MP, Wessely, S. (2008).

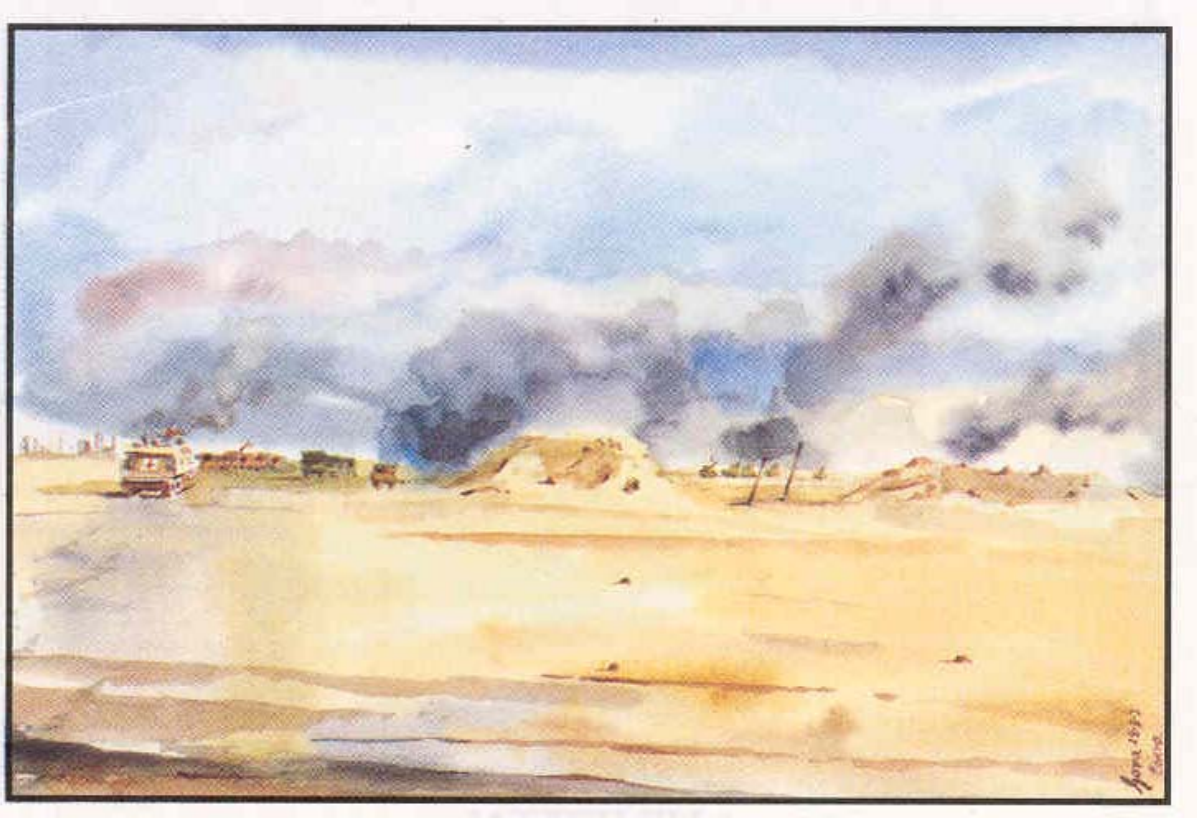
This was the first paper reviewing the practice of decompression.

Blood, Heat + Dust: Second Edition

Operation Telic and the British Medical Deployment to the Gulf 2003 -2009

Chapter 29:

British Casualties and their stories



battle landscape, Southern Iraq, 2003

Artist Gora Pathak

Introduction

We learn a great deal from the stories of individual casualties about the consequences of our actions and interventions, and about how we should work to improve the lives of those who survive combat injuries.

The Consumer Experience of the Road Home

The experience of being a casualty of battle trauma in the military evacuation chain is very different to that of an accident victim in civilian life. In the latter case, you will be rescued from the scene of your accident using whatever resources the emergency services need in the circumstances. The 'Blue Light' teams will be able to give their full attention to the medical and technical problems at hand without considerations of self defence or the risk of further attack by direct or indirect fire, mines or booby traps.

Once you have been extracted and your condition optimised for transport, you will be whisked away in a comfortable, well equipped ambulance or occasionally on a helicopter to a well equipped and well staffed hospital. There, the full resources of the local, regional and national health services will be available to you. Your family and friends will be able to visit you, to be at your bedside, and to bring you full moral and emotional support from the outset. Your every reasonable need will be promptly and adequately met, and you will be able to communicate freely.

If on the other hand, you are a serviceman and a casualty of war on an expeditionary deployment, your experience will be very different. Your place of wounding or injury may continue to be a place of acute danger to you, your colleagues, and to your medical recovery team, long after the time of wounding. Your extraction may be delayed and may occur under very unfavourable conditions, by helicopter at best, or by any other means, and possibly under fire.

When rescued, you will not always proceed directly to the best local hospital care immediately unless you are very lucky and the prevailing tactical circumstances are very favourable. Instead, you will enter a chain of evacuation, through a regimental aid post, staffed by young medical assistants and doctors with limited resources, experience and protection. You may then pass to the field dressing station, and then to the field hospital, where specialist care will be provided with limited resources and basic equipment.

At each point in this rearward movement you may be subject to delays consequent upon triage, availability of transport resources, and the changing tactical and weather state.

You will eventually be moved on, after stabilisation procedures - which may include surgery - to the airhead for further evacuation. There, you will be loaded onto an aircraft, and then flown homewards, possibly to a staging airhead and hospital such as Akrotiri, before the final leg of your flight to a UK airport. From there, you will be moved to the NHS receiving hospital. This may still be some distance from your home town, whence you will ultimately be transferred.

During this exhausting multistage chain of movement, when your body and mind would benefit from rest, stability, and security in one hospital, you will be separated from your friends, who are still in the combat zone, and you will be troubled by the events, recollections and possibly guilt of the incident. You will pass through the hands of many medics and paramedical staff so quickly that you will be unable to establish reassuring professional relationships with any.

Your primary thoughts, if you are conscious, will be about your family, whom you will not be able to contact because the system is not designed to make it easy for you to do so. If you have been lucky to borrow an official or unofficial mobile phone somewhere in the Casevac chain, your nearest and dearest may receive disjointed or distorted news from you, which may conflict with information passed back to them through the official and formal channels. If you are a 'stretcher case', you may enjoy many hours or even days on a platform which was not designed to optimise your comfort or your bodily functions.

In this book, we have focussed upon the 'producer' aspects of the delivery of a workable system of care for casualties. It is important that we audit this system by recording and understanding the experiences of the more badly injured and dependent casualties as they pass through the evacuation chain. This will help us to learn how their journeys can be improved and how the necessary miseries of the evacuation chain can be minimised. In an age when the experiences of individual casualties are closely scrutinised in the media, it is sensible that this 'out of focus' area of clinical concern and governance should receive close attention and careful assessment, and that we learn from the casualties themselves about the realities of being caught up in the medical system

Cpl Iain McDonald's Story, told from Plymouth on 24th Jan 2004

We are very grateful to Cpl Iain McDonald of the Royal Marines, who tells his own story from the moment that his injury was captured on TV Newsreel to his recovery and return to work.

"In 2003 I was serving in 40 Royal Marine Commando, based in Taunton in Somerset. We set sail for the Middle East in January, a journey which seemed to take for ever. When operations began, we found ourselves in an area with very little mutual and logistic support, as we were the first British conventional troops on the ground.

"We moved through the first night and secured several objectives. Within a few days we had moved into the main town in the Al Faw peninsula, where we took our helmets off to get the local people on our sides. Throughout that day we came across hundreds of people, who all seemed pleased to see us. Later on in the day, several hostile contacts were made and we found ourselves needing to fight back over a number of hours. One of the addresses we had been given was by now a well-known enemy position, which had to be cleared.

"My own troop -2 Troop of Alpha Company - was tasked to clear the building with two sections. The doors were blown up by PE and we moved in, clearing every

room with live ammunition and grenades. A grenade was thrown into one room, and as soon as it had gone off I burst through the door, firing my weapon on automatic. Within a split second there was an explosion and I was there in the doorway to meet the back-blast from a secondary explosion.

"At this stage I had no idea of what had just happened: my face felt as if it had been pulled as tight as it could get.

"I then managed to look down at my leg, where my trousers had begun to catch on fire and spread. As I started to put this out, I noticed the same was happening to my other leg. Then my arms were on fire. I somehow managed to remove my webbing but as I moved around the flames got out of control. I knew that I had to get out of the building. I had looked at the floor where I wanted to drop down and then roll around, but there was too much glass and cut metal to allow me to do this.



The moment of injury. A Sky News camera with a night sight was pointed at the building which Cpl McDonald's section was attacking, at the time at which he was caught in the explosion which produced his burns

"The rest of the lads in the building had no idea of what was going on. I somehow managed to make my way to the door and run out. The other lads then came over to me and managed to put the flames out. I was OK but too shocked to understand what had happened or what situation I was in. With the guidance of other marines, I walked back to the company base and the company medic. I sat down and work began to patch me up.

"I was conscious throughout all of this. I was given first aid and morphine, while my Casevac operation was being organised. An ambulance picked me up and took me to the Commando Logistics dressing station; they tidied me up and secured me

for flying. I thought I was going to be taken to the hospital ship Argos, but I ended up in 202 Field Hospital where I was met by Major John Clarke, a specialist burns nursing officer. He and his team then started the treatment and got me ready to fly back to the UK.

"While fully conscious I was asked for my next of kin details. At first I did not want to give this out, as I knew that I would be home shortly. I didn't see the point of worrying my parents, as it would have been better for them to have known when I was in the UK, where they could join me within a few hours. This request wasn't to be, and I then agreed to the unit phoning my parents.

"I am not sure who made the initial phone call; I know that they were not phoned directly because they had the padre on the doorstep on the Sunday night, telling them what had happened. I want you now to understand what I was feeling, knowing that my parents were going to be told of my injuries, and knowing that they had a couple of days to think about what state I was in. I was now thinking about what I had put then through. The feeling of guilt was at times just as painful as what had happened.

"As I was in a secure location, I asked if I could ring home. I was in a lot of pain but was still with it enough to hold a phone conservation. I new that there were phones in the hospital, but I was told about phone security and that I couldn't use the phone.

"As I had spent a week overlooking the border of Iraq, I didn't need to be told about phone security, as our guys had made phone calls hours before they went in. Surely it would have benefited my parents to hear my voice; I had no intention of giving them the locations of our positions or where we would going to next, but I just had to say hello - all is well; I will see you in a couple of days. It would have made a great difference to me to be able to speak to them and if they had spoken to me on the phone.

"I spent about 24-hours at 202 Fd Hosp. I was then put on a plane and flew to Cyprus, where I spent a few hours before I was moved to Birmingham. Throughout this period, everyone I had met - all the medics, and all the staff on the plane - were amazing. I then arrived in Birmingham and was taken by ambulance to Selly Oak Hospital.

"I can remember being taken through some side door, with a blanket over me to prevent any pressmen who were lurking around from taking pictures. I was glad of this as I did not want my photo to be used in the papers. I was taken to a ward at Selly Oak Hospital; the treatment that I and my family received was superb and I will never forget it. I also thought that the Casevac process to get me back home couldn't have been any better.

"One of the worst aspects of hospital was lying there and not knowing what had happened. No-one could do anything about this; I lay there wondering if I had done something wrong. Had I caused the explosion? Had I nearly killed the rest of the section? What did people think about me?



Cpl McDonald during the early stage of his recovery at Selly Oak Hospital in 2003
(Photo kindly supplied by Cpl McDonald)

"One of the worst things about being a 'burns victim' is that we always think the worst. The only example I knew was Simon Weston, (injured in the Falklands Campaign in 1982), and I wondered for many days if I was going to look like him.

"After a month in hospital, I was let out. The district nurse changed my dressings every day at home, to save me having to stay in Birmingham. I arranged to see the specialist in Plymouth, as this was the nearest hospital to where I live. The Docs seemed less knowledgeable there. Anyone who looked up 'burns' on the Internet would have found more useful information. For example, I started to have problems with my eyes where they had been burnt, so I managed to get the eye infirmary to check them out.

"As for my recovery, for me the best medicine was being able to talk to the lads, to know what had happened and to know that they knew that I was OK. It was also important for me to get back to work. I had to be around them to be able to share the experiences. You get absolutely no sympathy from the lads, and at times that is a good thing.

"With help from Sgt. Sylvester, the unit Physical Training Instructor who had also trained as a remedial instructor, I managed to get back to full fitness. At one point I didn't know if I would be able to stay in the marines but his work and sessions mean that I can carry on and that I don't have to leave. I am now left with scars up and down my arms and legs and on my hands, but compared to what it could have

been I am lucky. I still have problems with my arm and I am feeling it now the colder weather is here, but I am hoping that this will get better with time.

"I would like to thank everyone who was involved in my treatment and flight back to the UK, from myself and from my family. If this is going to print, I would also like to give a special mention to the pay clerk who decided to dock my wages for being in hospital and to charge me food and accommodation for my month. It's always good to know that for my efforts I was paid just over £500.00."

Sarah Sands reported in the Daily Mail on 20th October 2007, that

Forgotten heroes: how we've abandoned the wounded from Blair's wars

"When a British soldier is killed in Iraq or Afghanistan, he is publicly named so that proper tributes can be made. But no one knows about the horrors of the wounded. They are not identified. No official figures are released - indeed, we have no idea how many there are. The closest estimate is that, in the past six years, there have been 5,500 emergency medical evacuations from the wars in Afghanistan and Iraq.

Small wonder, then, that Forces charities and ex- officers have grown increasingly outraged about a breach of the "military covenant", which states that soldiers and their families should be properly looked after by the State in return for their sacrifices in the line of duty.

I have spoken to the families of some of those wounded in Iraq. They deserve to be heard, for in the face of public indifference and political denial, their courage is as inspiring as it is shaming.

Rory Mackenzie

Rory Mackenzie has his South African girlfriend, Storm. It was a medical miracle that Rory, 25, survived his injuries from the roadside bomb that ripped through the belly of his tank in Iraq in January.

Rory says: "I remember lifting my head, trying to focus - it was broad daylight, but I couldn't see. Then I remember someone saying 'One dead, one traumatic amputation' - my leg had been severed in the blast. Then I remember holding the nurse's hand and not letting go. And I remember saying to the surgeon: 'Are my balls going to be OK?' Then I woke up in Selly Oak hospital a week later."

That's when the harsh reality of his new existence began to dawn. Rory had to endure seven separate amputations on his leg as infections spread up it. Afterwards he remained in isolation at Selly Oak, where the only people he was allowed to mix with were elderly patients suffering from dementia on a non-military ward, because they carried the least risk of infecting him.

When his girlfriend Storm came to see him, she didn't know what to expect. The reunion between a wounded soldier and his loved ones is unbearably poignant.

The last time wives or girlfriends or mothers saw these men they were strong and capable. Suddenly, they are helpless.

For Rory Mackenzie, the recovery is a struggle. Though so badly disfigured that his mother said he was only recognisable by his eyebrows, Rory looks back on his early days at Selly Oak as his most hopeful period. Sedated by valium, he believed that he would overcome his injuries and resume an almost normal life.

As time passed, though, the realisation of what he had lost hit him hard. Because his leg has been amputated right up to the hip, it makes fitting a prosthetic limb very difficult and, at present, he has to rely on crutches. He was a young, active man who will never run again. Jobs will not be open to him and if he stays with the Army, it will be in a dead end desk job.

The administration and paper work of his predicament also overwhelmed him. Scandalously, his insurance company would only acknowledge a loss of foot, which kept his payment down to £100,000. While he was being treated at Headley Court, his mother and girlfriend had nowhere to live. They were temporarily housed in a small property available to relatives next to Headley Court, which had no hot water, no fridge and no washing machine. Storm shared the accommodation with the young wife and baby of a badly-injured soldier. One day, the mother disappeared with her child and could not be traced. She simply could not cope with having a crippled husband.

"Jack"

The strain on the families of the wounded is so great that many relationships do not survive. Nicola Curtis, 26, from London, had been with her boyfriend for four years when he was posted to Iraq in 2004.

When his vehicle overturned in a convoy in Basra and his neck was fractured, she realised that the gregarious man with the wide grin and dark eyes whom she loved would return utterly changed. He is still in excruciating pain from a titanium plate in his neck, three years later, and cannot concentrate for more than a few minutes.

He is afraid of crowds or attention and did not wish to be named or quoted for this article, but let us call him Jack. Jack was shockingly slow to be treated on his return from Iraq. After his initial operation at a specialist neurological unit, he was returned to Nicola's home and simply left there. He wore his neck brace for six months because he did not know what else to do.

It was only thanks to Nicola's perseverance that she found out about Headley Court, and Jack was admitted and treated there for two-and-a-half years until his recent discharge.

Nicola, a pretty, outgoing young woman who had imagined a full, adventurous life ahead with her boyfriend, was told that there was nothing more that could be done for him.

The damage to his spinal cord is permanent and he remains partially paralysed and in constant pain. What makes their burden even harder to shoulder is the inconsiderate attitude of so many of the public.

"Sometimes we are on the Tube and Jack is being pushed about I want to scream to the passengers: 'Do you know what this man did for his country? These people go to fight, to risk their lives, and then when they return nobody wants to know.['"

Often people ask Nicola why she stays. She is young, she is not married, why should she assume the burden of care, bathing him, driving him to hospital appointments, leaving her mobile on all the time she is at work in case he needs her and she has to rush home? She rubs her hand over her smooth forehead.

"When Jack was at Headley Court and came home for weekends, I couldn't wait to hand him back sometimes. And when I knew he was coming home for good, I was in a panic, full-scale tears. But then I think: this isn't his fault and I love him and if that is the way it is, then that is what we have to live with. But I gave him to the country as an able-bodied young man and he should not be treated like this."

At least Nicola and Jack now have a house provided by an ex-servicemen's charity. Rory Mackenzie and Storm have no such security. When I met them recently, their attempt to buy a small house had fallen through.

A few weeks ago, Pippa Dannatt, wife of Sir Richard, the head of the British Army, lent them her house for a week. They are now staying with a South African couple whom they have only recently met.

"I am embarrassed that we are staying with a civilian family who don't even really know us," says Storm. Her polite manner masks terrible anxiety. "There was something Storm said last night," adds Rory. "It was that everything in our lives is a worry." But Storm has no intention of abandoning her boyfriend.

"I love this man dearly and I am not going to leave him at the very worst moment in his life," she says. "We have been brought up in good homes and we have a good moral base, and we will see this through."

In America, men and women like Rory, Ilai and Jack would be treated with respect as the brave men that they are. But in Britain, they are the forgotten ones: the war victims whose names will not be carved on any proud memorial in a country that prefers to look the other way.

The Armed Forces charities are now trying to raise money to house the relatives of the wounded near Selly Oak and at Headley Court, but it is in the face of public indifference that sometimes borders on outright hostility.

When Headley Court recently applied for planning permission to convert a house nearby for relatives to stay, local residents objected on the grounds that the presence of so many weeping and distressed visitors might affect the value of their houses.

Instead of being hailed as heroes, our war wounded are being treated as pariahs. Yet these are men who do not like to complain - it is not in their nature. So it is left to others to plead on their behalf. It's not just about money.

Rory Mackenzie has been called a "f***ing cripple" and been jostled on the Tube by impatient passengers. Yet this is someone who wanted to join the British Army since he was a small child and who was honoured to serve.

Nicola's boyfriend, Jack, hardly dares leave the house now, but when he read that his regiment was off to Afghanistan he turned to her, his face twisted with pain and said: "I would give anything to be with them."

Their wounds may make us flinch. Their wars may be unpopular. But when men like these are being ignored and abandoned, we have no right to call ourselves a civilised nation.



Major David Bradley was severely injured during a mission to rescue soldiers in Basra in 2004. Photograph: Public Domain

After Basra, a Fight for Life: Story of a 'broken Soldier' of the Iraq War

Published: in the Guardian on 13th April 2009

“The electric pruners make light work of the bare cox's apple branches as David Bradley strips them back, preparing the orchard for a new season and the harvest to follow. The farmer cuts and thins out the trees but when he removes the chamois leather glove protecting his right hand, the loss of his index finger, ligaments and skin tissue is laid bare.

This is not the only lasting injury from the former British army major's time in Iraq. Sometimes, Bradley, 40, has to step out of the direct sunlight as his damaged iris no longer dilates and contracts in the way that it should. The right side of his face is lightly peppered with black shrapnel marks but seeing him now on the family farm, it is hard to imagine that in the summer of 2004 he was so badly injured that doctors gave him only a 5% chance of survival. His right hand and eye were shredded when his Warrior - an armoured infantry fighting vehicle used to carry troops - was hit by rocket-propelled grenades.

He was, he says, "blown up". In the four years that followed, the soldier would first have to fight to live, then fight to rebuild his broken body and then create a completely new life outside the army.

"As soon as the doctors say they can't operate on you any more you have a choice - stay in and do a desk job or leave. I left. It was the right thing for the army and for me. I am a soldier. I joined to command soldiers. With the injuries I have sustained I can't do that. I was medically discharged and suddenly became mister, not major, Bradley."

So, he and his wife Lara and his two children, Philippa, 10, and Alexander, eight, moved out of their military accommodation in Tidworth and returned to Bradley's family farm in Kent. There are times, he admits, when he wishes he was back with his company, which is currently in Iraq, preparing for the British withdrawal. But instead of men, the former major will spend his days this spring marshalling apples, pears, cherries and asparagus.

Sitting in the study of the farmhouse that once belonged to his grandparents, it's easy for Bradley to conjure the events and mood of Iraq five years ago just as it might be easy for many to forget just how dangerous it was in the country at that time.

By the summer, the Shia insurgency was beginning to sweep across Basra and southern Iraq and in the months to come crude, but deadly, improvised explosive devices would become the weapon of choice against British soldiers, tearing through ineffectual armoured plating on vehicles, killing and maiming scores of soldiers.

Bradley had been in the country since April and was commanding B Company, the Princess of Wales's Royal Regiment, a group of 116 men attached to the Cheshire Regiment. This was their first tour of Iraq. The company was based in the grounds of the Shatt al-Arab hotel in the northern part of Basra. Before the war, the art deco hotel had boasted a four-star rating and had been a favourite haunt for foreign businessmen who had come to the comparatively prosperous and cosmopolitan southern port.

But by 2004, the Shatt al-Arab had become a large British military base, with row upon row of tents and portable toilets. It was heavily fortified with perimeter walls

and guard posts. For US troops in Baghdad, car bombers had become the biggest threat but in the "Shatt", B Company came under a different kind of attack - every night, the soldiers were mortared by Katyusha rockets, forcing them to sleep under the hard cover of one big, fetid room rather than in the tents that had been erected around the camp.

"We were mortared every night. We hunkered down inside the hotel because it was the only place with a hard roof. I remember once being mortared when I was outside in the toilet and thinking 'don't let me die here'."

Bradley had been in the army for 12 years and in spite of serving in Northern Ireland and having been on exercise in countries such as Kuwait and Oman, this was the first time he had really felt the meaning of the adage: war is often 10% terror and 90% boredom. The terror he had often talked of and thought about would visit him on Monday 9 August 2004.

Although it was cloudy that morning, it was oppressively hot - even more so inside the claustrophobic armoured fighting vehicles. Heading out of camp in their Warriors, the soldiers' morning mission was to track down a group of 15 men who had been spotted on rough ground close to another British base, Camp Cherokee - that same rough ground had been the site used by insurgents who had been firing rockets at the camp.

By the time they dispersed the crowd, it was already more than 45c, and B Company were late for lunch; hot and hungry they returned to camp and made straight for the company cookhouse where the chef had kept pie and chips for them in the oven. They were still in the middle of eating when a runner came in with disturbing news: a number of British troops were missing in the heart of Basra. The details were scarce but the problem obvious.

Gunners from the Royal Horse Artillery had been attacked when they raced in to the city to pull out an army officer who had seen a crowd build up outside the small British Camp Stephen and had radioed for help. As they drove towards the officers, their three "Snatch" Land Rovers were barraged with rockets and bullets - one managed to pull out, but two were so badly shot up they caught fire, the soldiers inside were forced to run for cover, leaving their radios inside.

Their sergeant managed to ring headquarters on an Iraqi mobile phone but he could give no coordinates as they had no idea exactly where they were. He told HQ that nine soldiers were in the area of the Ba'ath party headquarters, right next to the office of the Moqtada al-Sadr - the headquarters of the Mahdi army.

In the cook house, Bradley remembers thinking that he just wanted to eat the rest of his chips. He gathered some of his men for a quick briefing. They were going to be the rescue party, and Bradley would lead them in to Basra to get the soldiers out. Hostage-taking had become a well-publicized weapon of the insurgents and no one needed reminding that for them the capture of British soldiers would have been the ultimate prize.

"You have images in your mind of them being caught, put into orange jumpsuits and being decapitated on TV," said Bradley. "They were from a different regiment but none of us would ever leave a British soldier there - we would do whatever we had to to get them back."

The first call about the missing troops came in at 3.44pm and by 4pm, five of Bradley's Warriors swept out through the camp gates, each with a driver, gunner and commander on top and between four and seven soldiers - "dismounts" - in the back. There was no air support to call upon; the only means of rescue were the Warriors. The convoy sped down the main road into town, known to the British army as Red Route.

They had been driving for just five minutes when they came under heavy fire - more intense than any previous attack on B Company. As it crossed a T-junction, Bradley's Warrior, which went under the radio call sign Two Zero Alpha, was hit by a barrage of rocket-propelled grenades and small arms fire.

The assault was coming from buildings on both sides of the street, and Bradley, standing in the commander's turret, was "scanning for the enemy" through the sight of his rifle, to give his men some idea of where to return fire, but before he had a chance an RPG hit the right side of the vehicle. Another hit his shoulder.

"I just suddenly felt this pressure. I was knocked down. Then there was this small, thick, dark grey explosion below me and I thought: 'This is bad.' It looked evil. I flung my hand up and it was a cloven hoof - my index finger had gone."

In the pandemonium that followed, Bradley thought that another RPG had landed inside the vehicle and shouted through the intercom for everyone to "debus" - get out of the vehicle. But the communications were no longer working.

"I crawled out on top of the turret. I was on fire and with my good hand I patted it out and thought I was OK." As he lay up there, Private Carl Yee-Lim, his gunner, was screaming: "Sir, sir, get back inside." The voice, cutting through the roar of the rockets, brought Bradley back to his senses. "Suddenly I was really conscious of all the rounds coming past me. My gunner grabbed me and I dropped down."

In fact, the Warrior had been hit by seven RPGs almost simultaneously. Inside the back of the vehicle, it was thick with smoke and blood was everywhere. Sergeant Major Simon Barnett had serious shrapnel wounds to his leg and arms and his helmet had been blown off - a lump of metal was embedded in his head and his teeth were blown out.

The medic, sorely needed, was also badly hit. The rest of the crew in the back, including the Iraqi interpreter, suffered varying degrees of injury, mostly flash burns, and could no longer hear anything because of ear damage. He had blood in his eye but he could still see light.

The pain, however, was spreading and so Bradley reached for the morphine jab he

kept just under the breast plate of his flak jacket. With the last reserves of his strength, he ripped it open with his teeth and stabbed it in his thigh. As he did this, the Warrior sounded like a grunting metal pig as the driver, Sergeant Mick Pike - who thought Bradley was dead - was attempting to drive them out of danger.

"Yee-Lim was sitting behind the chain gun and he kept leaning across and going: 'Sir, sir, stay with us.' I was thinking why does he keep shaking me when I am not badly wounded?" Bradley drifted in and out of consciousness and was a little irritated by the panic in Yee-Lim's voice. As the vehicle pulled inside camp, the major tried to get out himself.

"I remember putting my hand down on the vehicle and jumping off and just feeling really, really tired and some lads turned up with a stretcher. I collapsed back thinking I am not getting up from this. I didn't know I was as badly wounded as I was. I just felt drained."

Bradley collapsed on to a stretcher, was taken inside and put on the commanding officer's desk. The room turned into a casualty clearing station, but only limited first aid could be done. It immediately became clear they needed to move him to a place with more specialist care. He begged the doctor to knock him out as he had had enough. The last thing Bradley remembers from that day was being wheeled out to a helicopter that flew him to the medical centre at Shaibah logistics base.

"One of the nurses said if any of the other lads had come in at the same time as me they would have put me to the side. They didn't think I was saveable. If there had to have been a choice, they wouldn't have operated on me, they would have operated on someone else."

On the operating table, Bradley was losing blood pressure and the doctors couldn't work out why. Luckily, there was a Czech doctor working at the base, Marcel Hyack, who was a specialist in chest surgery. With little to lose, Hyack decided to operate and found copper piercing shrapnel from an RPG embedded deep inside. "The shrapnel had cut my innominate vein. The surgeon thought I was going to die anyway, so let's have it out."

That night Bradley was induced into a coma and flown to Birmingham in an intensive care unit on board a C17 military aircraft. After being operated on for 18 hours he was brought round, with his wife and father at his bedside.

"They still weren't sure that I would make it. I had severe shrapnel wounds to the right hand and they had to cut of 80% of the deltoid muscle. They removed my index finger back to the metacarpal. They had to attach my hand to my stomach and transfer the skin flap - it was attached for three weeks."

"The blast blew out the lens of my right eye and shredded the cornea. I had a new artificial lens and a corneal graft. I can wear a lens but don't wear it all the time because the cornea is so sensitive. I had three broken ribs and a broken clavicle. I lost some of my lymph glands."

Bradley remained in hospital for eight weeks. On his tenth day there he received a letter telling him he had been posted to the Y list - an administrative location for people who are not fit to serve.

"In order for them to get a replacement for me I had to leave the battalion. Lara says she watched me shrink when I read it. It was confirmation of my situation and it was very impersonal. I complained about it and they have now changed their procedures.

"All I wanted to do was to get back and command the company. Over time I realised that it wasn't going to be that easy but that time allowed me to come to terms with it. If you are a double amputee, you know that you can't go back to fighting as soon as you open your eyes." From hospital he was allowed home but spent six separate month-long stays at Headley Court military rehabilitation centre in Surrey.

Bradley missed out on compensation introduced in April 2005 for those British soldiers injured on the frontline. He received a medical discharge lump sum of £48,000 and supplements his pension of £21,000 a year with a wage from the farm. A few weeks ago, Bradley - with the help of his father and some hired labour - planted 7,500 new apple trees to augment the orchards of his childhood. For his family, they are a symbol of their new life.

In spite of what happened to him, the soldier-turned-farmer says he "would have been nowhere else on 9 August". He said: "In its purest form, we went out there to save British soldiers' lives and we achieved that."

But also, unknown at the time to the badly injured Bradley, the battle that had engulfed his company left one of its soldiers, Private Lee O'Callaghan, 20, dead. Without Bradley as commander, his junior officers and soldiers stormed the Ba'ath party headquarters - heavily fortified by the British but handed over to the Iraqis - but could not find the missing troops. By some stroke of good fortune a helmet was spotted in a house nearby and since only British soldiers wore helmets in Basra,

they knew they had stumbled across the lost men who were about to run out of ammunition. The beleaguered soldiers were piled into the back of a Warrior. Bradley's men gave up their safe-ish seats to fight their way out on foot. Some soldiers were later awarded medals for bravery, including the Military Cross.

"There are dark moments when I lie in bed," Bradley concedes. He knows he has changed. "I am more emotional than I was. I think many people who come back from those sorts of environments experience that sort of change. "I have a shorter temper sometimes, though that is becoming less. I am different. But so far farming has been great. The army is a fit man's business and I am a broken soldier."

Gareth A Davies wrote in the Daily Telegraph on 20th April 2009

Soldier Phil Packer gets ready for his biggest battle in London Marathon





"Inspirational: Major Phil Packer, who suffered a spinal injury whilst serving in Iraq, could take two weeks to complete the Flora London Marathon

Following a rocket attack in Basra 13 months ago Major Phil Packer, a Royal Military Police officer, was left with a severe spinal injury. He was expected never to walk again.

Yet, through the support of the British military's rehabilitation centre at Headley Court, Epsom, Packer's recovery – not to mention his steel-willed refusal to be held back by his injury – has progressed to such an extent that he will be attempting to walk the 2009 Flora London Marathon on crutches. Painstakingly, it will take him almost two weeks to complete the 26.2 miles.

Major PP will take his place alongside 36,000 other Flora London Marathon participants on April 26, a task which would have seemed impossible a year ago. As they disappear over the horizon, his mammoth challenge will just be getting under way.

Packer is a tall man, 6ft 3in, a man's man. He joined the army at 16. He loved the active life, "and the command of my men". Since the incident, at times racked by the agony of an active life he loved ripped from him, the self-confessed adrenalin junkie has rowed the Channel, sailed dinghies and skydived with the Red Devils.

All huge undertakings on the evidence of the physiotherapy room and gym at the British military's rehabilitation centre.

No question, with Packer's very slow movements which require huge levels of concentration as his brain battles with his nerve centre to send messages through

his spine to his lower limbs, it will be a very long and winding 26.2 mile road for the man whose aim is to raise £1 million for the charity Help For Heroes, for "people less fortunate than myself". The charity raises money to assist wounded British servicemen.

The Marathon 'walk' will test Packer's mettle to the core. Courage? Undoubtedly. But more than that, Packer demonstrates a selflessness typified by British soldiers.

Arriving in Basra in November 2007, Packer was in his element. He had previously had several overseas postings, among them Bosnia, where he set up a project to bring supplies and clothing from the UK for an orphanage. Deployed with 115 Provost Company in Basra, he insists that his time in Iraq was "one of the most rewarding experiences of my 16-year career in the army".

His life changed on Feb 19 last year. At 7pm, the mortar alarm sounded, warning of an impending attack from enemy forces. The major was driving on the base and immediately got out of his vehicle to take cover. Tragically the vehicle rolled over him and he was crushed by the front and back wheels. He suffered bruising to his heart, broken ribs and an injury to the base of his spine.

Curiously, the day before, only 25 metres from where his spine was crushed, three civilians had been killed in a rocket attack, and he had been dealing with the aftermath.

Packer explained, at times with difficulty, as he recalled his own incident: "The pain was excruciating. I was taken to the field hospital, put on morphine and flown back to Selley Oak. I will be forever grateful that the plane which came to take me back to the UK landed in the middle of a rocket attack."

The initial prognosis was a "motor complete injury" and that he would not walk again. He was operated on. "The pain I had was neuropathic, the nerves were damaged, and after surgery the pressure was alleviated." Slowly, he gained some motor functions in his lower limbs. He is still making minuscule progress, day by day.

Last summer, he left hospital. He contemplated his future. He admits he felt alone, isolated. Then he began to set himself challenges, and deep within his mind, he focused on his body functioning again.

"There were some very dark days in recovery. Days when I considered whether I had a future," said the major, still a serving officer in the military. "In our roles, we do not show weakness. So there was a certain amount of bravado that you do tend to display, and of course you want to be able to carry on as normal."

Lt Col Alan Mistlin, Major Packer's medical consultant, told The Daily Telegraph: "Phil has come a long way from a serious injury. The thought of him contemplating the marathon was not really on anyone's radar a few months ago. It is going to be very challenging, and the major concern I have is whether he will hurt himself in the process."

Packer has already demonstrated commitment to others, but he also reveals the determination shown by winners in sport, and indeed, in life.

"In my mind, those 26.2 miles are already completed. Simple as that. I'm still a serving officer in the army, and I want to give something back. Hopefully the public will see that, and want to donate.

"I want to raise £1 million by the end of the marathon, and then ask 'What's the next challenge?' I want to show – and prove – that once people have a spinal injury, life doesn't end. It's all about what you can do, not what you can't do."

And on May 9, 2009, Fiona Hanson was able to write in The Times that:

Major Phil Packer finishes marathon

"Major Phil Packer, 36, who lost the use of his legs during an attack in Basra last February arrives in the Mall, London to complete the Flora London Marathon two weeks after he started the 26.2-mile course. Major Phil Packer was told by medics that he would never walk again after being badly injured in a rocket attack in Basra last February. He walked two miles a day on crutches after starting with other competitors on April 26.

His marathon walk comes just a month after Major Packer started using crutches. The soldier, who served in Bosnia, Kosovo, and Northern Ireland hopes to raise £1m for the soldiers' charity, Help for Heroes and has £370,000 more to raise to hit his charity target.

Still undergoing physical rehabilitation at Headley Court in Epsom, this afternoon Maj Packer was greeted by hundreds of well-wishers who lined the final mile of the course. As he crossed the finishing line, at St James's Park on the Mall, he said the feeling was "bittersweet" coming so soon after more serving soldiers lost their live in Afghanistan.

Yesterday the soldier dedicated his long walk to all his comrades who have lost their lives or suffered disabling injuries in conflicts across the world and thanked medical staff who helped him achieve his mammoth task.

He wrote on his website: "A year ago I never thought this would be possible and there are so many to thank, Stanmore Hospital and the MoD/the Armed Forces have been outstanding to me; I am walking because of them – I know I am very lucky to have this mobility so many others are not. This is for those who cannot be there tomorrow."

He was presented with his London marathon finisher's medal by Sir Steve Redgrave after completing the course. On crossing the finish line he thanked the public for all their support.

He said: "I've walked 52,400 steps and somebody has walked with me every step of the way, be it a dinner lady, a London taxi driver or a Metropolitan Police officer. "I've had time to talk to people and have conversations, people have really opened up about their feelings about the Services and it has been humbling.

He added: "I wouldn't be standing here now if it wasn't for the staff at Headley Court. I feel that I am very lucky so many people I met along the way are more injured than I am."

Next month Major Packer will attempt to climb El Capitan in Yosemite National Park in California, and he intends to complete 4,000 pull-ups over a series of days in order to reach his fundraising target. Major Packer has already rowed the English Channel in just over 15 hours and completed a sky-dive as part of his fundraising efforts".

Concerns continued to be expressed on both sides of the Atlantic and as late as March 2009 that the true human cost of war was being concealed, with the implication that this was for reasons of political expediency.

Magnus Linklater wrote in The Times on March 2nd, 2009:

The human cost of war is hidden from us

"Statistics for the number wounded in the line of duty have been buried. We need to know more:

Our friend Billy came back from Afghanistan rather earlier than planned. A Scots Royal Marine, he was on patrol in Sangin province when his Jackal armoured car hit a roadside bomb and was blown apart. Both his legs have been badly broken, but he has been told he is not going to lose them. "I'm definitely going to enroll in the Paralympics," he joked from Selly Oak, the military hospital in Birmingham where all our serious casualties go. The reality is that months of long and painful recuperation lie ahead of him. As to the long-term mental effect, that can only be guessed at.

As Lance Corporal Johnson Beharry, VC, pointed out so forcibly at the weekend, the war wounded returning from Afghanistan and Iraq, however well cared for initially, are too often left to fend for themselves later - the forgotten victims of an endless conflict. Beharry was hailed for his bravery, but the scars may be with him for life. "I am learning to live with it," he said. "Everyone experiences combat stress differently. But we are all linked, we all suffer the same problem in different ways." His charge was that the Ministry of Defence provides inadequate aftercare - he called it "disgraceful". But perhaps too he meant that for every soldier who dies there are others whose suffering we hear little about.

The death of a soldier in Afghanistan or Iraq is still accorded a mention on the

news. The statistics about the wounded are buried. You can find them on the Ministry of Defence's website. But they do not command the headlines. Death is different. British soldiers killed in action - 148 of them now, since 2001 - are returned home with full military honours. Flags fly at half-mast, and the Union Flag is draped over the coffins as they are carried in a slow march off the plane at Brize Norton.

For the war wounded, however, there is no recognition. Anyone who flies back from Kandahar (or Basra) in one of the RAF's cavernous Tristar planes is only too aware of the stretchers and the hospital equipment they carry in what would otherwise be the first- class section. The figures, in so far as they can be interpreted, suggest that the standard army calculation of seven wounded to every soldier killed is, in the case of Afghanistan, more or less accurate.

Between 2006 and 2009, when 138 servicemen were killed, 573 military and civilian personnel were categorised as wounded in action. Of these, 71 were classified as "very seriously injured", which means that their lives were in danger and that they may well have lost limbs or been blinded; 94 were "seriously injured," which meant that, while there was cause for concern, there was no imminent danger to "life or reason". A further 1,289 were taken to field hospitals with disease or non-battle injuries. Beyond that, we rely on occasional parliamentary questions - such as the one last year that revealed that there were 50 amputations between April 2006 and August 2008. There was no information on those suffering from combat stress.

The MoD argues that to give out anything more specific is to run the risk of identifying individual soldiers. There is, it says, no suggestion of covering up the reality lest it damage morale and recruitment. And yet, for anyone attempting to make sense of the war, its purpose and its cost, the picture with which we are presented is wholly inadequate. We are denied the essential backcloth of combat, the long-term cost to our troops of a war that gets harder by the day.

Lance Corporal Beharry was complaining that the treatment of the mentally affected is left to voluntary organisations. The MoD denies that. We cannot judge who is right unless we are told more about the sacrifice and the suffering that will, in the end, be the most enduring legacy of the Afghan venture. Not just the long, painful weeks in hospital, the prosthetic limbs, the blinding and the scarring, but the battle of the mind, the aftermath of shock and stress that any soldier may confront. Yesterday, Combat Stress, the charity that looks after servicemen and women suffering from the trauma of war, said that among those it cares for are some who endure the mental effects of war 14 years after the battles they fought.

There are two additional barriers to this kind of detail. The first is the media, which find the grim and long-term suffering of the wounded less compelling than the instant shock of death. The second is the troops themselves. Their natural disposition is to make light of the scars of battle - to laugh off the danger and play down the wounds. When I was in Helmand province I talked to several Scottish soldiers who had been inside vehicles that had driven over roadside bombs. Their

accounts of how they survived were hair-raising, but passed on as a joke, or with dismissive modesty.

The time has come for them to be allowed to tell us more of the reality of war - and for us to be prepared to listen. If there is a justification for what we are doing in Afghanistan, and I think there is, then we need to be able to debate it with the full facts at our command. Lance Corporal Beharry has been brave enough to lift the curtain on his own suffering. We should demand to know more of the others. If we sense that we are not being told the whole truth, we will suspect the worst. And that is to hand a propaganda victory to the enemy we are meant to be defeating".

Blinded Soldiers

LCpl Chris Ashton

Lance Corporal Chris Ashton, a soldier in the Logistic Corps attached to the Black Watch, was deployed on Operation Telic 9 to Shaibah Logistic base in Iraq in November 2006. He received his injury in January 2007; he lost an eye, received serious head injuries and other significant injuries. He was initially flown to Birmingham for treatment and then received further rehabilitation at Headley Court. Chris has been a Service User at Goole Neuro-Rehabilitation Centre since December 2007. He is planning life in Hull when he returns to live in the community.



He is pictured here receiving his medal for service in Iraq from Brigadier David Madden, Commander of 15 (North-East) Brigade.

In a press release in May 2008, Knockhill Racing Circuit reported:

Blinded Soldier Ben Shaw Attempts Ferrari Drive At Knockhill Racing Circuit

"Ex soldier, Ben Shaw (25) who was permanently blinded in a roadside bombing in Iraq will drive again for the very first time since losing his sight, when he attempts to lap Knockhill racing circuit in a Ferrari 360 Modena.

After two training sessions on 6 & 9 May, Ben will tackle the circuit on Sat 10 May in front of thousands of supporters at 'Motorfair'. Since losing his sight Ben has shown courage and determination to rebuild his life, with the support of his fiancé, his family and the team at Scottish War Blinded in Linburn. He will fulfil two of his major dreams during the weekend of 'Motorfair'.

Firstly he will drive a Ferrari around the track on the Saturday. Knockhill instructor Alan Brunton will guide him around the track by giving direction based on a clock-face.

This is the first step on Ben's ambitious journey to one-day break the world blind land speed record (currently set at 165mph on a motorbike). Secondly, after completing the lap, Ben will dash off to make it on-time for his wedding rehearsal on Saturday afternoon before tying the knot with fiancé Louise on Sunday.

Amanda Killelea and Nick Webster reported in the Daily Mirror in February 2008:

Craig Lundberg, blinded in Basra enjoys his own Top Gun moment

The last time Craig Lundberg felt an adrenaline rush like this, he was in the middle of a fierce firefight in Iraq. It was a fight that left him close to death - and robbed him of his sight. But this time, that same thirst for adventure that drew him to the Army in the first place found him taking his first flying lesson over his home city of Liverpool.

Less than a year ago, Craig was leading his platoon on a reconnaissance mission to tackle suspected insurgents in Basra city. But the brave soldier was left fighting for his life after he was hit in the chest by a rocket propelled grenade during a fierce rooftop firefight.



Craig Lundberg (Pic:DM)

The fact that he survived the ordeal at all has amazed his doctors. And now the way he has coped with his injuries and the devastating knowledge he'll never see again has won him the admiration of the nation.

Craig says: "One day I was out shopping when this chap came up to me and said:

'How do you fancy learning to fly?' I said yes straight away - how could I refuse? My favourite film is Top Gun!" The chap was Alan Whalley, owner of Mersey Flight flying school at Liverpool Airport. "I recognised Craig so I went up and introduced myself and asked him if he wanted to fly," says Alan. "He is such an inspirational young man and is open to all sorts of new ideas. He is not going to let being blind slow him down."

Craig took to the skies alongside instructor Neil Hazlehurst in a Cessna 150 light aircraft. Neil took the plane upwards from the runway before handing the controls to Craig as they soared over the Mersey estuary. Craig was so confident at the controls that pilot Neil let him help land the plane - almost unheard of for a first-time pilot.

Craig says: "I just can't believe I have flown a plane - and it was pretty easy really. I know I can't see the dials and the instruments, but I can feel the sensitivity of the steering and power with my hands and feet.

Craig knows his career in the Army is most probably over, but he has plans.He says: "I'll get a job and it will be a good one. I understand now that I have to basically start again.

Amanda Killelea subsequently wrote in the Daily Mirror on 22/11/2008 that:

Craig Lundberg aims to win 2012 Olympic football gold medal

Since returning from Iraq, Craig has run the London Marathon, taken flying lessons and now he's aiming for gold in the London 2012 Paralympics. He is learning to play blind football and has impressed coaches so much he has been invited to train with the cream of England's sight-impaired footballers.

He says: "Some soldiers, when they get injured, feel like they're on the scrapheap, down and out, and get themselves into a deep depression. They don't know what to do.

The Great Britain Paralympic blind footballers are hoping for gold in London 2012. Craig explains: "At the moment Great Britain has got a great blind football team but they are getting quite old - I think the youngest player is 28 and the oldest is about 40. They will need a new crop of players for 2012 and I am aiming to be one of them." Craig had trials at the world's first blind football academy in Hereford - and has now been invited to spend three days a week training with the national squad.

Tony Larkin, head coach of the Great Britain Blind Football Team, said: "Craig clearly has real talent, great mobility and the kind of commitment and determination that creates international standard players. The training schedule is pretty tough, but incredibly rewarding, too."

Although he's still employed by the Army, Craig is to be discharged in January,

when he will receive his Army pension. And his fledgling football career has given Craig a fresh focus.



Craig Lundberg (Pic:DM)

An article in the Daily Telegraph on 13th April 2009 reported that:

Craig Lundberg pays tribute to guide dog

…After recuperating in hospital, Craig applied for a guide dog and was teamed up with a two-year-old Labrador Retriever cross called Hugo. Following weeks of training, the pair are now living together at Mr Lundberg's home in Walton, Liverpool.

"The big advantage of a guide dog is companionship. Hugo is a great companion," Mr Lundberg said. "I also get around much quicker, going naturally around obstacles. I know that Hugo is going to be a big part of my life. And I am really pleased about that."

The 23-year-old has kept busy by fundraising for a number of worthy causes, including the Guide Dogs charity.

And subsequently:

Liam Creedon reported on16 March 2010 that:

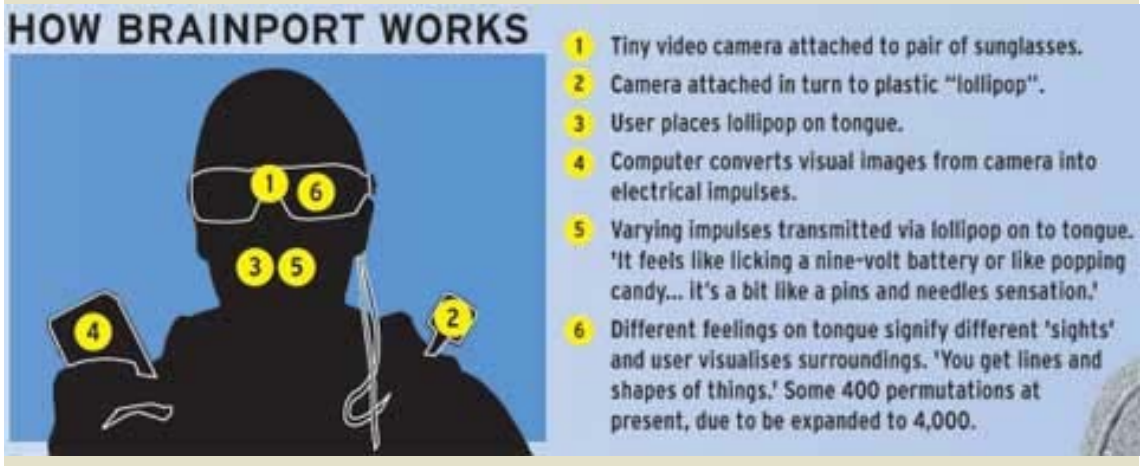
Craig Lundberg learns to see with tongue

A soldier blinded by a grenade in Iraq has described how his life has been transformed by groundbreaking technology that enables him to "see" with his tongue.

Lance Corporal Craig Lundberg, 24, can read words, identify shapes and walk unaided, thanks to the pioneering BrainPort device, despite being totally blind. He was faced with the prospect of relying on a guide dog or cane for the rest of his life. But he was chosen by the Ministry of Defence (MoD) to be the first person to trial the device, which could revolutionise treatment for the blind.



Lance Corporal Craig Lundberg, who was blinded in Iraq in 2007, with the BrainPort, a device which allows him to 'see' with his tongue. Picture: PA



The BrainPort converts visual images into a series of electrical pulses, which are sent to the tongue. The different strength of the tingles can be read or interpreted, so the user can mentally visualise their surroundings and navigate around objects.

The device is a tiny video camera attached to a pair of sunglasses, which are linked to a plastic "lollipop", which the user places on his tongue to read the electrical pulses.

L-Cpl Lundberg explained: "It feels like licking a nine-volt battery, or like popping candy. The camera sends signals down on to the lollipop and on to your tongue. You can then determine what they mean and transfer it to shapes.

"You get lines and shapes of things. It sees in black and white, so you get a two-dimensional image on your tongue – it's a bit like a pins-and-needles sensation. "It's only a prototype, but the potential to change my life is massive. It's got a lot of potential to advance things for blind people.

"One of the things it has enabled me to do is pick up objects straight away," he went on. "I can reach out and pick them up, when before I would be fumbling around to feel for them."There is no way I'm getting rid of my guide dog Hugo, though – I love him. This is another mobility device, it's not the be-all and end-all of my disability."

The MoD said it expected to pay the United States about £18,000 for the device and training to enable the trial to take place. Unveiling the BrainPort at the MoD headquarters in Whitehall, US Major-General Gale Pollock, who worked on the scheme, said that the device had 400 points sending information to the tongue connection.

Designers plan to expand this to 4,000 points, which would vastly upgrade the clarity of the image. Users cannot speak or eat while using the BrainPort, so designers are hoping to create a smaller device that could be fixed permanently behind the teeth or to the roof of the mouth, enabling more natural use.

Group Captain Rob Scott, who is L-Cpl Lundberg's eye doctor, travelled to the US with him for the BrainPort trials. The MoD is trialling BrainPort to discover what help it could offer service personnel who have suffered eye injuries.

The MoD said that, between July 2004 and July 2008, 62 soldiers suffered eye injuries while serving in Operation Herrick in Afghanistan. Of these, 15 lost their sight in one or both eyes. Fewer than five soldiers were blinded during Operation Telic in Iraq, the MoD said.

Chapter 29 Resources and References

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Blind servicemen

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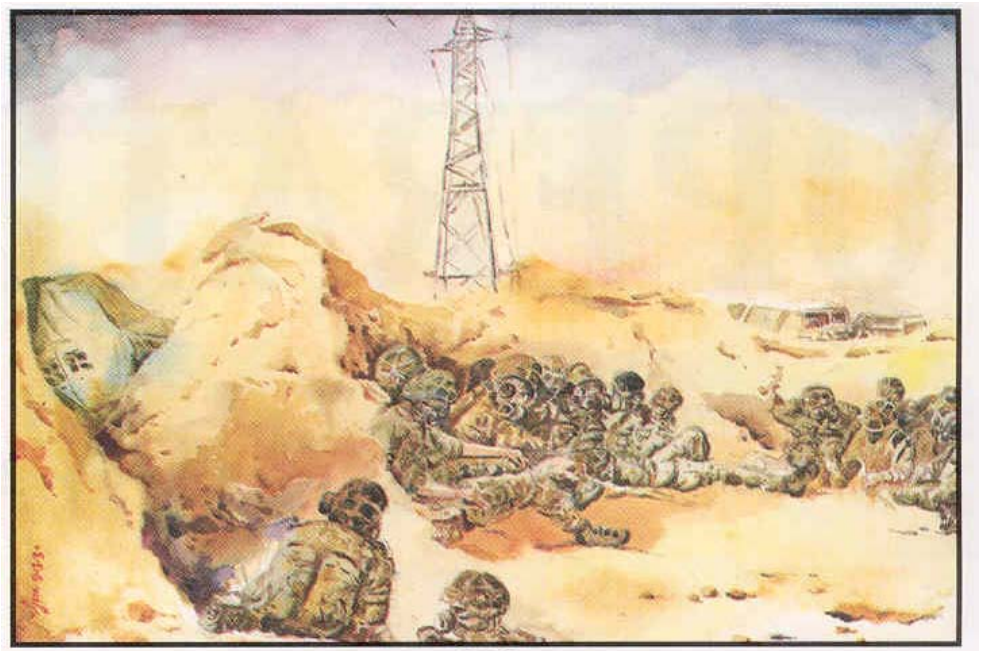
Blood, Heat + Dust: Second Edition

Operation Telic and the British Medical Deployment to the Gulf 2003-2009

Chapter 30:

High level management and reorganisation of the DMS during Operation Telic

acknowledgement to Lt General Louis Lillywhite



Painting: *Take cover!* Artist: Gora Pathak 2003



Introduction

The 1990s produced radical changes and instabilities in a Defence Medical Services management system which had changed little in the preceding half century, despite the progressive shrinkage in the DMS "estate". The introduction of modern management and budgetary systems, language and concepts to the Ministry of Defence, created a new command and control environment in which to organise and deliver military health care. The concept of "Fitness for Purpose" is now widely applied to many organisations, systems and processes, including the Defence Medical Services. It became apparent that changes were necessary to adapt the DMS to best modern governance practice, not least in the care of casualties with complex injuries from the point of wounding to long term aftercare.

The Defence Medical Services have been in a state of continuous flux and reorganisation since their inception, and the pace of change during the Operation Telic decade has been no exception. Underpinning the DMS in any configuration is the quality, flexibility and motivation of its personnel, but the performance of the best of human resources is in turn underwritten by a coherent and competent organisation and leadership.

During the past decade, the DMS has been continuously engaged in supporting two medium scale conflicts, in Iraq and Afghanistan, the volume and complexity of casualties from which have been drivers to major change, as we have seen elsewhere in this book, along with supporting a continuous training programme, exercises and numerous smaller operations, including those conducted by Special Forces around the Globe and maritime deployments.

There have been a number of key drivers to change over this time;

- the overall contraction in the size of the Armed Forces has obliged the DMS to develop its clinical partnership with the NHS in order to train personnel and maintain professional skills outside the warfighting operational environment, and to consolidate its hospital infrastructure

- the impracticability of maintaining a wholly regular force has obliged progressive integration and interchangeability with the Reserves, and the development of engagement and mobilisation policies which maximise goodwill with civilian employers, and primarily with the NHS.
- drivers to increased standards of clinical and operational governance have obliged rigorous attention the clinical and military skills of deployed personnel
- advances in technology and communication, including the Internet and email, which have made the welding and coordination of this complex, rapidly changing and geographically diverse organisation much simpler and more efficient.

Despite the contraction in the size of the Armed Forces, the DMS has maintained some historical anachronisms in respect of the separate Arms of Service histories and identities of the Army, Naval and RAF elements, rather than amalgamate under one uniform or cap badge.

The 1998 Strategic Defence Review of the Defence Medical Services

It is very helpful to an understanding of the changes in the organisation of the DMS during Op Telic to step back to the 1990s and consider the challenges in the context of its recent history, for which the following 1998 Report by the House of Commons Defence Select Committee provides helpful background information.

As with all public sector organisations, overall direction to the Defence Establishment is Political, both through the Secretaries of State for Defence and through the Treasury, which makes funding available. To a greater degree than previously, the NHS and the Secretaries of State for Health also play an important role, following the progressive transfer of hospital care from independent Defence Hospitals to NHS Units.

Within the MoD, various command and reporting structures exist from time to time to make the Defence Medical Services answerable through the Surgeon General and through the Vice Chiefs of the Defence Staff to the Military Chiefs of Staff, and then on to the politicians.

The principle of high level command is based upon the maximum devolution of responsibility down the command chain consistent with the aims of the Chiefs of Staff, with accountability for decisions and actions passing back up the command chain. This process in turn requires the appointment of intellectually and organisationally able commanders at all levels, who are attuned both to the military intent but also to the realities of finance, personalities and politics.

The 1998 Defence Select Committee report was as follows:

“Background to the 1998 Defence Select Committee report

This Committee's predecessors have reported on the DMS on two occasions. In 1995 the Defence Committee looked at the proposals made in two studies into the DMS: the 'Prospect' review of 1993 and Defence Costs Study 15 the following year.

The 1993 review into defence secondary care, published in February of that year, was carried out as part of a fundamental review of defence policy and its implications for the structure of the armed forces, known as "Options for Change", which was described in some detail in our Report into the Strategic Defence Review. That review concluded that the DMS required 1,500 secondary care beds, of which the majority would be provided by three single-service hospitals at Haslar, Aldershot and Wroughton (a reduction from the seven service hospitals in existence at the time of the review's publication).

300 beds would be based in NHS district general hospitals but militarily staffed – a new concept, to be known as Military District Hospital Units (MDHUs). At the time of the review's publication, negotiations to provide some of these beds were already underway with local health authorities. The final establishment of the DMS once these proposals had been carried out was to be 7,900 personnel.

"Despite the "fundamental" review which had been completed only a year before, the DMS was further reviewed as part of the Defence Costs Study (DCS) process, the results of which were published in Front Line First in June 1994. The since notorious 'DCS 15', into the DMS, determined a reduction in the number of beds staffed by the DMS to 777; a reduction in establishment to around 5,700; and the closure of the hospitals at Aldershot and Wroughton. Royal Hospital Haslar, the sole remaining hospital, was to become a tri-service hospital and the proposals made for the establishment of three MDHUs in the previous year's review were reconfirmed.

Four 'Next Steps' agencies were to be created: to manage secondary care, dental care, medical training and medical supplies. Each was to overlap between the existing single Service medical services and to have a Chief Executive reporting to the Surgeon General. The then Defence Committee responded that –

. . . the major reduction in the Defence Medical Services will reduce the ability of the United Kingdom to generate military medical support for the front line in the event of serious hostilities short of all-out war, as well as reducing to a bare minimum the training and skills base for all the military medical disciplines.

"In the 1996-97 Parliamentary session the Defence Committee examined the implementation of the changes announced in DCS 15. The Committee found that the DCS proposals had failed to enhance capability, and that staff levels and morale were dangerously low. They concluded that –

. . . the Defence Medical Services are not sufficient to provide proper support to the front line in all realistic planning scenarios and show little prospect of being able to do so in the future. A choice would have to be made between sending troops without proper medical support or only sending the limited number of troops who could be supported. Defence Costs Study 15 has not enhanced the front line but has seriously impaired it.

And that –

. . . staff shortages in the Defence Medical Services are so serious that it is not clear whether it will recover.

"Our predecessors also expressed their disquiet at the frequency of reviews of the DMS. The MoD's justification for the re-examination of the DMS in 1994, so hard on the heels of the 1993 review was that factors which had not been taken into account in the earlier review provided increased opportunity for reductions in secondary care. These factors were given as: the end of the Cold War; developing medical practice; and greater integration with the NHS. The apparent failure of Options for Change to take these into account would support our predecessors' lack of confidence in the review system and the extent to which proposals made in different reviews unpicked those of previous ones. They believed that this ". . did not inspire confidence in the MoD's past record of internal review".

We have sought to examine in this current inquiry whether the latest proposals are based upon sound and well-analysed evidence and can be expected to withstand the test of time.

As our predecessor Committee noted, the 1993 "Options for Change" review of the DMS and DCS 15 were only part of a longer line of reviews of defence medical services going back as far as the 1970s, none of which "had really been taken through to fruition".

Similarly the proposals and restructuring outlined in this decade's earlier studies have not been fully seen through. Despite concerns that the DMS pictured in DCS 15 would not be able to fulfill its wartime obligations, almost two years on from the review our predecessor Committee found that there were 200 fewer secondary care beds than DCS requirements; that there were 26 Army surgical teams rather than the establishment of 35; that the tri-service hospital at Haslar had 389 staff, against a planned level of 485; and that staff shortages in many disciplines were acute and likely to become worse.

"The DMS has been reviewed and restructured many times over the years (and in this experience it is not unique within the armed forces). Each review has been presented as the "review to end all reviews", and each time the review has failed to be fully implemented. This did, perhaps, lead to a situation in the early 1990s where some rationalisation was necessary. However, cuts were too severe and where counterbalancing improvements were planned they failed to materialise and morale, retention and recruitment suffered. It is against this unpromising history of sometimes ill-conceived plans almost invariably badly-executed, that the current proposals must be judged.

In July 1998 the government published its Strategic Defence Review (SDR), which was intended to:

> . . . give the armed forces of this country a coherent and stable planning basis in the radically changing international and strategic context of the post-Cold War world
>
> by setting out the objectives of UK defence policy, the resources required to achieve those objectives and the government's plans for implementing change. Recognising the perilous state of the DMS, the government stated that addressing the problems experienced by the DMS would be one of its highest priorities during the SDR process.
>
> 13. The 1998 White Paper was rather sketchy in its proposals for the DMS. The SDR acknowledged that, as our predecessors had found in their 1997 Report –
>
> Shortfalls in personnel and equipment have reduced the ability of the Defence Medical Services to support substantial deployed operations effectively.
>
> A series of operational enhancements was therefore proposed to increase the capability of the DMS. These included addressing equipment and personnel shortfalls, procurement of a new hospital ship, creating an additional 800 field hospital beds and enhancing the Army's Regular ambulance evacuation capability. Further plans for the Defence Secondary Care Agency (DSCA) included recruitment to bring the Agency up to its establishment staffing levels and renegotiation of hospital unit contracts with NHS Hospital Trusts. The medical personnel of the Reserves were also to have an increased role. An extra £140 million was committed to the DMS over the following four years, including £62 million to be spent on personnel and £49 million to be spent on equipment enhancements.
>
> Despite welcoming these proposals in our Report on the SDR we could not be optimistic that improvements will be quickly apparent.
>
> "The most pressing problem facing the DMS is that of its personnel. The post-DCS 15 establishment requirement for the three Medical Services was 4,645 personnel, although as we have seen the DCS 15 changes were never fully implemented and acute shortages in certain areas of the DMS's operations have persisted. The SDR increased this requirement to 7,661, although the last establishment figure had never been achieved. As the Chief of Staff of the Surgeon General's Department put it –
>
> . . . the SDR has given an uplift in people, to which we then need to recruit, which is a . . . problem.

The Defence Medical Services in 1998: A Strategy for the Future

"While recognising the 'serious shortfalls' in medical support for the armed forces and outlining a number of relatively minor changes to DMS, the SDR was not the government's final word on the subject. After its publication, detailed studies on the DMS continued, and their results were published in December 1998 as Defence Medical Services: A Strategy for the Future. This document outlined strategies for improving the personnel position of the DMS, including measures designed to improve recruitment and retention and reduce overstretch; a programme of equipment investment; and a new strategy for management and organisation. These steps are intended to –

. . . significantly enhance [the] ability to deliver medical support ... on a tri-service basis.

The Strategy also included new measures designed to improve the provision of secondary care by the DSCA.

"Under the Strategy for the Future, the structure of the DMS will be streamlined. The Surgeon General has been the owner and has had strategic direction over the four medical agencies since their inception in 1996. However, until now the three heads of single Service medical services, the Service Medical Directors General, have reported to their own Chiefs of Staff. Under the new management structure they will report to the Surgeon General, giving him complete oversight of the DMS. The Surgeon General in turn reports to the Secretary of State.

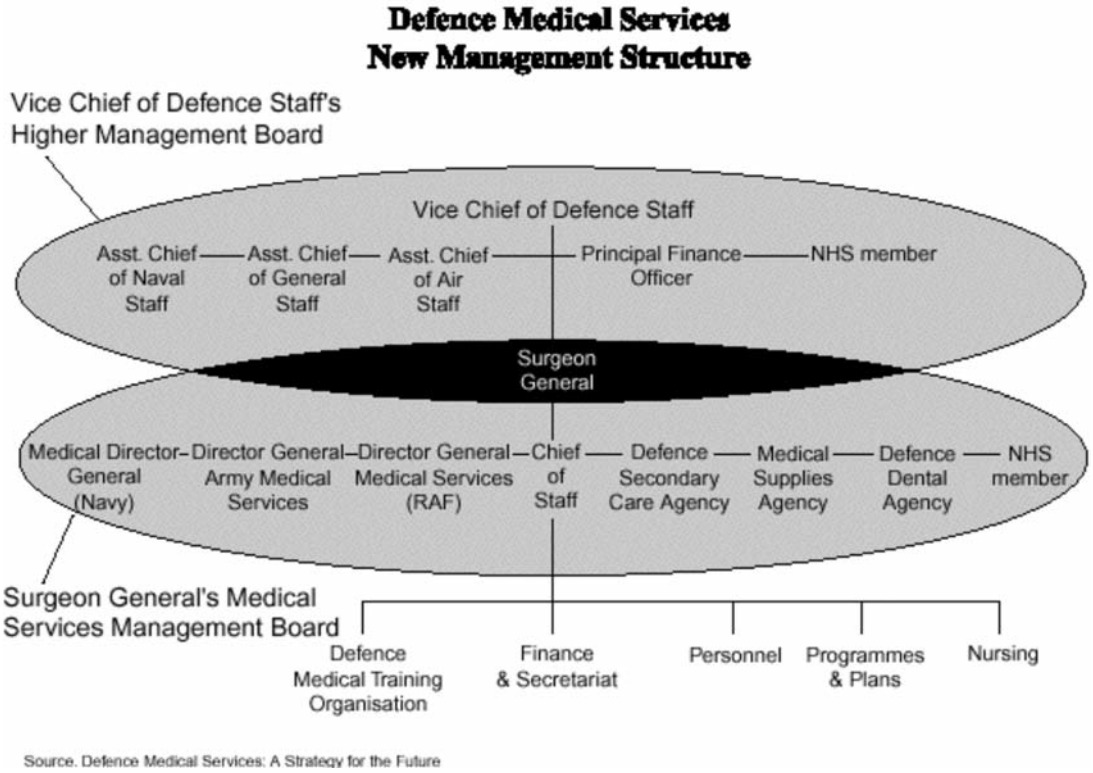
"Another innovation is that the NHS Executive will henceforth be represented on the Defence Medical Board. This is intended to

- ensure that the armed forces have a timely understanding of prospective changes in civilian medicine that need to be taken into account by the DMS;
- ensure that developing DMS policies are in accordance with NHS best practice; and
- provide a relevant but different perspective on DMS management issues.

The Committee strongly welcomes this move, which is long overdue. One of the two NHS representatives, Ms Barbara Stocking, told us that she saw her role as –

. . . to bring in some general knowledge about what is going on in the NHS more widely . . . [and] liaise properly within the NHS Executive so that we can work jointly on some of the issues.

"Reactions to the government's proposals have varied. Some commentators have suggested that the planned changes to the DMS are too little, too late. The British Medical Association's memorandum to the Committee told us that the BMA 'was disappointed at the lack of discussion of the DMS in the Strategic Defence Review', and the follow on document did not receive great praise either –



"[it] suggest[s] a lack of urgency about this issue and does not appear to recognise that measures that will have an effect in the medium to long term are not enough.

However, **in their evidence to us representatives of the MoD did not attempt to disguise the parlous state of the DMS and recognised the urgent need for measures to address it. The MoD cannot be accused of displaying complacency about the present problems of the DMS, as the publication of *Defence Medical Services: A Strategy for the Future* shows, although it has yet to demonstrate its commitment to implementing its plans.**

"We examine below the extent to which the new plans adequately address the present plight of the DMS. **However, history has shown that too often promises have been unfulfilled and improvements unimplemented. Many of the problems of the DMS can, we believe, be ascribed to the uncertainty brought on by constant review and restructuring. We hope that this will be the last review of the DMS for some time.** Indeed, should this review not succeed in halting the decline of the DMS, there may well be no DMS to review.

Medical support for operations

"The primary and most important role of the DMS is to provide the medical care and attention necessary for the armed forces on operations. Soldiers, sailors and aircrews may need medical attention as a result of accident, illness or aggression, and it is vitally important that they should be able to receive high quality treatment in their theatre of operations.

The DMS is currently very overstretched both in terms of operational deployments

and in secondary care, described in more detail below. We were told that currently the Army would only be able to deploy two of its three Field Hospitals, and that "at a real push". **Thankfully UK forces did not have to undertake a ground invasion of Kosovo earlier this year—but should they have had to do so it is not clear to us that they would have had adequate UK medical support**. Our predecessors noted that the amount of medical support able to be generated to support operational deployments was not sufficient for all planning scenarios. The UK's armed forces currently have many operational commitments – particularly in the Balkans and now in East Timor. They concluded that –

. . . while it is in the military plan to deploy troops on a certain scale, medical services should be maintained at a level capable of supporting such operations.

The current reorganisations of primary care outlined below are, according to the MoD, intended "to enable the DMS to operate effectively and efficiently in support of deployed troops deployed on large scale operations. They are also essential to our ability to deploy in support of two concurrent operations at medium scale."

The SDR planners were conscious of the deficiencies in the quantity of medical support available to the front line. Enhancements to this announced in the SDR were:

- upgrades to the medical facilities in the Royal Fleet Auxiliary ship Argus , in 2000;
- procurement by 2005 of two 220-bed Primary Casualty Receiving Ships, one at high, the other at low readiness;
- transfer of the airmobile field ambulance unit into the new air assault brigade;
- creation of an extra air evacuation flight by 2001;
- formation of a new Regular Ambulance Regiment comprising 3 Ambulance Squadrons;
- increase in the number of air evacuation flights; and
- increase in investment in the Surgeon General's new information strategy.

The medical cell in the Permanent Joint Headquarters has also been doubled in size to provide immediate operational support to commanders.

"Without medical reserves, operational medical support would be severely curtailed. The MoD's plans allow for regular medical personnel, if fully staffed to establishment levels, to meet the deployed requirements at a "medium" scale of effort (one non war-fighting operation and roulement) and to be able to meet the initial requirements of a war-fighting brigade deployment. However –

. . . for the remainder of a war-fighting medium scale deployment, and for all higher scales of effort, [the MoD] would need to resort to compulsory call-out of Reserves . . . The majority of these reservists would be from the Territorial Army although some specialists would be Individual Reservists.

During both the Gulf War and the recent crisis in Kosovo the DMS was heavily reliant on its volunteers. The use of medical reservists forms a key part of the DMS's personnel strategy, and here the potential for conflict between the DMS and the NHS is acute. We discuss these problems later.

The issue of front line medical support is a crucial one, and by concentrating on defence secondary care in the course of this inquiry we do not mean to diminish its importance. As part of our follow-ups of the SDR implementation, we intend to keep an eye on whether the government is attaining its targets in terms of reorganisation, equipment procurement and reservist recruitment for operational medical support.

The Report went on to consider at length issues relating to the organisation of the Defence Secondary Care Agency, hospital organisation, and the recruitment and retention of regular and reserve personnel with considerable clarity as to the issues.

It concluded that:

"The government's vision for the DMS is for a fully manned, trained, equipped, resourced and capable organisation with high morale, capable of providing timely and high quality medical care to the Armed Forces on operations and in peacetime.

That goal has been unachievable for a decade. **This vision cannot be realised at present, and will certainly not be realised for some years into the future. On the evidence we have before us in this inquiry, we consider that it is still possible that it will not be achievable**. Under the SDR, a genuine effort has been made to match medical capability to operational requirements. It is, however, clear that currently for any situation beyond a 'medium' scale of military effort – and it is not clear to us that this scale of effort is not currently exceeded – the DMS relies on reservists that simply do not exist. It is scandalous that such a situation should have been allowed to come to pass.

"We have noted, and commented upon in this Report, the many initiatives which could improve the lot of the DMS. However, these remain plans, not achievements. The effort that is going into turning the DMS around will come to nought if the problems of recruitment, and more pressingly, retention, are not solved. We were told by the Surgeon General that solving these problems 'is going to be a long old haul', and by the Minister for the Armed Forces that 'a lot of these issues cannot be resolved quickly'.

However, the crucial question is whether or not the DMS can survive for long enough for new measures designed to improve it can have effect. Despite the government's efforts, it may be that changes planned are little more effective in the long term than baling out a leaky boat. Staffing RH Haslar until its closure, bringing the MDHUs to full establishment and establishing a Centre for Defence Medicine would be an enormous challenge – one which we are not convinced the DMS can overcome.

We are not yet convinced that the MoD has produced a plausible strategy for managing the handover from Haslar to the Centre for Defence Medicine, or indeed that all efforts were made to retain Royal Hospital Haslar with its continuing role in ensuring a strong military ethos and supporting the Defence Medical Services.

"However, the most critical problem that faces the MoD is to make effective use of the instruments at its disposal in the new reality where the DMS is now the junior partner in a dependent relationship with the NHS. We acknowledge that the 'stand-alone' DMS of the Cold War era is no longer viable given the reduced size of today's armed forces. The culture and objectives of the two organisations are very different.

"Forging relations between the DMS and the NHS will therefore be crucial to the continuing existence of a separate military medical service. This will require commitment, energy and application to detail from personnel at all levels, including ministerial, in both Departments of State. It would not be acceptable in a nation with a National Health Service for that service to be a silent and inactive witness to the collapse of the armed forces' deployable medical support. The situation of the Defence Medical Services continues to deteriorate despite all the efforts, some would argue too many, of defence management to rectify the situation. The nation needs both Departments to work actively together to ensure that potential collapse does not become a reality".

Given the angst and pessimism expressed in that report, the achievements of the following decade, in supporting operations both in Iraq and Afghanistan, and in the process securing the transformation of the outputs of the Defence Medical Services have been very significant indeed.

In the remainder of this chapter, we consider how the problems were met and how these changes were led and brought about at command level in the DMS.

I am grateful to Lt Col Damion Pealin (SO1 at AMD Camberley in June 2010) for instructive discussions on the significance to military health care delivery of the management concept and processes of Defence Lines of Development;

I am particularly grateful to Lt General Louis Lillywhite, Surgeon General, for direction on the philosophical and practical development of Medical Operational Capability after 2000. Both concepts are important to the understanding of how the strategic management of the DMS evolved through the period of Op Telic.

Defence Lines of Development and their significance for the DMS

The Defence Lines of Development (DLoDs) describe a series of capabilities or a framework in which strategic change, development and evolution in Defence can be managed and understood. They have equal weight and importance, and apply equally to planning in all arms and branches of Defence. The concept of DLoD emerged in the late 1990s.

Training: This is defined as the provision of the means to practise, develop and validate, within constraints, the practical application of a common military doctrine to deliver a military capability.

Equipment: This covers the provision of military platforms, systems and weapons, (expendable and non-expendable, including updates to legacy systems) needed to outfit/equip an individual, group or organisation.

Personnel: This aims to secure the timely provision of sufficient, capable and motivated personnel to deliver Defence outputs, now and in the future.

Information: This covers the provision of a coherent development of data, information and knowledge requirements for capabilities and all processes designed to gather and handle data, information and knowledge. Data is defined as raw facts, without inherent meaning, used by humans and systems. Information is defined as data placed in context. Knowledge is Information applied to a particular situation.

Concepts and Doctrine: A Concept is an expression of the capabilities that are likely to be used to accomplish an activity in the future. Doctrine is an expression of the principles by which military forces guide their actions. It is authoritative, but requires judgement in application.

Organisation: This relates to the operational and non-operational organisational relationships of people. It typically includes military force structures, MOD civilian organisational structures and Defence contractors providing support.

Infrastructure: This covers the acquisition, development, management and disposal of all fixed, permanent buildings and structures, land, utilities and facility management services (both Hard and Soft facility management (FM)) in support of Defence capabilities. It includes estate development and structures that support military and civilian personnel.

Logistics: This is the science of planning and carrying out the operational movement and maintenance of forces.

Interoperability: This describes the ability of UK Forces and, when appropriate, forces of partner and other nations to train, exercise and operate effectively together in the execution of assigned missions and tasks.

In the context of DLoDs, Interoperability also covers interaction between Services, UK Defence capabilities, Other Government Departments and the civil aspects of interoperability, including compatibility with Civil Regulations.

The concept and application of operational clinical governance

Clinical governance describes the procedures to ensure and secure an acceptable standard of clinical care in any health care organisation. Senior officers and senior NHS managers were obliged to consider very carefully how clinical governance procedures should be modernised.

General Lillywhite recounts that on his appointment as Director General Army Medical Services in 2004:

> "As a result of the Bristol enquiry and other NHS failures, the NHS realised that its chain of command, from Chief Executive of individual Trusts upwards, could not form a view on the quality of care. At the time, the NHS chain of command's managerial mandate specifically excluded responsibility for clinical quality and was confined to business aspects only. Progressively since 1999 the NHS had introduced Governance and Assurance systems to enable it to proactively address the quality of care, which had been largely replicated in British Forces Germany.
>
> "Under the General Staff Plan I was responsible for the quality of the Army's Medical Services. The deployable hospital service comprised some 1,700 beds organised into 14 major units, and these units were Army. I issued doctrine and via the LAND Special to Arm Training Directive was to ensure that the deployable hospitals were fit for role.
>
> "HQ 2nd Medical Brigade was from the 1st April responsible for ensuring that the training directive is turned into action by all Regular and TA hospitals, and it provides the physical training prior to operational deployment. There should be a formal process of audit that feeds back to HQ 2nd Medical Brigade, so that they could adjust their training, and to myself so that I could meet my responsibilities under the General Staff Plan and adjust doctrine as appropriate.
>
> "I began to suspect that our deployable Army Hospitals had become "stuck" at the point at which they were when the Service Hospitals were disbanded during DCS 15. No single event led to me concluding this. I was first alerted to this by a presentation, supported by photographic evidence, on an Infection Control Audit submitted to PJHQ. Next, there was the issue by a NHS package designed to identify and then prevent those at risk of avoidable death in hospital.
>
> "I suspected that we no longer rolled such programmes out across our deployable hospitals as we used to automatically when we introduced them into our Service Hospitals prior to DCS 15. I realised that I did not routinely have reported to me from deployable hospitals Critical or Significant Events. I was not sure who, if anyone, received these or even if they are routinely undertaken. They certainly did not get to HQ 2nd Med Bde, who could not therefore take them into account in pre-deployment training, nor did I receive them for inclusion in the LAND Special to Arm Training Directive.
>
> "On further enquiry I found that Defence Consultant Advisers were visiting our deployed Army hospital as individual professional advisers when the NHS

abandoned this some years ago in favour of a multi-disciplinary approach, following some very public major system failures. I rarely saw reports from the visits and they were rarely in a useful format. Within the NHS a more formal approach had been adopted which was multi-professional in nature, structured and in the process of being rationalised.

"I felt that the Army hospitals being deployed to Theatre were operating at risk without the processes or procedures in place that are reasonably expected of hospitals seeking to meet NHS standards. I felt it essential that the Army undertakes a proper audit of its deployed hospital using a team of Subject Matter Experts that was experienced in audit and which constituted an Inspectorate to report back to PJHQ and myself as the Competent Army Authority.

"There were individuals in the Regular Army and the TA who were accredited to the NHS Inspectorates and who had significant experience in this area (for example, the Chief Nursing Officer for Wales was a TA Officer). They would identify where our processes and procedures are deficient (if at all) and make recommendations. I expected the TOR and their report to be fully staffed. I also expect that in future we would take a more formalised approach to professional visits, changing from the outdated model to one more consistent with a modern health service.

"I therefore formally sought agreement to a visit by an audit team, comprising a maximum of four individuals from the Regular and TA AMS to BMH Shaibah. Their role would be to enquire into the procedures and processes that were in place to ensure that clinical care in that hospital meets Clinical Governance standards and make recommendations for both BMH Shaibah and for our other Army hospitals".

The Iraq Governance Audit of 2004

The commissioned report was undertaken from 10th to 14th December 2004 by Brigadier J W Freeman L/RAMC, Col R Kennedy L/QARANC and Lt Col P Sokolow QARANC. It was a detailed review which mapped existing operational command and control arrangements to perceived best NHS clinical practice and concluded that:

- **Clinical Governance Policy must be updated to reflect modern processes**
- **Overarching Clinical Governance Strategy and monitoring arrangements must be developed, approved & implemented**
- **The Department of Health internal audit tool should be adapted and adopted**
- **Clinical Assurance leads should be appropriately trained and deployed to ensure continuity and corporate memory across roulements**
- **Clinical Governance assurance should include internal, external and independent validation and audit**

Actions following from the 2004 Shaibah Governance Report

Subsequently, General Lillywhite wrote to senior medical commanders:

"On taking up my appointment as DGAMS I discovered that the checks and balances that I had become used to in delivering peacetime secondary care to the Army in Germany did not appear to be in place in the Land operational environment. Simplistically, I could not come to an informed view on whether the quality of care provided on operations to Army personnel or by Army medical units is of an acceptable standard and nor can anyone else. Neither did I have the visibility over the whole of the casualty chain that AMD had pre-OPTIONS, even to the extent of not having access to basic data that used to be routinely provided.

"I commissioned a report on Clinical Governance on Role 3 Hospitals on Operation Telic, the Report on clinical governance of UK Medical Group – Operation Telic 10-14 Dec 2004, which became known as the Clinical Governance Stocktake. Its audit findings, at around 30% of notional targets, confirmed the deficiencies.

"The report indicated that whilst MOD had introduced into the operational arena Clinical Governance policies based on the Government's 1999 Clinical Governance policy it had not, at least in the operational area, progressed the Assurance agenda and remained a reactive instead of a proactive organisation. The Defence Medical Services Directorate sought to close the gap and promulgated a Surgeon General's Policy Letter on Assurance in the operational environment.

"It was important to stress that the report did not state that the quality of care provided on operations is sub-standard, nor that any individual or organisation responsible for providing care on the ground has failed; on the contrary it painted a picture of organisations and individuals strongly committed to providing the best possible service and striving so to do. However, it concluded that we simply could not assess our quality of care and nor were we proactively addressing the clinical risk that undoubtedly existed.

"How we were to introduce the Assurance process that was considered essential for minimising and addressing such clinical risk needed to be debated by the stakeholders, who included those who own and/or command and train the personnel and units in peace and prepare them for operations; those who Command the deployed personnel and organizations on operations; and those responsible for the care of the patient after he has been returned to the UK.

"I noted that whilst the report only covered deployed Role 3 Hospitals, any action arising out of the report must cover the patient care pathway from point of wounding through to the NHS. Whilst the Army "owns" 85% of the resources, the 15% it does not own (eg RCDM, Aeromed) are an essential component of the patient care pathway. Therefore, whatever system of Clinical Assurance was to be put in place must involve the other two Services."

The 2006 Defence Select Committee (DSC) Review of the Defence Medical Services

In October 2006, the Defence Committee undertook a wide-ranging inquiry into the provision of healthcare for the Armed Forces, when operations in Iraq were at their peak, and when there was at the time considerable media interest in the treatment of casualties from operations in Iraq and Afghanistan. This report provides a very valuable "snapshot" of the overall state of management of the DMS, its human resources and its broader responsibilities at that time. A further report was published, reviewing progress in 2007 and 2008.

Subsequently, a report was commissioned by Surgeon General Louis Lillywhite from the civilian national Health Care Commission, under the Chairmanship of Sir Ian Kennedy, to consider the state of the DMS. This was delivered early in 2009.

These various documents, provided and analysed in abridged versions in this chapter, are a valuable collegiate review of the Defence Medical Services in the first decade of the 21st century, when the DMS was dealing with the acute and long term health consequences of the war in Iraq and of ongoing operations in Afghanistan.

A brief history of recent structural change in the DMS

The 2006 DSC reported that :

"There have been inquiries into Armed Forces medical care on a number of occasions. Key reports were produced during the mid- to late 1990s, a period of profound change for the UK Armed Forces following the end of the Cold War and the attempt to make good on the so-called 'peace dividend'. There were reports in 1995, 1997 and 1999.

Changes in the provision of military healthcare

The first major post-Cold War review of the UK's military requirements was 1990's *Options for Change*. This reviewed defence secondary care in the UK, and proposed a rationalisation of the seven existing military hospitals to three single-Service facilities, at Haslar (Royal Navy), Aldershot (Army) and Wroughton (Royal Air Force). Secondary care for overseas garrisons such as Cyprus and Gibraltar was to remain the responsibility of the existing stand-alone hospitals.

The care provided by the three Service hospitals was to be augmented by 300 beds based in National Health Service hospitals, staffed by military personnel. These would be known as Military District Hospital Units or MDHUs. Engagement with the NHS was intended to ease the burden on MoD resources and to encourage the broadening of clinical skills and the interchange of experience.

A further review in 1994, as part of *Front Line First* recommended the closure of Aldershot and Wroughton, and the consolidation of provision at a tri-Service hospital at Haslar. The review also re-endorsed the creation of three MDHUs, and suggested the creation of four 'Next Steps' agencies, to manage: secondary care,

dental care, medical training and medical supplies. Each agency was to have a Chief Executive who would report to the Surgeon-General.

There was further administrative streamlining of the Defence Medical Services in 1998. *Defence Medical Services: A Strategy for the Future* gave the Surgeon-General complete oversight of the DMS by making the individual Service Medical Directors-General report to him rather than to their Chiefs of Staff. The administration of medical services was further altered in 2002, with the appointment of a non-medical Deputy Chief of the Defence Staff (Health) to manage the administrative work of the Defence Medical Services Department. We are satisfied that this 'double headed' approach is an efficient and effective one.

The Defence Hospital Estate

"Although the MoD had planned to maintain the Royal Hospital Haslar, it was found that the number and range of cases required to maintain skills and make clinical services viable was not available. Therefore, in December 1998, the Government took the decision to close Haslar in phases and to consolidate its training activities within the NHS, based around the MDHUs. Haslar ceased to be a military unit on 31 March 2007, though it continued to be owned by the MoD and continued to function until late 2009, when clinical services transferred to the Queen Alexandra Hospital at Cosham in Portsmouth."

Birmingham as the centre for treating operational casualties

"Since 2001, the main receiving unit for casualties evacuated from operational theatres has been the Royal Centre for Defence Medicine, based at the University Hospital Birmingham Foundation Trust (UHBFT) (though there was some use made of The Princess Mary Hospital at RAF Akrotiri in Cyprus during the most intense phase of Operation TELIC 1 in Iraq in 2003).

The original arrangements were put in place for Birmingham "to operate in peacetime but not in times of conflict or war". A plan by which the NHS as a whole would become involved in the treatment of substantial numbers of casualties was devised, the Joint Casualty Reporting and Reception Plan (JCRRP). This was refined in 2002 into Reception Arrangements of Military Personnel (RAMP). RAMP has been used only once, in 2003. UBHFT has since taken all other casualties sent back from Operation Telic.

The 2006 DSC acknowledged the case for concentrating the main clinical and training assets of the DMS and DMETA on one cluster of sites, subject to the MoD making its case for the Birmingham-Lichfield 'dumb-bell' more explicitly; working with the voluntary sector to ensure adequate and clear travel and accommodation arrangements for families visiting patients in Birmingham; and reporting on the delivery of the Birmingham New Hospitals project.

The realignment of medical care, and especially the provision of secondary care, was noted to present problems. There was considerable strength of feeling in the

Service community and beyond. The existence of identifiable, military-owned and run facilities was clearly important and a source of much pride and affection, and a number of the contributors to our web forum wanted to see them re-established. However, the arguments in favour of the closure of the stand-alone Service hospitals were felt to be irresistible from a clinical, administrative and financial point of view.

The 2006 DSC examined other key areas of DMS activity, including;

- The treatment of personnel seriously wounded on operations, and the procedures for caring for them, from the point of wounding to evacuation to treatment in the UK.
- The rehabilitation of those with serious, generally musculo-skeletal or neurological, injuries.
- The relationship between the MoD and the NHS in terms of delivering healthcare.
- The care for veterans and Service families.
- Mental healthcare, both for Service personnel and for veterans.
- and the role of Reserve personnel in the Defence Medical Services.

Public consultation by Internet forum

"The 2006 DCS visited a number of UK and overseas medical units, and interviewed a wide range of military and civilian "stakeholders" with interests and experience in military healthcare provision. It held four evidence sessions and conducted a two-stage Internet-based consultation, in 2007.

This novel web forum aimed to engage directly with Service personnel, their families and others, and to hear the views of those who would not normally submit evidence to an inquiry by a select committee of Parliament. The forum was advertised by press release and publicised to, among others, Service welfare groups, HIVEs*, health organisations and unofficial Service internet sites. The web forum was created by Parliamentary Information Communication and Technology (PICT) in conjunction with an independent consultant.

During the course of the forum, Committee staff, with support from the Committee Office Scrutiny Unit, were responsible for 'facilitation moderation'. The Chairman posted comments to facilitate discussions, asking for additional comments on an issue posted on the web pages, or introducing a new topic to move the discussion along.

The web forum closed in December 2007, but contributions remained open for viewing at **forums.parliament.uk/defence-medical**.

** (HIVE Information Centres support the Chain of Command and tri-Service communities through the provision of an information network for all members of the Service community*

on matters such as relocation, local unit and civilian facilities, places of interest, schools and further education, housing, healthcare facilities, employment and training opportunities).

The Director General's Medical Operation Capability Report of 2007

A synopsis of the recommendations of this report, structured according to DLOD principles, is as follows:

Analysis

The analytical stage of the DG Med Op Cap Report identified the four effects of the deployed DMS:

Maximising the number of fit personnel
This is achieved though the provision to the chain of command of advice and assistance in the prevention of injury and disease and the rapid return to duty of those sick and injured who can, without imposing an unacceptable logistic and administrative burden, be treated in Theatre.

Optimising treatment and evacuation from the Theatre of Operations
or battle-space all sick and injured who would otherwise constrain the commander in the prosecution of his military mission. The provision of this effect is sometimes the primary responsibility of the medical services, sometimes the primary responsibility of the chain of command (eg within battle-groups) and often shared (eg the use of SH borne medical teams).

Ensuring maximum survival with residual disability
of all those who suffer significant sickness and injury by applying the highest practical quality of care (commensurate with the condition of the battlefield) to all those who are sick and injured in a Theatre of operations. Although this effect is the responsibility of the medical services, for those sustaining injury it initially has to be effected at the point of injury via appropriately trained non-medical personnel with access to the appropriate first aid equipment.

Further along the treatment chain, there are significant influences on both time for and extent of recovery. For example, infection has a significant effect on both, and the presence of infection is influenced by a variety of factors, some understood and some not. Seeking to inappropriately save a leg that has to be subsequently amputated significantly extends the time to full residual function (and has significant adverse psychological impact) whilst inappropriately amputating a limb restricts the extent of recovery. The initial treatment of head injuries can have a disproportionate impact on time and extent of recovery. Identifying cause and effect is the main driver for advances in battlefield medicine

Providing assurance to deployed personnel
via their commanders, that those sick and injured who are evacuated from the battlefield are being appropriately treated throughout the duration of their illness.

This effect has not previously featured in medical services doctrine. It does not appear to have been a major concern during World War 2 and no formal procedures or processes have hitherto been put in place for this feedback to a Theatre of operations. However, Commanders increasingly wish information on the state of their personnel"

> *Authors note: It is instructive with the benefit of hindsight that there is no mention of the treatment of "host nation civilians and combatants, who in practice have been a major element of delivered care on operations in Iraq and Afghanistan.*

The enabling processes and resources for implementation

It was recognised that the following issues would need to be addressed to optimise these effects. These were and remain:

The need for an evidence base

to ensure that policies and clinical practices are up to date and are able to exploit in a timely manner advances in clinical practice and technology. Although in most areas, the medical services can rely on research and development within the civilian sector or by other nations' military medical services, there are some areas where the provision of an evidence base will require research commissioned in the UK.

The report's assessment was blunt.

"Without access to such data, no assessment can be made of the timeliness of evacuation, recovery and return to duty rates, mortality and complication rates. As well as being unable to objectively assess the medical success or otherwise of the Armed Forces, without such an objective assessment any modification to the current system can only be based on subjective impressions or by extrapolating information from other nations who do keep high quality data. It is unlikely that the UK could replicate for its modern conflicts the quality of data published for the majority of campaigns in the official medical histories of the Second World War.

For example, "no data was available to enable direct measure of evacuation times (as was available to UK using Patient Tracking System) or to identify other potential adverse effects of delay in evacuation (other than death) such as infection rates (available to the US using a Trauma Registry System; a UK system provides some data).

"The Defence Medical Information Capability Programme (DMICP) was expected to go some way to addressing the absence of data by providing electronic patient data, although it would not initially provide comprehensive cover of secondary care data. However, data alone would be insufficient. The processes, individuals, and organisations required to exploit this data and turn it into useable information had not yet been identified. We needed accurate knowledge of the populations at risk, which was not readily available.

"Current medical practice places an obligation on individual medical practitioners to assess their performance and to base decisions on evidence. As a result, there is a body of evidence arising from the actions of individual clinicians, such as the audits undertaken by the Defence Consultant Adviser in Emergency Medicine. There were also examples where good quality data was collected to answer specific questions, such as the deployment to Iraq of Colonel Glyn Jones to address the impact of heat.

"The evidence provided reassurance that the care of the wounded in Theatre was of high quality and comparable to best civilian practice. However, there was no evidence on which to assess the outcome of the whole system, such as on infection or amputation rates, or to allow comparison with US data. Data also requires context, as outcome will be affected by factors such as delays in evacuation.

Exploitation of the evidence

A process was needed to convert the evidence into amended and costed policies, doctrine, practices, procedures and organisations to enhance effectiveness and value for money.

"A vision for RCDM was established, known as SG's Research Strategy. The Defence Science and Technology Laboratory, DSTL was commissioned to undertake a review of medical research within MOD. A modest research programme continued and a SO1 Mil Med post was established within DMSD.

"The processes for effecting change and implementing new skill sets, were unclear and took too long.

Manpower and equipment:

"Appropriate medical forces and personnel should be at the same readiness as the combat troops they support. They should be able to deploy and redeploy in a suitable time frame to the right place with the right equipment with militarily and clinically trained and experienced personnel and teams. They should be capable of being sustained with appropriate communication, information systems, logistic support and physical defence.

Manpower

The manpower resources needed to deliver medical support on operations were specified and agreed. They included:

Forward (Role 1 and 2) capability.

Hospital based capability, including surgical support at Role 2 and afloat.

Aeromedical Capability, some of which is also hospital based.

Specialist capability, much of which is hospital based.

The DMS was acknowledged to rely heavily upon the NHS for clinical training and employment of defence healthcare professionals. The NHS itself was undergoing significant changes in manpower planning. There was divergence between the clinical competencies required by deployed personnel and those in civilian practice.

It was recommended that work was done to identify and cost the additional military training required to make military medical personnel "fit for purpose", and that promotion to OF4 (Lt Col) should in the future be linked to military career progression.

Changes in the NHS workforce were perceived to have significant implications for skill mix in the Reserves. It was also considered that an active strategy should be developed to involve the Regular Reserve with a view to making greater use of them on operations.

There was a need to promote the reputation of DMS personnel with professional bodies such as the Royal Colleges.

There was a need to develop a multi-disciplinary team approach to clinical training.

Personnel Management

There was a requirement for a review of the Defence Medical Education and Training Agency, DMETA.

Individual Training

There was agreement that initial military training for Regulars was appropriate, but thereafter there was the risk of skill fade.

DMETA had to ensure that skills were sustained in between deployments. A system was needed to ensure that all clinical staff, and in particular junior staff, in non-clinical posts receive appropriate clinical experience.

The loss of Service hospitals led to the loss of the experience to manage deployed medical facilities. For example, there was an urgent need to develop Wardmaster training and experience.

Team and Collective Training

"All this hurry, this dire confusion, this wretched wear and tear of men's lives comes, and will come, from not preparing in peace for war, and so assimilating our peace routine and organisation, and our war customs, that a soldier of any rank will glide from one into the other almost imperceptibly. How different it was with ... frontier mountain batteries, and indeed with the frontier force regiments generally. One learned from them, more than ever, the great lesson of the need of readiness for field work at all times, the be all and the end all of the soldier's existence."

Personal Recollection of the Afghan Campaigns of 1878-79-80 Surgeon Major (later Surgeon General) GJH Evatt MD CB AMS(R).

The lack of collective training for the personnel of deployed hospitals was a recognised weakness. The success on Op GRANBY and other operations of the Army's then only regular field hospital (22 Fd Hosp) led to the formation of three new Cadre Field Hospitals (33 and 34). However, the retirement of personnel after DCS 15, the frequency of deployments and the new relationship with NHS Host Trusts made it difficult to declare a hospital operationally ready. The connection was also lost between the non-clinical hospital cadre staff and the hospital clinicians following the closure of Service hospitals.

This was addressed to a degree by the pre-deployment training provided by HQ 2nd Med Bde prior to current deployments.

The absence in NHS peacetime practice of serious trauma caseload highlighted the need for better simulation training.

Role 3 (Hospital) medical units needed to be at operational readiness both militarily and clinically. Collective training needed to include significant input by clinicians. This needed to include RN, RAF and Army Role 2(E) (field medical unit) personnel. A process was needed to incorporate medical play into field exercises. A review of preparation for multinational medical operations was also needed.

Ensuring Clinical Success

Audit, evidence based medicine, governance and assurance relies on data which is standardised, accurate and timely. Whereas detailed data exists for most campaigns up until the 1980s (for example, accurate records kept in the Afghan Campaign show that between 24th August and 1 September 1880, during the advance from Kabul to Kandahar, the force of 14,302 soldiers suffered 29 deaths, 43 missing and 1037 sick and injured). No such data is readily available for the campaigns of the 21st Century. Individual clinicians have collected high quality data, but it overlaps and does not address outcomes. The lack of reliable data had major disadvantages in the political and planning processes.

Data was thus seen as essential to any system of quality assurance. Exploitation required the development of a multidisciplinary team that includes DASA and clinicians.

An "owner" was needed to manage the quality assurance process from end to end. It was logical that DG Healthcare assumes responsibility for ensuring end to end audit of casualty care. Risk is inherent in clinical processes but a process to identify risk in deployable medical units when they do not treat patients prior to deployment.

Equipment

Significant deficiencies in medical equipment were partially addressed by the E2E (End to End) review of medical logistics, which identified and made recommendations to correct logistics and sustainment shortcomings. However, the

E2E review did not addressed the complete procurement cycle, for which an urgent review of DMS equipment strategy, policy, procurement, maintenance and sustainment and disposal was required.

"MOD has over a significant period failed to articulate the quantitative requirement for medical capability and personnel. This has resulted in "planning blight" in a number of personnel and equipment areas.

"The DG Med Op Cap project was specifically designed to address this shortcoming and the Policy and Programmes Steering Group (PPSG) endorsed the overall medical capability plan by October 2006.

"Over the last 10 years, the equipment requirement has been poorly articulated and addressed piecemeal in an incoherent and an inconsistent manner. There are many reasons for this, including:

- The disruption arising from a transfer from SG to *The Defence Logistics Organisation* (DLO) and DGAMS to the Director of the Royal Logistic Corps (DRLC),
- A lack of coordination of clinical input with over-reliance on the views of individual clinicians, and
- The use of Urgent Operational Requirement (UOR) procedures as a substitute for systematic forward planning and design of deployable hospitals.

"Land based hospitals were too heavy and too large to meet the requirement of the forward elements of the battlefield and too primitive to provide the environment expected of a static hospital in a rear area. Conversely, the medical facility aboard ARGUS is modern and fully fit for purpose.

There was also a lack of expertise and timeliness in planning and building field hospitals, as in inadequate attention to sources of cross infection in the field hospital in Iraq.

A comprehensive review was required of the medical procurement cycle, concentrating on overall capability rather than individual items.

A system of Audit, Governance, Assurance and a Lessons Learnt process

This was needed to assist individual clinicians and clinical teams to assess their individual and collective effectiveness and provide assurance to the chain of command and individuals that the quality of care being provided is indeed of the highest practical quality.

The lack of robust data was seen as the major obstacle to assessing and improving hospital level care. The US Trauma Registry System was to be considered for use in operational Theatres as soon as possible. It was felt to be essential that DASA and DG Healthcare were involved in any such work.

A process was required to ensure the relevance of medical services provision in different Theatres of Operation.

PJHQ had developed a Risk Register, but there was no comprehensive assessment of the clinical risk existing in deploying units, nor a system for communicating this to PJHQ on deployment.

RCDM were undertaking a "gross error check" by assessing all deaths, classifying them as expected or unexpected. However, there was universal recognition that this is an area where further developments were required.

There was significant investment by individual Top Level Budget holders (TLBs) in developing processes and procedures for identifying and addressing risk. These started from a "Top Down" approach but were developed to the extent of being "middle up" and "middle down". The continuing involvement of DIA, at the separate invitations of SG, DGAMS and CJO significantly advanced this process.

Humanitarian Support

The inability of DMS clinicians to provide basic care for the very young and pregnant mothers was seen to have had a deleterious impact on the reputation of MOD amongst clinicians. Appropriate medical equipment should be introduced as a matter of urgency.

The DMS was not resourced to provide support to civilians (other than MOD civilians) nor for humanitarian operations, despite there having been extensive contacts between individual members of the DMS and emergency humanitarian medical care efforts.

Military personnel were involved with the Society of Apothecaries Faculty of Conflict and Catastrophe Medicine. Military medical units, sub-units and individuals were involved in providing humanitarian care in a variety of environments over the last 15 years, including Northern Iraq (1991) and Rwanda (1994). Individual personal and professional contacts with individuals in various national and international organisations were not effectively exploited by the Ministry of Defence.

The role of the DMS in humanitarian operations needed to be addressed and policy formulated.

Medical Intelligence and Force Protection

Medical Intelligence is aligned to Force Protection. Medical Intelligence identifies the threat to health from natural causes, from infectious diseases, from industrial sources and hazardous industrial installations, and from enemy weapons including unconventional weapons.

Force protection also includes the medical aspects of Health & Safety, such as risk from our own weapons and collecting data to study health hazards associated with military training and operations.

Field commanders felt that insufficient emphasis was given by the DMS to this aspect of deployed medical care. This was addressed in part by deploying dental teams and rehabilitation teams to operational Theatres.

However, greater coherence was needed to translate medical intelligence into practical guidance and/or direction.

Command and Control

There was a need for a full review of Medical Command and Control. This was assessed to be confused and fragmented. The Top Structure Study was intended to address Command and Control at the 2 Star (Major General) level.

Doctrine

A systematic approach to writing clinical doctrine was required, using clinical staff with dedicated time, and supported by an appropriate secretariat.

Learning from the NHS

There was a need for a process to track civilian health service developments for suitability for introduction into the deployed medical environment.

Defence Medical Welfare Services

The origins of the DMWS lie in Service hospitals and in the British Red Cross Society and are a non-profit making organisation. Their personnel see themselves as an element of the DMS with whom they work in peace. A review was needed to consider the future relationship between the DMWS and the MOD.

Research

Biological and health related research needed to be incorporated into the wider Defence research agenda and processes.

Summary of the 2007/2008 Defence Select Committee Report on the DMS

"The Defence Medical Services (DMS) provide a range of healthcare, from treating Service personnel injured in combat to providing rehabilitation for sports injuries in the UK.

The clinical care for Servicemen and women seriously injured on operations is second to none. DMS personnel, working with the NHS, provide world-class care and we pay tribute to them. Recent improvements at the Royal Centre for Defence Medicine in Birmingham in areas such as ward management and welfare support

are welcome. We acknowledge this progress, and encourage the Ministry of Defence to continue it, and to incorporate these considerations into its plans for developing the facilities in and around Birmingham.

The DMS rehabilitation services, especially at Headley Court, are exceptional, and are contributing enormously to the welfare of injured Service personnel.

(Defence Health and Welfare) Services are delivered to Armed Forces personnel by the MoD, the NHS, and charities and welfare organisations. We believe this is right, and builds on a proud tradition in the UK of linking the community with the Service personnel who have been injured fighting on their behalf. However, the Government and voluntary organisations should engage with a wider public debate about which services are most appropriately provided by each sector.

The MoD's decision to base its secondary care around units embedded in NHS Trusts was, and remains, a sound one. It allows DMS personnel to work side by side with civilian clinicians to develop and maintain their skills, while offering the opportunity for Servicemen and women to be treated in a semi-military environment. However, more needs to be done to address the sharing of best practice between the DMS and the NHS.

(Political) Devolution means that the MoD must cooperate with a number of different health departments to provide the full range of appropriate services for Armed Forces personnel, their families and veterans. This cooperation is usually good, but we found that in Scotland it was often inadequate. The MoD must review the structures through which it engages with other departments and administrations. The Scottish Executive must also examine its procedures for engagement and cooperation and look at how improvements could be made.

We welcome the Government's extension of the priority access to healthcare available to veterans but we are not sure that adequate procedures are in place to identify veterans and to ensure that priority access. The MoD's reliance on self-identification is simply not good enough. We are also concerned that medical records are not transferred efficiently enough from military to civilian clinicians.

The MoD provides high-quality healthcare for Service families abroad, but spending has lagged behind that in the NHS. There are also doubts about the long-term viability of the stand-alone hospitals in Cyprus and Gibraltar.

Mental health is a vital responsibility for the DMS. We acknowledge the progress they have made and their adoption of a preventative approach where possible. Their community-based system of mental healthcare is in line with NHS best practice. We pay tribute to the work of Combat Stress in assisting veterans with mental health needs, but we are concerned that the identification and treatment of these veterans is not sufficiently thorough or systematic. The NHS needs both a robust method of tracking veterans, and a detailed understanding of their problems.

Reserve personnel play a critical role in the delivery of military healthcare. The Territorial Army has so far met around half of the Armed Forces' medical commitment in Iraq and Afghanistan. The public should recognise the contribution which the Reserve forces make to the military and to society as a whole. The MoD needs to make sure that the Reserve forces are not overstretched and that recruitment and retention remains buoyant.

Consequences of the Medical Operational Capability Report

The Medical Operational Capability Report thus addressed the operational outputs required of the DMS and an assessment of those outputs, along with resource issues and processes. In consequence of this and other detailed staff appraisals, in particular the Top Structures Next Steps Process, a new organisation evolved in the Joint Medical Command (JMC). The Vice Chief of the Defence Staff was able to issue the following publicly sourced instructions in January 2008 to Senior Medical Commanders. This also gives a clear illustration of how command is exercised to the highest levels of the Defence Medical Services.

The Defence Committee published its Seventh Report of Session 2007-08 on *Medical care for the Armed Forces* on 18 February 2008, as House of Commons Paper HC 327.

"Top Structures – Next Steps (TS-NS) Project Implementation

1. On 9th Nov 2007 the Chief Of Staff endorsed the recommendations of the Top Structures –Next Steps Study and directed that a Joint Medical Command (JMC) be established as soon as possible. On 7th Jan 2008 Ministers signified that they were content for implementation to proceed. You are now to implement the recommendations of the study.

2. You are to deliver the following, consistent with your original Terms of Reference:

   a. A reorganised Defence Medical Services Department, including:

      - The dis-establishment of DG Med Op Cap and DG Healthcare positions;
      - The establishment of the post of Assistant Chief of Defence Staff (Health) (ACDS(H);
      - The temporary establishment of a 2* DG Strategic Change/Inspector General by January 2008.

   b. Establishment of the JMC, on removal of agency status of DMETA in April 2008, with Interim Operating Capability by Sept 2008 and Full Operating Capability by April 2009. The JMC is to bring together the relevant elements from DMETA, Defence Dental Service (DDS), Defence Healthcare, DMSD and the Single Services. It is to be responsible for the delivery of all joint

medical services including force generation, secondary healthcare delivery (including dental services), acquisition, training and education (including collective training coordination) and the Defence Deanery. As with the Joint Helicopter Command you are to ensure that the JMC has a clear operational focus.

c. A team, formed in Jan 2008 with people from the single Services and, if necessary, external assistance is to undertake an independent End to End (E2E) value stream analysis of all medical HQs and Directorates to make recommendations on their optimum configuration. It is to report by December 2008 with resulting changes implemented by April 2009. The Inspector General post will endure as a one star. The Director General Strategic Change element will be reviewed during implementation.

d. Establishment by April 2008 of the Surgeon General as the Process Owner (Analogous to the role played by CDM for End to End Logistics) for E2E Healthcare and Medical Operational Capability. Required changes to DMS organisational structures and processes are to be implemented by April 2009.

e. A single medical governance and assurance organization, under the direction and authority of the Inspector General, responsible to the Surgeon General for the assurance framework governing Defence healthcare, by September 2008.

f. Robust mechanisms to enable JMC to manage all medical personnel in secondary health care, the DDS and all trainees. This should be facilitated by 'embedded manners' from the single Services who are to be in place by September 2008.

However, whilst the principle of the global management of manpower was acknowledged to ensure that DMS careers were managed to best effect, Chiefs of Staff need to be fully briefed on the proposed manpower control mechanisms, to be reassured that they are practical and to ensure that we have sufficient, capable and motivated medical personnel. You are to report on this aspect in time for consideration at COS(I) on 2nd April 2008.

g. Establishment of:

(1) Lead service management of Regional Rehabilitation units under the RAF with consequent transfers of funding and personnel in shadow form by April 2008 and with Full Operating Capability (FOC) in place by April 2009.

(2) Lead service management of Defence Community Mental Health units under the Army with consequent transfers of funding and personnel in shadow form by April 2008 and with FOC in place by April 2009.

The End to End delivery of rehabilitation and mental health services are to remain under the direction of SG and the lead service arrangements

are to be reviewed by April 2011 to establish the extent to which there is confidence that the JMC, in terms of competence and benefits delivered, is able to assume responsibility for these units thereafter.

h. A public health observatory within the JMC working with the Defence Analytical Services Agency (DASA) and the University of Birmingham, as a Defence asset and directing the remaining single Service public health assets as a virtual component of the observatory by April 2009.

i. A unified medico legal capability under the JMC by April 2009.

j. A strategic medical HQ capability, ideally co-located with the JMC, to deliver medical strategy and policy and support to Assistant Chief of the Defence Staff (Health) (ACDS(H)) and via him to Deputy Chief of the Defence Staff (Personnel) and Defence Crisis Management Organisation (DCMO), and Defence Staff (Commitments) (DCDS(C)) by April 2009. All medical policy is to be developed under Surgeon General's direction and integrated into Joint Medical Policy directives (specialised areas such as aviation, radiation and diving medicine will continue to be developed by the appropriate single Service leads for the SG).

k. Improved delivery of collective training at Role 2 enhanced hospital facilities and above, by incorporating RN and RAF training staff into the Army Medical Services Training Centre (AMSTC). This is to be completed by April 2009 by which time arrangements are also to be in place to enable SG to set and assure the clinical standards of collective training in all roles.

3. You are to deliver these objectives within a coordinated programme with appropriate governance, coherent with streamlining, bringing health policy under DCDS(Pers) from April 2008. Healthcare will remain under SG with both outputs being staffed through ACDS(H).

4. As the Senior Reporting Officer for the Midlands Medical Accommodation project, you are to ensure that the strategic importance of securing the Lichfield site is afforded the appropriate priority with a view to Main Gate being achieved by April 2008. It is envisaged that you will remain responsible for project implementation of the top structures work until April 2010 when the DCDS(H) post will be disestablished.

5. You are to ensure that robust internal communications measures are in place to ensure that the medical community is kept appropriately informed. You are also to attend to the necessary Trade Union consultation requirements.

6. You are to report progress to me every two months starting in February 2008, copied to COS(I) members, particularly bringing to our attention when a milestone is not likely to be met".

These orders were signed off by the Vice Chiefs of the Defence Staff.

SG and DCDS (Health) were thus able to write the following to all DMS personnel from Whitehall in July 2008:

The TS-NS Project implementation report of 31st July 2008

"In its 2007-08 Report on Medical Care to the Armed Forces, the House of Commons Defence Committee concludes, "The clinical care for Servicemen and women seriously injured on operations is second to none." It noted the developments in Birmingham and at the RCDM and went on to "encourage the Ministry of Defence to continue it, and to incorporate these considerations into its plans for developing the facilities in and around Birmingham." As promised, we are writing now to update you on the progress of our plans for developments in the Midlands and of our Top Structures-Next Steps project, and to sign-post key milestones2. We also wanted to address, as best we can at this stage, the concerns of Defence Medical Service (DMS) personnel, both military and civilian, affected by this vital transformation programme.

"Ministers and the Treasury have now approved the business case for the redevelopment of Whittington Barracks, Lichfield, as the military home of the DMS. We remain on track to move the new DMS Strategic Medical HQ, and HQ Joint Medical Command (JMC) to Lichfield by 1 April 2010, and the DMS Training Centre (DMSTC) to Lichfield by 2014. This is a welcome major investment in the DMS of circa £200M and will fulfil the 1998 intent to form a medical centre of excellence in the West Midlands.

"We are convinced that the facilities in the West Midlands will further enhance our ability to deliver joint medical support for the armed forces. Apart from the obvious benefits that close proximity will bring in terms of travel and increased effectiveness, it will also better enable us to integrate our academic clinical centre with our military medical focus in order to deliver high quality patient focused care in a military environment, and help to foster a further shared sense of identity as Lichfield becomes the military home of the DMS. The key is to improve the connections between our research, clinical delivery, education, training and capability development for what is effectively the UK Role 4 facility in Selly Oak.

"We are acutely aware of the impact that this transformation will have on DMS staff. We expect the re-location and re-organisation of DMS to result in some 120 fewer posts (military and civilian) than currently required, and that other posts will be relocated and/or re-defined. We fully recognise that until the process of designing the new organisation is complete, there will be an unwelcome and disconcerting period of uncertainty.

"We will work to ensure that, as decisions are made, they are communicated, with advice on sources of further information. For civilian staff affected, we will be undertaking a comprehensive Trade Unions (TU) consultation. To gain a better understanding of individual wishes, a preference exercise will be carried out for DMS civilian staff currently based in London, Gosport and Halton.

"We will reach key milestones in late Summer/Autumn of 2008:

- We will start formal TU consultation and a civilian preference exercise this Summer.
- By the middle of September, the ongoing Value Stream Analysis work to identify key processes and posts at DMS HQs should be complete and endorsed.
- DMSD and JMC HQs will then review existing posts against the new structure and carry out a post mapping exercise. Affected staff will be informed of the proposed future of their post and have the opportunity to discuss any concerns they may have.
- By the middle of October, we aim to have completed the TU consultation process, and to have made a final decision about all current posts, with the exception of DMSTC who are moving later.

Other key milestones in Autumn 2008 include:

- The establishment of a Single Medical Governance and Assurance Organisation headed by an Inspector General reporting directly to SG and drawing on the Clinical Governance teams in the single Services. This will provide a common approach to Clinical Governance ensuring that best practice is identified and shared with a view to continuously improving patient care.
- JMC reaching Initial Operating Capability. The DDS will also formally come under the command of HQ JMC at this time, as will D Healthcare.

To ensure DMS personnel are fully briefed about these key milestones, the TS-NS team will undertake a new round of road shows, and there will be extensive briefing through Line Management and the Chain of Command. We shall also write out again before Christmas to summarise the key developments and point the way forward.

"Further ahead from April 2009:

- SG takes on full process owner responsibilities for the DMS.
- Many of the decisions for the detailed future structures agreed in Autumn 2008 will have been implemented – DMSD and HQ JMC will be in the process of slimming down, in preparation for the move to Lichfield. Where possible, new organisations will have formed, albeit in virtual form prior to relocation.
- The RAF and the Army respectively will assume lead Service responsibilities for our Regional Rehabilitation Units (RRUs) and Departments of Community Mental Health (DCMHs).

Our new structures will be complete by April 2010, with new co-located JMC and DMS Strategic Medical HQs formed up at Lichfield and the smaller London team fully operational.

Looking out further still between 2012 and 2014:

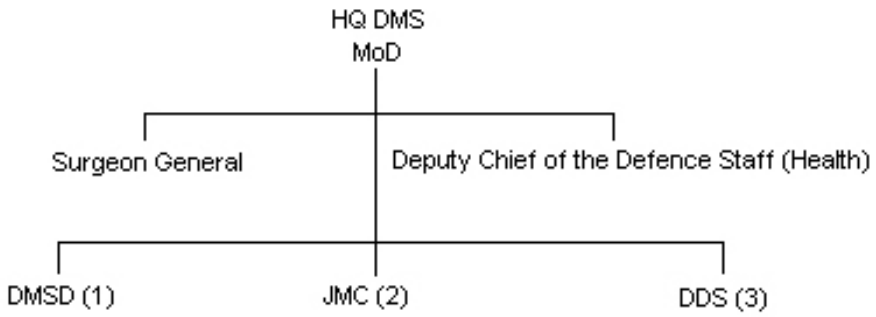
- High quality training facilities and Single Living Accommodation will be provided at Lichfield
- Other features will include an officers' and a warrant officers' and senior non commissioned officers' mess facility, a junior ranks' dining facility, a training centre and a purpose built lecture theatre.
- At this point Lichfield will truly become the military home of the DMS, and DMSTC will move to Lichfield.

We hope that this letter has been helpful in bringing you up to date on developments, pointing the way to the future, and preparing individuals to make informed decisions about their future career. We recognise that the period of uncertainty will extend until at least Autumn 2008 and ask for your forbearance as we make certain that the right decisions are made to ensure that the transformation of the DMS is successfully completed.

"As always, we will continue to rely on the professionalism and dedication of all our staff as we work to make the most of this great opportunity to secure the future of the DMS".

The structure of the Defence Medical Services in 2009

In 2009, the Defence Medical Services (DMS were headed jointly by the Deputy Chief of Defence Staff (Health) (DCDS(H)) and the Surgeon General (SG). The Surgeon General is the clinical head of the DMS with responsibility for the professional performance and development of military medicine. The Deputy Chief of Defence Staff (Health) is accountable for the overall outputs of the DMS. These officers oversee the work of three separate organisations:



The Defence Medical Services Department (DMSD) (1) is the headquarters for the Defence Medical Services. It provides strategic direction to ensure delivery of defence medical outputs. The DMSD operates through the following four directorates: Medical Operations; Medical Policy; Healthcare; Finance and the Secretariat.

Joint Medical Command (JMC) (2) is a joint service agency which provides secondary care personnel to meet requirements for operational deployments. It also supports the front line units by educating and training medical personnel. Its immediate predecessor, The Defence Medical Education and Training Agency DMETA, has been running some 2,000 clinical courses (providing about 300,000 training days) to all three services per annum.

JMC (formerly DMETA) has responsibility for the following:

The MDHUs (Ministry of Defence Hospital Units)

There were currently five MDHUs in 2009, vis:

MDHU Portsmouth (Queen Alexandra Hospital, Portsmouth Hospitals NHS Trust)

MDHU Derriford (Derriford Hospital, Plymouth Hospitals NHS Trust)

MDHU Frimley Park (Frimley Park Hospital NHS Foundation Trust)

MDHU Northallerton (Friarage Hospital, South Tees Hospitals NHS Trust)

MDHU Peterborough (Peterborough and Stamford Hospitals NHS Foundation Trust)

RCDM (The Royal Centre for Defence Medicine)

DMRC (The Defence Medical Rehabilitation Centre at Headley Court

DMSTC (The Defence Medical Services Training Centre) in Towthorpe, Strensall, York, (which is in turn linked to the Central Volunteer Headquarters AMS and 2nd Medical Brigade at Queen Elizabeth Barracks, Strensall, York)

The Defence Medical Postgraduate Deanery in Birmingham

The JMC thus provides a single headquarters responsible for healthcare delivery.

The Defence Dental Services (DDS)

This is a joint service organisation employing both Armed Forces and civilian personnel to provide dental services in the UK and to personnel on operations overseas. The DDS came under the 'umbrella' of the JMC from mid 2009. It employed 1,000 personnel from the three armed services and contracted civilians. During early 2009 the RADC strength was 380 all ranks (110 officers).

Service primary health and medical care

The three armed services, the Royal Naval Medical Service (RNMS); the Army Medical Services (AMS); and the Royal Air Forces Medical Services (RAF MS), were responsible for delivering primary healthcare to their respective services and for providing the required medical support on operations.

The personnel/establishment figures for these agencies in late 2008 are as follows:

	Trained Personnel	Personnel in initial training	Personnel total
Royal Navy	1378	271	**1649**
Army	3783	561	**4344**
Royal Air Force	1574	63	**1637**
Tri-service Totals	**6735**	**895**	**7630**

Reserve personnel

The medical cadre is doubled by the reserve. In practice, all deployed units are now a mix of regular and reserve personnel, from all three services.

Land Force Medical Infrastructure

There were considerable enhancements to the first aid training and equipment of all front line soldiers during Op Telic, as explained elsewhere in this book.

Level 1 Front Line Medical Care

Field Ambulances were reorganised into Medical Regiments, comprising a mix of TA and Regular squadrons. On Op Telic 1, The Close Support Medical Regiments supported the forward combat units, while the General Support Medical Regiments provided the primary care and blue ambulance matrix support to operations. Since then, the Medical Regiments in turn provided the overall framework for the Medical Command in both Iraq and Afghanistan, with the field Hospital Squadron under command. There were five regular Medical Regiments. The Reserve also provided two General Support Medical Regiments and one Casualty Evacuation Regiment (335).

Casualty Evacuation (CASEVAC) had traditionally been by armoured or wheeled ambulance. The operational environment in Iraq and Afghanistan obliged a focus on helicopter evacuation. Puma and Merlin helicopters were the main work horses in Iraq, along with US Black Hawk helicopters, while Chinook helicopters were used primarily in Afghanistan for their greater speed, endurance and "hot and high" capabilities.

Deployable (Levels 2-3) Field Hospital care

In early 2009 the DMS held three regular field hospitals, Nos 22, 33 and 34, working in rotation. The TA provided 12 x independent field hospitals, sharing the deployment rota on 3 monthly tours with the regular units. Not all could be staffed simultaneously, and staff moved freely between the units on deployment. The RN and RAF could also be tasked to provide composite hospital squadrons, as have been the case in Afghanistan, and capabilities are further enhanced by close cooperation with the Danish Armed Forces medical services.

Fixed hospital care in the UK and elsewhere

In the UK, hospital care was provided in Birmingham, at the Selly Oak/Queen Elizabeth Hospital complex; and at Ministry of Defence Hospital Units (MDHU). The Defence Medical Services Department had contracts with the NHS for provision of care in MDHUs, which were run as military subunits embedded at NHS hospitals at Derriford (Plymouth), Frimley Park (Aldershot), Northallerton (near Catterick), Peterborough and Portsmouth.

Other Defence Medical Services units, included:

- the Royal Centre for Defence Medicine (Birmingham),
- the Defence Services Medical Rehabilitation Centre (Headley Court)
- and The Duchess of Kent's Psychiatric Unit (Catterick).
- some 245 DMS medical and dental primary care facilities mostly located in the UK. Service personnel serving in Germany were treated in one of the five German Provider Hospitals under contract.

The Royal Centre for Defence Medicine (RCDM)

The RCDM operated on a contract between the DMSD and the University Hospitals Birmingham (UHB) NHS Trust. The RCDM was a Joint Service establishment with medical personnel from all three of the armed services wearing their respective Naval, Army, or Air Force uniforms. In 2010, a military ward was opened at the new Queen Elizabeth Hospital in Birmingham.

Defence nursing staff

On operations, nursing staff from all three services deliver primary and emergency care at the front line and secondary and critical care in field hospitals and in the Critical Care Air Support Teams.

Defence nurses work within Ministry of Defence Hospital Units within NHS Trusts across the UK; at the RCDM and at Headley Court. During early 2009 the QARANC personnel total was 830 all ranks.

The Royal Army Veterinary Corps (RAVC)

The RAVC look after the many animals that the Army has on strength, including guard and search dogs, and horses for ceremonial duties. Personnel total in early 2009 was 280.

The Midlands Medical Accommodation project

From 2010 Whittington Barracks in Lichfield was planned to become the home of military medicine The Midlands Medical Accommodation project (MMA) would provide space for the 2,000 military and civilian staff who are expected to work at the barracks when the MMA project completes in 2014.

The Medical Reserve Forces

These had become a critical element in the DMS infrastructure, providing some 50% of deployable strength and some 3,500 personnel of all skills and cap badges. These

individuals ultimately come under command HQ 2 Med Brigade based near York, which directly supports one non-deployable field hospital and one medical evacuation regiment, whose trained staff support other units on deployment. It also supports the Army Medical Services Field Training Centre and the National Field Hospital simulator at Strensall, where all deploying medical units are exercised. Other field hospitals and medical units come under direct command of the regional brigades in the UK, and have now been organised for administrative purposes into three regional groupings: North, Centre and South.

And the outcomes:

Public and media interest in during Op Telic had drawn considerable political attention to the work of the Armed Forces. At the outset there was much public hostility to Op Telic, with which we were all tarred. The rapid mobilisation of forces and subsequent operations revealed a number of deficiencies in the provision of health care infrastructure for modern expeditionary warfare, including hospital and rehabilitation resources in the UK.

By the end of Op Telic, and with ongoing operations in Afghanistan, public attitudes towards the Army and interest in the work of the Defence Medical Services had been transformed. The following items, from the House of Commons Defence Select Committee in 2008, and the Health Care Commission in 2009, summarise this transformation:

The Healthcare Commission Praises "Exemplary" Trauma And Rehabilitation Services For Military Personnel Hurt In Battle

In April 2009, The Healthcare Commission praised the British military's "exemplary" trauma and rehabilitation services for personnel injured in battle.

“The Healthcare Commission is the health watchdog in England. The Commission also promotes improvements in the quality of healthcare and public health in England through independent, authoritative, patient-centred assessments of those who provide services.

It published the first ever independent review of the Defence Medical Services (DMS), which is responsible for providing healthcare to defence personnel and their families in the UK and overseas.

The independent watchdog conducted the review at the request of the Surgeon General, Lieutenant General Louis Lillywhite.

It praised the care provided to casualties of war, highlighting systems to reach and treat casualties quickly, innovations in the treatment of major injuries, the training of staff, design of field hospitals, clinical audits to feedback important lessons and rehabilitation for injured personnel.

The Commission also identified a range of areas for improvement, urging the DMS

to: ensure that universal standards are in place across all services; address problems relating to maintenance and cleanliness at some medical units away from the frontline; urgently replace ambulances in Cyprus; and improve awareness of procedures for safeguarding children.

Sir Ian Kennedy, Chair of the Healthcare Commission, said: "By asking for this review, the Surgeon General has thrown the spotlight on these services in a way that has never been done before. He has invited us to report publicly on the good and the bad. That is something for which he deserves a huge amount of credit: identifying where problems exist is the first step to getting them fixed.

"There is absolutely no question that personnel injured in battle have a better chance of survival than ever before. That is entirely due to efficient and innovative care, delivered under exceptionally difficult circumstances. The NHS' urgent and emergency services could learn a lot from how the defence service plans care, trains staff and constantly seeks to learn and improve trauma services.

Sir Ian added: "By the services' own assessments, they still have some way to go before they can tell all their patients - in all parts of the armed services - that standards are in place to provide high quality care wherever they get treatment. By commissioning this review, the DMS has taken the first step towards achieving this important goal. The results provide a clear agenda for action.

"Away from the frontline and the spotlight of war, the DMS must give urgent attention to the maintenance and cleanliness of buildings. It must also improve awareness that 16 and 17 year-olds are still legally children - military personnel or not - and healthcare workers have a responsibility to act on any suspicion of bullying or abuse."

The review involved self-assessments by reference to the 24 core standards set out by the Department of Health for the NHS. The Commission received declarations from 153 DMS units or regions encompassing a number of units. This included military hospitals, rehabilitation centres, dental services, community mental health services and general medical services.

This was followed-up by inspections at 53 units in the UK and overseas. The review also incorporated 500 comments from current and ex-service personnel, family members and organisations that work with the DMS.

The Commission praised the following areas of exemplary practice:

- Trauma care is exceptional and has greatly increased the chance of survival and recovery for injured personnel. Trauma care is delivered to personnel injured in war zones, with an aim to save life, stabilise the patient's condition and transport them for further treatment. A helicopter can be airborne within minutes of receiving a call, transporting highly trained clinical staff to the casualty on the frontline. Casualties are assessed and treated very quickly, greatly improving

their chance of recovery. They are then transported for further medical treatment, in a field hospital or in the UK. Aeromedical evacuation teams provide treatment in-flight and can transport injured personnel from the frontline to the UK within 24 hours. The field hospital inspected in Iraq was well-planned and extremely clean.

- Rehabilitation services are excellent. Services are provided at Headley Court rehabilitation centre and regional units in the UK and Germany. Some personnel described services as "outstanding" and "first-class".
- Innovative "patients' diaries" aid recovery for those with memory loss. Patients' diaries are kept for personnel recovering from injury in military hospitals who may suffer from memory loss. Staff record important milestones in recovery and visitors also add messages. This helps patients to fill in time lost from their memories and aids recovery.
- Clinical audits of services for trauma and rehabilitation mean care is continuously improving and innovating. Clinical experts closely examine all aspects of a patient's treatment, from when a person suffers a major trauma, through to rehabilitation. They then feed back lessons weekly to the field hospitals2.

However, the Commission urged the DMS to:

- Ensure that standards are in place across all services. Medical centres and field hospitals inspected in Iraq declared compliance with all core standards and no declarations were overturned upon inspection. But, there was significant variation in compliance with core standards at those services away from conflict zones.
- Address problems relating to maintenance and cleanliness of buildings and replace ambulances in Cyprus.
- Improve awareness of procedures to safeguard children. The DMS does not always recognise that personnel under the age of 18 are still legally children. While no concerns were found relating to the practice of treating and safeguarding children, some DMS staff did not know processes for reporting matters relating to child protection or safeguarding, including staff at units providing services to the families of personnel.
- Collect information centrally to allow comparison across all services and to provide a clear overview of quality of services across the whole organisation. Currently, regular audits and reviews are conducted differently by each of the navy, army, air force and dental services. This means that it is not possible to make comparisons between areas. The Defence Medical Information Programme being rolled out will provide electronic records for patients and a central database. This is expected to improve the way the DMS collects and uses information.

Thus, by the end of Operation Telic, a wholly new and "fit for purpose" organisation had been constructed around the Defence Medical Services for its future operational effectiveness, which was to be further tested in Afghanistan and Operation Herrick, and a plan was in place for a durable future organisation, built around the extraordinary clinical achievements of the Decade.

At which point the meltdown in Government finances obliged another fundamental rethink of Strategic Defence Policy… (To be continued..Ed)

Chapter 30 Resources and References

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Chapter Abbreviations
PJHQ: Permanent Joint Headquarters
RCDM: Royal Centre for Defence Medicine
DMETA: Defence Medical Education and Training Agency (Superceded by JMC in April 2008)
PPSG: Policy and Programmes Steering Group
JMC: Joint Medical Command
DASA: Defence Analytical Services Agency

Blood, Heat + Dust: Second Edition

Operation Telic and the British Medical Deployment to the Gulf 2003-2009

Chapter 31:

Medical Reserves, Training, Mobilisation and Morale during Operation Telic



Picture: *Front Gate* Artist: Gora Pathak 2003

"We find it worrying that some five years after the Strategic Defence Review the problems in the DMS, in particular the problem of under-manning, appear to be as bad as they ever have been. We were alarmed to learn that for the major specialties for war MoD had 'emptied the boxes' for Operation Telic. Further deployments in the near future are only likely to exacerbate the problems.

We acknowledge that the manning issue is not an easy one to address quickly, but we look to MoD, the Department of Health, the NHS and the medical profession to support the DMS in its efforts to find new and innovative solutions. We recommend that MoD bring together the Department of Health, the NHS and the medical profession with the DMS in order urgently to identify solutions to the problem of increasing specialism among surgeons in the NHS.

Commons Defence Committee 3rd Report 2004 on Operation Telic, March 2004

Introduction

In this chapter, we consider the role of the medical reserves though Op Telic, and the pre-deployment collective professional training which has made a major contribution to the operational effectiveness of both regulars and reservists when deploying individually or as formed units.

For the purposes of simplicity, "medical" refers to all clinical staff, allied health professionals and individuals with roles within medical units. Many of the issues addressed in respect of reservists are increasingly relevant to regular health professionals. The progressive closure of the main military hospitals has led to a much greater dispersal of Regulars around NHS Units in small packets, such that the camaraderie of working in large military units with all of their families and domestic support arrangements no longer applies.

The role of the Medical Reserves during Operation Telic

The effectiveness of the Defence Medical Services depends upon its ability to recruit and retain individuals with a broad spectrum of skills in the health professions and in those technical and support areas needed to deliver military medical services operationally. In a small Regular Armed Forces, the requirement for a wide range of trained medical manpower for surge operations must be met to a significant degree from the Reserves, as was the case in Iraq from 2003 to 2009.

The needs and processes of recruitment and retention (R and R) apply both to full time retained, or "regular" service personnel, and to volunteer and mobilised reservists. The needs of these groups and their individual experiences differ. R and R for both groups is in a continual state of flux, as the legal framework, public and professional attitudes and the status and personnel needs of current operations changes. The armed forces seek to recruit, train and employ regulars and reservists into a common ethos and

culture, which allows the development of military and organisational skills such as are needed to co-ordinate and deliver operational needs.

There nevertheless remain two conflicting schools of thought on the balance between regular and reserve numbers among medical planners and senior commanders.

"Regulars" are career health care professional personnel, who are voluntarily contracted in permanent employment. In exchange for a dependable career structure, income and financial benefits, and the diversity of professional challenge, these individuals accept the upheaval and exigencies of service life and provide a flexible resource to commanders for immediate availability and deployment under orders. Regular health personnel are also employed within the civilian health sector or in MDHUs when not on active service.

It is not generally practical, sensible or cost effective to retain large regular medical forces in peacetime, as most would be significantly under-employed in their intended military roles for most of the time. Many specialist skills, which are of use to the armed forces at war, are best developed in peacetime in the civilian and public health sector, to be called upon as necessary from civilian health professionals who are dual hatted as Army, Navy or RAF reservists.

The UK's DMS volunteer reserves include the Territorial Army, the Royal Naval Volunteer Reserve (RNVR) and the RAF Reserve. Reserves include Territorial volunteers and ex-regular reserves subject to retention for up to fifteen years for their skills and experience. The medical reserves in the Defence Medical Services include some 5000 volunteer reservists from all trades and professions.

They form an important bridge between the professional armed forces and civilian society, and have been the basis for rapid expansion of the armed forces in national crises, as in the two world wars of the past century. Through the Noughties (2003+), they provided an invaluable resource for rapid expansion and operational support of Operation Telic and Op Herrick.

To illustrate this point, the current total size of the regular British armed forces is of the order of 200,000 uniformed personnel, with a substantial additional number of dependants and civilian personnel serving the forces who are entitled to use service medical facilities. These individuals are generally fit, young and healthy people, whose health needs are principally for primary health and dental, sports and minor injuries care.

There is relatively little demand for routine elective hospital care in this service population, which can be readily met by other agencies, such as the NHS. By comparison, a typical small district general hospital in the UK will service a population of 250,000 people, and larger hospitals typically provide services for 500,000. The NHS is thus essential for the training and skills maintenance of medical and allied health professionals.

A political perspective on the role of Medical Reserves during Operation Telic

The 2006 House of Commons Defence Select Committee Report recognised that DMS is heavily reliant on Reserve personnel. The Surgeon-General explained that a degree of the reliance on Reservists had been necessitated by manning shortfalls. However, he argued that the situation was "significantly improving", and that this would ease some of the pressure. For example, in 2002, there had been serious shortfalls in the number of anaesthetists, with only 20 posts out of 95 filled. There were now 45 filled and by 2012 that figure would rise to 71. "That, of course, will automatically reduce the reliance on the Reserves."

The DSC saw 201 (Northern) Field Hospital (V), preparing and training for operational deployment as part of Operation Herrick. It was told that TA recruitment remained steady, but there was a need to recruit younger people, as the TA medical service represented an ageing population.

Officials admitted that more could be done in terms of providing support for Reservists returning from operations. There were procedures in place for occupational health departments to debrief personnel, for line managers to discuss relevant issues with staff, and generally to create an environment in which participation in the Reserve forces was encouraged.

In respect of the Reserves, the DCS concluded that

> "We understand and appreciate the vital role which Reservists play in delivering the Armed Forces' healthcare capabilities, and believe that they are an integral component of the DMS. We have seen ample evidence of excellent cooperation between Regular and Reserve forces, and believe that Reservists bring important skills to the Armed Forces. We also think that operational deployment gives members of the Reserve forces the opportunity to make use of their training when back in the UK.
>
> "The MoD must not take the integral involvement of Reservists for granted. It must make sure that recruitment remains buoyant and that retention is sufficient to guard against any degradation of capability. It must also ensure that members of the Reserve forces receive proper support, both from their civilian employers, and from the Armed Forces when they return from operational deployments. The public should recognise the contribution which the Reserve forces make to the military and to society as a whole".

The Legal and Policy Framework: The Reserve Forces Act of 1996 (RFA 96)

RFA 96 created a new legal framework for the management and mobilisation of reserve personnel for the armed forces. It provided for the selective mobilisation of reserves for periods of six months in circumstances short of general war. RFA 96 recognised the importance of the civilian employer in this process, and created protection mechanisms for employers and employees on mobilisation. This has led to a number of initiatives to develop a tripartite partnership between the MoD, the employer and the employee; and

to highlight the benefits to the civilian employer of having reservist staff. RFA 96 thus changed the nature of the relationship between the reservist, the civilian employer and the MoD: all reservists could now expect operational engagements during their career.

More importantly, the processes set in train by RFA 96 This also created the conditions to convert the volunteer reserve into a fully integrated component of the regular armed forces, a process which is by no means yet complete, but which has seen a much greater interchange of rising commanders between regular and reserve units, and a greater familiarisation with mutual problems. Crucially, it provided a mechanism for many reservists to spend significant periods of time on regular service, and the nature of the medical services reserve has changed to shed of its armchair soldier or dad's army image to become a more dynamic, fluid and effective organisation.

RFA 96 also obliged all reserve officers to accept and sign up to the possibility of mobilisation. This also produced a greater military focus and professionalism within the reserve. Mechanisms were also set in place to formalise the short-term contracts and attachments of individual reservists to regular units, through Full-time Reserve Service. This process has been extended from individuals to the call-out of formed reserve subunits - such as the deployment of TA infantry platoons to Afghanistan in 2002 and 2003. The continued success of RFA 96 in recruitment and retention of reservists nevertheless depends upon intelligent, restrained and flexible use of the legislation.

Nevertheless, the provisions of the RFA 96 are inherently inflexible, because they mandate a formal call-out over a relatively long period to take effect, when the practicalities of civilian life mandate much shorter periods of active service if reservists are to be retained. These shortcomings of RFA 96 were recognised since *Operation Telic* 1 and have been addressed.

The recent history of reserve medical mobilisations, 1990-2009

The first large scale reserve medical mobilisation of the modern era came in 1990-91, when a large number of ex-regular and territorial medical reservists were mobilised to fill posts throughout the Gulf deployment on Operation Granby. This included attachments of regular personnel to the Regular manned 22, 32 and 33 Field Hospitals and to the Role 2 Armoured Field Ambulance Units with the forward 4th and 7th combat brigades. An entire TA General Hospital, 205 (Evacuation) Hospital was deployed to King Khalid International Airport near Riyadh in Saudi Arabia.

The experience and lessons of the reserve medical deployment of the First Gulf War was not initially seized upon or developed. Mobilisation and demobilisation procedures and welfare packages were undeveloped at that time, and the philosophical divide between the regular and reserve streams of personnel was not properly bridged. The Defence Medical Services were also preoccupied with the administrative problems relating to 'Gulf War Syndrome', and to a major re-organisation in the early 1990s, wherein service hospital based care for servicemen in the UK was devolved to NHS hospitals, and was contracted down abroad. The resulting Ministry of Defence Hospital Units (MDHUs) were conceived to improve the training and clinical opportunities for

military health personnel, but they also ran the risk of diluting the independent military ethos, and thus of increasing the flow of staff back to the civilian sector.

The nature of Reservists from the health professions

The individual, personal and professional circumstances of reservists differ from those of regular personnel. Reservists must balance their voluntary commitment to the armed forces as a secondary employer with their primary responsibilities to their civilian employers or employees and colleagues, and to a social support structure which may have no other connection to the forces and the regular military ethos. The reserves now provide 50% or more of personnel on deployment, including the ongoing Operation Telic deployment, and it is thus crucial that the military personnel management system is as focussed and understanding of the needs and expectations of reservists as of regular personnel.

Characteristics of the individual reservist

Military medical reservists include men and women of all ages from 17 to 65, parents and partners from a wide variety of social, geographic, cultural, ethnic and professional backgrounds, and with a wide variety and duration of service experience, and of currency in military skills. The Armed Forces Medical Reserve is a complex grouping of civilian reservists and of former full-time personnel retained on the National Reserve List for their skills and training for up to ten years after leaving the forces. It includes many individuals with long full- and part-time service, who thus bring a depth and breadth of experience to military and clinical matters.

For many volunteers, military service offers opportunities for personal development which are not easily found in civilian life. Nevertheless, mobilisation can profoundly disturb the pattern of individual lives and employments. Individual reservists, their civilian employers and their part-time military employers must thus anticipate and understand the possible problems of mobilisation and work in a partnership on a case by case basis to mitigate the consequences. Mobilisation also has a bearing on civilian career development, income and personal relationships.

The motives of individual volunteer medical reservists are many and varied, but it is possible to discern common traits of enthusiasm, self-discipline, self-sufficiency, teamwork and sociability among them, and an underlying belief in public service. The social, professional, political, geographic and cultural background is also wide and varied. Some contribute out of a sense of public duty and social service; others serve for the sense of membership, from the enjoyment of companionship, teamwork, specialist training, leadership training, sardonic humour, variety, and adventure which military service can offer.

Reserve military careers vary from the short- to the very long-term. Many of the senior British reserve officers and NCOs had more than twenty-five years' experience of the military, bringing a broad competence to the urgent adjustments required of them on

Operation Telic. A reserve career of over thirty years must run in parallel and accommodate the demands of civilian life, job and family. Demands upon reservists must thus be sensitive to their changing personal circumstances with a long perspective if their skills and loyalty are to be retained.

For example, a female reservist with very young children - or an individual whose long-term civilian career might be adversely affected by time away from civilian work at a crucial stage - must be carefully and sensitively managed. Each individual might have considerable energies to offer at a later date, and should thus be spared immediate mobilisation in all but extreme circumstances. Autocratic approaches to mobilisation are counter-productive. Modern life thus obliges a far more sophisticated strategy of man management for the armed forces. Official attitudes to morale and welfare must address both the physical and psychological aspects of individual motivation, and deal properly and appropriately when things go wrong through mental or physical injury, death, disease and social disruption.

The threat of personal disruption, separation from family, children, partners, workmates, and employers creates a serious disincentive to reserve service. Financial considerations which may be of little significance for individuals during peacetime training may become highly significant for reservists on longer term deployments. The skills which reservists bring to the forces often command a significant premium in the civilian job market, and there may be a considerable disjunction between the individual's military rank and role and their peacetime status, perhaps as an employer themselves. The MoD necessarily goes to considerable lengths to compensate reasonable loss of earnings for individuals on compulsory mobilisation, following the considerable difficulties which were met by some during *Op Granby* in 1991.

Such complexity thus requires an extremely well tuned reserve personnel management system, which is currently under development but is by no means complete. The modern armed forces are in a competitive social environment and market for the time and commitment of reserve personnel. Individual reservists need to be recruited and retained, and terms and conditions of service need to be appropriate and competitive. Financial factors such as rates of pay, insurance and pensions will affect these matters. The likely and statutory duration of mobilisations will have a particular bearing on the attitude of families, partners, employers - and on the reservists themselves - in their attitudes to such service.

The civilian employer's perspective on reserve service during Operation Telic

The NHS was by far the largest employer of individual medical reservists on *Operation Telic 1*. This obliged direct statutory arrangements between the Department of Health and the Ministry of Defence for the release of personnel. The loss of skilled personnel caused local operational difficulties in those hospitals, health centres and other care facilities around the country which employed significant numbers of military personnel.

Such arrangements are not so easy where reservists work for smaller employers or are employers themselves, and reservists must engage in medium and long term prior

planning for mobilisation with their employer or employees. Reservists must also consider well in advance the financial impact and consequences of any future deployments, in anticipation of which they should keep good personal financial records, evidence of civilian income from all sources, and maintain a financial impact statement.

The introduction of the SaBRE organisation in 2002 - Supporting Britain's Reservists and Employers - was an important step to raising awareness of the Volunteer Reserve Forces among employers and decision makers, to encourage support for those in the reserves and to inform employers about the benefits of employing members of the Volunteer Reserve Forces. It provided a comprehensive information service and a single point of contact for all related issues, legislation, rights and responsibilities, good management practice and financial matters. SaBRE is supported by the regional TAVRAs, which host meetings and social gatherings for civilian employers.

The Mobilisation of Reserves during Operation Telic

Mobilisation is the process of taking individual reservists from their peacetime employments to operational deployment. It has a number of components

1. Forward planning of likely employments for individuals, supported by demographic information and data on individual military and professional skills
2. Maintenance of individual and collective generic skills through the annual training cycle
3. Timely notification of individuals and civilian employers for mobilisation
4. Administrative transition from civilian to military employment
5. Pre-deployment individual and collective training
6. The move to the operational theatre.

The experience of mobilisation for *Operation Telic 1*

Operation Telic I was the first major mobilisation of volunteer health care professional reservists for many years, and it is thus worth considering the experiences and lessons of a diverse population of individuals who brought a whole range of skills and perspectives to the Operation. For called up reservists in particular, whose new lives as mobilisees are often and suddenly very different from their peacetime lives and employment, there is a complex dynamic of personal and professional issues between the individual, his or her peacetime employer or independent business, family and friends, the MoD as new employer and paymaster, the public in general and the media.

The *Operation Telic* mobilisation was unique, in as much as the political circumstances made it difficult under conditions of secrecy as to ultimate political intent and matters which have subsequently been reviewed at length in high level public enquiries.

Nevertheless, in immediate tactical terms, the rapid mobilisation of a significant proportion of the DMS Reserves for *Operation Telic* was a considerable success. Nevertheless, the Commons Defence Committee report has highlighted a number of strategic issues about the recruitment and retention of reserve health professionals (as with all reservists). In this chapter, we highlight some of the experiences, lessons and issues which may influence future thinking about the R and R in particular of reservists in the health professions. We also consider some of the issues relating to the maintenance of morale among a complex group of professionals and specialists in the field, which may be of help to future commanders and leaders at all levels in the challenging circumstances of expeditionary deployment.

The rolling, phased, "just in time" mobilisation for *Operation Telic 1* between January and March 2003 has been described briefly in Chapter 6 (Medical Logistics).

This rapid deployment, while administratively efficient, was very disruptive to the personal and professional lives of many reservists. The secrecy surrounding it, arising from political rather than military needs, caught many reservists on the hop, and some received notice to attend for call out as late as three days before the appointed day. For reservists, clinical practices, businesses and personal plans had to be put on hold; single parents had to make arrangements for the care of their children; partners back home had to take on responsibilities and burdens which were previously shared or devolved. House, school and job moves were deferred.

Independence of action and responsibility was subsumed into the military organisation, which moves individuals 4000 miles from home and away from normal support mechanisms, with limited and unpredictable communications, by way of the email, phone and internet access which are now central to the efficient management of domestic and professional life. Mobile telephony provides instant connectivity where base stations are installed - as in Kuwait - and the power and capability of mobile phones now hugely exceeds that of formal military communications systems. This is a far cry from the not so distant past, when deployed troops would be wholly dependent on official resources for links with the outside world.

Indeed, reliable access to such systems, within the constraints of operational security, would have substantially reduce the impact of mobilisation on individuals, and allowed them to continue to administer their lives so far as possible from their deployed location. This in turn will reduce the administrative demands on the system itself. For example, an individual who can organise his or her bank account remotely, or keep in regular email contact with civilian agencies and an employer or employees, may be able to maintain functional autonomy in his or her civilian life, and become a more effective contributor as a military reservist.

The Chilwell Reserve Mounting and Training Centre (RMTC)

Following *Operation Telic 1*, mobilisation became a more "leisurely" process as units and individuals were drawn into the deployment plot with longer notice periods. Procedures and processes were well coordinated at the RMTC, which gradually

subsumed responsibility as the common "funnel" for the deployment of Reservists and Regulars.

The RTMC is based at Chetwynd Barracks in Chilwell, Notts. It now prepares all branches of the Reserve Forces, and some Regulars and civilians for service with the Regular Forces, either for deployment into an operational theatre or for a peacetime attachment. It also "demobilises" troops returning to the UK and advises on mental health welfare.

RMTC Courses, Operation Telic 2-13

The Mobilisation / Reserve Course

Territorial Army personnel and Regular Reservists attend a two week training package at RTMC before mobilisation to Operational Theatre. Participants attend mandatory briefings, undergo administration, medical and dental checks, and receive all the kit/equipment required for their deployment. Training is undertaken is based on Level 1 Military Annual Training Tests (MATTs) 1 to 9.

Regular Individual Augmentees (RIA) Course:

RIAs attend a one week training package at RTMC. It is mandatory for all personnel deploying to operational theatre. The training is based on Level 1 MATTs, 1 to 9.

United Nations Individual Replacements (UNIR) Course:

This is a five day package, consisting of mandatory briefings and specific training for individuals deploying on United Nations missions to the Sudan, Democratic Republic of the Congo and elsewhere.

Full Term Reserve Service (FTRS):

Individuals attend two sessions at RTMC. One day one there are medical and dental inspections and a terms and conditions of service briefing. On day two there are administration and documentation checks, kit issue and Leverl 1 MATTs, 1 to 9.

Contractors on Deployed Operations (CONDO):

Civilian Contractors authorised through PJHQ to deploy to an operational theatre attend RTMC for issue of personal protective equipment only.

Civilian Pre-Deployment Training:

RTMC also trains civilians - mainly MOD Civil Servants - who are deploying or visiting an operational theatre. Training spans three days and covers many different aspects of life in theatre as well as current advice and information on health, safety and security. It includes a fitness assessment, first aid training (based on battlefield casualty drills and involving participation in casualty simulations), cultural briefs and a talk given by a civilian who has recently been in theatre.

The training and preparation of reservists: *Operation Telic 1*

The short mobilisation process left little time for individual or collective training for Operation Telic 1. All reservists proceeded directly from the two day induction process at the Chilwell mobilisation centre in Nottingham to training camps in Grantham for a rapid refresher course of NBC training, and theatre briefings. There was very little time for collective training. For example, the staff of 202 Field Hospital had less than a week from deployment to Kuwait to the onset of hostilities and the running of a fully operational trauma hospital.

The Armed Forces were unable to address "special to role" professional training. Staff had to be selected in advance for currency of specialist skills in the roles in which they were deployed. Changes in civilian practice and in civilian professional development - particularly for surgeons - have shortened and narrowed training experience very considerably. Severe trauma and gunshot injuries are rare in UK civilian experience, but this further reduces opportunities for training in the UK, though not elsewhere in the developing world, where interpersonal trauma is rife. It was a measure of the experience in depth among all health professionals from past civilian employments and older training models that the deployed units were able to deal so effectively with a wide range of clinical challenges across the age spectrum.

The training and preparation of reservists: Operation Telic 2- 13

As with mobilisation procedures, so the collective training of medical units for deployment became much more structured and effective during Op Telic. This training applied equally to regular and reserve personnel.

The role of Hospex and the AMS Trining Centre at Strensall, York:

Charles Cox and Peter Roberts describe how collective field hospital training exercises evolved through the 1990s and 2000s to deliver highly effective clinical teams to Operation Telic through the work of the training teams at the Army Medical Services Training Centre (AMSTC) based at Towthorpe Lines ear Strensall, York.

"Hospital Exercises (Hospex) in the 1980's were largely notional. Specialist surgeons occupied a tented operating theatre for 2 or 3 nights and estimated the length of time to complete an operation on an exercise 'patient'. Oversight was provided by regular Army Umpires, who were often less experienced than the players themselves and usually treated as an adversary.

Casualties were normally played by cadets and 'make up' limited; there was little or no attempt at simulation. These exercises were geared towards the Cold War with mass casualties and a hospital capacity of up to 800 beds, when exercise play focussed on moving large numbers of casualties rearwards and clinical proficiency was assumed. Against this background, Hospex was transformed into a responsive, useful and credible predeployment activity.

Identifying the training requirement for Operation Telic

Regular field hospitals held an annual MAXI MASH exercise, which was deemed sufficient preparation for Cold War high-intensity warfighting scenarios. This exercise contained very little realism, virtually no simulation and much that was notional. Its lack of value in preparing teams and individuals for their war role was apparent during the 1991 Gulf Conflict.

Little changed until the end of Operation Telic 1 in 2003. Colonel Robbie Patterson had deployed as a consultant orthopaedic surgeon to a Role 3 unit during Operation Telic 1 and realised there was a need to transform predeployment training, based on the appreciation of three factors:

- The changing nature of military operations and their impact on medical care.
- The changing 'political' environment of peacetime clinical practice and the impact of Clinical Governance to validate and improve clinical practice.
- A need to increase the level of sophistication of medical care in the field.

As Chief Umpire at the AMSTC at Strensall and with a small team of Reservists he set about transforming the hospital exercises held there.

His vision was to establish Role 3 Hospital Collective Clinical Training (R3CCT) as a vital activity within the AMSTC, with a fully resourced staff infrastructure; adequate funding and a progressive annual programme of planned activity to meet these needs. The training was to incorporate realism and credibility, and was to be achieved by innovative training methods, including high and low fidelity simulators, and traditional human (casualty) simulation. This training would be lead by a clinical faculty with previous and contemporary operational experience.

As a result of this initiative, a Faculty has been established to facilitate and continue this transformation. Realism and credibility in R3CCT is now the norm, particularly as more and more exercise players have acquired operational experience.

The initial R3CCT effort was heavily dependent on a small group of Reservist personnel providing the Faculty. The Faculty needed to grow and have an appropriate proportion of Regular clinical personnel. The Defence Consultant Advisers (DCA) were not all engaged in the strategic planning of training. A closer relationship between the Faculty and DCAs needed to be forged. The Hospex continues to evolve.

Hospex in 2008:

Tim Davies and colleagues described in much greater detail how Hospex had evolved by end of Operation Telic.

"Hospex serves two purposes. It minimises the risks to patients within Deployed Health Care (DHC), and it assures military and medical commanders that their hospitals are fit for purpose. It is thus the 'means' rather than the 'end' (of patient safety and assurance). Lectures, directed training, simulation and scenario rehearsal are 'ways' within that 'means' to achieve the 'end'.

The formats of Hospex and the importance of HICON

Hospex has three formats, depending on the proximity of the medical formation to deployment. The exercise construct is standardised, intentionally simple and will exercise one or two Player levels. A single Player would be a field hospital or a squadron. Two players would be a hospital squadron and the HQ of its 'parent' medical group.

HICON is a generic Higher CONtrol representing the command level above the player levels; which also coordinated the insertion of non-clinical serials and the more complex clinical serials into the exercise.

It also monitors and assesses the performance of the unit throughout the exercise. HICON can vary the tempo of exercise play, providing greater levels of activity or complexity, exposing the unit to greater challenge and providing greater assurance, matched to training and educational value.

HICON personnel are predominantly drawn from Reservists from the Staff and Watchkeepers Pool of 2nd Medical Brigade. They are augmented with specialist Regular staff from the Brigade and from Tactical Medical Wing (TMW), who also provide the expertise to assess both the delivery of aeromedical retrievals and transfers.

HICON activity is coordinated with that of Casualty Control (CASCON). CASCON is responsible for preparing, inserting and facilitating the moulage of simulated casualties and other clinical serials in accordance with the overall exercise design and construct. CASCON includes contracted amputee casualty and foreign actors, military personnel assigned as casualties, contracted make-up staff and the 2nd Medical Brigade Faculty.

The Conduct of Hospex during Operation Telic

"Hospex is based upon the management of a number of simulated casualties during their DHC pathway. The clinical history and presentation of these casualties is written by the faculty, comprising reserve Consultant medical staff and senior nurses, increasingly augmented by Regular personnel and Specialist Nursing Advisers, and supported by the Defence Professors and Consultant Advisors (DCAs).

Casualty medical histories are selected for relevance to the specific Theatre, providing examples of the contemporary injury and disease profiles. In some cases anonymised operational case histories are modified. Each history is regularly reviewed against operational lessons to ensure its ongoing relevance. Cases are designed to have a 'background' that meets the required training objective and will have appropriate imagery, blood results, and ECG available when requested by the training audience.

The clinical and administrative management of these cases provides a realistic environment for the newly formed clinical teams to bond and rehearse, or revise team skills, clinical paradigms and procedures. The role of the Faculty is to facilitate the continuing management of the case throughout the hospital complex; feedback on the overall performance of the team is usually left to senior team members. This best enables the development of the team, leadership and management skills in a benign environment.



Casualty simulation team preparing a patient for insertion into the hospex

The three stages of Hospex

1. The Adaptive Foundation (Exercise Rosedale Able):

This is based on a generic scenario, and is designed for units to practice their core medical and logistic functions in training for a war.

2. Pre–Pre Deployment Training (PDT) (Exercise Rosedale Walk):

This is Theatre-specific training for current operations, as during Operation Telic. It is held 4 to 6 months before units deploy. It is the deploying CO's exercise and is held to assist in identifying areas of strength and weakness, and helps direct that further pre-deployment training.

3. PDT (Exercise Rosedale Ready):

This is the theatre-specific 'dress rehearsal' and a formal assessment of performance after which units immediately deploy.

The Use of Simulation on Hospex

A variety of media is used to simulate clinical activity, including

- medium fidelity electronic patient simulators
- low fidelity simulation using actors,
- high quality casualty make-up,
- animal tissue,
- and administrative and management paperwork.

Foreign national actors are used to simulate local challenges, religious and cultural issues, and working through interpreters.

Amputee actors are used to provide an unparalleled level of realism.

A simulated supply chain allows command and logistic elements and clinical teams to understand the processes needed to ensure sound medical logistic provision.

In order to demonstrate familiarity with Healthcare Governance (HCG) processes, Hospex includes serials requiring HCG analysis, action and reporting. These may be as sophisticated as having to provide input to a ministerial question through to mitigating the effects of a total power failure in the hospital. These 'challenges' are also selected from real life and are chosen to ensure relevance.

Quality Assurance on Hospex

The 'quality assurance' function of Hospex is provided through a formal assessment of six Collective Training Objective (CTO) functions, which are Command, Manoevre

Clinical Activity ; Information and Intelligence ; Protection and Combat Service Support.

Each CTO comprises one of 68 Operational Performance Statements (OPS), against which the unit's performance is assessed. Assessment is made using a 'traffic light' system of Green (full achievement of the OPS), Amber (partial achievement) and Red (not achieved).

On conclusion of the Hospex, the unit's command team including its Deployed Medical Director (DMD) conducts an After Action Review together with the Exercise Directing Staff. At the Review, performance can be assessed from both perspectives and graded appropriately. Where performance falls short of full achievement of the OPS, a plan of mitigation or further training is devised. The

findings then determine Commander 2 Medical Brigade's letter of assessment and assurance to the Command and Functional chains.

The Responsiveness of Hospex

Hospex also provides the means by which the latest changes to clinical practice and operational clinical lessons may be demonstrated and rehearsed.

The Brigade HQ Command staff, Exercise Planning Staff and the Brigade's Faculty conduct "horizon scanning" and maintain close links with DMSD, AMD and the academic departments within RCDM. Professional and specific direction is also provided through a variety of means, including the Surgeon General's Operational Policy Letters, and the weekly Joint Theatre Clinical Case Conference.

Examples have included:

- The accuracy and timeliness of Trauma Audit Forms,
- Hypothermia mitigation,
- The tagging micro-structures in penetrating hand injury,
- The accurate siting of sternal intraosseous devices,
- And inappropriate use of the T4 triage category.

Clinicians recently returned from operations also attend Hospex to brief their peers on workload, cases of interest and to provide an overview of practice on current operations. The authors concluded that Hospex provides deploying hospitals the opportunity to rehearse in a realistic but controlled environment.

Justine East reported on the use of simulated casualties on Hospex in the Independent on Thursday, 20 November 2008.

Theatre of war: How amputees are helping soldiers prepare for the horrors of battlefield first aid

"Albert Thomson lost his leg in 2003. He was working in Iraq in the armed forces when he was shot several times by a Warrior-mounted machine gun. The injuries were so extensive that his left leg had to be amputated above the knee. While he was recovering in hospital, he had a lot of time to think. "I wanted to change a huge negative into a positive," he explains. No mean feat, yet he managed it.

"It struck me that without the quick thinking and level-headedness of the army medics and doctors who were first on the scene following the horrific injuries, I wouldn't be here today. It occurred to me that I could set up a business using other amputees in training to make sure soliders were less likely to lose their lives."

The idea was simple but effective: he'd recreate scenarios of devastation, using amputees and special effects like make-up for bruises and fake blood. Even the

cause of the injury would be simulated – a loud bang for a car bomb, land mine or suicide bomber. He had research on his side – with studies showing that casualty simulation training providing a more realistic incident, putting trainees in the real setting, can help to prepare medical and rescue personnel for the unexpected.

In 2005, Thomson's business, Action Amps, was born and has gone from strength to strength. "I actually started the company before leaving the military – where I was then working behind a desk – by introducing it into a couple of medical units. I'd explained that I wanted to use myself and other amputees to show how to face the moment and they agreed." Today, Action Amps is not only a quality provider of specialist training packages for the armed forces, but also for rescue services such as fire stations and paramedics, and for London Underground.

In addition, Thomson provides amputees and special effects for film and TV. "I recently starred in a film myself as an ex-soldier in the First World War," he says. "The director thought, why not use a real amputee?"

Thomson, who is married with a five-year-old son, attributes the success of the business to the fact that he's "been there and got the T-shirt. It's also thanks to the 100 amputees I've got on my database. They range in age from 16 to 66 and are male and female. Some were born with missing limbs, while others, like me, had them catastrophically removed. Sadly, I can't employ them full-time, but if I've got a job in, say, Peterborough, I'll look for the closest person and ask them if they want to do it. Most of them have full-time jobs, but they fit this work in around that."

Thomson manages to find amputees by advertising in disability magazines, and points out that the database also provides an invaluable network whereby amputees can chat about other issues relating to their disability.

Thomson gains huge satisfaction from seeing amputees doing what they enjoy. "You see them surrounded by the blood and guts and they love it!"

But the greatest reward of his work comes from the calls and letters he receives afterwards when people say they had to apply the training – for example upon deployment to Iraq or Afganistan – and it led to someone staying alive.

And in a press release from Action Amps in the Hull Daily Mail on 6 February 2007:

"Amputee Ben Elton, 41, of Thorngumbald, is director of Action Amps ACS Ltd, a company that provides real-life training for the armed forces. The company has been awarded a three-year contract with the Ministry of Defence (MoD) and will train medics at the Army Medical Services Training Centre in Strensall, near York.

Mr Elton, who is married with two children, was medically discharged from the Army in 2005 after losing a leg in a water-skiing accident.

Mr Elton, who rose to the rank of Regimental Sergeant Major in the Royal Logistics Corps, said it was crucial medics and soldiers, who will also take part in exercises, are "de-sensitised" as much as possible before they reach war zones.

He said roadside bombs and mortar attacks in Afghanistan and Iraq often caused horrific injuries involving loss of limbs. "People see amputees and panic," he said.

A spokesman for the MoD, which runs the Army Medical Services Training Centre, said: We provide realistic operational and casualty simulation to the forces. To ensure scenarios are as realistic as possible, the MoD employs the use of former service amputees, who willingly give their time to enable the Army to learn about the injuries that can be sustained on a modern battlefield"

Sustaining Morale of Medical Reserves during operational deployments

The perspective of the friends and families of medical reservists

The mobilised reservist is exposed to unpredictable attitudes and responses in the civilian workplace, which may affect his or her reemployment on demobilisation, and to misunderstanding and hostility in his or her personal life after an abrupt and prolonged departure.

The families of regular service personnel have a greater degree of social support from their units than do reservists, particularly where reservists are nationally recruited and have no local regimental affiliations. In theory, these families have a call upon a number of service agencies, but in practice these are little used. Families and partners tend to rely upon their own civilian and family support networks. The detachment of reservists' families and partners from the military system can cause considerable problems for individual reservists, as family members become self- sufficient or face substantial difficulties during the prolonged absence of the mobilisee.

It is difficult to know whether these challenges have turned into long term welfare problems in matters such as divorce, in advance of reports from the Department of Psychiatry at King's College Hospital, London, where a specialist team has been conducting a post-operational survey of the personal impact of mobilisation on reservists on Operation Telic 1 (see below). Nevertheless, anecdotal experience suggests that more needs to be done to support, inform and educate wives, husbands and non-serving partners during all phases of reserve service.

The media perspectives on mobilisation

In an open democracy with free and unrestrained press, television and internet commentary, no individual or organisation is immune from the public mood. The MoD, the civilian employers, the general public and individual reservists were all well aware of the political and public debate about the legitimacy and advisability of the Gulf War of 2003, of the "Peace Marches" in London, and the direct action protests such as those conducted at Marchwood Military Port near Southampton, which may have delayed the departure of important stores and medical supplies for the Gulf.


THE PEOPLE
THE PAPER THAT SUPPORTS OUR TROOPS
Dear Soldier
Please find enclosed one new pair of Desert Boots – bought for you by readers of The People newspaper.
We launched a campaign to buy new boots after hearing how the old pairs were melting in the heat.
And just to let you know we're all behind you, our readers raised an amazing £6,000.
We have sent you this pair of new Soldier 2000 boots or their American equivalent after your family wrote to us telling us you were one of the servicemen fighting for freedom in Iraq who needed the boots.
We trust the boots get to you in perfect order, and you use them to march to victory. They are totally free and have been sent to you with all the goodwill of our readers.
May God Bless You. We pray you and your colleagues come home safely... and soon.
But give Saddam the boot first!

For those veterans of the First Gulf War, the media mood was very different in 2003 from the unreserved support of 1991, and a sense persisted that there was continual, hostile and negative reporting from many media organisations, and in particular from the BBC, during the military campaign itself, expressing a bias against the allied cause.

This was of course a wholly legitimate and understandable process, but it nevertheless called for robust humour from service personnel at war. Fortunately, the negative media feeds to the Gulf from the public broadcast media were balanced by the approach of other independent media, such as Sky and Fox news, which were received in field encampments by satellite TV. Indeed, service personnel in base camps were able to follow the progress of the campaign in detail through the televisual media rather than through military sources, most notably through the imagery of the symbolic toppling of the Saddam statue in Baghdad in early April.

Nevertheless, British servicemen and women enjoy a rapport with the local and national print and televisual media which is not usually extended to their political masters. The media is usually generous in its support and sympathy for service personnel, and respectful of their professionalism. This rapport provides an informal route of communication and education on reserve forces matters back to the public and politicians. In return, media representatives - such as those who were embedded with units during *Operation Telic* - can be made welcome and trusted.

Few if any service personnel would report that they were actively obstructed or impeded during the mobilisation by virtue of public or media hostility. However, the negative influence of the Iraq war from the media worked in more subtle ways. Many returning mobilisees might report their return weeks and months later to indifference and disinterest, and the sense that their families and friends had been adversely influenced by adverse social comment and attitudes.



Additional professional challenges: dealing with the media in the field, at 202 Field Hospital



The embedded Channel 4 documentary crew at 202 Field Hospital at work on their programme Battle Hospital, subsequently screened on national television in early 2004 (Photo: Author)



A cabin from the 'Paradigm' welfare system in use at BMH Shaibah, providing computer terminals and telephone cubicles (Photo 202 Field Hospital)

Morale in the field medical units during Operation Telic

Good morale in the field arises from a complex interplay of leadership, of personalities, of material and welfare resources, of local military and physical and of individual experiences.

The success and professionalism of the British Armed Forces, the quality of leadership and initiative and the choice and success of operations in recent decades, have ensured that morale was high on Operation Telic despite challenging environmental and military circumstances. The approaches to developing and maintaining morale within the regular armed forces differ from unit to unit, regiment to regiment and command team to command team, and from role to role. Thus, for example, circumstances differ considerably between a field medical regiment, dispersed and on the move at the front line, and within a field hospital, where staff may be confined over a long period with relative or absolute inactivity at a fixed location, such as Coyote or Shaibah hospital, or in an aeromedical evacuation unit, where members may be shuttling back to Cyprus or the UK.

The issues of morale as they affect medical units are of particular interest in respect of deployed field hospitals, where the command challenge of coordinating the activities and expectations of large numbers of senior doctors, nurses and other health care professionals as reservists is unusual among military organisations, and where the conflicting demands and needs of patients must be set against the broader military needs. This is particularly important during times of professional inactivity, a phenomenon unfamiliar to NHS professionals and workaholics.

On Operation Telic 1, it found particular focus in the management of the staff of 33 Field Hospital at Camp Coyote, who after setting up the field hospital in anticipation of servicing it during the warfighting phase, were obliged to stand down and hand over to an incoming unit, 202 Field Hospital, and then wait as the theatre strategic reserve hospital, in which role they were unused until eventual return to the UK.

Conversely, the morale of 202 hospital staff, such as it can be generalised, was multiphasic. Initial problems of adjustment of individuals to the rapid mobilisation and the consequent domestic problems, were superceded by high morale during the month of heavy clinical activity. Morale then flagged as workload tailed off and individuals were substantially underemployed, until late May, when the unit was downsized and better matched to the ongoing clinical activity and other tasks.

Mobilised personnel bring a range of personal issues and problems which can affect unit cohesion and morale, particularly where mobilisation took place at short notice or in unsatisfactory personal circumstances.

In the field medical unit, good morale has many facets. It develops from a sense of clear, collective and shared purpose; from efficient field administration; from fulfilment in the professional role, from physical and mental wellbeing, from good provision for personal hygiene, food, and from satisfactory environmental adaptation. Conversely, poor morale can progress when individuals, particularly at a senior level, become disaffected or dissenting. The contribution that individuals make to collective morale can be very

significant. Experience teaches that if we could measure and plot mathematically the contribution that individuals make to the collective performance of a unit or organisation with time, the majority will work successfully and happily to the norms expected of them and contribute evenly to the overall outcomes. A smaller number will thrive and excel in the prevailing conditions, adding cheer, originality, direction and positivity and thus raising the collective performance, while other individuals, sometimes at a senior level, can detract from the collective performance when boredom, frustration and dissatisfaction take hold.

Medical Leadership and Morale during Operation Telic

Field hospitals offer a particular leadership challenge, because in conventional military terms they have a very unusual rank and age structure, and a level of professional seniority and experience which demands excellence both in clinical professional leadership and understanding, and high administrative standards.

The source of good morale is invested to a very considerable degree in field medical units as in all military units in the commanding officer and his or her immediate staff. senior commanders have a considerable freedom to influence the character of their unit by the standards which they set, in the personalities which they display, the leadership styles which they adopt and directing actions which they take. They are also constrained by higher authority in many matters, such as communications security, local freedom of movement, and personnel policies (who goes and who stays during the inactive phases).

Thus, actions which commanders may deem desirable for the morale of troops may not be possible for operational reasons. For example, security needs may constrain units to confined camps for long periods. Medical units at war and with clear objectives and well trained professional personnel are fairly easy to lead, because individuals are focused on tasks. The same units are more challenging to lead in the pre- and post-war phases, because professional morale flags in periods of inactivity.

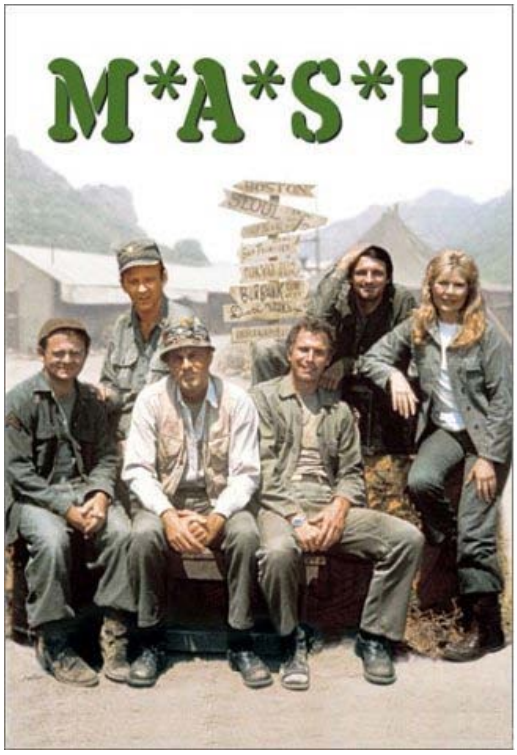
There are many forms of effective leadership style, but overly prescriptive and inflexible direction can be unproductive. The range of organisational skills and original minds in a field medical unit can be enormous, and the creativity which can be brought to focus on professional and social organisation in an austere environment is considerable, as was illustrated by the experience of 202 Field Hospital as the deployment progressed.

Prospective field hospital commanders would do worse than to watch the MASH film and television series, which parallels more closely than the uninitiated might suspect the realities of deployment in such units.

The physical component of morale on Operation Telic mobilisation

Mobilisation causes serious disruption to individual lives, and it is rarely possible for an individual to deal with, complete and close down all aspects of his or her civilian life in the short time span available.

In civilian life, the internet and e-mail have hugely compressed time and space in communications, and we are now used to their benefits. In respect of e-mail, issues that once took weeks to resolve through surface mail can now be addressed immediately. In





The MASH model for morale in deployed field hospitals

this way, personal problems are solved, business and social contacts can continue, and strong links can be retained between mobilisees and their civilian lives.

Narrowband internet access is one element of a standard 'welfare package' which was available for deployed units, and which also included television, newspaper and Forces Radio access. The availability of satellite television news and a wide range of channels to the hospital staff and visitors throughout the Operation Telic campaign was a mixed blessing, as it provided daily insight to the whole campaign, but also acted as a barometer of public and political attitudes in the UK. It brought a considerable degree of normality and sense of connection to home through the ability to watch live sporting events and standard UK TV fare.

The social component of morale in medical units on Operation Telic

Military units contain a range of individuals with many different skills and interests outside their professional lives, and these can be harnessed wherever possible to the collective good and the constructive occupation of 'down time'.

Individual and collective fitness and sports activities promote acclimatisation and physical wellbeing, as well as personal and collective morale. For example, at 202 Field Hospital a series of charitable activities included a mini marathon on the date of the London Marathon, in which teams of ten individuals ran relays in the desert over 2.6 miles. A fancy dress walk was held to coincide with a midnight Walk for Breast Cancer in London. Competitive and team races were held at other times. Inter-unit activities included an 'It's a Knockout' games day, using the resources and hospitality of a local engineer unit.





Left. Britain's armoured reserve primed for action.
Right. A novel use for used theatre drapes: The CoyoteField Hospital Air Defence system, later dismantled as it was too real a risk to aircraft

Collective activities can include professional training, such as study periods and training sessions which draw upon the skills and knowledge of individuals, and spiritual activities such as music concerts, religious services, dance classes, and study days. Normal civilian professional life need not end on mobilisation, and field deployments provide excellent opportunities to further individual and collective education and inter-professional training.

Individual mobilisees must also plan their personal strategies for self-sufficiency in advance of deployment. Books can be read, and personal computers can be a valuable and versatile tool for personal occupation, education and entertainment.

With the right attitude and a positive approach, individuals can find rich personal experiences in the most unexpected ways, and discover talents of which they were unaware, or which they have not previously used in such circumstances. For example, Doug Goodship and his team produced the newsletter whose serial editions (see Appendices) added humour and entertainment to the life of 202 Field Hospital.

Personal Vignette: Smiley Faces: Lt Wanda Machnicka

Wanda Machnicka was a staff nurse at the Christie Hospital Manchester prior to her call up in 2003 as a general nurse with 202 Field Hospital. Her artwork helped her to adjust to the dislocation of the deployment, to find positive experiences in stress and adversity, and to cheer up and inspire many of the other members of her unit over a long and hot six months in the tented hospital camp.



Lt Wanda Machnicka's art class, Shaibah

"The end of the tour was finally in sight. People started to cross off days on the calendar. I find that very negative: every day is special and valuable, and should not be discarded with a cross. A smiley face is much more cheerful. The idea started with a hand drawn bereavement card for a friend at home. I drew bright circles of various sizes on a big sheet of watercolour paper, the largest circles representing days gone by, and the smaller circles days still to come. As each day went by, so I drew a smiley face, with the intention to complete 149 circles. The sheet was hung up in the ward, where it caught the attention of many of my friends. The CO also commissioned his own copy, and my son also had a duplicate as a way of looking forward to my return.

"Unfortunately, a Shaibah dust devil blew away the picture - along with the ward - before I could complete it, and it was never found. However, by then, smiley faces and copies were appearing everywhere in the camp, and some have since been framed. I think it had a very positive effect on everyone."

Personal Vignette: The Sikh Shrine: Dr Sujan Singh

Major Sujan Singh was an NHS anaesthetist with 202 Field Hospital, having worked at Glenfield Hospital, Leicester before mobilisation. He sought permission for an opportunity to visit Baghdad, to pay homage the shrine of the first Sikh Guru, Guru Manak. The shrine had been preserved discretely with the knowledge of the Ba'ath regime, kept locked and intact by a local Muslim family of caretakers over many generations.

In early May 2003, Major Singh was invited to join a convoy of Royal Military Policemen to cover the reopening of the British Embassy in Baghdad. Once in Baghdad, and with the ex-officio support and volunteer escort of his RMP team, the shrine was tracked down through enquiries of the local Iraqi railway police at the Central Station. One evening soon after, the curious passer by would have seen a small convoy of army landrovers pull into the courtyard of a small house near the station, where a turbaned British Army Officer was greeted by the caretaker as the first Sikh visitor in many years, with a traditional Sikh greeting. He spent thirty minutes in contemplation at the shrine, while his escort waited outside.

Dr Singh has since used the experience in talks to his own community to illustrate those personal qualities of goodwill that transcend politics and religion, and which brought together an incongruous group of Sikhs, Muslims and Christians in a symbolic moment.





Major Sujan Singh and his volunteer RMP escort at the Sikh Shrine to Guru Pathak and at Baghdad Railway station, May 2003

The oldest volunteer in the Army?: Captain, Major, Lt. Colonel in four Years

A personal account from a very senior recruit: Mr Graham Rushforth

My personal account began in early 2001, in my late 50s, when I was approached as a consultant orthopaedic surgeon at Salisbury District Hospital by a Colleague to join the Territorial Unit of the Army, solely for the reason of providing some Orthopaedic Teaching for 243 Field Hospital. This seemed a pleasant part time hobby with a chance of some activity outside the NHS.

A month later I was given the noble Rank of Captain. Little was I to realise what it would lead to! Some few weeks later at the first Training Weekend I was asked if I would go to "Saif Sarrea" for an Exercise. I agreed, to find myself in The Oman three months later, and two weeks after the events of 9/11/2001 in the USA.I began to have some questions about what I had let myself in for.

The Exercise began with the Dutch General Surgeon greeting me with "Captain Mannering has arrived!" I soon found myself advising some Senior Officers on complex Trauma management.

During the following year I was conducted thought the Definitive Trauma Skills course at the RCS and the Officer Entry Course with a degree of haste that surprised even me! In March 2003 I was promoted to Major, eighteen months after joining the T.A.

I had some very good friends at our Local Church who were Regular Officers, and information began to percolate down of an imminent and dramatic change of tempo for the Army. My full Colonel friends probably told me rather more than many others knew about, with specific dates included. Suffice to say, I was included in the first phase of the "*Operation Telic 1*".

Telic 1 was my baptism of fire. Within forty-eight hours of arriving in Kuwait, war started. The Casualties took a few hours to start arriving, and rather then Iraqi Soldiers they were two young girls in their teens, one with her leg shot off, and the other with a severe bullet wound to her leg. I had very little idea that a bullet could do so much damage, light years away from the normal civilian road casualties back home.

For the next week we were busier than most on-call weeks at Salisbury. I was very grateful for more War-savvy colleagues who mentored me during the next month of War fighting, but found time to learn and use experiences of some time back, together with stories that my father had told me of his 2nd World war experience as Orthopaedic Surgeon in Wroughton RAF Base.

The War fighting lasted only six weeks, but we were all told that we might stay in Kuwait for a year! The thought of this set the Escape Committee into overdrive with many attempts to get out of the Desert Camp. One of our colleagues who spoke Arabic got into Kuwait City by Lorry, returning with fruit in vast quantities. Another got under the wire with the claim that his pregnant wife couldn't manage his flock of sheep!

With increasing summer temperatures the inevitable heat began to take its toll. In the end I was Casevac'd home after three months having been found to be somewhat incoherent one day. No Alcohol being available! I can only describe the trip home as the most memorable experiences I have ever had. Once in the comfort of the RAF Tent any memory loss evaporated, and the Flight back on a VC 10 surpassed my widest dreams of flying. To sit in the Cockpit and join the Crew was

the icing on the cake! The journey took the whole day since we went via Düsseldorf to collect another patient, arriving late that afternoon in Bristol. Here we were allowed off but told we hadn't officially arrived in Britain. The Departure lounge was packed and it was only after I had 'phoned my wife and turned around to find a cup of coffee to see my son looking totally bemused to see his father in dirty Desert greens, that I found out why it was so crowded! The Army had commandeered the Airfield for our flight!

Operation Telic 5 a year later, (November 2004) was a very different story. I volunteered for this after I heard at one of the meetings in London with 256 Field that their Orthopaedic Surgeon didn't wish to deploy again. This was the first time I deployed as the only Orthopaedic Surgeon, given the field Rank of Lt. Colonel, and felt very sheepish about it. The General Surgeon and one Anaesthetist were Czechoslovakian The whole episode was vastly better handled, as was being treated by all from the Commanding Officer Phil Harrison as a full colleague from the start.

We had little to do, but what came in taxed my surgical skill and knowledge to the limit. An Iraqi boy of six years had kicked a mine, blowing off one leg and grossly injuring the other. My Anaesthetic colleagues performed magnificently on the moribund child, whence I could do an amputation and my Czech General surgical colleague debrided the other. Later we grafted the left leg and covered the open tibia with a flap graft.

The other Casualty was a Sergeant shot by another of our own on the Ranges through the Knee. Tiger Country to an Orthopod. Fortunately the Popliteal Artery was intact, with a vein controlled by a very competent GDMO with direct local pressure of two field bandages. A rather hairy exploration, again with my Czech colleague, controlled the vessel, followed by a very rapid Casevac.

The icing on the cake this time was at the gift of the C.O who provided us with a trip to the old War Memorial from the 1914/18 war. This was six Kilometres out of camp in the Desert. For me this was an extraordinary visit since my Grandfather had been in the Expedition to Mesopotamia for three years in the First World War. Saddam had moved the Memorial from the Bank of the Tigris to the Desert in order to build a new Palace for himself, but had reconstructed it as near to the original as possible.

Op Herrick 5 in Afghanistan followed in 2006, a tour of just a month to fit in with Regular Orthopaedic Surgeon.

My final Tour was on Operation Telic 11. Again totally different, and very much closer to the front line with almost daily Rocket attacks. The worst was a barrage of eighteen within half hour. This was the Second tour of three months and more excitement than in the whole 25 years at Salisbury District Hospital.

Have I enjoyed my 7 years at the end of my NHS career on deployment with the

Army? The answer must be a resounding yes, Would I do it again, again yes but I wish I was rather younger. It was a hugely beneficial change from the humdrum routine of the NHS. The Army knows how to enjoy itself as I have found, and almost all of the time I felt welcome and part of the bigger Army. I know I made a few mistakes with the Etiquette, for which I hope I will be forgiven. But all in all, this was a good hobby to find in the latter years of my career.

Independent field agencies and morale during *Operation Telic*

Many individuals face personal difficulties, pressures and stresses, often in relations to domestic events back home and through circumstances beyond their control, which do not lend themselves to solutions through the conventional command structure. The deployment of the independent Chaplaincy and the SSAFA welfare teams creates channels for informal resolution of personal issues and additional systems of welfare administration. Large numbers of deployed personnel from a wide range of social backgrounds and produce a huge range of challenges for these agencies.

Personal behaviours

The concentration of large numbers of men and women over long periods inevitably produces intimate inter-personal relationships of variable transience and durability. Military discipline, custom and practice sets important constraints on private personal behaviour, but also demands some flexibility and a Nelsonian blind eye where military efficiency is not demonstrably impeded. A policy of discretion and a "Don't ask - don't tell-don't flaunt and don't provoke" recognises the realities and keeps such matters in proportion.

Nevertheless, there is an important side effect of tolerance in such matters, which extends into personal and marital relationships at home, with damaging consequences. Commanders understandably and wisely steer clear of these difficult issues, but stories and rumours can undermine collective morale and create domestic insecurities.

The misuse of alcohol impairs individual performance and health, and collective capability, discipline and control. Its rigid exclusion in other than medicinal quantities from the desert theatre may have made a major contribution to the efficiency and safety of military operations in both major Gulf campaigns.

The domestic component of morale during Operation Telic

The circumstances of the home front make a major difference to personal morale. Individuals leave behind robust or fragile families and relationships; complex circumstances of parental responsibility through pregnancy, divorce or separation; sickness of family members; and so on. Op Telic was a particularly difficult deployment for families on the Home Front, as there was considerable hostility to the Operation in many quarters, unlike Operation Granby in 1991, and this undoubtedly played upon families and friends.

Personal problems are compounded by uncertainties over the duration of deployment

and unresolved or new problems at home, with children, spouses, extended family or business partnerships. Conversely, periods of enforced separation can work to the benefit of families and relationships, strengthening bonds and friendship.

There is thus no one formula for success or failure on the home front, but extensive preparation, prior planning, discussion and anticipation can help mitigate the effects of mobilised separation. Informal social support networks with families of other mobilisees - and those who have previously experienced such separations - can be very beneficial, and often more so than official organisations.

Families are faced with the additional duress of saturation media coverage, uncertainties, disinformation and partial information during operations. This is exacerbated by security and communications blackouts during warfighting, and by the turn-around times of 'snail mail'. Families and partners thus develop considerable autonomy and independence during such prolonged separations, and they grow in different ways. The return home will rarely be a return to the status quo.

Morale of medical mobilisees: Post deployment issues from *Operation Telic*

Morale is influenced both by events before and during an operational deployment, and operational effectiveness depends upon the many factors which contribute to high morale.

The retention of the professional services of regular and reserve personnel in the post-operational phase and in the longer term is an important measure of morale. It is influenced by many factors arising from the actual and perceived treatment of people and their aspirations before, during and after active service.

There are a number of factors which distinguish the treatment, reward and remuneration of reservists from regular service personnel. These have been addressed in part by the introduction of common terms of service policies to harmonise matters of pay, rank and professional status since 2003.

Many demobilisees face domestic and occupational challenges and problems, particularly after long deployments. These usually fall well short of the clinical severity of post traumatic stress disorder (see Chapter 17), but are nevertheless significant and poorly documented. The mobilisation centre at Chilwell offers briefings to all returning service personnel after deployment and a continuing support and advisory service. However, prevention being better than cure, there is much work still to be done to understand how best to anticipate and pre-empt the challenges of reintegration on an individual basis.

The recent development of a specialist centre for the psychological aspects of military health is a welcome development in the aftermath of Operation Telic, which should provide greater understanding of these problems, is thus to be welcomed.

Informal support networks

The recognition of the need for better management systems has led to the development of formal support systems for demobilising reservists. This is an ongoing process which

should lead to long term improvements in recruitment and retention, which are clear measures of collective professional morale. However, the most effective support networks for individuals who have experienced the dislocating and horizon broadening effects of mobilisation and its aftermath remain the informal links within and around service units, within families, and social networks.

It is a common experience that war memories are most easily shared with other veterans, and that civilian friends and work colleagues may not show much enthusiasm or overt interest. Returnees should not expect an exuberant welcome at home and in the civilian workplace, and it is of note that the early resignation rate of reservists after Operation Telic 1 has been remarkably low.

Official Support Systems

We have covered the issues around the mental health of reservists in general in Chapter 28, and we have seen how welfare and financial support for Operation Telic veterans improved substantially over the course of the Operation through both official and charitable initiatives.

The UK Government's Veterans Agency was formed in 2001 direction to bring together a number of functions related to the long term management of military veterans, including pensions, medals, service records and general welfare matters. It offers a range of information through its website and various offices.

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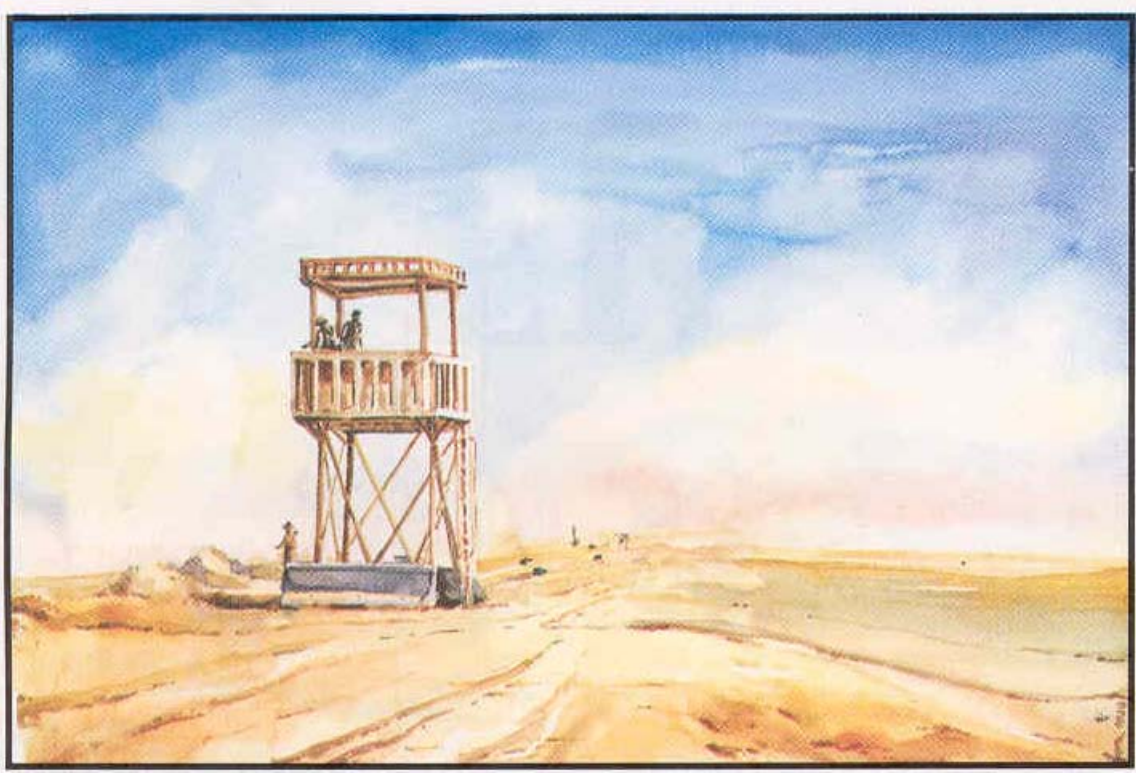
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Blood, Heat + Dust: Second Edition

Operation Telic and the British Medical Deployment to the Gulf 2003-2009

Chapter 32:

Medicine, Law, Morality and War



Painting: *Guard tower at Camp Fox, Kuwait*

Artist: Gora Pathak 2003

Introduction

This book is about the interface of Medicine and War. It is about the interface between professional people, torn flesh and torn lives.

Some wars are fought for national survival, or on behalf of peoples unable to defend themselves. Such wars are viewed as Just Wars.

Other wars are fought for less noble motives; for the aggrandisement of kings and queens, emperors, generals and lesser politicians; or through foolishness, mistake, misrepresentation, misunderstanding and error.

The armed forces of Great Britain and the United States and configured and equipped for technologically advanced expeditionary warfare, underwritten by a martial history and calling which in our own case resonates down many centuries and back into the mists of time. The Angles, the Saxons, the Celts, the Germanic tribes, the Romans, the Vikings, the Normans mingle in our blood. Stories from the Fields of Hastings, Agincourt, Crecy, Waterloo, and Normandy, and the imperial campaigns of Africa, India and Burma fill our history books.

War dislocates human behaviour and morality. We may argue the absolutisms and relativities of the moral dimension of war. We may argue that morality is a luxury of the secure and well fed. Anyone who has studied the European Campaigns of the latter phases of the Second World War, for which Sir Max Hastings' book Armageddon collates some graphic tales, will understand how savage and animalistic human behaviour can become, as demonstrated by the Wermacht on its foray into Russia and the Eastern European States, and by the Red Army on the return trip. However, we have no claim on absolute moral superiority on that war or any other. Rape, pillage, plunder, and the summary execution of prisoners, were not the privilege of those armies alone.

Modern armies are subject to democratic governments and the often flawed decision making that drives them. War is no longer reported weeks and months after the event in dispatch, poem and painting. Digital technology has brought war, its horrors and its human and political consequences into every home with immediacy. Moral questions and issues which were conveniently overlooked, forgotten or which lay in the memories of aging veterans are now central to the public perception and permission for war.

Few thinking men and women would argue the questionable moral and information dimension to the Iraq war of 2003, despite the best efforts of the politicians to cover the cracks. In the disputed circumstances of modern expeditionary warfare, soldiers who value their professional reputation and their place in the history books need to be very sure of their ethical and moral codes and their implementation in the imposed cauldron of resulting conflict.

In the first edition of this book, I wrote that

> "Medical professionals must thus bear witness to the actions of combatants and prison guards, and consider their role in the moral conscience of armies. They must balance their duties to their compatriots with their social and professional

> responsibilities when witness to actions and behaviours inconsistent with the higher ideals and broader view of the rules of war, as in the treatment of prisoners. Medical officers may need from time to time to bring oversight to the actions of field officers and commanders."

This obligation applies as much to the strategic level as to the tactical level. Just as regimental medical and medical staff officers are the tactical conscience of regimental, brigade and divisional commanders, so must senior medical commanders have the strategic empowerment and confidence to argue and to drive through the moral and ethical issues at the operational planning stage and beyond in respect of the immediate consequences of "elective warfare".

Adequate provision must be made in advance for predictable moral hazards; as for the ownership of the health care of civilian casualties of war, and for the rapid reconstruction of dislocated civilian health systems. If this demands more resources for the task, then so be it, for the war for hearts and minds will ultimately be won not by the hard power of the fighting generals but by the soft power of the healers and the nation builders.

Certain aspects of the conduct of the War in Iraq did terrible damage to professional and military reputations both directly and by association. At the time of publication of the first edition, many of these stories had not run their course; the Abu Ghraib prison story; the Camp Breadbasket photographs; the mistreatment of detainees and the death in British custody of Baha Mousa, are all deeply engrained in the public memory, and bring ongoing succour to those who would undermine our purpose. While none of these incidents directly involved misbehaviour by medical officers, they highlight the moral pressures upon those imbued with the ethical conscience of military units to know what is going on, and where necessary to intervene. To paraphrase Sir Arthur Conan Doyle, where was the dog that did not bark in the night?

In this revised chapter, we consider a number of practical matters in respect of the obligations upon medical officers as the independent consciences of military units; of the rules and obligations of the Geneva Convention, and their implications for the medical resourcing of expeditionary warfare; of our moral obligations to prisoners and civilians under our care; and of the obligations to those local nationals who help us in our professional duties. These include the interpreters who have taken huge personal risks with great courage to help us discharge our own professional duties in Iraq and elsewhere.

In hospitals in Iraq and Afghanistan, medical personnel have been confronted on a daily basis with ethical experiences arising from the chaos of conflict. The following illustrative article from the US Hospital in Balad could have been written from Basra or Camp Bastion in Afghanistan.

Rory McCarthy wrote for The Guardian on Monday 13 October 2003

> "This is the hidden story of America's military adventure in Iraq. From their heavily barricaded offices in Baghdad, the US army's public relations operation did not announce the attack last week on Wilhelm. It did not describe how the Black Hawk

pilots risked their lives to retrieve him and bring him to the emergency room of the 21st Combat Support Hospital at Balad where some of the army's finest nurses, medics and doctors saved his life. It did not describe the pain he is suffering, the agony his family is going through or the fact that Spc Wilhelm will never be a soldier again.

The military has never admitted the total number of soldiers injured so far, though the figure appears to run into the thousands. At the combat hospital in Balad, one of a handful of military medical centres in Iraq, a total of 1,088 patients were admitted for treatment between May and the end of August. As many as 916 had to be evacuated, although not all suffered combat injuries (soldiers who break their ankles in football games are also sent home to recover.) One report last month said 6,000 US soldiers had already been evacuated home, of whom more than 1,000 were designated "wounded in action" - twice the toll for the first Gulf war.

The problem facing American infantrymen is the resistance fighters' weapon of choice: homemade bombs, known in military parlance as improvised explosive devices (IEDs). They are artillery shells or grenades hidden by the roadside and detonated from the bushes with a command wire as a US convoy passes. The blast forces the convoy to halt and then the fighters open fire. "We return fire but they have got the choice of ground. They get as many shots off as they can and they back off," Ryan says. Soldiers now stuff sandbags into the flooring of their Humvees for protection from the bombs and otherwise hope today is not the day the medevac is coming for them.

The 21st Combat Support Hospital (motto: "Fear Not") is a peculiar honeycomb of white, air-conditioned tents built around a corridor that connects the emergency room to a pre-op tent and then to two fully collapsible operating rooms. Spread out on either side are wards for intensive and intermediate care. There are seven surgeons in the unit and a host of other medical staff including a dentist, a psychiatrist, a physiotherapist and even a dietician. Most are on active duty - full-time soldiers put through medical training by the army and taught to handle gruesome combat injuries.

Others among the medical staff are reservists, Americans who joined up as students to pay their way through $120,000 medical schools and who are now giving back their time to the army. Now they live far from home, work 12-hour shifts and spend part of nearly every night sheltering in the bunker from the regular mortar attacks. Major Gordon Olsen is an orthopaedic specialist who runs a small private practice in Heber City, Utah, where the most serious injuries he sees are riders who have fallen off their horses.

"Before I came over, watching the news I was rah-rah and here we go," he says. "Now I am just thinking, this needs to stop and go away. When talking to my wife at home, you know, people just hear about a few casualties a day and it doesn't sound like a big deal. But when you see a 19-year-old kid with his leg barely hanging on, that one alone is a big deal."

Yet what most of the medical staff in the hospital find the biggest challenge is not the horrific injuries they see every day but the fact that they must also treat Iraqi prisoners. In one recent case an American soldier died from his injuries, while on the trolley next to him the Iraqi suspected of attacking him was treated for his wounds, operated on several times and eventually pulled through. "There are times when you take these guys in, take care of them and they are going to live and that is really hard," says Captain Eric Ritter. "I know what these guys have done and you have got to remind yourself they are patients. But every day our guys are out there getting hit."

There are nine Iraqis recovering in the enemy prisoner-of-war ward, all of whom have been injured by US troops. Two armed military policemen guard the door. Ather, 24, a taxi driver, was shot in the hand in a scuffle after troops found a gun in the back of his car. Doctors at the hospital performed a complicated operation on his hand, which is now held together with several pins. "We didn't do anything wrong. We were just driving to Baghdad and we had a gun in the car to protect ourselves from thieves," he says. "I was happy that Saddam has gone but I'm not pleased with what has happened to me." Like all the other patients on this ward, once he has recovered he will be taken in for questioning at a US detention centre, probably at Baghdad airport.

In a ward next door nurses are treating a young Iraqi girl, Aya, six, who suffered severe burns to her back after she fell into a clay oven apparently scared by a low-flying American helicopter. There was little the local hospital in Balad could do for her and her father, Faris Abdullah, is plainly overjoyed that his daughter is being so well treated. But every day outside the base there are long queues of Iraqis desperate for similar treatment. Some of the soldiers even mutter their own private criticism that such Iraqi civilians benefit from their medical care.

In the quiet after the terrible casualties, there is little encouragement to question the reasons for war. "We are here doing our job. It is part of the risk we take," he says. "If being in the army was easy, there would be a lot more soldiers around."

International Law and the behaviour of combatants in War

Rationally conducted warfare seeks to minimise death and destruction in pursuit of the political and operational objectives. Peace and harmonious relations between states are most readily restored when armies have acted with maximum restraint.

There has been much debate since the Gulf War about the legality of war, and the legality or otherwise of political decisions made to commit British and US forces to war. War is about the imposition of will by the use of force by one nation upon another. The concept of a 'legal' war in any form is thus somewhat curious, given that war involves the state-authorised use of lethal weapons against people and property.

Democratic governments nevertheless need to carry their electorates and people with

them in decisions as grave as the instigation and conduct of war. The growth in human rights legislation in the late 20th century has created a much more legalistic mindset.

The decisions of Western nations to intervene in failed and failing states - or against stable but repressive states - whether for enlightened self interest, pre-emption, or moral crusade, creates new tensions between the rule of law and the rules of war. These have yet to be resolved. They nevertheless create legal precedents which may cause problems in future for the Western powers.

Combat immunity

The legal framework in which troops operate on deployments has now changed dramatically. This has implications for behaviour, for responsibility, and for the medico-legal basis of compensation claims both by troops against the MoD, and by foreign nationals affected by conflict. The past legal protection for troops in action was known as 'combat immunity'. The changing moral and public climate now places the responsibility upon troops for injury, death and property damage to civilians caught up in combat operations, and the defacto removal of 'combat immunity' from troops on such operations.

The Geneva Convention

The British armed forces seek to conduct war with the minimum of force and the maximum of restraint consistent with the achievement of the aims. Respect for the protocols is central to the conduct of all members of the armed forces, and are taught to all service personnel.

In 1859, the Swiss businessman, Henri Dunant witnessed the Battle of Solferino. In *A Memory of Solferino* (1862), he described the concept of an independent organisation to tend to wartime casualties. The framework of the International Committee of the Red Cross was created in 1863. In 1864, he persuaded the Swiss government to hold a 16-nation conference which produced the first Geneva Convention. The treaty was ratified by twelve of the attendees; and by the United States in 1882.

The Geneva Convention of August 1864 set out *Laws of War* to minimise the suffering and barbarism of war. The Convention has been updated from time to time. Its application will always be imperfect in an imperfect world, but it nevertheless sets out terms by which the personnel of signatory nations will be judged. Non-adherence to the Convention by terrorist and insurgent groups often sets them apart from mainstream military forces. All British military personnel are obliged to study the terms of the modern Convention and their application.

The original Convention set out articles for the 'Amelioration of the Condition of the Wounded on the Field of Battle (the Red Cross Convention)'. These continue to apply. Among these were the following conditions:

- Ambulances and military hospitals should be acknowledged to be neutral.
- Persons employed in hospitals and ambulances, should benefit from neutrality whilst so employed. Even after occupation by the enemy, they should be allowed to continue to fulfil their duties in the hospital or ambulance in which they serve.
- Military hospitals and ambulances should not be used to support military operations, other than in a medical role.
- Civilians who help the wounded should be respected, and should remain free.
- Wounded or sick soldiers of any nation should be treated. Those who are incapable of serving after their wounds are healed should be sent back to their own country. The others may also be sent back, on condition of not again bearing arms during the continuance of the war. Evacuations, together with the persons under whose directions they take place, should be protected by neutrality.

A practical consequence of the Convention is that all casualties must be treated equally, regardless of rank, status or side in the conflict and on the basis of clinical need and priority alone. The humane treatment of opposing combatants sets the conditions for subsequent peace and reconciliation.

A distinctive and uniform flag should be adopted for hospitals, ambulances and evacuations; it should be accompanied by the national flag. An arm-badge (brassard) should also be allowed for individuals neutralised, but the delivery thereof shall be left to military authority.

The flag and the arm-badge should bear a red cross on a white ground. The Convention should be regulated by the commanders-in-chief of belligerent armies, according to the instructions of their respective governments, and in conformity with the general principles laid down in the Convention.

The initial convention was amended in 1906 and expanded in 1929 to cover the treatment of PoWs. The atrocities of World War II led to its wholesale overhaul in 1949, when the current four conventions were adopted. Two more protocols were added in 1977 to protect victims of 'non-traditional' conflicts - wars of self-determination and civil wars.

British law consolidates the Geneva Convention into the Geneva Conventions act of 1957, and the Geneva Conventions (Amendment) Act of 1995.

Protocol I is a 1977 amendment protocol to the Geneva Conventions relating to the protection of victims of international armed conflicts. It reaffirms the international laws of the original Geneva Conventions of 1949, but clarifies it and adds new provisions in respect of developments in modern international warfare that have taken place since the Second World War.

Protocol II of 1977 relates to the protection of victims of non-international armed conflicts, to provide better protection for victims of internal armed conflicts that take place within the borders of a single country. The scope of these laws is more limited

than the other Geneva Conventions in respect of the sovereign rights and duties of national governments.

The Geneva Conventions and United Nations Personnel (Protocols) Bill of 2008-09 ratified two international agreements to protect humanitarian workers and military medical personnel: the Third Additional Protocol to the Geneva Conventions; and the Optional Protocol to the Convention on the Safety of United Nations and Associated Personnel.

It sanctions the Red Crystal as a new symbol to protect humanitarian personnel in armed conflict where the existing Red Cross or Red Crescent is not acceptable, and it extends the Convention on the Safety of United Nations and Associated Personnel to protect UN workers in two new categories: those delivering humanitarian, political or development assistance in peace-building operations, and those delivering emergency humanitarian protection.

Moral perspectives on dealing with terrorism

Terrorism is the use of weapons by secretive, underground or unconstitutional organisations against civilians and state agencies to achieve disproportionate effects for political, ideological or criminal purposes. The effects sought include indiscriminate death; a disproportionate and heavy-handed response by the authorities, which alienates populations and which further advances the aims of the terrorists; or a diversion of security and economic resources to counter-terrorism strategies which causes social or economic dislocation in the target state.

Terrorists usually have a constituency in which they operate on behalf of legitimate or synthetic grievances. For example, in recent British history, Irish Republican terrorism thrived in Irish nationalist sentiment, the Mao-Mao insurgency of Kenyatta in Kenya in African tribalism in the 1950s, and the Malayan Emergency of 1948-1960.

The British armed forces have thus had an opportunity to refine its counter-terrorism strategy over fifty years. The successful response to terrorism must be fundamentally political rather than military. Military action must set the conditions for political resolution through actions of goodwill and co-operation rather than antagonism towards the civilian population..

Medical Ethics and Military Engagement

All British medical personnel grow up in a liberal democracy and educational system and in a state of many religious persuasions. This creates a diverse range of attitudes and moral positions within the armed forces. Modern military medical doctrine recognises the dilemmas which are felt by many about the ethics and propriety of health professionals involving themselves in war, and in promoting the fighting power of the combatants. In a democracy, an individual health professional may choose whether or not to join the armed forces and thus elect to provide care for the soldiery at risk by war.

The beliefs and practices of military medical professionals represent a complex and sensitive balance between two key moral positions. As set out in British doctrine, the absolutist approach perceives that "war or not, I am a doctor". The utilitarian, or pragmatic approach perceives that "doctor or not, this is war". The armed forces accept both of these positions as entirely legitimate and consistent with military service, and seek to strike an acceptable balance between them on a case-by-case basis.

In order to sustain these moral positions, governments, armed forces and commanders must be seen to respect the primacy of life and the avoidance of unnecessary or indiscriminate killing and maiming. This is important at the strategic level, as the British public will in future rightly question the basis and legitimacy of any military action which is not directly related to national survival.

War nevertheless throws up complex circumstances and ethical dilemmas which cannot all be anticipated. Medical professionals and commanders must thus retain flexibility and adaptability to difficult circumstances, consistent as far as possible with their consciences and moral guidance.

The moral responsibilities of the Military Medical Services

Medical services must work within the military framework, but they also have responsibilities and obligations which may conflict with operational needs. For example, human casualties usually demand the highest priority in the logistic chain, and priorities are determined by the clinical judgement of the medical staff rather than operational need.

Clinical need is underpinned by an ethical, legal and judgmental framework which is in turn based on experience and a common, ingrained professional culture. National and international law applies equally to civilian and military health services, and codes of law - particularly those laid out under the Geneva Convention, to which we will return later in the context of Iraq - set out universal rules for the care of combatants and non-combatants of all sides.

Standards of care in military practice are now governed to a considerable degree by standards and expectations set in civilian practice, in terms of the training and expertise of the personnel providing care, of the environment in which care is delivered, and in the equipment provided for its delivery. Commanders and planners must thus continually balance the sufficiency of resources for each phase of an operation, with the calculated clinical and operational risks for all reasonable eventualities.

The Geneva Convention and Interrogation

There are few issues that have arisen from the events following the initial military achievements of 2003 that are more disturbing than the images and stories from the

US-run detention centres, and the treatment of detainees in the aftermath of war, as recorded in an ICRC Report of February 2004, and as the following press report illustrates.

Julian Borger, writing from Washington in The Guardian on Friday 30th April 2004, was one of many journalists to report upon the use of private contractors in Iraqi jail interrogations highlighted by inquiry into abuse of prisoners.

"Graphic photographs showing the torture and sexual abuse of Iraqi prisoners in a US-run prison outside Baghdad emerged yesterday from a military inquiry which has left six soldiers facing a possible court martial and a general under investigation. The scandal has also brought to light the growing and largely unregulated role of private contractors in the interrogation of detainees.

According to lawyers for some of the soldiers, they claimed to be acting in part under the instruction of mercenary interrogators hired by the Pentagon.

US military investigators discovered the photographs, which include images of a hooded prisoner with wires fixed to his body, and nude inmates piled in a human pyramid.

The pictures, which were obtained by an American TV network, also show a dog attacking a prisoner and other inmates being forced to simulate sex with each other. It is thought the abuses took place in November and December last year.

The pictures from Abu Ghraib prison have shocked the US army. Brigadier General Mark Kimmitt, deputy director of operations for the US military in Iraq, expressed his embarrassment and regret for what had happened. He told the CBS current affairs programme 60 Minutes II: "If we can't hold ourselves up as an example of how to treat people with dignity and respect, we can't ask that other nations do that to our soldiers."

Gen Kimmitt said the investigation began in January when an American soldier reported the abuse and turned over evidence that included photographs. "That soldier said: 'There are some things going on here that I can't live with'."

The inquiry had centred on the 800th Brigade which is based in Uniondale, New York. The US army confirmed that the general in charge of Abu Ghraib jail is facing disciplinary measures and that six low-ranking soldiers have been charged with abusing and sexually humiliating detainees. Lawyers for the soldiers argue they are being made scapegoats for a rogue military prison system in which mercenaries give orders without legal accountability.

A military report into the Abu Ghraib case - parts of which were made available to the Guardian - makes it clear that private contractors were supervising interrogations in the prison, which was notorious for torture and executions under Saddam Hussein. One civilian contractor was accused of raping a young male prisoner but has not been charged because military law has no jurisdiction over him.

Colonel Jill Morgenthaler, speaking for central command, told the Guardian: "One contractor was originally included with six soldiers, accused for his treatment of the prisoners, but we had no jurisdiction over him. It was left up to the contractor on how to deal with him."

Col Morgenthaler said the charges against the six soldiers included "indecent acts, for ordering detainees to publicly masturbate; maltreatment, for non-physical abuse, piling inmates into nude pyramids and taking pictures of them nude; battery, for shoving and stepping on detainees; dereliction of duty; and conspiracy to maltreat detainees".

One of the soldiers, Staff Sgt Chip Frederick is accused of posing in a photograph sitting on top of a detainee, committing an indecent act and with assault for striking detainees - and ordering detainees to strike each other. He told CBS: "We had no support, no training whatsoever. And I kept asking my chain of command for certain things ... like rules and regulations."

His lawyer, Gary Myers, told the Guardian that Sgt Frederick had not had the opportunity to read the Geneva Conventions before being put on guard duty, a task he was not trained to perform.

"It's insanity," said Robert Baer, a former CIA agent, who has examined the case, and is concerned about the private contractors' free-ranging role. "These are rank amateurs and there is no legally binding law on these guys as far as I could tell. Why did they let them in the prison?"

The Pentagon had no comment on the role of contractors at Abu Ghraib, saying that an inquiry was still in progress".

Columnist Simon Jenkins commented forcefully in the The Times: "As for those running the prisons, I do not see them as 'a few bad apples'. They are victims of the shambles to which America and Britain have reduced a country they claim to have liberated. After 14 months there is no room for excuses. Liberation has been followed by a new bondage, that of individual insecurity, public anarchy and, in much of the country, a looming clerical totalitarianism."

Regardless of the crude criminality of the worst of the behaviour of the guard forces in these centres, and of the complete failure of the local higher command functions to stop them in their tracks, the saga of Abu Ghraib has highlighted a particularly serious failing in the duties of those charged with upholding the Geneva Convention.

The issue and circumstances of interrogation and of the transportation of prisoners between countries and interrogation centres, highlighted by the saga of extraordinary rendition, must be resolved for the clarification and protection of service personnel and detainees. Medical officers and medical commanders are not immune from these issues, and indeed hold a particular responsibility for them.

They may be the most authoritative and professionally independent commentators and observers of prisoner abuse. Indeed, this dilemma has been highlighted by civilian doctors whose work brings them close to torture and interrogation centres through organisations such as Amnesty International.

The practice of interrogation provides a fundamental problem for armed forces personnel who would abide to the letter and spirit of the Geneva Convention. For those seeking moral guidance in the complex and emotive circumstances of war, the terms of the Convention and the Rules of War are either absolute or they are worthless. They are not a menu of consumer choice to be rummaged and selected at will by politicians and commanders, but they do require formal review and revision from time to time.

To protect their citizenry from serious military and terrorist threats, personnel in the police, intelligence and armed services of modern states need to obtain information from detainees for a variety of legitimate reasons. Information is a perishable commodity, and its early extraction may be very important for the safety of communities and individuals.

The techniques and advantages of non-violent interrogation are well understood by civilian and military agencies, and by service personnel who have undergone training in resistance to Tactical Questioning and Interrogation. They nevertheless involve the application of a number of tricks of coercion and duress which play on fear, uncertainty and other raw human emotions, where the requested information is not yielded rapidly and voluntarily by the detainee.

Laws will not prevent all misdemeanours, or the perception thereof, against the dignity of detainees by adrenalin-charged youngsters in the heat, stress, strangeness and anger of war. Nevertheless, there are particularly dark areas in the interpretation of the Rules of War in relation to tactical interrogation. Article 13 of Part I of the Geneva Convention of 1949 specifically rules out acts of intimidation against prisoners of war, while Article 17 rules out physical or mental torture - or any other form of coercion - to secure information of any kind.

These provisions create a fundamental dichotomy with current and historic practices of interrogation. The issues must now be illuminated and codified for the future protection of service personnel who are trapped between moral, legal and military imperatives. An informed public can then make a balanced and reflective judgement on the angst which such revelations induce. If any good is to come out of these terrible events, then it must be a fundamental public analysis, education and re-appraisal of the legal basis, purposes and practices of military interrogation, within a framework of regard for human dignity.

Failure of Command and leadership over detainees

The moral obligations upon commanders and medical professionals are highlighted by the following abridged report, written by Robert Fisk and Published on Sunday, January 4, 2004 by The lndependent Newspaper.

“British Soldiers 'Kicked Iraqi Prisoner to Death'

“Eight young Iraqis arrested in Basra were kicked and assaulted by British soldiers, one of them so badly that he died in British custody, according to military and medical records seen by The Independent on Sunday.

Amnesty International has urged its members to protest directly to Tony Blair about the death of Baha Mousa, the son of an Iraqi police colonel, and to demand an impartial and independent investigation into the apparent torture of the Basra prisoners. A major at 33 Field Hospital outside the southern Iraqi city said that one of the survivors suffered "acute renal failure" after "he was assaulted ... and sustained severe bruising to his upper abdomen, right side of chest, left forearms and left upper inner thigh".

British military authorities have offered Mr Mousa's relatives $8,000 (£4,500) in compensation, providing they are not held responsible for his death, but the young hotel receptionist's family plans to take the Ministry of Defense to court. His body was returned to them, covered in bruises and with his nose broken, after he and seven colleagues were arrested by British forces in Basra last September and held in military custody for three days.

One of the other workers has given a frightening account of their ordeal. Baha Mousa, he says, was tied and hooded and then repeatedly kicked and assaulted by British troops, begging all the while to have the hood removed because he could no longer breathe.

A death certificate provided by the British Army states that Baha Mousa had died of "asphyxia". A restricted medical document from a British hospital says a surviving prisoner, Kifah Taha, suffered his injuries "due to a severe beating". The IoS has copies of both documents.

Mr Mousa's violent death left two left two small boys, five-year-old Hassan and three-year-old Hussein orphaned: his 22-year-old wife died of cancer shortly before his detention by British troops.

The last time Lieutenant Colonel Daoud Mousa of the Iraqi police saw his son Baha alive was on 14 September, as British soldiers raided the Basra hotel where the young man worked as a receptionist.

"He was lying with the other seven staff on the marble floor with his hands over his head," Col Mousa says today. "I said to him: 'Don't worry, I've spoken to the British officer and he says you'll be freed in a couple of hours.'" The officer, a second lieutenant, even gave the Iraqi policeman a piece of paper and wrote "2Lt. Mike" on

it, alongside an indecipherable signature and a Basra telephone number. There was no surname.

"Three days later, I was looking at my son's body," the colonel says, sitting on the concrete floor of his slum house in Basra. "The British came to say he had 'died in custody'. His nose was broken, there was blood above his mouth and I could see the bruising of his ribs and thighs. The skin was ripped off his wrists where the handcuffs had been."

No one hides the fact that most if not all the eight men picked up at the Haitham hotel - where British troops had earlier found four weapons in a safe - were brutally treated while in the custody of the Royal Military Police. One of Baha's colleagues, Kifah Taha, suffered acute renal failure after being kicked in the kidneys; a "wound assessment" by Frimley Park Hospital in Britain states bluntly that he suffered "generalized bruising following repeated incidents of assault".

When Col Mousa and another of his sons, Alaa, visited Kifah Taha in a Basra hospital immediately after his release to seek news of Baha, they found the wounded man - in Alaa's words - "only half a human, with terrible bruises from kicking on his ribs and abdomen. He could hardly speak."

But another of Baha's colleagues - who pleaded with The Independent on Sunday not to reveal his name lest he be rearrested by British forces in Basra - gave a chilling account of the treatment the eight men received once they arrived at a British interrogation center in Basra. By a terrible coincidence, the building had formerly been the secret service headquarters of Ali Majid, Saddam's brutal cousin, known as "Chemical Ali" for his gassing of the Kurds of Halabja and later military governor of the Basra region.

"We were put in a big room with our hands tied and with bags over our heads. But I could see through some holes in my hood. Soldiers would come in - ordinary soldiers, not officers, mostly with their heads shaved but in uniform -- and they would kick us, picking on one after the other. They were kick-boxing us in the chest and between the legs and in the back. We were crying and screaming.

"They set on Baha especially, and he kept crying that he couldn't breathe in the hood. He kept asking them to take the bag off and said that he was suffocating. But they laughed at him and kicked him more. One of them said: 'Stop screaming and you'll be able to breathe more easily.' Baha was so scared. Then they increased the kicking on him and he collapsed on the floor. None of us could stand or sit because it was too painful."

But not one of the prisoners says he was questioned about the discovery of the weapons in the hotel. Indeed, the man who hid the two rifles and two pistols in the hotel safe - one of the partners in the hotel, Haitham Vaha - fled the building after the British arrived and is still on the run. His father and another business partner, Ahmed Taha Mousa - no relation to either Kifah Taha or Baha Mousa - are still in

British custody in southern Iraq. At least one of the men beaten by the British says that he would happily hand Haitham to the British forces if he found him.

Amnesty International has demanded an impartial and independent inquiry into Baha's death and the mistreatment of the other Iraqi prisoners, but the Ministry of Defence is attempting to keep its investigation within the Army. Two soldiers originally arrested in connection with Baha's death have since been released - and Baha Mousa's family is outraged. "We are going to sue the British Army in London," his brother Alaa says. "They gave us $3,000 in compensation, then said we could have another $5,000 - but they wouldn't accept responsibility for his murder.

"We reject this money. We want justice. We want the soldiers involved to be punished. How much would a British family receive if their innocent son was arrested by your soldiers and beaten to death?"

The Mousa family were given an international death certificate by the British Army at the Shaibah military medical centre outside Basra. It was dated 21 September, but again carried an indecipherable signature. It stated that Baha's death had been caused by "cardio-respiratory arrest: asphyxia". But the anonymous British officer who signed the document failed to fill in the column marked "due to/as a consequence of". He also failed to fill in the column marked "approximate interval between onset (of asphyxia) and death". More seriously still, the British Army failed to complete the form's request for "Regt. Corps/RAF Command" and "Ship/Unit/RAF Station".

An inquiry was opened into Baha Mousa's death on 18 September by 61 Section of the 3rd Regiment, Royal Military Police's Special Investigation Branch. Captain G Nugent, the officer commanding 61 Section, named a Staff Sergeant Jay as chief investigating officer of case number 64695/03. From the start, the SIB were faced with overwhelming evidence that British soldiers had kicked and beaten the prisoners in their custody.

Major James Ralph, the anesthesia and intensive care consultant at the British Military Hospital's 33 Field Hospital at Shaibah, stated in a letter - a copy of which is in the IoS's possession - that Kifah Taha "was admitted to our facility at 22.40 hours on 16th September. It appears he was assaulted approximately 72 hours ago and sustained severe bruising to his upper abdomen, right side of chest, left forearms and left upper inner thigh." He described Kifah Taha as suffering from "acute renal failure".

Col Daoud Mousa says that his son was deliberately kicked to death by the soldiers because they discovered that his father had persuaded the British officer - "Second Lieutenant Mike" - to arrest several British soldiers who were stealing money from the hotel during the raid. "I saw two of the soldiers at the back of a safe, wrenching it open and stuffing money into their shirts and pockets - Iraqi dinars and foreign money. The officer made one of the men open his shirt and he found the money and the soldier was disarmed. But the military inquiry didn't want to hear about this -

they weren't interested in the theft or why the soldiers who were stealing the money would want to mistreat my son as a result of what I did."

"A sergeant came into our home, his name was Jay, and he sat on our sofa and said: 'I have come to tell you about the death of your brother Baha.' It was like a revolution in our house - there was screaming and shouting and crying. The British said they wanted my father, Daoud, and one of us to come to identify the body. He said a doctor from Britain was coming to examine the body." Alaa described how he later met a "Professor Hill", a pathologist who, he says, later acknowledged that there were "very clear signs of beating on the body" and that two of Baha's ribs had been broken.

Robert Harkins, the British political officer in the city, arranged for the Mousa family to meet Brigadier William Moore, commander of British forces in Basra. The family say that Brig Moore, though he expressed his condolences to Daoud Mousa, refused to allow an Iraqi lawyer to participate in the British inquiry. "He told us that since this had happened inside the British Army, the British Army would conduct the investigation," Alaa says.

The brigadier issued a statement on 3 October, expressing his "regrets" that their son "died while under British jurisdiction" and promising that if the military police concluded that a crime had been committed, "those suspected will be tried ... under the laws of the United Kingdom." The family initially accepted $3,000 of compensation for Baha's death - they say they thought that by offering this, the British were accepting responsibility - but they refused to sign a letter they received last month from a British claims officer called Perkins which offered a further $5,000 as a "final settlement" of the "incident" which would be made "without admission of liability on behalf of the British Contingent of the Coalition Forces in Iraq".

An MoD spokeswoman said yesterday that "as far as I'm aware, as of the beginning of December, the investigation was ongoing - nothing in our records suggests it is not still ongoing". But no charges appear to have been made, no soldiers are currently under arrest and Alaa Mousa and his father Daoud remain infuriated by their treatment.

"Are the soldiers responsible for killing Baha to go unpunished?" Alaa asks. "Why can't we be involved in this? If these men have no punishment, they will do this again.

"We are not saying the British are 'occupiers'. We think you came here to Basra to save us from Saddam. But you should not treat my family like this, just paying us money when you kill Baha and ... then stopping us being involved in finding out what really happened. If you go on like this, your 'big welcome' in Basra will be over."

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This story ran its course through the Courts in the UK, where the Mousa family finally received generous compensation. Concurrently, some of those involved in the case were tried by Court Martial, although the verdicts subsequently came under intense scrutiny.

Steven Morris and Richard Norton-Taylor reported (in this abridged report) in The Guardian on Thursday 15 February 2007 that:

> "The highest-ranking British officer to face a court martial in modern times and three of his men were cleared yesterday of involvement in the systematic abuse of Iraqi civilian prisoners.
>
> Colonel Jorge Mendonca was acquitted of failing to ensure that his men did not mistreat prisoners who were being held at a British detention centre in Basra, southern Iraq. His three colleagues were found not guilty of taking part in the beating of the prisoners, violence which culminated in the death of hotel worker Baha Mousa, who was attacked over a 36-hour period while handcuffed and hooded and suffered 93 separate injuries.
>
> A fifth man, Corporal Donald Payne, was cleared of the manslaughter of Mr Mousa. Corp Payne has admitted inhuman treatment of the detainees, a war crime, and will be sentenced at a later date. The verdicts in favour of the five men - on the 80th day of a case estimated to have cost more than £20m so far and which is still not over - provoked anger and dismay.
>
> There is fury from some quarters of the military that they were put before the court martial in the first place.
>
> Those who represent Mr Mousa's family and the Iraqi detainees, who were un doubtedly subjected to terrible abuse, are also understood to be angry at the verdicts - but will not comment until the case is completely over.
>
> The court martial, being held at Bulford in Wiltshire, has heard how in September 2003, 10 civilians were arrested by members of the QLR during a raid at a hotel in Basra, southern Iraq. Handcuffed, hooded with sacks and deprived of sleep, they were forced to maintain a "stress position" - backs to the wall, knees bent and arms outstretched. If they dropped their arms they were punished with beatings.
>
> Payne, who was in charge of the guarding of the prisoners, was said to be at the centre of the ill treatment. At the start of the trial he made history when he became the first British soldier to admit a war crime. But he denied the manslaughter of Mr Mousa.
>
> Two other soldiers were also accused of inhumanly treating prisoners - a war crime. A third was said to have kicked and punched an Iraqi prisoner. But the case against them centred on the claims of a colleague who was attacked as a "fantasist" in court.
>
> The case against Col Mendonca was that he should have known what was going on and ought to have acted to stop it. But the judge, Mr Justice McKinnon, yesterday

directed the board hearing the courts martial to find Col Mendonca, Kingsman Fallon, Lance Corp Crowcroft and Sgt Stacey not guilty. He directed them to acquit Payne of manslaughter and of intending to pervert the course of justice. Mr Justice McKinnon told the board there was "no evidence" fit to put before them on which they could convict the men.

The decision to clear the soldiers is certain to lead to an inquest in the army prosecution authority, already bruised by a series of previous failures and deep resentment among senior army commanders.

Over the past two years a number of courts martial, including that of seven paratroopers accused of the unlawful killing of an Iraqi, have collapsed".

The subsequent Baha Mousa Inquiry

In a written statement given in Parliament on 14 May 2008 the Secretary of State for Defence announced that there would be a public inquiry into the death of Baha Mousa, an Iraqi civilian who died in Iraq in September 2003. He described that death as a disturbing incident: not just because a man died in the custody of British soldiers but because an investigation by the Royal Military Police and a subsequent Court Martial highlighted further important questions that needed to be answered.

The Inquiry was established under the Inquiries Act 2005 and was chaired by the Right Honourable Sir William Gage, a retired Court of Appeal judge. His terms of reference were:

> *"To investigate and report on the circumstances surrounding the death of Baha Mousa and the treatment of those detained with him, taking account of the investigations which have already taken place, in particular where responsibility lay for approving the practice of conditioning detainees by any members of the 1st Battalion, The Queen's Lancashire Regiment in Iraq in 2003, and to make recommendations."*

The Inquiry closed on 14th October 2009. In July 2008 the Ministry of Defence agreed to pay £2.83m to those who were mistreated in Basra. The payout followed "mediation" with the Iraqis' lawyers. The money was divided between eight surviving men, Mr Mousa's family and the brother of a 10th man who was mistreated but later died in an unrelated incident.

The final report of the Inquiry was not available at the time of writing this chapter. However, the following article from the Guardian of Tuesday 16th March 2010 illustrates clearly the moral dilemmas and challenges faced by those who were witness to mistreatment of internees in Iraq.

Richard Norton Taylor wrote that:

Baha Mousa inquiry: Eight or more civilians died in British custody

Legal chief tells of killings and torture in early days of invasion

"Eight or more civilians died in the custody of British troops in the weeks after the invasion of Iraq, despite frequent warnings by the army's most senior legal adviser there about unlawful treatment of detainees, an inquiry has heard.

In devastating evidence to an official inquiry, Lieutenant Colonel Nicholas Mercer described the way Iraqi detainees were intimidated and hooded by British soldiers as "repulsive". He said that 10 days after the invasion in March 2003 he saw 20 or 30 detainees lined up with sandbags on their heads.

He was shocked, he said, adding that it was "a bit like seeing pictures of Guantánamo Bay for the first time". Mercer said he had had a "massive row" with the commander of the Queens Dragoon Guards about the army's legal obligations under the Geneva conventions and the European Convention on Human Rights. He had walked out of a meeting between British officials and the International Committee of the Red Cross after being told by a "political adviser" to keep his mouth shut, he added.

Mercer's repeated protests about the unlawful treatment of Iraqis in British custody was so unwelcome within the Ministry of Defence that his boss, Martin Hemming, head of its legal service, threatened to report him to the Law Society, he said.

Mercer, who is still serving, was giving evidence into the death of Baha Mousa. This was months after Mercer had persistently warned senior army officers — including General Robin Brims, commander of British troops in southern Iraq — that detainees were being subjected to unlawful treatment. He revealed that he and Brims later refused to sign statements pre-prepared by Hemming as evidence to the Commons human rights committee.

He said the abuse of Iraqi prisoners might have been prevented if a British judge had been appointed to oversee the handling of detainees, a proposal that he said was blocked by Lord Goldsmith, the attorney general.

Goldsmith, who has said he never authorised the use of five banned techniques, including hooding, may be asked to give evidence to the inquiry with the former defence secretary Geoff Hoon, and former armed forces minister, Adam Ingram.

In his evidence, Mercer described how in May 2003, two months after first issuing his warnings, military police investigators told him about two deaths in custody. They added that they thought there were "five or six more deaths that required investigation".

Speaking later outside the inquiry, Phil Shiner of Public Interest Lawyers, which represents Iraqi detainees, said there were 47 "unresolved cases" involving the mistreatment of civilians by British troops. "There are so many cases, that is why we

need a single inquiry [to cover them all]", he said.

Mercer recalled seeing one prisoner, Faisal Sadoon, held in "appalling conditions" in a container "with a barbed wire door in 40 degrees-plus of heat". He was told of prisoners appearing bruised and hooded at detention centres. He recalled seeing "a generator running outside the interrogation tent, which seemed to me to create a culture of intimidation and possibly with the aim of muffling any noise".

He warned that "in no circumstances should [detainees'] faces be covered as this might impair breathing" "I felt I was banging my head against a brick wall. We found ourselves in a constant legal battle," he told the inquiry.

He regarded hooding, banned in 1972, as repulsive. "It amounts to violence and intimidation and it degrades the individual so I don't like it in any circumstance," he said.

He said he felt vindicated when the Red Cross began to express concern in May 2003. British soldiers were handed cards before the invasion saying that civilians should be treated "humanely". But there was no training in interrogation techniques, Mercer said.

His warnings, and those of the Red Cross, reached ministers and top military commanders in London. But hooding was not banned until after Mousa's death more than six months later, the inquiry heard.

"The issue of prisoners had very low priority and was treated more as an inconvenience than an obligation under international law," Mercer said in a written statement to the inquiry. It was partly a question of resources and lack of planning, he said.

But he added that it was also about "proper education, training, and the moral compass". He said there was a "classic dilemma" in the army. "You're in the command structure and there's always pressure to do one thing, when legally you may believe something else".

An MoD spokesman said: "All deaths in British custody in Iraq have been thoroughly investigated. Having committed to a public inquiry, it would be wrong to comment upon any evidence presented to it."

He said the ministry will have an opportunity to respond to the report written by the chairman, Sir William Gage, at the end of proceedings".

Madeleine Bunting wrote in The Guardian on Friday 20 April 2007 that:

Other Duties of Care

"A massive asylum crisis has developed in the Middle East, but the MoD will not even help Iraqis who served the British forces as interpreters.

The war on terror has brought a high price. There's a long roll call of lost liberties, and compromised or broken international law. Britain's global reputation is as badly damaged as that of the US by this war. Despite attempts to patch up the damage with action on African development, this government's recent claim to values such as fair play as quintessentially British is horrifying hypocrisy.

Two stories this week deal yet another blow to Britain's record. On the same day as a Human Rights Watch singled out the UK for its singular lack of support for the massive Iraqi refugee crisis, there was a disturbing story of how three Iraqis who have served the British forces as interpreters and had fled to Syria were not allowed even to set foot inside the British embassy there to claim asylum.

Two million Iraqis have fled to neighbouring countries to seek asylum from the appalling violence in the country; there are estimated to be another two million displaced internally within Iraq.

This massive asylum crisis is a tragedy as Iraq's neighbours now close the borders and refuse to issue visas. Saudi Arabia is even building a high-tech wall at the cost of $7bn to keep Iraqis from fleeing. Yet as Human Rights Watch points out, the US and the UK bear particular responsibility in dealing with this flood of refugees, given their role in triggering Iraq's instability and violence. Belatedly, the US has agreed to take an allocation of 7,000 Iraqi refugees this year - a tiny figure but still significantly more than anything the British are offering to do.

Astonishingly, last year, Britain returned a plane of 32 failed asylum seekers to Iraq despite criticism from Amnesty International; in 2005 another plane of failed asylum seekers was similarly returned.

But this ruthless denial of all responsibility beggars belief in the cases of Loay Mohammed Al Tahar, Issa Jafer Al-Saed and Akram Moaiy'd Kalaf.

All three worked with British forces in Basra on the frontline and saw colleagues killed and kidnapped; their lives were in constant danger as they returned to the civilian areas where they lived with their families while their British colleagues lived in secure compounds. Finally, after death threats they fled the country but when they arrived in Syria, they were not allowed to claim asylum in Britain - despite showing their papers proving they had worked for British forces, they were not even allowed into the UK embassy compound.

It's believed that there are a total of about 50 interpreters who have worked for the British stranded in Damascus. They have been hounded out of Basra by militia but they are fast running out of money and without assistance from the British, they will have no option but to take the risk of returning to Iraq.

When questioned, the UK Ministry of Defence simply replied that "its contractual obligations" ended when a civilian leaves its employment. Such harsh self-interest even towards allies does not add up to an effective "hearts and minds strategy"; it reveals a ruthless denial of responsibility for the chaos British foreign policy has

created in the region.

The sense of anger and horror at the Iraq war has long since gone beyond words - how can one adequately articulate outrage? - but these stories about Britain's refusal to accept the consequences of its own policies in terms of refugees desperate to flee Iraq, adds yet more detail to a shaming national record.

Moral considerations in the conduct and strategy of *Operation Telic*

Each military operation is unique. It brings its own lessons and experiences, not all of which can be generalised for future use. It is an old adage that armies learn too well the lessons of the last war, and this may be the case with Operation Iraqi Freedom. In military terms, this drew on the experience of Operation Desert Storm to achieve military dominance through the multiple dimensions of land, sea, air, space, covert, special and intelligence operations, and the aggressive application of manoeuvrist tactics to overwhelm the conventional opposition Iraqi armed forces.

The operations vindicated in technical terms the plans and war-gaming behind the overall military strategy. They showed how a combination of military force and psychological operations could so undermine the material defence of the Iraqi regime that defensible positions were abandoned, strategic bridges remained intact from demolition, and the complexities of street fighting in Baghdad and other urban centres did not materialise during the initial campaign.

Nevertheless, there was a profound difference between Operation Desert Storm in 1991 - which was conducted in open desert and largely outside population areas - and Operation Iraqi Freedom in 2003, which was fundamentally a 'hearts and minds' operation in densely populated areas. We must ask to what extent the explosive strategy of overwhelming firepower (as used on such operations as the 'thunder runs' of armoured columns into Baghdad), contributed to stiffen the resentment and the resistance of ordinary Iraqi citizens to the occupying powers; and to what extent the physical destruction and subsequent dismantling of the Iraqi armed forces contributed to this situation.

Was the coalition military strategy matched by a sufficiently sophisticated political post war reconstitution strategy?

What contribution could a better resourced military medical operation have made to the early resolution of conflict on the streets, and to what extent did moral failings in the individual incidents which received such wide media coverage contribute to the difficulties in securing the peace?

In the years following the end of Operations, we will need to give very careful and critical consideration to these issues.

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Chapter 32 Resources

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Appendix to Chapter 32

Report of the International Committee of The Red Cross (ICRC) on the Treatment by the Coalition Forces of Prisoners of War and Other Protected Persons by the Geneva Conventions in Iraq During Arrest, Internment and Interrogation

February 2004

Source: globalsecurity.org/military/library/report/2004/icrc_report_iraq_feb2004.htm



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Executive Summary

In Its "Report an the Treatment by the Coalition Forces of Prisoners of War and other protected persons in Iraq", the International Committee of the Red Cross (ICRC) draws the attention of the Coalition Forces (hereafter called "the CF") to a number of serious violations of International Humanitarian Law. These violations have been documented and sometimes observed while visiting prisoners of war, civilian internees and other protected persons by the Geneva Conventions (hereafter called persons deprived of their liberty when their status is not specifically mentioned) in Iraq between March and November 2003. During its visits to places of internment of the CF, the ICRC collected allegations during private interviews with persons deprived of their liberty relating to the treatment by the CF of protected persons during their capture, arrest, transfer, internment and interrogation.

The main violations, which are described in the ICRC report and presented confidentially to the CF, include:

- Brutality against protected persons upon capture and initial custody, sometimes causing death or serious injury
- Absence of notification of arrest of persons deprived of their liberty to their families rousing distress among persons deprived of their liberty and their families
- Physical or psychological coercion during interrogation to secure information
- Prolonged solitary confinement in cells devoid of daylight
- Excessive and disproportionate use of force against persons deprived of their liberty resulting in death or injury during their period of internment

Serious problems of conduct by the CF affecting persons deprived of their liberty are also presented in the report:

- Seizure and confiscation of private belongings of persons deprived of their liberty
- Exposure of persons deprived of their liberty to dangerous tasks
- Holding persons deprived of their liberty in dangerous places where they are not protected from shelling

According to allegations collected by ICRC delegates during private interviews with persons deprived of their liberty, ill-treatment during capture was frequent. While certain circumstances might require defensive precautions and the use of force on the part of battle group units, the ICRC collected allegations of ill-treatment following capture which took place in Baghdad, Basrah, Ramadi and Tikrit, indicating a consistent pattern with respect to times and places of brutal behavior during arrest. The repetition of such behavior by CF appeared to go beyond the reasonable, legitimate and proportional use of force required to apprehend suspects or restrain persons resisting arrest or capture, and seemed to repeat a usual modus operandi by certain CF battle group units.

According to the allegations collected by the ICRC, ill-treatment during interrogation was not systematic, except with regard to persons arrested in connection with suspected security offences or deemed to have an "intelligence" value. In these cases, persons deprived of their liberty under supervision of the Military Intelligence were at high risk of being subjected to a variety of harsh treatments ranging from insults,

threats and humiliations to both physical and psychological coercion, which in some cases was tantamount to torture, in order to force cooperation with their interrogators.

The ICRC also started to document what appeared to be widespread abuse of power and ill-treatment by the Iraqi police which is under the responsibility of the Occupying Powers, including threats to hand over persons in their custody to the CF so as to extort money from them, effective hand over of such persons to the custody of the CF on allegedly fake accusations, or invoking CF orders or instructions to mistreat persons deprived of their liberty during interrogation.

In the case of the "High Value Detainees" held in Baghdad International Airport, their continued internment, several months after their arrest, in strict solitary confinement in cells devoid of sunlight for nearly 23 hours a day constituted a serious violation of the Third and Fourth Geneva Conventions.

The ICRC was also concerned about the excessive and disproportionate use of force by some detaining authorities against persons deprived of their liberty involved during their internment during periods of unrest or escape attempts that caused death and serious injuries. The use of firearms against persons deprived of their liberty in circumstances where methods without using firearms could have yielded the same result could amount to a serious violation of International Humanitarian Law. The ICRC reviewed a number of incidents of shootings of persons deprived of their liberty with live bullets, which have resulted in deaths or injuries during periods of unrest related to conditions of internment or escape attempts. Investigations initiated by the CF into these incidents concluded that the use of firearms against persons deprived of their liberty was legitimate. However, non-lethal measures could have been used to obtain the same results and quell the demonstrations, or neutralize persons deprived of their liberty trying to escape.

Since the beginning of the conflict, the ICRC has regularly brought its concerns to the attention of the CF. The observations in the present report are consistent with those made earlier on several occasions orally and in writing to the CF throughout 2003. In spite of some improvements in the material conditions of internment, allegations of ill-treatment perpetrated by members of the CF against persons deprived of their liberty continued to be collected by the ICRC and thus suggested that the use of ill-treatment against persons deprived of their liberty went beyond exceptional cases and might be considered as a practice tolerated by the CF.

The ICRC report does not aim to be exhaustive with regard to breaches of International Humanitarian Law by the CF in Iraq. Rather, it illustrates priority areas that warrant attention and corrective action on the part of CF, in compliance with their International Humanitarian Law obligations.

Consequently the ICRC asks the authorities of the CF in Iraq:

- to respect at all times the human dignity, physical integrity and cultural sensitivity of the persons deprived of their liberty held under their control
- to set up a system of notifications of arrest to ensure quick and accurate transmission of information to the families of persons deprived of their liberty
- to prevent all forms of ill-treatment, moral or physical coercion of persons deprived of their liberty in relation to Interrogation

- to set up an internment regime which ensures the respect of the psychological integrity and human dignity of the persons deprived of their liberty
- to ensure that all persons deprived of their liberty are allowed sufficient time every day outside in the sunlight, and that they are allowed to move and exercise in the outside yard
- to define and apply regulations and sanctions compatible with International Humanitarian Law and to ensure that persons deprived of their liberty are fully informed upon arrival about such regulations and sanctions
- to thoroughly investigate violations of International Humanitarian Law in order to determine responsibilities and prosecute those found responsible for violations of International Humanitarian Law
- to ensure that battle group units arresting Individuals and staff in charge of internment facilities receive adequate training enabling them to operate in a proper manner and fulfill their responsibilities as arresting authority without resorting to ill-treatment or making excessive use of force.

Introduction

1. The international Committee of the Red Cross (ICRC) is mandated by the High Contracting Parties to the Geneva Conventions to monitor the full application of and respect for the Third and Fourth Geneva Conventions regarding the treatment of persons deprived of their liberty. The ICRC reminds the High Contracting Parties concerned, usually in a confidential way, of their humanitarian obligations under all four Geneva Conventions, in particular the Third and Fourth Geneva Conventions as far as the treatment of persons deprived of their liberty is concerned and under Protocol I of 1977 additional to the Geneva Conventions, confirmed and reaffirmed rules of customary law and universally acknowledged principles of humanity.

   The information contained in this report is based an allegations collected by the ICRC in private interviews with persons deprived of their liberty during its visits to places of internment of the Coalition Forces (CF) between March and November 2003. The allegations have been thoroughly revised in order to present this report, as factually as possible. The report is also based on other accounts given either by fellow persons deprived of their liberty inside internment facilities or by family members. During this period, the ICRC conducted some 29 visits in 14 internment facilities in the central and southern parts of the country. The testimonies were collected in Camp Cropper (Core Holding Area, Military Intelligence section, "High Value Detainees" section); Al Salihlyye, Tasferat and AI Russafa prisons; Abu Ghraib Correctional Facility (including Camp Vigilant and the "Military` Intelligence" section); Umm Qasr and Camp Bucca, as well as several temporary internment places such as Tallil Trans-shipment Place, Camp Condor, Amarah Camp and the Field Hospital in Shaibah.

   The ICRC conditions for visits to persons deprived of their liberty in internment facilities are common for all countries where the organization operates. They can be expressed as follows:

   - The ICRC must have access to all persons deprived of their liberty who come

within its mandate in their place of internment

- The ICRC must be able to talk freely and in private with the persons deprived of their liberty of its choice and to register their identity
- The ICRC must be authorized to repeat its visits to the persons deprived of their liberty
- The ICRC must be notified of arrests, transfers and releases by the detaining authorities

Each visit to persons deprived of their liberty is carried out in accordance with ICRC's working procedures expressed as follows:

- At the beginning of each visit, the ICRC delegates speak with the detaining authorities to present the ICRC's mandate and the purpose of the visit as well as to obtain general information on internment conditions, total of interned population and movements of persons deprived of their liberty (release, arrest, transfer, death, hospitalization).
- The ICRC delegates, accompanied by the detaining authorities tour the internment premises.
- The ICRC delegates hold private interviews with persons of their choice who are deprived of their liberty, with no time limit in a place freely chosen and if necessary register them.
- At the end of each visit, the delegates hold a final talk with the detaining authorities to inform them about the ICRC's findings and recommendations.

2. The aim of the report is to present information collected by the ICRC concerning the treatment of prisoners of war by the CF, civilian internees and other protected persons deprived of their liberty during the process of arrest, transfer, internment and interrogation.

3. The main places of internment where mistreatment allegedly took place included battle group unit stations; the military intelligence sections of Camp Cropper and Abu Ghraib Correctional Facility; Al-Baghdadi; Heat Base and Habbania Camp in Ramadi governorate; Tikrit holding area (former Saddam Hussein Islamic School); a former train station in Al-Khaim, near the Syrian border, turned into a military base; the Ministry of Defense and Presidential Palace in Baghdad, the former mukhabarat office in Basrah, as well as several Iraqi police stations in Baghdad.

4. In most cases, the allegations of ill-treatment referred to acts that occurred prior to the internment of persons deprived of their liberty in regular internment facilities, while they were in the custody of arresting authorities or military and civilian intelligence personnel. When persons deprived of their liberty were transferred toregular internment facilities, such as those administered by the military police, where the behavior of guards was strictly supervised, ill-treatment of the type described in this report usually ceased. In these places, violations of provisions of International Humanitarian Law relating to the treatment of persons deprived of their liberty were a result of the generally poor standard of internment conditions (long term Internment in unsuitable temporary facilities) or of the use of what appeared to be excessive force to quell unrest or to prevent attempted escapes.

1. Treatment During Arrest

5. Protected persons interviewed by ICRC delegates have described a fairly consistent pattern with respect to times and places of brutality by members of the CF arresting them.

6. Arrests as described in these allegations tended to follow a pattern. Arresting authorities entered houses usually after dark, breaking down doors, waking up residents roughly, yelling orders, forcing family members into tins room under military guard while searching the rest of the house and further breaking doors, cabinets and other property. They arrested suspects, tying their hands in the back with flexi-cuffs, hooding them, and taking them away. Sometimes they arrested all adult males present in a house, including elderly, handicapped or sick people. Treatment often included pushing people around, insulting, taking aim with rifles, punching and kicking and striking with rifles. Individuals were often led away in whatever they happened to be wearing at the time of arrest - sometimes in pyjamas or underwear - and were denied the opportunity to gather a few essential belongings, such as clothing, hygiene items, medicine or eyeglasses. Those who surrendered with a suitcase often had their belongings confiscated. In many cases personal belongings were seized during the arrest, with no receipt being issued *(see section 6, below)*.

7. Certain CF military intelligence officers told the ICRC that in their estimate between 70% and 90% of the persons deprived of their liberty in Iraq had been arrested by mistake. They also attributed the brutality of some arrests to the lack of proper supervision of battle group units.

8. *In accordance with provisions of International humanitarian Law which oblige the CF to treat prisoners of war and other protected persons humanely and to protect them against acts of violence, threats thereof, intimidation and insults (Art. 13 14,17, 87, Third Geneva Convention; Art. 5, 27, 31,32, 33 Fourth Geneva Convention); the ICRC asks the authorities of CF to respect at all times the human dignity. physical integrity and cultural sensitivity of the persons deprived of their liberty held under their control. The ICRC also asks the authorities of CF to ensure that battle group units arresting individuals receive adequate training enabling them to operate in a proper manner and fulfill their responsibilities without resorting to brutality or using excessive force.*

1.1 Notification to families and Information for arrestees

9. In almost all instances documented by the ICRC, arresting authorities provided no information about who they were, where their base was located, nor did they explain the cause of arrest. Similarly. they rarely informed the arrestee or his family where he was being taken and for how long, resulting in the de facto "disappearance of the arrestee for weeks or even months until contact was finally made.

10. When arrests were made in the streets, along the roads, or at checkpoints, families were not informed about what had happened to the arrestees until they managed to trace them or received news about them through persons who had been deprived of their liberty but were later released, visiting family members of fellow persons deprived of their liberty, or ICRC Red Cross Messages. In the absence of a system to notify the families of the whereabouts of their arrested

relatives, many were left without news for months, often fearing that their relatives unaccounted for were dead.

11, Nine months into the present conflict, there is still no satisfactorily functioning system of notification to the families of captured or arrested persons, even though hundreds of arrests continue to be carried out every week. While the main places of internment (Camp Bucca and Abu Ghraib) are part of a centralized notification system through the National Information Bureau (and their data are forwarded electronically to the ICRC on a regular basis), other places of internment such as Mossul or Tikrit are not. Notifications from those places therefore depend solely on capture or internment cards as stipulated by the Third and Fourth Geneva Conventions.

Since March 2003 capture cards have often been filled out carelessly, resulting in unnecessary delays of several weeks or months before families were notified, and sometimes resulting in no ntification at all. It is the responsibility of the detaining authority to see to it that each capture or internment card is carefully filled out so that the ICRC is in a position to effectively deliver them to families. The current system of General Information Centers (GIC), set up under the responsibility of the Humanitarian Assistance Coordination Centers (HACC), while an improvement, remains inadequate, as families outside the main towns do not have access to them, lists made available are not complete and often outdated and do not reflect the frequent transfers from one place of internment to another. In the absence of a better alternative, the ICRC's delivery of accurate capture cards remains the most reliable, prompt and effective system to notify the families, provided cards are properly filled out.

The ICRC has raised this issue repeatedly with the detaining authorities since March 2003, including at the highest level of the CF in August 2003. Despite some improvement, hundreds of families have had to wait anxiously for weeks and sometimes months before learning of the whereabouts of their arrested family members. Many families travel for weeks throughout the country from one place of internment to another in search of their relatives and often some to learn about their whereabouts informally (through recessed detainees) or when the person deprived of his liberty is released and returns home.

12. Similarly, transfers, cases of sickness at the time of arrest, deaths, escapes or repatriations continue to be notified only insufficiently or are not notified at all by the CF to the families in spite of their obligation to do so under International Humanitarian Law.

13. *In accordance with provisions of both the Third Geneva Convention (Art. 70, 122, 123) and the Fourth Geneva Convention (Art. 108, 136, 137, 138, 140), the ICRC reminds the CF of their treaty-based obligation to notify promptly the families of all prisoners of war and other protected persons captured or arrested by them. Within one week, prisoners of war and civilian internees must be allowed to fill out capture or internment cards mentioning at the very least their capture/arrest, address (current place of detention/internment) and state of health. These cards must be forwarded as rapidly as possible and may not be delayed in any manner. As long as there is no centralized system of notifications of arrest set up by CF, it is of paramount importance that these capture cards he filled out property, so as to allow the ICRC to transmit them rapidly to the concerned families.*

14. *The same obligation of notification to families of captured or arrested persons applies to transfers, cases of sickness, deaths, escapes and repatriation and identification of the dead of the adverse party. All these events must be notified to the ICRC with the full details of the persons concerned, so as to allow the ICRC to inform the concerned families (Art. 120. 121, 122, 123 Third Geneva Convention; Art. 129, 130, 136, 137, 140 Fourth Geneva Convention).*

2. Treatment During Transfer And Initial Custody

15. the ICRC collected several allegations indicating that following arrest, persons deprived of their liberty were ill-treated, sometimes during transfer from their place of arrest to their initial internment facility. This ill-treatment would normally stop by the time the persons reached a regular internment facility, such as Camp Cropper, Camp Bucca or Abu Ghraib. The ICRC also collected one allegation of death resulting from harsh conditions of interment and ill-treatment during initial custody.

13. One allegation collected by the ICRC concerned the arrest of nine men by the CF in a hotel in Basrah on 13 September 2003. Following their arrest, the nine men were made to kneel, face and hands against the ground, as if in a prayer position. The soldiers stamped on the back of the neck of those raising their head. They confiscated their money without issuing a receipt. The suspects were taken to Al-Hakimiya, a former office previously used by the *mukhabarat* in Basrah and then beaten severely by CF personnel. One of the arrestees died following the ill-treatment (################ aged 28, married, father of two children). Prior to his death, his co-arrestees heard him screaming and asking for assistance.

    The issued "International Death Certificate" mentioned "Cardio-respiratory arrest - asphyxia" as the condition directly leading to the death. As to the cause of that condition. it mentioned "Unknown" and "Refer to the coroner". The certificate did not bear any other mention. An eyewitness' description of the body given to the ICRC mentioned a broken nose, several broken ribs and skin lesions on the face consistent with beatings. The father of the victim was informed of his death on 18 September, and was invited to identify the body of his son. On 3 October, the commander of the CF in Basrah presented to him his condolences and informed him that an investigation had been launched and that those responsible would be punished. Two other persons deprived of their liberty were hospitalised with severe injuries. Similarly, a week later, an ICRC medical doctor examined them in the hospital and observed large haematomas with dried scabs on the abdomen, buttocks, sides, thigh, wrists, nose and forehead consistent with their accounts of beatings received.

17. During a visit of the ICRC in Camp Bucca on 22 September 2003, a 61-year old person deprived of his liberty alleged that he had been tied, hooded and forced to sit on the hot surface of what he surmised to be the engine of a vehicle, which had caused severe burns to his buttocks. The victim had lost consciousness. The ICRC observed large crusted lesions consistent with his allegation.

18. The ICRC examined another person deprived of his liberty in the "High Value Detainees" Section in October 2003 who had been subjected to a similar treatment.

He had been hooded, handcuffed in the back, and made to lie face down, on a hot surface during transportation. This had caused severe skin burns that required three months hospitalization. At the time of the interview he had been recently discharged from hospital. He had to undergo several skin grafts, the amputation of his right index finger, and suffered the permanent loss of the use of his left fifth finger secondary to burn-induced skin retraction. He also suffered extensive burns over the abdomen, anterior aspects of the lower extremities, the palm of his right hand and the sole of his left foot. The ICRC recommended to the CF that the case be investigated to determine the cause and circumstances of the injuries and the authority responsible for the ill-treatment. At the time of writing the results of the report were still pending.

19. During transportation following arrest, persons deprived of their liberty were almost always hooded and tightly restrained with flexi-cuffs. They were occasionally

[MISSING SECTION]

haematoma and linear marks compatible with repeated whipping or beating. He had wrist marks compatible with tight flexi-cuffs.

The ICRC also collected allegations of deaths as a result of harsh internment conditions, ill-treatment, lack of medical attention, or the combination thereof, notably in Tikrit holding area formerly known as the Saddam Hussein Islamic School.

22. Some CF military intelligence officers told the ICRC that the widespread ill-treatment of persons deprived of their liberty during arrest, initial internment and "tactical questioning" was due to a lack of military police on the ground to supervise and control the behavior and activities of the battle groups units, and the lack of experience of intelligence officers in charge of the "tactical questioning".

23. *In accordance with provisions of International Humanitarian Law which oblige the CF to treat prisoners of war and other protected persons humanely and to protect them against acts of violence, threats thereof, intimidation and insults (Art. 13, 14,17, 87, Third Geneva Convention; Articles 5, 27, 31, 32, 33 Fourth Geneva Convention), the ICRC asks the authorities of the CF to respect at all times the human dignity, physical integrity and cultural sensitivity at the persons deprived of their liberty held in Iraq under their control.*

The ICRC also asks the authorities of the CF to ensure that battle group units transferring and/or holding individuals receive adequate training enabling them to operate in a proper manner and meet their responsibilities without resorting to brutality or rising excessive force.

3. Treatment During Interrogation

24. Arrests were usually followed by temporary internment at battle group level or at initial interrogation facilities managed by military intelligence personnel, but accessible to other intelligence personnel (especially in the case of security detainees). The ill treatment by the CF personnel during interrogation was not

systematic, except with regard to persons arrested in connection with suspected security offences or deemed to have an "intelligence" value. In those cases, persons deprived of their liberty supervised by the military intelligence were subjected to a variety of ill-treatments ranging from insults and humiliation to both physical and psychological coercion that in some cases might amount to torture in order to force them to cooperate with their interrogators. In certain cases, such as in Abu Ghraib military intelligence section, methods of physical and psychological coercion used by the interrogators appeared to be part of the standard operating procedures by military intelligence personnel to obtain confessions and extract information. Several military intelligence officers confirmed to the ICRC that it was part of the military intelligence process to hold a person deprived of his liberty naked in a completely dark and empty cell for a prolonged period to use inhumane and degrading treatment, including physical and psychological coercion, against persons deprived of their liberty to secure their cooperation.

3.1 Methods of ill-treatment

25. The methods of ill-treatment most frequently alleged during interrogation included

- Hooding, used to prevent people from seeing and to disorient them, and also to prevent them from breathing freely. One or sometimes two bags, sometimes with an elastic blindfold over the eyes which, when slipped down, further impeded proper breathing. Hooding was sometimes used in conjunction with beatings thus increasing anxiety as to when blows would came. The practice of hooding also allowed the interrogators to remain anonymous and thus to act with impunity. Hooding could last for periods from a few hours to up to 2 to 4 consecutive days, during which hoods were lifted only far drinking, eating or going to the toilets;
- Handcuffing with flexi-cuffs, which were sometimes made so tight and used for extended periods that they caused skin lesions and long term after effects on the hands (nerve damage), as observed by the ICRC;
- Beatings with hard objects (including pistols and rifles), slapping, punching, kicking with knees or feet on various parts of the body (legs, sides, lower back, groin);
- Pressing the face into the ground with boots;
- Threats (of ill-treatment, reprisals against family members, imminent execution or transfer to Guantanamo);
- Being stripped naked for several days while held in solitary confinement in an empty and completely dark cell that included a latrine.
- Being held in solitary confinement combined with threats (to intern the individual indefinitely, to arrest other family members, to transfer the individual to Guantanamo), insufficient sleep, food or water deprivation, minimal access to showers (twice a week), denial of access to open air and prohibition of contacts with other persons deprived of their liberty;
- Being paraded naked outside cells in front of other persons deprived of their liberty, and guards, sometimes hooded or with women's underwear over the head;

- Acts of humiliation such as being made to stand naked against the wall of the cell with arms raised or with women's underwear over the head for prolonged periods while being laughed at by guards, including female guards, and sometimes photographed in this position;
- Being attached repeatedly aver several days, for several hours each time, with handcuffs to the bars of their cell door in humiliating (i.e. naked or in underwear) and/or uncomfortable position causing physical pain;
- Exposure while hooded to loud noise or music, prolonged exposure while hooded to the sun over several hours, including during the hottest time of the day when temperatures could reach 50 degrees Celsius (122 degrees Fahrenheit) or higher;
- Being forced to remain for prolonged periods in stress positions such as squatting or standing with or without the arms lifted.

26. These methods of physical and psychological coercion were used by the military intelligence in a systematic way to gain confessions and extract information or other forms of co-operation from persons who had been arrested in connection with suspected security offences or deemed to have an "intelligence value".

3.2 Military intelligence section, "Abu Ghraib Correctional Facility"

27. In mid October 2003, the ICRC visited persons deprived of their liberty undergoing interrogation by military intelligence officers in Unit 1A, the "Isolation section" of "Abu Ghraib" Correctional Facility. Most of these persons deprived of their liberty had been arrested in early October. During the visit, ICRC delegates directly witnessed and documented a variety of methods used to secure the cooperation of the persons deprived of their liberty with their interrogator. In particular they witnessed the practice of keeping persons deprived of their liberty completely naked in totally empty concrete cells and in total darkness, allegedly for several consecutive days. Upon witnessing such cases, the ICRC interrupted its visits and requested an explanation from the authorities. The military intelligence officer in charge of the interrogation explained that this practice was "part of the process". The process appeared to be a give-and-take policy whereby persons deprived of their liberty were "drip-fed" with new items (clothing, bedding, hygiene articles, lit cell, etc) in exchange for their "cooperation". The ICRC also visited other persons deprived of their liberty held in total darkness, others in dimly lit cells who had been allowed to dress following periods during which they had been held naked. Several had been given women's underwear to wear under their jumpsuit (men's underwear was not distributed), which they felt to be humiliating.

    The ICRC documented other forms of ill-treatment, usually combined with those described above, including threats, insults, verbal violence, sleep deprivation caused by the playing of loud music or constant light in cells devoid of windows, tight handcuffing with flexi-cuffs causing lesions and wounds around the wrists. Punishment included being made to walk in the corridors handcuffed and naked, or with women's underwear on the head, or being handcuffed either dressed or naked to the bed bars or the cell door. Some persons deprived of their liberty presented physical marks and psychological symptoms, which were compatible

with these allegations. The ICRC medical delegate examined persons deprived of their liberty presenting signs of concentration difficulties, memory problems, verbal expression difficulties, incoherent speech, acute anxiety reactions, abnormal behaviour and suicidal tendencies. These symptoms appeared to have been caused by the methods and duration of interrogation. One person held in isolation that the ICRC examined, was unresponsive to verbal and painful stimuli. His heart rate was 120 beats per minute and his respiratory rate 18 per minute. He was diagnosed as suffering from somatoform (mental) disorder, specifically a conversion disorder, most likely due to the ill-treatment he was subjected to during interrogation.

According to the allegations collected by the ICRC, detaining authorities also continued to keep persons deprived of their liberty during the period of interrogation, uninformed of the reason for their arrest. They were often questioned without knowing what they were accused of. They were not allowed to ask questions and were not provided with an opportunity to seek clarification about the reason for their arrest. Their treatment tended to vary according to their degree of cooperation with their interrogators: those who cooperated were afforded preferential treatment such as being allowed contacts with other persons deprived of their liberty, being allowed to phone their families, being given clothes, bedding equipment, food. water or cigarettes, being allowed access to showers, being held in a lit cell. etc.

3.3 Umm Qasr (JFIT) and Camp Bucca (JIF/ICE)

28. Since the establishment of Umm Qasr camp and its successor, Camp Bucca, persons deprived of their liberty undergoing interrogation, whether they had been arrested by British, Danish, Dutch or Italian armed forces were segregated from other internees in a separate section of the camp designed for investigation. This section was initially operated by the British Armed Forces who called it Joint Field Intelligence Team (JFIT). On 7 April, its administration was handed over to the US Armed Forces, which renamed it Joint Interrogation Facility/Interrogation Control Element (JIF/ICE). On 25 September 2003, its administration was handed back to the British Armed Forces.

29. CF intelligence personnel interrogated persons deprived of their liberty of concern to them in this section. They were either accused of attacks against the CF or deemed to have an "intelligence value". They could be held there from a few days to several weeks, until their interrogation was completed. During a visit in September 2003, the ICRC interviewed in that section several persons deprived of their liberty that had been held there for periods from three to four weeks.

30. Initially, inmates were routinely treated by their guards with general contempt, such as having orders screamed at them and being cursed, kicked, struck with rifle butts, roughed up or pushed around. They were reportedly handcuffed in the back and hooded for the duration of the interrogation and were prohibited from talking to each other or to the guards. Hooding appeared to be motivated by security concerns as well as to be part of standard intimidation techniques used by military intelligence personnel to frighten inmates into cooperating. This was combined with deliberately maintaining uncertainty about what would happen to the inmates, and a generally hostile attitude on the part of the guards. Conditions

of internment improved according to the degree of cooperation of the persons deprived of his liberty. Interrogated persons deprived of their liberty were held in two separate sections. Those under initial investigation were reportedly not allowed to talk to each other (purportedly to avoid exchange of information and "versions of events" between them). They were not allowed to stand up or walk out of the tent but they had access to water with which to wash themselves. Once they had cooperated with their interrogators, they were transferred to the "privileged" tent where the above mentioned restrictions were lifted.

31. Persons deprived of their liberty undergoing interrogation by the CF were allegedly subjected to frequent cursing, insults and threats, both physical and verbal, such as having rifles aimed at them in a general way or directly against the temple, the back of the head, or the stomach, and threatened with transfer to Guantanamo, death or indefinite internment. Besides mentioning the general climate of intimidation maintained as one of the methods used to pressure persons deprived of their liberty to cooperate with their interrogators, none of those interviewed by the ICRC in Umm Qasr and Camp Bucca spoke of physical ill-treatment during interrogation. All allegations of ill-treatment referred to the phase of arrest, initial internment (at collecting points, holding areas) and "tactical questioning" by military intelligence officers attached to battle group units, prior to transfer to Camp Bucca.

3.4 Previous actions taken by the ICRC in 2003 on the issue of treatment

32. On 1 April, the ICRC informed orally the political advisor of the commander of British Armed Forces at the CF Central Command in Doha about methods of ill-treatment used by military intelligence personnel to interrogate persons deprived of their liberty in the internment camp of Umm Qasr. This intervention had the immediate effect to stop the systematic use of hoods and flexi-cuffs in the interrogation section of Umm Qasr. Brutal treatment of persons deprived of their liberty also allegedly ceased when the 800th MP Brigade took over the guarding of that section in Umm Qasr. UK Forces handed over Umm Qasr holding area to the 800th MP Brigade on 09.04.03. The 800th MP Brigade then built Camp Bucca two kilometers away.

33. In May 2003, the ICRC sent to the CF a memorandum based on over 200 allegations of ill-treatment of prisoners of war during capture and interrogation at collecting points, battle group stations and temporary holding areas. The allegations were consistent with marks on bodies observed by the medical delegate. The memorandum was handed over to XXXXXXXXXXXXXXXX, US Central Command in Doha, Sate of Qatar. Subsequently, one improvement consisted in the removal of wristbands with the remark "terrorist" given to foreign detainees.

34. In early July the ICRC sent the CF a working paper detailing approximately 50 allegations of ill-treatment in the military intelligence section of Camp Cropper, at Baghdad International Airport. They included a combination of petty and deliberate acts of violence aimed at securing the cooperation of the persons deprived of their liberty with their interrogators; threats (to intern individuals indefinitely, to arrest other family members, to transfer Individuals to Guantanamo) against persons deprived of their liberty or against members of

their families (in particular wives and daughters); hooding; tight handcuffing; use of stress positions (kneeling, squatting, standing with arms raised over the head) for three or four hours; taking aim at individuals with rifles, striking them with rifle butts, slaps, punches, prolonged exposure to the sun, and isolation in dark cells. ICRC delegates witnessed marks on the bodies of several persons deprived of their liberty consistent with their allegations. In one illustrative case, a person deprived of his liberty arrested at home by the CF on suspicion of involvement in an attack against the CF, was allegedly beaten during interrogation in a location in the vicinity of Camp Cropper. He alleged that he had been hooded and cuffed with flexi-cuffs, threatened to be tortured and killed, urinated on, kicked in the head, lower back and groin, force-fed a baseball which was tied into the mouth using a scarf and deprived of sleep for four consecutive days. Interrogators would allegedly take turns ill-treating him. When he said he would complain to the ICRC he was allegedly beaten more. An ICRC medical examination revealed haematoma in the lower back, blood in urine, sensory loss in the right hand due to tight handcuffing with flexi-cuffs. and a broken rib.

Shortly after that intervention was sent, the military intelligence internment section was closed and persons deprived of their liberty were transferred to what became the "High Value Detainees" section of the airport, a regular internment facility under the command of the 115th Military Police Battalion. From this time onwards, the ICRC observed that the ill-treatment of the category of persons deprived of their liberty by military intelligence declined significantly and even stopped, while their interrogation continued through to the end of the year 2003.

3.5 Allegations 0f ill-treatment by Iraqi police

35. The ICRC has also collected a growing body of allegations relating to widespread abuse of power and ill-treatment of persons in the custody of Iraqi police. This included the extensive practice of threatening to handover these persons to the CF for internment, or claiming to act under the CF instructions, in order to abuse their power and extort money from persons taken in custody. Allegations collected by the ICRC indicated that numerous people had been handed over to the CF on the basis of unfounded accusations (of hostility against the CF, or belonging to opposition forces) because they were unable or unwilling, to pay bribes to the police. Alleged ill-treatment during arrest and transportation included hooding, tight handcuffing, verbal abuse, beating with fists and rifle butts, and kicking.

During interrogation, the detaining authorities allegedly whipped persons deprived of their liberty with cables on the back, kicked them in the lower parts of the body, including in the testicles, handcuffed and left them hanging from the iron bars of the cell windows or doors in painful positions for several hours at a time, and burned them with cigarettes (signs on bodies witnessed by ICRC delegates). Several persons deprived of their liberty alleged that they had been made to sign a statement that they had not been allowed to read. These allegations concerned several police stations in Baghdad Including Al-Qana, Al-Jiran Al-Kubra in al-Amariyya, Al-Hurriyyeh in Al-Doura, Al-Salhiyye in Salhiyye, and Al-Baiah. Many persons deprived of their liberty drew parallels between police practices under the occupation with those of the former regime.

38. In early June 2003, for instance, a group of persons deprived of their liberty was taken to the former police academy after they had been arrested. There, they were allegedly hooded and cuffed and made to stand against a wall while a policeman placed his pistol against their heads and pulled the trigger in a mock execution (the pistol was in fact unloaded); they were also allegedly forced to sit on chairs when they were hit on the legs, the soles of their feet and on their sides with sticks.

    They also allegedly had water poured on their legs and had electrical shocks administered to them with stripped tips of electric wires. The mother of one of the persons deprived of liberty was reportedly brought in and the policemen threatened to mistreat her. Another person deprived of his liberty was threatened with having his wife brought in and raped. They were made to fingerprint their alleged confessions of guilt which resulted in their transfer to the CF to be interned pending trial.

37. *The ICRC reminds the authorities of the CF that prisoners of war and other protected persons in the custody of occupying forces must be humanely treated at all times; they must not be subjected to cruel or degrading treatment; and must be protected against all acts of violence (Art. 13, 14, Third Geneva Convention; Art. 27, Fourth Geneva Convention). Torture and other forms of physical and psychological coercion against prisoners of war and other interned persons for the purpose of extracting confession or information is prohibited in all cases and under all circumstances without exception (Art. 17 and 87, Third Geneva Convention; Art. 5, 31 and 32 Fourth Geneva Convention).*

    Confessions extracted under coercion or torture can never be used as evidence of gilt (Art. 99, Third Geneva Convention, Art. 31, Fourth Geneva Convention). Such violations of International Humanitarian Law should be thoroughly investigated in order to determine responsibilities and prosecute those found responsible (Art. 129, Third Geneva Convention and Art. 146, Fourth Geneva Convention).

4. Treatment In Regular Internment Facilities

4.1. General conditions of treatment

38. The ICRC assessed the treatment of persons deprived of their liberty in regular internment facilities by CF personnel as respectful, with a few individual exceptions due to individual personalities or occasional loss of control on the part of the guards. Abusive behavior by guards, when reported to their officers, was usually quickly reprimanded and disciplined by superiors.

39. The ICRC often noted a serious communication gap between detention personnel and persons deprived of their liberty, primarily due to the language barrier, which resulted in frequent misunderstandings. This was compounded by a widespread attitude of contempt on the part of guards, in reaction to which persons deprived of their liberty, which often complained of being treated like inferiors, adopted a similar attitude.

40. The ICRC occasionally observed persons deprived of their liberty being slapped, roughed up, pushed around or pushed to the ground either because of poor communication (a failure to understand or a misunderstanding of orders given in

English was construed by guards as resistance or disobedience), a disrespectful attitude on the part of guards, a reluctance by persons deprived of their party to comply with orders, or a loss of temper by guards.

41. Disciplinary measures included being taken out of the compound, handcuffed and made to stand, sit, squat or lie down in the sand under the sun for up to three or four hours, depending on the breach of discipline (disrespectful behavior towards guards, communication between persons deprived of their liberty transferring from one compound to another, disobeying orders); temporary suspension of cigarette distribution, and temporary segregation in disciplinary confinement sections of the detention facilities.

42. Despite the tact that reductions in the availability of water or food rations or, more commonly cigarettes were occasionally observed, the prohibition on collective punishment provided for under International Humanitarian Law (Art. 26.6, 87.3. Third Geneva Convention and Art. 33, Fourth Geneva Convention) appeared to be generally respected by detaining authorities.

4.2. "High Value Detainees" section, Baghdad International Airport

43. Since June 2003, over a hundred "high value detainees" have been held for nearly 23 hours a day in strict solitary confinement in small concrete cells devoid of daylight. This regime of complete isolation strictly prohibited any contact with other persons deprived of their liberty, guards, family members (except through Red Cross Messages) and the rest of the outside world. Even spouses and members of the same family were subject to this regime. Persons deprived of their liberty whose "investigation" was nearing completion were reportedly allowed to exercise together outside their cells for twenty minutes twice a day or go to the showers or toilets together. The other persons deprived of their liberty still under interrogation reportedly continued to be interned in total "segregation" (i.e. they were allowed to exercise outside their cells for twenty minutes twice a day and to go to the showers or toilets but always alone and without any contact with others). Most had been subjected to this regime for the past five months. Attempts to contact other persons deprived of their liberty or simply to exchange glances or greetings were reportedly sanctioned by reprimand or temporary deprivation of time outside their cells. Since August 2003, the detainees have been provided with the Koran. They have been allowed to receive books of a non political nature, but no newspapers or magazines on current affairs. The internment regime appeared to be motivated by a combination of security concerns (isolation of the persons deprived of their liberty from the outside world) and the collection of intelligence. All had been undergoing interrogation since their internment, in spite of the fact that none had been charged with criminal offence.

    On 30 October 2003, the ICRC wrote to the Detaining Authorities recommending that this policy be discontinued and replaced by a regime of internment consistent with the CF's obligations under the Geneva Conventions.

44. *The internment of persons in solitary confinement for months at a time in cells devoid of daylight for nearly 23 hours a day is more severe than the forms of internment provided for in the Third and Fourth Geneva Conventions (investigation of criminal offences or disciplinary punishment). It cannot be used as a regular, ordinary mode of holding of prisoners of war or civilian internees. The ICRC reminds the authorities of the Coalition*

Forces in Iraq that internment of this kind contravenes Articles 21, 25, 89. 90, 95, 103 of the Third Geneva Convention and Articles 27, 41, 42, 78, 82, 118, 125 of the Fourth Geneva Convention. The ICRC recommends to the authorities of the CF that they set up an internment regime which ensures respect for the psychological integrity and human dignity of the persons deprived of their liberty and that they make sure that all persons deprived of their liberty are allowed sufficient time every day outside in the sunlight and the opportunity to move about and exercise in the outside yard.

5. Excessive And Disproportionate Use Of Force Against Persons Deprived Of Their Liberty By The Detaining Authorities

45. Since March 2003, the ICRC recorded, and in some cases, witnessed a number of incidents in which guards shot at persons deprived of their liberty with live ammunition, in the context either of unrest relating to internment conditions or of escape attempts by individuals:

Camp Cropper, 24 May 2003: In the context of a hunger strike, unrest broke out in the camp prior to ICRC visit. One person deprived of his liberty suffered a gunshot wound.

Camp Cropper, 9 June 2003: Six persons deprived of their liberty were injured by live ammunition after a guard opened fire on the group in an attempt to quell a demonstration.

Camp Cropper, 12 June 2003: Two, or possibly three persons deprived of their liberty were shot at when they attempted to escape through the barbed wine fence. One of them, Akheel Abd Al-Hussein from Baghdad, was wounded and later died after being taken to the hospital. The other person deprived of his liberty was recaptured and received treatment for gunshot wounds.

Abu Ghraib, 13 June 2003: When unrest flared up, guards from three watchtowers opened fire at the demonstrators, injuring seven persons deprived of their liberty and killing another, Alaa Jasim Hassan. The authorities investigated the matter and concluded that the "shooting was justified as the "three tower [guards] determined that the lives of the interior guards were threatened".

Abu Ghraib, late June 2003: During unrest, one person deprived of his liberty was injured by live ammunition when a guard opened fire.

Abu Ghraib, 24 November 2003: During a riot four detainees were killed by US MP guards. The killing took place after unrest erupted in one of the compounds (no 4). The detainees claimed to be unhappy with the situation of detention. Specifically, lack of food, clothing, but more importantly the lack of judicial guarantees and, especially important during the time of Eid al-Fitr, lack of family visits or lack of contacts all together. The detainees alleged to have gathered near the gate whereupon the guards panicked and started shooting, Initially, non-lethal ammunition was used which was subsequently replaced by live ammunition.

The report handed over by the CF to the ICRC states that detainees were trying to force open the gate. It further states that several verbal warnings were given and non-lethal ammunition fired at the crowd. After 25 minutes deadly force was

applied resulting in the death of four detainees.

The narrative report furnished by the CF does not address the reason for the riot in any way and does not give any recommendations as to how a similar incident could be avoided. It does not question the use of lethal force during such an incident.

Camp Bucca, 16-22 April 2003: ICRC delegates witnessed a shooting incident, which caused the death of one person deprived of his liberty and injury of another. A first shot was fired on the ground by a soldier located outside the compound in a bid to rescue one of the guards, allegedly being threatened by a prisoner of war armed with a stick; the second shot injured a prisoner of war in the left forearm and the third shot killed another prisoner of war.

Camp Bucca, 22 September 2003: Following unrest in a section of the camp, one person deprived of his liberty, allegedly throwing stones, was fired upon by a guard in a watchtower. He suffered a gunshot wound to the upper part of the chest, the bullet passed through the chest and exited form the back. The investigation undertaken by the CF concluded that "the compound guards correctly utilized the rules of engagement and that numerous non-lethal rounds were dispersed to no avail". The person deprived of his liberty "was the victim of a justifiable shooting". An ICRC delegate and an interpreter witnessed most of the events. At no point did the persons deprived of their liberty, and the victim shot at, appear to pose a serious threat to the life or security of the guards who could have responded to the situation with less brutal measures. The shooting showed a clear disregard for human life and security of the persons deprived of their liberty.

46. These incidents were investigated summarily by the CF. They concluded in all cases that a legitimate use of firearms had been made against persons deprived of their liberty, who, except perhaps in Abu Ghraib on 13 June 2003, were unarmed and did not appear to pose any serious threat to anyone's life justifying the use of firearms. In all cases, less extreme measures could have been used to quell the demonstrations or neutralize persons deprived of their liberty trying to escape.

47. In connection With the 22 September 2003 incident, the ICRC wrote on 23 October to the Commander of the 800th MP Brigade and recommended the adoption of crowd control measures consistent with the rules and principles of the Third and Fourth Geneva Conventions and other applicable international norms relating to the use of force or lifire arms by law enforcement personnel.

48. Since May 2003, the ICRC repeatedly recommended to the CF to use non-lethal methods to deal with demonstrations, riots or escape attempts. In Camp Cropper, its recommendations were heeded. After initial deplorable incidents no further shooting of persons deprived of their liberty has occurred since November 2003. In mid-July, the ICRC witnessed a demonstration in that camp: in spite of some violence by the persons deprived of their liberty, the problem was efficiently dealt with by the camp commander without any excessive use of force. He called in antiriot military policemen, refrained from any act that might have provoked further anger from the persons deprived of their liberty, waited patiently for the emotions to calm down and then sought to establish dialogue with the persons

deprived of their liberty through their section representatives. The unrest was quieted down without any violence.

49. *The ICRC reminds the authorities of the CF that the use of firearms against persons deprived of their liberty, especially against those who are escaping or attempting to escape is an extreme measure which should not be disproportionate to the legitimate objective to be achieved (to apprehend the individual) and shall always be preceded by warning appropriate to the circumstances (Art. 42 Third Geneva Convention).*

    The CF detaining personnel should be provided with adequate training to deal with incidents in their internment facilities. Firearms shouled not be used except when a suspected offender offers armed resistance or otherwise jeopardizes the lives of others and only when less extreme measures are not sufficient to restrain or apprehend him (Article 3 of the Code of Conduct for Law Enforcement Officials and Article 9 of the Basic Principles on the Use of Force and Firearms by Low Enforcement Officials).

    In every instance in which a firearm is discharged, a report should be made promptly to the competent authorities. All deaths or serious injuries of a person deprived of his liberty caused or suspected to have been caused by a sentry should be immediately followed by a proper inquiry by the Detaining Power which should ensure the prosecution of any person(s) found responsible (Art. 121, Third Geneva Convention; Art. 131, Fourth Geneva Convention).

6. Seizure And Confiscation Of Private Belongings Of Persons Deprived Of Their Liberty

50. The ICRC collected numerous allegations of seizure and confiscation of private property (money, cars and other valuables) by the CF in the context of arrests. In only a few cases were receipts issued to the arrested person or his family, detailing the items confiscated. This was perceived by persons deprived of their liberty as outright theft or pillage. The following examples will serve to illustrate the allegations:

    - XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX alleged that the CF took US$22,000 in cash and his personal luggage during his arrest;
    - XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX claimed that large amounts of money and personal effects were confiscated by the CF when he was arrested at his home on 27-28 May 2003. The items confiscated allegedly included 71,450,000 Iraqi dinars, 14,000 US dollars, two wedding rings, a video camera, a watch, real estate property documents, his wife's residential documents, his father's will, his private diaries, as well as most of the family private documents and personal identity and other papers;
    - XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX claimed that his car was confiscated when he was arrested by the CF in Basrah on 18 July 2003.
    - XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX claimed that CF confiscated two million Iraqi dinars when arrested at his home on 21 August 2003;
    - XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX claimed that his money and two cars were confiscated when he was arrested by the CF on 11 August 2003;

51. In Camp Cropper, Camp Bucca and Abu Ghraib, a system was gradually put in place whereby personal belongings in the possession of persons deprived of their liberty at the time of their arrival in these facilities which they could not keep with them (money, other valuables, spare clothing, identity papers) were registered and kept until their release. In these cases, a receipt was usually issued to the person deprived of his liberty and his belongings were returned when he was released. However, this system took no account of the property seized during arrest.

52. In response to property loss or damage caused to property by the CF during raids and also to complaints regarding pension or salaries, the CF established a compensation system open to everyone, including internees and the general public. Complaints could be filed at General Information Centers (GIC), set up under the responsibility of the Humanitarian Assistance Coordination Centers (HACC).

    Supporting evidence, which is problematic given that arresting authorities rarely issue receipts, should back claims. The ICRC is not yet able to assess the efficiency of this compensation system although it has had the possibility to visit one of the GICs. There are nine GICs in the city of Baghdad and one in the city of Mosul, there are however none in the other parts of the country therefore depriving a large number of persons of the possibility to file complaints

53. *In accordance with international legal provisions, the ICRC reminds the authorities of the CF that pillage is prohibited by International Humanitarian Law (Art. 33, Fourth Geneva Convention), that private property may not be confiscated (Art. 46.2, 1907 Hague Convention No IV), and that an army of occupation can only take possession of cash, funds, and realizable securities which are strictly the property of the State. (Art. 53, 1907 Hague Convention No IV).*

    In addition, persons deprived of their liberty shall be permitted to retain articles of personal use. Valuables may not be taken from them except in accordance with an established procedure and receipts must be issued (Art 16, 68.2, Third Geneva Convention and Art. 97, Fourth Geneva Convention).

7. Exposure Of Internees/Detainees To Dangerous Tasks

54. On 3 September 2003 in Camp Bucca, three persons deprived of their liberty were severely injured by the explosion of what apparently was a cluster bomb:

    They were part of a group of 10 persons deprived of their liberty involved in voluntary work to clear rubbish along the barbed wire fence of the camp. They were transferred to the British Field Military Hospital where they received appropriate medical treatment. Their injuries required limb amputations.

55. On 23 October 2003, the ICRC wrote to the officer commanding the 800th MP Brigade to request an investigation into the incident. The ICRC encouraged the CF not to engage persons deprived of their liberty in dangerous labour.

56. *The ICRC recommends to the authorities of the CF that all three victims be properly compensated as provided for by both Third and Fourth Geneva Conventions (Art. 68.*

Third Geneva Convention and Art. 95, Fourth Geneva Convention).

8. Protection Of Persons Deprived Of Their Liberty Against Shelling

57. Since its reopening by the CF, Abu Ghraib prison has been the target of frequent night shelling by mortars and other weapons, which resulted, on several occasions, in persons deprived of their liberty being killed or injured. During the month of July, the Commander of the facility reported at least 25 such attacks. On 16 August, three mortar rounds landed in the prison compound, killing at least five and injuring 67 persons deprived of their liberty. Subsequent attacks caused further deaths and injuries. An ICRC team visited Abu Ghraib on 17 August and noticed the lack of protective measures: while the CF personnel were living in concrete buildings, all persons deprived of their liberty were sheltered under tents in compounds which had no bunkers or any other protection, rendering them totally vulnerable to shelling.

    Persons deprived of their liberty alleged that they had not been advised on what to do to protect themselves in the event of shelling. They were dismayed and felt that the authorities "did not care". After these attacks, security was improved around the prison compound to reduce the risk of further attacks. However, steps taken to ensure the protection of persons deprived of their liberty remained insufficient. The inmates were allowed to fill and place sandbags around the perimeter of each tent. By late October, sandbags had not been placed around all tents and those sandbags that were in place did not offer adequate projection from shelling or projectile explosions.

58. *In accordance with International Humanitarian Law provisions, the ICRC reminds the authorities of the CF that the detaining power must not set up places of internment in areas particularly exposed to the dangers of war (Art. 23.1, Third Geneva Convention and Art. 83, Fourth Geneva Convention). In all places of internment exposed to air raids and other hazards of war, shelters adequate in number and structure to ensure the necessary protection must be made available in the event of an alarm, the internees must be free to enter such shelters as quickly as possible (Art. 23.2, Third Geneva Convention and Art. 88, Fourth Geneva Convention). When a place of internment is found to be unsafe, persons deprived or their liberty should be transferred to other places of interment, offering adequate security and living conditions in accordance with the Third and Fourth Geneva Conventions.*

Conclusion

59. This ICRC report documents serious violations of International Humanitarian Law relating to the conditions of treatment of the persons deprived of their liberty held by the CF in Iraq. In particular, it establishes that persons deprived of their liberty face the risk of being subjected to a process of physical and psychological coercion, in Some cases tantamount to torture, in the early stages of the internment process.

60. Once the interrogation process is over, the conditions of treatment for the persons deprived of their liberty generally improve, except in the "High Value Detainee" section at Baghdad International Airport where persons deprived of their liberty

have been held for nearly 23 hours a day in strict solitary confinement in small concrete cells devoid of daylight, an internment regime which does not comply with provisions of the Third and Fourth Geneva Conventions.

61. During internment, persons deprived of their liberty also risk being victims of disproportionate and excessive use of force on the part of detaining authorities attempting to restore order in the event of unrest or to prevent escapes.

62. Another serious violation of International Humanitarian law described in the report is the CF's inability or lack of will to set up a system of notifications of arrests for the families of persons deprived of liberty in Iraq. This violation of provisions of international Humanitarian Law causes immense distress among persons deprived of their liberty and their families, the latter fearing that their relatives unaccounted for are dead. The uncaring behaviour of the CF and their inability to quickly provide accurate information on persons deprived of their liberty for the families concerned also seriously affects the image of the Occupying Powers amongst the Iraqi population.

63. In addition to recommendations highlighted in the report relating to conditions of internment, information given to persons deprived of their liberty upon arrest, and the need to investigate violations of International Humanitarian law and to prosecute those found responsible, the ICRC wishes particularly to remind the CF of their duty:

- to respect at all times the human dignity, physical integrity and cultural sensitivity of persons deprived of their liberty held under their control;
- to set up a system of notifications of arrests to ensure that the families persons deprived of their liberty are quickly and accurately informed;
- to prevent all forms of ill-treatment and moral or physical coercion of persons deprived of their liberty in connection with interrogations:
- to instruct the arresting and detaining authorities that causing serious bodily injury or serious harm to the health of protected persons is prohibited under the Third and Fourth Geneva Conventions
- to set up an internment regime that ensures respect for the psychological integrity and human dignity of the persons deprived of their liberty
- to ensure that battle group units arresting individuals and staff in charge of internment facilities receive adequate training enabling them to operate in a proper manner and fulfill their responsibilities without resorting to ill-treatment or using excessive force.

The practices described in this report are prohibited under International Humanitarian Law. They warrant serious attention by the CF. In particular, the CF should review their policies and practices, take corrective action and improve the treatment of prisoners of war and other protected persons under their authority. This report is part of the bilateral and confidential dialogue undertaken by the ICRC with the CF. In the future, the ICRC will continue its bilateral and confidential dialogue with the CF in accordance with provisions of International Hmanitarian Law, on the basis of its monitoring of the conditions of arrest, interrogation and internment of persons deprived of their liberty held by the CF.

Blood, Heat + Dust: Second Edition

Operation Telic and the British Medical Deployment to the Gulf 2003-2009

Chapter 33:

A retrospective on the UK Mission in Iraq



Painting: *'Lament to the Lost'*

Artist: David Rowlands Medium: Oil on Canvas

November 2004: 1st Battalion The Black Watch (Royal Highland Regiment) at the Jurf Al Sukhr Bridge, Iraq.

Introduction

The inception and conduct of Iraq campaign has been highly divisive within British Society, and members of the Armed Forces are not immune from the pressures and comments in civil society. Many will ask whether their sacrifice in lives and limbs have been justified, and doubts and angst will plague many for the remainder of their lives. It would be utterly wrong to ignore the debate and avoid these issues, as they have a profound bearing on long term post traumatic stress and upon the reputation of the Armed Forces.

All of those who have served on Op Telic will be exposed to the media, social and public comments which will often cause them to question the value of the sacrifices that they have made; the meaning of the horrors and evils which they have witnessed and the traumas that they have endured; and the personal tragedies of death and injury to self, friends and colleagues. These questions will be reflected in dreams, nightmares and other memories, and for many the distress will become apparent in their changed lives for decades to come.

In this chapter, I set out a range of commentaries on the immediate aftermath of the Op Telic Campaign. It is for professional historians, politicians and other commentators to set out the political context and repercussions in due course.

The decisions made by military commanders in respect of strategy and tactics, and equipment procurement must also be reflected upon in another arena, given their consequences both for the overall outcome of the Operation and for the lives and deaths of the soldiery. Only the passage of time in Iraq will allow history to judge whether our interventions have been for the better or for the worse overall. Regrettably, experience in Iraq and the Balkans before us teaches that when states are held together by firm or brutal dictatorship, the removal of the dictatorial glue can unleash the very worst of civil strife and ethnic horrors, to which we have become inured in the past two decades.

At the time of writing, in late 2010, the balance of judgment hinges on two factors

- Improvements in the quality of life for the population of the Southern Iraqi provinces, and in Basra in particular, in consequence of our presence, and:
- The strategic assessment of our involvement in Operations in Iraq

There is general agreement that the UK Armed Forces have performed with honour and credit in very difficult circumstances, albeit with some highly public but infrequent blemishes. They partook in a campaign which was highly questionable in grand political strategy and grossly under-resourced in manpower and specialist equipment, to subdue and overthrow a violent insurgency among a population of some two million discontented Iraqis, with strong Iranian intervention and support.

Given the political difficulties, the commanders on the ground may thus be judged to have acted with honour and realism in recognising the limits of the achievable, and in curtailing the slaughter by strategic withdrawals from Al Amarra and Basra Palace, not withstanding the criticisms of the commentariat

Tactical gains: The quality of life in and around Basra

It is also right and proper that the MoD should seek to promote the most positive perspectives on the Campaign, both as an arm of Government, but also as the responsible body for those men and women who have served, suffered and died for the decisions of others.

Writing in the Daily Telegraph on 21 December 2008, General Sir Mike Jackson said:

"The announcement that Britain is largely to close down its military role in Iraq by May 31, 2009, is welcome news to both this country and Iraq. It represents a most significant achievement after what will have been a very difficult and challenging six years.

We should remember that this saga does not start in 2003, but rather in 1990 with Saddam Hussein's invasion of Kuwait – an act of outright international aggression. After the forcible removal of his forces from Kuwait, there followed a decade and more of brutality towards his own people and defiance of at least 16 binding resolutions of the United Nations Security Council.

My purpose in writing is not to conduct yet another post-mortem of the decision to intervene militarily by the United States, the UK and some 30 other countries, but to reflect on what British forces have achieved. The purpose of intervention is not to indulge in some latter-day military adventurism, but to help a country move out of a dark past – out of tyranny, civil war, ethnic cleansing – to a better future, a future in which the country is stable, at peace with itself and its neighbours, with a representative government, institutions being built, the rule of law being established, the economy recovering.

This is a complex and difficult task; pace the neocons, it is indeed nation-building. And it is a task for military and non-military alike. It is also true that conflict between groups such as in Bosnia in the 1990s, and the Shia and Sunni in Iraq (and wider, for that matter) is a political phenomenon which, in the end, can only be solved politically. This cannot per se be achieved by soldiers; their job is to create the conditions for such a political solution. And all of this takes time, a rather unappreciated commodity in today's 24/7 world. This, then, is my benchmark for judging the effectiveness of our intervention in Iraq.

The initial conventional war-fighting campaign against Saddam Hussein's forces in southern Iraq was a tremendous military success; in particular, the taking of Basra city by 7 Armoured Brigade was a brilliant operation conducted with great finesse and fine timing. Despite the gloomy predictions of some commentators, there was no re-run of Stalingrad in either Basra or Baghdad.

The initial euphoria which followed the toppling of Saddam Hussein was short-lived, as factions within Iraq began to use violence in pursuit of their political objectives. Iraqi expectations of immediate economic improvement were understandably but unrealistically high; their frustration at not seeing this realised

quickly turned to anger with the Coalition forces. This volatile situation was much exacerbated by the security vacuum created by Washington's appalling decisions to disband the Iraqi security forces and to de-Baathify the public administration to a very low level; the latter marginalised the very people who were best placed to help. These decisions may well have doubled the time it has taken to get to where we are now. Iranian backing for Shia militants was a further difficult complication, as was the lack of a coherent reconstruction plan and the failure in Coalition capitals to understand fully the complexity of the situation.

All of this presented an enormous challenge to the Coalition, not least the British Armed Forces in the south. The Army, in particular, was fighting the classic "3-block war": a mixture of intense firefights, benign patrolling and reconstruction projects.

The campaign became a long haul – we had to have the strategic endurance to see it through. There were tremendous successes: the referendum on the new Iraqi constitution and the subsequent elections; the avoidance of outright civil war; the long and hard efforts to bring on the new Iraqi security forces; the handover of security responsibility for our four southern provinces to the Iraqi authorities. There were drawbacks: how we dealt with the Mahdi army in Basra; allegations of abuse of Iraqi prisoners; Whitehall's organisational difficulties in bringing an integrated single national effort to bear; the political and military friction of working within a coalition.

And there have been the tragic costs in casualties, the agony of soldiering. The bereaved and the wounded have our greatest sympathy; those deaths, those wounds, were not in vain but rather suffered in the noble cause of a better future for Iraq and, indeed, the region as a whole.

The end of Coalition involvement in Iraq was always going to be that moment when the Iraqi government concluded that it had the political and security strength to deal with its own future, that Coalition forces had done all that they could. For Britain, for the four southern Iraqi provinces, that day will be May 31, 2009, at the latest – save the probability that we will maintain a military training team as we do in many other countries. For the US and the rest of Iraq, that day will be somewhat later.

It has been a long, hard and controversial campaign, but I believe it has largely succeeded. If none of this had taken place, if Saddam Hussein had remained in despotic power – no doubt to be followed by his despicable sons – where would Iraq be? We will never know, but I cannot think that Iraq would be a better place, nor that the Iraqi people would wish for such a fate.

The British Armed Forces, as ever, have played a courageous, enduring and committed part in all this. It has been difficult, messy and challenging, but I believe they rose to that challenge in their inimitably good-humoured and professional

manner. The Iraqi prime minister has thanked them generously for their part in getting Iraq to where it now is; our Forces may justifiably be proud in playing that part. We, in turn, may be justifiably proud of them – our young men and women have been at once inspirational and humbling to watch.

The struggle against those who would destroy our own way of life is by no means over. Afghanistan will require even greater strategic endurance – but I know that the British Armed Forces, I trust properly supported in every way by government and nation alike, will continue to do their duty".

The official senior military line has nevertheless come in for some fierce commentary from others, as illustrated in the immediate response from the loyalist, authoritative but critical Defence of the Realm Blog on Sunday, 21 December 2008:

"…on an individual and unit level, the courage, tenacity, skill, dedication – and suffering – of our troops (and airmen and sailors) is to be applauded, unreservedly. They did what they could, and many did more than we had any right to expect of them.

However, we – and they – should not run away with the idea that the campaign was a success. At best, we could describe it as an "heroic failure". Our armed forces were under-resourced, undermanned and ill-equipped from the very start, given a job that they could not hope to achieve. And thus, predictably – but with no reflection on those at the cutting edge – they failed.

. . . No one will disagree that the Americans made some appalling mistakes. But so did the British. Immediately after the invasion, they failed to recognise that a Shi'a insurgency was building up round them, initially attributing attacks to Saddam loyalists and the remnants of his forces. Instead of taking on the militias, they gave ground to them, made deals with them, and then eventually handed southern Iraq to them on a plate.

Much of that was entirely the responsibility of the politicians, and Tony Blair in particular, who lacked the courage, in the face of the growing unpopularity of the war, to commit the resources and the men to do the job properly. Instead, his "spin" machine went into high gear, painting a wholly false picture of a "success" that was belied by the fact that the security situation was getting worse, and worse and worse".

The debates, accusations and arguments will wax and wane with many moons, but there are many tangible achievements. These were recognised both in the official information campaign, and in the independent press reporting of the seemingly much improved situation in Basra towards the end of 2008 and into early 2009, although only time will tell whether the Mahdi Army has truly been defeated or whether it has just gone conveniently to ground for the foreseeable future".

Early in 2009, The MoD reported its catalogue of achievements prior to the handover of the COB to US forces as follows:

"What have British forces been doing in Iraq?"

"British Armed Forces have been helping the Iraqis to secure and rebuild their country after years of neglect and conflict. The Multinational Force in Iraq (MNF-I) has been working in partnership with the Iraqi Government to contribute to the maintenance of security and stability in Iraq. This has involved the direct provision of security by MNF-I through security operations. and most importantly the training and equipping the Iraqi Security Forces (ISF) so that the Iraqi authorities have been able to take responsibility for providing security themselves.

. . . Currently, there are some 4,100 UK Forces personnel in southern Iraq. They still have important work to complete. The bulk of the deployment are from the British Army, and are focused on completing the task of mentoring and training the 14th Division of the Iraqi Army in Basra. The Royal Navy are continuing to help provide security for Iraq's offshore energy infrastructure, as well as helping to train the Iraqi Navy. The Royal Air Force provides essential support to both the Iraqi Security Forces (ISF) and as part of the Coalition air effort.

Today, violence is at its lowest level since 2003 and international military forces are increasingly being reduced throughout Iraq. Over the past two-and-a-half years, responsibility for security in 13 of the 18 provinces of Iraq was transferred gradually from the Coalition to the Iraqi authorities. Following the expiry of UNSCR 1790 on 31 December 2008, the Government of Iraq now leads in maintaining security throughout Iraq, with Multi-National Forces focused on mentoring and supporting the Iraqi security forces.

Whilst still capable of appalling atrocities, Al Qaeda in Iraq has suffered repeated setbacks and indiscriminate terrorist attacks have lost it any sympathy it once enjoyed amongst some Iraqi communities. This reflects the success of the UK and partner forces in training Iraqi troops to be able to deliver security on the streets, thereby allowing the Iraqi authorities to focus on tackling the key social challenges.

Over half a million Iraqi police and military personnel have been trained and equipped by Coalition Forces since 2004. There are approximately four Iraqi security personnel for every Coalition soldier deployed in Iraq, and this ratio is growing as Multi-National forces are able to draw down. The Coalition has also worked very closely with the Iraqi authorities to develop their Ministry of Defence and Ministry of Interior.

The Iraqi Police Service has made significant progress in its capability to maintain public order, investigate crimes and arrest suspects. The number of Iraqi units capable of conducting independent counter-insurgency operations is increasing steadily. There are now around 270,000 police officers trained and equipped nationwide, plus some 40,000 border enforcement personnel.

Security in Basra

In 2007, our presence in Basra was acting as a magnet for militia violence and as a propaganda tool for extreme nationalists. In consultation with the Iraqi Government and our coalition partners, we devised a strategy under which we made a calculation about the right moment for UK forces to withdraw from the centre of Basra - on our own terms and to our own time scales.

The Iraqi authorities took on responsibility for security and began to deliver an Iraqi-led security solution. General Petraeus, who personally approved the strategy, said at the time that it was "a positive step on the path to Iraqi self-reliance".

Under PM Maliki's leadership, the Iraqi Security Forces broke the power of the militias in Operation "Charge of the Knights". The operation may not have taken quite the shape or timing that we expected, but with active UK and Coalition support, the training and determination of the Iraqi Security Forces won through and delivered improved security for the people of Basra. The success of that operation is a vindication of the long-term strategy that we have pursued with our Iraqi partners.

Security is no longer the biggest concern for ordinary Basrawis. In a poll, they put security 15th on their list of issues of concern - well below issues such as employment, public utilities and corruption. As the Defence Select Committee noted in July 2008, "the security situation in Basrah was a world away from what we saw last year."

What British Forces have achieved

Security Force training: UK troops in the south of Iraq have trained over 22,000 policemen and 20,000 Iraqi soldiers since 2004; first as part of building up 10th Iraqi Army Division in south-eastern Iraq and, since 2007, training 14th Division in Basra. 10th Division has proved its military effectiveness, having been deployed up to Baghdad as part of Iraqi/US operations to combat Al Qa'eda and other insurgents.

We and the Iraqi authorities judge that the first stage of the general training of 14 Division's combat troops is now complete. All our training tasks - including headquarters and specialist training - will be completed by May 2009.

Naval training: Royal Navy ships will continue to patrol the Gulf area and to contribute to the defence of Iraqi territorial waters and oil platforms. With support from the UK-led Coalition Naval Training Team, the new Iraqi Navy has made great strides from the broken force inherited from the previous regime. We are discussing with the Iraqis how we can meet their ongoing requirements for Maritime support and Naval training as part of our long-term bilateral defence relationship.

Basra International Airport: We have also worked closely with the Iraqi civilian authorities to develop Basra International Airport which will be key to the ongoing economic development of Basra and southern Iraq. The airport handles some 4,000 passengers a month and is able to cope with significant surges; in December it proved itself able to handle around 5,000 pilgrims during the Hajj. Scheduled commercial services operate routinely to Baghdad, Jordan and the Gulf States.

The RAF was able formally to hand over control of the airport to the Iraqis on 1st January 2009, the same date as Iraq took back control of its sovereign airspace.

Iraqi Security Forces have had full responsibility for security in Basra since December 2007 and have been planning how they will ensure a safe and secure environment for the forthcoming provincial elections. We have assisted in the development of those plans but do not envisage UK troops being required on the ground. The Iraqi Army is perfectly capable of doing the job.

Our military tasks are now largely complete and the British and Iraqi Governments have agreed that our current military tasks would be completed by 31 May 2009, allowing the bulk of our forces to withdraw by the end of July. Subject to the Iraqis' precise requirements, around 400 troops will remain after July to provide long-term training and capacity-building to the Iraqi Security Forces.

Between the start of operations in 2003 and 2009, 178 UK Service personnel and one MOD civilian have died on Operation Telic. We pay tribute to the sacrifice they made in service of their country, and to their family and friends. Iraq's progress shows that their sacrifice has not been in vain.

Official sources also issued the following raw figures in April 2009 on the MoD Website:

There have been 4,259 US military deaths and 179 UK military deaths since the invasion. 99,500 is the highest estimate of Iraqi civilian deaths.

Iraqi Security Force development: The coalition has been involved in what was probably the most ambitious security sector reform effort in modern times. More than 585,000 members of the Iraqi Security Forces have now been trained and equipped.

Reconstruction across Iraq: The UK has pledged a total commitment of £750 million towards reconstruction in Iraq. The funding has helped in the following areas:

Reconstruction across Basra to 2009

Water and Sewage: In 2003, only 23% of Basrawis had access to piped water, by far the worst figures for any of Iraq's 18 provinces. Only 9% of Basrawis were connected to a reliable sewage system. Since then, improvements to water supplies, including pumps for isolated villages, have benefited over 1.25 million people (70% of Basrawis). 200km of modern piping have been laid and over 5,000 leaks repaired. $160 million has been

invested in modernising and extending the sewage system. 40km of sewers and 7,000 septic tanks have been cleaned.

A water training centre in Basra has been constructed to train and increase the skills of Iraqi engineers in water treatment and leakage repair. A reverse osmosis unit has been refurbished to supply potable water to about 500,000 people. We have improved the water supply to 60,000 people in Al Amtahiyah (Basra Province). Department for International Development (DfID) power and water projects will employ around 450 people, generate almost 100,000 workdays and secure around 17,000 workdays per year for operation and maintenance.

Twenty portable water treatment facilities have been built or rehabilitated, and nine centralized sewage treatment facilities have been rehabilitated. More than one million people in southern Iraq have improved access to water.

Power: Since 2003, Department for International Development reconstruction has provided additional electricity equivalent to that needed for a city the size of Leeds. The Hartha power stations chimney has been repaired with transmission lines from the power station to Basra city. 65,000 homes now have a mains supply for the first time and 239,000 homes now have a much more reliable mains supply. This is benefiting 1.5 million residents.

Education: The former Multi-National Division (South-East) (MND(SE)) has run almost 400 education projects worth $25 million. In 2003, 80% of 7-13 year old Basrawi children attended school. Since then, attendance has increased by 9.8% (an extra 25,000 children). 61 primary schools have been refurbished to modern standards. Over 5,000 schools have been rehabilitated and more than 100,000 primary and 40,000 secondary teachers have been trained.

In 2003, 49% of 13-16 year old Basrawi children attended school. Since then, attendance increased by 8.9% (an extra 10,700 children). 18 secondary schools have been refurbished to modern standards.

Health: In 2003, all 16 Basrawi hospitals discharged untreated waste back into the water supply. Since then, over $14 million spent by the former MND(SE) alone on 189 health projects, with particular emphasis on refurbishing hospital laundries and providing appropriate sewage and sanitation. Over five million children have received life-saving vaccinations. There has been a resulting decline in the prevalence of polio, measles, mumps, rubella, and malaria.

1,000 healthcare facilities have been rehabilitated or equipped and more than 6,000 staff trained.

The Iraqi Government has raised doctors' salaries from around $30 per month under Saddam, to up to $2,000 per month. The Coalition-backed immunisation programme across Iraq protected 98% of under fives against measles/mumps/rubella, and 97% against polio. Progress has been made in combating malnutrition - the number of Iraqis going hungry reduced by 75% between 2005 and 2007 (from 4 million to 930,000).

Political institutions: The Iraqis adopted a new permanent constitution by referendum in October 2005, with a turnout of 63%. The constitution defines Iraq as democratic and pluralist. Elections in January 2005 saw the first true democracy in Iraq for over three decades, and those in December 2005 saw a turnout of over 12 million people, or 76% of the electorate. Iraq's Prime Minister, Nouri al-Maliki, announced his Government of National Unity on 20 May 2006.

The media: Over 180 journalists have been trained in independent journalism and feature writing. 250 newspapers and magazines have been launched. New TV and radio stations have been set up.

Institution-building: The focus of our efforts has been to build capacity of local authorities to plan for, access and spend central and local funds. In Basra, we supported the production of the first ever Provincial Development Strategy by the Provincial Council. On the back of this work, Basra Provincial Council was able to access $US172 million of central government funding in 2006 and $205 million in 2007 (after receiving none in 2005) and is undertaking more than 300 local reconstruction projects based on this work. We have refurbished Governorate offices and trained Governorates officials.

We have built up the financial management and budgeting capacity of the governorates. 576 Iraqi judges, lawyers and prosecutors have been trained in human rights, international humanitarian law, and in the independence of the judiciary. 2,500 Iraqi NGOs are now registered with the Iraqi government and trade unions.

Local Business: We have established a local Business Journal and Business Information Centre. Over 3,000 women and young people in the south have been trained in business and enterprise skills.

Agriculture: 60 Agricultural directorate staff have been trained in administrative, IT and planning skills. We have restored the marshlands in Basra, Maysan and Dhi Qar, which resulted in the return of the Marsh Arabs.

Basra International Airport has been undergoing extensive renovation

A new mobile phone network has been introduced with over eight million subscribers.

Oil production is now around two million barrels per day. Production and export facilities are much more secure. Increased oil production and prices increased Iraq's revenues from $US18bn (2002) to $US29bn (2005,2006) and $41bn (2007).

The Financial Cost of UK Military action in Iraq

The costs of our operations in Iraq come from the Treasury Special Reserve. The Ministry of Defence identifies the costs of military operations in terms of the net additional costs it has incurred, over and above planned expenditure on defence. The costs for the following financial years were:

- 2002/03 - £847M
- 2003/04 - £1,311M
- 2004/05 - £910M

- 2005/06 - £958M
- 2006/07 - £956M
- 2007/08 - £1,457M

The costs for 2003/04 include the costs of combat operations from 1 April 2003, the costs incurred in maintaining and supporting subsequent peacekeeping operations and the costs of recuperating operational capability afterwards".

These improvements were also witnessed and reported by independent journalists. For example; Damien McElroy, Foreign Affairs Correspondent, reported in The Daily Telegraph on 20th December 2008, wrote that:

Basra enjoys peace as British troops prepare to leave

"Last year the situation was completely different," said Saad Al Atabi, the al-Fayhaa receptionist. "We didn't receive a single wedding booking because of the situation in our city. Now we are getting about 10 couples every week."

Less than a year ago, the city stood in thrall to the murderous power of rival gangs of militant thugs, who enforced a vicious reign of terror over anybody who dared challenge their authority. Moqtada al-Sadr's Mahdi army, supported by Iran, imposed strict religious clothes on women and people avoided large gatherings in case of bomb attacks.

Now, with Basra's inhabitants once again walking the streets in comparative safety, Britain has been able to announce its withdrawal from the city after nearly six years of occupation. The transformation is the fruit of Charge of the Knights, an Iraqi government operation in March, to wrest control of the city back from the warring gangs and clans.

It was one of the greatest successes achieved by Iraq's armed forces since Saddam Hussein's army was disbanded in summer 2003, and was followed by joint British-Iraqi patrols to maintain order. The patrols marked an improvement in relations after the Iraqi government blamed Britain for allowing the Mahdi army to gain so much power.

While city residents are keen to assert their new found sense of normality, however, it is clear that problems still run very deep. The unemployed youths who last year joined militias are still angry and disaffected. And although the British Army is pulling out, it will be replaced by American troops, who will be supporting Iraqi forces. However, with greater security, city services - including the basic provision of water, electricity and rubbish collection - have improved.

"The atmosphere in Basra is no different to that in any normal Middle Eastern city," said one official serving in Basra. "Shops are open for business, roads are being mended, goods are stacked up on the pavements."

The city's once celebrated Corniche again throngs with families in the evenings. A ferris wheel turns above the Shatt al-Arab, the long water way running from the confluence of the Tigris and Euphrates down to the Gulf. Floating restaurants have been re-opened".



Similarly, Nick Meo in Basra wrote for the Daily Telegraph on 24th January 2009 that:

"Basra rediscovers hope after years of war as British prepare to leave"

"Basra has suffered years of war and chaos yet finally its people believe in the future.

Strolling with his wife on Basra's corniche as a refreshing breeze blew in from the Shatt al-Arab waterway, Aladeen Hassan observed that a year ago enjoying this simple pleasure would have been to invite death.

"If I had come here with my wife then we would have been killed or abducted for sure," Mr Hassan said with a grin. "But now we come here all the time and in the afternoon it is so crowded you cannot find a seat in the cafes. Basra has been reborn. The militias have gone, the people are happy, and we have our city back again."

For three years until last March, gangs terrorised Iraq's second city and killed British soldiers in its streets. Criminals looted and kidnapped while the religious zealots of the Mahdi Army enforced a harsh Islamic rule. The streets were so dangerous that Mr Hassan's wife, Thana, spent nearly six years locked in their tiny flat.



Basra Prepares for Provincial Elections January 2009

"It was like being a prisoner," she said. She would occasionally dart out to a shop, heavily veiled for protection in case she ran into militiamen.

Now Mrs Hassan dares to go out in public wearing makeup, although her modest black abaya still covers her hair and she is careful to wear black gloves. Elsewhere on the corniche, the walkway along the Shatt al-Arab that is the heart of Basra's social life, courting couples flirt discreetly. Some even dare to hold hands as they watch boats, or come at dusk to gaze romantically at the sun setting behind the date palm groves on the far bank of the waterway.

The mood has lifted business too in the city, raising hopes of reconstruction and an economic takeoff financed by Iraqi oil. It has even fuelled a property boom, perhaps the only one in the world right now, with top-end house prices almost doubling over the last year.

British troops still patrol the city from time to time but security is now in the hands of thousands of Iraqi soldiers and police who have flooded Basra's filthy streets ahead of provincial elections next weekend. Security may be better in the sprawling city of more than one million, but stagnant pools remain in the rutted streets and piles of rubbish are strewn in bazzars, slums and even the best residential areas.

Adding to the chaos, walls, lamp-posts and vehicles are plastered with posters of the candidates. Most are well-fed men in suits, not the scowling fundamentalists in turbans whose stars are waning. A quarter of the candidates are women. Hopes are high that the militia-linked candidates will get nowhere and instead a new and energetic set of politicians will be voted in to run the city.

If that happens and violence is minimal the remaining Iraqi businessmen and professionals who fled abroad when the anarchy was at its worst will return. A peaceful election will also give a green light to hundreds of foreign companies who are ready to move in to the oil-rich province. The transformation of Basra after almost three decades on the frontline of a series of wars is now a real possibility. Many Basrans can still hardly believe that their long nightmare could really be over. Last January Sammi Alta'ee, a 27-year-old translator for British troops, had decided that his only chance of a future was to somehow escape Iraq.

"I'd had enough," he said. "The police were being bullied by the militias, who were so violent and had better weapons than the police. I thought at that time that there was no hope for Iraq and my friends all thought the same. "Yet now the violence seems to be over and we are seeing the beginning of real reconstruction in our country at last. The people have turned against the militias. They believe the future is good."

That future has been bought at the price of the lives of 178 British soldiers who have been killed since 2003, some in the initial invasion but most in the traumatic and gruelling guerrilla war that followed but which is now over. Soldiers died or were maimed in mortar attacks on their bases and by sophisticated bombs which shot streams of molten metal through the armour of their vehicles.

Now the Army's role is training their Iraqi counterparts as the British prepare to bring their Basra operation to a close and start leaving Iraq in May. Soldiers on their third and fourth tour barely recognise the city they have been sent back to. Mortar and rocket attacks on the British base in Basra Palace have fallen from five per day a year ago to none since November.

Major Jez Mawdsley, of 26 Regiment, Royal Artillery, said: "We're in the endgame now. The lads want to go to Afghanistan." The officers talk earnestly about their legacy – of helping topple Saddam, struggling to fill the post-invasion power vacuum, and most importantly, training Iraqi security forces who can keep the peace when they have gone.

Frustratingly for the British though, after years of fighting they had a only a minor role in the military operation ordered by the Iraqi government last March which finally drove out the gangs and allowed the transformation of the city to happen".

And finally: Martin Chulov in Basra and Richard Norton-Taylor were able to write in The Guardian on Tuesday 31 March 2009 that

"The British Army hands control of Basra to US forces"

"Britain today handed the US control of Basra airport, where thousands of its troops have been based since the invasion of Iraq, six years ago. In a ceremony marking the UK's official withdrawal from Iraq, Major General Andy Salmon transferred authority to a US major general, Michael Oates. Most of the 4,100 British troops will go by 31 May, the day they complete their combat mission. Around 300 will stay, mentoring and training Iraqi officers and sailors.

Air Chief Marshall Sir Jock Stirrup, chief of the defence staff, flew in from London for the changing of the guard ceremony, and the Royal Marines band played Reveille as the US 10th Mountain Division hoisted its standard in place of the British division banner, which had flown there.

"This occasion is about the countless numbers of young men and women from far-flung corners of the US and the various reaches of the British Isles, who have together striven here with such commitment, such dedication and courage, over so long a period," Stirrup said. "We remember particularly at such a time those who paid the ultimate price in this endeavour, those who suffered injury and disablement, in order that we might get to this point today." Since 2003, 179 UK personnel have died in Iraq, 43 as a result of illness or accidents.

In Basra yesterday, there was talk of gallantry and hardships endured, but the memory of only one former British leader was invoked – Winston Churchill. There was no mention of Tony Blair, the prime minister who sent Britain to war in 2003, nor of the man who replaced him, Gordon Brown, who by the end of July will have withdrawn all remaining British forces except the few hundred who will stay on to train Iraqis.

General Ray Odierno. the US commander in Iraq, paid tribute to reconstruction efforts, which are slowly taking shape in Basra after eight relatively stable months. "Under the former regime, the people of Basra suffered from oppression and neglect," he said. "Only one in four people had access to running water and one in 10 had access to sewerage. The British presence here brought in projects of over $1bn [£0.7bn], and they began the process of creating sustainable employment opportunities."

While the US will be on hand in crises as well as protecting supply routes, the Iraqis now have overall responsibility for Basra's security. John Hutton, the defence secretary, said: "The Iraqis have not reached this point on their own. Thousands of British servicemen and women have stood shoulder to shoulder with them during the past six years.

"Thanks to their shared commitment, sacrifice and resilience, Basra is now a much safer city with a bright economic future, which has put behind it the fear, misery

and oppression endured under Saddam's regime. I am immensely proud of all that our people have achieved."

Aside from safer streets, Basra city, about 10miles from the fortified airport base, has yet to see the broad benefits of the money pledged. The army has funded several dozen community projects, such as pavement improvements and general clean-ups, but the extensive sewerage, water and civic works projects being planned are still up to five years off, city officials said this week.

Salmon, who took control of the Basra region last summer said: "Basra bears little resemblance to the place I came to with my headquarters eight months ago. Security was not a given and we were in the midst of six months of counter-insurgency operations" During Salmon's tenure, British forces did not launch any combat operations, but continued to patrol jointly with Iraqi army teams in and around Basra.

General Nasier Abadi, vice-chief of staff of the Iraqi joint forces, said the people of Iraq would not forget the UK servicemen and women killed in his country. He said security in Basra had been "transformed", adding: "On behalf of all the Iraqis, I thank the United Kingdom for the hard work and sacrifice that helped bring peace and stability to Iraq's second city."

The Economist's print edition pronounced from Basra on Apr 30th 2009 that:

Searching for a phoenix in Basra

"The country's second city is in better shape than it was a year ago but its future is still shaky. "Security has dramatically improved in the past year" versus "We don't know what'll happen when the foreign troops leave" are the competing mantras of Basra, Iraq's battered second city. Almost everyone agrees that the first claim is true. But no one is at all certain that harmony will persist when most of the Americans, who have recently taken over the leading foreign role in Basra from the British, themselves withdraw from Iraq in little over a year, if Barack Obama sticks to his proposed schedule. By the end of June combat troops are supposed to have withdrawn from all the towns. On every count—security, politics, economics, social life—Basrawis are cautiously optimistic. But they are queasily aware that things could well go wrong again.

Security improved drastically just over a year ago thanks to the "Charge of the Knights" ordered by the prime minister, Nuri al-Maliki, in late March 2008. Mr Maliki sent 30,000-plus Iraqi troops, closely mentored by teams of American marines, into the city to clean out the Shia militias. They killed hundreds of the 10,000 or so fighters on the streets. Many of the militia leaders fled to Iran, which had been supplying them with weapons, especially Katyusha rockets.

British officers helped with logistics and other operational tasks, including the deployment of Predator drones from which Hellfire missiles caused carnage among the militiamen. But most of the 4,000 British soldiers remained in their base, played no part in the assault during its crucial first week and did none of the fighting. Despite official protestations to the contrary, the British had lost control of Basra. It was retaken by Iraqis largely under American tutelage, with advice from a handful of British officers.

Mr Maliki had become exasperated by the dominance of Basra's militias, who had chased the British army out of the city and imposed a reign of repression over the hapless inhabitants in the previous two years. In a city that once claimed to be the "Venice of the Middle East", vaunting a cosmopolitan tolerance, the militias had closed bars and barber shops, murdered women who disdained the veil and killed scores of people selling alcohol and pop-music CDs. Critics had been silenced or killed, and teachers had been afraid to discipline students. Several hospitals were taken over by gunmen. Professionals fled.

According to a Western police adviser, some 900 of the murders that took place in 2006, in a city of 1.7m people, remain unsolved to this day. The murder rate that year was some 40 times higher than Britain's. In 2007 the figure was probably worse. Some say half of Basra's 20,000-strong police force had been infiltrated by the militias. Many kidnappings and murders were committed by people in police uniforms. A sheikh of the al-Abadi tribe says the militias killed about 10,000 Basrawis during their two years' reign.

The British army, seeking to cut deals with some of the militia leaders, most of whom owed allegiance to a radical young cleric, Muqtada al-Sadr, was pushed out of the city centre by roadside bomb and bullet and was eventually obliged to leave its riverine base in Basra Palace. Since then the troops, now numbering around 4,000, have generally stayed stuck at "the COB", an airport 8km (five miles) west of the city officially called the Contingency Operating Base.

Just a few British service people still work in Basra proper, in the shabby but once grandiose Shatt al-Arab Hotel that serves as the Basra Operations Centre, known as BAOC, now the joint American-Iraqi command hub for military operations across Iraq's southern third. The British have handed over their main military and civilian responsibilities to the Americans. Most British troops will have left by the end of May, with just 300-400 trainers, including naval ones, staying behind.

A limited legacy

In the months leading up to the Charge of the Knights, the militiamen used to launch an average of six rocket salvoes a day at the British in the COB. Few were lethal, but they drained morale—and, more important, made it impossible for the British to repair Basra's rotten roads, bridges and sewers, or get out and about to regenerate civil or political life in the area.

In each of Iraq's 18 provinces, a provincial reconstruction team provided by the governments of the American-led coalition was meant to lead the drive for economic and political revival. But almost no one in Basra's team, led by Britain's Department for International Development, had been allowed to venture into Basra proper for an entire year before the Charge. Reconstruction tasks were subcontracted to local Iraqis, many of whom creamed off millions of dollars of aid money, often without doing the job.

In the past six years the British government has pledged £744m ($1.1 billion) towards rebuilding Iraq, much of it in the area under its occupation. Officials explain that a lump of that cash went on humanitarian tasks, such as helping displaced people. A National Audit Office report notes instances of fraud and corruption. The upshot is that British-sponsored reconstruction has been dismally sparse.

After the Charge of the Knights that is all supposed to have changed—and in some respects it has. Some 20,000 Iraqi soldiers are still in Basra, along with 800-plus American police trainers, all deployed in relatively small bases across the city, after the model prescribed by General David Petraeus in his successful "surge" conducted two years ago in and around Baghdad. "You cannot commute" when conducting a counter-insurgency, says a rueful British officer who helped the operation. "The Americans learnt the lesson that you've got to live among the people."

Good riddance to malicious militias

Nowadays the arterial roads into Basra are monitored by checkpoints. Cars driving along all the city's main roads must go through Iraqi military checkpoints every few hundred yards. Most notably, the Iraqi army, whose troops come mostly from outside Basra, holds sway over the police, still regarded as unreliable, even though their new commander, Major-General Adel al-Ameri, has sacked at least 4,000 members of his force in an effort to clean it up.

"The time of the ban on singing is over," says Hatim el-Bechari, an ebullient businessman who wants to build a park in his city. After the Charge of the Knights, "The militias' wall of fear fell down," he says. "People no longer feel the militias are part of life," confirms a Western diplomat.

Women still feel obliged to wear headscarves but dresses are sometimes gaudy. Fewer are cloaked in the black abaya. Half a dozen shops have been given licences to sell alcohol. Couples can stroll along the Corniche by the Shatt al-Arab waterway, formed by the merging of the Tigris and the Euphrates 64km (40 miles) upstream.

In provincial elections at the end of January, most of the councillors, a notoriously incompetent and corrupt lot, were chucked out. Twenty of the new council's 35 members support Mr Maliki and his State of Law coalition, which did well across

Iraq and particularly so in Basra, where people ascribed their new-found relative calm to his Charge of the Knights gamble. The new governor, Shiltagh Abboud Sharad, a mild-mannered professor of Islamic literature who went into exile for 28 years under Saddam Hussein, is a staunch Maliki man.

But Basra's resurgence is still far off. The governor complains that his notoriously lousy predecessor had already spent or earmarked the current year's entire budget, which in turn, according to the outgoing governor, was barely a quarter of what was required to mend the broken services of Basra. The city's proximity to the front-line meant that it never recovered from its pasting during the war with Iran from 1980 to 1988. Though the province holds 80% of Iraq's known oil reserves, it was sorely neglected under Saddam.

Since the Charge, the central part of the city has been spruced up. A few markets have been reopened and some pavements relaid. But basic services are still dire. Everyone complains that electricity cuts out for three or four hours a day, sometimes more, a problem widely considered worse even than violence and corruption.

The British government, in the words of a long-time Basra observer, has been "desperate to salvage anything from the past 12 months", after the previous five years of chaos and disappointment. It has provided start-up loans for businesses, and fosters youth-employment schemes. It bolsters a fledgling investment commission to woo foreign business. It has even sent a minister, Lord Mandelson, with representatives of 23 big British companies, to tour Iraq, including Basra (well, the COB). And it is holding a conference in London, with Mr Maliki in attendance, to promote investment. But so far few British firms, beyond the oil-and-gas giants, have taken the plunge to invest seriously in Iraq's south.

For Basra still offers little of what is needed to lure outside investment. It has virtually no banking or insurance system, not even a top-class hotel, though one is said to be opening soon. Skilled workers are scarce. All big decisions are made in Baghdad. Red tape and corruption are rife.

Above all, security is still shaky. The police, despite improvements, are incompetent. There is no secure compound or office block where international companies would be confident to place their staff. Even today British officials do nearly all their business in the COB. Those who venture "downtown"—the phrase is mentioned as though Basra city is still another world—go barely once a week under carefully arranged routines. The Western police adviser, for instance, notes that in the course of the past year he has visited the city on average once every ten days.

This correspondent, under the British aid ministry's aegis, was flown from the COB to Basra's operations centre and accompanied by a team of ten bodyguards provided by a security company on a tightly scheduled tour of the city. A saunter

through the streets was evidently deemed unwise. In such conditions, no Western businessman from a middling firm is going to spend much time airing investment ideas in downtown Basra.

Fear and loathing in the suburbs

Moreover, despite the hammering the militias took a year ago, the fear of a resurgence of violence from Mr Sadr's followers has not disappeared. True, his front men won only a couple of seats in Basra's provincial election, indicating a slump in his popularity. Yet thousands of the sullen, jobless men who followed Mr Sadr and other Islamist radicals are still there, lying low in the vast, insanitary breeze-block settlements laid out in grids on the city's western side. These places, dumps like Hayaniya and Jumhuriya, are much like the teeming Shia slums of Sadr City to the east of Baghdad. No one dares say they will not explode again.

The fear of that will increase if the new council fails to deliver services, as it may well do. Most Basrawis seem happy that the militias have been swept aside for the moment. Many, with a forced bravado, say the people will "never let them back". But often in the same breath they say they are also nervous about what will happen when the Americans leave. Despite Britain's last-gasp efforts to perk things up, Basra is still struggling to come back from the dead. For the British, their Iraqi venture cannot be marked down as glorious.



The Strategic View

The debate as to whether the invasion of Iraq was wise or not, and whether the Regime of Saddam Hussein could and should have been brought down by other means, will run for many years. Given the position that the UK Armed Forces found themselves in 2002, when war in Iraq became both a possibility and a probability, and under direction from the then UK Government, questions arise as to whether a different outcome could have been assured by different tactics and strategy at the outset, once the commitment to invasion was made.

History is continuously revised as new facts and perspectives emerge. The following articles from the pens of a number of authoritative commentators illustrate the strategic synopsis as it appeared in early 2009. However, as early as 04th November 2007, Sean Rayment, was able to report an internal strategic analysis by the Army in the Daily Telegraph:

"The Iraq war was badly planned, says Army

A leaked internal Army report has delivered an unprecedented attack on the planning and execution of the war in Iraq. The leaked document claims the failure in Iraq is due in part to a lack of understanding of Arab culture. The document, which openly condemns British and US foreign policy, says that "leaders should not start an operation without thinking through the options and implications of their plans".

It claims that widespread planning failures in the post-war phase led to the peace in Iraq being lost by September 2003, within the first 100 days of the occupation. The report is marked "restricted". It adds that many senior officers now believe that the Government has developed a "bureaucratic approach to problem solving" and is "no longer capable" of running large scale military operations such as the conflicts in Iraq and Afghanistan.

The 16-page document describes how the Iraq campaign was undermined by a lack of planning, resources, funding and intelligence. "The evidence shows that too little planning was done for Operation Telic [the codename for the war in Iraq] particularly on the non-military side, and that too few resources, both human and financial were allocated to the post-war situation," it says.

The report was drawn up in late 2006. It suggests that Britain and the US may have breeched the Geneva Convention by failing properly to conduct their duties as "occupying powers". It also says that assessments by British commanders on the success of their reconstruction efforts were "hopelessly optimistic". The secrecy surrounding the operation, the report claims, meant that government departments were unable to plan for the post-war phase until December 2002 - just three months before the start of the invasion.

The report, entitled An Analysis of Operation Telic, makes no apology for the stark criticisms contained within it nor for the embarrassment it will cause the Government. Instead, the document, which is part of a wider study called Theme Zero, says that the "Army has a duty to learn from experience". The report states:

- Lack of planning put Britain and the US, as occupying powers, in "breach" of the Geneva Convention
- Lack of planning resulted in delays before essential reconstruction could begin
- Not enough funding was requested by senior commanders or approved by the Treasury
- British commanders were forced to work to an ideologically driven US timetable
- Restrictive operational security meant that few people in Government were involved in planning.

The report also says that the main focus of US commanders was the stabilisation of Baghdad and that they were "unresponsive" to the concerns of their British counterparts for the worsening situation in southern Iraq. One officer wrote that the Britain was committed to an ideologically driven US timetable, adding: "The train was on Grand Central station, and was leaving at a time which we did not control."

The report says "the multinational headquarters suffered from a lack of good quality British officers with formal staff training", a situation which persisted until the military secretary, who advises the secretary of state for defence, intervened to ensure that officers of the correct calibre- were posted to Iraq.

Crucially, the document claims that the British were unable to win the "hearts and minds" of the Iraqis because they failed to understand Arab culture. One officer wrote: "We may be able to influence their minds but we will never win the (Islamic) heart.

"The Army must do more to gain tolerance and depart (from the country) before intolerance sets in." On attempts by the coalition to stabilise the country after the fall of Saddam, it said: "Stability operations take years to complete but the achievements of the first few weeks are critical. Lack of Phase IV [post-war] planning meant that coalition forces were ill-prepared and equipped to deal with the problems in the first hundred days."

The report also states that the failure to remove large amounts of Iraqi army ammunition supplies aided the insurgents in the creation of lethal improvised explosive devices which killed more than 300 coalition troops.

One officer who contributed to the report said: "We couldn't begin planning until it was almost too late, we just didn't have enough time so we went to war on untested plans."

Liam Fox, the Tory defence spokesman, said: "The fact that too few resources and too little time was made available for the post-war phase of the Iraq invasion has undoubtedly cost both military and civilian lives and allowed the insurgents a breathing space, which has made the whole long-term outlook for Iraq much more uncertain."

A spokesman for the MoD said: "We don't comment on leaked documents."

An Editorial in The Guardian on Saturday 28 February 2009 stated:

"The end in sight in Iraq"

Barack Obama campaigned on a promise to end the war in Iraq, and he won the election in part because he did so. He has repeated that promise since taking office, so in a sense there was nothing substantively new in the speech he gave yesterday at Camp Lejeune. But he gave it executive form, he gave details and dates, and he formally drew a rhetorical line as commander-in-chief under the war.

He chose to do this before a military and not a civilian audience, clearly understanding that American soldiers have borne the brunt of decisions which they did not make, and which in some cases they advised against, and that they have the right, as it were, to be the first to hear it from him. Indeed his speech, with its promises of spending on the needs of soldiers, veterans, and their families, and with its pledge never again to put American soldiers in harm's way in an irresponsible or ill-considered manner, was as much an attempt to reach out to the armed forces as it was an address to the nation.

What he had to say will hardly satisfy everyone. He has compromised with his military and political advisers to the extent that he has somewhat lengthened the timetable for withdrawal he originally envisaged, and he has increased the number of troops who will remain after the end of combat operations. Many people would say that a withdrawal which could leave as many as 50,000 troops in place is a pretty strange kind of withdrawal, and that no amount of jiggling with the word "combat" can disguise the fact that a force half the size of the whole British army, to give a point of comparison, will be staying on. One response to such criticisms would be to say that what President Obama is actually signalling is that the United States is on the way out unless impeded, and he seemed to underline this when reserving the right to amend the timetable if it becomes necessary to do so.

The broader context of American policy has shifted since Mr Obama first committed himself to ending the war. The improvement in security in Iraq, fragile as it may be, has emboldened Iraqis to the point where many are already behaving as if the Americans are no longer relevant to most of the calculations they have to make. They are more and more dealing with one another directly, with less and less reference to the third party that is the United States. If the Iraqi government does

succeed in exerting a firmer grip on the country in such a way as not to provoke a new round of armed opposition, it will soon want to get more Americans out of the country.

The agreements it and the United States have signed already lay this down, as the president made clear in his speech. Iran, weighing how to respond to the new US administration, has no interest in delaying the departure, and probably some interest, oddly enough, in a smaller US presence continuing for a time to be a factor in the regional equation. The anxieties of other neighbours, like Saudi Arabia, may also be allayed, for the time being, by a continued US presence.

There are two possible reactions to what President Obama has decided. One would be to charge that he has sadly diluted his promises and missed the chance to decisively repudiate a war which his predecessor ought never to have started. The other is to say that, short of absolute victory, ending wars is harder than starting them, and coping with their long-term consequences sometimes harder still. Finally, Iraq does not stand alone. There has to be movement toward settlement of a whole range of linked conflicts, which the president acknowledged when he called for broad engagement with all the nations in the region. That is a pledge which may turn out to be the most important, and also the most difficult to fulfill, of the commitments which President Obama made yesterday".

Martin Chulov wrote for The Guardian on Monday 2 March 2009 that:

"We will leave Iraq a better place - British general"

"The general who has spearheaded Britain's two longest and most controversial wars of the past 60 years claims today the army will leave Iraq with al-Qaida largely defeated and the roots of democracy firmly planted.

Lieutenant-General John Cooper, who stands down tomorrow as deputy commanding general in Iraq and also retires from the army after more than 30 years, said Basra, which the British will leave by early summer, is back on its feet and buttressed from any militia resurgence. Cooper believes January's nationwide provincial elections were a turning point and said Iraq would be handed over in better shape than when Britain invaded six years ago.

His optimism echoed predictions made after provincial elections in early 2005, which instead heralded escalating violence. But this time, he said, shifts in attitude throughout Iraqi society, as well as improved security, would prevent another slide towards anarchy.

"We have got democracy rooted here," Cooper said in his final interview before leaving Iraq. "Clearly there is a long way to go to develop things. The provincial elections show that Iraqis have an appetite for it. They were free fair and credible and that reflects a desire for change."

Cooper was second in command only to US generals David Petraeus and Raymond Odierno. All three were responsible for the 150,000 coalition troops in Iraq. His upbeat assessment comes weeks before the final tranche of British troops begins to withdraw from Iraq and is bound to renew controversy over the role Britain played in the invasion and its aftermath.

Tens of thousands of Iraqi civilians have been killed during the insurgency. The number of British soldiers killed stands at 179, hundreds more have been maimed. The infrastructure of the country has, in places, been decimated.

American generals have said al-Qaida was strategically defeated in Iraq following the troop surge of late 2007. Cooper would not go that far, but said: "Al-Qaida had been here in significant numbers and hopefully their aims and objectives have been denied to them. The lesson that I draw from this is that an organisation like al-Qaida that purports to represent the people and then targets them will never take the people with them. They have suffered significant reverses and their ability to operate and target civilians has been diminished.

"Their organisational ability has been greatly reduced. Their ability to communicate through the internet has been taken from them and so has their ability to finance themselves. Effectively the size of their networks has been much reduced.

"The surge was very important. Surges work. We saw that in Northern Ireland in 1972 and with the way the Awakening removed support for al-Qaida. If you have the people's support, you will win." The Awakening councils or Sahwa were groups drawn from Sunni Arab tribes that began allying themselves with the coalition in 2005 to fight al-Qaida.

Despite the general's comments Basra remains impoverished and in desperate need of essential services, but Cooper believes an occupying army's main task should be to set the conditions for changes to society. "They [the Iraqis] have a writ of national government, the growth of the internal security services. (In addition) they have a well-defined legal system, a well-defined and understood legislative system and security structures that have grown," he said. "We have done that by establishing democracy in the Middle East. Diplomatic missions are beginning and Iraq is again a member of the community of nations.

"British forces will leave southern Iraq in a better position. People have made sacrifices. Quite often the ultimate sacrifice. Soldiers understand what they are doing here and why. You don't get a decent account of history until everyone involved is dead. But in time I think people will say we played a strong role in the south."

Cooper arrived in Iraq in early 2005 as a major-general fresh from acting as a deputy theatre commander in Afghanistan, where the insurgency had then largely been stabilised. He led the 1st Armoured Division in Iraq into what was then a rapidly spreading anti-coalition insurgency and sectarian war.

"What emerged in Iraq was insurgency on a grand scale. What is different [in Iraq] in 2009?" he asked. "The conditions. In 2003 the lid came off from 30 years or more of sadistic oppression and the passions of everyone involved had been let out. It took time for the Sunnis to realise they should be inside the political process. It took time for the Shia militias to do the same and it took time for the government to build capacity. By 2008 the time was right for this to happen."

But when the British army leaves its fortified base at Basra airport, nine miles (15km) north of the city, American military units will replace them, a fact which opens the door for criticism that the British mission is far less accomplished than claimed by both Westminster and Whitehall.

"The Americans are going to be doing something different," Cooper said from his office in the US Embassy in Baghdad. "Our principal task was to train up 13 divisions of the Iraqi army. We have done that. And we also aimed to get conditions right for the development of other non-military activities. The Americans will have fewer troops. They themselves will be drawing down. They are not duplicating what we have done."

Iraqi officials in Basra say that over the past six months the Americans had already taken a lead in securing the city. Britain maintains 18 joint outposts with the Iraqi army throughout Basra province, but its units are rarely seen on the streets of towns and cities. British forces have been criticised by some quarters in Iraq for rarely leaving the Basra base since late-2007.

As the war has become increasingly unpopular among the British public the government has been accused of going to extreme lengths to minimise casualties on one front, while the war in Afghanistan is claiming the lives of an increasing number of servicemen and women. Britain's Challenger tanks have not left the Basra base in the past eight months and combat operations have been reduced to the contribution of the SAS in and around Baghdad.

British forces withdrew from Basra city to the airbase in September 2007 after safe passage was negotiated with the Mahdi army, the Shia militia whom they had fought throughout southern Iraq in the three years before. They supported the Iraqi army last March as it drove the Mahdi army out of Basra in an operation that ushered in relative safety to the city.

At the time Cooper had just arrived back in Iraq after two years and was not told in advance of the operation. Some British-trained Iraqi forces abandoned their posts and vehicles during the operation which was called Charge of the Knights. But Cooper insists Iraqi capabilities have grown markedly.

"The government has made it clear that in a democracy the only force that can exist is a government," he said. "The south had seen a militia dominating their lives, which in the end they rejected. They have assessed that it is better for them for now to be involved in the political process."

Sean Rayment wrote from Basra in the Daily Telegraph on 09th March 2009

"Iraq - so was it worth it?"

"They were on the verge of humiliation – but now British troops believe they can depart southern Iraq with their mission accomplished.

On a balmy spring evening in early May 2007, a small and isolated British outpost in the centre of Basra was attacked by more than 200 insurgents. The militiamen – followers of the Iranian-backed Shia cleric Moqtada al-Sadr – had a simple plan: kill all of the 40 soldiers inside the base. Had it been successful, the attack would have amounted to "strategic failure" for Britain in Iraq, and a retreat from the country would have been inevitable.

For more than four hours, the troops inside the Provincial Joint Coordination Centre (PJCC) fought off wave after wave of attack. Those inside the base later said that the British machine-gun barrels had glowed red after firing more than 9,000 rounds and killing dozens of insurgents. Although the attack failed, it signalled to the British that the militias had the capability to plan, mount and launch large-scale operations without their knowledge. It was also the first real sign that the Iraqi Army would struggle to control the streets once the British had gone. Most of the insurgents who took part in that attack almost two years ago came from the Hyaniyah area of Basra, one of the most deprived parts of the city.

But much has changed in Basra in the past 18 months, especially in the Hyaniyah. Where once street battles were fought, today British soldiers are working hand-in-glove with their Iraqi colleagues, opening schools and developing strategies for clearing rubbish. The troops are regarded as heroes and liberators and are greeted with smiles and handshakes from Iraqi civilians.

The transition is, according to both Iraqis and the British, nothing short of stunning. In some areas of the city, the property market is soaring, with some exclusive homes costing $400,000. One local businessman has built a hotel costing $15 million. There are even plans to create the city's first casino.

Major General Andy Salmon, the Commander of the Multinational Division in Basra, believes the war was worth the sacrifice of the 179 British servicemen and women who have so far died fighting in Iraq. He also believes it is now time for the British military to return home. He will be the last senior British officer to command in southern Iraq.

At the end of March, the long-awaited withdrawal will begin and an estimated 2,500 US troops will replace the British inside the Contingency Operating Base (COB), to be renamed Camp Charlie.

"It is a case of mission accomplished," Maj Gen Salmon told The Sunday Telegraph. "The Iraqis now effectively run their own affairs. They control the streets, and the militias have more or less been defeated."

He believes that, with the right investment, Basra could become a major international city, like Dubai. "It's close to Iraq's only deep-water port, it sits at the top of the Persian Gulf, and it has a rail link which extends to the Turkish border, so it's knocking on the door of the EU. I'm very confident that in 10, maybe 20 years' time, this place will be transformed – and a large part of that is down to the British troops who served here.

"We have achieved what we set out to do. We have got the Iraqi 14 Division up and running to manage security by itself. We have handed over Basra International Airport. We have created a secure and stable environment for social and political development to take place.

"Everyone should be rightly proud of what has been achieved. There have been ups and downs but that is the same in any campaign. There is still a lot of work to help investment to take place, and we need to help British investors to get in. The sacrifices of our mates have not been in vain, so in that respect it has been worth it."

But when the last soldier flies out of Basra for the final time, others will question that assessment. The Iraq War not only divided the nation, it also soured relations with Britain's European allies. The conflict lasted longer than the Second World War, cost the taxpayer in the region of £8 billion and tarnished Tony Blair's legacy; it showed that the US-led coalition had the power to topple a dictatorship but that it lacked the foresight to plan for a lasting peace. It exposed failings in the highest levels of military planning, and the battle for Basra almost left the British armed forces humiliated.

So as the 4,100-strong British force prepares to leave, what is Britain's legacy in southern Iraq? In 2003, following the Coalition invasion, a region centred on Basra came under British control. Initial joy among the local Shia population at the toppling of Saddam Hussein's regime turned to frustration and, on occasion, to violence.

In August 2007, Basra Palace, the British Army's last base in the city, was given up to Iraqi provincial control and the British withdrew to the Contingency Operating Base six miles from the city. The ceremony was sombre. Many British troops had died in the weeks leading up to the handover as the militias, most notably the Jaish al-Mahdi (JAM) led by al-Sadr, fought to seize control of the city.

The controversial pull-out was the end to a politically motivated mission to get British troops out of Iraq as quickly as possible. While the plan looked good on paper, the reality was different. Within weeks of the British handover, the Iraqi Army in Basra had lost control of the streets – a devastating blow for the British generals who had planned on the assumption that it was a competent fighting force. In Baghdad, American officers accused the British of jeopardising the security of southern Iraq; it was the British Army's lowest point in the entire campaign.

Basra descended into chaos, intimidation and murder were rife, women were executed for merely looking "too western", and the COB faced rocket and mortar attacks almost hourly. Britain had once prided itself on its counter-insurgency strategy, but the failure to defeat the militias in Basra forced British generals to accept that the lessons they had learnt after 30 years of fighting in Ulster were no longer relevant.

The militias' rule lasted until March 2008 when Nuri al-Maliki, the Iraqi president, ordered his army to retake the city in "Operation Charge of the Knights". After a series of false starts, the militias were eventually forced out in May last year. Today, Basra and southern Iraq are both relatively stable. The "monopoly of violence", according to Maj Gen Salmon, is now in the hands of the Iraqi Army.

One of the most competent officers in the Iraqi army is Colonel Khalid, the commander of 26th Brigade's 3rd battalion. The word among the British is that nothing happens on his patch without his knowledge or approval. Colonel Khalid is charged with the responsibility of controlling the Hyaniyah.

Home to around 600,000 people, this former militia stronghold is one of the most impoverished and densely populated areas in the whole of Basra, built by Saddam Hussein to house tens of thousands of Marsh Arabs "cleansed" from their historical home along the Shatt al-Arab. Today, it languishes at the bottom end of Third World poverty. Here, flocks of sheep feed off rubbish piles, unemployment stands at around 40 per cent, and the stench from open sewers, where bare-footed children play, hangs in the air.

"Today, the Hyaniyah is safe," Colonel Khalid told The Sunday Telegraph. "The insurgents have gone. They know that we will arrest them or kill them if they return. Some have been killed, others arrested and some have gone to Iran. The people here do not want them any more."

After the "Charge of the Knights", the British Army returned to Basra to work alongside the Iraqi army in Military Transition Teams (Mitts). Their role is to gently advise the Iraqi army on how to win the consent of the people. Around 850 British troops are still involved in "Mitting" around Basra, but as each day passes the role of the British diminishes.

When Brigadier General Sabah, the commander of 26 Brigade, opened the new Haleema Al Saadeyah school last Saturday, he was greeted by several hundred schoolgirls all screaming "Viva Iraq! Viva Iraq!". The adulation he and his men received is yet further proof of the trust the Iraqi public now has in its army. Once an ill-disciplined and incompetent rabble, today it is a confident and professional force, which has the support of around 97 per cent of the population. Brig Sabah says he is grateful for the help from the British and for "the sacrifices of your soldiers". But, he says, the time has now come to leave.

"We no longer need any help from anyone. We are not ungrateful, we are thankful to our friends who released us from Saddam's prison. Your sacrifices and our sacrifices have helped us to get to where we are now. But now we can run Basra. We control Basra now."

Despite the optimism, the city's future remains uncertain. There is real concern in and around Basra that the insurgents could profit from growing discontent over the lack of jobs, especially among young males. On Leaf Island, which lies to the north-west of Basra, Sabbah, a 22-year-old fisherman, complains about the lack of work.

"It is good that the militias have gone. But I have no work – neither do any of my brothers or their friends. If we don't get work soon, the militias will return and they will say 'Come and work for us, we will pay you', and some of the young men will go."

While troops in Basra prepare for the final withdrawal from Iraq, the nation's military chiefs are now focused on an even greater challenge: Afghanistan. The Iraq War and the conflict in Afghanistan are often grouped together but remain very different problems. It is difficult to draw lessons from the Iraq campaign that might also be relevant in Afghanistan because the countries and the insurgencies are vastly different. But one of the reasons why Britain almost lost the Battle of Basra was because there were too few troops on the streets.

David Miliband, the Foreign Secretary, said last week that the war in Afghanistan was "not a numbers game". Well, commanders in Iraq disagree. Just about all the senior British officers in Iraq to whom I spoke agreed that more troops needed to be sent to Helmand to ensure that the mistakes made in Iraq should not be repeated in Afghanistan".

Reflections in the independent UK media on the UK contribution to the Iraq war and Operation Telic

Jane Corbin, BBC Panorama reporter, summarised her coverage of

Five Bloody Years in Basra

"Six years ago, British troops began streaming across the Kuwaiti border into Iraq as the invasion aimed at toppling Saddam Hussein's regime began.

A deal hammered out between US President George W Bush, British Prime Minister Tony Blair and their military chiefs gave UK forces responsibility for winning and occupying the predominantly Shia south and Iraq's second city, Basra. Baghdad, along with central and northern Iraq, came under US control.

I entered Basra, the fabled trading city of Sinbad the sailor, with the British Army in early April and at first it seemed as if the British had got the best deal. A Shia

population which had been ruthlessly suppressed by Saddam Hussein and his Sunni henchmen welcomed us with smiles and flowers. One of the first women I met was squatting with her family in the mansion of Saddam Hussein's cousin, the deposed ruler of the city, the infamous Chemical Ali who had unleashed poison gas on the Kurds. She wept when she saw us and urged the crowd around us to praise Mr Blair and clap us - which they did to our embarrassment.

Bad omens

The magnitude of the task that faced the British was immense. In April 2003, I reported from Basra on the struggle then facing the people of Iraq's second city. Apart from the security situation, there was no water or electricity and canals of sewage ran through the streets. The citizens clamoured for clean drinking water - a troop of soldiers we were with in Warrior armoured vehicles were almost overwhelmed by angry people demanding action. It was a sign the citizens of Basra would not stay cowed forever.

On the surface it seemed quiet - British commanders prided themselves on the ability of their troops to walk around the city wearing soft berets while US troops in full armour were still fighting their way north towards the capital. There was goodwill towards the British in those early heady weeks, but there were bad omens too - mistakes and tragedies which the British and their allies were responsible for which caused a backlash.

No blueprint

I found the Hamoodi family in the ruins of their home. It had been hit by a coalition bomb that was supposed to have targeted Chemical Ali, staying overnight next door. He somehow escaped. Even in the midst of mourning 10 of his relatives, Abid Hassan al Hamoodi, the patriarch of the clan, told he was still glad that the coalition had forced Saddam Hussein out. "The most important thing is democracy and for us to lead a peaceful life," he said as we looked at the family photo album together.

I left Basra feeling that although the battle had been won, there was no blueprint for the post-Saddam era and that spelt big trouble. There was a vacuum developing and who knew what malign forces would fill it? I said as much in my TV reports as I drove out of the city.

Unpopular war

British commanders knew very well there had been virtually no planning and this was an unpopular war back home where the legality of the invasion was being hotly debated. "We have to transition from a brutal regime to a democracy," Brigadier Graham Binns of the 7th Armoured Brigade told me, "and that transition will be difficult and we're beginning to see different groupings vying for that power".

Within months the first powerful home-grown militias had emerged out of the chaos in the country. In the south the Mahdi Army, led by a ruthless young cleric, Moqtada Sadr, flaunted their Shia credentials but also positioned themselves as Iraqi nationalists. They had strong support in the poverty stricken Shia flats - the slums of Basra. They challenged US forces in an uprising in Najaf, followed by a truce. They would become a political challenge in the years ahead and a security nightmare for the British.

The Americans privately grumbled that UK forces had refused to put down this militia and its leader in their southern strongholds right at the start and predicted this would strengthen them. The British government argued that the Iraqi people had to choose their own leaders, however unsavoury they might be to Western tastes. Three years on and the malign influence of the militias had led to increasing deaths amongst British forces and increased instability in the southern provinces. I came back to make another programme Bringing our Boys Home? which explored a possible exit strategy from Iraq.

I arrived by RAF transport plane - "hot dropping" into Al Amarah, a wild tribal area on the border with Iran. As we touched down British tanks came roaring out to meet us and we ran from the back of the plane to the shelter of the heavy armour. Panorama spent 10 days in Basra in March 2006 as the country teetered on the brink of civil war. The town had become a battle zone for the Mahdi Army and a competing Shia militia, the Badr Brigade. The British were caught in the middle.

Sophisticated roadside bombs were an every day hazard, the armour piercing technology in them supplied by Iran, I was told. It was a way for Iraq's old enemy and neighbour to de-stabilise the south, undermine the West and exert influence by backing rival militias against each other.

Escort killed

A day later our team travelled through Al Amarah town, which even Saddam Hussein had never tamed. My escort was Captain Richard Holmes and his men from the Paras. He took me to see how the training of local police forces was progressing and showed me tank mines and rockets which had been seized by Iraqi forces. But the atmosphere in the town was tense and we sensed something bad could happen any minute. Moqtada Sadr had been in town stirring up anti-British feeling.

The soldiers were anxious for us to get back to their base, a few miles away. Our convoy split as part of normal security measures - we took one street with an escort, the Paras took a parallel road. As we sped out of town I saw helicopters and tanks heading back the way we had come. Something very bad had indeed happened. Capt Holmes' convoy had been targeted by a roadside bomb - his shattered vehicle then petrol bombed by local crowds. He and Private Lee Ellis had died just minutes after we left them.

No-one knew which militia was behind the killings or what the motive was in the convoluted politics of the town. The British death toll was mounting daily, as were Iraqi casualties - victims of the rival militias.

'The Borrowers'

In early 2007, as the fourth anniversary of the war approached, I found myself interviewing the families of British soldiers who had decided to speak out. The programme For Queen and Country showed how the military contract between soldier and government had been broken by the Basra experience. I spoke to the families of British soldiers killed in Iraq about their sons and their views on the government's culpability in their son's deaths

Sue Smith, whose father and grandfather had been in the Army saw her son, Phillip, off to war believing he would be properly equipped and protected. But he died when his lightly armoured Snatch Land Rover was blown up - one of several soldiers to die in similar circumstances. The Army argued then that these Snatches were more mobile than heavy armour, but the reality was that the British Army had no heavily armoured vehicles suitable for using in built up areas.

"The Yanks always used to call the Brits 'the borrowers' - they've always got to borrow something because they haven't got it," Sue explained. "Under health and safety law in the UK if someone kept dying because of the same mistake then it would be closed down. Why is it acceptable these lads aren't in the right vehicle to keep them safe?" she asked.

Since then the controversy has only increased with soldiers talking openly about the failings of NHS care for colleagues suffering stress and the growth of charities like Help for Heroes, which many feel are unreasonably having to plug the gap.

Remarkable footage

By the end of 2007, with the fifth anniversary of the invasion approaching, I was back in Basra. This time it was to make two films for Panorama. The first The Battle for Basra Palace revealed the secret deal between the British Army and the Mahdi Army, which had allowed our forces to withdraw from the city centre to the airbase outside.

As British forces handed back control of Basra Province to the Iraqis in December 2007, Panorama, using soldiers' own footage, told the story of the bloody British fight in southern Iraq

We got hold of remarkable footage shot by soldiers themselves in their last fraught weeks in the city when it was becoming clear the British presence had become so counterproductive that it was time to leave. Lance Corporal Kevin Bagling of the Rifles was filmed on a mobile phone in the back of his armoured vehicles as a hail of bullets pinged off the armour round him in an ambush. The battle raged for 90 minutes in temperatures of over 50°C. "We went through six boxes of water . . . the

spent bullet casings were red hot, I was burned as one went down my body armour," laughed Kevin.

A month later he was hit by a rocket propelled grenade and with blood pouring down his neck made it back to base where army medics discovered 52 pieces of shrapnel in him - one just touching the jugular vein.

Time to go

There were many individual tales of heroism but the British were just clinging on. Iranian mortar crews crept into the city to support their allies in the Mahdi Army. An Iraqi general, Mohan al-Firaji, was sent from the government in Baghdad with a blunt message for the British - they had to go - fast. And so a deal was done and Panorama was the first to reveal it.

"The deal was simple" Gen Mohan told me, "the Mahdi Army had to stop bombing British forces and the British would release all Mahdi Army prisoners in its custody".

Subsequently pictures showed the Rifles leaving the Palace - the heart of downtown Basra, in their Warriors with banners flying.

So were they essentially a defeated army as some of the press had charged?

"We left because it was the right thing to do. Arguably the peace and quiet we are seeing now in Basra is because we fought them to the negotiating table!" Lt Col Patrick Saunders told me. But if it was quiet for the British now out at the airbase, it was anything but quiet for the citizens of Basra as we found out in The Legacy, our second programme.

Ominous threats

Brave local people were prepared to research and film for us in a city where Westerners would be kidnapped the moment they showed their faces in the streets. The tales we uncovered were harrowing.

In December 2007, Panorama looked at the role of the Mahdi Army and the techniques they employed to enforce their will in Basra Province. The Islamic militias harassed women - and worse. The police showed us records of 47 killings of women and we saw ugly graffiti - "Beware of using makeup and prettifying yourself, God will punish you for it!" read the ominous threats.

'When a woman is murdered her corpse is thrown in the streets," the police chief Maj Gen Abdul Jalil Khalaf told me. "They write notes on her body that she was an adulteress or some such excuse'" he continued.

Maj Gen Khalaf himself had survived numerous attempts on his life - including once from a car bomb as he drove to meet me. Despite the bravery of such people the situation was becoming untenable. The UK forces would only say it was now

the job of the British-trained Iraqi forces to defend themselves and call on outside help only if they really needed it.

Joint offensive

The fifth anniversary of the invasion in 2008 coincided, at last, with a determined effort to break the power of the militias in Basra. But the British had nothing to do with it. The central government of Iraqi Prime Minister Nouri Maliki, together with US military chiefs disillusioned at the British attitude, began Operation Charge of the Knights - a joint offensive spearheaded by the Iraqi 14th Division. The militias were routed and for the moment have remained quiescent.

Today, six years on, Basra is far from where it was supposed to be by now - development and re-building have hardly touched those slums and open sewers, although there is more electricity and water, thanks to international aid efforts. Recently provincial elections have been held which have given hope that Iraq's fledgling democracy is gradually taking hold.

The Foreign Office talks optimistically of Basra, the city of Sinbad, one day being like Dubai - a profitable trading port with investment flowing in. It is difficult to picture that now, and although it is premature to talk of failure doubts remain about British security policy in the past six years and what it has bequeathed to Basra.

(Source: BBC Website)

A public debate between Sir Jeremy Greenstock and Col Tim Collins

Sir Jeremy Greenstock, former UK Ambassador to the United Nationss, and Colonel Tim Collins debated the Iraq war in the Guardian on 14th April 2009:

Greenstock: "I think at the time there was a case for going in because Saddam was resisting a whole raft of resolutions, building a missile programme that was proven, and the WMD question was unknown. There was a strong case, that Tony Blair made, that better to deal with him then than leave it till later. It was, however, high risk because we hadn't established legitimacy of what were doing.

In the invasion the British did extremely well. It was a high-grade military performance. Post-invasion it was extremely difficult to work within what was an American dysfunctional performance. In the first two years we performed superbly in the south. It was only when Basra politics became so confused and divisive that we found it hard to keep it together. In the end it was the right decision to pull out because Britain had done the job.

It will long be remembered that we were part of a forceful intervention in someone else's territory that a lot of people resented, and many saw as illegitimate. The fact that we did it without full international backing undoubtedly has had an impact on

our global image. On the other hand, in the Middle East, we are regarded as understanding the region better than in the US, of understanding local interests better. I think it's not fatal. It's a sticky period but its recoverable."

Colonel Tim Collins, best known for his inspirational speech to his troops on the eve of the Iraq war in 2003

"I think the whole scheme ultimately was probably ill-conceived. That was compounded by some poor decisions that were taken shortly after the invasion. There was no understanding of the conditions that we found and no clear strategy and that probably cost something in the order of three years of chaos before things could be restored. It's a tale of two parts. The United States fared poorly at the beginning of the insurgency. Their learning curve was extreme, and I have to say they have come out of it as a thoroughly impressive counter-insurgency force that has achieved tangible results in Iraq.

The tale for the British sadly was the opposite. It was a very different army that went in. The men and women did well as individuals. It exposed the poor level of command and staff - which has been swept away - and a poor performance at strategic level and what the Americans would characterise as an institutional lack of aggression and forward leaning and a capacity for muddled thinking. I think the army is a better army for the experience. It is a better equipped army, it's a better led army. It's an army now with a clear purpose".

Michael Evans, Defence Editor wrote in The Times on March 30, 2009 that:

General Sir Richard Dannatt says MoD took eye off Iraq as Afghan instability grew

"Attacks on British soldiers in Iraq rose dramatically in 2005 after military chiefs, under orders from Tony Blair, switched their attention to a new campaign in Afghanistan, the head of the Army has told The Times.

General Sir Richard Dannatt, who retires as Chief of the General Staff in August, indicated that the MoD became distracted after Mr. Blair committed Britain to "a bigger effort" in Afghanistan in 2004. At that time southern Iraq was relatively quiet compared with Baghdad, where US troops were coming increasingly under attack. It was in this context that Mr. Blair then decided to order military chiefs to start planning for Afghanistan.

Sources close to the former Prime Minister said that he had made the decision because of deteriorating security in Afghanistan, not because he wanted the main focus to switch from Iraq. General Dannatt told The Times in an exclusive interview: "The importance about that decision [however] is that it was a strategic move by the United Kingdom to make a bigger effort in southern Afghanistan to relieve some of the pressure on the United States, because by the middle of 2004, in



General Sir Richard Dannatt in 2009

Baghdad and the north and the west of Iraq, violence was mounting considerably more than it was in the south.

“It seemed a very reasonable and understandable alliance and coalition thing to do more in another theatre to relieve the senior partner in a coalition. But we said we wouldn't do it until the middle of 2006, so we gave ourselves a two-year lead-in,” he said.

“But of course by the middle of 2006, the situation in southern Iraq had also deteriorated, which gave us the conflation of two difficult operations to put the pressure on the Army that we've spoken about in the past,” General Dannatt said, looking back at the lessons learnt from the six-year Operation Telic campaign in Iraq. Tomorrow a two-star American general will take over command of the base at Basra airfield in the first stage of Britain's withdrawal from Iraq.

In 2004, the year of Mr Blair's decision, which was announced at a Nato summit in Istanbul, twenty-two British Service personnel died in Iraq, but only two from roadside bombs. Thirteen of the fatalities were caused by road traffic accidents or other non-combat incidents. This changed dramatically in 2005 when Iran-backed Shia militia launched a war against the British troops.

One of the reasons, General Dannatt said, may have been Iran's anger at new Western efforts at the time to try to stop Tehran's nuclear programme. Of the twenty-three troops who died in 2005, eight were killed after their lightly armoured Snatch Land Rovers were blown up by a new type of explosive device that had been manufactured in Iran and smuggled over the border into southern Iraq.

The following year, out of the 29 who died, 15 were killed from the deadly roadside bombs called explosively formed projectiles or penetrators (EFPs). The MoD had to scrabble around to buy heavily armoured vehicles off the shelf to send off to Iraq to provide better protection against the EFPs.

"We'd been used to dealing with IEDs [improvised explosive devices], particularly in Northern Ireland, but these were really big ones. These weren't just made in someone's backyard. The intelligence and the evidence shows that these were proper workshop bits of equipment, down to an Iranian design, and this was a serious escalation that appeared very quickly," General Dannatt said.

Huge Mastiffs and Bulldogs were dispatched to Basra, although there were time delays, General Dannatt said, because of the need to integrate British military radios into these new armoured vehicles.

General Dannatt recalled the impact that Mr Blair's decision on Afghanistan had on the military. "Inevitably, part of our planning effort in the MoD and in the Permanent Joint Headquarters was allocated to thinking about what we would be doing in southern Afghanistan, what sort of forces we would need, and we began planning that operation, and particularly also thinking through the very difficult issue of establishing a line of communications almost halfway round the world - no small feat," he said.

"So inevitably the amount of work we had given ourselves was going to increase as we prepared to move towards beginning that operation in southern Afghanistan."

Despite rising casualties, there were no reinforcements. With 3,500 troops being earmarked for Afghanistan, resources were tight. Instead, to try to stop the daily attacks on units serving in Basra city, talks began with the Shia militia to end the violence. The last-remaining 500 troops in Basra City withdrew in September 2007.

General Dannatt was at pains to emphasise the role of British Forces in restoring security to Iraq's biggest port city.]"We've got to a very satisfactory outcome in southern Iraq and Basra today, and I think that's huge credit to the Armed Forces, frankly, for taking the pain and managing with the resources that we had," he said.

Plain speaking

General Sir Richard Dannatt took over running the Army in 2006 and quickly acquired a reputation for speaking his mind. He admits that everything he says is intended and calculated. In October 2006 he warned of the risk that the continued presence of British troops in Basra might "exacerbate" the security situation. In the same interview, he said that whatever consent British troops had enjoyed from the Iraqi people had "largely turned to intolerance".

He frequently highlighted the pressures the Army was under and warned that it might be broken by the nonstop tempo. He said that there was a "moral and spiritual vacuum" in Britain that had allowed Muslim extremists to undermine "our way of life". He criticised the practice of putting injured servicemen into the same wards as civilians, and he has urged the public to come out in support of troops when they return home The general also called for better pay for young

soldiers, saying that those serving in Iraq and Afghanistan were paid less than traffic wardens"

Correlli Barnet, wrote in the Daily Mail on1st May 2009

"As British forces pull out of Iraq, it is time, at last, for the truth"

"So it's over at last. Six years and six weeks after British forces carried out Tony Blair's order to join in George W Bush's attack on Iraq, our troops are returning home. This has been the moment for Gordon Brown and his colleagues to dish out double rations of praise to our armed forces for what they have accomplished. But the praise, though much deserved, is poor compensation for the true costs of this conflict.

A proper audit of the Iraq adventure must look at the entire balance sheet, with original objectives measured against accomplishments six years on, and the accomplishments measured against the losses we have endured.

Well, the alleged original objective was stated often enough by Bush and Blair in the months before the war began in March 2003. It was to topple Saddam's regime because of the danger posed by his weapons of mass destruction, which were - so we were told - ready to fire at 45 minutes' notice.

We now know that no WMDs existed and that 179 British servicemen have died, and thousands more been grievously wounded, all in vain. Yet that is by no means the full story. For it is all too probable that WMD only served as a pretext to cover Bush and Blair's real purpose - 'regime change', meaning that Saddam ought to be toppled because he was a cruel tyrant, or, in Blair's own word, 'evil'.

This belief originated with politically influential Washington academics like Paul Wolfowitz (appointed by Bush as Defence Secretary in 2001) who preached that the 21st century was to be 'the American century'. The economic and military might of the only global hyperpower would convert all the tyrannies of the world to American-style capitalist democracy.

The neo-cons believed that toppling Saddam Hussein would create the initial bridgehead for spreading democracy throughout the Middle East. After all, the first experiment in this kind of political conversion had already been carried out in 2001 with the toppling of the Taliban regime in Afghanistan. Some conversion!

It seems certain that Bush and Co. actually believed that the toppling of Saddam would lead almost at once to the Iraqi people embracing democratic institutions, whereupon all but a handful of American forces could be withdrawn. Indeed, so convinced was Washington that the military occupation need not last beyond summer 2003 that they made no proper plans at all for the governance of the country.

They even demobilised the Iraqi army and police (leaving them without pay but with their weapons) on the basis that these forces had been instruments of Saddam's regime.

The resulting security vacuum was promptly filled by an armed insurgency partly recruited from disgruntled soldiers and policemen. From then until into 2008 there raged a ferocious guerrilla war between the insurgents and the American occupying forces - and that was coupled with a civil war between Sunnis and Shias.

Nothing like this had been anticipated by political or military planners in Washington. Only with a now famous 'surge' overseen by a new U.S. commander, General Petraeus, in 2006, was the insurgency largely mastered. Even so, it may well be that the insurgents are simply lying low until the Americans go home next year. So instead of the hoped-for quick and cheap 'in-and-out' job in Iraq, the United States has found itself trapped in a political and military embroilment costing so far over 4,200 American lives and at least $600billion.

What lies on the positive side of the balance sheet? Simply the shaky, Shia-dominated government of Nuri Al-Maliki contending with Sunni disaffection and Kurdish separatism. It would be a bold man who would prophesy the political anatomy of Iraq in five years' time - bolder still if he bet on a functioning democracy in a stable country.

But what has (this) war done for the Iraqi people? Certainly political dissent no longer invites torture and death as it did under Saddam. Yet for the ordinary Iraqi and their family, the war and occupation has been truly a nightmare. Even today basic services like clean water, sewage disposal, and electricity for lighting, refrigeration and air conditioning have still not been restored to the levels under Saddam's rule.

As for the direct violence of war, insurgency and counter-insurgency, the Iraqi nation has suffered between 100,000 and 600,000 deaths (estimates vary). Some four million people have become refugees either in Iraq itself or in neighbouring countries such as Syria. In short, Bush and Blair's experiment in regime change has caused a catastrophe only surpassed in scale by the two world wars.

So by all means, let us be thankful that at least Britain is now out of it - thankful that no more brave servicemen and women will be killed or wounded, no more families bereaved. But this cannot - indeed, must not - be the end of the matter. For this is surely the moment when we must set up a commission of inquiry which will search for answers as to how and why (we were) ever embroiled Britain in (this) deeply misguided war. It is time, at last, for the truth."

Barnett's article, from one of the most loyalist and conservative of British Newspapers, illustrates the division between public support for the Armed Forces in general, and concern for the political decision making that led us into the Iraq

War and Operation Telic, remain acute and unresolved. Indeed, the opinions expressed by Corelli Barnett are among the more moderate of many of those expressed across the spectrum of the British Press, including those who would be regarded as strongly nationalist, conservative and on the side of the Armed Forces.

Dr Warren Chin wrote in an article in Strategic Studies Quarterly in the Winter 2008 issue:

Why Did It All Go Wrong? Reassessing British Counterinsurgency in Iraq

Britain has a relatively good track record in counterinsurgency (COIN). But as one journalist commented in 2008: "the war in Iraq has been one of the most disastrous wars ever fought by Britain. It has been small, but we achieved nothing." Although this view can be contested, it is clear that, if judged in terms of the original aim, Britain's achievements fell far short of expectations set in 2003. A fundamental reason for this failure was the apparent ineffectiveness of Britain's COIN campaign. The aim of this article is to explain why a strategy used so effectively in the past unraveled in Iraq.

Specifically, it challenges the view that British failure in Iraq was inevitable or that it was the product of an outdated COIN strategy. Although the British accounted for only five percent of the entire coalition force, such an analysis is warranted for two reasons. First, British experience of insurgency in Iraq proved to be very different from that of the Americans, and it is important to address this divergence if only because it reveals a different aspect of the campaign to stabilize the country.

Initially at least, the British area of operations in the Multi-National Division (South-East) [MND(SE)] presented a relatively benign environment: there were no global insurgents, little sectarian conflict, and the six million people living in the MND(SE) were primarily Shia Arabs, most of whom welcomed the downfall of Saddam Hussein. Why then did the people rebel against the British, and why were the British unable to deal with insurgent groups which began to blossom in the south?

This last question leads into a second line of inquiry. British experience in Iraq appears to confirm the view that British COIN doctrine cannot deal with the new challenges posed by insurgents today and that, consequently, this strategy is obsolete. It is true that British counterinsurgency Doctrine emerged in response to the challenge of maintaining imperial control over its colonies where local populations embarked on nationalist struggles of independence. This strategy also played a critical role in managing Britain's withdrawal from the empire and was used to good effect to ensure that pro-British governments were established in former colonial territories. During this period the British built up a body of knowledge based on Charles Caldwell's Small Wars (1896), Sir Charles Gwynn's

Notes on Imperial Policing (1934), a government pamphlet called Imperial Policing and the Duties of Aid to the Civil Power (1949), Sir Robert Thompson's Defeating Communist Insurgency (1966), Julian Paget's Counterinsurgency Campaigning (1967), and Frank Kitson's Low Intensity Operations (1972).

These various commentaries informed and shaped British counterinsurgency strategy and have been distilled into a series of principles that shaped the British army's approach to counterinsurgency. These principles are as follows:

1. Maintain political primacy over the military and focus on finding a political solution to the conflict;
2. Apply a coordinated government and security infrastructure which ties all civil, police, and military agencies into a coherent campaign;
3. Develop an effective intelligence and surveillance network;
4. Separate the insurgents from the people;
5. Neutralize the insurgent; and
6. Look forward to the future in terms of post-insurgency planning.

The application of this framework placed a great deal of importance in terms of addressing the economic, political, and social causes of the insurgency. It also stressed the discriminate use of force and focused on winning the trust and support of the civil population. In essence, it recognized that the people rather than the insurgent's forces were the center of gravity. Using this "formula," the British were able to achieve success in Malaya (1948–60), Borneo (1963–66), Oman (1970–75), and most recently, Northern Ireland (1969–98). Most important, failures such as Palestine (1945–48), Aden (1963–67), and Cyprus (1955–59) came to be explained in terms of a failure to adhere to these principles, which served to reinforce the power of this approach.

The war in Iraq, and more recently Afghanistan, provoked a debate about the current utility of this doctrine. Initially it focused on the conduct of the US military in Iraq and the belief that a more British or classical COIN strategy, as it was termed, needed to be applied against the insurgency that was rapidly spreading amongst the Sunni population. However, this critical analysis of strategy very quickly infiltrated discussion within the

British media, the military, and academia and focused on the deteriorating situation in the MND(SE). This debate centers on two main arguments.

The first relates to the changing environment in which COIN is conducted.6 The logic holds that such a construct worked well in Malaya and subsequent campaigns because the British were able to exploit a functioning colonial administration and security apparatus to fight and defeat the insurgency. Equally important were the strong cultural and social links, which stemmed from long exposure by the British to the environment and the people and gave the British security forces at least some

sense of how to engage the population. Where this understanding was absent, for example in the Southern Arabian Federation in the 1960s, failure followed.

In theory this is a cause for concern because, while it is clear that British COIN doctrine proved a useful construct, even in the post-imperial era such as Oman in the 1970s, there is profound skepticism that such a strategy will work in this new setting. There is no government infrastructure and little appreciation or understanding of the target state by the intervening force.

The challenge then is to create these pillars in the vacuum that exists. Failed states have also resulted in the proliferation of armed groups which compete with the state's forces for control. This means that a COIN campaign must now deal with a number of opponents rather than just one which, as Steven Metz explains, makes it more difficult to establish security or implement an effective conflict termination strategy.

Second, the nature of insurgent strategy has changed. According to the likes of Metz and John Mackinlay, insurgency in the Cold War was based largely on the Maoist model of revolutionary war, and British COIN doctrine evolved to address this threat. In simple terms this strategy entailed a protracted conflict in which the insurgent moved progressively through three phases of revolution. The first focused on political mobilization and the establishment of a shadow government. The second envisaged the move to guerrilla war. Finally, when the government was sufficiently weak, the insurgent strategy would shift to open, conventional war.

The end of the Cold War made the application of this strategy problematic. This was caused in part by changing environmental conditions. Maoist revolutionary war was designed to operate within a rural setting, but the world was becoming increasingly urbanized—a trend that is very apparent in Iraq, where over 70 percent of the population lives in cities and towns.The application of this strategy has also become more difficult because of change in the political domain. Of particular importance here has been the decline of secular ideologies such as Marxism and Maoist political thinking and the rise of ethnicity and religion as sources of internal conflict. The reasons for this reversion to more basic and reactionary forms of identity have been linked to the social and economic impact of globalization, but their effect has been to limit the utility of both Maoist insurgency and British COIN, because both assumed that the loyalties of a community were not fixed and could be won via promises of political and economic reform.

Although this argument is controversial, it is clear that religion and identity in the form of conflict between Shia and Sunni or Sunni and Kurd played an important role in shaping the internal war in Iraq. Finally, materiel constraints also limited the extent to which insurgents could mimic past revolutionary wars. This was caused by the decline in support the great powers provided. The most obvious aspect of this decline in external support was that insurgents had limited access to heavy weapons. This made it almost impossible for a movement to progress from

guerrilla to open, conventional war and overthrow the existing regime. As Metz explains, the lack of a state sponsor often precluded strategic victory in the way Mao and Ho Chi Minh realized this goal; they simply did not possess the means. In some cases, such as Peru and Columbia, the lack of an external patron was compensated by the insurgents' ability to exploit internal sources of wealth derived from the drug trade and organized crime. However, rather paradoxically, access to this resource did not result in a renewed commitment to the three phases of revolutionary war. Instead it allowed insurgent groups, such as the FARC in Columbia, to abandon the preparatory phases of this process and move quickly to a direct and open attack against the state and its armed forces.

How then have resource-constrained insurgents attempted to deal with this challenge? Col Thomas Hammes and the fourth-generation warfare school argue that modern insurgent strategy now consciously seeks to bypass the opponent's military capability and focuses instead on fighting its war in the political domain. In this context military action is concerned with bringing about the moral collapse of the opponents by attacking their domestic political support base during wartime. This shift in strategy reflects an increasing trend for insurgent groups to exploit new technologies as a way of generating new asymmetries. In the case of the British, Mackinlay argues that British COIN has failed to recognize that insurgency has adapted to take advantage of new technologies in terms of mass communications, cheaper transport, and the easy transfer of money across the globe. Most importantly, these developments require a COIN campaign to engage in a propaganda war that extends beyond the insurgent state to incorporate diaspora communities who have sectarian links with the insurgents but who are living in other countries, including the intervening state.

The net effect of these changes has been to create a very different insurgent type which, it is argued, requires a new counterinsurgency strategy. So to what extent does this picture of radical change coincide with what happened to the British in the MND(SE)? If we look first at the environment, Kaldor has argued that Iraq was a failing state even before the war in 2003.

An artificial political entity containing a volatile mix of ethnic and religious groups brought together to satisfy the imperial ambitions of the British after the First World War, its history was one dominated by violence, instability, and frequent coups. Ba'ath efforts to consolidate control over Iraq through the exploitation of its oil wealth and the promotion of a secular ideology proved effective in creating a relatively cohesive state.

However, this nation-building project was undermined by eight years of war with Iran, followed by the disastrous invasion of Kuwait in 1990 and the UN-imposed sanctions regime, which lasted until 2003. As a result, the Iraqi state was effectively divided with the establishment of Kurdish autonomy in the north after 1991. In the south, the Ba'ath Party struggled to reimpose control, and approximately 100,000 Shia were killed in the uprising that followed Iraq's ejection from Kuwait in 1991.

The brutality of the Ba'ath government's repression of the Shia and the impact of the UN sanctions regime, which resulted in a catastrophic fall in living standards, caused the regime in the south to unravel. To compensate, Saddam relied increasingly on tribal and religious politics, both as a basis for generating support and to create new networks of control and patronage. In parallel with these developments was the rise in criminality caused by the introduction of the oil-for-food program in 1996, which provided ample opportunities for smuggling and bribery. "Hence, on the eve of the invasion, Iraq was showing all the signs of incipient state failure."

It is clear the British were shocked by the conditions they faced as an occupying power in the MND(SE)—a problem compounded by their failure to stop the orgy of looting that took place after the downfall of the Ba'ath government. What this meant in practical terms was that stability depended on achieving four key goals:

(1) the establishment of a viable economy,

(2) the provision of essential services,

(3) stability and security, and finally,

(4) governance.

Failure in one of these domains was likely to impact on the other areas to produce strategic failure. As previous British campaigns demonstrate—although the scale of the problem was greater in Iraq—such broad policy actions had always been an implicit part of British COIN. Moreover, COIN doctrine provided the British with a model of bureaucratic management to coordinate such diverse activities. In past campaigns, the British set up a system of committees operating at the national, provincial, district, and local levels of government, which included the police, intelligence services, military, and all principal civilian departments of state. This system was designed to secure and protect the population; win their active support via psychological, political, economic, and social programs; and actively cultivate intelligence sources within the community so that a discriminate and proportionate COIN campaign could be waged against an opponent. The contemporary relevance of this construct can be demonstrated by the way it continues to influence thinking on this topic today.

Reconstructing this apparatus in Iraq was affected by two problems. The first was the absence of a functioning local administration with which the military could coordinate its actions, and this meant importing expertise and resources from the UK and the Americans via the Coalition Provisional Authority (CPA). The relationship between the British and the CPA also proved problematic.

In theory, the British MND(SE) commander acted under the broad direction of US military commanders in Baghdad while coordinating with the CPA South on reconstruction. Therefore, a strong expectation existed within the British government and military that the CPA would focus on supporting reconstruction and development in this region.

Unfortunately, in the view of Paul Bremer, head of the CPA, the MND(SE) was not a priority; for Bremer the center of gravity was Baghdad and its environs, and that is where the lion's share of the CPA reconstruction effort was focused. As a result, the CPA only slowly established itself in the MND(SE) and when it did so, its mission was, as Rory Stewart, a CPA advisor in Maysan explained, not concerned with running a development operation. Money given to him by the CPA was supposed to support his political work and making friends, not redeveloping the MND(SE).

But even had there been a commitment to reconstruction and development in the MND(SE), the CPA lacked the necessary key skills. What it needed was a head with experience of running a large municipal authority. It also needed experts in the provision of public education, health, and management of utilities, but such expertise was virtually nonexistent in the CPA.

The second problem lay in getting British agencies to deploy and then coordinate with the military. To succeed, it was imperative that government departments were willing to support the army in its endeavors. Although in theory these departments of state should have been directed and controlled by a cabinet subcommittee under the chairmanship of the foreign secretary, in reality no leadership was forthcoming. The committee met infrequently and was therefore unable to build a cross-departmental consensus on how to approach problems being faced in southern Iraq.

The Iraq experience led to a series of new doctrinal, procedural, and organizational initiatives to promote greater coordination on the ground in post-conflict states, but this came too late to make a real difference in Iraq. For example, the UK Stabilisation Unit, which coordinates post-conflict reconstruction, began operating in Iraq only in 2006, and the first provisional reconstruction team was set up later that year.

The riots on 9–10 August 2003, caused by the failure of the British to restore basic services to the population, made the British government realize how tenuous its hold on the region was and how desperate was the plight of the people. As a result, the government accepted that it would be responsible for orchestrating the reconstruction and stabilization of the MND(SE) and, equally important, provide significant funding to facilitate this process. In response, the UK finally approved £500 million for reconstruction, but five months were lost before this money became available.

Although that sum was subsequently increased in 2007 to £700 million, it was still short of the estimated $7.2 billion engineers believed was needed to repair the region's physical infrastructure in 2003. In essence, lack of support to the military as much as the complex environment explains British failure in the MND(SE). According to one military source, there was no coordinated plan and the military leaders were left to prepare and execute their own agenda. To this end they set out

their own objectives and used their own resources to improve essential services and the economy. Initially, they tried to buy time by implementing a series of quick-impact projects funded via the Commander's Emergency Response Fund.

The military were involved in all four lines of operation—security, governance, reconstruction, and long-term development—without the support of other government departments. In terms of governance, senior officers were deployed as provincial governors; they helped establish businesses and projects. British forces on Operation Telic 2 (July–November 2003) reported that they had not been briefed on nation building before deployment, and there was no interaction with the Foreign Office or the Department for International Development. As a result, the army's civil affairs group ended up doing the work of other governmental departments.

It also became clear that the CPA lacked the skilled personnel to implement reconstruction and was forced to rely on the British army to provide key personnel. Even the CPA's development plan for the MND(SE) was based on the army's Emergency Implementation Plan devised in August 2003.

Once the Iraqi interim government was established in June 2004, the British reduced their nation-building activities and focused on security sector reform.

What then of the insurgents? Superficially, the plethora of armed groups in the MND(SE) and their multiple agendas conveys the impression of a "post-Maoist insurgency." Although al-Qaeda had no physical presence in the area, it was able to capitalize on the alienation of a minority of British Muslims who conspired to carry out a series of terrorist attacks on the UK mainland as a protest at Britain's war against Islam. Incidents like the torture of Iraqi looters in 2003 and the murder of a hotel clerk, Baha Mousa, in 2004 also provided powerful propaganda to insurgent groups in Britain and Iraq.

Appearances can be deceptive, however, and it is the contention of this article that the main political groups in the MND(SE) had more in common with a Maoist as opposed to a post-Maoist insurgency. These groups were not interested in communicating with the populace of the intervening state; rather, their focus was on the Shia population in Iraq. Moreover, the vast diffusion of parties which came into existence in 2003 increasingly came under control of three Islamist groups, which were structured and organized in a familiar and orthodox manner. The principal Islamist parties in the south were the Islamic Supreme Council of Iraq (ISCI), the Sadrist movement, and the Fadhilla Party. All three acted in a rational if opportunistic way to increase their power and, as such, cooperated with the British when it suited them and attacked when it did not. A similar attitude prevailed in terms of their relationship with the central government.

It could be argued that such action does not constitute an insurgency, but this is naïve. A cursory glance through history shows that the Chinese Communist Party,

the classic insurgent force, was willing to form an alliance with the Nationalist government on two occasions before finally overthrowing it. Moreover, it is also clear that the parties in Iraq had a common agenda in that they opposed the creation of a secular government and wanted an Islamic republic. This attitude was very apparent when the British took over, and all such groups tried to subvert British efforts to reestablish governance in the south. As Allawi explains:

Iraq's inhabitants did not meet the invasion with joyous scenes of welcome for a liberating army. The collapse of the decades-old dictatorship left a power vacuum, especially in the South and the poor Shi'a suburbs of Baghdad. Islamist forces and their allies, who laid claim to the loyalty of the population, quickly filled the power vacuum. Parallel power structures evolved in nearly all towns and cities of southern Iraq, but they remained undetected by officials installed by the occupying authorities.

The speed and extent of the Islamist wave that swept over Shi'a Iraq was as if a tsunami had silently and very rapidly spread to cover the south. No one had predicted the strength of this wave and the depth of support it engendered amongst the poor and deprived population of the area.

Influence and control were achieved by traditional means. In the case of the ISCI, it used Iranian subsidies to buy influence in the south, and it is claimed that during the war in 2003 large elements of the ISCI and its armed wing, the Badr Corps, infiltrated across the border, seized many of the district towns, and established their own political and security apparatus in areas like Maysan. In contrast, Moqtada al-Sadr reactivated a political and religious movement which had been created by his father but driven underground by the Ba'ath government. During that time it continued to provide support to the Shia through the local mosques and charities.

Thus, when the Ba'ath government collapsed in 2003, Moqtada al-Sadr was able to mobilize a latent network of support amongst the Shia and establish his movement as a dominant force in Shia politics. Later, Sadrist militias also drew on Iranian material and financial support to conduct increasingly sophisticated attacks against the British.

What is particularly interesting is how the Islamist groups in the MND(SE) were able to crowd out other nascent political organizations and even suppress or incorporate tribal militias. The emergence of a secular opposition was limited because Saddam's internal security destroyed secular opposition parties.34 In spite of this, in 2003, 22 of 38 political parties that emerged in the south were secular in nature, but the Islamists very quickly came to dominate. This was caused in part by the British, who seemed ready to ally with organizations like the ISCI to the extent that they ignored the activities of its militia. Moreover, a genuine effort seems to have been made to reach an accommodation with all the Islamist parties, including the Sadrists.

The dominance of religious parties was reinforced by a failure to provide physical security to the wider populace. According to one CPA official in the south, this was the critical weakness of the occupation in the MND(SE).The inability of the British to fill the security vacuum allowed the armed Islamist parties to remove any opposition to them.

Through the use of targeted violence, such groups eliminated alternative sources of political activity. This included members of the former regime, the tribes, and eventually the secular elements of the middle classes, who were forced increasingly to look to the Islamist militias for protection.

The fundamental problem was that the British did not have sufficient force to control the MND(SE). Overall, troop levels fell drastically during the summer of 2003 from 26,000 to 9,000 to cover four provinces, and in 2005 there were only 7,200 British troops in the region plus small contingents from other countries. This meant that forces on the ground were stretched thinly.

In 2003 the British deployed a force of 1,000 troops to provide security in Maysan, an area the size of Northern Ireland, which included the city of Ammara with a population of over 400,000. This also entailed deploying a force of just 70 soldiers to secure a 200-mile border with Iran. In the case of Northern Ireland, however, the ratio of soldiers to civilians was approximately 1:50; in the case of Iraq that ratio was 1:370.

Improving the security situation was also hindered by the British failure to secure all the arms dumps in the area under their control. By February 2004, UK forces had disposed of 680,000 tons of munitions. However, this was only a fraction of the total tonnage of ordnance left behind in the south, and the British admitted that of the 62 captured ammunition sites recorded, they had only cleared 13.

A report published by Human Rights Watch noted that many of these sites were located in urban areas and were easy to access. Not only did this represent a significant safety threat to the civilian population, it also provided insurgents with a readily available supply of ammunition.

The biggest problem initially was the extensive criminality in the area. According to Toby Dodge, organized crime accounted for 80 percent of the violence in Iraq. Organized crime, which focused on oil smuggling, existed during the time of Saddam Hussein and flourished in the 1990s, as sanctions took effect and the regime's control of society declined. Such groups flourished in the chaos of the occupation, the absence of law and order, the ready availability of small arms, and the lack of intelligence about Iraqi society. The initial British response to these security problems was not that dissimilar to the Americans, in that they tried to increase their presence on the streets through frequent patrolling. In Basra, the British undertook between 1,000 and 2,000 patrols per week. Inevitably this brought the army into conflict with thieves, carjackers, kidnappers, smugglers, and

even pirates, but there was also an element of Islamist and nationalist attacks, suggesting political opposition to the occupation.

Unfortunately, establishment of this military presence caused conflict between the people and the army. It appears that the British were as culturally unaware as their American counterparts when attempting to establish security. In June 2003, six military policemen were killed by a mob over the British army's efforts to seize all firearms possessed by the civilian population. Apparently, the city of Majar al Kabir had proved ungovernable, even during Saddam's reign, and had liberated itself from Ba'ath rule, so its citizens did not perceive the British as liberators when they arrived.

British efforts to establish law and order in the city through random house searches and the use of dogs to search for explosives resulted in sporadic fighting between locals and the British. It was in the midst of this violence that the MPs were trapped in the local police station and killed by protesters. This demonstrated the conditional nature of the support for the occupation in the south.

An obvious solution to the problem of a lack of troops was to use the existing local security apparatus to supplement and reinforce British actions. Indeed, the British had assumed that a functioning Iraqi police force and army would be available to impose stability and security. To this end, they attempted to reactivate the local Iraqi police, and by May 2003, more than 900 police were available for service. However, it soon became clear that the police were ineffective, because under the Ba'ath government, law and order in southern Iraq was provided by the military and the Ba'ath intelligence services; the police functioned merely as the eyes and ears of those agencies and were not trained to sustain law and order.

These weaknesses were compounded by the process of de-Ba'athification, which removed what little leadership existed within the local police force. This effectively meant that local policing became the responsibility of the British army. However, it was hindered in this process because it did not possess any real knowledge or understanding of the various criminal gangs. Confronted by violence and obvious criminal acts, the army found it impossible to identify who the real culprits were and, as Sir Hilary Synott points out, arresting everyone simply caused antagonism and ill feeling within the local community.

The security situation in the MND(SE) was made worse because of the decision to demobilize the Iraqi military. This and the decision to carry out de-Ba'athification are probably two of the most controversial decisions made by the CPA and had a significant impact on Iraq's security and stability. In a country where 40 percent of the adult population was already unemployed, this served to reinforce Iraqi anger and provided the militias with access to a vast pool of trained manpower.

Confronted by a deteriorating security situation, tribal and religious leaders began raising their own militias. Synott explains that the British adopted what he

describes as a more "nuanced approach" to this trend than the CPA, which attempted to ban all militias. The lack of a more robust response to this disturbing phenomenon was based on the realization that it would prove militarily impossible to impose such a ban and the recognition that there were good reasons why people were trying to organize security in their local area. However, this did not provide a satisfactory long-term solution, and the British were forced to begin the process of reconstructing the state security apparatus. This entailed not just the recruitment and training of a national army and police force but also the establishment of a judicial and penal infrastructure which could deliver justice.

The British faced a series of problems in achieving this goal. The first and most important requirement was the creation of a brand new police force, but the army did not have the training or manpower to provide this facility, and the Home Office and British police showed a strong aversion to becoming involved. An inability to disarm the militias sometimes resulted in the rather bizarre arrangement of absorbing them into the police. This at least is what seems to have happened in Maysan.

Given the urgency of the situation and the pressure on the British to do something, they decided to go along with these arrangements and badged these forces as policemen; only Sadrist forces were excluded. Subsequently, the British were heavily criticized for the lax hiring policy when recruiting for the police and the army. The only restriction imposed was that those who served in the Iraqi intelligence services, the Fedayeen Saddam, or the Ba'ath party were not allowed to apply. As a result, the security services were heavily infiltrated by the militias and provided a convenient cover to instigate violence against known opponents. According to one source, 80 percent of the murders in Basra in 2006 were orchestrated through the police.

According to one observer, COIN is won or lost in the first 100 days. The examples of Malaya and Northern Ireland demonstrate that this is not true in all cases, and perhaps a greater investment on the part of the British in 2003 and 2004 might have halted the deteriorating situation in the MND(SE). However, events beyond British control served to exacerbate an already precarious situation. These external forces are important because they also challenged the logic and coherence of British COIN doctrine.

The first of these upheavals was caused by the CPA's political and economic policies, which amounted to optimism-run riot and served only to alienate and anger many Iraqis. The second was the CPA and the American military decision to target Moqtada al-Sadr in 2004. The repercussions of this conflict spread rapidly into the MND(SE), where there was a significant upsurge in attacks against the British.

In July 2004, British forces suffered only seven attacks, but this increased to over 850 assaults on British patrols and bases in August 2004 at the height of the Sadrist

uprising. The third was caused by national elections and the delay experienced in creating a new government in 2005. This resulted in an increase in militia violence in the MND(SE) as the various parties jockeyed to improve their relative positions.

The fourth factor was the ongoing violence caused by the conflict over resources. This was not confined to control of oil smuggling, but extended to the Iraqi state itself. Control of government ministries and, more importantly, the security services provided an important source of money and resources. As a result, the principal militias in the MND(SE) had representation at the local, regional, and even national levels of government.

In the case of Basra, the Fadhilla Party controlled the post of governor, the oil protection force, and the customs police force. The ISCI had representation in the intelligence services, and the Sadrists controlled the local police. As a result, the British found themselves in a situation where action taken against the militias caused the local or provincial government and/or police to intervene to protect the militias. The last key milestone in the breakdown of relations between British forces and the Islamists was the decision to take action against a police intelligence unit known as Jamiat in September 2005.

This unit was under the control of the militias, and it was known that two British soldiers had been captured and handed over to them. Military action was taken to release the men but resulted in significant clashes with the local population. In response to this attack, Basra's governor, Muhammad al-Waeli, condemned the British, and the Islamist-controlled provincial council suspended cooperation with the British.

Thereafter, the British played an increasingly marginal role in the MND(SE), and questions were asked about the continuing utility of having British forces in Iraq. The British seemed unable to stop the mounting violence and increasingly became the focus of attacks by the militias.

In late 2006, the Chief of the General Staff declared that the British had outstayed their welcome and were now part of the problem rather than the solution. Operation Sinbad in late-2006 and early-2007 was Britain's last effort to establish security and stability in Basra, but this offensive provided only temporary relief, as the militias simply retreated in the face of clear-and-hold operations launched by British forces and then returned once the British left. The increasing number of attacks against the British garrison in Basra, which peaked in August 2007, is evidence of the limited success of Sinbad. So bad was the situation that the British decided to withdraw their garrison from the city to Basra Air Station in September.

By the end of 2007 the British officially handed over Basra province to the Iraqi government and declared the end of their combat role and the move to "overwatch," which entailed continuing the mentoring of Iraqi forces and provision of military assistance if requested.

Conclusion

In this short article I have attempted to show that British failure in Iraq was not due to a new kind of insurgency, and whilst the environment proved challenging, this did not make defeat inevitable. There appears to be a broad consensus that many of the errors made by the British and the United States were avoidable rather than preordained. A properly coordinated and resourced phase IV plan implemented in 2003 might have allowed the British to exploit the window of opportunity that existed in the early stages of the occupation and generated stronger support for the continued presence of the British in the years that followed.

Winning in the MND(SE) required the British to provide physical security to the populace along with sufficient aid so that the people looked to the British rather than to the Islamists for support. Most important, the creation of economic and social networks within the Shia community might also have resulted in a better intelligence picture, which is vital in a COIN campaign and yet was clearly missing in the MND(SE). British efforts to win the support of the people were affected by the CPA and the American military, but the critical failure was the British government's unwillingness to accept its role as an occupying power or the financial liability it entailed.

Ironically, British experience in Iraq demonstrates that failure was not due to an obsolete doctrine but happened because the British never implemented a proper counterinsurgency strategy. Whether this strategy is viable in other conflicts is open to question, and clearly there are new challenges in terms of alliance politics and dealing with a potentially uncooperative host government, but these were not insuperable problems, and their importance in Iraq was amplified by poor decisions made in London. The political will to prosecute a COIN campaign was clearly lacking within the British government, and eventually even the military's "can do" attitude steadily eroded, as it became clear that it did not have the resources or political direction to contest the key center of gravity in Iraq: the people.

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A Commentary by Professor Michael Clarke

Professor Michael Clarke was director of the Royal United Services Institute. He wrote in The Sunday Times on May 3rd, 2009:

A draw in Iraq, no victory near in Helmand

"The lowering of the flags in Basra and the intonation of the names of the 179 British military dead murmur the big question in a more dignified way than the

rest of us will. Was the operation a success? The troops themselves have their own hard-edged answer – it was a score draw away from home. No, it was not a victory. The soldiers don't come home from these operations in troopships like the heroes of the Falklands, to be greeted by a grateful nation. They come back in battalion units, marching to their home bases knowing that they have done the job in their gritty, professional way.

But they also know that "doing the job", with what they are given, isn't quite the answer the nation has come to expect. The subtle soldiering we take pride in – the velvet glove that conceals the iron fist – did not produce a smooth transition from war to peace.

The 9,500 British troops in the south nearly lost control of Basra in the autumn of 2003 and were certainly losing the psychological battle on the streets by September 2005 when pictures of the blazing Warrior flashed around the world. So they reassessed their objectives, put more effort into protecting themselves and into training Iraqi forces that could take over.

They had never seriously intervened with the warlords or in the feuding that characterised Iraqi society and were unable to limit Iranian involvement across their area. They could influence the situation with the numbers they had but never control it. The Americans dominated the strategic picture from Baghdad, leaving the British to do the best they could at a tactical level in the south. Their objectives narrowed. A score draw would do, and we would look for the best opportunity to declare victory and leave.

But British military chiefs repeatedly counselled political leaders against a precipitate reduction in troop numbers. Much as they, too, wanted to get out – to escape from what one former army chief described as the "corrosive effects" on the forces of the whole operation – an irresponsible withdrawal would create the worst of all worlds.

It was the success of the US troop surge, the new political strategy in Baghdad and the determination of the Obama administration to quit the country by the end of 2011 which last year provided the first feasible opportunity. The Iraqi 14th Division was then trained well enough to cope with local security; the port of Umm Qasr and the airport were working again. The £5.1 billion in military costs and the £750m in aid spent by the British since the war ended had helped make Basra a quieter province, if not a more liberal one, and in January this year provincial elections took place following the successful national elections of December 2005. From now on, whatever happens in Basra can fairly be said to be the responsibility of the Iraqis. History will judge, but for now, that's good enough.

Still, there are other accounts to settle. The US has taken over military command in the nine Shi'ite provinces in the south. To some, it looks as if the Americans are having to fill a vacuum that the British are leaving; but in truth US forces are looking after their back door out of the country next year.

"Job done" in a politically controversial operation such as Iraq doesn't provide the uplift the forces need from either the public or the Americans – not to mention in their own minds – as they grind it out again in more strategically important operations in Afghanistan.

Anthony King, Professor of Sociology, University of Exeter wrote:

Britain's Vietnam? Learning the Lessons of Operation Telic

The undoubted bravery and professionalism of British troops in Iraq disguised the deeper strategic failings of their mission. Leaders need to learn from the mistakes in Basra as we now concentrate on Afghanistan.

As British troops begin to withdraw from Basra, it is perhaps an opportune moment for the armed forces to consider the implications of Operation Telic. For all the criticism, the campaign demonstrated the evident strengths of Britain's armed forces. The bravery and professionalism of British troops – men and women – was obvious throughout. They demonstrated skill and fortitude. Iraq proved that the British armed forces are extremely successful in training their troops and remain excellent at low-level tactics especially at company level. They were also adept at mentoring and training Iraqi troops and commanders. It should not be forgotten that Operation Charge of the Knights was conceived and initially planned by British officers. These successes are considerable but should not disguise deeper failings.

Serious Failings

There was never sufficient political investment in the campaign. The government and MoD, defensive in the face of a hostile public and media, never acknowledged the requisite scale of the operation and, by 2006, were focused on Afghanistan, having dismissed Basra as a lost cause. Consequently, the British campaign was never resourced adequately. Signally, the Chiefs of Staff seemed to be incapable or unwilling of demanding resources from government – or of clarifying through 'politically aware' military advice, the strategic implications of this under-resourcing. Cross-governmental co-ordination was poor throughout the campaign and, only after Operation Charge of the Knights in March-April 2008, was a comprehensive approach discernible in Basra. Moreover, at the operational level, no coherent campaign was ever developed for Basra until 2008

as operational commanders mis-interpreted the Shia insurgency in Basra for criminality. Accordingly, the political causes and objectives of the insurgency were never addressed. Decisively, the British had a very poor understanding of the political and social dynamics of Basra. Indeed, even in 2008, Multinational Division-South East Headquarters was still only able to designate the amorphous and imprecise 'consent of the population' as its centre of gravity.

However, even at the tactical level there were shortcomings. British forces favoured short-term aggressive, raiding tactics, in order to undermine the insurgents. This preference for small-scale offensive action was partly as a result of inadequate numbers but it is also deeply embedded in British military culture in which the company has become the prime tactical unit. Yet, sporadic raids were potentially counter-productive, alienating moderate Basrawis from the British and hardening the Jaish A-Mahdi against the British without achieving their defeat. There were serious questions over whether tactical successes contributed to the achievement of strategic goals in Basra. Throughout the operation, dispersed units fought their own very brave independent battles in Basra and the surrounding region but there was little coherence or synergy between them. Despite the evident strengths of the British forces, Operation Telic demonstrated serious failings at the strategic, operational and tactical levels.

Avoiding a British Vietnam

In 1973, American forces withdrew from Vietnam. Despite numerous tactical successes, the United States had suffered a severe defeat, costing the lives of 58,000 servicemen. The American campaign was compromised by intense domestic opposition to the war, lack of clear governmental direction, a fractured command structure, an attritional approach which prioritised conventional fire-power, poor morale, heavy drug use and, ultimately, atrocities. The Vietnam War initiated a period of profound reflection and self-criticism in the United States armed forces. As a result, the United States professionalised its military and the Army eventually developed a new concept of operations 'Air Land Battle' which created the conditions for the so-called 'Revolution in Military Affairs' in the 1990s. Through a painful but rapid process of reform, the United States recovered from abject defeat to develop the finest conventional military in the world.

Basra was no Vietnam; it was not a strategic defeat for the British. The troops themselves performed admirably and there were notable successes. Nevertheless, it is accepted by even those political and military leaders who have every interest in emphasising the success of the campaign that serious mistakes were made, especially at strategic and operational levels. Decisively, many senior officers are deeply concerned that the reputation of Britain's armed forces with the US military has suffered. This is extremely serious.

In justifying the Iraq intervention, Tony Blair emphasised the illegitimacy of Saddam Hussein's regime and, with specious claims about WMD, the threat it posed to British security. However, one of the unstated but decisive reasons for Iraq was the strategic importance of the transatlantic link. Britain went to war in Iraq in order to sustain the alliance with the United States and all the political and military benefits which flowed therefrom. Accordingly, the maintenance and enhancement of the reputation of Britain and Britain's armed forces in the eyes of the United States and its military was a decisive, if not primary, strategic goal. Britain's military performance in Basra has put that reputation in jeopardy, as senior officers now acknowledge. The situation has not been assisted by the arrogant presumption of many British officers that, even after 2005, they remained the acknowledged experts in counter-insurgency.

Learning from our Mistakes

The mistakes of Basra are irreversible; they are now history. However, the potential damage to Britain's military reputation can be repaired. Decisive here is the attitude which the British armed forces, and especially its senior commanders, adopt towards Operation Telic. Ignoring the issues which Iraq raised or refusing to admit that serious mistakes were made is likely to damage US-British military relations permanently. The British forces need to accept that they were lucky to avoid a genuine Vietnam in Basra and that if they want to salvage a tarnished reputation, they must, like the Americans in the 1970s, humbly accept that they need to change. It would be fool-hardy to continue in the time-honoured British tradition of muddling through and pretending that nothing is wrong. Such negligence is likely to ensure that Basra does indeed become Britain's Vietnam; a genuine strategic defeat for the armed forces.

The Chilcot Inquiry

The then Prime Minister Gordon Brown announced on 15th June 2009 that an Inquiry would be conducted to identify lessons to be learned from the Iraq conflict. The Iraq Inquiry was officially launched on 30th July 2009. At the launch the Chair of the Inquiry, Sir John Chilcot, set out the Inquiry's Terms of Reference:

> "Our terms of reference are very broad. This is an Inquiry by a committee of Privy Counsellors. It will consider the period from the summer of 2001 to the end of July 2009, embracing the run-up to the conflict in Iraq, the military action and its aftermath. We will therefore be considering the UK's involvement in Iraq, including the way decisions were made and actions taken, to establish, as accurately as possible, what happened and to identify the lessons that can be learned. Those lessons will help ensure that, if we face similar situations in future,

the government of the day is best equipped to respond to those situations in the most effective manner in the best interests of the country."

The inquiry had yet to conclude and report at the time of revision of this Chapter in February 2011. However, Brigadier Paul Gibson, a former Director of Counter Terrorism and UK operations, who commanded the 4th Armoured Brigade (the Black Rats) in Iraq, wrote in The Times on 5th February 2011, challenging the Military not to blame politicians alone for the outcome of events in Iraq:

Chilcot should target the military, not Blair

"The inquiry has taken its evidence; now it must pull no punches on where Britain's Armed Forces failed in Iraq. Blaming Tony Blair for Iraq may be cathartic for some, but the sight of a former British prime minister being hectored from the floor of a public inquiry, as if he solely were responsible for the deaths of British soldiers, is damaging. It is damaging for the military, for politicians and for the future conduct of war.

For many the credibility of Sir John Chilcot and his inquiry team depends on whether they find the former Prime Minister guilty of plunging us into an illegal war. But there is a different, more productive way to judge the inquiry's success: from a military perspective, it needs to expose the many things the Ministry of Defence got wrong. It must not pull its punches.

Its value will be not to focus on whether we should have gone, but what we did when we got there. Those who served in Iraq know where the skeletons lie, and if these are not publicly acknowledged in the report the very future of Britain's ability to conduct expeditionary warfare will be jeopardised.

Sir John faces the difficult task of cutting through the opaque and jargon-ridden language of many military witnesses while navigating the obfuscation and self-aggrandisement of others. That the inquiry had to interview 13 major-generals, all of whom commanded in southern Iraq over the six years of the war, highlights not only the scale of his task, but also a fundamental lack of military continuity.

The lack of post-conflict planning is often blamed on the Americans, but that is unfair and simplistic. Those intimately involved in forming the UK's military plan focused entirely on the defeat of Saddam Hussein's forces and gave little consideration to what came next. There was a widespread belief that somehow, with the dictator removed, Iraq's liberated people would quickly effect its metamorphosis into a stable democracy, with little help from the "liberators".

Much of the planning was unduly influenced by the success and speed of the 1991 Gulf War. In 2003 the emphasis was to defeat the Iraqi Army and systematically remove the "most wanted" players from the "deck of cards". At the critical moment when the Iraqi military had been defeated the MoD reduced

force levels from 46,000 at the start of the invasion to 8,600 by May 2004. It was a woefully inadequate number.

If ever there was a time to maximise boots on the ground, this was it. Our obligations included providing security, law and order, basic utilities and humanitarian aid. But the military was undermined by the Government's determination not to describe us as an "occupying power". Instead, we were "liberators" — a more politically expedient term. From a soldier's perspective the Government's failure to recognise, clarify and resource the international obligations of an occupying power was negligent. It not only undermined the mission from the outset but also, critically, placed us in an invidious position in the eyes of the Iraqi population. Put simply, we couldn't keep the peace. And a vacuum was created. For some Iraqis, this was a sign of weakness to be exploited.

We expected the Shia majority to welcome us as liberators. But they felt betrayed by our failure to support their uprising against the Baathist regime in the immediate aftermath of the 1991 liberation of Kuwait .

Our cultural understanding was very limited. Sunni-Shia fault lines, the pervasive influence of Iran, tribal matters, family honour and blood money were as unfamiliar to us as they were routine to T. E. Lawrence.

We could have created a lasting legacy in Basra, to the benefit of both the Iraqi population and British industry. Increasing power station capacity, dredging the Shatt al-Arab waterway, building suspension bridges and tackling major engineering projects were all missed opportunities.

There was a complacency about our counter-insurgency operations. We irritated our American partners by constant references to our success in Northern Ireland and our historical experience of hearts and minds campaigns in Malaya and elsewhere — while apparently ignoring our own advice. We basked in the misguided praise for our decision to patrol in soft hats, enjoying the comparison with our heavily armed US colleagues .

When the environment turned ugly, the shortcomings of our strategy were ruthlessly exposed. By contrast the Americans demonstrated a remarkable ability to learn from their mistakes mid-campaign, rewrite their doctrine and implement it with considerable success.

Whitehall's emphasis on creating instant democracy and holding elections when the security situation remained dire and the infrastructure in tatters was delusionary. The premature transfer of authority to the Iraqis in 2004 allowed British policymakers to hide behind a veil of Iraqi sovereignty while turning a blind eye to the increasingly violent reality.

The January 2005 elections, which occurred on my watch, were trumpeted as a success for the fledgling Iraqi security forces, ignoring the fact that without the British military the vote could not have taken place. In the politically driven rush for the exit, "Iraqi-isation" became the totemic goal. Inadequate vetting, six weeks' training and a blue shirt created an Iraqi policeman. We should not have been surprised that many retained links to the militia and exacerbated the violence.

There was no strategic vision for Iraq. This may have been the reason that General Sir Richard Dannatt did not receive political censure when he said that British troops were part of the problem and we needed to get out some time soon.

Consequently, as the Americans surged, we withdrew and for the first time since 9/11 we were no longer standing shoulder to shoulder with our transatlantic colleagues, who clearly regarded us in a more jaundiced light. Our withdrawal from Basra was ignominious. It took the Iraqis and the Americans to defeat the militias that we had allowed to flourish.

For a military that serves as an executive arm of government, it is dangerous if wars are seen as the sole responsibility of politicians. All those who serve in the British Armed Forces are professional volunteers, who understand and fully accept that they may be committed by the government of the day to dangerous conflicts. Future occupants of 10 Downing Street may look at Mr Blair's trial by public inquiry and become highly averse to deploying our Forces in anything but benign situations.

With soldiers still in Afghanistan, the Chilcot inquiry must address military culpability for what happened in Iraq, however uncomfortable, so that lessons may be learnt. This would go some way to repairing the reputational damage we suffered in the eyes of our American colleagues and in Whitehall. Failure to do so will do an injustice to those soldiers who served with such stoicism, particularly those who paid the ultimate price and others who continue to suffer each and every day".

Footnotes by the author

The world is an unstable place, in which man is never far from his biological and evolutionary past. Life is a brutal genetic game that has been driven by the inviolable genetic principles of the survival of the fittest over generations. Each generation of civilised society hopes that it will see the last of war, but that future never seems to come. We need to continue to prepare and train for war, and to mitigate its consequences.

Those in Europe who thought that we had learned the lessons of World War II - and who believe that disarmament is the answer to political ills - might reflect on the horrors of Yugoslavia on our back door in the 1990s. In the states of the former Yugoslavia, fear, evil and terror ran riot for want of the display and use of decisive force and intervention by the Western and European powers in 1991. By the time decisive military action was forthcoming in 1999, hundreds of thousands had died unnecessarily, and whole states had been ruined.

History is a continuum, shaped by attitudes and relationships between peoples and nations which persist long after battles are over and events have moved on. The lessons of 2003 will be mulled over by historians and by military strategists for many years to come. There are those who will take the view that military operations against Iraq should not have happened, and that relationships between the Arab world and the Western world will have suffered unnecessary long term damage in consequence. There are others who will consider that the war was justified, for a variety of reasons, but that the outcome was compromised by a lack of attention to the planning for the post-invasion phase, and by a lack of understanding of the mindset, the hopes, fears and national pride of ordinary Iraqi citizens.

Wars are no longer won and lost on remote battlefields through textbook manoeuvres, by martial art and weight of numbers and weaponry alone. They are won and lost in the hearts and minds of the populations in the lands in which they are fought, and in the wider political world of electorates and international fora such as the United Nations.

One great practical lesson of Operation Telic must therefore be that military operations are planned and conducted with an informed and sophisticated approach to the civilian populace. The strategic perspective must also be informed by a very long view of history - in particular in the Middle East, where historical perspectives on the Crusades a millennium ago still influence attitudes.

I wrote in the first edition: "And so we return from the grand issues of political and military strategy, to the small contributions which health professionals can make to the outcomes of conflict. Operation Telic saw the deployment of 40,906 UK armed forces personnel into theatre, of whom thirty-six died in action during the war itself. Of these people, fourteen were killed in action and twenty-two died in non-combat related circumstances. Since the end of April 2003, a number of other British service personnel and civilians have died in southern Iraq of violent incidents, in accidents and of natural causes. However, in the context of historical campaigns, the complexity of the operation and the fierce environmental conditions of the Middle East, these tragic deaths were mercifully few. The quality of medical and environmental health planning and care made a considerable contribution to the success of the campaign.

The British armed forces have secured a worldwide reputation for professionalism mixed with discipline and restraint, where character and human contact substitute for

brute firepower."

The damage that incidents of moral failing such as the death of Baha Mousa does to this reputation is significant, and vigilance and leadership are essential if individuals and units are not to fall into the moral abyss, nor to be placed in circumstances where such failings are possible.

British troops will continue to be needed and used to establish and keep the peace, and restore and sustain social order, and to develop a doctrine of goodwill and engagement with civil populations. The medical services will continue to play an important role. The ability to conduct expeditionary warfare will remain important for British governments. It will ensure the security of British material, economic and commercial interests. It will project aid to communities and governments on humanitarian grounds; and through self-interest, historical ties, political and treaty obligations.

The contribution of the British Defence Medical Services to Operation Telic 1 may be judged a tactical success in the complex political context of the campaign. Success was achieved despite very short timescales and logistic challenges. During the war, it was fortunate that casualties were relatively light on both sides, so trauma care could be focused to a high standard on individual casualties.

The care delivered to the Iraqi civil population may have helped with local goodwill and reconciliation in a small but significant way, and may have contributed to the co-operation between the British military authorities and the population in southern Iraq in the first year after the war." However, we must ask whether we could and should have done much more in the provision of care for the population of Basra, and had we done so, whether we could have mitigated the growing animosity to our collective presence.

While the early synopsis may have been somewhat rose tinted and optimistic, it remains clear that the members of the UK Defence Medical Services disposed of their duties with considerable professionalism through the many harrowing challenges of Op Telic between 2003 and 2009, and in the course of them contributed to a transformation in the approach to trauma care and in the perception of the importance of those duties in war.

Members of the military medical professions are privileged observers of the uncertainties and consequences of war. Life and events come around and have a habit of repeating themselves, but we never return to quite the same place as time passes. We spiral along the axis of time, learning much and forgetting much. If this book/CD has communicated some of the lessons, challenges and complexities of modern war as seen through the eyes of those who observed and partook in Operation Telic - and some of the professionalism and humanity in our approach to war, that timeless and most inhuman of human activities - then its compilation will have been worth the effort.

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"Smug and Complacent?" Operation TELIC: The Need For Critical Analysis[1]

Daniel Marston

The Current Situation

The British Army's campaign in Iraq, its overall impact, and whether it has been a success or failure, are currently topics of intense discussion in the UK press, military and government communities. Recently, the Chief of Defence Staff referred to Britain as having become "too complacent" and "smug" about its experiences in Northern Ireland and Bosnia and their application to operations in Iraq.[2] Many within the Army do not dispute this, but I think the opposite viewpoint is also worth stating: that there were an equal number, if not more officers, NCOs and soldiers who were not smug, and who actively sought to know more about how to reform and adapt their doctrine and tactics for the counter-insurgency (COIN) campaign in MND (SE).[3]

Many officers and soldiers lay blame for some of the Army's bigger mistakes at the feet of Whitehall, citing the lack of a 'Comprehensive Approach', and they are correct to do so. Others blame limited public support for the UK Government's lack of strategy and resources. Whitehall was guilty of not providing the support, troops, and long-term mindset that were crucial to carrying out a successful COIN strategy in MND (SE). The British Army was not on the verge of defeat in 2007; but Whitehall's and PJHQ's strategy was flawed, and close to failure. Many officers felt that PJHQ was guilty of 'watering down' assessments. As one senior officer noted:

> *"Many of us feel that, notwithstanding limited political and popular support for the Iraq campaign, too much military advice from theatre was watered down on the basis of perceptions of what the market would bear. In contrast with the US our people in Basra struggled to get their views over, as reflected in our lukewarm response to the SSR challenge right up to Charge of the Knights (CotK). Personally I point the finger at PJHQ who, in my view, filter straight up advice on our requirements. The whole construct lacks the dynamism and necessary tension that you see in the US relationships."*



Chief of Staff of the Sultan's Armed Forces, Oman, Lieutenant General Ahmed Harith Bin Nasser Al Nabhani visited 22nd January 2006 greeted here by Air Chief Marshal Sir Glen Torpy DSO outside PJHQ at Northwood

The fact that the situation has been turned around is mainly to the 'in-theatre' Army's credit. Despite this, all was undeniably not well within the Army, and many of those who have served on TELIC operations have not hesitated to say so.

Observations From TELIC

I had the opportunity to meet, brief, debate with and observe many British units in MND (SE), on each TELIC from July 2006 through September 2008. The following is a synopsis of my observations and discussions with units either preparing for deployment or already serving during this period. As an American military historian working as a COIN advisor who has extensively studied the British Army's record of learning and adapting in war, the Iraq campaign has presented an interesting, sometimes frustrating, but always an important case study.

The successful British COIN campaigns of the last century have shared a list of key ingredients. This list has been used within the British Army as a benchmark, and within the US military as a guide, as even a cursory perusal of FM 3-24 and recent comments from MNF-I and CENTCOM demonstrate:

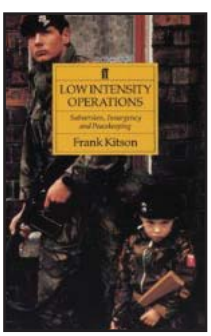
- Comprehension of existing doctrine
- Adaptation to local situations and learning from mistakes
- Risk-taking organisations
- Harmony of effort
- Small-unit approach
- Corporate memory within theatre HQs
- Appropriate training
- Reconciliation amongst their enemies
- Ongoing education in COIN
- Population security
- Understand local perspectives—non-western metrics
- Raise, mentor and fight with indigenous forces (army/paramilitary police/local auxiliaries)

The necessity of nearly every one of these ingredients has been debated in my own discussions with officers, NCOs and soldiers from divisional level down. Many were open to the need for reform and hoped that the need would be recognised at all levels of the Army.

Observers expected that British forces going into Afghanistan and Iraq, given their history of success in COIN, would automatically be better suited to waging

'wars amongst the people' than their American counterparts. British officers and NCOs provided many layers of advice, from formal discussions in the Pentagon to attachments to American units and formations serving in the Sunni triangle and Baghdad in the summer of 2003.[4] At that point in time and for a few years after, the British Army was considered the leader in COIN, and its forces were a sought-after commodity.

Meanwhile, the British Army, in practice, appeared to be losing its way in terms of practical application of key facets of COIN. Many officers and NCOs, while able to discuss 'tactical' approaches to COIN knowledgeably, but were apparently unaware of important operational and strategic aspects of COIN that were having an immediate impact in MND (SE). Some British officers, NCOs and soldiers demonstrated uncertainty about not only the environment in which they found themselves in MND (SE) during 2003-5, but also their mission there, which was variously described as peace support operations, nation building and, sometimes, COIN.[5] The overarching narrative for this mission was missing, and the lack of a coherent COIN strategy coming from MNF-I in Baghdad during this period only exacerbated the situation.[6]



Low Intensity Operations, General Frank Kitson

It was not uncommon during this period for officers of the Army to be unable to list the British COIN principles, define their meaning, or discuss past British successes in a meaningful way. Many were not familiar with the work of the key theorists such as Major General Sir Charles Gwynn, Sir Robert Thompson and General Sir Frank Kitson. Many within the Army have stated this was due to a lack of education in COIN, from RMAS through to Staff College. One British officer commented, *'personally, I feel that British doctrinal and historical knowledge of COIN is actually a bit of a myth.'*[7] Some criticised the validity of the 2001 AFM on COIN in isolation, with no consideration of whether its principles were actually being applied in theatre. The Army was not helped by a chorus of academics and civil servants who insisted that none of their previous COIN experience and doctrine was relevant to operations in Iraq.[8]

As the Americans began to adapt to deal with the insurgencies in both Afghanistan and Iraq, they followed the British tradition of bottom-up reform. Many American officers at junior and mid-level rank began to educate themselves in an effort to understand the complexity of a type of warfare dramatically different from the one for which they had been trained. Officers and NCOs began to examine historical case studies from many countries, trying to find solutions for the problems they were facing. Even commanders of BCTs, RCTs and Divisions within MNC-I and MNF-I in such places as Tal Afar, Al Qaim and Ramadi, started to self-educate, but, until early 2007, these initiatives were taking place at the tactical and operational levels in theatre.[9] This bottom-up reform was formally linked to higher levels by key generals, such as Petraeus and Mattis, who allowed—and encouraged—this change of mindset. The change of command which took place at the beginning of 2007, with Petraeus taking over MNF-I and General Odierno in charge of MNC-I, reinforced this trend.

Some in the British Army began to notice that the approach in the American sectors was becoming increasingly 'population-centric', and decided that this was what was missing in the south. They embraced the concept, and began to agitate for equivalent changes, both to their own professional training and the overall strategy for MND (SE). Many British commanders were aware that the MNF-I COIN guidance issued in July 2007 was not being followed. It stated the following key goals, most of which the British Army could not claim to be achieving in MND (SE) in the summer and autumn of 2007 and early 2008:

- Secure the people where they sleep
- Give the people justice and honour
- Integrate civilian/military efforts—this is an inter-agency, combined arms fight
- Get out and walk—move mounted, work dismounted
- We are in a fight for intelligence—all the time
- Every unit must advise their Iraqi Security Forces partners
- Include ISF in your operations at the lowest possible level
- Look beyond the IED - get the network that placed it
- Be first with the truth
- Make the people choose[10]


The King's Own Scottish Border Regiment at Batu Bahat. Men on parade prior to going out on jungle patrol (IWM)


On Patrol in malaya (IWM)



Squatter resettlement under the Briggs Plan, 1950 (IWM)

One incident that illustrates this shift concerns the Multi-National Forces-Iraq COIN Center for Excellence (CFE), which was based in theatre at Taji, Iraq. At this school, incoming RCT and BCT command staff spent one week receiving briefings on COIN and its application in their future AO.[11] The structure of CFE was based upon a British in-theatre training centre, the Far East Land Forces Training Centre, Kotta Tingi, Malaya in the 1950s.[12] A small group of us, including a handful of British officers, called for greater British involvement at CFE: as staff members; to attend the course to learn lessons from other areas; and to deploy incoming British commanders to the course. The US military staff at CFE articulated their willingness throughout 2007 and 2008 to support a British brigade deployment and course. Despite great interest from many within MND (SE), and efforts from a number of people, this British involvement only occurred in February 2008, and this is unfortunate. Both armies would have benefited from sharing important information and feedback.

British units and formations in and out of theatre have had visiting academics come and talk about current and past operations on their own initiative. These presentations were likely to spark debates about whether the British were actually carrying out a COIN operation in MND (SE). Young officers respectfully differed from COs who asserted that the British were achieving success with the way operations were being run. Other COs felt that Basra needed to be cleared, these areas held and the support of the government rebuilt, using both British and Iraqi soldiers. These discussions produced plans, some of which were carried out on operations, such as Operation Sinbad. Op Sinbad has been seen as an extension of some of the debates that were taking place across MND (SE) in the second half of 2006. However, Op Sinbad did not achieve clear, hold, build due to the lack of resources, from both Whitehall and MNC-I, and a lack of political will to see the operation through.



A soldier patrols from the shadows in North Basrah as a smiling Iraqi child looks on. Soldiers from 19 Light Brigade were taking part in Operation Sinbad at the time.

Land Command personnel also took note of these initiatives, with the result that the Land Warfare Centre formalised a Counter-insurgency Cadre for all outgoing brigades deployed to Afghanistan.[13] But here also, the institution's response was fragmented: many of these efforts initiated at the lower levels were stymied by a lack of support from higher up the chain of command and across Whitehall.

The rotation of divisional HQs, brigades and battalions within MND (SE) occurred every six months.[14] As is commonly known throughout the history of COIN, the British experience in particular, six months is not long enough to establish a true presence on the ground and to develop relationships with local leaders. This was seen as counterproductive by many commanders. Many divisional and brigades HQs came in with their own concept of operations, and commanders commented repeatedly that successive TELICs were not joined up properly. An overall campaign plan for the south, shift to Provincial Iraqi Control and withdrawal, was lacking. The role of MND (SE) divisional HQ was not fully established until TELIC 5, which exacerbated the lack of continuity for those operating in the region. Officers repeatedly cited previous command structures set up in Malaya, Kenya, Dhofar and Northern Ireland, and asked why MND (SE) was following a different pattern. Units fed back that continuity in terms of intelligence gathering, reconstruction efforts and working with indigenous forces was lacking throughout most of the campaign. As one officer stated to me:

> *'Your points relating to rotation of commands through the 6 month tour structure is at the root of most of our problems from Basra and also now in Afghanistan. Not only does it work against our accumulation of knowledge and understanding of the situation, but it also ultimately undermines our reputation in the face of our US allies who think it's a joke that we scuttle back home after only 6 months in theatre. The extension to 9 months for Staff officers is an improvement but still doesn't compare to the American system. Collation of intelligence was dire when I was out there. It was clear that intelligence from the previous BGs in Maysaan had either been thrown away or never collected in the first place. We started on a blank canvas. My patrol reports were always praised for their level of detail, but there was never any follow-up, never any pursuit of some significant leads I uncovered when in lengthy dialogue with the local Sheikhs. I think this was inherent throughout the chain of command.'*[15]



A Weapons Mounted Installation Kit (WMIK) Land Rover of the Queen's Royal Lancers (QRL) on a desert patrol in Maysaan Province

Training and Mentoring of the Iraqi Army
Despite earlier successes with British Army battalions mentoring the Iraqi Civil

Defense Corps (ICDC), who had trained and operated alongside their British counterparts, by 2006 the British had taken a very 'hands-off' approach to the Iraqi Army (IA). Many observers in MNF-I and MND (SE) found this strange, considering the British history of creating and training local security forces. MNF-I had made its own mistakes building up and transferring responsibility to the IA too early, but they also created some excellent initiatives to enhance the IA abilities, such as joint US/Iraqi operations in Tal Afar, Al Qaim and Ramadi. The 'surge' of 2007 was not, as is commonly believed, primarily about numbers, but really about how the Americans and the IA deployed their forces in Joint Security Stations throughout contested areas in an attempt to protect the population. Ironically, many British commanders in late 2006 were thinking along the same lines. They spoke of embedding British units, such as companies, with IA units together to fight and live together to clear, hold and build in Basra, and some even did it in Maysaan province. Unfortunately, at the end of 2006, this type of initiative was considered politically unacceptable in London, and became a major issue with the drawdown of troops.[16]

Despite this, British troops deployed with two battalions of the Iraqi 10 Division to Baghdad during the 'surge' in 2007. Observing this, many British commanders were perplexed and frustrated with the hands-off approach in general use in MND (SE) throughout 2007 and early 2008. As a result, by February/March 2008, commanders within MND (SE) and 4 Brigade were ready to take a different approach as the Iraqi 14 Division prepared to clear Basra. This was reflected in an unofficial document agreed by the commander 4 Brigade, and which was presented to MNF-I. It became the starting point for a potential shift of strategy in MND (SE) in February 2008. While many battalion commanders agreed with this new approach, it would take the launch of CotK to truly facilitate the plan. This approach made the following points:

- General Mohan's (COIN) plan for the retaking of BASRA is a key development—14 DIV must win this fight and the British must support it in all aspects.
- British assets in terms of 4 Brigade and future TELICs need to support this effort in many manners—this will provide a focus of effort for the British officers, NCOs and soldiers as well as playing a role in the future pacification of BASRA and BASRA province.
- British officers, NCOs and soldiers can be embedded across many lines of operation within 14 DIV - from staff officers, ISTAR etc to platoon to company embedded roles.
- This future plan will need to be briefed to MNC-I and MNF-I so they clearly see a plan developing for this important area of IRAQ with major British support - which will be well received by many sceptics in BAGHDAD.[17]

The CotK operation occurred earlier than anyone within MNF-I, American or British expected, on 25 March 2008.[18] There were many reports of the 'five-day' delay to support the efforts of the Iraqis. The timeline for the CotK and the British involvement is a little bit different; there was a delay of only three days after the 14 Division attempted to clear the city. The first reinforcement of Iraqi units from the 1st Iraqi Division began to arrive on Sunday and the first US MiTTS arrived on Monday. The first US MiTTed IA units went into Basra late Monday/Tuesday. General Mohan requested British MiTTs for the 14th Division - a major reversal of his previous position. The 1 SCOTS MiTT went in to support the Iraqi 14 Division on Wednesday evening, earlier than expected in London. The British commanders on the ground made the decision to commit earlier than expected. (According to some sources, the unofficial document helped commanders shape what was needed, when restrictions from PJHQ and Whitehall were lifted.) Contrary to many press reports, the British were not embarrassed by the CotK; on the contrary, they welcomed the opportunity to demonstrate their professionalism and their ability to utilise the key ingredients in COIN warfare, learning and adapting, in a joint effort with the USMC and US Army MiTTs and the IA 14th Division to clear the city of Basra.[19]

While MND (SE) and 4 Brigade (and, later, 7 and 20 Brigades) as well as personnel from ARRC enhanced the effort with proper embedding of training teams amongst the Iraqi 14 Divsion and Basra Operations Command (BaOC),[20] they were not the first to recognise that the change was needed. Many other officers from earlier TELICs felt the same way, and it happened that these three brigades were on the spot and had the capability and willingness to do what was needed. Adaption within MND (SE) continued as British MiTTs travelled around in Iraqi Army vehicles, which helped create more trust within the advisory mission.

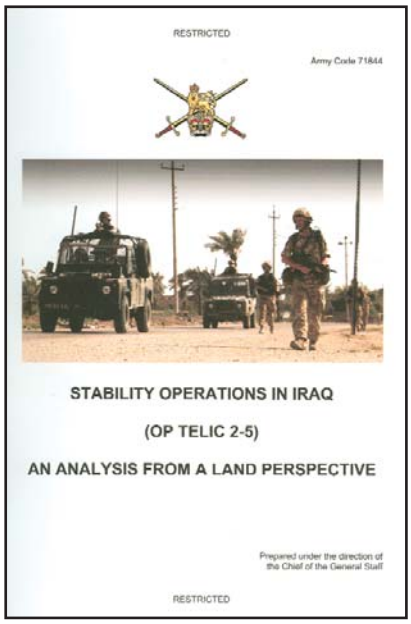
Recent efforts, dating from March 2008, have helped to foster the establishment of a properly trained and led Iraqi 14 Division. This initiative was preceded by extensive debate about the role of the British Army in building up the IA. In the course of this debate, many useful lessons from past British experience of training indigenous forces were brought up, only to be rejected.[21] This, I feel, was a mistake. If the end goal of this initiative was to withdraw and hand over to the IA a reliable force capable of dealing effectively with insurgents in MND (SE), the way in which the advisory mission set out to achieve this was disjointed, to say the least.

The Lessons of Iraq

The British Army cannot turn its back on a difficult campaign and disregard the lessons, some of which are admittedly very tough to swallow. It must delve into its own experiences and extract the lessons that it can take forward for operations in Afghanistan and beyond. As one officer noted: *"We are putting domestic military considerations ahead of campaign success; and it will cost us more*

in the long run. Again it is about remaining true to our history and COIN experience."[22]

The British Army has historically been considered at the forefront of military institutions learning from and adapting in various campaigns. This has been true in both conventional and unconventional warfare, from the forests and plains of North America in the eighteenth century to Sir John Moore's reforms of the Peninsula Army; from the colonial conflicts of the nineteenth century to the Second Anglo-Boer war; from the trenches of Flanders to the jungles of Burma in the Second World War; and from there to the jungles of the Malayan Emergency, the jebel of Dhofar and, finally, to the streets of Belfast and Londonderry.[23] The history of British experience in creating, as well as living, fighting and dying with indigenous forces, is generally considered one of the British Army's hallmarks of excellence. Many armies have also expressed admiration bordering on awe at the British Army's ability to learn and adapt across the spectrum of conflict in modern warfare. Other militaries, including the US Army and the USMC, have undertaken research and interviewed British officers and NCOs in order to better understand its abilities to adapt.



Op Telic Analysis

Whitehall, and also some senior officers, failed to understand the nature of the growing insurgency in the south, and as a result they failed to implement a COIN strategy until the eleventh hour. This failure is all the more strange because, while some senior officers and civil servants in Whitehall were asserting, as late as 2007, that there was no insurgency in MND (SE)[24], the Army's *Stability Operations in Iraq (OP TELIC 2-5): An Analysis from a Land Perspective,* published in 2006, which specifically refers to insurgency and the need for a COIN approach throughout, was in circulation within the Army.[25]

The British campaign in MND (SE) was not a glowing success, as some within Whitehall and PJHQ may try to claim. The fact that it will end on a positive note, as of the summer of 2009, has more to do with bottom-up reform within units and formations in theatre, and less to do with planners in Whitehall and PJHQ. The war has been changing in Iraq since the beginning of 2007, and many within MND (SE) recognised early on that different approaches might be needed. Some British commanders expressed concern that the 'withdrawal' strategy from Basra to the COB would cause major splits with MNF-I. Some even feared a USA Brigade Combat Team (BCT) or USMC Regimental Combat Team (RCT) coming south to clear the city, underscoring their inability to do so. The decisions taken in Whitehall in 2006 and 2007 promoting Provincial Iraqi Control and handover, as well as withdrawal to the COB, were not linked to the eventual success of the CotK; they could not have been, since the COTK was not part of this strategy. In some significant ways, they were two different campaigns.

CotK and the good work done by MND (SE), 4, 7 and 20 Brigades and the Iraqi 14 Division have allowed the British Army to 'leave with honour'. Some within the Army, myself included, felt that the 'honour of the army' was at stake in 2007. This was stated in an internal report written in March 2007, highlighting the shift of strategy in the rest of Iraq and the need for the British to refocus their campaign. This report was seen by many of the senior staff within the army and by General Petraeus. However, in the end, there was no major shift for the British efforts in MND (SE), until March 2008.

It is important to remember that many officers, NCOs and soldiers from previous TELICs were part of this eventual success; their efforts to debate, relearn valuable lessons and awareness of the US military's successful reforms led the way to the current positive state of affairs: withdrawal from a reasonably stable Basra.

It is not a question of whether the Army is learning, but of how fast, how deep and how joined up the learning process is. It is also a question of how fast the politicians and other governmental departments are learning, and how prepared they are to accept the risks and costs that are an integral part of following the route that these lessons dictate.

British officers, NCOs and soldiers performed their duties throughout TELIC professionally and with courage, and they can be proud of their efforts. US forces have made no criticism of the British Army's fighting abilities; the issues for many, on both sides of the Atlantic, stem from the lack of a coherent strategy for MND (SE): one that was closely linked into the rest of MNC-I and MNF-I, and that would take account of the changing conditions in the whole of Iraq, especially in 2007-8.

What Should Happen Next

The British Army's experience in Iraq needs careful critical analysis from within its own ranks as well as from outside, in order to draw out both negative and positive lessons. The Army needs to understand why Iraq was a difficult campaign; and to recognise its own fundamental role in changing strategy, policy and ultimately, the final outcome in MND (SE). The campaign in Basra has ended differently than many in

MNF-I, myself included, expected in late 2007. Among other things, it is part of the Army's role to ensure that the British Government, the higher echelons of the MoD, and the British press and population better understand its responsibilities and challenges. The next major debate that needs to occur focuses on the lessons from this campaign. Some of these will be difficult to process and apply. As many know, COIN campaigns require resources, funding, boots on the ground, specialists from across government, time, a clear understanding of COIN across government and the support of the people, both at home and in the theatre of operations. Will Whitehall and PJHQ be willing to take the lessons on board, and do something to make sure that these mistakes are not repeated in Afghanistan and future COIN campaigns?

The Army cannot, and should not, simply dismiss the valuable lessons of the last six years as they 'move on' to focus their attention fully on the COIN campaign in Afghanistan. Many British officers with whom I have met have questioned why the Americans turned their back on their Vietnam experience when there were so many excellent lessons to be learned. The answer is that they did so because the campaign was difficult, complex, and ultimately unsuccessful. As a result, the American military has lost many lives in Iraq and Afghanistan trying to learn lessons, some of them from Vietnam, that they had not previously troubled to absorb. As insurgency campaigns in Afghanistan and Iraq grew in strength and intensity, a significant number of American officers, NCOs and soldiers discovered that the doctrine and tactics they were using were not bringing the results they wanted. So they sought to reform their own military systems to adapt to the wars they found themselves engaged in, delving into others' experiences, many of them from British Army campaigns. The Americans are the first to admit that there is still much work to be done in this area. Learning and adapting are, and should be, ongoing tasks. All of this is applicable to the current debate within the British military.

This exercise needs to avoid the 'blame game' that often happens in such internal debates. The US military is attempting to avoid this in its own assessment of failures and (more recently) successes in Iraq, and such finger-pointing is detrimental to the honest discussion and analysis that are critical to the effective conduct of current and future operations. Any analysis that the British military undertakes should be at pains to neither blame nor commend specific people, whether in theatre or in Whitehall, but focus instead on evaluating operations and results, including admitting that mistakes were made, and learning lessons from them.

In discussing how best to analyse and learn from the British campaign in MND (SE), a number of interested parties have echoed, knowingly or not, General Sir Frank Kitson's famous quote about the role of the military in promoting understanding of the realities of insurgency and COIN:

> *We have seen that it is only by a close combination of civil and military measures that insurgency can be fought, so it is logical to expect soldiers whose business it is to know how to fight, to know also how to use civil measures in this way. Not only should the army officers know about the subject, they must also be prepared to pass on their knowledge to politicians, civil servants, economists, members of the local government and policemen where necessary. The educational function of the army at these critical moments is most important. Amongst senior officers in particular, ignorance or excessive diffidence in passing along such knowledge on can be disastrous.*

Over the last few years there have been signs of improvement in COIN education across the British Army, with revised modules for RMAS cadets, an expanded and updated Module C for captains and the introduction of lectures from both US and UK practitioners for junior to mid-level officer corps at RMAS. This cross-pollination has extended to brigade and division level HQs seeking to share information with US Army and USMC mid- and senior level officers. There are also indications of reforms at Staff College, and some officers have expressed a desire for greater linkage between courses run by RMAS, those run by the Staff College and other potential education initiatives that may take place. The system is by no means perfect, or complete, but the will to continue learning and adapting, in the educational as well as the operational sphere, has been established. British officers, NCOs and soldiers have realised that COIN is about more than training.

Lessons from Iraq have resulted in some demonstrable progress. The handling of deployments and support for Afghanistan operations (HERRICK) are currently being debated, with positive progress being made. The fact that the Brtiish Army has stated that it is on a 'campaign footing' has helped shift the discussion a bit for some wtihin the media and population. The British Army is close to publishing its updated version of the COIN manual, which will include important lessons from Iraq from both the US and UK perspectives. The British 6 Division HQ will serve for a year to allow for better continuity of effort. The outgoing brigades are being briefed and are debating many of the important lessons from Iraq and Afghanistan, from both the British and American perspectives. Finally a Land Stability and COIN Centre has been established, to help co-ordinate all the efforts of training, education, lessons learned and other pieces for the Army. This is all good news, but for many in the Army, the most pressing need is for these reforms to go deep and long, and to help join up disparate groups within the Army who are trying to reform independently.

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1. What follows is a military historian's (who also acted as an advisor) view of efforts in MND SE. I have also had the opportunity to meet with, brief, debate and observe units and formations of the USA and USMC in Iraq, where many of these themes were discussed in depth. I have been engaged in the COIN reform debate on both sides of the Atlantic (and beyond) since 2003. I have met many officers, NCOs and soldiers who have demonstrated their willingness to learn in order to adapt to changing conditions on the ground throughout MND SE. Bottom-up reform has already occurred in the British Army; however, many officers, NCOs and soldiers want to make sure that it goes deeper into the Army's culture, in order to better prepare the British Army not only for Afghanistan but also for future COIN operations. I want to thank the many officers who read an earlier draft of this paper and offered some of their thoughts.
2. http://www.economist.com/world/britain/displaystory.cfm?story_id=13022177
3. This issue is not specific to being British. In the American military, there is concern that some American commanders with recent success in Iraq will become complacent; dismiss lessons from other operations; or fail to recognise that what worked in Iraq will not necessarily work in Afghanistan.
4. See Pete Mansoor, *Baghdad at Sunrise*, Yale University Press: New Haven, 2008.
5. See *Stability Operations in Iraq (OP TELIC 2-5): An Analysis from a Land Perspective*, Army Code 71844, for examples of some of the confusing messages.
6. The Americans are aware of their shortcomings during this period and have attempted to deal with the issues internally and externally. They are aware that they allowed the British to detach themselves from the overall command structure at times, due to their own issues in the rest of the country, and realise that some of the blame for confusion in the British mission falls to them. However, many Americans remain perplexed that the British did not re-evaluate their strategy in the south following the change of strategy in 2007.
7. Conversation with a senior officer in 2007.
8. Most of these claims have since been debunked by the USA, USMC and British Army's recent successes.
9. See Brian Burton and John Nagl, *"Learning as we go: the US army adapts to counterinsurgency in Iraq, July 2004-December 2006"*, *Small Wars and Insurgencies*, Volume 19, Issue 3, 2008.
10. MNF-I COIN Guidance, July 2007.
11. http://smallwarsjournal.com/documents/mccllnewsletterfeb08.pdf. See pages 7-8 for more details on the course.
12. See Daniel Marston, "Lost and Found in the Jungle" in *Big Wars and Small Wars*, edited by Hew Strachan.
13. The last Iraq-bound BDE was prepared, but will not deploy due to plans for withdrawal by summer 2009.
14. While some commanders feel that battalions can be rotated every six months, the deployment of brigade and divisional HQs should have been longer. Many feel that at least a year deployment should occur for these formations. This did not occur in MND (SE).
15. Conversation with a British officer who has served in both Iraq and Afghanistan. It is worth noting that, having absorbed these lessons, the British Army is trying to avoid this mistake by using a different structure in Afghanistan for divisional staff.
16. The numbers needed to properly embed with an Iraqi Division and the forces needed as 'quick reaction forces' (QRF) to support the MiTTed IA units would be quite high. The US Army and USMC attached a nine-man team to each battalion and there was a company QRF in reserve to support the IA battalion. The British drawdown would not allow for these numbers. PJHQ and Whitehall can best answer why they did not understand the need for the numbers. 'Commute to work' advising never could have sufficed; and even though this was well known by the end of 2006, PJHQ and Whitehall continued to promote a 'hands-off' policy.
17. The author helped to draft the document discussed here, and presented it to General Petraeus' staff in February 2008. General Petraeus' staff responded with ambivalence: they were pleased to hear that officers were thinking about a different approach to the mission in MND (SE), but pessimistic about the PJHQ and MOD response.
18. The offensive was not supposed to begin until July 2008, after which the 14 Iraqi Division would have been properly trained for the following offensive.
19. Reporting on CotK has largely failed to note the efforts of the GOC at the time to support the forward HQ of XVIII ABN Corps, as it came south to help direct the operation.
20. Basra Operations Command was the overall Iraqi security HQ in Basra with command over all army, police and border guards. It was mentored by British officers from ARRC, who helped design the eventual COIN campaign that brought success.
21. These included case studies and systems that had been created in the past to select the correct officers and NCOs for specific roles, as well as aspects of support provided to the missions. Another key factor from past operations that was discussed was risk. Many British models of working with indigenous forces were predicated on a certain level of risk acceptance, something that has been missing for many commanders when they discussed the past as well the evolving US Army/USMC approaches with their MiTT mission.
22. Correspondence with a senior officer.
23. There are many books focusing on the British Army's history of reform over the last two hundred years, including Stephen Brumwell, *Redcoats: The British Soldier and the War in the Americas*; Raymond Callahan, *Churchill's Generals*; David French, *Raising Churchill's Army* and *The British General Staff: Reform and Innovation, 1890-1939*; Paddy Griffith, *Battle Tactics on the Western Front*; Paul Harris, *Men, Ideas and Tanks*; Stephen Hart, *Montgomery and Colossal Cracks: The 21st Army Group in Northwest Europe*;

Daniel Marston, *Phoenix from the Ashes: The Indian Army in the Burma Campaign*; Thomas Mockaitis, two volumes on British COIN; Tim Moreman, *The Army in India and the Development of Frontier Warfare and The Jungle, the Japanese and the British Commonwealth Armies at War*; John Nagl, *Counterinsurgency Lessons from Malaya and Vietnam*; Timothy Harrison Place, *Military Training in the British Army, 1940-1944*; Hew Strachan, *From Waterloo to Balaklava, Politics of the British Army and Big Wars and Small Wars*; Tim Travers, *Killing Ground: The British Army, Western Front and the Coming of Modern Warfare*; and Trevor Wilson, *Command on the Western Front: The Military Career of Sir Henry Rawlinson*.

24. There are numerous articles from 2004 on discussing the insurgency in MND(SE) as an accepted fact; the following are some good examples: http://www.guardian.co.uk/world/2004/aug/18/iraq.military, http://news.bbc.co.uk/2/hi/middle_east/3549600.stm, http://www.guardian.co.uk/world/2005/oct/12/iraq.iran, http://spectator.org/archives/2005/11/01/the-battle-for-basra, http://www.telegraph.co.uk/news/worldnews/1532800/British-to-evacuate-consulate-in-Basra-after-mortar-attacks.html. http://www.guardian.co.uk/politics/2007/feb/21/iraq.iraq3, http://www.timesonline.co.uk/tol/news/world/iraq/article1878705.ece, http://www.iht.com/articles/ap/2007/08/19/europe/EU-GEN-Britain-Iraq.php, http://www.telegraph.co.uk/news/uknews/1567603/Message-from-Basra-%27get-us-out-of-here%27.html.

25. There were many commanders in theatre who called the campaign in MND (SE) a COIN campaign, from 2004 on.

26. General Sir Frank Kitson, *Bunch of Five*, Faber & Faber: London, 1977, p. 300.☐



The Blesma Yacht at the start of the Fastnet Race, August 2009. Special thanks to Lightwave Images.

Talking To The "Enemy" – Informal Conflict Termination In Iraq

(This piece was written as Brigadier Storrie's dissertation whilst at RCDS in 2009)

Brigadier Sandy Storrie
Commander 7 Armoured Brigade, 2007-2009

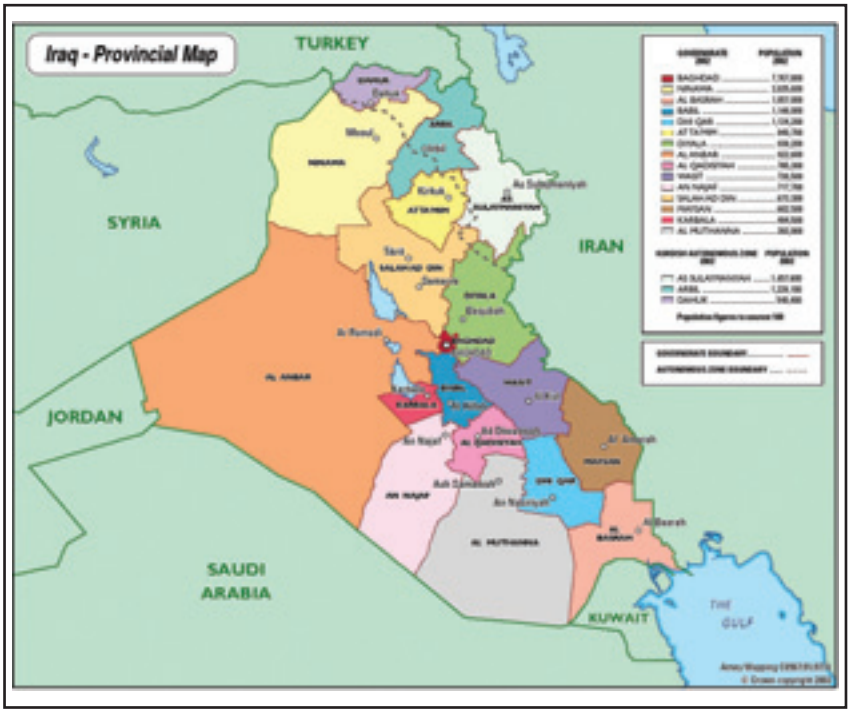
"The single clenched fist lifted and ready /Or the open asking hand held out and waiting / Choose: / For we meet by one or the other." [1]

Introduction

In the wealth of literature on war in its various forms, surprisingly little attention is given to the complex problems of conflict termination. Counter-insurgency (COIN) in particular presents difficulties. With few exceptions COIN campaigns are drawn-out, confused and ambiguous; decisive military victory is elusive, and other means of conflict termination come into play. Military commanders can find themselves in unexpected roles, influencing and even driving national strategy through their actions at the operational and higher tactical levels.

This paper considers two such instances in Iraq. In 2006 a series of local agreements between US Marine Corps (USMC) commanders and Sunni sheikhs produced the Anbar Awakening (AA), a switch in tribal alignment which turned the COIN campaign in the West decisively against al-Qa'eda in Iraq (AQI). Over the following year, this model was extended to other parts of Iraq as the Concerned Local Citizens (CLC) programme, with equally spectacular results.[2] And in Basra, a separate deal between British commanders and the Sadrist Jaish al Mehdi (JAM) enabled UK to cut casualties, reposition its forces, and transfer security responsibilities to the Iraqi Security Forces (ISF), in return for a structured programme of detainee releases. The first of these deals been widely lauded, the second widely criticised. But both judgments may be incorrect, or at least premature.

This paper considers these informal deals and their implications. It first reviews some relevant academic thinking, and then examines and compares the deals, assessing their effectiveness as tools for conflict termination and resolution in Iraq. It concludes that current judgments are misleading: that the much-maligned Basra deal has already proved to be a sound foundation for long-term conflict resolution, while the tribal strategy contains elements that may yet prove antithetical to Iraq's future as a unitary state. Finally, it suggests some generic guidelines for military officers engaged in informal conflict termination, and draws some wider conclusions on COIN from the Coalition experience in Iraq.



Map Iraq Provinces

Conflict Resolution or Victory?

Already two terms have been introduced which require definition. Michael Handel describes conflict termination as *"the discontinuation of hostilities, which does not necessarily indicate positive progress to a lasting peace"*[3]: which is his definition of conflict resolution. Chris Tuck emphasises the relationships between the two, considering that *"effective conflict termination is wider, and is about ending conflicts in ways that best support the political end states set."*[4] The distinction between termination and resolution is often taken to be that between the cessation of armed hostilities and the settlement of the underlying disputes, but Tuck views the true picture as non-sequential: conflict resolution is not a distinct phase that follows conflict termination, but an umbrella term: *"…if conflict resolution describes the overall objectives sought, conflict termination is one of the ways in*

which these objectives may be achieved."[5] Conflict resolution objectives provide the end-states to which conflict termination should be directed, and it is the relationship between the two that defines the ultimate value of any military campaign.[6] For the purposes of this paper, Tuck's key point is that the conditions for a conflict's long-term resolution are affected by the way in which it is terminated: a sub-optimal termination can lead to difficulties downstream.

Jan Angstrom and Isabelle Duyvesteyn have grappled inconclusively with the problems of understanding victory and defeat in modern wars – in particular wars between unequal opponents – and in defining the utility of force in these conflicts.[7] Duyvesteyn is sceptical of the continued relevance of the Clausewitzian idea of decisive victory,[8] while Angstrom concludes that there are now multiple understandings of victory and defeat, some of which are contradictory.[9] Johnson and Tierney use the examples of Mayaguez and Somalia to argue that popular judgments of success and failure in war are not always informed accurately by the objective outcome. Rather, public perceptions are formed instead by a number of psychological and informational biases – a phenomenon they term "match-fixing" – whereby rather than weighing up material gains and losses objectively, observers fix the results in their minds so that one side is seen to win or lose, irrespective of what actually happens on the ground.[10] Victory and defeat, the authors argue, are essentially perceptions.

In the same volume, Ivan Arreguin-Toft argues convincingly for the highly discriminate use of force in any counter-insurgency,[11] while Gil Merom considers that intervention with ground forces against markedly weaker protagonists has an inherent potential to regress into protracted insurgency, and that even an effective military COIN campaign may not deliver the political outcomes sought. He posits three broad options for Western powers engaged in such campaigns, *"none of which is thrilling"*: first to insist on total military victory at the risk of discovering that even sound battlefield performance leads nowhere politically (Algeria, Vietnam, Lebanon, the second *intifada*); second, upon realization that the military effort is politically unsustainable, cut losses and run (Somalia): and third, accept and support the least unpleasant indigenous authority without expecting that it will obediently serve Western interests. *"In essence, aim low, possibly lower."*[12]

Finally, William Zartman has considered in depth how and when internal conflicts can be resolved. He suggests that parties in conflict decide to negotiate when they perceive a Mutually Hurting Stalemate (MHS); a deadlocked position which imposes significant but not necessarily equally pain on both. Decisive victory has proved unattainable, other possibilities have been exhausted and a high level of intensity has been reached. The MHS prompts the parties to look for a better alternative: if they then sense the possibility of a negotiated solution or Way Out a "ripe moment" is created, in which talks can begin. In summary, negotiations occur when both parties lose faith in their chances of winning and see an opportunity for cutting losses and achieving satisfaction through accommodation: they adjust their aims and settle for *"…an alternative somewhere between unattainable triumph and unlikely annihilation…rather a muddy field to play on.*[13]

This brief survey suggests that conflict termination in COIN is not likely to be black and white, but grey, and with that background in mind, the paper will now consider the deals.

The Anbar Awakening (AA)

The Anbar Awakening (AA) began in early 2005, when Sunni tribes near the Syrian border started to resent the influx of AQI to their area, and the resultant competition in their lucrative smuggling operations, and decided to resist.[14] Sensing the potential threat, AQI opened its own campaign of murder and coercion against them,[15] and the tribes turned to the Multi-National Force (MNF) for help. But the Government of Iraq (GOI) initially withheld its support, and by September the tribes had been overwhelmed. Co-operation resumed in mid-2006, centred on Ramadi, and Sheikh Sattar abu Risha of the Dulaimi federation. Although himself a relatively minor sheikh, Sattar provided a focus for tribal opposition to AQI; MNF's enthusiasm prevailed over continuing GOI reluctance, and Sattar's tribesmen were co-opted in large numbers into the Iraqi Police (IP). A blind eye was turned to his extra-legal streams of revenue generation.[16] Sattar's success in resisting, surviving and making money proved exemplary; more sheikhs brought more men, and by the end of 2007 the forces ranged against AQI had doubled in size.

The results were striking. In September 2006, a USMC intelligence officer assessed that *"AQI is the dominant organisation of influence in Al Anbar, surpassing the nationalist insurgents, the Iraqi Government and MNF in its ability to control the day-to-day life of the average Sunni."*[17] A year later the situation had been transformed. In December 2007, the Commanding General (CG) of MNF West was able to report 10 straight months of decreasing incidents and a fall in attacks of some 90 per cent, and to claim credibly that *"…we have kicked Al Qa'ida out of Anbar."* IP numbers had more than doubled, from 10,600 to 25,800: with thousands more candidates keen to join.[18] AQI strength had fallen from some 12,000 in mid 2007 to 3,500 in early 2008.[19] Sattar's eventual



Governor Maamoon Sami Rasheed al-Awani met with local tribal sheikhs and city government leaders at a U.S military outpost in Husaybah, Iraq, July 3, 2006.(US Marine Corps - Cpl Antonio Rosas).

assassination by AQI caused a temporary hiatus, but the overall momentum of AA was maintained by his brother, who inclined it further towards mainstream politics.

One of AA's first successes was to re-establish the Anbar Provincial Council (PC), and since then it has progressively strengthened its links with mainstream politics and the GOI. In the PC elections of February 2009, the AA's candidates won the most votes and the most seats, and were the power-brokers for the election of the Governor. *"The Awakening is an economic and political entity now, and our strategy is financial and economic"*,[20] said its leader Abu Risha: there are still occasional veiled threats to *"…transfer our entity from a political to a military one…"*[21] to counter opponents, but essentially the AA now has an effective working relationship with the GOI. In fact, some of its main recent difficulties have been with senior Sunni elements of that Government, who see it now as a serious political competitor.[22]

The AA was not simply an impromptu rejection by Sunnis of AQI's brutal methods and radical rule. Austin Long suggests that the switch was based on three incremental realizations by tribal sheikhs:

- first that the political process might confer more benefit than continued fighting,
- second that AQI's transnational and fundamentalist goals were at odds with their own local or national objectives,
- and third and most importantly, that AQI was competing for control of revenue sources, such as banditry and smuggling, which had previously been the exclusive province of the tribes.[23]

Reasserting Tribal Authority

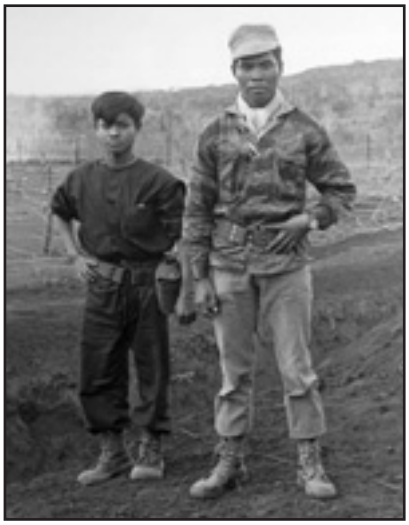
The tribes were thus essentially re-asserting their authority and business rights. AQI's insistence on intermarrying with local tribes – an imported practice from Afghanistan – also inspired deep resentment.[24] Former USMC officer Gabriel Leeden gives credit also to MNF's behaviour, seeing the AA not as a spontaneous uprising against insurgent brutality, but a response to conditions created by the USMC, by means of dynamic security operations, complex relationships with tribal leaders, and consistent moral authority.[25] British Maj Gen Paul Newton supports this view, seeing the USMC's operation as an outstanding example of mission command and risk-taking, on a scale unprecedented in Iraq.[26] So while AQI brutality undoubtedly played a part,[27] it was not the sole or even the prime driver.

Lt Gen Graeme Lamb echoes these analyses but adds other elements; the first being the increasingly precise use of force.[28] From insufficiently discriminate beginnings, MNF-I became increasingly accurate in its operations against AQI, changing the relative balance of strengths in Anbar, and emboldening and empowering the tribes to risk the extreme coercive violence levelled by AQI at any that chose to resist its rule. Adjusting Gallieni's metaphor, Lamb introduces the idea of "reverse ink-spotting" – dismembering an initially coherent insurgency by killing or capturing its mid-tier facilitators and co-ordinators to break it up into its constituent parts.

Lamb is warm in his praise of the USMC, recalling that their behaviour led influential Sunni imams to conclude that MNF did not intend to threaten either the tribes' way of life or their religious freedom, and therefore to reject any religious obligation to continue defensive *jihad*, and to co-operate with CF to oust the interlopers of AQI. He recalls the AA not as a negotiation but a dialogue: not a grand bargain but as a discussion of a mutual problem in an attempt to find some common ground and an alignment of interests.

General Lamb stresses also the importance in achieving a solution of time and will; that, *"…certain things were possible in 2006 that would not have been possible in 2004 or 2005."* AQI had exacted severe retribution on those Sunnis who participated in the 2005 elections, and with continued coalition commitment uncertain, many tribal sheikhs were undecided over which horse to back. This can be seen as a simple Hobbesian calculation of self-preservation, which deters the general population from committing to either side during a violent insurgency.[29] Two USMC officers have described how they countered this ambivalence by telling the sheikhs *"…that we would stay as long as necessary to defeat the terrorists. That was the message they had been waiting to hear. As long as they perceived us as mere interlopers, they dared not throw in their lot with ours. When they began to think of us as reliable partners, their attitudes began to change."*[30] The USMC thus persuaded influential sheikhs that it intended to remain a significant actor in the medium term, and that they should align themselves with "the strongest tribe." The announcement in January 2007 of the intended US troop surge undoubtedly assisted this process, though its military effect was not felt until much later in the year.

But Lamb also cites a further reason for the tribes' repositioning; the historic Sunni fear of Iranian influence, and distrust of the Shi'a dominated GOI. In similar vein, is the view of a prominent imam who said that the people of Fallujah were fighting a Persian occupation: in the form of the Shi'a-dominated Iraqi Army (IA).[31] One Sunni sheikh saw it as *"… just a way to get arms, and to be a legalized security force to be able to stand against Shi'a militias and to prevent the Iraqi Army and police force from entering the areas."*[32] This demonstrates graphically the possible long-term weakness of a tribal strategy: while it has proved an admirable vehicle for the achievement of one strategic end, the defeat of AQI, it may well be antithetical to another, the creation of a stable, unified and democratic Iraq.[33] A comparison can be made with the US Army's training and equipping of Montagnard tribesmen in Vietnam, who



Montagnard Irregulars (US Army Center of Military History)

were enthusiastic in fighting the insurgents, but only slightly less hostile to the government of South Vietnam: a situation which came to a head in late 1964, when several groups of tribesmen rose in open revolt.[34] The tribal strategy is similar, with the inherent tensions between the GOI and the Sunni tribes containing the seeds of potential sectarian conflict or even the break-up of the fledgling Iraqi state. This situation would actually be more challenging than Vietnam: the Sunni tribes of Anbar are not a small rural majority like the Montagnards, which makes it harder for MNF to exert leverage over them. Whereas Saddam Hussein was generally able to exert some central or co-confessional leverage over the tribes, the current GOI may soon face a situation where powerful sheikhs carve up and control their fiefdoms like feudal lords.[35]

Concerned Local Citizens

This tension is still more apparent with the wider manifestation of the Awakening Councils, the CLC. The success of the AA sparked an understandable desire to repeat the model in the other Sunni provinces, and even to extend it to the Shi'a south, and led to a US-led programme which recruited, trained and equipped some 103,000 Iraqis, over 80% Sunni, many of whom were former insurgents. CLC manned checkpoints and conducted static guards and "neighbourhood watch" type tasks, with similar success to the AA. In Baghdad, 2007 saw a 90% reduction in murders, an 80% fall in attacks on citizens, and a 70% decline in vehicle-borne explosive devices.[36] But although many CLC groups have termed themselves Awakening Councils, they are very different in nature to the original AA. Where most AA volunteers were progressively incorporated into the IP, and thus employed by the Ministry of the Interior (MOI), the CLCs were US-funded until October 2008. And where the AA has consistently had a relationship with the GOI – albeit initially a fractious one – many of the CLC groupings remain ambivalent towards it, even hostile. In several areas, the refusal of CLC groups to recognize the legitimacy or authority of the GOI has prompted it to act against them. In March 2009, the Baghdad suburb of Rusafa saw two days of serious fighting, as the ISF and MNF pursued CLC leaders wanted by the GOI.[37]



An Iraqi soldier leads the way during a combined cordon and search of the Rusafa area of Baghdad (US Army)

The transfer of funding responsibility from MNF to the GOI has added further frictions, and bureaucratic inertia and governmental unease have meant that CLCs have been paid either late, or not at all.[38] A falling oil price has exacerbated the GOI's difficulties, as has its need to reintegrate detainees and refugees returning from abroad. There is intense suspicion on both sides, and the GOI's tolerance of all militias appears to be hardening. *"The State cannot accept the Awakening", said one leading Shi'ite MP. "When the Government attacked the Mahdi Army it sent the message to all the militias including the Awakening that their days are numbered."*[39] It therefore intends to incorporate only some 20% of CLCs into the ISF, and the future for the remainder is unclear. Violence, meanwhile, is trending upwards: from 275 civilian deaths in January, to 343 in February, 408 in March and 485 in April.[40] With CLCs funded only until the end of 2009, the GOI seems ready to let them wither away: whether it will be able to do so peacefully remains to be seen.

Responses to the tribal strategy fall into two broad camps: the sceptical and the pragmatic. The sceptics concede the benefits of the deals in terms of fighting AQI, but highlight the tensions created, and the potential longer-term problems for the Iraqi state and its institutions. The tribal strategy is a temporary alignment of interests rather than a resolving formula, and Coalition drawdown, a resurgence of AQI and/or a government shift towards Shi'ite theocracy could all lead the tribes to review their position, possibly even switching sides, like Dostum in Afghanistan. This would be a particularly bad outcome for the Coalition as it would then have helped to train, equip and sustain forces that would work counter to its interests, while for the GOI it would mean de facto partition, civil war, or both. *Using tribal power to secure a modern state is at best a stop-gap measure, and at worst, a source of eventual state failure.*[41]

The latter is hardly optimal, but optimal is no longer a luxury the United States can afford.

The pragmatists recognise many of these objections but contend that the tribal strategy was the only practical course of action at the time. The US had a choice: either to continue to press for a national and unified state, and risk allowing the insurgency to go unchallenged, or to relax ties to the state in order to counter AQI with local police forces, at the cost of formalising sectarian divisions and weakening democratization. *"The latter is hardly optimal, but optimal is no longer a luxury the United States can afford."*[42]

Lamb is also a pragmatist: whilst acutely conscious of the potential pitfalls *"…given the difficulties we were facing, the absolute inability of the Iraqis to cope themselves, and a violent insurgency that was approaching the tipping point, we really didn't feel we had much choice."*[43] The pragmatists therefore regard the tribal deals as the lesser of two strategic evils: an enforced reversion to an earlier social model in the interests of short-term stability.

This argument is compelling. If all politics is local, then so is much insurgency, and MNF's embrace of bottom-up solutions should come as no surprise. The tribal strategy has been a pragmatic stop-gap, ensuring the short-term survival of the Iraqi state in the face of a vicious insurgency, though it has in the process empowered forces which may yet threaten that state's existence in its current form. Its success will be defined by where it goes from here. The AA in particular has successfully redirected Sunni nationalist insurgents towards mainstream politics, and even the less well-structured CLCs have provided an honourable means for former insurgents to realign their loyalties without admitting defeat.[44] Their emerging relationships with the GOI could provide the foundation for longer-term stability; not least since Iraq's central government relationships with its provinces have historically been fluid.

But this is not a guaranteed outcome. Some feel that *"…all the Americans did was buy the Iraqi government some time…the fact that fewer people are dying now does not change the reality that this is a dysfunctional state that can easily slip back into civil war."*[45] To paraphrase Rupert Smith, the tribal strategy has thus created a conceptual space for diplomacy, economic incentives, political pressure and other means to create a desired political outcome of stability and if possible democracy,[46] and has given Iraqis an opportunity to determine their internal governance through discussion rather than secession and/or civil war. But it has not resolved the conflict: at least not yet.

The Basra "Accommodation"

> Senior officers including the Chief of the General Staff had started to re-define the Army's presence as part of the problem, not the solution.

The deals in Anbar and Basra are outwardly similar and there is no doubt that events in Anbar opened the eyes of CF leaders elsewhere in Iraq to the possibilities of a less kinetic approach.[47] But the "accommodation" with JAM was born of very different demographics and strategic needs, and was substantially different in its aims. Some context is therefore required.



Members of C company 1st Battalion The Yorkshire Regiment (1 Yorks) who are part the the 2nd Battalion The Duke of Lancaster's (2 Lancs) Battlegroup conducting a arrest and search operation within the Al Jameat district of Basra (Cpl Russ Nolan)

In late 2006 there was an increasing sense that British military presence in Southern Iraq had run its course. UK troops were fighting bravely and innovatively but the situation was deteriorating. Senior officers including the Chief of the General Staff had started to re-define the Army's presence as part of the problem, not the solution.[48] A final, under-resourced effort to "win" Basra through conventional COIN techniques had ended inconclusively: Basra did not want to be won.[49] Instead, from early 2007 on the Army became increasingly embroiled in a self-fuelling cycle of violence with the JAM. In the first six months of the year, UK lost 29 killed and nearly 160 injured. The incoming brigade commander in May 2007 recalls; *"We walked into a war."*[50]

These difficulties were partly due to critical weaknesses in governance, both national and local. Basra has a history of detachment from Baghdad, based on its distinct economy, demography and geography, and a record of autonomous and even secessionist ambitions.[51] The results of the 2005 PC elections were unhelpful: the Sadrists declined to stand (and thereby excluded themselves indefinitely from mainstream politics), and the victorious Islamic coalition failed to agree on a Governor, allowing the election by default of Muhammad al-Wa'ili, whose Fadhila party had gained only 13 of the 41 seats. For the next four years, Wa'ili deftly circumvented all political and legal attempts to unseat him, consolidating his position at the heart of a black economy based on oil-smuggling, overseen by his militia within the Facilities Protection Service.[52] Other militias - notably the JAM - carved out similar fiefdoms in electricity generation and the ports. A weak GOI could do little to stop them: preoccupied with the plethora of more serious threats to its existence, it showed little sustained interest in Basra until early 2008. The effect was to turn the deep south into a kleptocracy, where well-armed political–criminal Mafiosi were able to lock both the central government and the people out of power.[53]

> None of the militias wanted to bring the South to the point of collapse: they simply wanted as large a slice of the cake as possible.

The conflict in Basra was therefore fundamentally different to that in Anbar. The AQI-inspired violence in the central belt was essentially nihilistic: escalation was open-ended, with total collapse an acceptable, even desirable end-state for AQI. The Shi'a South, on the other hand, was absolutely not nihilistic. Even at the height of the violence in 2006/07 the oil and energy infrastructure remained largely undisturbed, though its key nodes had long been identified as critical vulnerabilities by MNF. None of the militias wanted to bring the South to

the point of collapse: they simply wanted as large a slice of the cake as possible. So the British Army increasingly found itself as a *de facto* actor in an intra-Shi'a power-struggle: through its obligation to support a legitimately-elected but corrupt and unpopular Governor, it was slowly but inexorably drawn into confrontation with the JAM.

By early 2007 the Army's legitimacy had expired.

By early 2007 the Army's legitimacy had expired. It faced MNF's ubiquitous problem of *"…finding a way to create a sustainable security architecture that does not require the 'coalition in the loop', thereby allowing Iraq to stabilise and the Coalition to withdraw in favourable strategic circumstances."*[54] UK therefore sought to change the conditions of the campaign through early transition to Iraqi leadership: to hand off its Forward Operating Base (FOB) at Basra Palace (BP) to the ISF, consolidate forces at the airport Common Operating Base (COB), transfer security responsibilities to the ISF under Provincial Iraqi Control (PIC), and then draw down and release resources for Afghanistan. If this sounds like an abrogation of responsibility, it was not: more a recognition of lost and irrecoverable legitimacy, and an active effort to empower the ISF as a more appropriate force. The General Officer Commanding (GOC) charged with implementing this strategy was Maj Gen Jonathan Shaw.[55]

Shaw viewed Basra as *"Palermo, rather than Beirut"*

Shaw viewed Basra as *"Palermo, rather than Beirut"*: a violent but essentially self-limiting competition for power and resources rather than an ideological struggle. He saw the militias as a potentially useful vehicle of social cohesion in a fragmented society where central government authority was weak: a primary form of organising force, a sort of urban tribe. Their power was not dangerous *per se*: it could be harmful if misapplied, but if harnessed correctly, he felt that it could be productively employed. This chimed with the views of the competent and determined new Iraqi security chief, Maj Gen Mohan, who had arrived to head up the Basra Operations Command (BaOC). Mohan assessed that the UK presence in the city was distorting normal politics and prompting nationalist Basrawis to fight simply to be free of occupation: early PIC would therefore help to clarify their loyalties and undercut public support for the JAM.



General Mohan (Cpl Martin Coleman RAF)

Shaw therefore hit on a twin-track approach: increasing the tempo of strike operations to ramp up the pressure on JAM, whilst simultaneously beginning a search for effective interlocutors; essential to both was a less monolithic understanding of JAM. The first track led to the killing or capture of several leading figures in Basra JAM, amongst them Wissam Abu Qadir, its then leader. The second led to a series of discussions with high-ranking JAM member Sheikh Ahmed al-Fartusi, who had been in detention since 2005. In these discussions, Shaw sought to re-channel Fartusi's intense sense of Iraqi nationalism for productive ends, away from attacks on MNF and towards countering malign Iranian influence in the city. Shaw felt that *"…he and I wanted the same things for Basra – prosperity, self-rule, religious* moderation, *education etc…"* and sought to persuade him that *"…he should co-operate with redevelopment instead of attacking it."*[56] These were ambitious aims. Where the AA sought to restore security by reverting to an earlier social model, the Basra deal sought to promote a more inclusive politics at a supra-tribal level. Shaw's successor Graham Binns hoped to *"…get to the point where the main Sadrist strain will support the Iraqi security forces – that's the goal."*[57] No political solution to Basra could ignore the Sadrists, and the Northern Irish peace process had demonstrated the value of an inclusive approach. Just as the AA had countered AQI in the West, malign Iranian influence in Basra might perhaps be offset by the JAM.



Quitting Basra Palace for the COB (Cpl Ian Fellows)

Shaw's discussions with Fartusi led to a provisional "accommodation" between the two parties.[58] JAM would cease attacks on the Army and facilitate its extraction from BP; the Army would suspend its strike operations and progressively release 120 internees, including, late in the process, Fartusi himself. (All were likely to have been released anyway on the expiry of UNSCR 1723, then scheduled for the end of the year). And although not explicitly stated, there appears to have been an underlying understanding that UK forces, once redeployed outside the city, would have little reason routinely to return: security responsibilities within the city would be discharged by the ISF. In this respect the deal was a conscious effort to empower Mohan and the IA.

The benefits of this deal were felt immediately, mainly by the British but not exclusively so. Indirect fire (IDF) attacks dropped from a campaign peak in the preceding months to minimal levels, total attacks on UK forces fell by some 90%, and there were no further UK

deaths from IDF in 2007. The Army was able to hand BP to the ISF and relocate to the COB – potentially a highly complex and hazardous operation - without a shot being fired, and refocus its efforts on training the IA. With IDF attacks sharply down, re-development work at the airport was able to resume, paving the way for its handover to the Iraqi authorities, and local politicians were content to resume their visits to the COB to engage with British consular staff. The building of the Basra Children's Hospital – suspended over access difficulties for Coalition staff and contractors – was able to resume, and with British forces no longer in the city, Baswaris were less likely to be caught up in any crossfire. As one sheikh told Binns in the autumn of 2007, *"Things are bad – but they're a lot better than they were."*[59] Critically, the fall in violence in the city satisfied MNF that the conditions for transition had been met, and Basra went to PIC on 16 Dec 07: the last of Multinational Division SE's four provinces to do so.

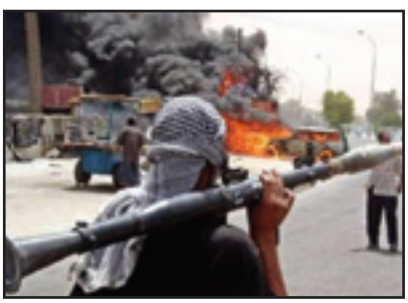
...in the three months prior to PIC, some 40 women were killed in Basra for wearing make-up, not veiling, or otherwise failing to observe the narrow rulings of the repressive local militias.

Yet the accommodation was not an unqualified boon. The ISF proved unable to impose itself on the city with any authority (although Mohan came to value the accommodation both as a means of buying time to build up his combat power, and as a useful channel of communication with the JAM, which he was subsequently able to use to his own advantage),[60] and therefore the unintended consequence was to consolidate JAM control over much of the city. The extent of their depredations is difficult to judge objectively, but there is some anecdotal evidence that they ranged from widespread dress restrictions, through the forced closure of alcohol outlets and music shops, to ethnic cleansing, brutality and murder.[61] All had featured pre-deal, of course, but British withdrawal removed the one real



IA troops giving aid (UK rations) and Info Ops leaflets to Basrawi citizens at a VCP during Op COTK (HQ 4 Armd Bde)





Militia activity during Op COTK (HQ 4 Armd Bde)

remaining constraint. Basra IP chief Maj Gen Jalil later claimed that in the three months prior to PIC, some 40 women were killed in Basra for wearing make-up, not veiling, or otherwise failing to observe the narrow rulings of the repressive local militias.[62] MND (SE) should perhaps have foreseen this, but many felt that JAM control was unlikely, and were satisfied by Mohan's air of confidence and assurances of the future capability of the ISF: despite its evident lack of effective units at that time. Others were less sanguine, but felt that the UK's ability to influence had in any case expired, and that the increasing air of Islamisation was a price worth paying for PIC.

The struggle for control of Basra persisted until March 2008, when Prime Minister (PM) Maliki chose to confront Basra JAM, moved personally to BP, and directed Mohan to begin CHARGE OF THE KNIGHTS (COTK), a British-drafted plan for the recapture of Basra due to be implemented later in the summer. The premature launch produced some initial incoherence, but when reinforced by additional Iraqi units and US support – both a first – the IA prevailed. Maliki's personal investment was also highly significant: by taking such a public stand against the JAM he explicitly re-defined Basra's turf wars as an insurgent challenge to the GOI, forcing Basrawis to decide where their loyalties were going to lie. As COTK developed, UK forces were able to re-engage with their role clarified, not as occupiers but as direct supporters of the IA, and enjoyed a sea-change in public support as a result. A highly successful mentoring mission

throughout 2008 and early 2009 has restored at least some of the UK's military reputation with the US and IA (though not perhaps with Maliki), and has enabled final withdrawal, with some sense of sufficiency in what was achieved.[63]

The accommodation is seen in some quarters as a cynical sell-out to preserve British lives: this was not its principal motive.[64] The cessation of IDF in particular was viewed mainly as a metric of Fartusi's ability to deliver: it was not the central objective but a very welcome by-product.[65] The benefits of the deal for the British were threefold:

- First, it allowed the Army to extract from a force-sapping tactical laydown, and to stem a flow of casualties which was eroding domestic support and reducing UK political will to a mission-threatening level.
- Secondly, by dramatically cutting the level of violence, it created the breathing space in which PIC could be credibly declared at the end of the year. Without a reduction in IDF there could be no PIC – *"…how can you declare PIC in the middle of a war?"*[66] - and without PIC there could be no progress: in that sense the "by-product" of Shaw's goals was more significant than the goals themselves.
- Together, these gains – a manageable casualty rate and successful transition to PIC – were sufficient to preserve UK strategic appetite to remain alongside the US in force throughout 2008 and well into 2009. Pre-deal, the political risks to the Brown government from staying in Iraq were coming to outweigh the consequences for the transatlantic relationship from unilateral withdrawal: post-deal the reverse was true.

Therefore, although the deal with the JAM did not resolve or even fully terminate the conflict in Basra, it set strong conditions for conflict resolution in three ways:

- First, by enabling PIC it transferred responsibility for resolving the conflict to the Iraqis, since only they could resolve it – and they did.
- Secondly it restored UK appetite to remain in force: and therefore to retain sufficient combat power to provide worthwhile support to the IA during and after COTK.
- And finally, it gave JAM the rope to hang itself, since JAM's complete inability to provide reconstruction or public services, and its air of oppressive Islamisation, resulted in strong popular support for PM Maliki and the ISF during COTK.

This was maybe not quite what the deal's architects intended, but it was necessary nonetheless. As Shaw put it, *"…they had to go through this. Somehow we had to persuade the population that JAM was the enemy and not us."* [67] Subsequently, the 2009 Provincial elections saw Maliki's coalition gain 35% of the vote in Basra, with independent Sadrists winning only two of the 41 seats, and Fadhila reduced to a humiliating 3%, and failing to win a seat. [68] Shaw still contends that the extremists showing their real hand and losing their legitimacy was the best thing for Basra, albeit painful at the time.[69]

The "abandonment" of Basra to the JAM is the aspect of the deal which has probably caused most unease, even within the Army,[70] and this paper suggests that the British consistently overestimated the legitimacy and public support enjoyed by Basra JAM. Misled by Sadrist strength in Baghdad, and by the organisation's roots as a social provider (*pace* Hamas), some British officers compared the JAM to the Orange Order; a relatively unthreatening body with wide-ranging public support. In fact, as Juan Cole warned as early as 2003, the Sadrist movement is *"…highly puritanical and xenophobic, and characterised by an exclusivism unusual in Iraqi Shi'ism. To any extent that it emerges as a leading social force in Iraq, it will prove polarizing and destabilizing."*[71]

Even in Basra – traditionally a relatively secular and cosmopolitan port city, inherently more liberal than JAM's heartlands of Maysan and east Baghdad – these Islamist and sociopathic tendencies emerged fiercely. Some British officers are thus now sceptical of the extent of Fartusi's enduring influence,[72] and although his power in mid 2007 was clear enough, his subsequent threats to the British, delivered from Lebanon in 2008, elicited no response from his former colleagues-in-arms.[73] In retrospect, the British view of JAM appears rose-tinted: in seeing its prime motivation as criminal and self-interested, they neglected its religious leanings, and thus underestimated its potential antipathy towards those secular and progressive elements of Basra's population that refused to conform to its strictures.[74]

Those that were there find this harsh, and point to the reality of JAM control, and the lack of realistic alternatives. By 2007 the Army had Gil Merom's choice: escalate, get out, or lower your sights.[75] It could have persevered: fought its way out of BP, and continued to bear a similar level of IDF casualties for the rest of the year: perhaps another 50 UK dead. This view had some advocates within Whitehall, who saw it as the blood-price to be paid to sustain the transatlantic relationship, but it is doubtful that the political appetite for this course existed: and more doubtful still that PIC could have been declared in such a visibly unstable environment.

A second alternative was simply to declare success – whatever suspension of disbelief this might involve – and leave. That would have triggered a range of possible consequences, all involving some degree of national humiliation: opposition from a bemused US, the probable replacement by a US Brigade, a contested withdrawal to Kuwait, looting reminiscent of the withdrawal from Maysan, the complete loss of military reputation, and the most severe hiatus in the transatlantic relationship since Suez.

A third and more palatable alternative was to reinforce: to mirror the US surge and to seek a decisive military victory over the JAM. But where would the forces have come from? Even had this been politically deliverable, UK was by 2007 operating well above Defence Planning Assumptions to sustain its burgeoning commitment to Afghanistan, and national forces simply were not there. There was also a marked national reluctance to request reinforcement from the Corps,[76] and it is by no means certain that any such request would have been met: US forces were fully committed elsewhere and there was a widely-held US view that having carved out a discrete Divisional area, the UK owned the responsibility for resourcing it.[77]

In that sense the Basra deal also served US interests, since it enabled the Corps to concentrate its resources elsewhere.

Nor is it axiomatic that reinforcement would have been useful. It is undeniable that UK never committed sufficient resources to defeat the JAM,[78] but it is also far from certain that more military resources could by 2007 have produced the desired outcome. Certain assets would undoubtedly have been helpful – helicopters and ISTAR for example – but ground troops might not. There is a critical distinction between mass and legitimacy, and despite the overall success of the US surge, it is far from clear that more troops can of themselves compensate for a lack of legitimacy, in the absence of a credible external threat. As John Nagl has pointed out, it is *"…perhaps only a slight exaggeration to suggest that, on their own, foreign forces cannot defeat an insurgency: the best they can hope for is to create the conditions that will enable local forces to win it for them."*[79] So it is by no means clear, given the Army's travails in sustaining BP, that additional FOBs in the city would have been helpful, or sustainable. Additional, capable ISF units would have been both, but priorities lay elsewhere, and 2007 in any case was the nadir in British relations with the IA. The locally-raised 10th Division was weak, with JAM influence strongly



UK MiTTs supporting an IA search operation during Op COTK (note IA troops carrying sacks of ammunition) during Op COTK (HQ 4 Armd Bde)

apparent in its Basra-based brigades. Embedding UK mentors – to prove so successful in 2008 – was unattractive: 10 Div were unwilling to partner because UK troops drew fire from the JAM where they did not, and there were several instances where 10 Div units would not fight.[80] At BP, effective co-operation had ceased,[81] although some still feel that this was a missed opportunity; that the lack of welcome went both ways.[82] Overall there were few good options and the situation was essentially Zartman's MHS.

The Basra deal in fact exhibits many aspects of Zartman's analysis.[83] There was palpably an MHS, and (for the British at least) a perception of impending catastrophe: an opposed withdrawal from BP, which was likely to produce significant casualties and a public perception of failure. Neither side any longer possessed the ability to escalate; they *"…were like two battered boxers: we could have kept slugging it out, but to what end?"*[84] And the deal also had many of the effects that Zartman's analysis predicts: it did undercut the identity of JAM,[85] and did remove the confusion over Shi'a nationalism, just as Mohan had hoped.[86] It did not resolve the conflict because that was essentially over resources: an intra-Shi'a power-struggle in which the British were no longer prepared to take a stake. So as Zartman hypothesised, both sides saw the potential for achieving their strategic aims (which in the British case had reduced significantly) by alternative means. Senior British officers were still willing to fight it out, but few saw any useful purpose in doing so.[87]

They chose instead a variant of Merom's third way, and found an accommodation with a *de facto* indigenous authority without expecting that it would obediently serve their interests. Admittedly this requires a fairly liberal interpretation of Merom's *"least unpleasant indigenous authority"* – since such authority as JAM possessed came purely from its organisation, its arsenal, and its illegal control of electricity and the ports. Perhaps the UK should simply have thrown its military power behind the GOI and its representative in Basra - the corrupt Wa'ili - and accepted the continuing cost in lives that this would have entailed.[88] But given the

implausibility of this and other options, and the benefits that were gained, the Basra deal does not look a bad one. Those that struck it remain unanimous that, given the resources and political support available, they took the best course available to them; the "least worst" option.

Restricted by a shortage of resources and an imminent failure of national will, faced with an imperative to transition to PIC, to enable both UK drawdown and Iraqi progress, they found a creative way forward, and cashed in their only remaining leverage on JAM while it still had value. Though the deal's most far-reaching ambitions for Sadrist integration were never achieved, its principal failing – the abandonment of Basra to its fate – was also relatively quickly redeemed by the GOI and the ISF: who, as Nagl implies, were probably the only people ever able to do it.

Comparative Analysis

Many points of comparison have emerged naturally in the above discussion, but it is worth highlighting some key distinctions between the deals. The first is the strategic context. The US public's commitment to Iraq has occasionally wavered, but even in 2006 the Administration was resigned to staying into the medium term, and in 2007 this hardened into a commitment not only to stay but to surge. UK strategic intent, on the other hand, was to transition to PIC as early as possible. There was therefore a strategic dissonance between Coalition partners, which affected the negotiating position of each of the parties, and thus the deal that each was able to strike.

"Your ways are defined by your means - and we didn't have enough!"

A second distinction concerns the relative strength of the parties. In Basra, UK forces no longer had a widespread power to compel: they were capable of achieving local tactical superiority in time and space, and thus inflicting localized pain on the JAM, but they lacked the combat power to sustain the effort, or expand it across the city. As Bashall put it, *"Your ways are defined by your means – and we didn't have enough!"*[89] The position in Anbar was better; the USMC could not force an outcome, but it was still demonstrably "the strongest tribe." It could therefore make fewer concessions, reflecting the US' greater combat power and political will.

A third distinction is that the Anbar deal was made with the tribes, that in Basra with a militia. This is less significant than it may seem. The resettlement of Marsh Arabs into Basra's sink estates has dismembered previous tribal structures, and seen them replaced by political-religious Islamic groupings like the JAM.[90] Both deals were therefore made with the de facto local non-state authority, neither of which was an "enemy" in the conventional sense, and both sought to mobilize Iraqi nationalism against external forces of different kinds. In Anbar, AQI was manifestly an interloper, but Basra's links with SW Iran go back centuries, and many of its tribes straddle the border. Iranian influence was therefore more widespread and less overtly hostile than that of AQI, and JAM was in a more ambiguous position, and less likely to make a dramatic shift. Arguably this changed only when PM Maliki came to recognise the extent of malign Iranian influence, and its hostility to his Government: too weak to act in 2007, he countered effectively only in 2008. But Iranian influence never offered the same existential threat to the locals as AQI, and the Basra deal was thus inevitably a harder one to strike.

"Why would you take crocodiles as pets?

A fourth distinction is the relationship between the parties, which in each case was tripartite, with MNF and the GOI as two of the elements, and the tribe / militia as the third.[91] Arguably in Anbar, USMC commanders were easier interlocutors for the Sunni tribes than the Shi'a-led GOI: the USMC therefore fostered an engagement by proxy which had utility for both the GOI and the tribes. In the South, by comparison, the GOI had no such need of the MNF as go-betweens: it could talk to the JAM whenever it wished to, and did. Indeed it questioned the need, asking frequently *"Why would you take crocodiles as pets?"*[92]

This distinction is reflected in the key issue of transparency. The key to the USMC's success in Anbar was their continuous engagement of the PM and his ministers: they linked the bottom and the top of the process in a highly structured fashion, with each proposed recruitment of tribal militias into the IP staffed in detail with the GOI. Frictions only arose with the less structured expansion of the AA into the CLC, in circumstances where the GOI felt it had little influence or control.[93] Similarly, Lamb ensured that his discussions with former regime elements were completely transparent, even pulling out from one potentially rewarding meeting because it was considered by the GOI to be "beyond the pale".[94] The Basra deal was a little more opaque: while undoubtedly socialized with the key figures in the GOI (although there now seems to be some selective amnesia on that count), it was not widely briefed beyond. There was perhaps an element of not pressing an issue where Iraqi opposition would have left the UK with nowhere to go strategically. Thus Mohan learned formally of the deal late in the day and through Iraqi channels, and although he subsequently came to value many of its aspects, this unpleasant surprise was the start of a breakdown in his working relationship with the UK, and fuel on the fire of the PM's mistrust.[95]

The final distinction between the deals is the extent to which they supported the fledgling structures of the Iraqi state. The AA was the most successful in this respect, since its members were drawn progressively into the ISF and GOI. CLCs were not, but were to a degree "socialized" by routine operational contact with the ISF and CF. But the Basra deal contained no such linkage,[96] and even those Iraqi commanders well-

disposed towards the British found their dialogue with the JAM difficult to bear: particularly when combined later with an initial (perceived) hesitancy in supporting COTK. Indeed, the most damaging legacy of the British deal is perhaps PM Maliki's continuing hostility to a long-term UK engagement, which is likely to inhibit the benefits to UK business from the blood and treasure which the nation has committed.

The transatlantic relationship is probably less dented: the most senior US commanders understood the thinking behind the Basra deal, and while they may not all have liked it, they were prepared to make tactical concessions for the strategic gain of Coalition coherence. Conceptually the deal reflected Petraeus' own aims; *"We're not after Jeffersonian democracy – we're after conditions that would let our soldiers disengage."*[97] US staffs were less understanding, although their opposition was based on a more monolithic view of the JAM than Shaw's nuanced approach. But the break has not been irreparable, and UK's military reputation was at least partly restored the following year by its vigorous support for the later stages of COTK. UK remains likely to be the USA's first partner of choice for future interventions, though perhaps with a little more scepticism than of yore.

Generic Principles

> ...this paper has probably invested all of the deals with a coherence they did not in fact possess.

Finally, does this analysis reveal anything useful generically in terms of conflict resolution in intervention and COIN? It may, but with two important caveats. First, all COIN campaigns are *sui generis* – of their own kind - making problematic the transfer of lessons from one to another.[98] Secondly, in packaging complexity for easy presentation, this paper has probably invested all of the deals with a coherence they did not in fact possess. The proliferation of CLCs in particular was uncontrolled, even anarchic: in the prevailing mood of strategic opportunity, effects were created first and explained to the GOI later.[99] Tribal and militia dynamics are complex, and JAM in particular embraces a wide range of nationalist, criminal and religious motivations, impossible to reflect fully in a paper of this length. All of the commanders interviewed felt that they were improvising to some degree, and in dissecting the deals for examination, this paper rather over-tidies an intensely complex picture.

But with those caveats, the generic conclusions are as follows:

- Military commanders negotiating towards conflict termination must not overlook the pre-conditions for conflict resolution, though it may be tempting to do so to solve immediate and pressing security problems. This is important, because it is the relationship between conflict termination and conflict resolution that determines the ultimate value of any military campaign.[100] In practice, this principle will inevitably be difficult to operationalize, and will require some difficult judgment calls.
- Informal deals are best negotiated from a position of strength: or at least, not of weakness. This may be self-evident, but then so is Clausewitz' prescription that *"the best strategy is always to be very strong..."*[101] In retrospect, neither the US nor the UK committed sufficient resources to the campaign, and this is reflected in the bargains each was compelled to strike. The British Army has belatedly recognised the importance of persistent presence and mass in operations designed to secure the population, and the need for a more flexible approach to force levels through the course of a campaign.[102] One hopes that this thinking will inform the upcoming Defence Review, though mass of itself is of little use without legitimacy.
- Similarly, time and will are important in creating the conditions in which such deals can be struck. Burton and Nagl conclude that counterinsurgents must demonstrate staying power if they are to break the grip of militants over the population, since without the promise of protection, civilians will support the insurgency in order to survive. Premature transition to indigenous forces can thus be a "rush to failure"[103] This is a fair position, but it conflicts with another lesson from Iraq, which is that the legitimacy of an occupying force declines progressively – Petraeus speaks of a "half life"[104], and endures only for as long as that force is perceived as beneficial and non-oppressive. And since each citizen makes that calculation individually, the loss of legitimacy can be sudden, catastrophic and irrecoverable. Balancing the commitment to stay with a corresponding commitment eventually to leave is another fine call: each case will be *sui generis*, even in different parts of the same theatre. This will be a key judgment in Afghanistan.
- Next, kinetic activity is important and a high level of intensity appears to be required. Both deals support Zartman's analysis that *"...to ripen a conflict one must raise the level of conflict until the stalemate is reached and then further until it begins to hurt...the ripe moment becomes the godchild of brinkmanship."*[105] Pressure on the Anbar tribes came from both sides – AQI and the USMC – and forced them to choose; UK strikes against JAM had a similar effect; in fact they were one of the few real levers the Army still possessed. Thomas Schelling has written of the bargaining power that comes from the capacity to hurt,[106] and this featured in both deals. Kinetic force may not produce a decisive result, but must at least generate the perception of MHS: the necessary but not sufficient condition for negotiations to begin.
- That said, this is not a carte-blanche for unselective violence: CF behaviour is critical.[107] One of Lamb's key lessons from Anbar

was the highly discriminate use of force, and this accords with the author's own experience in Basra in 2008, when weapons had utility in direct relation to their precision. There is still a view that successful COIN demands a willingness to escalate violence to extreme levels, with the Philippines and now Sri Lanka cited as examples. There is little evidence that this worked in Iraq, at all. On the contrary, Iraq suggests that successful COIN is *"a function of legitimacy first and violence second."*[108] Occupiers get no latitude: they have to get their targeting right.

- Relationships with the host government are critical, and any lack of transparency between the parties, perceived or real, can lead to a fundamental breach of trust. In the factional and conspiratorial politics of Iraq, the most successful deals were also the best-socialized. Since the host government will have to bear the consequences of whatever is agreed, it seems only appropriate to cut it in from the outset.
- Finally, a successful deal is likely to draw reformed insurgents into some kind of relationship with indigenous security forces or governmental structures. Ideally this will see their formal inclusion (as in Anbar): failing that some form of socialization through joint operations (as with the CLCs). Any deal which does not create such a linkage risks recidivism, as in Basra.

Conclusion

The tribal strategy and the Basra "accommodation" were therefore not quite the resounding success or the craven sell-out they might initially have appeared. As has been shown, in a little over 8 months the Basra deal achieved the desired end-state: allowing the British to withdraw from the city, removing any lingering confusion over Shi'a nationalism, setting the conditions for COTK, and leading to a military victory over the JAM which has since been ratified in the Provincial elections of 2009. It did not work out quite as its architects intended but in war little does. Although the Sadrists remain largely excluded from mainstream Basra politics, the intra-Shi'a conflict has effectively been resolved: just as Shaw predicted it would be, once the British were removed.

The consequences of the tribal strategy are less certain. Having removed a Ba'athist regime at least declaredly inimical to sectarianism, racism and tribalism, the US has been forced to ally itself with tribes which are largely xenophobic and sectarian, in order to avert strategic failure.[109] Its Faustian bargain has delivered spectacular short-term success, but has set the conditions for a potentially problematic confrontation downstream. The AA has been the most successful element, and its integration has reinforced the position of the Sunni bloc within the GOI as an effective counterbalance to the Shi'a parties. But the success of the CLCs is less clear, and the GOI still faces a serious challenge in terms of their disarmament and reintegration, with a falling oil price limiting the sweeteners it is able to offer.

Yet few in either the US or the UK would subscribe to such a view. Perhaps notions of victory and defeat are indeed largely perceptive:[110] the US has decided that it "won" in Anbar, the UK that it "lost" in Basra. In both cases the truth is less clear-cut, but neither public is interested in the detail. In Britain in particular, the Iraq war suffers from such a lack of popular legitimacy that the country is not yet prepared to entertain the view that it could have been anything other than a massive mistake.

And the Army remains locked in a corporate cringe, preferring renewed action in Afghanistan to any rigorous examination of what went wrong, or indeed right.

This paper suggests that the true verdict on the Basra deal should be much less critical, and that the current embarrassment is both misplaced and unhelpful. There are legitimate reasons for national unease over the performance in Iraq, including the lack of resources committed, the failure to apply COIN doctrine, the lack of continuity in key appointments, the occasional arrogance with Coalition partners, the inability to meet the aspirations of the Iraqi people, the failure to regenerate and actively mentor effective ISF, and the extreme dissonance between ends, ways and means, particularly since 2006.

If these mistakes had not been made, perhaps a deal with JAM would not have been necessary, but they were, and it was. UK commanders found an imaginative and pragmatic way of escaping a strategic cul-de-sac: COIN is no place for absolutist thinking, and the Basra deal looks much better now than it did in early 2008. Although its ambitious goal of creating an inclusive politics in Basra did not work out as intended, it did set the conditions for effective conflict resolution, and thus perhaps for some long-term strategic benefit. The tribal strategy cannot claim as much, at least, not yet.

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1 Carl Sandburg's poem "Choose"; taken as the informal motto of the Force Strategic Engagement Cell (FSEC) by Maj Gen Chris Hughes, who headed the cell from Nov 07–Sep 08. Hughes, interview, 10 Jun 09.

2 CLC were later re-named Sons of Iraq (SOI) – this paper uses the earlier term to avoid confusion with other acronyms.

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4 Christopher Tuck, "Conflict Termination in Iraq", p 17.

5 Ibid, p 18.

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7 Jan Angstrom and Isabelle Duyvesteyn (eds), *Understanding Victory and Defeat in Contemporary War.*

8 Ibid, p 227.

9 Ibid, p 109.

10 Ibid, p 58.

11 Ibid, p 153.

12 Ibid, pp 183-184.

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14 This paragraph draws on Austin Long's "The Anbar Awakening", and on an interview with Lt Gen Sir Graeme Lamb, Deputy Commanding General (DCG) MNF-I Sep 06 - Sep 07, 11 Jun 09.

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Army Doctrine Publication (ADP) *Land Operations*, the Army's capstone doctrine was published in 2005. This publication is being superseded by ADP *Operations in the Land Environment* produced by the Land Team at DCDC. The new doctrine explains the Army's approach to operations and is the primary source of UK higher level tactical doctrine for forces operating in the land environment.

ADP Operations in the Land Environment builds on ADP *Land Operations* 2005, reflecting experience from recent operations, new joint doctrine and our understanding of the future character of conflict. It is aimed at Army sub-unit, unit and formation commanders and their staffs, however it also has utility for both the Royal Marines and the RAF Regiment. It also provides joint staffs and civilians working in the land environment with an understanding of how the British Army operates.

ADP *Operations in the Land Environment* is now being taught at ICSC(L) and is being used by the Land Warfare Centre to inform the development of lower-level tactical doctrine. The final version will be published in Jun 10; comment on the 2 Star Trial Draft will be accepted by the Writing Team up to 30 Mar 10. You can access the 2 Star Trial Draft electronically at the DCDC Teamsite (This can be accessed by searching for DCDC on the RLI Search Engine). along with links to further direction on how to comment, the Land Team's contact details and Commander Force Development and Training's direction on its development. Alternatively, you may comment directly to the Land Team at DCDC by sending an email to **'DCDC-Land Ops in LE Comment.'**

We Learn from History that We Learn Nothing from History

Brigadier J K Tanner OBE
Commanded LWCTG(G) and its Field Training Group offspring before and during TELIC 1. COS MND(SE) TELIC 3 and 4. Currently SBA, Saudi Arabian National Guard.

George Bernard Shaw's remark about history was not intended to highlight its pointlessness; it was to highlight the importance of learning from history. And for an Army that is, ostensibly at least, imbued with a deep notion of its past, one might think that the British Army was good at learning from it. If this is a truism and one accepts that the British Army is the main repository of knowledge in dealing with conflict of the type faced in Iraq then it should, surely, have done better. Well: yes and no. Yes, because the Army should have recognised what it would be facing before it committed forces to the Coalition of the Willing. And no, because, once into the inevitable insurgency, the British Army was left to carry the can (but perhaps this is something else the Army should have learned from the past). Ultimately, amid any debate about victory and defeat in Iraq (not military victory or military defeat), it was not only *"no way to win a war"*, it was no way to start a war.

Iraq is, of course, yesterday's war as far as the British Army and the UK in general are concerned. But before the Op TELIC medal (with or without clasp) shifts too far along the chest, like that of Op BANNER, the tale might be told of the British Army's struggle to achieve



Iraq Medal (MoD)

success. Because, despite what might be alluded from the introductory paragraph, 'failure', as far as the British military effort **within** South East Iraq was concerned, is an altogether unfair and unwarranted conclusion given the circumstances of this six-year war. It would be like blaming the British Army for the loss of Aden in 1967 or for the political disaster of Suez in 1956. Notwithstanding the impact of the so-called 'strategic corporal', there are far greater forces at play in counter-insurgency than any manner or number of soldiers can influence in the long term.

Notwithstanding too the enduring principles of counter-insurgency; they can be intimately understood, but applying them is often unique to the prevailing circumstances. Ashley Jackson and Colonel Alex Alderson, while neither are that specific about Iraq, have both gone some way to show how tactical lessons cannot fit every situation[1]. It is the over-riding principles that prevail, but these must not be taken at face value. A glib repetition of the principle that there must be 'a clear and achievable political aim' might be assessed as a principle too far in the case of Iraq. That it is 'all about the politics', to quote General Petraeus, and that *"Fighting insurgencies is a long-term proposition"*, to quote General Casey before him, must put whatever any army can achieve in a counter-insurgency campaign into context. So, if fingers are to be pointed at the British Army regarding Iraq, Multi-National Division (South East) is not the place to point them.

> "It is easy to conquer any Arab country, but their natural inclination to rebellion makes it difficult and expensive for the invader to maintain his control."

South East Iraq

Perhaps the overall outcome in South-East Iraq can be seen at best as ambiguous, and certainly persistent tactical successes did not a strategic victory make. But, given the conditions from the outset, the UK should not have expected anything different and, in not appreciating this, the British Army might be viewed as culpable as its political masters and other involved government departments. Once the Iraqi Army had been kicked into touch – as inevitable at the hands of the original warfighting members of the Coalition as night follows day – then, without a truly massive, politically led, all-government department effort to secure Iraq's future, strategic failure was always going to be on the cards. Never mind that slowly and with some horrendous violence still to come, security in Iraq has been said to have improved since the terrible days of 2005-2007, strategic failure has been a much wider matter. The Arab and Muslim world had been assaulted by an army of foreigners and kufaar and Iraqis did not have to be in any way 'extremists' to be opposed to their occupation by foreign infidels. Perhaps the first lesson from past experience that might have been borne in mind ahead of the invasion of 2003 was that provided by Glubb Pasha:

> *"It is easy to conquer any Arab country, but their natural inclination to rebellion makes it difficult and expensive for the invader to maintain his control."*[2]

But the point of this article is not to ramble on about learning from the past in general; it is to try to learn something specific to the British Army's experience in South-East Iraq in the early days of the war against the insurgents in the hope that that experience is at least

recorded and that something good might come of it.

1 Armoured Division Planning

It is a simple fact that, in training for the war in Iraq, the 1st Armoured Division and its main constituent parts (7 Armoured Brigade, 16 Air Assault Brigade, 3 Commando Brigade) did not at any stage consider any post-war insurgency or how to deal with it; indeed, in all the weeks before crossing the Iraqi border, the very broad area of "post-conflict operations" was barely discussed. It was not totally ignored because 'Phase IV' was an obvious concern, but no Coalition plan was ever issued during this period and well after. So it was in an entire vacuum that the Divisional Headquarters – a tactical level headquarters – conducted what planning it could and under the general belief that, once the hurly-burly was done, divisions of civilian aid agents would quickly assume all responsibility for the undefined but presumably considerable tasks required. These tasks were, after all, not military ones and, while the invading military forces would clearly have a lot to do in the business of stabilisation, it was also generally assumed that the very grateful people of Iraq, especially the Shi'a in the South, would be benign and happy in their attitude towards the foreigners now in their midst.

So – should 1st Armoured Division have prepared itself better and, indeed, Headquarters 3rd Division, which followed in the early summer of 2003? 1st Armoured Division could not. It is very correct to be enormously impressed by the Division's preparation and move to be ready for the ground war, for in just about seven weeks the whole force had been transported from the UK and Germany and was ready in its assembly areas. But the very few weeks preceding the move had allowed for no more than complete dedication to the task of organising and preparing an army for warfighting operations. The holding back of the political order until after the Christmas of 2002 prevented any meaningful reorganisation and training until the very start of the New Year, despite it being blatantly obvious, given the sabre rattling that had been going on since the summer of 2002 that we were going to war.



Royal Engineers hurry to deploy a bridge from an advanced ABLE bridgelayer vehicle (MOD)

Headquarters 1st Armoured Division had enough to do in sorting out the force it was given – for that was also not confirmed until the New Year – let alone in planning the actual operation. Up until the week before Christmas not only was the make-up of the brigades vastly different from those committed eventually to operations, but the whole decision-making process was predicated on an attack south out of Turkey[3]. The successes and failures of the preparation and conduct of the war – of Op TELIC 1 – have been examined in some detail and the findings published[4]. But some information, which would help further explain the Division's predicament, is missing from that analysis. No full explanation of what then transpired post-war can be considered complete without this further context.

It was very fortunate that each allocated brigade was well up to the tasks immediately ahead for no sooner had lower level training begun in earnest in early January 2003 than vehicles and equipment had to be prepared for the long move. By the end of the month commanders and their staffs were already moving too, removing the chance of any Divisional integration. There were few concerns with operating at brigade level and below but, while Headquarters 1st Armoured Division was a well worked-up headquarters, the Air Assault and Commando Brigades had never operated within the Division's framework and there were also divisional level operations that were extremely rusty. Divisional level transitional operations, such as forward passage of lines, had not been practised in the field in years and movement in the combat zone had begun to assume the aura of an administrative task, so little had it been done since the end of the Cold War[5].

The point of all this is not to finger the Division for its weaknesses; they were known and understood and the brigade level and divisional level CPXs (not FTXs) and the small amount of integration with the US Marines that took place in late February and early March in the Kuwaiti desert helped to iron out some creases. The point is to demonstrate that, given what the Division faced (and, even if anyone had read Glubb, the last thing to be assumed was that the whole thing would be a walkover), there was simply no time to think very long about the aftermath, about what to do with Basrah, the Marsh Arabs, the rest of the South East or whatever the Brits found themselves in possession of. That it was a walkover[6] and that the truly complicated stuff of warfighting – getting things in the right place at the right time – was not overly tested, were blessings. The Divisional Headquarters had the chance to hold just one major planning session to consider the perceived aftermath before launching the attack into Iraq and then, as we know, the very rapid collapse of Iraqi forces meant that the aftermath descended all too rapidly upon the Coalition.

Of course it was too late, even in February 2003 and a month ahead of the attack, to be putting together a concrete plan for stabilisation and for securing Iraq's future. But, late as it might have been, opportunities were then missed to use troops already in theatre and fully embedded in the Division to lead the planning and preparation for stabilisation operations while the main Divisional staff effort was focussed on the Iraqi Army[7].

The bulk of Land Warfare Collective Training Group (Germany), including the



Map - SE Iraq (MoD)

CAST team, had deployed with the Divisional Headquarters to run the in-theatre training. Once this was completed a number of its officers augmented the Divisional Staff, such as SO1 CAST, who set up the new and much needed Ops Support team. A number of officers took the GOC's Tactical Headquarters into 1st US Marine Division's Forward Headquarters for the attack into the Ramaila Oilfields and the remainder reorganised themselves in Kuwait ready to form the UK's liaison team to the surrendered Iraqi Army, once that occurred[8]. Rather ignominiously, all of these troops were ordered home (not by the GOC) at the beginning of April as the Division sat on the edge of Basrah, in order to train 1st Armoured Division's reliefs which, subsequently, they were never asked to do.

Post Invasion Iraq

Jump forward about nine months to December 2003. British troops were still in Iraq but now as part of a coalition of forces in occupation of the south-east of the country. The situation had settled down and was relatively quiet across all four of the Provinces of Basrah, Maysan, Dhi Qar and Muthanna. 3rd (UK) Division had replaced 1st Armoured that summer and, while the frustrations of the population had boiled over in the heat and amidst shortages of all essential services, the Iraqis in the south-east still seemed cautiously hopeful that the temporary occupation by foreign soldiers would lead to better times. By late December Headquarters 3rd Division had completed its handover to Headquarters Multi-National Division (South East)[9], led by the British but now including another 12 nations' officers, although the Americans always called MND(SE) "those British guys" – a remark that was invariably unhelpful when constantly surprised US officers in Baghdad got a Dane or a Rumanian or an Aussie on the other end of the telephone. The greater impact of this will be described later. Through the second half of 2003 the Main Effort for the South-East had been the improvement of essential services; to move the situation, in a phrase, from 'Fragility to Stability'.



Rioters burn the Ice Factory, Nasiriyah – 2003



Ammo everywhere



Burning Cash

This seemed to be working, if only because the deteriorating security situation in the rest of Iraq was not happening in the South East. The attack on the Italians in An Nasariyah in November 2003, which left 19 Italian soldiers and Carabinieri dead, seemed an aberration. So, while considerable military effort was still focussed on essential services, about the same time HQ MND(SE) stood up, Main Effort shifted to Security Sector Reform, the avowed aim being to establish:

the plan had established four enduring, mutually supporting and concurrent Lines of Operation: Security, Essential Services, Economy, Governance. While just one of these – Security – was the direct responsibility of the military, without the military lead across the board, the rest would have been stillborn.

> *"A sufficiently credible and capable Security Sector accountable to the population and working to effective and representative provincial governments within the MND(SE) AOR to allow Coalition Forces to withdraw."*[10]

...the plan had established four enduring, mutually supporting and concurrent Lines of Operation: Security, Essential Services, Economy, Governance. While just one of these - Security - was the direct responsibility of the military, without the military lead across the board, the rest would have been stillborn.

Subsequently, Main Effort would shift within four months to enabling transition of political authority to the Iraqis. All of this was within the campaign plan which, albeit focussed rather locally on the South-East, was in line with the overall Coalition aim and the aims of the UK. But it was at most an operational level plan, worked up by Headquarters 3rd Division, as still no clearly defined strategy existed. Nevertheless, the plan had established four enduring, mutually supporting and concurrent Lines of Operation: Security, Essential Services, Economy, Governance. While just one of these – Security – was the direct responsibility of the military, without the military lead across the board, the rest would have been stillborn.

There is a good exposé of what went wrong and why between Op TELIC 2 and 5 in the Army's published analysis contained in *'Stability Operations in Iraq'*[11]. Some of its language is perhaps somewhat guarded but it clearly identifies the *"failure to plan the military and non-military Phase IV tasks for Iraq in timely fashion and in sufficient breadth and depth"*[12] as the prime source of all the trouble that eventually followed. The analysis also clearly absolves 1st Armoured Division of the responsibility for this failing.[13] There was not only no time afforded for such planning but outside the military there was also very little effort; no concept that a national, cross-government approach was required from the outset and through to the end. One has to ask why and, if time was the only problem, why no more time was allowed? To say that, as a result, *"local support for and confidence in the Coalition ebbed"*[14] is to put it mildly. The situation noticeably worsened in South East Iraq from the latter part of Op TELIC 3 onwards and the story is well known, but as the dust has settled since the final withdrawal of British troops on 31 July 2009 – the last of what was left of MND(SE) – there is arising a tendency to point the finger of failure at the British military effort in Iraq.

General Jack Keane, former Vice-Chief of Staff of the US Army, declared of the British in Iraq that they were *"a regular pain in the ass"*, and maybe he was right...

Winston Churchill said that *"Coalition warfare is a tale of the reciprocal complaints of allies"*[15] and the difficulties, especially between the main components of the post-war Coalition, were certainly manifold. It was readily identified in MND(SE) that *"Such multinationality has inherent frictions, difficult enough in a purely military operation but conceivably greatly exacerbated in the politico-military environment of counter-insurgency."*[16] They have barely been mentioned in the British Army's literature, except in the case of the perceived difficulties created by US military NOFORN procedures during the war. But never mind the very fact that the US leaders of the Coalition, including those at CFLCC in Baghdad, did not prepare for Phase IV. US attitudes towards 'those British guys' was invariably at odds with the situation in the South East and the way MND(SE) was dealing with it. General Jack Keane, former Vice-Chief of Staff of the US Army, declared of the British in Iraq that they were *"a regular pain in the ass"*[17], and maybe he was right, but next to no attempt was made by CFLCC to properly understand the different conditions inherent in the southern Provinces.

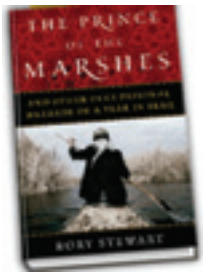
The Insurgency Emerges

Never mind the fact too that, initially, the Americans in the centre and north *"wasted a year by using counterproductive tactics … in unprofessional ignorance of the basic tenets of counter-insurgency warfare"*[18]

before they started to 'get it' (and get it they did). There was simply little dialogue. Until certainly into Op TELIC 5 not one single senior staff conference, such as for the collected Divisional chiefs of staff, was called by CJTF-7. Planned staff visits to Baghdad were invariably met by blank looks on arrival, with senior American staff absent at other meetings, and attempts to set up even a weekly conference call on secure telephones all failed.[19] Passage of information from CJTF-7 was largely confined to a tortuous daily conference call comprising lengthy summaries of that day's activities from each Division[20] and the daily FRAGO frenzy, requiring HQ MND(SE) simply to "concur" or "non-concur".[21]

> *"some Americans in Baghdad … chafed at what they saw as Britain's failure to grasp the nettle."*

It must be said that CJTF-7 was becoming entirely consumed by the rising intensity of an insurgency at a time when it was still relatively quiet in the South. But MND(SE)'s whole point was that there already appeared to be a minimum of consideration of the political context of the situation across Iraq and a poor understanding of the very different conditions prevailing in the South. A point was made to Baghdad in the late summer of 2003 that 'One Size Does Not Fit All' and that planning considerations in other Provinces might not be appropriate to the South. This did not make MND(SE) easy or particularly compliant allies, especially when concerns were voiced about the impact on the political scene in the South of US military operations elsewhere. A good example was HQ MND(SE)'s resistance in



Rory Stewart - The Prince of the Marshes



Iraqi Boys - Nasiriyah

February/March 2004 to the US plan to seize the Shi'a cleric Moqtada Al Sadr because, with the Shi'a entirely dominating southern Iraq, his arrest could seriously destabilise the region. His arrest might or might not have prevented the subsequent Shi'a insurgency, but the Americans just did not engage with MND(SE) (or with MND(Central) for that matter – and their problems were becoming acute). The result was that *"some Americans in Baghdad … chafed at what they saw as Britain's failure to grasp the nettle."*[22]

This was bad enough but next to no consideration was given by the US towards Britain's other Coalition partners, and their presence also goes almost entirely unmentioned in the various British post-operational reports. It has already been alluded to, but the reaction of CJTF-7 to finding a Rumanian or Lithuanian staff officer on the end of the telephone in Basrah was often to hang up. This was not just a minor inconvenience, for J3 Operations in MND(SE) was a Danish lead, and J5 Plans was an Italian lead. There were up to 13 nations represented in MND(SE) in 2004[23] and each had, apart from the Danish battalion embedded in the British brigade, a very different approach to operations. None of them, apart from the British, had any experience of counter-insurgency operations and only the British and the Danes could operate outside specific, nationally defined, areas of operation. None of them were inclined to accept direct orders from what they saw as a British Headquarters, whether or not the order had originated in Baghdad. This implies harsh criticism of other Coalition partners and some –



Centaur Tank Iraq (Italian Army)



Japanese Self-Defence Forces Iraq (Australian Army)

the Dutch and Italians for instance – had made significant contributions to MND(SE). The point is that all these differences had to be understood and worked with if the Coalition was going to be held together, let alone if any insurgency was going to be defeated. The Italians, the lead nation in Dhi Qar

Province, came in for some particularly hefty criticism, and some of it from within the MND(SE) military hierarchy. Rory Stewart, the CPA deputy governorate coordinator at the time the 'Sadr insurgency' erupted in early April 2004, has given a particularly critical account of this period.[24] His immense frustrations at apparent lack of Italian will to engage with the enemy and with HQ MND(SE) for seemingly doing little to support him must be well appreciated. But what was never properly factored in was the enormous political pressure the Italians were under not to have any more fatalities. Great efforts had to be made to keep the Coalition together at this stage,[25] and with pressure from CJTF-7 growing (CPA reports from Dhi Qar went straight to Baghdad and, unhelpfully, not to Basrah), MND(SE) pulled together a British battlegroup to move against the insurgents in An Nasariyah. It was not

required as the Italians, whose pragmatic agreements with local Iraqi leaders had clearly broken down, went on to the offensive, and with their Centaur wheeled tanks cleared their way into the city. It was the first time Italian troops had fought a battle since the Second World War and the judgement from HQ MND(SE) was that *"The Italians kept us informed of their intentions throughout and in their own measured way appeared to us to deal with the situation effectively … the Italian response, just like ours, must be measured by balancing risk and effect."*[26] Stewart acknowledged some time later that Dhi Qar Province did actually settle down in the following year, although he ascribed this to Iraqi exasperation at Italian efforts rather than the effort itself.[27]

And then there were the Japanese, massively disadvantaged by lack of any relevant experience and the constraints of domestic politics, but nevertheless anxious to work on civil engineering and medical projects. The battalion from the Japanese Self-Defence Forces, deployed within the Dutch area of operations in Al Muthana Province, had over 80% of its troops fixed to force protection and support tasks. But this was probably an improvement on their original plan, which was to hire a private security company to protect their soldiers! The Japanese might be considered naïve and were certainly, eventually, daunted by the task they had taken on. But no nation committed to MND(SE) refused to soldier, like the Ukrainians in Wasit Province, or simply turned tail for home, as the Spanish did during this period. This is no intended slur on the Spanish military, forced home by domestic politics after the appalling attacks by Al Qa'ida in Spain in March 2004, but their departure was preceded by serious planning at very short notice by MND(SE) to move British troops into the Spanish area.

No force in history has ever before countered an insurgency within such a disparate Coalition. And no counter-insurgency had ever been attempted within the political chasm that prevailed in the Coalition in Iraq and the resultant lack of overall, let alone correct, strategy. It is difficult to understand why, given the knowledge and resources of the Coalition, that this could not be achieved. Professor Eliot Cohen's conclusion is particularly damning:

"From the outset of the Iraq war much of our difficulty has stemmed not so much from failures to find the right strategy, as from an astounding and depressing inability to implement the strategic and operational choices we have nominally made."[28]

It might be all very well being critical or otherwise of the tactics used by any particular nation but this is as irrelevant as US tactical victories in Vietnam for, as Colonel Bob Killebrew, a Vietnam Special Forces veteran, commented on Iraq: *"If you get the strategy wrong and the tactics right at the start, you can refine the tactics forever but you will still lose the war."*[29]

Troop levels in South East Iraq did contain the insurgency and terrorism that erupted in April 2004 and then intensified over the following two years, but MND(SE)'s military leadership could not hope to reach its Centre of Gravity – defined as *"The support of the majority of the people within each Province of [the] AOR"*[30] – without a fully wound up effort from other Government departments and agencies: *"Cross-Government team efforts are vital to strategic success".*[31] There is no space here to delve into the lack of British cross-Government coordination in the South East, and the added difficulty and confusion when other Coalition partner's efforts were thrown into this muddle must be imagined. Tom Rick's 'Fiasco' paints a graphic picture from the US angle and Mark Etherington's 'Revolt on the Tigris', albeit from MND(C), shines a light on this from the British perspective, concluding that:

> *"I believed that our leadership structures were flawed on the British side, and that what we needed was someone capable of satisfactorily combining diplomatic and military strategies."*[32]

One of the fundamental principles of counter-insurgency, re-learnt countless times, is unity of command at the highest level. It is also outside the scope of this article to comment on the mess that was the higher leadership of the Coalition Provisional Authority and the division between its Director and Commander CJTF-7. But neither was there any unity at the lower levels and, while locally, CPA heads and their military counterparts often did their utmost to tie their activities together, without a fully integrated approach and unity of political and military command, efforts will founder and fail. The genius who physically separated the British led CPA (South) from HQ MND(SE), the former in Basrah Palace and the latter in Basrah Airport, should surely step forward and explain his logic. So, too, should the genius who established that each governorate would report directly to Baghdad and not to the regional military commanders, which further hampered proper coordination of effort. When the CPA then folded in June 2004 this effectively removed in-country political direction, contravening perhaps the most fundamental of the counter-insurgency principles – that civil primacy reigns and the military role is subordinate to it. Had Thompson and Kitson and many others taught us nothing?

This was all very well understood within MND(SE) even in the first half of 2004 but, as this article has tried to portray so far, understanding the situation was all very well; being able to do something particularly coherent about it was another matter. Additionally, the situation did not seem all that bad and there was genuine confidence that, certainly as far as the South East was concerned (an attitude which might have been at least selfish), the delivery of the Four Lines of Operation was still achievable. For Security this meant a *"Secure and stable environment maintained by Iraqi security structures"*[33]. The timeframe for the overall goal of an Iraq run by Iraqis by July 2004 now seems, but in hindsight, hopelessly naïve.

Moreover, it must be appreciated that dealing with the majority of these threats was not in the gift of the military alone, although the military alone was increasingly being held responsible.

It is another unfair judgment to accuse MND(SE) of not preparing for an insurgency in the South East. In its CONPLAN, HQ MND(SE) had identified the seven threats it faced and the nine effects required to overcome them[34] and, aside from measures to defeat terrorism and what were somewhat ill-defined 'non-compliant forces', filled its time to full measure and more with all its other tasks whilst maintaining the Coalition. Moreover, it must be appreciated that dealing with the majority of these threats was not in the gift of the military alone, although the military alone was increasingly being held responsible. MND(SE) was not complacent and in its planning had long recognised that its Centre of Gravity meant – and this was unique to the South – maintaining the consent of the majority of the Shi'a; *"we did not need them all and could afford to lose the small Sunni population in the South East, but we had to have the majority of the Shi'a. We had long recognised that a general Shi'a insurgency directed against the occupying power – us – would make our position rapidly untenable."*[35] In providing fertile grounds for an insurgency, the people are the threat.

Within the paucity of military, political and economic resources available, it could do no more and when the Sadr Insurgency bit MND(SE) on the backside, it came as a shock. HQ MND(SE) was at that time planning for British troop reductions and a withdrawal from some of the Basrah city locations, including Basrah Palace,[36] and clearly did not see the insurgency coming. Perhaps it should have, but the point here is that MND(SE) was doing its level best to forestall any insurgency from developing and thought it was succeeding. In many ways it was, but Iraqi expectations ran very high *('surely the nation that put a man on the moon can give us electricity')* and the Coalition had failed to meet the overall need of 'security' – security in its very widest sense: *"It had little to do with the military situation but made us understand that the vast majority of common men in Iraq, just like anywhere, are driven by security of family and home and wished to lead their lives free of fear."*[37]

As it was, the insurgency was not as was feared – a large-scale rising of the people – but a minority, urban insurgency with a military flavour. Feeding off the frustrations of the Shi'a and the masses of unemployed young men, many of whom had been soldiers, Moqtadr Al Sadr had an easy audience. But, despite the severity of the subsequent violence, the insurgents were relatively easy to defeat militarily and tactical success for MND(SE) was always achievable. It was achieved entirely within the principles of countering an insurgency and force, when it was applied (for military force is, of course, a key part of counter-insurgency) was applied under the principle of minimum force. Hereby hung a further dilemma. There are lessons from the past that tell us that the Arab respects force and that to show weakness is to invite a whole heap of trouble: *"Arabs … are accustomed to be ruled by the strong hand. Indeed, there is no denying that they respect force, and force alone."*[38] This quotation from the British commander in Iraq at the time of the Shi'a uprising in 1920 is from another age and its imperialist arrogance cannot be denied. But the same lesson was evident in Iraq in 2004.

In trying to define the potential insurgent, MND(SE) was facing myriad groups amongst the Shi'a and even Shi'a tribes that had supported Saddam, having placed their bets on the strongest man. The town of Qal at Salih was particularly notorious for its tribal lawlessness and an incident in February 2004 rapidly escalated when local police and members of the Badr Corps suspected the British were about to seize their weapons. The day long battle that followed left a number of Iraqis dead, but local leaders were then convinced the Coalition would punish the town as Saddam would have done, and we would have done in the 1920s, by bombing. In 1926 a British officer remarked that:

> *"These people … best understand a .303 bullet. The Turk beat them at their own games [and] they are rather apt to regard our leniency and straight dealing as a sign of weakness."*[39]

Should MND(SE) therefore, in anticipation of an insurgency of some sort, have bombed the living daylights out of the place? Perhaps the rules of engagement used in the South East were also seen as a sign of weakness and there is certainly a recognisable dilemma between employing *"firm and timely action"*[40] and using minimum force. A very real concern arose when the Norwegian contingent commander revealed his nation's very tight RoE to the newspapers as it was feared these could be very easily exploited by any 'non-compliant' group, as they probably were in the case of British troops later on. But MND(SE) was simply and rightly not in the business of deterrence by firepower, whatever the consequences were a month or so later. This led to further battles with Baghdad. The UK had often to argue to persuade CJTF-7 that groups of Iraqis clad in black and armed to the teeth did not necessarily constitute insurgents and could not be 'taken out' unless they engaged the Coalition first. This reached the limits of absurdity when Baghdad sent a team to Basrah, led by a retired British officer, to impose protection measures on the electricity power lines being cut down by criminal gangs. The measures – helicopter gunships that would 'whack' anyone seen within five kilometres of the power lines – ignored the fact that the bulk of the population lived along them. The suggestion that local tribes should be encouraged to protect the power lines, perhaps being paid to do so, was met with derision.

And finally, of course, good intelligence

would give MND(SE) the answers it required. Intelligence drives operations and this is more important in counter-insurgency than in any other form of conflict, but quite how an efficient and universal intelligence service was going to be established and in the time available is an unanswered question. Iraqi society, deeply suspicious of its neighbour after decades of attention by Saddam's own intelligence services, is virtually impenetrable by outsiders. The intense tribalism often encountered actually helped to deter terrorist acts in the South East but it made the quest for intelligence almost impossible, certainly in the short term.

No matter that the HUMINT teams were poorly resourced as well, if this very closed society also views the occupier, no matter how altruistic that occupier's intentions might be, as merely temporarily in residence, then a foreign-led counter-insurgency campaign is going to stumble and fail. The occupier will eventually depart, so there is little to be gained by supporting him.

The Strategic Perspective

Any criticism of MND(SE)'s effort in its occupied territory misses the point entirely if it does not view the whole strategic perspective: occupied Iraq was just that. To occupy an Arab/Muslim state by western/infidel troops has always and will always invite a shed-load of trouble. Compound that occupation by not resourcing stabilisation and reconstruction in any way adequately from the very beginning leaves the military, the very obvious representatives of the occupier, increasingly vulnerable. It is then all too easy to dig into tactical ups and downs, but the solution does not and never will lie at this level. To have any hope of defeating an insurgent people the approach has to be very special and grounded in an underlying political condition for eventual success. In the British experience only Malaya and Northern Ireland (it is still hoped), and perhaps Cyprus to some extent, have seen insurgency completely overcome because the politics worked. Left to the military, the dilemma is unchanged. T E Lawrence, commenting on his Arab comrades and their revolt against the Turk, noted the relationship between insurgent and regular soldier:

> *"… suppose we were (as we might be) an influence, an idea, a thing intangible, invulnerable, without front or back, drifting about like a gas? Armies were like plants, immobile, firm-rooted, nourished through long stems to the head. We might be a vapour, blowing where we listed. Our kingdoms lay in each man's mind; and as we wanted nothing material to live on, so we might offer nothing material to the killing. It seemed a regular soldier might be helpless without a target, owning only what he sat on, and subjugating only what, by order, he could poke his rifle at."*[41]



TE Lawrence (IWM)

There can be tactical victories at every stage and even partial strategic success. The occupier might view this as victory, having created a semblance of order but ignoring the resulting greater ripples he has created. Ultimately, might we not learn from history that there are times when there is no possible way to defeat an insurgency, unless the occupier has annihilation in mind?

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1 Ashley Jackson, *British Counter-insurgency in History: A Useful Precedent?*, BAR 139 and Col Alex Alderson, *Counter-Insurgency: Learn and Adapt. Can We Do Better?*, **BAR 142**.

2 Lieutenant General Sir John Bagot Glubb, *A Soldier With the Arabs*, London, 1957, p 37. Anyone who has cause to work with Arab soldiers, especially Beduin, must read Glubb's books.

3 When the 'mother-of-all-training-conferences' took place at Herford on 18 December 2002 it was attended by 7 Armd Bde, 20 Armd Bde and a 'Rear Operations Group', based on HQ LWCTG(G) and to comprise about three and a half battalions. Three days later the conference re-convened, now with 19 Bde in place of 20 Armd Bde. On Christmas Eve planning was halted and by the New Year the ROG was stood down and 3 Cdo Bde was in. Then 19 Bde was stood down and 16 Air Assault Bde was included. The Division went through more than 80 changes to the ORBAT before the force finally departed for Kuwait. And, of course, all planning had, until Boxing Day, been focussed on an attack from Turkey.

4 *AC71816: Operations in Iraq – An Analysis From The Land Perspective.*

5 Exercise SAIF SARREA II in Oman in September/October 2001 had shown up these formation level weaknesses and attempts were made, with limited success, to improve matters procedurally on Exercise ARRCADE FUSION 2002 and practically in Poland.

6 Many British soldiers and marines faced fighting locally that was tough and bloody and some company groups and even battlegroups conducted coordinated offensive operations in the couple of weeks of battle that prevailed. But to describe this as *"significant Iraqi resistance"* is drawing the longbow too much. The quotation is taken from *Operations in Iraq: First Reflections*, DGCC MoD, July 2003, p 11.

7 AC71816, op cit. Much is made of what is perceived as the over-manning of British headquarters, especially that of 1 Armd Div. A fairer criticism might have been that some of the staff might have been better employed in planning for Phase IV.

8 It is a now forgotten fact that on 16 February 2003 the GOC tasked Comd LWCTG(G) with forming a team to take on faction liaison post warfighting. This team, later called the Divisional Liaison Group, had as its main task, liaison with the surrendered Iraqi Army and would comprise four pairs of Landrovers manned

entirely by officers and warrant officers from LWCTG(G). Work with US Special Forces had already begun before the entry of 7 Armd Bde into Basrah, but the DLG was then stood down and sent home.

9 It is hard to fathom Dr Daniel Marston's remark in his article in BAR 147 that *"the role of MND(SE) divisional HQ was not fully established until TELIC 5"* (Daniel Marston, *"Smug and Complacent?"* Operation TELIC: The Need for Critical Analysis, **BAR 147**, p 18). Admittedly, the founding of the Headquarters was entirely ad hoc. It was 'set up' at PJHQ in September 2003 and its established staff consisted of just three – the COS, GOC's ADC and a clerk – until staff officers from all contributing nations started to trickle into Basrah from early December 2003. It had managed a three-day 'training' period at PJHQ, attended by about half the nominated British officers and the Romanians, and the majority of the British officers attended the OPTAG package at Chilwell. During the course of December the HQ MND(SE) staff gradually took over from the HQ 3 Div staff, the bulk of British officers not arriving until the very end of December, when the GOCs handed over. Within the first month HQ MND(SE) had produced, largely from scratch and with no direction from Baghdad, a full operational plan that, over the highs and lows of the following couple of years, stood up to scrutiny. But as a doctrinal basis for stabilisation operations and then counter-insurgency, such an ad hoc approach is an absurdity. It was saved by the quality and dedication of many of the officers and soldiers (many of them ill-qualified) at the time.

10 MND(SE) CONOPS 01/04 dated 5 February 2004.

11 *AC71844, Stability Operations in Iraq (Op TELIC 2-5)* – An Analysis From a Land Perspective, July 2006.

12 *AC71844*, op cit, p 2, para 5.

13 While AC71816 states, accurately, that HQ 1 Armd Div did not publish its Op Order for Phase IV until 21 April 2003, some 15 days after Basrah fell, this apparent slowness must be excused. The requirement did not seem that urgent and any adverse consequences were certainly not apparent. And, of course, no plans were being distributed from above.

14 *AC71844,* op cit, p 4, para 10.

15 Quoted in Eliot A Cohen, *Supreme Command: Soldiers, Statesmen and Leadership in Wartime,* New York, 2002, p 68.

16 Col James Tanner, *The British Counter-Insurgency Experience in Iraq*, Counter-Insurgency Seminar, Johns Hopkins School of Advanced International Studies (SAIS), Baltimore, December 2004.

17 SAIS Seminar, op cit. General Keane had not realised a British officer was in the audience.

18 Ricks, op cit, p 4.

19 This situation did improve markedly later on and by the time of Op TELIC 8 was a mature and informative system. But by this time British political intent – to pull out of Iraq – was also clear.

20 Except from the Brits! GOC 3rd Division stipulated that the summary from HQ 3 Div/HQ MND(SE) was never to exceed two minutes in length.

21 Poor passage of information reached an early nadir on 13 December 2003, the day Saddam Hussein was captured by US Forces. HQ MND(SE) discovered the capture that lunchtime when the Iraqis working in the cookhouse got suddenly very excited as they saw Sky News broadcast the fact. The 'celebratory firing' of weapons across Basrah that morning, which could so easily have turned to something else, was then explained.

22 Mark Etherington, *Revolt on the Tigris – The Al Sadr Uprising and the Governing of Iraq,* London, 2005, p 96.

23 In February 2004 these were, in addition to the UK: Italy, the Netherlands, Japan, Romania, Denmark, Norway, Portugal, the Czech Republic, Lithuania, New Zealand and Iceland. Soon after, the Australians arrived.

24 Rory Stewart, *Occupational Hazards – My Time Governing in Iraq,* London, 2006.

25 The declared Coalition Strategic Centre of Gravity was defined as *"The maintenance of international support."*

26 COS MND(SE) to CPA Dhi Qar, quoted in Stewart, op cit, p 384.

27 The Spectator/Intelligence Squared, The Great Iraq Debate, 11 December 2007, at www.spectator.co.uk.

28 Cohen, op cit.

29 Quoted in Ricks, op cit, p 195.

30 MND(SE) CONOPS, op cit.

31 *AC71844,* op cit, Para 17.

32 Etherington, op cit, p 117.

33 MND(SE) CONOPS, op cit, Annex E. The other three Lines of Operation and their goals were: Essential Services *("delivered to acceptable standards")*; Economy *("Stable market economy established")*; Governance *("Democratic and representative Iraqi national and provincial government established")*.

34 MND(SE) CONOPS, op cit. The threats in February 2004, in no order of priority, were: Terrorism, Criminality, Environmental, Economic, Cultural, Religious and Political. The effects required were: Defeat Terrorism, Force Protection, Reduce Criminality to an Acceptable Level, Improve/Maintain/Secure Essential Services, Neutralise Non-Compliant Forces, Maintain and Improve Consent, Establish Effective New Iraqi Security Forces, Secure Environment for Political Progress and Maximise Iraqi Control.

35 Tanner, op cit.

36 Subsequently not handed over to the Iraqis until 3 September 2007.

37 Tanner, op cit.

38 Lt Gen Sir Aylmer Haldane, *The Arab Rising in Mesopotamia*, 1920, RUSI Journal, Vol LXVIII, Feb-Nov 1923, p 65.

39 Sqn Ldr CH Keith, quoted in Lawrence James, *Imperial Rearguard – Wars of Empire 1919-85,* London, 1988, p 77. These were the years of RAF primacy and the policy of 'Air Control' in Iraq and Transjordan in an attempt to provide imperial policing on the cheap.

40 Maj Gen Sir Charles Gwynn, Imperial Policing, London, 1934, p 15. The principles of *'imperial policing'* that General Gwynn identified would be recognisable today but his advocacy of nipping any insurgency in the bud (he never uses the word "insurgent") must be taken in the context of the time. As understanding as British and Imperial forces were in the 1920s and 1930s of the use of minimum force, this was still the age of the punitive expedition.

41 T E Lawrence, *Seven Pillars of Wisdom,* quoted in Malcolm Brown, *T E Lawrence in War and Peace,* London, 2005, p 265. ☐

Blood, Heat + Dust: Second Edition

Operation Telic and the British Medical Deployment to the Gulf 2003-2009

Chapter 34:

Heroism in the care for others in Iraq



Painting: *Private Johnson Beharry VC PWRR 2004*

Artist and text: David Rowlands Medium: Oil on Canvas

Introduction

Operation Telic repeatedly saw soldiers and medics working under fire and under attack throughout the area of operations; in the front line; on the resupply routes and in the insecure base areas. The exceptional action in the protection and care of others became routine, and occasionally heroic, as in the case of Pte Johnson Beharry.

In this chapter, we compile some of the individuals whose actions in the care of colleagues were outstanding, including combat medics providing care on the front line and often under fire.

Trooper Christopher Finney

It was announced on 31 October 2003 that the George Cross, which along with the Victoria Cross is the nation's highest award for gallantry, had been awarded to Trooper Christopher Finney of the Blues and Royals for his outstanding courage during an incident in Iraq on 28 March 2003.

Chris Finney, aged 18 at the time of the incident, is the youngest military recipient of the George Cross. From Marple, near Stockport, he joined the Army in September 2000, attending the Army Foundation College in Harrogate. He joined the Household Cavalry Regiment at Windsor in January 2002, and the Iraq campaign was his first operational deployment. Trooper Finney received his George Cross from Her Majesty The Queen at an investiture ceremony at Buckingham Palace on 25 February 2004."

His citation for the GC reads in full:

> On 28 March 2003, D Squadron Household Cavalry Regiment were probing forward along the Shatt Al Arab waterway, north of Basrah, some thirty kilometres ahead of the main force of 16 Air Assault Brigade. In exposed desert, their mission was to find and interdict the numerically vastly superior, and better equipped, Iraqi 6th Armoured Division.
>
> Trooper Finney, a young armoured vehicle driver with less than a year's service, was driving the leading Scimitar vehicle of his troop, which had been at the forefront of action against enemy armour for several hours. In the early afternoon, the two leading vehicles paused beside a levee to allow the troop leader to assess fully the situation in front. Without warning, they were engaged by a pair of Coalition Forces ground attack aircraft. Both vehicles were hit and caught fire, and ammunition began exploding inside the turrets. Trooper Finney managed to get out of his driving position and was on the way towards cover when he noticed that his vehicle's gunner was trapped in the turret. He then climbed onto the fiercely burning vehicle, at the same time placing himself at risk from enemy fire, as well as fire from the aircraft should they return. Despite the smoke and flames and exploding ammunition, he managed to haul out the injured gunner, get him off the vehicle, and move him to a safer position not far away, where he bandaged his wounds.
>
> The troop officer, in the other Scimitar, had been wounded and there were no senior

ranks to take control. Despite his relative inexperience, the shock of the attack and the all-too-obvious risk to himself, Trooper Finney recognised the need to inform his headquarters of the situation. He therefore broke cover, returned to his vehicle which was still burning, and calmly and concisely sent a lucid situation report by radio. He then returned to the injured gunner and began helping him towards a Spartan vehicle of the Royal Engineers which had moved forward to assist.

At this point, Trooper Finney noticed that both the aircraft were lining up for a second attack. Notwithstanding the impending danger, he continued to help his injured comrade towards the safety of the Spartan vehicle. Both aircraft fired their cannon and Trooper Finney was wounded in the buttocks and legs, and the gunner in the head. Despite his wounds, Trooper Finney succeeded in getting the gunner to the waiting Spartan. Then, seeing that the driver of the second Scimitar was still in the burning vehicle, Trooper Finney determined to rescue him as well. Despite his wounds and the continuing danger from exploding ammunition, he valiantly attempted to climb up onto the vehicle, but was beaten back by the combination of heat, smoke and exploding ammunition. He collapsed exhausted a short distance from the vehicle, and was recovered by the crew of the Royal Engineers' Spartan.

During these attacks and their horrifying aftermath, Trooper Finney displayed clear-headed courage and devotion to his comrades which was out of all proportion to his age and experience. Acting with complete disregard for his own safety even when wounded, his bravery was of the highest order throughout.

Private Johnson Gideon Beharry - Victoria Cross

Published Friday 18th March 2005

Private Johnson Gideon Beharry from 1st Battalion the Princess of Wales's Royal Regiment is the first person to receive the Victoria Cross since 1982 and the first living recipient since 1965.

Pte Beharry receives the Victoria Cross for two separate acts of outstanding gallantry of the highest order whilst based in Al Amarah, Maysan Province, Iraq, in 2004.

In the first incident on 1 May 2004, Pte Beharry was driving the Platoon Commander's Warrior armoured vehicle that had been called to the assistance of a foot patrol caught in a series of ambushes. The Warrior vehicle was hit by multiple rocket propelled grenades, causing damage and resulting in the loss of radio communications. The platoon commander, the vehicle's gunner and a number of other soldiers in the vehicle were injured.

Pte Beharry showed initiative and great courage driving through the ambush, taking his own crew and leading five other Warriors to safety. He then demonstrated outstanding bravery by extracting his wounded colleagues from the vehicle, all the time exposed to further enemy fire. He is cited on this occasion for "valour of the highest order".

Whilst back on duty on 11 June 2004, Pte Beharry was again driving the lead Warrior vehicle of his platoon through Al Amarah when this vehicle was ambushed. A rocket propelled grenade hit the vehicle and Pte Beharry received serious head injuries. Other rockets hit the vehicle incapacitating his commander and injuring several of the crew. Despite his very serious injuries, from which he is still recovering, Pte Beharry showed great strength of character, taking control of his vehicle and driving it out of the ambush area before losing consciousness.

Private Johnson Beharry, aged 25, was born in Grenada on 27 July 1979. He came to the UK on 6 August 1999 and enlisted in the Princess of Wales's Royal Regiment (PWRR) in August 2001. After completing his training at the Infantry Training Centre, Catterick, he joined the first Battalion of the PWRR in March 2002. Before joining the Army he worked in the construction industry.

Private Beharry deployed to Iraq with C Company 1 PWRR in April 2004. Prior to this he spent six months in Kosovo and three months in Northern Ireland.

On 10 June 2004 Private Beharry received shoulder and serious head injuries when an RPG hit the Warrior Infantry Fighting Vehicle that he was driving. After treatment at the Shaibah Field Hospital south-west of Basrah, he was evacuated to the Royal College of Defence Medicine (RCDM) in Selly Oak, Birmingham. At the RCDM he underwent neurosurgical reconstructive survey. He has been undergoing rehabilitation at the Defence Medical Services Rehabilitation Centre at Headly Court in Surrey.

"Beharry displayed repeated extreme gallantry and unquestioned valour, despite intense direct attacks, personal injury and damage to his vehicle in the face of relentless enemy action."

Corporal Stuart Henderson (MiD)

A soldier who dragged an Iraqi man to safety during a gunfight, then braved bullets to drive him to hospital, has been honoured for his bravery, as reported by BBC News on Tuesday, 13 September 2005.

Corporal Stuart Henderson, 26, from the Wirral has been Mentioned in Dispatches in the latest operational honours list for British soldiers. Cpl Henderson serves in an ambulance troop with 5 General Support Medical Regiment based at Fulwood, Preston.

His team was called to an ambushed US convoy at Shaibah in southern Iraq on 30 January. He started treating an Iraq man shot in the chest.

"To me it was another call out and I was just doing my job" he said. "I heard a crack and a thump of a bullet going over my head. Then we saw dust clouds rising from the road as bullets hit the ground around us. The first thing that entered my head was that I had promised my girlfriend I would keep my head down and I thought:

'Emily is going to kill me'. The infantry provided covering fire and I dragged the casualty to safety."

The man needed urgent treatment and Cpl Henderson judged waiting for help to move the man would be too late. "I decided to go off-road and drive cross-country. We eventually managed to get the casualty back to the hospital where surgeons gave him further care. He made a full recovery."

Pte Michelle Norris



Nigel Bunyan wrote in The Daily Telegraph on 23rd March 2007

Big day for 5ft Army medic who won MC

“To this day she remains modest: a 5ft tall slip of a girl, and yet one so courageous that she has become the first female officer to win the Military Cross. Pte Michelle "Chuck" Norris, 19, had only recently completed her Army training when she braved heavy sniper fire to climb on top of a Warrior armoured vehicle to haul her sergeant to safety after he was wounded in the head.

One bullet from an AK47 rifle ripped through her rucksack as she came under fire from five different positions. But she refused to let go of Colour Sgt Ian Page, dragging him to safety and then jokingly referring to him as "Dad" as they and their comrades waited in the darkness for a rescue helicopter.

The details of that terrifying mission in Al-Amarah were still running through her mind yesterday, as she received her Military Cross during an investiture with the Queen. She and the rest of C Company, 1 Bn the Princess of Wales Royal Regiment, were on a night operation when a Warrior became stuck in a ditch and insurgents poured into the area.

"It was my first casualty since training, which was pretty scary," she said. "On arrival at the scene, we stopped and when I heard 'dings’ off the Warrior, I thought

it was stones. All of a sudden, the driver shouted down to me that my commander had been hit. I didn't know where he'd been shot and how bad it was at this stage. So I jumped out the back of the Warrior, climbed up on top of the turret, looked down and saw the extent of his injuries.

"In training you always get told to assess the situation first and then, if it's safe to do so, to go forward. But that day I didn't think about my own safety. I just knew I had to get him. I suppose I knew there were bullets, but I didn't know how many and you don't think, 'I need to be brave', you think, 'I just need to get to him'."

As she carried on with her rescue mission she could hear the "crack and thump" of rounds going past her head. Once Sgt Page was safely in the back of the vehicle she began to check his vital signs and administer first aid. Pte Norris, whose most serious casualty beforehand had been a soldier with an infected mosquito bite, worked hard to prevent her comrade from going into shock.

"I just talked to him, I just kept saying, 'Dad, are you with me? Dad stay with me', until we got him to the casualty helicopter."

Nine months later the young medic finds it "amazing" that she has been awarded the Military Cross. "I never thought I'd go down in history for something I did," she said. "I can't explain it, I really can't. It's well over my head."

Pte Norris, 19, who is nicknamed Chuck after the film star, dreamed of becoming a soldier from an early age.

"I remember sitting on my dad's knee watching old war movies and documentaries, because he loves his history. I remember watching 'The Battle of Britain,' and we could both say the words before they came out of the actors' mouths.

"And the next morning, I would wake up thinking, 'I want to be a soldier. I want to do all that'. At 15 she was already in her second year as an Army cadet in Stourbridge and, although she did reasonably well at her GCSEs, her mind was focussed on one career.

"I wanted to join the artillery," she said. "I went up for selection as soon as I could, but I failed on my fitness: I took two seconds too long on the mile-and-a-half run and I could only do two pull-ups and you had to do four."

Devastated, she spent a year at college before trying again. This time she cut a full two minutes off her running time and managed nine pull-ups. She joined the RAMC and after nine months' training was posted to Germany with 1 Close Support Medical Regt.

"After a while, they said they were looking for volunteers for Iraq and I thought that was what I wanted to join for, so I just put my hand straight up."

Her mother, Susan, 55, recalls how she tried to make light of her heroism when she

phoned home. "I knew there had been an incident and I knew she was in a difficult situation, but Michelle played it down. When I realised the full enormity of it I broke down and cried. It was a mix of horror that she could have died and pride over what she had done. I just thank God she is alive. I'm so proud of her. We are all very, very proud."

The full citation:

"At just 19 years of age and having only recently completed basic training, Private Michelle Norris was deployed as a medical orderly with The Queen's Royal Hussars Battle Group in Al Amarah, Southern Iraq. 11 June 2006 saw the largest and most intense battle in Iraq since 2004. A search operation in Al Amarah turned into a war fighting engagement when her Company Group came under heavy, accurate and sustained attack from a well organised enemy force of over 200.

"During the heaviest of the fighting the company commander's group came under accurate sniper fire and the commander of the Warrior carrying Private Norris was shot in the face and seriously injured. Private Norris realised the severity of the situation immediately and without thought or care for her own personal safety, she dismounted and climbed onto the top of the Warrior to administer life saving first aid to the casualty. On seeing her on the top of the Warrior the sniper opened fire again, firing a further three rounds at her, one hitting the radio mounted on the side of the turret inches from her leg. Despite this she continued to administer first aid through the commander's hatch to the casualty until the gunner pulled her into the turret for her own safety.

"Despite the very real risks from sniper fire, heavy small arms fire and rocket propelled grenade she deliberately ignored the danger to her own life in order to administer live saving first aid to the commander of the vehicle. Private Norris's actions on 11 June were extremely courageous and outstandingly brave and have rightly earned her the Military Cross for actions to save the life of a comrade when under fire."

Stuart Borwn's Painting of the incident i which Pte Norris won her MC is the frontspiece to Chapter 11.

LCpl Dennis Brady RAMC

The Corps Journal of the RAMC recorded that:

"It was with much sadness that the Corps learnt of the death of L/Cpl Brady following an indirect fire attack on the Shat Al Arab Hotel Base in Basrah City on Sunday 1st October 2006. At the time of the attack he was a Regular Reservist attached to D Company of the 1st Battalion The Light Infantry.

Dennis Brady was born on 19th September 1969, growing up in Barrow-in-Furness and joined the army in March 1994. During his time in the regular army he served

in Kosovo and Iraq during Operation TELIC. Leaving the Regular Army in January 2004 he transferred to the Regular Reserve and after serving in the fire service for a short period, he once again volunteered for service with the army and served on operational tours, initially with the Royal Gurkha Rifles in Afghanistan and then more recently in Iraq with the Light Infantry.

In Iraq he was attached to D Company as the Company Medic and was immediately recognised for his professional skill and ever cheerful manner. Always willing to put the welfare of the Company before all else, two nights before his death he accompanied a patrol which successfully surprised insurgents about to launch an attack on the base.

The Commanding Officer of 1 Light Infantry, stated L/Cpl Brady will be remembered:

". . . for his calm and unflappable nature whatever the circumstance".

The funeral of L/Cpl Brady took place at the Parish Church of St.George, Barrow in Furness on 17th October 2006. To his family and friends, all in the RAMC extend their deepest sympathies.

SGT Gary Crooks RAMC

Sgt Gary Crooks was injured in the same incident. This record from his unit also appeared in the Corps Journal of the RAMC:

"Sgt Gary Crooks has been employed as the Shatt Al Arab Hotel (SAAH) Medical Troop Senior NCO since the beginning of the Operation Telic 8 Tour supporting 1 LI the Basra City North Battle Group BC (N) BG. This appointment has entailed ensuring the Blue Light Matrix is ready to deploy at 5 and 15 minutes Notice to Move and that the troops are kept current with all medical training and able to react to a myriad of situations in this challenging operational environment. In addition he is responsible for the Troop medical supplies in order to carry out its key functions.

He has been a stalwart member of the Troop HQ offering advice to the Junior Ranks, Doctors and Troop Commander, in most cases advice very much sought after.

During incidents Sgt Crooks, with the Troop Commander would run the Med Ops office ensuring the flow of communication was unhindered throughout. Information would come from call signs on the ground and need to be passed to the MRS to warn them of any incoming casualties, information then coming out of the treatment room would need to be passed to elements of the Battle group and the Med Group.

On numerous occasions during the 4 month window that is the R&R season, Sgt Crooks in addition to his routine role would also be on constant standby as the 15 Min NTM crew commander. He is an ideal Troop SNCO for this small detachment

as he has a no nonsense manner, but good banter always ensured morale stayed as high as possible.

He is a keen sportsman, willing to try virtually anything, and has played rugby and golf for the Regiment, in addition to player/managing the regimental football team. Training in his own time and has always encouraged the less fit members of the Sqn to develop their fitness.

The SAAH location has seen significant Aimed Indirect Fire (AIF) contacts and on the day of the incident, both Sgt Crooks and L/Cpl Brady were in the accommodation tent when the mortar hit causing fatal injuries to L/Cpl Brady, Sgt Crooks whilst significantly injured managed to initially treat his severely injured colleague (LCpl Dennis Brady) and then raised the alarm though wounded badly, He saw that LCpl Brady's injuries required significant medical treatment and walked to the crew room to get assistance; he then walked on further to the MRS to ensure a doctor was also going to the scene. Only once this had happened would he allow himself to be treated, and even this was by duress, as he kept saying that he was fine and that LCpl Brady was the hurt one; this was done with selfless commitment and no thought to his own injuries in the true spirit of the RAMC Cap Badge Motto.

Sgt Crooks had known LCpl Brady well from years ago and it was not uncommon and indeed a regular occurrence to see them disappearing off together to the gym in the afternoon, or watching the football in the welfare room.

Overall, Sgt Crooks clearly showed commitment and resilience far in excess of what would normally be expected of someone in his position and this is testament to the exceptional SNCO that he is. The SAAH Med Troop all miss his gentle Scots accent, particularly the phrase "*Here. Get oot my office!*" From all the UK CS Med Squadron we all wish him the very best recovery, and look forward to seeing him and his wife Michele when we return to the UK.

Blast kills 4 soldiers

Chris Hughes And Mark Ellis wrote in the Daily Mirror on 6th April 2007 that:

"Yesterday after four British soldiers, two of them women, died in a Basra bomb blast. Tony Blair came close to blaming Tehran.

He said: "we mourn the loss of our soldiers in Basra, killed by a terrorist act...It is far too early to say the act was committed by terrorists backed by any elements of the Iranian regime. But the general picture is that there are elements of the regime that are backing, financing, arming and supporting terrorism in Iraq."

The Warrior was patrolling the Hayaniyah district, west of Basra, at about 2am when it was hit by the roadside bomb. A nurse from the Royal Army Medical Corps, a woman from the Intelligence Corps and two men from the Royal Army

Medical Corps and 2nd Battalion, The Duke of Lancaster's Regiment died on the spot in the blazing vehicle.

Moments after the attack, insurgents opened up with small arms fire and rocket propelled grenades. A Kuwaiti interpreter was killed. A fifth soldier is fighting for life. The patrol was searching for weapons but had made no finds. Iraqi police claimed it had earlier detained a lieutenant in the Interior Ministry's major crimes unit and was returning to base when ambushed.

The assault is likely to have been carried out by Shia fanatics of the hardline Mahdi Army forced out of Baghdad by a surge in US troops. An investigation will reveal whether the bomb technology originated in Iran. Britain has previously accused Iran's Revolutionary Guards of supplying devices and of training insurgents.

The killings brought the British death toll in Iraq this week to six. At least 140 UK personnel have died in the country since the 2003 invasion. Yesterday's deaths brought the number of servicewomen to die to five".

Private Eleanor Dlugosz

The poignancy of such deaths, and the reality of the impact on families and friends, is exemplified in this moving account of the life and loves of Eleanor Dlugosz, who was killed in this incident.

"Private Eleanor Dlugosz, aged 19, of the Royal Army Medical Corps, was providing medical support to a Warrior patrol from 2nd Battalion Duke of Lancasters Battle Group when she was killed. Based in Catterick, North Yorkshire, Pte Dlugosz, 'Ella' to some and 'DZ' to everyone else, deployed to Iraq in November 2006 and initially provided primary healthcare at Shaibah Logistic Base. Pte Dlugosz, from Southampton, then returned to the UK in January this year in order to complete her Class 1 Medics Course. After completing the course, which she really enjoyed, she returned to Iraq in March.

As a Class 1 Medic, she was tasked with accompanying patrols into Basra, providing the patrols with integral medical support. Pte Dlugosz quickly gained the respect of the infantry soldiers she patrolled with, and was held in high regard by all who knew her. A strong, bright and capable young woman, she had aspirations to complete her A-levels and train as a medical laboratory technician.

A naturally unassuming and quiet individual, Pte Dlugosz was a central part of the Close Support Medical Squadron and enjoyed the challenge of being a military medic, patrolling with her infantry colleagues in Basra.

One of her friends and colleagues, Pte Stella Lee, said: "Ella was a caring girl who enjoyed being a medic. Helping others before herself was who she was. She brightened up everybody's day with her cheesy smile. She was a privilege to work with and know and she will always be in our hearts."





Another of her friends, Pte Tom Hammond, who has served with Pte Dlugosz since basic training, said: "Ella always wore a smile that would brighten anyone's day. She befriended everyone she met. Apart from her family and friends, her real passion was for horses. She will be sorely missed by everyone."

Her Troop Commander, 2Lt Vinny Ramshaw RAMC, said: "Pte Dlugosz was a strong and morally courageous young woman, who was an example to many older and more experienced soldiers. Supremely dedicated to her work, she thoroughly enjoyed her soldiering and was keen to use her life-saving skills as a medic to help others."

Her Squadron Commander, Major Phil Carter RAMC, said: "I admired Pte Dlugosz for her enthusiasm and zest for life. She was a good medic and wanted to make a difference. The whole squadron will miss her."

Her Commanding Officer, Lt Col Martin Toney, added: "DZ was one of those soldiers who, despite a degree of shyness and a natural reticence, always surprised with her guts and determination. She returned to Iraq as a Class 1 Medic and almost immediately began patrolling in the city, first from Basra Palace and then latterly from the Contingency Operating Base. My thoughts and prayers are with her family and friends. She had such promise and her sudden death is a sad loss to all."

Ann McFerran wrote in the Sunday Times on May 20th, 2007 about

The girl who went to war

"Eleanor Dlugosz was a pretty, pint-sized tomboy who wanted to be a fighting soldier. She never fulfilled her ambition but still became the youngest woman to die in Iraq for Britain. Our writer meets her family.

Not long before Private Eleanor Dlugosz returned to Iraq for the second and final time, her grandmother asked her: "Darling, have you killed anybody?" Somewhat startled, Eleanor, a combat medical technician, replied: "No, Granny. Not unless I've given anyone the wrong medication. The army doesn't let me kill people." Less than a month later Eleanor and three of her comrades were killed, together with a

civilian interpreter, when a roadside bomb ripped a hole in their Warrior armoured vehicle near Basra. She was l9, the youngest British woman soldier to be killed in Iraq.

Today, six weeks after her death, Eleanor's mother Sally Veck, 41, and her grandparents Lionel and Mary Veck, both 68, are remembering the "beautiful girl whose dream it had been to join the army".

"Eleanor loved to be in the thick of the action," says her mother. "If she could've been up there fighting with the boys on the front line she would. The problem is Iraq has no front line."

IN the back garden of Lionel and Mary's home near the village of Swanmore in Hampshire, a magnificent horse-shaped white wreath is only just beginning to wilt. Inside the back door, under the harnesses of Eleanor's horse Polly, lie her uniform hat and belt, so small they look like children's dressing-up clothes. Eleanor was tiny and tomboyish, says her family, "a tough cookie who was drop-dead gorgeous".

She may have been petite and feminine – she was 5ft 2in and a size 8 – but it was the pint-sized Eleanor who could beat the biggest and brawniest at army training in Cornwall and Winchester. She was the first to jump into a freezing lake while the other cadets hung around the edges as their sergeant-major shouted: "You wusses! You're going to be beaten by a girl." (They were.)

On a weekend training camp in the woods the other cadets groaned when they were told that their tea was three live chickens in a cage. "Oh, for goodness sake," Eleanor said as she took out her pocket knife, cut off a chicken's head and put the carcass in front of them. "There's your tea."

Eleanor's bravado and femininity were part of her appeal. One senior army officer wrote to the family: "Eleanor was a strikingly alluring young woman." His letter is one of dozens of cards and letters of condolence that spill from every surface of the Vecks' cosy front room, alongside the flowers that still arrive regularly. The letters tell of a girl "with a heart of gold" who "lit up every room" and for whom "nothing could be too much trouble".

A soldier, Rachel, has written to tell Eleanor's family about how bullied and homesick she'd been during training, and how Eleanor had had cheered her up by "playing the clown", mimicking the corporal who'd shouted at her. "Eleanor sat up helping me polish my shoes until 3am," wrote Rachel. "She was the only happy memory I have of my army training."

On the table lie piles of photographs of Eleanor, as a little girl on horseback, in uniform on parade, glamorous in a ballgown, mostly of her smiling and all looking stunning. The Vecks recall a vibrant, determined "action girl" who wanted to help others and be busy, in the thick of things.

SALLY VECK separated from her naval seaman husband when Eleanor and her

younger brother Andrew were small. She lived close to her parents in Somerset and then in Hampshire.

Eleanor first sat on a horse at the age of three, and soon discovered "the exhilaration of galloping over the fields". When her grandfather took her to feed pheasants, "she'd walk over planks over ditches, and I'd say, 'Put your hands on your head, like soldiers'," says Lionel.

Soon Eleanor was accompanying him shooting rabbits. "She'd helped skin them and we'd put them in a pie, with vegetables. They were happy, free days," says Sally. "Eleanor was very in touch with what mattered because she knew where things came from."

At 13 Eleanor went to an army activities week at her school. "And that was it!" says her mother. "She absolutely fell in love with the army. "I didn't want her to join, but if anyone tells me not to do something it makes me all the more determined, so I've tried never to say no to her. "I knew she was never going to be a sales girl at Woolworths. I knew she would do something special. I could only believe that the army is a huge organisation and the person above her knew what he was doing."

At 17 Eleanor went to an army recruitment centre but initially failed to be selected because she was told she wasn't assertive enough. "So we gave her bossy lessons," giggles Mary. "She'd say, 'Please pass the tomato sauce', and we'd say, 'Pardon?'" "And she'd shout." Sally bellows: "'Pass the tomato sauce!'"

Then, having been selected, she was disappointed to be told she should train to be a nurse. "She really wanted to fight and be in a tank," says Sally. "She'd have driven the tank if she could."

Training to be a combat medical technician – "which meant jumping out of helicopters to rescue wounded soldiers on the front line", explains Sally – seemed a sensible compromise. To train, Eleanor needed a size 4 pair of army boots. "It was like trying to find rocking horse poo," laughs Sally. "I drove 200 miles touring army surplus shops. We found a size 5 and I thought she should just stuff her shoes, but then I came home and found a size 4 on eBay."

In the right-sized boots there was no stopping Eleanor: she was awarded the prize for best student and won prize for best shot. Afterwards she was bored. "All I'm doing is counting tents," she complained to her mother. "I'm thinking, 'Good!'" says Sally.

Last October she was sent to Iraq. The Vecks disliked the war, but they supported her in every way they could think: they wrote e-mails and shopped for what she requested – ladies' razors, lip balm, flip-flops.

"She loved fruit so we'd send her raisins, apricots and prunes. We sent her so many she wrote to us saying 'No more raisins'."

Eleanor wrote about how terribly hot Iraq was and how awful the food was on the base, how she had had to put breeze blocks around her bed to protect herself at night from mortar attacks, and how she had to sleep in her helmet, boots and flak jacket. On Christmas Day her dinner was thrown off her plate by a mortar attack and she'd had to scoop it back off the floor.

"But nothing seemed to worry her," says Sally. "You've got to realise that Eleanor thrived on what would worry us. When the wall was blown out of Basra palace where she was based for a while, she wrote to tell us how exciting it was. Exciting! All during the time she was in Iraq I didn't watch any news. I just couldn't. I'd think if I ever have to hear anything I will – and of course I did."

On January 7 this year Eleanor came home for training. "She was exhausted," says her mother. "She'd had to work every day, and often she had to be up and ready to go at 2am and she'd very little time off. When she was home she used to love to have long hot baths, with bubbles and candles, and then bed, with satin sheets. She was always very girlie."

Young men would ring Eleanor's mobile, but nobody special, says the family. Together they sang along to DVDs of Grease, HMS Pinafore and The Mikado; but they didn't question her too closely about Iraq.

"We thought she'd tell us if she wanted," says Sally. "Now I wish I'd asked her more. She'd say that when someone was killed she was always relieved it wasn't someone she knew. I don't think she knew anyone personally who'd been killed but she did say that the sunset ceremony when they have a service and the coffins are sent back home was very sad.

"I think maybe her background helped. We're not the sort of people who rush around screaming when something happens to someone. Mum was a nurse and Dad was a fireman so we're used to being calm and practical and helping people. She said she was going to take me out for a Chinese meal and she would take me on a plane because I've never flown; we were going to go on holiday to Tenerife. I think she was proud of us. Apparently she used to talk about us a lot on the base.

"Just before she went back, I asked her if Iraq would be worse or better this time, and she said better. But I know she was also dreading having to put the breeze blocks around her bed again because it had made her hands raw the last time."

Eleanor returned to the army base in Catterick on Thursday, March 8, a few days early. She always made a big point of saying she had to pack up all her boxes. "'In case I die,' she'd said. She was a very practical girl," says Sally ruefully. "I said to her, 'For goodness sake stop it'."

On April 4, Eleanor phoned home from Iraq. Sally, who'd been on the night shift at the hotel where she worked, was asleep. Mary answered. "Eleanor had had a bad day and felt rather low," she says. "It was a good line that day; often we're

shouting. I said, 'Darling, Mummy's asleep. What's the matter?' Now I wish I'd woken up Sally."

Eleanor told her grandmother how she'd gone out to rescue two soldiers from the front line. "One had been shot in the brain and it was fatal. She said the smell was awful. I said to her, 'You can't perform miracles.'

"She wanted us to send her some sherry – in a shampoo bottle. Oh, don't put that in The Sunday Times because they're not meant to [drink alcohol]. But everybody did it, although we never sent any sherry to her. We were more worried about her smoking. But we didn't nag her because we knew it was a stressful job."

Later that day, when Sally was awake, she sent her daughter a text: "We love you and please take care." The following day, April 5, Lionel heard a report of a bomb near Basra on Classic FM's midday news. But Mary says there was nothing on the television lunchtime news. Maybe Lionel had got it wrong. JUST after 4pm, a man and woman called at the door asking to speak to Sally.

"Army plainclothes," mutters Lionel.

"Not plainclothes; weird clothes. They wore check," contradicts his wife. "I went to get Sally. By the time I joined her with the army people she was screaming."

"They said Eleanor had been in a Warrior on a routine patrol which had been hit by a device and unfortunately she'd been killed," says Sally. "Until then I had no idea she was in a tank. I thought she was in a Land Rover.

"Half of me thought this was all a horrible nightmare and I was imagining the whole thing. Then half of me hoped she'd been hurt and injured and not dead. I begged them to tell me there might be some mistake."

"But they have name tags to identify them, and they log them in and log them out," says Mary. For several moments everyone sits crying, quietly remembering.

Mary puts an arm around her husband's shoulder: "Our beautiful girl wanted to help the ordinary people of Iraq but she just happened to be in the wrong place at the wrong time."

Later it was reported that Iraqi children had been brandishing Eleanor's helmet. "My sister-in-law phoned and said, 'Don't go buy the papers'," says Mary.

"I don't think it was an appropriate thing to show on television," says Lionel.

"But we don't know it was Eleanor's helmet," adds Sally.

"Later someone implied I'd sent her to Iraq. I was so angry I reared up like a horse and said, 'I didn't send her.' We suggested alternatives to joining the army but we couldn't have stopped her."

On April 12 Eleanor's body was flown back from Basra, and on the advice of the army Sally didn't look at it before she was buried in a military funeral. The family asked it to be led by the Rev John Whitton, the army chaplain who'd presented Eleanor with the prize for best shot at Winchester. He told them it was the most difficult funeral he'd ever conducted, he had so much material about Eleanor to choose from.

"She was neck or nothing," says her grandfather.

"She was bold and brave," says her mother.

"I'd have liked to have kissed her goodbye," says her grandmother. "But maybe it would have brought up too many questions. I just pray her death was quick."

The BBC reported on Friday, 27 April 2007 that:

Hundreds of mourners gathered to pay their last respects to teenage Army medic Eleanor Dlugosz, who died in a bomb attack in Iraq.

A horse-drawn carriage carried the coffin of 19-year-old Pte Dlugosz to church in Bishop's Waltham, Hants. Pte Dlugosz was in a Warrior armoured vehicle returning from a patrol on 5 April when a bomb was detonated, killing her and three colleagues.

Her coffin was taken into church by members of her regiment. The funeral cortege had made its way through Swanmore, the home village of Pte Dlugosz, before it arrived at the church. Friday's service was conducted by former Army chaplain the Rev John Whitton.

He said: "The size of the congregation here and the many hundreds of cards and letters they [the family] have received is testimony to the unique life of Eleanor. "Her life was tragically cut short but her 19 years were lived with such an intensity and commitment that many people were touched by her zest for life."

He added that when the Army Careers came to her school she had been captivated and said she wanted to become a combat medical technician.

"She wanted to be in the front line," said Mr Whitton. "I know her family had their reservations about this but they obviously knew that you cannot stand in the way of your child's wishes. You have to let them go."

At the end of the service, colleagues from Pte Dlugosz's unit within the Royal Army Medical Corps 3 Close Support Medical Regiment fired a volley of three shots in tribute. The Last Post was then played and a one-minute silence was observed.

Corporal Kris O'Neill

The Northern Echo reported on "the Spaces left in line as tribute to lost soldiers": June 14, 2007:

"Corporal Kris O'Neill and Private Eleanor Dlugosz from 3 Close Support Medical Regiment, the Royal Army Medical Corps, died when their armoured vehicle was hit by a roadside bomb in April. The regiment gathered at their base at Catterick Garrison, North Yorkshire yesterday to receive their Operation Telic medals. The presentation was followed by prayers and eulogies to the two soldiers who never returned home. The Last Post was played and two spaces were left in the regimental formation where the dead soldiers would have stood.

Corporal Kris O'Neill, aged 27, of the Royal Army Medical Corps, was a committed soldier who had worked hard to recover from a knee injury in order to deploy to Iraq. From Catterick, he arrived in Iraq in January 2007 to serve with the Close Support Medical Squadron which is part of the UK Medical Group based at the Contingency Operating Base, Basra.

An experienced and confident medic, with an unflappable nature, Cpl O'Neill was a trusted member of the squadron who could be relied upon to always strive to deliver his best. Even when officially off-duty he would make sure that his soldiers had everything they needed, and as such he would often work long hours behind the scenes to ensure this.

As a future senior NCO Cpl O'Neill made great efforts to mentor those who were junior to him, taking time to teach and develop their skills, whilst also ensuring their welfare needs were always met. A committed family man with two small boys, those who knew him were always struck by his kind and gentle nature. Cpl O'Neill had recently been tasked with teaching First Aid to the Iraqi Police Service. This was something that he readily threw himself into and gained a great deal of satisfaction from. He was the sort of man who valued helping others and enjoyed his role as a military medic, greatly.

His friend and colleague Cpl Martin Blaker-Hood said: "Kris was pleasant, hard working and very well respected. He loved his family and was a really good bloke. His death is a big loss."

Another friend Cpl Dennis Read added: "Kris was an extremely well liked individual in and out of work. His commitment to his job, the soldiers and the equipment he was responsible for, was second to none. Each day working alongside him was a pleasure and a privilege."

His Squadron Commander, Major Phil Carter RAMC, said: "I could always depend on Cpl O'Neill. Whatever he was doing he would give it 110% and make sure it was right. He was dedicated to ensuring that the soldiers we support receive the best possible medical care and his death is a tragedy."

Cpl O'Neill's Commanding Officer, Lt Col Martin Toney, said: "Cpl O'Neill was a

reflective and utterly dependable soldier who used his maturity and common sense to great effect, becoming the squadron's "safe pair of hands". He would turn his hand to all sorts of things, including helping to rebuild Iraq by training the police service, and was a key player in the unit. My thoughts and prayers are with his family and friends, especially his wife and children, at this hugely difficult time."



Telic send-off at Sunset

Chapter 34 Resources and References

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Blood, Heat + Dust: Second Edition

Operation Telic and the British Medical Deployment to the Gulf 2003-2009

Chapter 35:

Operation Telic In Memoriam



The coffin of Britain's Second Lieutenant Joanne Dyer is carried by friends and colleagues at the sunset repatriation ceremony at Basra Air Station in Iraq, 11 April 2007.
Getty Images

"Honourable age does not depend upon length of days, nor is the number of years a true measure of life"

Introduction

The risk of death is an integral part of the military compact. The fallen of the great wars were buried in their hundreds and thousands in foreign fields. The dead are now brought home to rest. Each death is afforded a public and national respect and reverence which marks the value that we attach to individual lives. Each death is afforded an announcement in the national media; an announcement in the House of Commons to remind politicians of their responsibilities; and an eulogy in the official media and on the House of Commons web page.

Death is the ever present companion of the operational tour, and no service man or woman can be under any illusions about the risks. The Airhead Ramp Ceremony which precedes the repatriation of bodies of allied service personnel to their final state of rest is one of the most dignified and moving of all military ceremonies, and a private expression of collective grief and respect for the fallen. The procession of the coffin on and off the aircraft ramp is the iconic image of war, and an enduring memory for those who have attended.

Operation Telic has witnessed the particular tragedies of death to women in front line service.

Death by friendly fire causes anger and a sense of waste. Operation Telic had its share.

Death occurred in heroic circumstances on Operation Telic.

It occurred through the private tragedy of suicide, in individuals under intolerable personal stress and pressure;

It occurred through the maddening circumstances of accident and carelessness.

In this chapter, we pay tribute through imagery and the written word to those young people who made the ultimate sacrifice in this distant war.

The following first hand accounts illustrate just some of the real human stories behind the deaths in challenging circumstances arising out of the Iraq war of 2003-2009:

2003: "Blue on Blue" Death from "Friendly Fire" is a particular tragedy of war

Audrey Gillan, who was with the Household Cavalry in Iraq, wrote for The Guardian, Monday 31 March 2003:

'I never want to hear that sound again'

"Five British soldiers have died under 'friendly fire'. Yesterday as General Richard Myers apologised for the three deaths caused by the US, saying it would be his 'quest' to ensure it did not happen again, the first full account emerged of the tragic incident in which a A-10 tankbuster fired on two British armoured vehicles

They will never forget the sound of the guns. A cross between a moan and a roar, a fierce rattling of heavy rounds of 30mm canon fire from two A10 Thunderbolts flying low overhead. Aircraft that shouldn't have been in the British-controlled area, "cowboying" at just 500ft and looking for something to have a crack at.

Last Friday morning, two American pilots turned their guns on a convoy of five British vehicles from the Household Cavalry, killing one man just three days shy of his 26th birthday, injuring four others and wiping out two armoured reconnaissance vehicles from the squadron's Two Troop. Two Iraqi civilians, waving a large white flag, were also killed.

Coloured smoke signs were sent up to indicate that they were friendly troops but it didn't stop the attack. The planes came back a second time, seriously injuring those who had managed to scramble out of their vehicles with only superficial wounds. The gunner, Corporal Matty Hull, however, was the victim of a direct hit into his gun turret.

The men in the Scimitars were screaming over the radio "stop the friendly fire, we are being engaged by friendly fire" and "pop smoke, pop smoke". The forward air controller, who liaises with coalition air forces to bring in fire missions, was shouting "check fire, check fire". Frantic calls were made to 16 Air Assault Brigade headquarters to find out what was going on. But no one seemed to know.

The A10s were about to take a third swing when they were told by the American air patroller working with the Household cavalry to stop firing. Instead of providing air cover while helicopters came in to evacuate the casualties, they baled out.

The attack took place within the Household Cavalry's battlefield control line which means that everything in the air should be controlled by them and their embedded American air controller. The A10s were well out of their area and the matter is now being investigated amidst calls from some of the British troops that the pilots be prosecuted for manslaughter. So far in this conflict, Britain has suffered more casualties from friendly fire, five, than from assaults by the Iraqis.

That morning's plan had been to use artillery, air and helicopter strikes against Iraqi positions in order to secure the area for future operations. D Squadron is an

armoured reconnaissance unit and their job is to move in first and secure locations before other troops move in.

You could hear the battle over the radio, with the guns rattling down the airwaves. The squadron leader's Spartan vehicle narrowly missed a hit by two mortars, a procedure known as bracketing. The whistling and explosion cannot be heard in these vehicles but the tremor of the earth could. The two Scimitars had been probing a road, checking for landmines, enemy locations, assault batteries.

At this point, Two Troop was given orders to move forward. Squadron leader Richard Taylor said: "I remember saying 'move quickly through the urban area, as we will be vulnerable from civilians, make best speed, good luck'. I don't think I will be wishing anyone good luck again."

Ears pricked up as shouting came over the radio. At first it seemed like someone had just lost their rag. Then the full horror dawned. One of the vehicles had been hit, no two, and by "friendly call signs".

Manslaughter

They stood still, stopping what they were doing. At first they thought it was one lad, then another. Whoever it was, it didn't ease the twist of knots that started knitting themselves in their stomachs. Later, they learned it was Matty Hull, who aside from being a gunner was also a military instructor who was being considered for a posting to Sandhurst to train officers.

Amidst the grief, their anger could not be contained. All of D Squadron's vehicles are clearly marked, with fluorescent panels on the roofs, flags and other markings. It was something that the soldiers kept saying, over and over. "We spend all this money marking out our vehicles so this doesn't happen," one said. "If it was the heat of battle, shit happens. But it was clear daylight."

Another said: "As far as I am concerned, those two pilots should be done for manslaughter. There's no way on the planet that they couldn't see two vehicles, that they couldn't see the dayglo panel on the top."

Trooper Joe Woodgate, 19, the driver of the Scimitar in which Cpl Hull was killed, walked away with holes in his bulletproof vest and a tear in either side of his shirtsleeve where shrapnel entered and exited, without touching his arm. All the rest of his colleagues had to be evacuated to the hospital ship Argos.

"We were given this mission to go along and clear one of the furthest routes, a road running along between the river Euphrates and this village. We knew it was going to be pretty hairy because we had been bombing the shit out of the Iraqis all day," he said.

"I was moving along and for some reason, the wagon just stopped dead and these two massive sparks came flying into my cab. I turned round and the turret was just

a well of fire behind me. There was fire everywhere. I tried to get out and my hatch was jammed. I was banging away at it for what seemed like a lifetime but it was probably only a few seconds. As soon as I saw the fire, I thought 'get the fuck out of here'. I managed to get out and rolled on the floor. I didn't realise that it was the Americans that had hit us.

"I remember seeing the front wagon which had been hit and I remember seeing the people getting out of that and running for cover. I thought there must be ground troops coming to get us. I went pegging it after them and jumped in a ditch. That was when the American plane came round to do a second swoop on us. That fucking gun, I don't want to ever hear that again. It's like a cross between a moan and a roar it's that fast.

"Chris Finney helped people get out of the wagon, he was amazing. I didn't know what was going on at that point. We were in this ditch and I still didn't realise it was Americans. I didn't realise that Matty was still in the turret. So we ran back over to the wagons. The engineers who had been in our convoy were there helping with the casualties and getting them into their Spartan while they were under fire.

"By all accounts, I found Finney and he had a shrapnel wound all up his arse. Gerry knew exactly what needed to be done. I remember seeing him stand up and wave his arms in the air, trying to get these planes to stop.

"When I got out, I thought Matty had got out as well but when I was pegging it off after Gerry, I thought where's Matty and I looked behind me and the fucking wagon was just a mess man. It's weird because you are thinking, maybe if I had done things differently . . . I don't know why Matty couldn't get out. People said they remember hearing him on the radio but I don't remember a thing. In hindsight, you always think there's something else you could have done.

"I went back there on Saturday when they went to recover the vehicles and Matty's body but I wasn't allowed out of the vehicle until they held a service for him. Part of me thinks, I have already cheated death and I may be tempting fate by staying out here but they have moved me to squadron headquarters because I don't have a vehicle to drive anymore and I should be safe here."

The Scimitar was so badly ablaze it was still smoking the following morning, the palls of gray in the eyeline of every member of D Squadron. Fully loaded with ammunition, it had become an exploding tinderbox. Much of it, including its gun turret and its tracks, had melted.

The troops could do nothing but evacuate the casualties and leave the gunner's body behind. When daylight came, the squadron leader, a padre and a number of the troops returned to the scene to bring the body out. Chemical warfare suits had to be worn because of the threat from the depleted uranium used in the American weapons. A remembrance service yesterday was interrupted by the thuds of

incoming Iraqi artillery and the padre saying, "and the Lord said, oh, that was a bit close, get down".

Afterwards, squadron leader Taylor said: "Militarily, it was a very successful operation that was marred by the tragic events that led to friendly fire casualties. To Mrs Hull, I would like to say that the hearts of the squadron are very much with her and her family today. Her husband did not die in vain. He was an immaculately professional soldier. He was highly regarded and immensely popular within the regiment, he will always be remembered for his smiley face and professional manner."

Trooper Joe Woodgate said. "I can't stop thinking about him. I can't stop thinking about how he died. He has a wife and everything. In a way I think it is unfair that he had to go and I got out."

2003: The embedded journalist's story of facing death and its consequences

'If you cop it, can we have your radio?'

Audrey Gillan writes further on what it was like living with a hundred men from the Household Cavalry at war in the Iraqi desert, in The Guardian on Monday 28 April 2003

The note from the Newspaper Publishers Association said: "Women war correspondents: the MoD advised that the marines and the 16 Air Assault Brigade wished not to have women." It came as a shock. After months of rigorous training, fretting over kit, getting fit and steeling myself for war, I was told that because of my gender I could not go.

As an embedded journalist, part of the British pool system, my lottery draw had meant that I was to be assigned to the Household Cavalry Regiment's D Squadron, a unit within 16 Air Assault Brigade. Their job is frontline reconnaissance and, for reasons that are the army's own, women are generally allowed nowhere near the frontline.

It had not occurred to me or my editors that being a woman would be a hindrance to me doing my job or to the army. In the end, it wasn't.

Some quiet calls were made and, while the marines held their line, someone in 16 Air Assault Brigade changed their minds. The Household Cavalry, one of the oldest and most traditional regiments in the country, made it clear that they would be happy to take a woman on board.

Within days, I found myself with the 105 men of D Squadron, the Blues and Royals, in Camp Eagle in Kuwait. Along with Daily Mail photographer Bruce Adams, the only other journalist with the squadron, I was shown into a large Bedouin tent filled

with semi-naked, tattooed soldiers, men I would come to spend the next five weeks with. Towards the back were the officers and it was here that I found Squadron Leader Richard Taylor. He sat us down and said, in the politest of Household Cavalry tones: "When we are out in our vehicles in the field we live together, eat together, sleep together, fart together and wash our bollocks together. Do you think you can handle it?" I shrugged my shoulders, a part of me hoping he was pulling my leg in the way the regiment had when they hung up a picture of the Queen especially for the Guardian's arrival.

But he wasn't joking. At that time, there were more important things to be thinking about, like how do I keep my head down if we are attacked, should I jump head first into a trench, would they leave me behind if I couldn't run fast enough or not carry my kit? Would they take me less seriously because I didn't have an interest in big guns and had never seen a Scimitar or Spartan armoured reconnaissance vehicle, never mind lived in one? Washing my bits seemed the least of my worries.

We were shown to our tent: a hot, sticky, odorous enclosure with 60 squaddies sleeping and snoring on rollmats on a wooden floor. As we walked through, there were smirks on the faces that greeted us - the soldiers had been told they were going to have to put up with two journalists for the duration of the war but they hadn't been told one was a woman.

Lugging a holdall on wheels filled with a flak jacket, helmet, respirator, camping stove and other bits and pieces, an 85-litre backpack, a day sack and my laptop I was immediately told by Corporal Mick Flynn, one of the squadron's oldest and most experienced soldiers, I was going to have to scale down my kit. The first thing to go was the one-man tent I had been advised to buy by the MoD - the Household Cavalry don't sleep in tents, they just bed down in the dirt next to their vehicles, so there went my privacy. I would be allowed my work equipment but not much else as there would be limited space on the vehicles. That meant taking just the day sack with two shirts, two pairs of trousers, four pairs of knickers (big, for modesty purposes), two sports bras, four pairs of socks and one pair of boots. My toiletries would be limited, my bars of chocolate were welcomed, but only because they would disappear quite quickly and therefore wouldn't take up space. I wondered if they were trying to scare me when they asked: "If you cop it, can we have your shortwave radio?"

The shared showers and tents of the camp were soon to be looked back on as luxury as we moved into Iraq. The conditions were rough. We slept on the desert floor just inches from each other - a bonus on the freezing nights. The dust and sand went everywhere, into our kit and every crevice of our body, and we rarely got it out - we washed with a flannel in a bowl when we could and had to make do with babywipes when we couldn't, which was almost always. The soldiers gave me my space when I needed it and most of the time my wash was protected by the side of a vehicle and the modesty of a towel.

As they saw that I was prepared to muck in - and as part of a crew of five on a small vehicle, I had little choice but to take my turn at making the tea, heating up the boil-in-the-bags or laying down people's "doss bags", I was shouted at and ordered around - I simply became "one of the boys". Learning to swear like a trooper probably helped too.

It was different when we came across soldiers from other regiments who wolf-whistled and stared because they did not have a woman living with them. The two D Squadron guys, who had surrounded me with a poncho as I tried to have a quiet pee beside a wall when we found ourselves mobbed by curious Iraqis in one town, were outraged when a Para stuck his head through the hole and took a picture. I even had a guard when, on one occasion, a rare shower was to be taken fully exposed to all around - we crept up in darkness and those who approached were shooed away.

Of course, I was the butt of jokes, some of which were no doubt made out of my earshot. My nickname was "Admin" - in the military, admin means almost everything: taking care of your kit, making sure you have nothing out you are not using, eating enough food, washing your clothes, and yourself, just keeping everything in order. My ability to lose my Maglite torch, my goggles, at one point even mislay my helmet and a parcel just received in the post from my mother (we had just had to "bug out" or run away in the middle of the night from rounds of incoming Iraqi artillery at the time), meant I was an "admin vortex" and the source of much hilarity. Admin in the Field, they said, would be the title of my book on the war.

On one occasion, as the soldiers rooted around an abandoned barracks, finding Iraqi chemical warfare suits and masks, the squadron corporal major told some American marines that I was there to make his "brew" but he never treated me with any less respect - or indeed afforded me more privileges - than he did his own troops. My safety was one of his prime concerns.

The Household Cavalry found themselves leading 16 Air Assault Brigade in Iraq, coming under heavy attack from incoming Iraqi artillery, outgunned and fighting fierce battles with T55 tanks. They lost one of their men in the A10 friendly-fire attack, when two tankbuster aircraft turned their guns on their convoy. They lost two more in a tragic accident when a Scimitar overturned in a ditch, and had more injured.

I watched men desperately try to resuscitate their fallen colleagues and shake at their inability to fight with fate. I saw them weep as they learned of the death of men they had spoken to just that morning, men they had worked with for years, drank with, and played football with. Sometimes, as we took incoming fire, they hugged me but they hugged each other as well.

They spoke to me, sometimes as a journalist, sometimes as a friend, of their fears, of their grief, of their boredom, of their frustration and of their ultimate pride in what they had done in Iraq.

And I never had to worry about being left behind. On the first day, I met Corporal Craig Trencher, the driver of Spartan Three Three Alpha, the cramped vehicle which was to be my home, he said: "Don't worry; I will never, ever leave you. I will pick you up and carry you if I have to." On the day that our vehicle was "bracketed" - we took incoming rounds at the front and back which missed us by metres - Corporal Danny Abbott just looked at me and laughed and said, "I think we are being shot at". He squeezed my arm as if this was all part of a day's soldiering. It wasn't, but he didn't want me thinking it. On one gas alert - which like all the many others was false - one soldier handed me my respirator before picking up his own: when you have just nine seconds to get your mask on safely, that is quite a thing to do.

Yes, they said I was their "little packet of morale" but they weren't being sexist, just including me in their gang. I came to them with my own prejudices, the ones lots of people have about squaddies being tattooed, farting louts. They had tattoos, they farted and their feet certainly smelled, but they were also gentlemen. They showed me that there are other more appropriate clichés, the ones about camaraderie, "band of brothers", and dying for each other. They shared everything they could with each other and with me, sweets sent from home, toilet paper, news, secrets, and tears.

On Wednesday of last week, I went to the funeral in Windsor of Lance Corporal Karl Shearer who died when his Scimitar overturned in the ditch. Different men, from the regiment's other squadrons, were grieving. But they also had a chance to joke about me being a woman and how they had laughed when they found out. The commanding officer said he had informed the Queen, who had been surprised that a woman had been embedded with her own personal regiment.

Tonight, I am to talk to the soldiers' wives, telling them about a side of their husbands they will never see. Someone advised me not to wear nice clothes or make-up, to get into my smelly kit, put some sand on my face, be "admin in the field" again, because the wives might be jealous. Of course, I won't. My being a woman should make no difference to them either.

Yesterday, I phoned Bruce Adams and asked him what it was about me being a woman that got me by in a war, living together with more than 100 men. "Balls," he said. "More than some of the soldiers." So, that could be the answer, I didn't have the bollocks to wash in front of the squadron leader, but it seemed I had the balls.

British soldier killed in Basra: The Guardian Thursday 14 August 2003

A British soldier was killed and two others were injured in an attack on an army ambulance travelling through the outskirts of Basra today. The ambulance was attacked by an improvised explosive device hidden in earth next to a lamppost. One of the servicemen was being taken to hospital for a routine matter when the attack took place, according to the Ministry of Defence.

Major Charlie Mayo, British spokesman for the HQ Multi-National Division (South East), said: "This was a direct attack on a clearly marked ambulance, without any justification whatsoever. We will work closely with the police and local community to identify and track down those responsible. The British Army and our multi-national partners are working closely with the Coalition Provisional Authority and the Iraqi people to maintain order and rebuild the country after Saddam. Incidents such as this, carried out by a small minority of those who do not want peace, will not deter us from that aim."

An MoD spokeswoman in London said the target of the bomb, which may have been detonated with a remote-controlled device, was a Green Army ambulance with Red Cross symbols painted clearly on the side. It was the first British fatality in a hostile incident since June 25 when six soldiers were killed in the southern village of Majjar. It raises to 15 the number of British soldiers killed in attacks since US and British forces invaded Iraq on March 20 to oust Saddam Hussein.

The role of the coroner

Another important lesson of the Iraq war is the role of the independent minded coroner in examining the causes of death and in making recommendations. Every service death is fully investigated, a necessary matter which has led to a considerable backlog of work in the coroners' courts and delays in the release of bodies for burial. This process has produced uncomfortable verdicts on occasion for the military and political establishment, but it is an essential component of learning lessons and of correcting problems with procedures and equipment, besides getting as close to the truth of the circumstances of death of each individual as is possible or reasonable.

At bottom, it stops the "cover-up", whereby a convenient and plausible explanation conceals the greater truth; of money saved on fire suppression equipment in a Hercules wing, or of major Avgas leaks in the flight refuelling system of a Nimrod surveillance aircraft; or of the manifest deficiencies of the Snatch landrover in the hostile urban environment.

The following articles illustrate just a few aspects of the work of the Oxfordshire Coroner and the challenges which take the role into a political minefield.

Richarzd Norton-Taylor, wrote in The Guardian on Friday 20 April 2007

Coroner rejects US pilot error claim in Iraq crash

"The death of eight British servicemen in an American helicopter crash at the start of the Iraq war was due to mechanical failure, and not pilot error as the US has claimed, an Oxford coroner ruled yesterday.

In a case which has provoked a fresh row with America over Washington's refusal to cooperate with British inquests, Andrew Walker said it was unacceptable that the US had failed to release evidence about the incident. He said it made his job more difficult and the experience of the grieving families more harrowing.

The helicopter, an American Sea Knight, crashed south of the Kuwait border in March 2003 on the first day of the Iraq invasion. Four US marines also died.

An American inquiry found pilot error was to blame. It concluded that "spatial disorientation" suffered by the US Marine Corps pilots led to the helicopter plunging nose first to the ground. It was suggested at the Oxford inquest that the US explanation for the crash might have been designed to avoid grounding its Sea Knights to correct any mechanical failure.

Though a British board of inquiry by 3 Commando Brigade found technical failure was to blame, British navy chiefs endorsed the US conclusion that the pilots were at fault. A Ministry of Defence spokesman said yesterday: "Both conclusions were presented to the families as there was no way to definitely establish the cause of this tragic accident."

Recording a narrative verdict today, Mr Walker, assistant deputy coroner for Oxfordshire - bodies of repatriated UK service personnel are flown into RAF Brize Norton, near Oxford - said there was "no evidence whatsoever" of pilot error on the basis of the evidence he had seen. "The aircraft was flying at low altitude in straight level flight when a runaway [a mechanical fault] in both the differential air speed hold actuators [components within the helicopter] caused the aircraft to lose control and strike the ground at 23.35 hours local time [on March 21 2003]."

Mr Walker recommended that US Sea Knight aircraft be fitted with "black box" flight data recorders. He said it was unacceptable that the US had failed to release evidence about the incident. Though the US eventually provided the coroner with a report into the crash, Mr Walker said all the important conclusive analysis had been removed.

Last month Mr Walker castigated the US for its refusal to cooperate with the inquest into the death of Lance Corporal of Horse Matty Hull, killed by an American pilot in a "friendly fire" incident in Iraq. He called the killing a "criminal, unlawful act" tantamount to manslaughter, and "an entirely avoidable tragedy".

Michael Evans, Defence Editor wrote in The Times on February 20th, 2008:

2008: "Troop vehicle's armour was no match for bomb, says coroner"

"The safety of troops transported in the Army's Warrior armoured personnel carrier was called into question by a coroner yesterday, when an inquest heard that four soldiers were killed after an explosive device ripped through the underside of the vehicle.

David Masters, the Wiltshire Coroner, said that he would be urging the Ministry of Defence to improve the armour fitted to the Warrior as quickly as possible. He said he would be seeking confirmation "from the top" that something was being done.

Alan Hepper, an armour expert, told the inquest at Trowbridge that the MoD had already ordered improved protection for the underside of the Warrior and other vehicles. The armour on each side of the Warrior is more resistant to bombs and mines.

Mr Masters, who recorded verdicts of unlawful killing, said that he would be meeting Bob Ainsworth, the Armed Forces Minister, this week to discuss the armour issue".

Women at War

The death of young women on the front line of combat has been the cause of much heart searching. Many taboos have been broken over the employment of women in the services in recent years. Many young women have proved them selves to be extraordinarily valuable assets within the military community, and display an important range of skills and attributes which match and exceed their ale counterparts, along with no shortage of raw courage.

One such loss during the Campaign is recounted below in The Sunday Times on 7th 2006.

Four UK airmen die in Iraqi attack on helicopter:

Basra dead include first British woman killed in action

"Flight Lieutenant Sarah-Jayne Mulvihill, 32, was the first British servicewoman to die in action in 20 years and four colleagues were killed when their Lynx Mk7 was downed in Basra. Tom Walker and Sayed Hafez, Basra wrote that:

A jeering mob threw stones at the bodies of a British crew whose helicopter was shot down in the southern Iraqi city of Basra yesterday. Four servicemen were feared dead in the crash, which was followed by clashes between British soldiers from the 20th Armoured Brigade and supporters of the Mahdi army of Moqtada al-Sadr, the radical Shi'ite cleric.

At least four Iraqi militiamen were also reported to have been killed. Witnesses spoke of 31 civilians being injured in exchanges of fire as the British forces tried to secure the area around the crash site. A police captain said an Iraqi child had also died. Two Warrior armoured personnel carriers and a Land Rover were set on fire.

A commander of the Iranian-backed Mahdi army claimed one of his men had brought down the helicopter with a Russian-made shoulder-launched missile fired from a building in the northwestern al-Ashaar area of Basra. The helicopter crashed into an empty house half a mile from the governor's residence in the al-Twesa district".

Reservists

The Reserves also bore their share of loss, as the following story illustrates:

Michael Evans, Defence Editor wrote for The Times on July 21st, 2007

Reservist among 3 killed in mortar attack:

"The three RAF servicemen who died when mortars landed on the main British base in Basra yesterday were "incredibly unlucky" to have been killed by such an indiscriminate, random method of attack, defence sources said.

Few of the 123 British Armed Forces personnel who have been killed by enemy action in Iraq have died from mortar attacks. The majority of the deaths in recent months have been from roadside bomb explosions. The mortar attack on Thursday was the deadliest of its kind. It was the second day of violence by Shia militants against British Forces in Iraq's second city.

Major Mike Shearer, spokesman for the British military in Basra, said that insurgents launched a similar attack on Wednesday, wounding three civilians. "These rogue militia are morally anorexic. They don't care whether they injure people from the civilian community," he said.

The Ministry of Defence refused to reveal whether the three servicemen, one of them a reservist, had been caught out in the open when the mortar rockets landed inside the base on Thursday. The last soldier to die from a mortar attack was Major Paul Harding, of the 4th Battalion The Rifles. He was standing inside a guard position in central Basra when it was hit by a mortar round on June 20.

None of the latest victims had yet been named. However, two of those killed were serving with 1 Squadron RAF Regiment, which is responsible for protecting the base from insurgent attacks, and the reservist was from 504 Squadron Royal Auxiliary Air Force. A number of other Service personnel were injured.

The reservist squadron is based at RAF Cottesmore in Rutland, and 1 Squadron at RAF Honington in Suffolk. Although the MoD was giving only the briefest details

of the attack, it is likely that the men were manning defensive positions at the air base, keeping a lookout for possible attacks.

Major Shearer said that the British force in Basra was under constant threat. “Life in Basra is not risk-free for any Service personnel,” he said.

With the majority of British troops due to be located at the Basra air station before the end of the year, the huge base is expected to become the principal target for rogue militia groups operating in southern Iraq. Patrols go out regularly to seek out mortar and rocket positions, and sophisticated radar systems are used to try to give warning to the troops of incoming rounds.

“Usually the warnings give everyone enough time to take cover, but sometimes they don’t,” one military source said.

Defence sources said that about 75 per cent of the attacks against British troops were from indirect fire, with the rogue militia using either mortar rounds or Chinese-made 107mm rockets.

“There doesn’t appear to be a lot of science involved in firing these munitions,” Major Shearer said. “We do not pretend for a second that when we lose any of our servicemen that it doesn’t affect us, because it does. But we are determined to get on with the task that we have been charged to do.”

Chris Hughes wrote in the Daily Mirror on 22nd June 2007 that

2007: Death in combat is not solely the privilege of the young.

“Tributes were last night paid to Major Paul Harding, the oldest British officer to die in Iraq. The 48-year-old - the 152nd soldier to die since the 2003 invasion - was killed by a fluke hit during a mortar attack in Basra.

Lieutenant Colonel Patrick Saunders said: "It may seem strange to talk about love between soldiers but the very best officers and soldiers inspire extraordinary love, devotion and loyalty in their fellow men.

"Paul was such a man. His men came to see beneath his gruff manner and gunfighter moustache lay a man of wisdom, judgement and compassion. He was a consummate professional and a tough, quick-thinking and unflappable veteran whom they knew they could trust with their lives."

Northern Ireland veteran Major Harding, from 4th Battalion The Rifles, was killed on Wednesday. He leaves a wife Paula and two sons back home in Winchester, Hants. The major was an outstanding sportsman who represented the Army at squash, triathlon, swimming, athletics, football, basketball and water polo. Yesterday his desk was adorned with moving tributes from colleagues.

Brigadier James Bashall said: "He was a legend in the Rifles. He was a rock around which others took strength. In the midst of danger he had a steadying and calm influence on all around him."

Defence Secretary Des Browne said Major Harding had been "an exemplary soldier - courageous and committed". He added: "He was respected by his peers and loved by those who worked for him. I am sincerely saddened to learn of his loss."

Death beyond Iraq

Not all deaths which are directly related to the Iraq War have occurred on Iraqi soil. Another victim of the war who served his country loyally was Dr David Kelly, an eminent microbiologist with Defence connections, who became caught up in the political machinations surrounding the justification for the invasion of Iraq, and for whom the pressures and poisons of that world of spin proved just too much.

Nigel Fountain and Sarah A Smith wrote for The Guardian on Saturday 19 July 2003:

Guardian obituary: David Kelly: Biological weapons expert with a reputation for thoroughness

"Before this year's Iraq war, the microbiologist David Kelly, who has died aged 59, would recall that, with Saddam Hussein's 1990 invasion of Kuwait, the pattern of his life for the ensuing decade had been set. Ironically, his spectacularly professional work in Iraq in the 1990s, was to suck him towards a media and political quagmire.

Kelly was the Ministry of Defence's chief scientific officer and senior adviser to the proliferation and arms control secretariat, and to the Foreign Office's non-proliferation department. The senior adviser on biological weapons to the UN biological weapons inspections teams (Unscom) from 1994 to 1999, he was also, in the opinion of his peers, pre-eminent in his field, not only in this country, but in the world.

After the eviction of the Iraqis from Kuwait in 1991, the UN invited Kelly to join Unscom to force Saddam into compliance with the peace agreements. Kelly made 36 visits to Iraq, and, from New York, continued his work into the late 1990s. What made him the obvious candidate for such work was his earlier, and continuing, experience in Russia. In autumn 1989, he had been called in to assist MI6 in debriefing Vladimir Pasechnik, a leading Soviet biochemist and defector.

Eighteen months later, armed with Pasechnik's evidence of a gross violation of the 1972 biological weapons convention, Kelly co-led the US/British delegation to inspect suspect Russian sites. His sympathetic manner was an asset: at Vektor laboratories in Novosibirsk, Siberia; a researcher mentioned that the lab was studying the smallpox virus - in contravention of WHO regulations and the

biological weapons convention. This was a major discovery, which revealed the seriousness of the Soviet undertaking. Later, he was an observer on the reciprocal trip the Russians made to the US.

The son of an RAF officer and school teacher, Kelly was born in the Rhondda Valley, but raised in Tunbridge Wells. His early interests were in agriculture - and in Oxford, he was an expert on biological pesticides. In 1984, he was appointed head of microbiology at the chemical and biological defence establishment, Porton Down.

Thus would academics introduce doctoral students to a man who was endlessly accommodating. He was also, as colleagues emphasise, a scientist who, completely straight and honest, knew the laboratory bench work, but, unlike a lot of his fellows, went beyond it. His virtues included a willingness to share his expertise - though not his secrets - within that world where non-governmental organisations, academia and public and private institutions met.

He is survived by his wife Janice and three daughters.

Professor Alastair Hay writes:

As an environmental toxicologist, I have covered chemical and biological warfare issues since the 1970s and met David Kelly at many conferences; notably the Pugwash gatherings, which brought together scientists from many countries to talk issues through as professionals, not bound by national or political rivalries.

Pugwash, and those other meetings, simply relied on people like David. There is no Pugwash party line; it is simply a place where expertise is paramount. Meetings aside, when I needed to talk to somebody on a key issue of the moment - like the anthrax-in-the-post scare following 9/11 - David was there. There was no other person I would have gone to as such a source of unvarnished truth - and of such funny asides.

The two key areas where his insights were invaluable were around the biological weapons inspections in Russia in the 1980s, and in Iraq in the 1990s, where, in both cases, he had an central role. He would have absolutely ensured that the weapons, and the weapons material, were dismantled. The complete professional, he had such an eye for detail that nothing got past him.

Such talents served him less well when sucked into the controversies of the last few months. I dread to think of the pressures he must have been under within the MoD. To see him on television, before that parliamentary committee, almost inaudible, was to see him involved in a quite different process, over which he did not have control.

A week ago, I spent 40 minutes trying to get through to him at the MoD, to wish him well; they would not put me through to any of his numbers. After I finally got through by email, telling him to take care, he replied that he wanted to get back to Baghdad, and some real work.

David Christopher Kelly, microbiologist, born May 17 1944; died July 18 2003

The Process of Repatriation

For centuries, the bodies of British war dead lay in cemeteries on many a distant land. This reflected the impracticability in former times of repatriating bodies and remains in large numbers.

In recent years, the Armed Forces have recognised the demands of the public for the return of bodies and remains to UK shores, and have adopted the US practice of the ceremonial return of bodies. The homecoming of C17 transports in 2003 and their reception by pallbearers and honour guards has created a new iconic symbol of war for the age.

Death in war has fortunately been a relatively uncommon event in recent times for British servicemen, but it is a reality faced by all service personnel and their families. It leaves young lives ruined, young families widowed and orphaned, and bereavement for parents. It arouses deep emotions, anger and distress.

The process of repatriation of the dead has been one of great care and dignity throughout Op Telic. It has been adopted with minor regimental and national variations to the core procedures and ceremonies by all allied nations.

Once death had been certified and the necessary forensic tests completed, the flag draped coffin(s) were delivered by ambulance to the Basra Airfield, where a ceremony of remembrance and dedication was held before a guard of honour and a large parade of service personnel, both of the parent regiment of many other regiments and nations. The respect is returned if the dead are Canadian, Dutch, Danish, American, or from any other nation. The ceremony was often held just before or at sunset, in the relative cool of the evening.





Following the service, the coffins were loaded by the pall bearers onto the back of a Hercules transport acting as a hearse for movement to the Main Airhead in Kuwait, where they were transferred to a strategic transport aircraft for the flight home, usually a C17 for returnees to the UK.



The ceremony at Basrah Airport for the repatriation of Staff Sergeant Denise Rose after her tragic death on 31 October

The returning C17 was greeted at Brize Norton by an honour guard and reception committee, which may include family, relatives and civic dignitaries. The images of the returning C17, and of the bearing of coffins from the aircraft, were iconic.

The coffins were then carried by civilian hearse to a staging point under the direction of the coroner, pending further investigations and funeral preparations. Each individual was then buried with full military honours in a local church or resting place of their own or the family's choice.

For example, in this report by the BBC on Tuesday, 8 February, 2005:

Iraq crash RAF dead flown to UK: The bodies of 10 servicemen killed when an RAF transport plane crashed in Iraq have arrived in the UK.

"Nine airmen and a soldier died when the RAF Hercules came down 20 miles north-west of Baghdad on 30 January. Their remains have been returned to RAF Lyneham, Wiltshire, where eight of the airmen were based.

The crash was the single largest loss of British life in Iraq since military action began in 2003. The cause is still being investigated. The transport plane was said by officials to be on a routine flight from Baghdad to the massive US base at Balad. There has been speculation that the plane might have been the victim of "hostile action".



Home base

A C17 plane carrying the servicemen's bodies landed at the base at 1245 GMT, for a 90-minute repatriation ceremony at 1330 GMT.

"It is extremely poignant that today's ceremony is being held at RAF Lyneham as the majority of those who lost their lives in this tragic accident served or had served here," said Wing Cdr Jules Eaton. "Every effort has been made to ensure that today's events are a dignified and solemn homecoming. This is not a memorial service, it is a homecoming."

Princess Anne, who is Honorary Air Commodore of RAF Lyneham, Defence Secretary Geoff Hoon and military chiefs attended the service. The Princess was to meet the families of the dead after the ceremony.

The 1 Squadron RAF Regiment and the Royal Corps of Signals have formed the bearer parties and the Central Band of the Royal Air Force and the RAF Regiment Band provided the service music.

The families were due to be given time to spend with their loved ones before Wiltshire Coroner David Masters oversaw the transfer of the coffins to Great Western Hospital in Swindon for formal identification



Repatriation of war dead to RAF Brize Norton, 2003



The quiet dignity of the regular reception parades for the returning Dead in the convoys of hearses at Wootton Bassett

Web and Internet Memorials

The internet provides a new medium for the lives of the fallen to be remembered, and a number of agencies and groups have set up specialist memorial sites. One such site is that of The Military Families Support Group:

A message from Susan Smith, mother of Private Phillip Hewett, killed in Iraq on 16th July 2005, introduces the site thus:

> "The aim of the web site is to offer help and support to families of soldiers who have lost a loved one through conflict and war. illness, accident or suicide, and also to be there to talk to serving soldiers in confidence if they just want some one to talk to.
>
> The web site has been set up in memory of Private Phillip Hewett, my son, who was killed along side Private Leon Spicer and 2nd Lt Richard Shearer in Iraq on the 16th July 2005.
>
> As hard as the deaths were to come to terms with, we as a family had the help and support of the other families and a wonderful regiment, the 1st Battalion Staffordshire Regiment. Having had the knock on the door, and knowing how lonely a path we had to walk, we decided to set up this website.
>
> Over 46,000 service men and women have served in Iraq. 170 to date have been killed and over 4,000 have suffered minor or serious injuries. 152 soldiers have also died in Afghanistan. We are here to offer help and support to the families who have lost a son or daughter husband or wife As they were not just service personal they were our loved ones.
>
> We are here also to talk to the families and friends of injured and serving service personal. We are here if you need us".
>
> *Susan Smith, founder of The Military Families Support Group.*

Others are remembered on personal web sites, such as that set up for Corporal Kris O'Neill RAMC, who died along with Joanna Yorke, Eleanor Dlugosz and Adam Smith in the Warrior tragedy. Cpl O'Neill's family has posted a web site on which many pictures and tributes to his life are recorded.

Public monuments

Public monuments to the war dead retain a particular power to move, and the creation of the Armed Forces Memorial (AFM) and Arboretum at Alrewas, Staffordshire is an important contribution to sustaining the memories of those who have fallen in the service of the Crown in the many "Wars in Peace" since the end of World War II

Alan Hamilton, writing in The Times October 13, 2007, (with supplementary information from the QARANC Website)

"A monument at last for the fallen of modern times"

Not all servicemen die in battle. They can be the casualties of training accidents, aiding the civil power, or terrorist attacks. Since the end of the Second World War 16,000 British servicemen and their auxiliary forces have lost their lives in a variety of circumstances. Yesterday the Queen opened a national memorial to them, where relatives and friends of the lost can reflect before a carved list of their names.

The origins of the NMA can be traced back to a visit to Arlington Cemetery and the National Arboretum in Washington, DC, in 1988 by the Director, David Childs. He had the idea that such concepts could be introduced to Great Britain and provide a meaningful memorial to those who have served the United Kingdom since 1945.

The then Prime Minister John Major launched the appeal to create the Arboretum in November 1994. At this stage there was no land nor money for the project but this quickly changed when Redland Aggregates (now Lafarge) generously gifted 82 acres of reclaimed gravel working alongside the banks of the River Tame. This generous gift has now been extended to a further 70 acres which includes the wildlife lake. The Arboretum was officially opened by HRH The Duchess of Kent on the 16 May 2001 and dedicated on 11th June 2002.

There is nothing quite like it, and there has long been a call for a memorial to take over from where the Commonwealth War Graves Commission closes its books at 1948. There are memorials around the world to particular regiments, campaigns and even individuals, but no national shrine on home soil.

The Armed Forces Memorial (AFM) was designed and built as a living and lasting memorial to members of the armed forces who have given their lives in the service of their country while on duty. This includes those who have died during conflicts, when training or from acts of terrorism since the end of World War Two.

This figure reaches over approximately 16,000 service men and women and each name is engraved in stone panels around its internal walls. The AFM was

designed by Liam O'Connor with sculptural elements by Ian Rank-Broadley. The nominal roll of honour can be read at forcesmemorial.org.uk where there is a search facility that includes name, service and serial number to make finding a relative or comrade easier. The National Memorial Arboretum is also a United Kingdom's living and lasting memorial for military and civilian organisations and individuals to commemorate their comrades, families and friends by way of memorial plots and gardens or individual plaques and trees

Public subscription, National Lottery funding, and a modest £1.5 million government contribution from the sale of a Trafalgar commemorative coin, have enabled completion of the £7 million National Armed Forces Memorial at the National Memorial Arboretum in Alrewas, Staffordshire, near the geographical centre of England. Trustees still need to raise a further £1 million to ensure that the memorial is properly maintained.

The names carved in the Portland stone walls span age, class and ethnicity. They include Earl Mountbatten of Burma, killed by an IRA bomb in the Irish Republic in 1979, and Jabron Hashmi of the Intelligence Corps, killed in Afghanistan last year, the first Muslim in the British Armed Forces of recent times to lose his life.

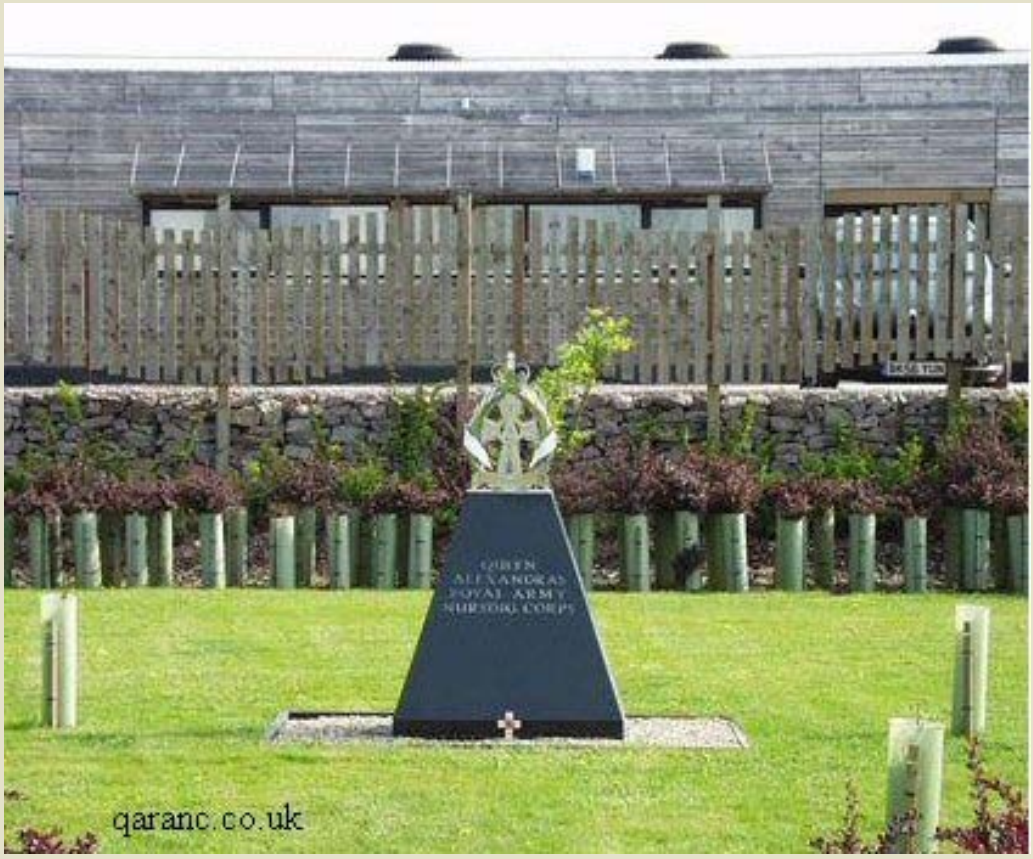
Death is a great leveller, but it arrives from many directions. Maureen Norton, 54, from Wigan, Greater Manchester, was among many family members who attended the opening. Her brother, Terence Griffin, was on leave from serving in Northern Ireland when he was killed by a bomb that exploded on a coach carrying service personnel and their families on the M62 across the Pennines. “This means an awful lot to me,” Mrs Norton said. “It means his name has been recognised . . . Even though I will remember him every day, I can come to this beautiful place; it’s so tranquil.”

Gerald Fellows, who served in the RAF at the time of the 1956 Suez conflict said: “It is really good that this kind of memorial has been built to honour those who died after the Second World War.”

The Queen, accompanied by the Duke of Edinburgh, Prince of Wales, Duchess of Cornwall, Gordon Brown, Dr Rowan Williams, the Archbishop of Canterbury, and service chiefs, met families and inspected the walls that carry the names of the dead from a host of theatres of war and peace — Palestine, Korea, Malaysia, the Falklands, the Balkans, Afghanistan, Northern Ireland and now Iraq.

Vice-Admiral Sir John Dunt, chairman of the memorial’s trustees, told guests: “I hope that those who have been bereaved, and colleagues of those whose names are engraved find this a fitting place to remember and reflect. There will be sorrow for family and friends who come here, but I hope they will also be uplifted.”

Designed by Liam O'Connor, the memorial has the backing of the Prince of Wales, who is patron of its trustees. Dying, sadly, is unlikely to go out of fashion. The memorial has enough spare blank space for 15,000 more names in the future.



The QARANC Memorial at the National memorial Arboretum



The National Memorial Arboretum, Staffordshire



The National Memorial and Arboretum in Staffordshire

The Basra Memorial Wall

Paul Harris wrote in The Daily Mail on 1st May 2009:

"Farewell, our fallen heroes: Britain says goodbye after six years in Iraq"

"One by one, their names echoed out into the stillness. They were proud young men and women once, serving their country or trying their best to rebuild another one. Now they were remembered in the land where they fought and died. A memorial wall in Basra bore their epitaph. Silent heads bowed all around it. This was how Britain said farewell to fallen friends yesterday - and goodbye to Iraq.

After six of the most bitter, difficult and controversial years in the UK's recent military history, the nation's combat role in Iraq was finally allowed to draw to a close. It was time to go home. Time to rejoin wives, children and loved ones. But particularly yesterday, time to pay tribute to those who couldn't make the journey.

In perhaps the most historic day of the conflict and its aftermath, it took nearly 40 minutes to honour each of the dead. There were 178 service personnel, a Ministry of Defence civil servant and another 55 foreign troops and civilian contractors who paid the price of someone else's war with their lives.



Final salute: A soldier pays his respects at a Basra memorial to the 179 who lost their lives serving with British forces in Iraq



Bugler Gareth Roberts, 25, is reflected on memorial plaques as he sounds off during the memorial ceremony for the 179 British personnel who died in Iraq since the invasion six years ago.

Representatives of the Army, Royal Navy and Royal Air Force read their names aloud. But they were not just names. Each was a lost son or daughter to a family somewhere, most of them 3,500 miles away in Britain.

Each had already been inscribed on an individual plaque on the memorial, fixed side by side to form a wall of brass. At one stage the desert sun turned it into a giant mirror.

One soldier winced as one of the names was read aloud, his pain captured momentarily by the TV cameras. Another lowered his head. They might not have known the individual personally, but anyone in the assembled ranks must have wondered whether, in different circumstances, their own names might have been on the list as well.

Across the neat lines of troops - and behind their poignant salutes - different berets, badges and ranks illustrated just how widespread Britain's commitment to its task has been. Now it was over. 'Today is about remembrance and thanksgiving,' Father Pascal said. But everyone knew it was also about lost lives and wasted futures.

The service was held in front of 20th Armoured Brigade HQ, where the memorial wall bears an inscription taken from the Book of Wisdom: 'Honourable age does not depend on length of days, nor is the number of years a true measure of life.'



Last post: The flag of the 20th Armoured Brigade is lowered at Basra airbase yesterday. UK forces are leaving after six years in Southern Iraq, with military authority passing to the Americans

It will remain for a time after British troops have gone. Later it will be dismantled and replicated at the Armed Forces Memorial in Staffordshire, where service personnel who have died since the end of the Second World War are honoured.

The reflected light illuminated some of the faces around it as Army chaplain Pascal Hanrahan paid tribute to those who had made 'the ultimate sacrifice'. You only had to study those faces to see what he meant. Fittingly, the wall became the focal point of the last six years as the end of the UK's combat role in Southern Iraq was announced a month earlier than expected.

It had lasted 2,232 days - longer than both world wars - and cost the country billions more than anyone might have imagined in 2003. But yesterday's ceremony underlined the human cost. In prayers, they recalled the courage and sacrifice of the dead. Some of the names would have been familiar because of the headlines that were generated by their acts of heroism. Others were less well known but no less important.

The roll-call of honour began with Royal Navy operator mechanic Ian Seymour, first to die in the conflict, on March 2, 2003. With equal solemnity, it concluded with M.A.M Usman, a civilian contractor killed in a rocket attack on March 9.

Military pipers played a lament before bugler Gareth Roberts, serving in Basra, sounded The Last Post, then Reveille.

There were more than 100 in the congregation, among them young men on their fourth tour. It is a duty that will have taken them away from home for a total of two years during the last six. Also among them, perhaps appropriately, was a representative of the government that sent them here.

Defence Secretary John Hutton said the UK should be proud of what its troops had achieved. 'It's been a long and hard campaign,' he said. 'There's no question about that, and we've paid a very high price. 'The families of those who have lost loved ones here will be thinking very hard about that - and we should as well.'

The sun still glinted on the brass plaques behind him as he spoke. Soon, it would set on them too.

Andy McFarlane for BBC News writing on Thursday, 8 October 2009:

Emotions as UK honours Iraq force at St Paul's Cathedral

" Members of the Royal Family are due to attend a service later to mark the end of UK combat operations in Iraq and honour the 179 UK military and civilian personnel who died there. Although senior armed forces officers and politicians are due to attend, the focus of the ceremony will be on the veterans and bereaved families making up the majority of the expected 2,500-strong congregation.

Some of those affected by the six-year conflict spoke to BBC News about how it affected them, and the importance of remembrance.

The grieving mother

During the service at St Paul's Cathedral, Tracey Hazel is due to light a candle in memory of those who died during Operation Telic in Iraq. Like most military mothers when they hear the knock at the door, Tracey Hazel instinctively knew it was bad news. But having two sons in Iraq only doubled the agony.

"It was awful. They didn't need to tell me one had gone but I didn't know which son it was," she recalls. "I didn't want it to be either of them and it took a long time before I let them tell me."

A week later Miss Hazel, 41, from Scunthorpe, Lincolnshire, watched her 19-year-old son Luke accompany a coffin bearing his brother Ben as it was carried off an aircraft at RAF Brize Norton in Oxfordshire.

Cpl Ben Leaning, 24, was killed in 2007 alongside another soldier - Trooper Kristen Turton, from Grimsby - after their Scimitar tank was blown up by a roadside bomb. Brother Luke had been in the same convoy.

"Army barmy" since he was a teenaged cadet, Ben had signed up after leaving school at 16, and died whilst on his second tour of Iraq with the Queen's Royal Lancers. Keen to take the place of someone who had children, Ben had already volunteered to go straight to Afghanistan when his tour ended.

Losing her son was the "worst pain ever", for Miss Hazel, who nonetheless counts herself lucky to remember his smiling face every time she shuts her eyes. "All I've got left of Ben is the memory," she says. She recounted how life since his death has been "terrible". After losing her son she suffered a nervous breakdown which led to weeks spent recovering in hospital.

Pride at seeing Luke's Iraq medal parade was tempered by knowing Ben should have been there too, while a previous remembrance service at York Minster proved too much to deal with. But Miss Hazel feels she is "turning the corner" and hopes the St Paul's event will help.

"The whole nation will realise that real people have lost their lives and they are not just numbers," she says. Miss Hazel hopes her small act of lighting a candle provides some comfort to the other 178 grieving families but, as always, there will be only one person on her mind.

The RAF Nurse

Flt Sgt Ann Carter knows the horrors of war better than most.

During three tours of Iraq, the 41-year-old repeatedly flew to the aid of stricken soldiers - some with gunshot wounds, others with multiple injuries from bomb blasts. She was awarded an MBE last year. Flt Sgt Carter now passes on her experience by writing guidance notes for the Princess Mary's RAF Nursing Service to use in conflict zones.

For much of the decade she interspersed working alongside civilian casualty nurses at Birmingham's Selly Oak Hospital with six-month spells spent near the front line in Iraq. While the medical work was essentially the same, dealing with soldiers provoked different emotions.

"You don't treat the patients any differently, but because they are wearing the same uniform you can relate to them a lot more," she explains. "It's like a massive extended family when you're out there, even if you've never seen them before. When there's only three of you in the back of a helicopter and you have four casualties, you just need to do the best you can within the limited time, space and equipment."

Fear, she says, rarely entered her mind. Often, such concentration on the job was

required that only on return to base did the team realise their Puma or Merlin helicopter had come under fire. On one occasion, her crew braved a fire fight to treat four casualties en route to a field hospital, only to be told it was too dangerous for them to return to collect a fifth. He later died from his gunshot wound.

"It was very hard. Sitting there, helicopter rotor running and wanting to get out to him, only to be told there's nothing you can do."

When she performs a reading at the service, she hopes it will help the nation recognise not just those who failed to return from Iraq, but also those wounded there.

"In a roadside bomb blast, for each person killed there's probably three or four who are injured and they deserve the recognition as well," she says. "It will help give them some closure."

The injured veteran

One veteran who will not be attending the service is Mark Dryden, from Berwick in Northumberland. In 2005, as a 29-year-old Lance Corporal, he lost his lower right arm and suffered serious injuries to his left when the Land Rover he was driving was hit by two roadside bomb explosions.

"Since my injuries I've never attended a remembrance service, I've never worn my medals and I feel a bit embarrassed about myself," he says. "The explosion went off and I knew then that I'd lost my arm"

His passenger Sgt John Jones was killed by the blasts, which struck as they progressed cautiously along an unusually quiet main road - sensing something was amiss.

"There's times I still blame myself for John's death. It would be heartbreaking [to attend the service]," he says. Mr Dryden says his treatment by medics in the field, and later at Birmingham's Selly Oak Hospital, was "brilliant".

After being forced to rely on round-the-clock care from his mother, during a seven-month wait for rehabilitation, he felt "abandoned" by the army. "I don't believe they knew how to treat my mental injuries," he adds, admitting that post-traumatic stress disorder made him an awkward patient when he was eventually treated.

Initially he was ashamed to let people see his severed arm, wearing long sleeves to disguise his injuries, until his sister ripped a coat from him in a pub and told him: "You've nothing to be ashamed about".

Though critical of the army in the past, he recognises the help it gave him as he prepared for civilian life by embarking on football coaching courses. He now

trains youngsters at Berwick Rangers, studies psychology and sports science at Northumbria University and feels more confident about his future. Despite still facing long road to full recovery, Mr Dryden is not bitter.

"If I could turn back the clock, I wouldn't change a thing," he says. He adds he did not stand in the way of his son when he joined the army.

Mr Dryden has questioned the reasoning behind the Iraq and Afghanistan conflicts but says such debate is irrelevant when it comes to events like the St Paul's service. "People have fought and died for the country so people can have their freedom. Others should stop and remember," he says.

Terri Judd wrote in the Independent on Thursday, 11 March 2010 of a momentous day for relatives of the Iraq fallen.

The re-dedication of the Basra Memorial Wall at the National Arboretum

"As The Last Post sounded, the wind that had buffeted the National Memorial Arboretum suddenly dropped and the billowing flags hung forlornly as heads were bowed in silence.

Wave after wave of the families of those who perished in Iraq moved forward solemnly to place their own flowery tributes at the newly rededicated Basra Memorial, the infirm assisted by younger arms.

For a few minutes they crowded around, urgent eyes scanning the gleaming brass plaques set in regimented rows on the brick red granite, looking for their son, daughter, husband or wife. Some sobbed openly as they placed their fingers delicately on the inscription they found.

Today beneath the elegant and imposing national memorial in Staffordshire to those who have lost their lives in conflicts since the Second World War, a smaller wall was rededicated. It was the memorial that the soldiers had built for their fallen comrades in Basra, dismantled at the end of Operation Telic combat operations last year and brought back to Britain.

The central marble tablet, dedicated at the St Paul's Cathedral commemoration service last year reads: "Honourable age does not depend on length of days, nor is the number of years a true measure of life."

The conflict may be consigned to history but the searing grief of the families, almost 500 of which gathered for the ceremony yesterday, was still fresh. On a day when five soldiers were repatriated from Afghanistan and two more were buried, it was a moment to remember earlier sacrifices from another war.



Andrew Yates/AFP/Getty Images: Relatives are reflected in the Basra Memorial Wall of rededication at the National Memorial Arboretum in Alrewas, central England

Staring at his son's plaque, Dany Wysoczan struggled to express his emotions. "It hurts," he said simply. Private Jonathon Wysoczan of the Staffordshire Regiment, 21, died days after being shot by a sniper in 2007. His father added haltingly: "It is fantastic but I am here for the wrong reasons, because I have lost my son,"

"It is gorgeous," said Carol Jones, who lost her son Sergeant John Jones, 31, of the Royal Regiment of Fusiliers, to a bomb in late 2005. "When they played the Last Post, four and half years of tears just came out."

The Prime Minister Gordon Brown as well as the leaders of the other parties, the Chief of the Defence Staff Sir Jock Stirrup and the Duke of Gloucester sat in the front row of a short poignant service yesterday over which flew a formation of RAF Tornados.

A note with Mr Brown's wreath read: "Each one a hero, who put country before comfort, service before self and liberty before life, a grateful nation will never forget."

Nervously Tracey Hazel, whose son Corporal Ben Leaning, 24, of The Queen's Royal Lancers, was killed on 19 April 2007, battled against the wind and damp to light a candle at the base of memorial – which has a plaque for each of the 179 Brits who died as well as soldiers from other nations who perished fighting alongside them.

"It was really emotional. I never ever thought I would see the wall in my life time," she explained. "I saw a photograph of it (in Basra) and spent hours to see if I could find Ben's plaque. I knew he was the 143rd. I am really grateful to those who campaigned to bring it home."

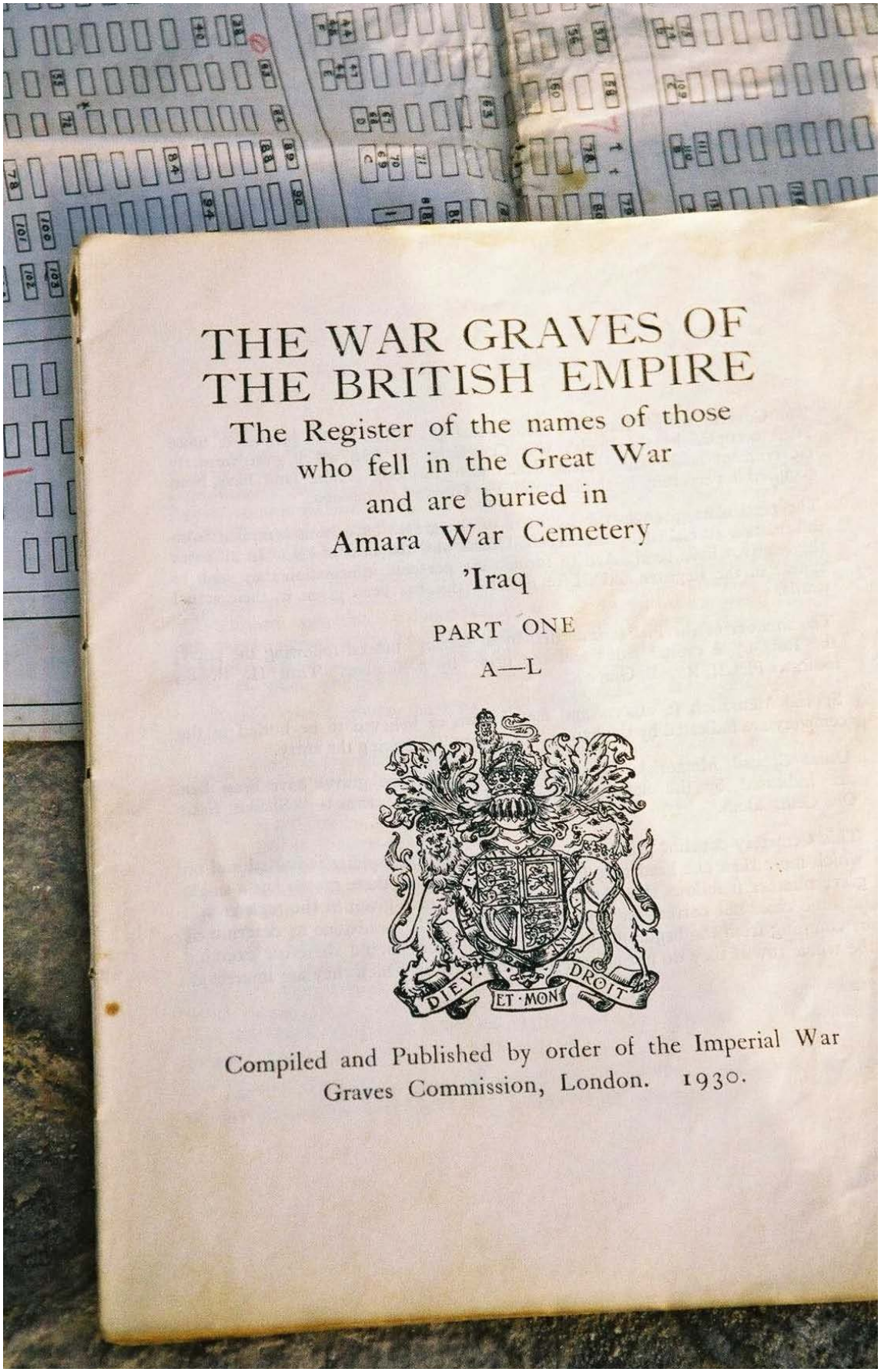
In a week when Mr Brown was accused of starving the armed forces before the Chilcot Inquiry and using a visit to troops in Afghanistan as a political stunt, his presence yesterday divided opinion. While several insisted they remained grateful for his assistance in bringing back the memorial others felt the seats he and his fellow politicians had taken at the service could have been better filled by family. Most, however, seemed oblivious to his presence, insisting the day was not for political posturing but for dignified remembrance.

For the families who fought to have the memorial brought home for fear that it would fall into ruins in Iraq, it was a momentous day.

"There is the national memorial but this is the military one. This was the one made by the boys for the boys," explained Roger Bacon, whose son Major Matthew Bacon, 34, of the Intelligence Corps was killed by a roadside bomb in 2005.

Former Sergeant Major Matt Graves recalled the two weeks his men from the Royal Engineers spent making the original wall in 2006. At the height of the battles in Basra in Operation Sinbad, they spent their spare time – often clad in body armour and helmet because the base was regularly mortared – building the wall at night. Three times he told them to take it down and start again.

"They knew this had to be right. The night we finished it we all stood back and had a quiet little moment. There was an overwhelming sense of pride that it was something that was going to last. It was for our fallen comrades."



The British War grave cemetery at Amara in Iraq: The register and grave map:
Photo courtesy of Col Paul Parker RAMC, April 2003

Chapter 35 Appendix

Fatalities during Op Telic

Coalition deaths in Iraq by November 13th 2008 (2)

Australia	2	Latvia	3
Azerbaijan	1	Netherlands	2
Bulgaria	13	Poland	22
Czech	1	Romania	3
Denmark	7	Slovakia	4
El Salvador	5	South Korea	1
Estonia	2	Spain	11
Fiji	1	Thailand	2
Georgia	5	Ukraine	18
Hungary	1	United Kingdom	176
Italy	33	United States	4195
Kazakhstan	1	**Total**	**4509**

Source: NATO research and technology organisation

NATO Trauma Registry : Erik Fosse; The Interventional Cente, Rikshospitalet/University of Oslo, 0027 Oslo Norway.

As at 12 February 2009, a total of 179 British Armed Forces personnel or MOD civilians have died serving on Operation TELIC since the start of the campaign in March 2003. Of these, 136 were killed as a result of hostile action.

43 are known to have died either as a result of illness, non-combat injuries or accidents, or have not yet officially been assigned a cause of death pending the outcome of an investigation. The balance of these figures may change as inquests are concluded.

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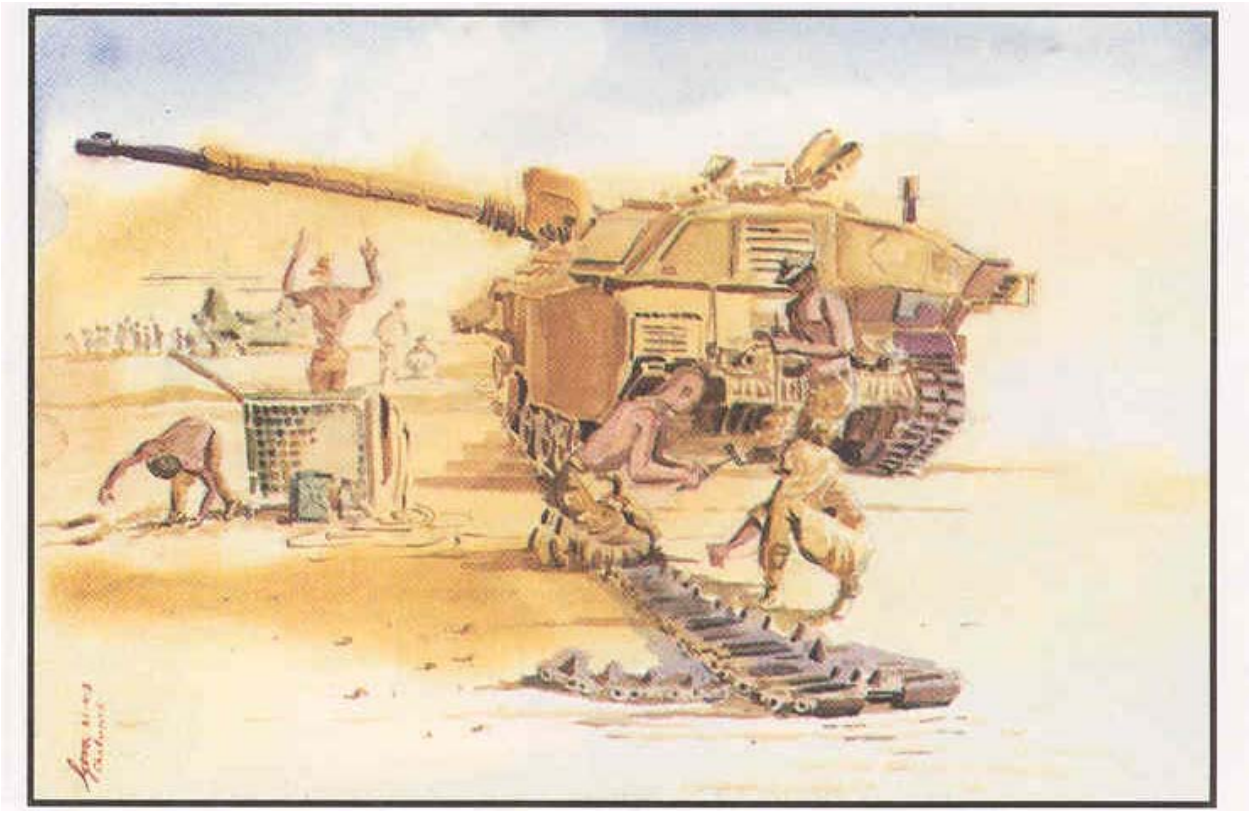
The coffin of Britain's Private Eleanor Dlugosz is carried by friends and colleagues at the sunset repatriation ceremony at Basra Air Station in Iraq on 11th April 2007.

Getty Images

Blood, Heat + Dust: Second Edition

Operation Telic and the British Medical Deployment to the Gulf 2003-2009

Appendix: Op Telic UK Unit Deployments January to April 2009



Repairs to a Challenger II tank in the field.

Gora Pathak 2003

British Army Units represented on Operation Telic One, January-June 2003 (in whole or in part) Source: British Ministry of Defence

The British deployed 45,000 personnel (including 26,000 ground troops) to Iraq .

1(UK) Armoured Division

Headquarters and 1 Armoured Division Signal Regiment

30 Signal Regiment (strategic communications)

The Queen's Dragoon Guards (reconnaissance)

1st Battalion The Duke of Wellington's Regiment (infantry)

28 Engineer Regiment

1 General Support Regiment, Royal Logistic Corps

2 Close Support Regiment, Royal Logistic Corps

2nd Battalion, Royal Electrical & Mechanical Engineers

1 Close Support Medical Regiment

5 General Support Medical Regiment

1 Regiment, Royal Military Police

plus elements from various units including:

33 Explosive Ordnance Disposal Regiment

30 Signal Regiment

32 Regiment Royal Artillery (Phoenix UAVs)

7th Armoured Brigade (The Desert Rats)

Headquarters and Signal Squadron:

Royal Scots Dragoon Guards (Challenger 2 tanks)

2nd Royal Tank Regiment (Challenger 2 tanks)

1st Battalion The Black Watch (Warrior infantry)

1st Battalion Royal Regiment of Fusiliers (Warrior infantry)

3rd Regiment Royal Horse Artillery (AS90 self-propelled guns)

32 Armoured Engineer Regiment

plus elements from various units including:

Queen's Royal Lancers (Challenger 2 tanks)

1st Battalion Irish Guards (Warrior infantry)

1st Battalion The Light Infantry (Warrior infantry)

26 Regiment Royal Artillery

38 Engineer Regiment

16 Air Assault Brigade

Headquarters and Signal Squadron

1st Battalion The Royal Irish Regiment

1st Battalion The Parachute Regiment

3rd Battalion The Parachute Regiment

7 (Para) Regiment Royal Horse Artillery (105mm Light Guns)

23 Engineer Regiment

Household Cavalry Regiment (1 x armoured reconnaissance squadron)

3rd Regiment Army Air Corps (Lynx & Gazelle helicopters)

7 Air Assault Battalion, Royal Electrical & Mechanical Engineers

13 Air Assault Support Regiment, Royal Logistic Corps

16 Close Support Medical Regiment

156 Provost Company RMP

102 Logistics Brigade (Joint Force Logistic Compnent, JFLogC)

Headquarters

2 Signal Regiment

36 Engineer Regiment

33 and 34 Field Hospitals

202 Field Hospital (Volunteer)

4 General Support Medical Regiment

3 Battalion, Royal Electrical & Mechanical Engineers

6 Supply Regiment, Royal Logistic Corps

7 Transport Regiment, Royal Logistic Corps

17 Port & Maritime Regiment, Royal Logistic Corps

23 Pioneer Regiment, Royal Logistic Corps

24 Regiment, Royal Logistic Corps

5 Regiment, Royal Military Police

specialist Royal Engineer teams

airfield engineer support units from 12 Engineer Brigade

elements from 11 Explosive Ordnance Disposal Regiment

elements from additional Royal Logistic Corps Regiments

Royal Naval Task Group 2003

HMS *Ark Royal* (aircraft carrier)

HMS *Ocean* (helicopter carrier)

HMS *Liverpool* (Type 42 destroyer)

HMS *Edinburgh* (Type 42 destroyer)

HMS *York* (Type 42 destroyer)

HMS *Marlborough* (Type 23 frigate)

HMS *Richmond* (Type 23 frigate)

HMS *Grimsby* (mine-hunter)

HMS *Ledbury* (mine-hunter)

RFA *Argus*

RFA *Sir Tristram*

RFA *Sir Galahad*

RFA *Sir Percivale*

RFA *Fort Victoria*

RFA *Fort Rosalie*

RFA *Fort Austin*

RFA *Orangeleaf*

plus a Fleet Submarine

The amphibious force numbered some 4,000 and included:

HQ 3 Commando Brigade

40 Commando Royal Marines

42 Commando Royal Marines

Helicopter air groups aboard *Ark Royal* and *Ocean*

14 other Royal Navy and Royal Fleet Auxiliary vessels were also involved in the operation, including HMS *Chatham*, HMS *Brocklesby* and HMS *Blyth*.

The air component on *Op Telic* numbers about 100 fixed-wing aircraft and 27 support helicopters, supported by some 7,000 personnel. Aircraft types involved include:

Sentry AEW1 command & control aircraft

Tornado GR4 bomber/reconnaissance aircraft

Jaguar GR3 attack/reconnaissance aircraft

Harrier GR7 attack aircraft

Tornado F3 air defence aircraft

VC-10 tanker aircraft

Tristar tanker aircraft

Hercules transport aircraft

Nimrod maritime patrol aircraft

Chinook helicopters

Puma helicopters

RAF Regiment units provided ground defence for the force. The Army's 21 Signal Regiment provided communications support for the Joint Helicopter Force.

Unit deployments on Op Telic II-XIII 2003-2009

1st Armoured Division remained in theatre, controlling UK ground forces until June 2003, when 3rd Mechanised Division's HQ arrived in theatre to take command of British forces. 3 Commando Brigade was the first of the combat units to return to the UK, followed by 16 Air Assault Brigade. 7 Armoured Brigade remained in theatre until they handed over to 19 Mechanised Brigade in June.

In November and December 2003, a second rotation of British forces occurred, with 3rd Division's HQ being replaced by a composite divisional HQ. 19 Mechanised Brigade was replaced with 20 Armoured Brigade. April 2004 saw the third change of forces. 20 Armoured Brigade was relieved by 1 Mechanised Brigade, and a new senior British military officer, Lieutenant General John McColl arrived in theatre to become deputy commander of the occupation land forces. Rumours also began to circulate in early May 2004 of imminent British reinforcements to replace Spanish troops pulling out of Najaf. 3 Commando Brigade, with 40 Commando, a battalion of the Parachute Regiment and a third line battalion were rumoured to be the forces concerned. However, these rumours later turned out to be false.

The end of October 2004 did see an important shift for the British forces. A battlegroup from the Black Watch deployed outside of the British area to Camp Dogwood south-west of Baghdad. This coincided with the next roulement of British forces, with 4 Armoured Brigade replacing 1 Mechanised Brigade.

Post-invasion

Occupation zones of Iraq after the invasion.

On 11 July 2003, 1st Armoured Division handed control over south-east Iraq to 3rd Mechanised Division, Major General Wall was succeeded by Major General Graeme Lamb as commander of British ground forces in Iraq. Unlike the invasion period, by then there was a substantial presence from many nations other than America, Britain, Australia and Poland. In addition to British troops, 3rd Division now commanded Italian, Dutch, Danish, Czech, Lithuanian, Norwegian and New Zealand forces. 3rd

Division handed over a new composite divisional headquarters on 28 December 2003. Major General Andrew Stewart took over from General Lamb as commander of British forces.

After the end of major operations, the main components of the British forces changed greatly. 3 Commando Brigade was withdrawn in early May and 16 Air Assault Brigade left later in the same month apart from a couple infantry battalions. 7 Armoured Brigade remained until relieved by 19 Mechanised Brigade at the same time as 3rd Division took over from 1st Division. 102 Logistics Brigade was relieved by 101 Logistic Brigade in late May Most of the RAF aircraft left the area with a few retained for patrols over Iraq and support of ground forces. British naval forces also returned to more usual levels, with two surface combatants, a tanker and a repair ship present in early July.

A further rotation of ground troops occurred in November 2003, with 19 Light Brigade relieved by 20th Armoured Brigade; 20th Armoured Brigade in its turn being relieved by 1 Mechanised Brigade. In April 2004, 20th Armoured Brigade turned over its responsibilities to 1 Mechanised Brigade and Lieutenant General John McColl was appointed deputy commander of occupation ground forces. By July 2004 the British area saw its fifth commander when Major General Bill Rollo took over. At the end of 2004 General Rollo was succeeded by Major General Jonathan Riley and in November of that year 4 Armoured Brigade rotated to replace 1 Mechanised Brigade.

In May 2005 4 Armoured Brigade was replaced by 12 Mechanised Brigade with the handover of responsibility taking place on 30 May.

In May 2006 7th Armoured Brigade, the Desert Rats were relieved by 20th Armoured Brigade[1] under the command of Brigadier James Everard.

October 2006 saw 19 Light Brigade take over from 20th Armoured Brigade.

1 Mechanised Brigade provided HQ and troops for Op TELIC 10, deploying to Iraq in June 2007. During that tour, both the PJCC and Basra Palace were handed back to Iraqi control. They handed over to 4th Mechanised Brigade on December 1, 2007, for Op Telic 11. 7 Armoured Brigade succeeded then on Op Telic 12, and 20 Armoured Brigade oversaw the final withdrawal from Iraq during Op Telic 13.

Operation TELIC II, June - November 2003

- **GOC 3rd (UK) Mechanised Division - Major General Graeme Lamb**
  - 3rd Mechanised Division Headquarters and Signal Regiment
  - 3 Regiment, Royal Military Police
  - 3 Close Support Regiment, Royal Logistic Corps
  - 3 Close Support Medical Regiment, Royal Army Medical Corps
  - 5 Battalion, Royal Electrical and Mechanical Engineers
  - Elements of 5 Regiment Royal Artillery
  - Elements of 7 Signal Regiment
  - Elements of 14 Signal Regiment
  - Elements of 30 Signal Regiment
  - Elements of 4 General Support Regiment, Royal Logistic Corps
  - Elements of 4 General Support Medical Regiment, Royal Army Medical Corps
  - Elements of 52nd Lowland Regiment (Territorial Army)
  - Elements of East of England Regiment (Territorial Army)
  - Elements of Tyne-Tees Regiment (Volunteers)
  - 19 Mechanised Brigade
    - 19 Mechanised Brigade Headquarters and 209 Signal Squadron
    - 40 Regiment, Royal Artillery
    - 38 Engineer Regiment
    - 1st Battalion, The Queen's Lancashire Regiment
    - 1st Battalion, King's Own Scottish Borderers
    - 1st Battalion, The King's Regiment
    - 2nd Battalion, The Light Infantry
    - 1st Battalion, The Royal Green Jackets
    - Elements of The Light Dragoons
    - Elements of the Queen's Royal Lancers
    - Elements of 2nd Royal Tank Regiment
    - Elements of Royal Monmouthshire Royal Engineers (Militia)
- **National Support Element**
  - 101 Logistic Brigade
    - 101 Logistics Brigade Headquarters and Signal Squadron
    - 27 Transport Regiment, Royal Logistic Corps
    - 9 Supply Regiment, Royal Logistic Corps

- 168 Pioneer Regiment, Royal Logistic Corps
- 4 Regiment, Royal Military Police
- 33 Field Hospital
- Elements from 17 Port and Maritime Regiment, Royal Logistics Corps
- Elements from 29 Regiment, Royal Logistics Corps
- Elements from 11 Explosive Ordnance Disposal Regiment, Royal Logistics Corps
- Elements from 1 Postal & Courier Service Group

- **Maritime Contribution**
  - HMS Richmond (to July 2003)
  - HMS Sutherland (July 2003-October 2003)
  - HMS Norfolk (October 2003-March 2004)
  - HMS Kent
  - RFA Diligence
  - RFA Brambleleaf

Operation TELIC III, November 2003 - March 2004

- GOC Multi-National Division (South-East) - Major General Andrew Stewart
  - 16 Signals Regiment
  - Elements from 14 Signals Regiment
  - Elements from 30 Signals Regiment
  - 20 Armoured Brigade - (succeeded by Brigadier Nick Carter)
    - 20 Armoured Brigade Headquarters and Signal Squadron
    - 26 Regiment Royal Artillery
    - 35 Engineer Regiment
    - 1st Battalion, The Light Infantry
    - 1st Battalion, The Royal Regiment of Wales (24th/41st Foot)
    - 2nd Battalion, The Parachute Regiment
    - 1st Battalion, The Royal Scots (The Royal Regiment)
    - 1st Battalion, Argyll and Sutherland Highlanders (Princess Louise's)
    - Elements of the West Midlands Regiment
    - Elements of The Royal Rifle Volunteers
    - Elements of The East of England Regiment (Militia)
    - Elements of The 9th/12th Royal Lancers
    - Elements of Royal Monmouthshire Royal Engineers (Militia)

- National Support Element
  - 4 General Support Regiment, Royal Logistic Corps
  - 22 Field Hospital
  - Elements of 33 Engineer Regiment (Explosive Ordnance Disposal)
  - Elements of 1 Regiment, Royal Military Police
  - Elements of 10 Transport Regiment, Royal Logistics Corps
  - Elements of 11 Explosive Ordnance Disposal Regiment, Royal Logistics Corps
  - Elements of 17 Port & Maritime Regiment, Royal Logistics Corps
  - Elements of 23 Pioneer Regiment, Royal Logistics Corps
  - Elements of 24 Regiment, Royal Logistics Corps
  - Elements of 5 General Support Medical Regiment, Royal Army Medical Corps
- Maritime Contribution
  - HMS Kent
  - HMS Norfolk (October 2003-March 2004)
    - HMS Grafton (March 2004-July 2004)
    - RFA Bayleaf

Operation TELIC IV, April 2004 - November 2004

- Senior British Military Representative (Iraq) - Lieutenant General John McColl
- GOC Multi-National Division (South-East) - Major General Andrew Stewart (to July 2004)
- GOC Multi-National Division (South-East) - Major General William Rollo (from July 2004)
  - 16 Signals Regiment
  - Elements from 14 Signals Regiment
  - Elements from 30 Signals Regiment
  - Elements of 52nd Lowland Regiment (TA)
  - Elements from The London Regiment (TA)
  - Elements of the Royal Yeomanry (TA)
  - Elements of the [Lancastrian and Cumbrian Voulenteers]] (TA)
  - 1 Mechanised Brigade
    - 1 Mechanised Brigade Headquarters and Signal Squadron
    - 1st Regiment Royal Horse Artillery
    - 22 Engineer Regiment

- Queen's Royal Lancers
- 1st Battalion, Princess of Wales's Royal Regiment (Queen's and Royal Hampshires) (with elements of 52nd Lowland Regiment)
- 1st Battalion, Royal Welch Fusiliers
- 1st Battalion, 22nd (Cheshire) Regiment
- 1st Battalion, Royal Highland Fusiliers (Princess Margaret's Own Glasgow and Ayrshire Regiment)
- 1st Battalion, The Argyll and Sutherland Highlanders (Princess Louise's)
- Elements of The Household Cavalry Regiment
- Elements of the Honourable Artillery Company
- Elements of The Rifle Volunteers

- National Support Element
  - 8 Transport Regiment, Royal Logistic Corps
  - 207 (V) Field Hospital relieved in 2004
  - UK Medical Group
    - 256 (City of London) Field Hospital (V)
    - Close Support Squadron, Royal Army Medical
  - Phoenix Battery, 32 Regiment, Royal Artillery Corps
  - Elements of 33 Engineer Regiment (Explosive Ordnance Disposal)
  - Elements of 1 Regiment, Military Police
  - Elements of 6 Supply Regiment, Royal Logistics Corps
  - Elements of 11 Explosive Ordnance Disposal Regiment, Royal Logistics Corps
  - Elements of 24 Regiment, Royal Logistics Corps
  - Elements of 29 Regiment, Royal Logistics Corps
  - Elements of 1 General Support Medical Regiment, Royal Army Medical Corps
  - Elements of 104 (V) Regiment, Royal Artillery
  - Elements of 6 Battalion, Royal Electrical and Mechanical Engineers
- Maritime Contribution
  - HMS Grafton (March 2004-July 2004)
  - HMS Somerset (July 2004-November 2004)
  - HMS Echo
  - RFA Bayleaf

Operation TELIC V, November 2004 - April 2005

- Senior British Military Representative (Iraq) - Lieutenant General John McColl
- GOC Multi-National Division (South-East) - Major General William Rollo (to January 2005)
- GOC Multi-National Division (South-East) - Major General Jonathon Riley (from January 2005)
  - 4 Armoured Brigade
    - 4 Armoured Brigade Headquarters and Signal Squadron
    - 4th Regiment, Royal Artillery
    - Phoenix Battery, 32 Regiment, Royal Artillery
    - 21 Engineer Regiment
    - Field Support Squadron, 28 Engineer Regiment
    - 1st The Queen's Dragoon Guards
    - The Royal Dragoon Guards
    - 1st Battalion, Scots Guards
    - 1st Battalion, Welsh Guards
    - 1st Battalion, the Duke of Wellington's Regiment (West Riding)
    - 1st Battalion, the Black Watch (Royal Highland Regiment) (detached from UK operational area from end of October 2004 to south-east of Baghdad to support 24th Marine Expeditionary Unit)
    - 40 Commando, Royal Marines
    - Elements of the Honourable Artillery Company
    - East and West Riding Regiment
- National Support Element
  - 1 Battalion REME
  - Elements of 7 Transport Regiment, Royal Logistics Corps
  - Squadron from General Support Medical Regiment
- Maritime Contribution
  - HMS Somerset (July 2004-?)
  - HMS Cumberland
  - HMS Echo
  - RFA Bayleaf

- Air Contribution
  - Detachment of No. 10 Squadron RAF
  - Detachment of No. 14 Squadron RAF
  - Detachment of No. 24 Squadron RAF
  - Detachment of No. 30 Squadron RAF
  - Detachment of No. 32 Squadron RAF
  - Detachment of RAF Kinloss Nimrod MR2 Wing
  - Joint Helicopter Force?Iraq
  - No. 51 Squadron RAF Regiment

Operation TELIC VI, May - November 2005

- Senior British Military Representative (Iraq) - Lieutenant General John Kiszely (October 2004-April 2005) replaced by Lieutenant General Robin Brims (April 2005-October 2005) Replaced by Lieutenant General Nick Houghton
- GOC Multi-National Division (South-East) - Major General Jonathon Riley (from January 2005)
  - 12 Mechanised Brigade
    - 12 Mechanised Brigade Headquarters and Signal Squadron
    - 19th Regiment, Royal Artillery
    - Phoenix Battery, 32 Regiment, Royal Artillery
    - Surveillance and Target Acquisition Patrols Troop from the Honourable Artillery Company
    - 106 (Yeomanry) Regiment, Royal Artillery
    - 26 Engineer Regiment
    - Field Support Squadron, 28 Engineer Regiment
    - The King's Royal Hussars
    - The Light Dragoons
    - 1st Battalion, Coldstream Guards
    - 1st Battalion, the Royal Anglian Regiment
    - 1st Battalion, the Royal Regiment of Wales (24th/41st Foot)
    - 1st Battalion, the Staffordshire Regiment (The Prince of Wales's)
    - 1st Battalion, the Royal Irish Regiment (27th (Inniskillings), 83rd, 87th and Ulster Defence Regiment)
    - East of England Regiment
    - Royal Rifle Volunteers

- National Support Element
  - 1 Battalion REME
  - Elements of 7 Transport Regiment, Royal Logistics Corps
  - Squadron from General Support Medical Regiment
- Maritime Contribution
  - HMS Marlborough (July 2004-March 2005)
  - HMS Argyll (March 2005-August 2005)
  - HMS Echo (to May 2005)
  - HMS Scott
  - RFA Bayleaf
  - RFA Diligence
- Air Contribution
  - Detachment of No. 10 Squadron RAF
  - Detachment of No. 101 Squadron RAF
  - Detachment of No. 14 Squadron RAF
  - Detachment of No. 24 Squadron RAF
  - Detachment of No. 30 Squadron RAF
  - Detachment of No. 32 Squadron RAF
  - Detachment of RAF Kinloss Nimrod MR2 Wing
  - Joint Helicopter Force?Iraq
  - No. 34 Squadron RAF Regiment

Operation TELIC VII, November 2005 - April 2006

- GOC - Multi-National Division (South-East)
  - 7 Armoured Brigade
    - 7 Armoured Brigade Headquarters and Signal Squadron
    - Phoenix Battery, 32 Regiment, Royal Artillery
    - 3rd Regiment, Royal Horse Artillery
    - 32 Engineer Regiment
    - 9th/12th Royal Lancers (The Prince of Wales's)
    - 2nd Royal Tank Regiment
    - The Royal Scots Dragoon Guards (Carabiniers and Greys)
    - 2nd Battalion, The Parachute Regiment
    - 1st Battalion, The Highlanders (Seaforth, Gordons and Camerons)

- 1st Battalion, The Royal Regiment of Fusiliers
- 1st Battalion, The King's Own Royal Border Regiment
- 4th Battalion, The Parachute Regiment
- Cambrai Company The West Midlands Regiment
- Royal Welsh Regiment
- 1st Battalion, Royal Highland Fusiliers (Princess Margaret's Own Glasgow and Ayrshire Regiment)

- National Support Element
  - 1st Battalion, The Royal Scots (The Royal Regiment)
  - 2 Battalion, REME
  - 2 Logistic Support Regiment, Royal Logistic Corps
  - 29 Close Support Medical Squadron
- 35 Battery Royal Artillery

- Maritime Contribution
  - HMS Campbeltown (August 2005-February 2006)
  - HMS St Albans (February 2006-?)
  - HMS Bulwark (February 2006-?)

Operation TELIC VIII, April 2006 - November 2006

- GOC Multi-National Division (South-East)
  - 20 Armoured Brigade
    - 20th Armoured Brigade Headquarters and Signal Squadron (200)
    - 12th Regiment Royal Artillery
    - 33 Engineer Regiment
    - 35 Engineer Regiment
    - 1st The Queen's Dragoon Guards
    - The Queen's Royal Hussars
    - 1st Battalion, Grenadier Guards
    - 1st Battalion, The Princess of Wales's Royal Regiment (Queen's and Royal Hampshires)
    - 2nd Battalion, The Royal Anglian Regiment
    - 1st Battalion, The Devonshire and Dorset Light Infantry
    - 1st Battalion, The Light Infantry
    - Lancastrian and Cumbrian Volunteers
    - King's and Cheshire Regiment

- 3 Logistic Support Regiment, Royal Logistic Corps
- K (Hondeghem) Battery Royal Artillery

Operation TELIC IX, November 2006 - April 2007

- GOC Multi-National Division (South-East)
  - 19 Light Brigade
    - 19 Light Brigade Headquarters and Signal Squadron (209)
    - 40th Regiment Royal Artillery
    - 38 Engineer Regiment
    - The Queen's Royal Lancers
    - 1st Battalion, The Yorkshire Regiment (PWO)
    - 2nd Battalion, The Duke of Lancaster's Regiment (King's Lancashire and Border)
    - 1st Battalion, The Royal Green Jackets (renamed 2nd Battalion, The Rifles 1st Feb 2007)
    - 1st Battalion, The Staffordshire Regiment (The Prince of Wales's)
    - 2nd Battalion, The Royal Regiment of Fusiliers
    - 2nd Battalion, The Light Infantry (renamed 3rd Battalion, The Rifles 1st Feb 2007)
    - 19 Combat Service Support Battalion
  - P Battery (The Dragon Troop) Royal Artillery (composite troop)
  - L Troop Honourable Artillery Company

Operation TELIC X, May 2007 - November 2007

Land Component

- Headquarters, 1st Mechanised Brigade
- 215th Signal Squadron, Royal Signals
- Two squadrons from the Household Cavalry Regiment
- The King's Royal Hussars
- Two squadrons from the 2nd Royal Tank Regiment
- 1st Battalion, Irish Guards
- One company from 1st Battalion, The Royal Welsh
- 2nd Battalion, The Royal Welsh
- 4th Battalion, The Rifles

- 1st Regiment, Royal Horse Artillery
- 22nd Engineer Regiment
- One squadron from 23rd Pioneer Regiment, Royal Logistic Corps
- 3rd Logistic Support Regiment, Royal Logistic Corps
- One company from 6th Battalion, Royal Electrical and Mechanical Engineers
- 3rd Close Support Medical Regiment, Royal Army Medical Corps
- 158th Provost Company, 3rd Regiment, Royal Military Police
- 22nd Battery, 32nd Regiment, Royal Artillery
- 34rd Field Hospital, Royal Army Medical Corps

Sea Component

- HMS Cornwall
- HMS Enterprise
- RFA Bayleaf
- Two Mine Countermeasures vessels
- Contribution to the 60-man joint US-UK 'Naval Transition Team'

Air Component

- 845 Naval Air Squadron (Sea King Mk4)
- Detachment from 652 Squadron, Army Air Corps (Lynx)
- No. 1419 Flight RAF (Merlin)
- No. 1 Squadron RAF Regiment
- 4th Force Protection Wing
- No. 120 Squadron RAF/No. 201 Squadron RAF (Nimrod MR2)
- No. 51 Squadron RAF (Nimrod R1)
- 814 Naval Air Squadron (Merlin)
- No. 216 Squadron RAF (Tri-Star)
- No. 32 (The Royal) Squadron RAF (BAE125/BAE146)
- No. 617 Squadron RAF (Tornado GR4)
- No. 23 Squadron RAF/No. 30 Squadron RAF (Hercules C130J)
- No. 101 Squadron RAF (VC10)

Operation TELIC XI, November 2007 - April 2008

- GOC Multi-National Division (South-East)
  - 4 Mechanised Brigade
    - 4 Mechanised Brigade Headquarters and Signal Squadron (204)
    - The Royal Dragoon Guards
    - D Battery, 3rd Regiment, Royal Horse Artillery
    - K Battery, 5th Regiment, Royal Artillery
    - 21 Engineer Regiment
    - 1st Battalion, Scots Guards
    - The Royal Scots Borderers, 1st Battalion The Royal Regiment of Scotland
    - 1st Battalion, The Duke of Lancaster's Regiment (King's Lancashire and Border)
    - 1st Battalion, The Mercian Regiment (Cheshires)
    - 1st Battalion, Royal Electrical and Mechanical Engineers
    - 115 Provost Company
    - 1 (Close Support) Medical Regiment
    - 12 Logistic Support Regiment

Operation TELIC XII, April 2008 - November 2008

- GOC Multi-National Division (South-East)
  - 7 Armoured Brigade
    - 7 Armoured Brigade Headquarters and Signal Squadron (207)
    - The Royal Scots Dragoon Guards (Carabiniers and Greys)
    - 1st Battalion, The Royal Regiment of Fusiliers
    - The Highlanders, 4th Battalion The Royal Regiment of Scotland
    - 2nd Battalion, The Royal Anglian Regiment
    - 3rd Regiment, Royal Horse Artillery
    - 32 Engineer Regiment
    - 2 Logistic Support Regiment
    - 3 (Close Support) Medical Regiment
    - 2nd Battalion, Royal Electrical and Mechanical Engineers
    - 111 Provost Company

Operation TELIC XIII, November 2008 - May 2009

- GOC Multi-National Division (South-East)
  - 20 Armoured Brigade
    - 20 Armoured Brigade Headquarters and Signal Squadron (200)
    - The Queen's Royal Hussars (Queen's Own and Royal Irish)
    - 1st Battalion, The Princess of Wales's Royal Regiment (Queen's and Royal Hampshires)
    - 1st Battalion, The Yorkshire Regiment (14th/15th, 19th and 33rd/76th Foot) (Prince of Wales's Own)
    - 5th Battalion, The Rifles
    - 26 Regiment, Royal Artillery
    - 35 Engineer Regiment
    - 1 Logisitic Support Regiment
    - 3rd Battalion, Royal Electrical and Mechanical Engineers
    - 110 Provost Company

Source: Wikipedia ://en.wikipedia.org/wiki/Operation_Telic_order_of_battle#6th_Roulement_.28Operation_TELIC_VII.29

From Hansard:

Territorial Army and Army Regular Reserves as a proportion of the Deployed Army in Iraq

TELIC 1 January 2003 – July 2003 12%

TELIC 2 July 2003 – November 2003 18%

TELIC 3 November 2003 – April 2004 10%

TELIC 4 April 2004 – November 2004 15%

TELIC 5 November 2004 – April 2005 9%

TELIC 6 April 2005 – November 2005 8%

TELIC 7 November 2005 – April 2006 8%

Operation Telic 1:

The Iraqi army orbat in early 2003

Reference source: www.orbat.com

Republican Guard units and their location

4 separate "Special Forces" brigades (14 battalions in all), guarding Saddam's palaces. So called "Special Republican Guard" (according to JCSS 26,000 men; 5 brigades

according to IISS).
1st brigade - Baghdad
2nd brigade - Al Rashid
3rd brigade - Taji
4th brigade - Baghdad

Northern corps - Al-Rashadia
The armoured division "Al-Medinah" - Al Munawara
1st mechanized division "Adnan" - Mosul
2nd infantry division "Baghdad" - Maqloob Maoten
The infantry division "Al-Abed"- Kirkuk

Southern corps - Al-Bafreia
The armoured division "Al-Nedaa" - Baaquba, Deyala Governate
The mechanized division "Hammurabi" - Al Wahda
The infantry division "Nebuchadnezzar"- Alhussainia, Al Khut Governate

Iraqi Special Forces
65th Special Forces brigade
66th Special Forces brigade
68th Special Forces brigade

1st corps - Kirkuk
5th mechanized division - Shuwan
2nd infantry division - Airabee
8th infantry division - Shuwan
38 infantry division - Karam

2nd corps - Deyala
3rd armoured division- Jalawla
15th infantry division - Amerili
34th infantry division - Alsadia

3rd corps - Al-Naserria
6th armoured division - Shalamcha
51st mechanized division - Zubair
11th infantry division - Al Naserria

4th corps - Al-Amara
10th armoured division - Al Teab
14th infantry division - Al Amara
18th infantry division - Al Musharah, Al Kahla

5th corps - Mosul
1st mechanized division - Makhmur
4th infantry division - Bashiqa Maoten
7th infantry division - Alton Kopri Castle
16th infantry division - Mosul

Blood, Heat + Dust: Second Edition

Operation Telic and the British Medical Deployment to the Gulf 2003-2009

Appendix to Blood Heat and Dust: US Military Medical Operations in Iraq from 2003 onwards



Hero's Highway: The casualty entrance to Balad Air Force Base Hospital, Iraq

(Source: mnprairieroots.wordpress.com)

Introduction

No book on UK military medical operations in Iraq would be complete without a description and consideration of the US military medical operation and the shared lessons from the US experience.

The US presence peaked at some 130,000 military personnel in Iraq during 2008, and some 4000 US personnel died during the campaign.

Other Coalition partner nations also provided medical resources and suffered casualties during the Operation, but none on the scale of the USA.

The following selected articles and items give but a flavour of the huge volume of work of US medical units in Iraq, which became focussed on the military hospital at Balad as events developed. Full justice to their work would require a book as large again as this work.

Iraq Coalition Military Fatalities By Year (Source: /icasualties.org/)

Year	US	UK	Other	Total
2003	486	53	41	580
2004	849	22	35	906
2005	846	23	28	897
2006	822	29	21	872
2007	904	47	10	961
2008	314	4	4	322
2009	149	1	0	150
2010	23	0	0	23
Total	**4393**	**179**	**139**	**4711**

US Mobile Medical Operations in the early phase

US medical doctrine mirrors British doctrine, with the deployment of forward, mobile medical, trauma, resuscitation and surgery capable units at Role 2, passing casualties back to mobile army surgical hospitals - the MASH units - similar in size, configuration and capacity to the British field hospitals. The rapidity of the advance and the uncertainties over the security of the supply routes nevertheless prevented the establishment of a substantial hospital footprint on the ground in the early days of the campaign. Strategy thus combined aggressive resuscitation in mobile, compact field units, with helicopter evacuation to the USNS Comfort in the Gulf, with a reserve capability provided by (UK) Field Hospitals in the south and by RFA Argus in the upper Gulf.

Brig. Gen. George Weightman, commander of the 3rd Medical Command and head of medical forces in the theatre, reported in June 2003 at a symposium of the Association

of the United States Army that the use of far-forward surgical teams and the rapid evacuation of casualties from the battlefield saved soldiers' and civilians' lives during the thirty-seven days of fighting.

"A surgical team was placed with each army brigade and a surgical company with each of the three marine regiments involved. Active and reserve components were both well represented. The role of '91 Whiskeys' - trauma trained combat medical technicians - was noteworthy. To keep pace with the manoeuvre units, medical support areas were established 100 miles into Iraq for supplies and to receive casualties.

The 212th MASH saw 300 patients and performed 49 operations in two weeks. At the peak, the hospital had fifty-one patients. The entire hospital was loaded into thirty-seven 5-ton trucks and five 'Humvee' light trucks and driven for seventy-eight hours and 300 miles into Iraq to support rapidly advancing forces. The hospital was set up during a sandstorm in central Iraq.

US Combat Army Support Hospitals (CASH) with 300 beds are too large and un-manoevrable for such rapid operations, and the US commanders have emphasised the need for much smaller, more agile medical units for such operations. The army thus had only 160 beds available in Iraq at the outset of operations. The US amphibious assault ships had 300 beds apiece. He said there also were 500 beds available in Kuwaiti hospitals.

In the thirty-seven days of combat, coalition medical teams treated 430 PoWs, 579 Iraqi civilians and 1,665 coalition casualties. US medical resources were caught out to an unexpected degree by the volumes of PoW and displaced civilian casualties. The public opposition of the Kuwaiti government to the treatment of Iraqis in the Emirate caused additional problems".

The Americans also had to deal with large numbers of burns and paediatric injuries, including those arising from domestic accidents. Patients were taken from temporary burns units in the combat support hospitals. In many instances, these patients were then taken to USNS *Comfort*. Some were eventually flown to Germany and the United States for further treatment.

U.S. Casualties in Iraq(monthly breakdown of figures)

Casualty Notes			
Monthly Summaries		References	
US Army Evacuations from Iraq			
Month	**US Named Dead** *	**US Reported Dead** **	**US Wounded** *** ****
March 2003	65	0	202
April 2003	73	0	340
TOTAL	**138**	**0**	**542**
May	37	0	54
June	30	0	147
July	47	0	226
August	35	0	181
September	30	0	247
October	43	0	413
November	82	0	337
December	40	0	261
January 2004	47	0	188
February	19	0	150
March	52	0	323
April	136	12	1214
May	80	8	757
June	42	2	589
July	54	7	552
August	66	5	895
September	81	3	706
October	63	5	647
November	137	3	1427

Casualty Notes			
Monthly Summaries		References	
US Army Evacuations from Iraq			
Month	**US Named Dead** *	**US Reported Dead** **	**US Wounded** *** ****
December 2004	72	1	540
January 2005	107	1	496
February	58	4	409
March	36	0	364
April	52	0	590
May	79	3	385
June	77	0	501
July	54	1	473
August	84	1	451
September	48	6	490
October	96	0	608
November	83	5	518
December	66	1	304
January 2006	61	4	521
February	53	3	300
March	30	3	475
April	74	7	481
May	69	2	422
June	59	2	512
July	42	9	574
August	65	5	503
September	70	7	776
October	100	11	870

Casualty Notes

Monthly Summaries	References		
US Army Evacuations from Iraq			
Month	**US Named Dead** *	**US Reported Dead** **	**US Wounded** *** ****
November 2006	63	13	502
December	105	12	644
January 2007	82	10	714
February	81	7	398
March	75	11	637
April	102	6	776
May	121	10	591
June	98	13	669
July	76	11	654
August	77	10	658
September	63	9	347
October	37	2	376
November	35	6	244
December	23		193
January 2008	40	2	216
February	29		216
March	37		590
April	51	3	283
May	20		132
June	28	2	39
July	13	2	
August	22		
September	25		

Casualty Notes			
Monthly Summaries		References	
US Army Evacuations from Iraq			
Month	**US Named Dead** *	**US Reported Dead** **	**US Wounded** *** ****
October 2008	13		
November	16		
December	13	1	
January 2009	16		
February 2009	17		
March 2009	9		
April 2009	17	2	
May 2009	25		
June 2009	14		
July 2009	8		
August 2009	7		
September 2009	10		
Oct 2009	7	1	
Nov 2009	10	1	
Dec 2009	3	1	
Subtotal	**4,282**	**5**	**30,182**
TOTAL	**4,287**		

* Includes both hostile killed and non-hostile killed
** Reported Killed but Unidentified Pending Notification of Next of Kin
*** Included both Wounded in Action and non-hostile prior to 01 Apr 04
**** Includes only Wounded in Action since 01 Apr 04

Casualties of War – Military Care for the Wounded from Iraq and Afghanistan

In December 2004, Atul Gawande reported the following in the New England Journal of Medicine:

"Each Tuesday, the U.S. Department of Defense provides an online update of American military casualties (the number of wounded or dead) from Operation Iraqi Freedom and Operation Enduring Freedom. According to this update, as of November 16, 2004, 10,726 service members had suffered war injuries. Of these, 1361 died, 1004 of them killed in action; 5174 were wounded in action and could not return to duty; and 4191 were less severely wounded and returned to duty within 72 hours. No reliable estimates of the number of Iraqis, Afghanis, or American civilians injured are available. Nonetheless, these figures represent, by a considerable margin, the largest burden of casualties our military medical personnel have had to cope with since the Vietnam War.

When U.S. combat deaths in Iraq reached the 1000 mark in September, the event captured worldwide attention. Combat deaths are seen as a measure of the magnitude and dangerousness of war, just as murder rates are seen as a measure of the magnitude and dangerousness of violence in our communities. Both, however, are weak proxies. Little recognized is how fundamentally important the medical system is – and not just the enemy's weaponry – in determining whether or not someone dies. U.S. homicide rates, for example, have dropped in recent years to levels unseen since the mid-1960s. Yet aggravated assaults, particularly with firearms, have more than tripled during that period. The difference appears to be our trauma care system: mortality from gun assaults has fallen from 16 percent in 1964 to 5 percent today.

We have seen a similar evolution in war. Though firepower has increased, lethality has decreased. In World War II, 30 percent of the Americans injured in combat died. In Vietnam, the proportion dropped to 24 percent. In the war in Iraq and Afghanistan, about 10 percent of those injured have died. At least as many U.S. soldiers have been injured in combat in this war as in the Revolutionary War, the War of 1812, or the first five years of the Vietnam conflict, from 1961 through 1965. This can no longer be described as a small or contained conflict. But a far larger proportion of soldiers are surviving their injuries.

It is too early to make a definitive pronouncement that medical care is responsible for this difference. With the war ongoing and still intense, data on the severity of injuries, the care provided, and the outcomes are necessarily fragmentary. But from the data made available for this report and discussions with surgical teams that have returned home, a suggestive picture has emerged. It depicts a military medical system that has made fundamental – and apparently effective – changes in the strategies and systems of battle care, even since the Persian Gulf War.

One key constraint for planners has been the limited number of medical personnel available in a voluntary force to support the 130,000 to 150,000 troops fighting in

Iraq. The Army is estimated to have only 120 general surgeons on active duty and a similar number in the reserves. It has therefore sought to keep no more than 30 to 50 general surgeons and 10 to 15 orthopedic surgeons in Iraq. Most have served in Forward Surgical Teams (FSTs) — small teams, consisting of just 20 people: 3 general surgeons, 1 orthopedic surgeon, 2 nurse anesthetists, 3 nurses, plus medics and other support personnel.

In Vietnam, only 2.6 percent of the wounded soldiers who arrived at a surgical field hospital died, which meant that, despite helicopter evacuation, most deaths occurred before the injured made it to surgical care.The recent emphasis on leaner, faster-moving military units added to the imperative to push surgical teams farther forward, closer to battle. So they, too, were made leaner and more mobile – and that is their fundamental departure from previous wars.

Each FST is equipped to move directly behind troops and establish a functioning hospital with four ventilator-equipped beds and two operating tables within a difficult-to-fathom 60 minutes. The team travels in six Humvees. They carry three lightweight, Deployable Rapid Assembly Shelter ("drash") tents that can be attached to one another to form a 900-ft2 facility. Supplies to immediately resuscitate and operate on the wounded arrive in five backpacks: an ICU pack, a surgical-technician pack, an anesthesia pack, a general-surgery pack, and an orthopedic pack. They hold sterile instruments, anesthesia equipment, medicines, drapes, gowns, catheters, and a handheld unit allowing clinicians to obtain a hemogram and measure electrolytes or blood gases with a drop of blood.

FSTs also carry a small ultrasound machine, portable monitors, transport ventilators, an oxygen concentrator providing up to 50 percent oxygen, 20 units of packed red cells, and six roll-up stretchers with their litter stands. Teams have forgone angiography and radiography equipment. (Orthopedic surgeons detect fractures by feel and apply external fixators.) But they have sufficient supplies to evaluate, and perform surgery on, as many as 30 wounded soldiers. They are not equipped, however, for more than six hours of postoperative intensive care.

The 274th FST is led by a 42-year-old surgical oncologist who was my chief resident when I was a surgical intern. He went to West Point, Johns Hopkins Medical School in Baltimore, Brigham and Women's Hospital in Boston for surgical residency, and then M.D. Anderson Cancer Center in Houston for a fellowship. He was known in training for three things: his unflappability, his intellect (he'd already published 17 papers on work toward a breast-cancer vaccine), and the five children he and his wife had during residency. He owed the Army 18 years of service when he finally finished his training, and neither I nor anyone I know ever heard him bemoan that commitment.

In 1998, he was assigned to Walter Reed Army Medical Center in Washington, D.C., where he practiced surgical oncology. Then, in October 2001, after the September 11 attacks on the World Trade Center and the Pentagon, he and his team were sent

with the first troops into Afghanistan. He returned after service there only to be sent to Iraq, in March 2003, with ground forces invading from Kuwait through the desert to Baghdad.

The 274th FST traveled 1100 miles with troops over the next four months, setting up in Nasiriyah, Najaf, Karbala, and points along the way in the southern desert, then in Mosul in the north, and finally in Baghdad. According to its logs, the unit cared for 132 U.S. and 74 Iraqi casualties during that time (22 of the Iraqis were combatants, 52 civilians). Some days were quiet. Others, overwhelming. On one day in Nasiriyah, the team received 10 critically wounded patients, among them 1 with right-lower-extremity shrapnel injuries; 1 with gunshot wounds to the stomach, jejunum, and liver; another with gunshot wounds to the liver, gallbladder, and transverse colon; 1 with shrapnel in the neck, chest, and back; 1 with a gunshot wound through the rectum; and 2 with extremity gunshot wounds. The next day, 14 more casualties arrived.

On the arrival of the wounded, teams carry out the standard Advanced Trauma Life Support protocols that civilian trauma teams follow. However, because of the high incidence of penetrating wounds — 80 percent of casualties seen by the 274th FST had gunshot wounds, shrapnel injuries, or blast injuries — lifesaving operative management is required far more frequently than in civilian trauma centers. Today, military surgical strategy aims for damage control, not definitive repair, unless it can be done quickly. Teams pack off liver injuries, staple off perforated bowel, wash out dirty wounds — whatever is necessary to stop bleeding and control contamination without allowing the patient to lose body temperature or become coagulopathic.

Surgeons seek to limit surgery to two hours or less, and then ship the patient off to a Combat Support Hospital (CSH), the next level of care. Abdomens can be left open, laparotomy pads left in, bowel unanastomosed, the patient paralyzed, sedated, and ventilated. For this approach to be successful, however, control of air space and major roadways and establishment of the next-level hospital (achieved early in Iraq but delayed in Afghanistan) are essential.

Two CSHs with four sites now exist in Iraq. These are 248-bed hospitals with six operating tables, some specialty surgery services, and radiology and laboratory facilities. Mobile hospitals, too, they arrive in modular units by air, tractor-trailer, or ship and can be fully functional in 24 to 48 hours. Even at the CSH level, the goal is not necessarily definitive repair. The maximal length of stay is intended to be three days. The policy is to transfer any American soldier who requires more to a level IV hospital — one was established in Kuwait, one in Rota, Spain, and one in Landstuhl, Germany. If expected to require more than 30 days of treatment, wounded soldiers are to be transferred home, mainly to Walter Reed or to Brooke Army Medical Center in San Antonio, Texas. (Iraqi prisoners and civilians, on the other hand, receive all their care in Iraq.)

It is a system that took some getting used to. Surgeons at every level initially tended to hold on to their patients, either believing that they could provide definitive care themselves or not trusting that the next level could do so. According to statistics from Walter Reed, during the first few months of the war, it took an injured soldier an average of eight days to go from the battlefield to a U.S. facility. Gradually, however, surgeons have embraced the wisdom of the system. The average time from battlefield to arrival in the United States is now less than four days. (In Vietnam, it was 45 days.)

One airman with devastating injuries from a mortar attack outside Balad on September 11, 2004, was on an operating table at Walter Reed just 36 hours later. In extremis from bilateral thigh injuries, abdominal wounds, shrapnel in the right hand, and facial injuries, he was taken from the field to the nearby 31st CSH in Balad. Bleeding was controlled, volume resuscitation begun, a guillotine amputation at the thigh performed. He underwent a laparotomy with diverting colostomy. His abdomen was left open, with a clear plastic bag as covering. He was then taken to Landstuhl by an Air Force Critical Care Transport team. When he arrived in Germany, Army surgeons determined that he would require more than 30 days' recovery, if he made it at all. Therefore, although resuscitation was continued and a further washout performed, he was sent on to Walter Reed. There, after weeks in intensive care and multiple operations, he did survive. This is itself remarkable. Injuries like his were unsurvivable in previous wars. The cost, however, can be high. The airman lost one leg above the knee, the other in a hip disarticulation, his right hand, and part of his face. How he and others like him will be able to live and function remains an open question.

As lifesaving as the new strategies have been, teams have been forced to confront numerous unanticipated circumstances. The war has gone on far longer than planned, the volume of wounded soldiers has increased, and the nature of the injuries has changed. Blast injuries from suicide bombs and land mines — improvised explosive devices (IEDs), in military lingo — have increased substantially and have proved particularly difficult to manage. They often combine penetrating, blunt, and burn injuries.

The shrapnel include not only nails, bolts, and the like, but also dirt, clothing, even bone from assailants. Victims of IED attacks can exsanguinate from multiple seemingly small wounds, even those in the back. Teams have therefore learned to pack the bleeding sites before laparotomy or other interventions are performed. And they are now performing serial operative washouts to ensure adequate removal of infectious debris.

Surgeons also discovered a dismayingly high incidence of blinding injuries. Soldiers had been directed to wear eye protection, but they evidently found the issued goggles too ugly. As some soldiers put it, "They look like something a Florida senior citizen would wear." So the military bowed to fashion and switched

to cooler-looking Wiley-brand ballistic eyewear. The rate of eye injuries has since decreased markedly.

Still, for many new problems, the answers remain unclear. Early in the war, for example, Kevlar vests proved dramatically effective in preventing torso injuries. Surgeons, however, now find that IEDs are causing blast injuries that extend upward under the armor and inward through axillary vents. Blast injuries are also producing an unprecedented burden of what orthopedists term "mangled extremities" — limbs with severe soft-tissue, bone, and often vascular injuries. These can be devastating, potentially mortal injuries, and whether to amputate is one of the most difficult decisions in orthopedic surgery.

Military surgeons have relied on civilian trauma criteria to guide their choices, but those criteria have not proved reliable in this war. Possibly because the limb injuries are more extreme or more often combined with injuries to other organs, attempts to salvage limbs following the criteria have frequently failed, with life-threatening blood loss, ischemia, and sepsis.

Every other Thursday, surgeons at Walter Reed hold War Rounds by telephone conference with surgeons in Baghdad to review the American casualties received in Washington during the previous two weeks. The case list from October 21 provides a picture of the extent of the injuries. There was one gunshot wound, one antitank-mine injury, one grenade injury, three rocket-propelled–grenade injuries, four mortar injuries, eight IED injuries, and seven patients with no cause of injury noted. The least seriously wounded of these patients was a 19-year-old who had sustained soft-tissue injuries to the face and neck from a mine and required an exploration of the left side of the neck. Other cases involved a partial hand amputation; a hip disarticulation on the right, through-knee amputation on the left, and open pelvic débridement; a left nephrectomy and colostomy; an axillary artery and vein reconstruction; and a splenectomy, with repair of a degloving scalp laceration and through-and-through tongue laceration. None of the soldiers were more than 25 years of age.

Late complications have emerged as a substantial difficulty as well. Surgeons are seeing startling rates of pulmonary embolism and deep venous thrombosis, for example, perhaps because of the severity of the extremity injuries and reliance on long-distance transport in management. Initial data show that 5 percent of the wounded at Walter Reed have had a pulmonary embolism, resulting in two deaths. The solution is not obvious. Using anticoagulants in patients with fresh wounds and in need of multiple procedures would seem unwise. On the other hand, there is no facility or expertise in Iraq for the routine placement of inferior vena cava filters.

Injured soldiers from Iraq have also brought an epidemic of multidrug-resistant Acinetobacter baumanii infection to military hospitals. It is not known how this has occurred. No such epidemic appeared among soldiers from Afghanistan, and

whether the drug resistance is being produced by antibiotic use or is already carried by the strains colonizing troops is still being debated. Regardless, data from 442 medical evacuees seen at Walter Reed showed that 37 (8.4 percent) were culture-positive for acinetobacter – a rate far higher than any previously experienced. The organism has infected wounds and prostheses and caused catheter-related sepsis in soldiers and, through nosocomial spread, in at least three other hospital patients. Medical evacuees from Iraq are now routinely isolated on arrival and screened for the bacteria.

These are just the medical challenges. Perhaps the most pressing difficulties arise from the changing conditions of the war. Medical teams were designed and outfitted for lightning-quick, highly mobile military operations. The war, however, has proved to be slow-moving and protracted. To adapt, CSHs have had to be converted into fixed facilities. In Baghdad, for example, the 28th CSH took over and moved into an Iraqi hospital in the Green Zone. This shift has brought increasing numbers of Iraqi civilians seeking care, and there is no overall policy about providing it. Some hospitals refuse to treat civilians for fear that some may be concealing bombs. Others are treating Iraqis but find themselves overwhelmed, particularly by pediatric patients, for whom they have limited personnel and few supplies.

Requests have been made for additional staff members and resources at all levels. As the medical needs facing the military have increased, however, the supply of medical personnel has gotten tighter. Many surgeons have been on a second deployment or an extended deployment, and even this has not been sufficient. As a result, military urologists, plastic surgeons, and cardiothoracic surgeons have been tasked to fill some general surgeon positions. Planners are having to contemplate pressing surgeons into yet a third deployment.

Compounding the difficulties, none of these realities have made it appealing to sign up as a military surgeon. Interest in joining the reserves has dropped precipitously. President George W. Bush has flatly declared that there will be no draft. However, the Selective Service, the U.S. agency that maintains draft preparations in case of a national emergency, has recently updated a plan to allow the rapid registration of 3.4 million health care workers 18 to 44 years of age. The Department of Defense has indicated that it will rely on improved financial incentives to attract more medical professionals. Whether this strategy can succeed remains unknown. The pay has never been competitive. One now faces a near-certain likelihood of leaving one's family for duty overseas. And without question, the work is dangerous.

The nation's military surgical teams are under tremendous pressure, but they have performed remarkably in this war. They have transformed the strategy for the treatment of war casualties. They have saved the lives of an unprecedented 90 percent of the soldiers wounded in battle. And they have done so under extraordinarily difficult conditions and with heroic personal sacrifices.

One surgeon deserves particular recognition. Dr. Mark Taylor began his Army service in 2001, to fulfill the terms of his military scholarship to attend medical school several years before. He, like many, was deployed twice to Iraq – first from February through May 2003 and then from August 2003 through the following winter. On March 20, 2004, outside Fallujah, four days from returning home to Stockton, California, the 41-year-old surgeon was hit in a rocket-propelled-grenade attack while making a telephone call outside his barracks. Despite his team's efforts, he could not be revived".

For every death in combat, there are a significant number of seriously injured men and women to be repatriated and whose lives and bodies must be rebuilt. The following article gives some idea of the challenges faced by the medical teams and the individual casualties of operations in Iraq".



Tidying up at Balad Hospital
Source: blackberryhillquilts.com/ourkidsatwar.htm

Dead Men Walking

What sort of future do brain-injured Iraq veterans face? by Michael Mason, writing in the March 2007 issue of Discover Magazine:

"In a flash, the blast incinerates air, sprays metal, burns flesh. Milliseconds after an improvised explosive device (IED) detonates, a blink after a mortar shell blows, an over-pressurisation wave engulfs the human body, and just as quickly, an under-pressure wave follows and vanishes. Eardrums burst, bubbles appear in the bloodstream, the heart slows. A soldier – or a civilian – can survive the blast without a single penetrating wound and still receive the worst diagnosis: traumatic brain injury, or TBI, the signature injury of the Iraq War.

But in the same instant that the blast unleashes chaos, it also activates the most organized and sophisticated trauma care in history. Within a matter of hours, a soldier can be medevaced to a state-of-the-art field hospital, placed on a flying intensive care unit, and receive continuous critical care a sea away. (During Vietnam, it took an average of 15 days to receive that level of treatment. Today the military can deliver it in 13 hours.) Heroic measures may be yielding unprecedented survival rates, but they also carry a grim consequence: No other war has created so many seriously disabled veterans. Soldiers are surviving some brain injuries with only their brain stems unimpaired.

While the Pentagon has yet to release hard numbers on brain-injured troops, citing security issues, brain-injury professionals express concern about the range of numbers reported from other military-related sources like the Defense and Veterans Brain Injury Center, the Department of Defense, and the Department of Veterans Affairs (VA). One expert from the VA estimates the number of undiagnosed TBIs at over 7,500. Nearly 2,000 brain-injured soldiers have already received some level of care, but the TBIs – human beings reduced to an abbreviation – keep coming.

"We would get about 300 helicopters landing a month, all having some level of trauma," says Dr. Elisha Powell, an orthopedic surgeon who served as commander of the U.S. Air Force Theater Hospital in Balad, Iraq, a facility described as "MASH on steroids," where most of the severely brain injured are treated.

A soldier treated at Balad Air Base stands a 96 percent chance of surviving; several hundred come through every month. I ask Dr. Gerald Grant, who served as one of the few neurotrauma surgeons in Iraq, how the hospital managed to keep patients alive.

"It's complex in that it's not only medical advances," he tells me. "This war is different in that the aerovac system is superb. The ability to get someone into your care facility with many forward surgeons and subspecialists so close to the front line, very quickly, is a novel concept in this theater."

The moment an injured soldier hits the helipad at Balad, he's swept into a whirlwind of critical care. It's the one ER in the world where up to 10 surgical

specialists are hell-bent on saving a life. Patients get lined up with IVs and catheters, undergo CT scans and X-rays, and then hit the operating table – the hospital's best time is 18 minutes. The head-and-neck team tackles their trauma while a cardiothoracic surgeon and a vascular surgeon go to work on the chest. They're shoulder to shoulder with the urologist, who's brushing against the chief trauma surgeon, who's coordinating everything over the buzz of orthopedic surgeons drilling external fixators into bone. It's crowded. It's hot.

Amid the cramped bustle, doctors are pushing the boundaries of medicine. They're going through crates of the hemophilia drug Factor VII, yet to be approved for trauma but a wonder drug in stopping bleed-outs. At $3,000 a vial, two vials per dose, the price is a drop in the bucket compared with the expenses incurred during the critical phase of recovery, which can easily exceed a million dollars in the coming weeks. The lifetime cost of care for brain-injured troops could reach $35 billion, according to a Nobel Prize–winning economist and a Harvard University budget expert.

If the diagnostics come up positive for blast-related brain trauma, the neurosurgeon takes action based on observable signs of trauma. Depending on whether the brain was pulled, pushed, twisted, or punctured in the blast, the neurosurgeon could elect major surgery.

"Our expression is 'Go big or go home,' " Grant says. "We really want to do the definitive operation that we know will be OK for them."

In a matter of minutes, a surgeon will saw the skull in half and discard the damaged portion. There will be a plastic replacement waiting farther down the line. Shrapnel is excised, cerebral tissue swells, and the scalp is pulled taut and sewn back over a ballooning brain. Thanks to the wealth of surgical resources, a procedure that takes several hours in any general hospital in the United States might take Balad surgeons 30 minutes. "The secret to our hospital's ability is throughput," Powell says. "We have to keep churning. Things that would overwhelm a major hospital would not overwhelm us. During the worst incident, we had 35 people come to us in 90 minutes, all by helicopter, landing with just horrible injuries."

"There are soft tissue traumas where we have no scalp, no eye, and no skull base left," Grant says. "And we have to somehow treat that acutely in one surgery setting."

Many of the soldiers treated at Balad won't remember being there. After leaving the frontline hospital, they're loaded onto a massive C-17 cargo plane that has been retrofitted to hold an entire intensive care unit – up to 8 critical care patients and 27 noncritical litter patients. It's basically a flying warehouse abuzz with armor-clad clinicians and portable life-support units. Known as a critical care air transport team, each consists of a critical care physician, a critical care nurse, and a respiratory therapist. There are 249 of these teams in the Air Force, catering to all branches of the armed forces.

Five hours later, the C-17 lands at Ramstein Air Base in Germany. Having been prepped through a satellite tracking system, doctors at Landstuhl Regional Medical Center (just across the autobahn from Ramstein) already have a strong grasp of any patient's treatment needs. In Balad, surgeons don't have the time to check medical records or advance directives, so every life is saved at any cost. But that's not the case in Landstuhl. In addition to being a transitional facility, Landstuhl also happens to be the place where the family has a voice in their loved one's fate.

"You can look at someone and see they will not survive," says Dr. Gene Bolles, former chief of neurosurgery at Landstuhl. "When you see that, you are up front with the families. But so often, you don't know enough. When you are in the military, you don't question, you just save life. When I was there, our modus operandi was to maintain them and keep them alive to get them to the States."

"It is very rare for us to have family contact in Iraq because the communication is so difficult," Grant explains. "The family can meet the patient in Germany. They are there to make decisions for them, and they can withdraw care there, whether the patient has an advance directive or not."

When one veteran's wife, Michele Reid, spoke with a doctor at Landstuhl about her husband, Pete, she was surprised to learn that he had survived an attack on May 2, 2004. She had feared him dead after receiving funeral notices for some of the friends he served with. A Navy Seabee, Pete Reid was one of the three severely injured servicemen hit by a barrage of mortar shells in Ramadi, Iraq. Thirty people were injured, six were killed.

"First they told me he lost his eye and that his brain was bleeding," she says. "But then they said that they didn't think he was going to make it."

Michele asked for the phone to be placed next to Pete's ear, and she told him to hang on, that she wanted to see him get better. Later that day, Pete emerged from his coma, opened his eyes, and asked a nurse when he could see his wife. The team immediately flew him back to the States to see Michele.

The aggressive level of care continues once the troops return to either Walter Reed Army Medical Center in Washington, D.C., or the National Naval Medical Center in Bethesda, Maryland. At Walter Reed, troops undergo intensive therapies aimed at helping them regain their independence. Reid was transferred to Bethesda, where Michele was waiting for him.

"When they let me see him, I lost it," she says. "I could see his open wounds when they pulled back the sheet. He didn't say anything – he just squeezed my hand."

While in the intensive care unit at Bethesda, doctors told Michele that her husband had a 1 percent chance of recovery, and if he survived, he would be vegetative.

"I cried, I prayed, I cussed, and I screamed," Michele says. "After a few days, Pete turned his head toward me and said, 'Enough already. I'm going to be OK.'"

From Walter Reed, soldiers are then triaged to one of the nation's Veterans Administration polytrauma centers, where the hard work begins. (There are only 4 polytrauma centers and 21 designated polytrauma rehabilitation sites, a painfully small number to deal with the great many injured troops.) Weeks ago, a staff sergeant might have been conducting complex tactical operations; on the polytrauma unit, his biggest challenge might involve lifting his head off the pillow. Another soldier experiencing sequencing problems might try his hand at disassembling a carburetor in one of the rehab rooms. That same soldier could then be taken to physical therapy to work on his balance. Because of the brain's complexity, each injury manifests its own unique set of challenges.

"All the polytrauma centers offer patients highly individualized care," says Dr. Rose Collins, a psychologist with the Minneapolis polytrauma center. "One of my roles is to decrease the barriers that get in the way of your participating in rehabilitation." Soldiers are not the only ones whose issues get addressed at the center. "Part of my job is to help their families," she says. "How do you make positive meaning out of this? How do you grieve ambiguous losses? On some level, family members prepare for the possibility of death, but they don't prepare for the possibility of severe disability. Who, outside in the real world, thinks about the lifetime impairments of a traumatic brain injury?"

At the polytrauma center in Tampa, Florida, Michele had a better idea of what condition her husband was in. He arrived at the center with a hundred stitches along his scalp and a missing eye. Surgeons had removed some of his stomach muscles along with portions of his hip bone and transplanted them to his right leg. Michele could come to terms with his physical injuries, but the personality changes brought on by the TBI made her feel as though her husband was a different man altogether. The injuries to Pete's right frontal lobe caused severe impulse control and reasoning problems.

"Near the beginning, Pete threw his urinal and grabbed people by the throat," Michele says. "He thought he was still in Iraq, and he even tried to stab out his one good eye with a pen. He could never be left alone, ever."

Inside the Minneapolis VA's polytrauma unit, military insignias adorn the walls, and the milieu is preternaturally calm – a necessity in brain-injury treatment centers. Color-coded floor tiles in front of entryways help soldiers who can no longer read room numbers. Halls and doorways are extra wide, all the furniture is movable, and even the bathroom fixtures are amputee-friendly. The unit was recently redesigned to be completely focused on treatment. Like Balad, Landstuhl, and Walter Reed, the polytrauma center represents the culmination of research and resources, a level of care to which many private hospitals aspire. The patients on the unit represent some of the most complicated treatment challenges in the world.

While there, I met a young soldier who had received the military's full battery of services. He had been blown apart and put back together, but not entirely, not yet. The upper left quadrant of his head was missing, pending a new skull plate, and the remainder was dappled with tufts of dark hair and notches left by shrapnel. In place of two limbs, he had prosthetics – one arm, one leg. The visible parts of his body were replete with fresh skin grafts, giving him an uneven, patched-together appearance. In some respects, he didn't look quite possible, but because he could talk and interact and function, he was a success story.

The guy parked in the foyer's corner, whom I didn't meet, wasn't faring as well. He was wrapped head to toe in heavy white blankets, with only his mouth and a single gray hand exposed. A plastic tube ran from his lips back behind the chair; he never moved for the duration of my visit. From a far room, the angry wailings of another brain-injured patient broke the calm. As I passed that soldier's room, I could see him sitting on the edge of his bed, swiping an arm at the nurse who was trying to help him. Behavioral outbursts, particularly those driven by agitation, are a common side effect of brain injury.

What looks otherworldly to us now will be commonplace in a matter of years. Projections based on a recent VA report suggest that 400,000 veterans deployed in the global war on terrorism will file for disability. Can such a number be adequately treated? With the lifetime costs of civilian brain injuries escalating, are local communities prepared for the complex treatment measures many veterans will require?

In high heels and a business suit, Marilyn Price Spivack makes an unlikely rock star, but in the world of brain-injury experts, that's exactly the image she conjures up. She is innately tenacious, bold, and energetic. The availability of cognitive, neurobehavioral, and mental health services is sorely lacking, Spivack explains. Men and women in the military will receive excellent care for a time, but eventually, they are going back to their communities.

"The military is doing an extraordinary job in saving young soldiers and treating them through the acute rehabilitation phase," says Spivack, who works with the brain-injured population at Spaulding Rehabilitation Hospital in Boston. In the early 1980s she founded the Brain Injury Association, today the foremost advocacy organization for TBI survivors.

"Now the government must make a commitment to help them in their recovery, but where are the resources going to come from? As brain-injury professionals, we know that TBI services aren't available in many places across the country, and we are aware of huge holes in the system," she says. "Frankly, I'm frustrated and angry about the government's refusal to give the TBI population the support it desperately needs."

Spivack is not being glib; the giant holes are glaringly apparent. Many states do not

have a single brain-injury rehabilitation center, and of the states that do offer some level of TBI treatment, few actually provide enough assistance to acquire even the most basic level of specialized care. At rates that can exceed a thousand dollars a day for postacute TBI rehabilitation, there aren't many American families that can afford a month's worth of treatment, much less the recommended minimum of 90 days.

As recently as mid-July 2006, the VA Office of the Inspector General admitted that patients and families were dealing with major inadequacies. The reality is that a fundamental level of care is simply absent in most states.

The military did not anticipate the magnitude of the problem, and now they are scrambling to add new brain-injury programs and services. Problems experienced by patients and families include inadequate or absent communication with case managers, lack of follow-up care, and being forced to pay out-of-pocket for necessary treatments and medication.

An evaluation of TBI programs and services conducted by the Institute of Medicine reads like a list of indictments. It concludes that "finding needed services is, far too often, an overwhelming logistical, financial, and psychological challenge . . . . the quality and coordination of postacute TBI service systems remains inadequate."

Samuel Reyes Jr. had never heard the term "traumatic brain injury" before he enlisted in the Marines. As a machine gunner who patrolled Route Mobile near Fallujah, he was well aware of the loss of limb and life. He regularly saw the unspeakable, and then he lived it.

On September 6, 2004, Reyes rode in the back of a seven-ton supply truck with his patrol buddies and members of the Iraqi National Guard. A suicide bomber pulled up next to the truck and detonated its payload of C-4 explosive and 250-millimeter shells. The blast reduced the truck to little more than a chewed-up driveshaft. Only Reyes and four other marines survived the attack.

Reyes's body sustained a range of trauma in the attack. The impact of the blast cleaved his tongue in two and tore open his abdomen from rib cage to navel. It slammed both his knees into a metal barrier and peppered his back with shrapnel. His left arm was blown open to the bone.

"I remember waking up, being on the street, being hot like I was on fire," Reyes recalls. "People were talking to me, asking questions I couldn't understand. Someone told me I got hit by an IED [improvised explosive device], and I got scared because I knew what it meant."

Reyes could not have guessed what had happened inside his skull.

Blast-related brain injuries like those sustained by Reyes can deliver multiple TBIs. First there is barotrauma, in which the body suffers the same magnitude of pressure

felt deep underwater. It's theorized that portions of the brain swell and decompress almost instantly during this stage, causing a host of cellular defects throughout the brain. Objects like shrapnel and gravel penetrate the skull, ping-ponging within the cranium walls. The force of the blast then blows an individual against an object, like a wall or a roof, causing blunt trauma to the head. Finally, in response to these injuries, the brain releases a metabolic cascade of neurochemicals that have a toxic effect on brain tissue. Reyes had no penetrating fragments; he experienced three of the four blast insults.

Reyes's ride through the military's medical system wasn't as clean as most. The medevac helicopters never arrived, so he was trucked to an ER. His heart stopped on the way to Baghdad – twice. Reyes awoke in a blur of bandages, surrounded by other wounded soldiers. Later that day, his platoon commander appeared from out of the haze and told him seven of his friends had died in the blast. The accompanying Iraqi soldiers had all died as well, he said.

"I had already lost a lot of friends before that, and this was another really big kick," Reyes says. "It's really bad to feel it, to hear it, and to know it."

The lieutenant left Reyes alone with his grief, and eventually Reyes's mind wandered to his own well-being. "It was all really going downhill then," Reyes says. "I was wondering what was going to happen to my military career, or if I could ever have a career at all anywhere else. It was hard to think of all that."

At the time of his injury, Reyes had only two more weeks of duty remaining before his tour was over. A natural-born athlete, he had planned to try out for Marine Recon, a component of special operational forces, and then move on to Officer Cadet School. He dreamed of someday leading his own platoon, then working his way up the chain of command until retirement. His entire future began to crumble away as he lay helpless among the damaged.

In less than a day, Reyes was transported to Balad, where a critical care air transport team accompanied him to Landstuhl. There he regained enough strength to make it to the National Naval Medical Center in Bethesda, Maryland.

"I was just waiting at Bethesda," Reyes explains. "By then, I was walking a bit better, but I still had a lot of headaches, a lot of pain, and vision blurs." Prior to his injury, Reyes had perfect eyesight; now he wears glasses in order to drive.

After a couple of days as an inpatient, Reyes was discharged to Camp Pendleton, near San Diego, where his father saw him for the first time since his injury.

"I was just happy to see he was alive and walking, but I knew something was different," Reyes Sr. tells me. "I could tell by the expression on his face that he didn't know me at first."

Reyes accompanied his father home for a three-week medical leave. During his

entire journey through the military's most elite treatment centers, nobody mentioned anything about a traumatic brain injury to him – the most that was discussed was the likelihood of a mild concussion. Meanwhile, Reyes's concentration was shot, his tolerance was low, and he still could not shake the terrible headaches. He figured he was just a little shaken up and that his head would clear in a short time.

During his convalescence at home, Reyes didn't tell his family or friends about his memory gaps. Initially, he recognized no one. Reyes's father grew increasingly concerned.

"I had to keep explaining things to him," Reyes Sr. says. "He would ask me how everyone was, and I would have to tell him who they were and how he was related to them."

Reyes smiled and shook the hands of high school buddies and cousins, trusting that his memory would be jogged, but other problems began to creep in. Once, he drove an old girlfriend to work and then lost his sense of direction. When he dropped her off, he had a full tank of gas. He pulled into his driveway hours later with less than a quarter of a tank. Reyes also began drinking heavily; it was the only thing that soothed the searing pain in his head.

When he returned to Camp Pendleton that October, Reyes complained and complained, but the Marines put him back to work training new recruits. He misidentified guns; he forgot to include details about special combat procedures. It took the Marines a month to realize that Reyes wasn't the same, but instead of looking deeper, he says they simply allowed him to whittle his time away playing video games in the barracks while the rest of his friends prepared for another tour in Iraq. Finally, in June 2005, out of concern for Reyes's unrelenting headaches, a civilian doctor tested him for neurological problems. It was the first time Reyes heard the term "brain injury."

"I didn't know what a brain injury was, how it was caused, what it did, or what it was going to do to me," Reyes says. "It was just another term. They told me I would have to deal with these problems my whole life and that I needed to work with it and to find ways to live with it."

The military sent Reyes straight to the polytrauma center in Palo Alto. "They told me that his mild concussion wasn't as mild as they thought it was," Reyes Sr. says, recalling his first meeting with the Palo Alto treatment team. The team told both father and son that the memory damage might be permanent but that the son could still benefit from rigorous rehabilitation.

At Palo Alto, Reyes spent more than a year learning to learn again. The rehab team gave him a handheld organizer that beeps when he has appointments. They taught him meditation in hopes of relieving his anger. They educated him about brain injury and warned him that it would probably be tough on his social life.

Reyes is currently stationed back at Camp Pendleton. His primary duty involves chauffeuring a sergeant major around the base, a job he feels comfortable doing. As he grows more aware of his limitations, he is beginning to draw connections between his injury and its effect on his life.

"I don't really tell people about my injury," he says. "I don't like to go out at all. I stay inside and do things with people I know. I don't talk to my friends as much. When I get really upset, I forget how to calm myself."

Reyes's injury may be fresh, but his challenges mirror the complaints I hear from other survivors many years after the injury. Isolation, addiction, agitation—they are all quintessential characteristics of a serious TBI. When I ask officials in the VA system if they knew about the long-term outcomes faced by blast-injury survivors, I am met with shoulder shrugs. The injury is too new, the research is ongoing, the book is still being written.

I ask Reyes's father if he has any advice for other families dealing with the effects of a blast injury. "There ain't no really easy way to get through this," Reyes Sr. says. "You got to hope like hell someone is there to help you."

After five months of multiple transports between VA hospitals in Bethesda and Tampa, Seabee Pete Reid was finally cleared to return home. He still struggles with frequent nightmares, and sometimes he asks for the car keys, thinking he can still drive. His behavioral outbursts occur only every few days now.

"When someone dies, you go through all the steps of grieving," says his wife, Michele. "When someone goes through what we have, you grieve over and over because the TBI never goes away. This has ripped our family apart emotionally, physically, and financially. He was once the strong one who kept our lives together, and now our roles have changed drastically."

Pete Reid has a good sense of what he has lost, and what remains. "My biggest problem right now is staying focused," he says. "But I also miss being able to drive and do things around the house. It's frustrating to be taken care of, to not be able to wash myself and use the toilet on my own."

Reid knows he won't return to the service, but he still carries a strong sense of duty. I ask him what he sees himself doing 10 years from now, and he doesn't hesitate a moment in his answer. "I hope to help other vets so they don't have to go through what my wife has had to deal with," he says. "To me it seems like we had a lot of paperwork and mess to deal with. If they're going through the trouble of fixing me up, then they ought to help walk us through the red tape."

In its ambitious efforts to save lives, the military did not expect the dire circumstances that await surviving soldiers. With most other kinds of injuries and disorders, there are a wealth of services in place. Any heart patient can find affordable treatment within city limits, and any kidney patient can get dialysis

within state lines. But brain-injury patients are stranded in their communities, isolated without basic services. Why have we devoted such tremendous effort to sustaining life while investing so little to support and nurture it? How did we become so shortsighted about such a serious problem?

Spivack agrees that the equation is unbalanced. "Our government will spend whatever it takes in pharmacology and technology to save people, and if they don't die, it's OK," she says. "Prevent fatality. They speak to caring, but meanwhile services are being cut and access is an issue. When we first began this effort, everybody talked about the quality of life, maximizing functionality. It costs money, and a lifetime of commitment."

Today Samuel Reyes Jr. perseveres despite the realities of his impairments. He plans to enroll in college and pursue a career in business management. "I expect school to be really hard, but I just want to try," he says.

Behind the impairments, you can still sense the soldier. Reyes's determination is rivaled only by his loyalty to the Marines. He believes they'll take care of him, Semper Fi. I want to believe Reyes, but I know there are obvious problems with service delivery. What happens when he and others are taken off active duty? In my eyes, he's the future. He's one of the thousands of veterans who will be in routine contact with brain-injury centers, asking for advice and help. Bolles points out that the actual number of troops wounded in Iraq is likely to betwice as many as reported. Will local VA hospitals have brain-injury clinicians ready to deal with a plague of psychological and social issues? Can communities already overburdened with brain-injury patients sustain the new influx of veterans?

The military has done a spectacular job repairing bodies, but it has not yet learned how to put lives back together. "More lives are being saved," says Bolles. "At the same time, those that are being saved are the more critically injured. There's a higher incidence of permanently disabled people." America isn't prepared for the injured's medical demands. After the dream-team care is finished, soldiers are finding themselves trapped in a nightmare.

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This collection of books illustrates the range and complexity of the subject matter which we touch upon in Blood Heat and Dust.

The Borden Institute of the US Army Medical Department and is affiliated to the Walter Reed Medical Center in Washington. It publishes a wide range of books on military medical matters, some of which (marked*) are available to download in PDF format. Volumes in chronological order which are relevant to this text include:

Medical Consequences of Nuclear Warfare *(1989) - Addresses the increasingly important medical challenges of the consequences and management of radiation injuries. Publisher: Department of the Army, Office of The Surgeon General, Borden Institute. 1989: 287 p.; ill. 1999-repr.

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Military Medical Ethics Vol. 1 (2003) and **Military Medical Ethics Vol. 2** (2003) - Explores the ongoing tension between the medical profession and the profession of arms as experienced by the military physician, including an extensive and detailed discussion of the many lessons learned from previous wars. Topics range from discussions of traditional medical ethics, military ethics, and the unique field of military medical ethics, to a discussion of medicine gone awry, as exemplified by the Nazi doctors, the Japanese biomedical experimentation programs during the WWII era, and the radiation experiments conducted in the United States. The authors were selected based on their expertise in their respective academic disciplines. Some are uniformed officers; some are civilian academics. Many support military medicine; a few do not. Combined they provide a lively discussion of the topics covered in these two volumes. Although written for uniformed medical officers, this book is also

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Emergency War Surgery (2004) - Although called the 3rd US Revision, this edition of Emergency War Surgery represents an entirely new Handbook. All material is new and revised to reflect lessons learned from ongoing American involvement in Southwest Asia. The Handbook takes a bulleted manual style in order to optimize its use as a rapid reference. Drafted by subspecialty experts, it was then updated by surgeons returned from yearlong deployments in Iraq and Afghanistan. A collaborative effort of the Borden Institute and the AMEDD Center & School, this Handbook is an essential tool for the management of forward combat trauma.

Military Preventive Medicine: Mobilization and Deployment, Vol 2 (2005) - Offers comprehensive research on a range of topics related to preventive medicine, including the exploration of epidemiology in the field, various infectious diseases, preventive medicine efforts following disasters and the effects of post-deployment on soldiers. Publisher: Department of Defence, Office of The Surgeon General, US Army, Borden Institute. 2005: 735 p.; ill.

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Medical Aspects of Chemical Warfare (2008) - a comprehensive source of the information available on chemical agents, this book will increase the level of preparedness and response capability of military and civilian practitioners responsible for chemical casualty care. Includes detailed explanations of chemical detectors and protection equipment, diagnosis, decontamination techniques, established and emerging countermeasures, and therapy techniques, as well as the history of chemical warfare and casualty management.

War Surgery in Afghanistan and Iraq, a Series of Cases, 2003-2007 (2008) - describes the management of nearly 100 cases of acute combat trauma, conducted in the forward austere operative environment of war in the 21st century. Presented with vivid surgical photos, the cases encompass the spectrum of trauma that characterizes war today, as well as the medical interventions constantly evolving to treat these wounds. Publisher: Department of Defense, Office of The Surgeon General, US Army, Borden Institute. 2008: 442 p.; ill.

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Care of the Combat Amputee (2009) - addresses all aspects of combat amputee care ranging from surgical techniques to long-term care, polytrauma and co-morbidities such as traumatic brain injury and burns, pain management, psychological issues, physical and occupational therapy, VA benefits, prosthetics and adaptive technologies, sports and recreational opportunities, and return to duty and vocational rehabilitation. Written by experts in the military, Veterans Administration, and private sector, the book provides a significant update to the field of rehabilitation, with comprehensive coverage of emerging approaches, techniques, and technologies for amputee care.

The Military Advanced Regional Anaesthesia and Analgesia (MARAA) Handbook (2009). *This fully illustrated instructional manual provides step-by-step instructions for performing regional anaesthesia blockades, including the latest techniques emerging from the battlefields of Iraq and Afghanistan. The handbook was conceived by deployed medical personnel who are teaching these techniques to their military colleagues as well as civilian practitioners. In addition to instructions for individual blocks, chapters address equipment, anesthetics, complications, pain management, air evacuation, and pediatric techniques. A spiral-bound paperback designed for practical use in the field and in the OR, the book has a water-resistant coating to protect its pages under harsh conditions. Also included in each book is an instructional DVD.

Blast Injury: Translating Research into Operational Medicine (2010): this monograph "describes pioneering biomedical research that forms the basis of our current knowledge of blast injury mechanisms."

Appendix Resource

The Hypertext World War II Project

bordeninstitute.army.mil/other_pub.html