

NATIONAL INSTITUTE OF OCEANOGRAPHY

WORMLEY, GODALMING, SURREY

Wave data

based on records taken by O.W.S. "Weather Explorer"

February 1953 — December 1954

by

J. DARBYSHIRE

N. I. O. INTERNAL REPORT No. A5

OCTOBER 1955

WAVE DATA

based on records taken by O.W.S. "Weather Explorer"

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WAVE DATA

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The data given in this report are based on wave records taken by the O.W.S. "Weather Explorer" with the N.I.O. shipborne wave recorder from February 1953 to December 1954. All the records were taken while the ship was stationary. Measurements are given for every 12 hours while the ship was on station, the height being the maximum wave height on the record, which was of 8 to 10 minutes duration, and the period the mean period of the highest third (with respect to height) of the waves on the record. The ship was always at position I ($59^{\circ}00'N$ $19^{\circ}00'W$ and, after August 1953, $61^{\circ}00'N$ $15^{\circ}20'W$) or J ($52^{\circ}30'N$ $20^{\circ}00'W$). No records were available for August 1953 or September 1954.

J. Darbyshire
National Institute of Oceanography
October 1955

FEBRUARY 1953

Day	Time	Wind Speed (knots)	Significant Period (sec)	Maximum Wave Height (feet)
<u>Position J</u>				
22	1200	20	11	24
22	2400	20	11	19
23	1200	35	10	20
23	2400	40	13.5	31
24	1200	32	13	47
24	2400	23	13	40
25	1200	30	13	19
25	2400	20	12.5	19
26	1200	18	12.5	26
26	2400	14	12	20
27	1200	18	10.5	12
27	2400	18	10.5	19
28	1200	23	13	18
28	2400	23	10.5	20
Mean period = 11.86 sec Mean maximum height = 23.86 feet				

Wave Period Distribution

No. of Records	Wave Period (sec)	%	Mean Height (feet)
5	13 to 14	36	31.0
3	12 " 13	21	21.7
2	11 " 12	14	21.5
4	10 " 11	29	17.8

Wave Height Distribution

No. of Records	Wave Height (feet)	%	Mean Period (sec)
2	Over 40	14	13.0
-	35 to 40	-	-
1	30 " 35	7	13.5
1	25 " 30	7	12.5
4	20 " 25	29	10.9
5	15 " 20	36	12.0
1	10 " 15	7	10.5

MARCH 1953

Day	Time	Wind Speed (knots)	Significant Period (sec)	Maximum Wave Height (feet)
<u>Position J</u>				
1	1200	22	10.5	15
1	2400	15	9.5	11
2	1200	21	8.5	10
2	2400	19	10.5	14
3	1200	26	12	20
3	2400	24	13	21
4	1200	20	13	23
4	2400	28	12	20
5	1200	32	12	21
5	2400	9	10.5	24
6	1200	18	10.5	13
6	2400	17	9.5	10
7	1200	16	9	11
7	2400	13	11	12
8	1200	13	11.5	14
8	2400	18	12	13
9	1200	22	10.5	13
9	2400	23	9	13
10	1200	23	10.5	14
10	2400	18	10.5	10
11	1200	20	9	14
11	2400	16	13	16
12	1200	21	13	17
12	2400	23	13	15
13	1200	25	12	14
13	2400	30	11	21
14	1200	9	10	19
Mean period = 10.98 sec Mean maximum height = 15.48 feet				

Wave Period Distribution

No. of Records	Wave Period (sec)	%	Mean Height (feet)
5	13 to 14	18	18.4
5	12 " 13	18	17.6
3	11 " 12	11	15.7
8	10 " 11	30	15.2
5	9 " 10	18	11.8
1	8 " 9	4	10.0

Wave Height Distribution

No. of Records	Wave Height (feet)	%	Mean Period (sec)
7	20 to 25	26	10.5
5	15 " 20	18	11.9
15	10 " 15	56	10.2

APRIL 1953

Day	Time	Wind Speed (knots)	Significant Period (sec)	Maximum Wave Height (feet)
<u>Position I</u>				
1	2400	9	5	4
2	1200	25	9.5	17
2	2400	35	13.5	32
3	1200	10	13.5	25
3	2400	19	13	26
4	1200	38	13	42
4	2400	22	13.5	24
5	1200	25	12.5	18
5	2400	16	13.5	8
6	1200	2	11	11
6	2400	5	9	10
7	1200	2	8.5	9
7	2400	33	8.5	10
8	1200	22	8	14
8	2400	30	7	12
9	1200	25	8.5	17.5
9	2400	24	8.5	16
10	1200	35	9	19
10	2400	26	9	22
11	1200	20	9	15
11	2400	35	9.5	17
12	1200	30	9.5	21
12	2400	25	8	16
13	1200	30	8	16
13	2400	12	8	10
14	1200	23	10.5	10
14	2400	22	9	17
15	1200	20	10.5	12
15	2400	32	9	19
16	1200	25	9	19
16	2400	9	9	23
17	1200	0	8.5	11
17	2400	22	8.5	10
18	1200	24	7	8.5
18	2400	13	8	6
19	1200	17	8.5	8
19	2400	12	9	7
20	1200	18	8.5	6
20	2400	15	8	10
21	1200	10	9	6
21	2400	10	8.5	6
22	1200	13	8	5
22	2400	20	9	8.5

Continued

Day	Time	Wind Speed (knots)	Significant Period (sec)	Maximum Wave Height (feet)
23	1200	18	8	15
23	2400	16	9	13
24	1200	23	9.5	19
24	2400	8	9.5	15
25	1200	17	13	21
25	2400	13	12.5	15
26	1200	9	13	8
26	2400	22	6	5
27	1200	20	6	1.5
Mean period = 9.42 sec Mean maximum height = 14.17 feet				

Wave Period Distribution

No. of Records	Wave Period (sec)	%	Mean Height (feet)
8	13 to 14	15	23.2
2	12 " 13	4	16.5
1	11 " 12	2	11.0
2	10 " 11	4	11.0
17	9 " 10	33	15.7
17	8 " 9	33	10.9
2	7 " 8	4	10.2
2	6 " 7	4	3.2
1	5 " 6	2	4.0

Wave Height Distribution

No. of Records	Wave Height (feet)	%	Mean Period (sec)
1	Over 40	2	13.0
-	35 to 40	-	-
1	30 " 35	2	13.5
2	25 " 30	4	13.2
5	20 " 25	10	10.8
16	15 " 20	31	9.3
12	10 " 15	23	8.9
13	5 " 10	25	9.0
2	0 " 5	4	3.2

MAY 1953

Day	Time	Wind Speed (knots)	Significant Period (sec)	Maximum Wave Height (feet)
<u>Position J</u>				
17	1200	10	9.5	16
17	2400	0	10.5	13
18	1200	3	9.5	10
18	2400	7	9.5	7
19	1200	19	9	6
19	2400	17	10	8
20	1200	32	9	19
20	2400	25	10.5	27
21	1200	22	9.5	18
21	2400	15	8.5	15
22	1200	9	8	12
22	2400	2	7.5	10
23	1200	4	7	6
23	2400	9	7	8.5
24	1200	29	8.5	15
24	2400	14	9	10
25	1200	18	8	8.5
25	2400	27	7.5	10
26	1200	22	9.5	16
26	2400	25	10.5	16
27	1200	12	9	14
27	2400	16	8.5	16
28	1200	20	10.5	16
28	2400	13	11	14
29	1200	20	11	10
29	2400	18	7	6
30	1200	15	8	8
30	2400	21	7	7
31	1200	15	8	6
31	2400	13	10	8
Mean period = 8.93 sec Mean maximum height = 11.87 feet				

Wave Period Distribution

No. of Records	Wave Period (sec)	%	Mean Height (feet)
2	11 to 12	7	12.0
6	10 " 11	20	14.6
9	9 " 10	30	12.9
7	8 " 9	23	11.5
6	7 " 8	20	7.9

Wave Height Distribution

No. of Records	Wave Height (feet)	%	Mean Period (sec)
1	25 to 30	3	10.5
-	20 " 25	-	-
9	15 " 20	30	9.3
9	10 " 15	30	9.2
11	5 " 10	37	8.2

JUNE 1953

Day	Time	Wind Speed (knots)	Significant Period (sec)	Maximum Wave Height (feet)
<u>Position J</u>				
1	1200	14	10.5	6
1	2400	17	8.5	7
2	1200	4	8.5	7
2	2400	15	8.5	5
3	1200	12	9.5	7
3	2400	10	9.5	10
4	1200	4	9.5	7.5
4	2400	3	8.5	10
5	1200	4	8.5	11
5	2400	14	10.5	7
27	2400	7	7	3
28	1200	8	7	4
28	2400	9	8.5	3.5
29	1200	5	10.5	7
29	2400	5	8.5	3.5
30	1200	13	9	7.5
30	2400	11	9	8
Mean period = 8.91 sec Mean maximum height = 6.71 feet				

Wave Period Distribution

No. of Records	Wave Period (sec)	%	Mean Height (feet)
3	10 to 11	18	6.7
5	9 " 10	29	8.0
7	8 " 9	41	12.4
2	7 " 8	12	3.5

Wave Height Distribution

No. of Records	Wave Height (feet)	%	Mean Period (sec)
3	10 to 15	18	8.8
10	5 " 10	59	9.4
4	0 " 5	23	7.7

JULY 1953

Day	Time	Wind Speed (knots)	Significant Period (sec)	Maximum Wave Height (feet)
<u>Position J</u>				
1	1200	7	8.5	7
1	2400	8	7	6
2	1200	13	8	4
2	2400	12	7	6
3	1200	14	7	7
3	2400	15	6.5	5
4	1200	23	7	12
4	2400	11	7.5	11
5	1200	13	8	10
5	2400	22	9.5	15
6	2400	26	7	15
7	1200	36	9	18
7	2400	29	10.5	21
8	1200	27	10	23
8	2400	18	8.5	11
9	1200	13	7	7
9	2400	7	9	8
10	1200	20	7	8
10	2400	22	7	10
11	2400	17	8	9
12	1200	28	8	11
12	2400	19	8	9
13	1200	18	8	9
13	2400	20	8	15
14	1200	22	8	17
14	2400	13	8	11
15	1200	10	7	7
15	2400	7	9.5	10
16	1200	25	7.5	11
16	2400	22	8.5	13
17	1200	13	7.5	14
17	2400	6	7.5	7
Mean period = 7.95 sec Mean maximum height = 10.84 feet				

Wave Period Distribution

No. of Records	Wave Period (sec)	%	Mean Height (feet)
2	10 to 11	6	22.0
4	9 " 10	12	12.7
12	8 " 9	38	10.5
13	7 " 8	41	9.3
1	6 " 7	3	5.0

Wave Height Distribution

No. of Records	Wave Height (feet)	%	Mean Period (sec)
2	20 to 25	6	10.2
5	15 " 20	16	8.3
11	10 " 15	34	7.9
13	5 " 10	41	7.5
1	0 " 5	3	8.0

SEPTEMBER 1953

Day	Time	Wind Speed (knots)	Significant Period (sec)	Maximum Wave Height (feet)
<u>Position J</u>				
20	2400	53	12	31
21	1200	40	12	31
21	2400	18	10	17
22	1200	30	9.5	15
23	1200	30	9.5	20
23	2400	20	9.5	12
24	1200	20	9	10
24	2400	16	9	8
25	1200	10	8	7
26	1200	30	7.5	18
26	2400	30	13	24
27	1200	36	13	29
27	2400	25	13	20
28	2400	30	12	20
29	1200	25	13.5	25
29	2400	36	10.5	23
30	2400	33	12	27
Mean period = 10.76 sec Mean maximum height = 19.82 feet				

Wave Period Distribution

No. of Records	Wave Period (sec)	%	Mean Height (feet)
4	13 to 14	24	24.5
4	12 " 13	24	27.2
-	11 " 12	-	-
2	10 " 11	12	20.0
5	9 " 10	29	13.0
1	8 " 9	6	7.0
1	7 " 8	6	18.0

Wave Height Distribution

No. of Records	Wave Height (feet)	%	Mean Period (sec)
2	30 to 35	12	12.0
3	25 " 30	18	12.8
5	20 " 25	29	11.6
3	15 " 20	18	9.0
2	10 " 15	12	9.2
2	5 " 10	12	8.5

OCTOBER 1953

Day	Time	Wind Speed (knots)	Significant Period (sec)	Maximum Wave Height (feet)
<u>Position J</u>				
1	1200	15	13	19
1	2400	10	12.5	18
2	1200	20	11	18
2	2400	25	10.5	11
3	1200	15	12	16
3	2400	15	9.5	8
4	1200	25	9.5	5.5
5	1200	20	8.5	8
5	2400	20	8.5	7
6	1200	16	8.5	6
6	2400	20	8.5	9.5
7	1200	16	8.5	11
7	2400	16	8.5	7
8	1200	16	9	8
8	2400	25	8.5	8
9	1200	25	8.5	8
9	2400	37	8.5	16.5
10	1200	29	9.5	17
10	2400	20	9	12
11	1200	20	9.5	10
11	2400	20	11	21.5
<u>Position I</u>				
31	1200	15	8.5	10
31	2400	15	9	9
Mean period = 9.57 sec Mean maximum height = 11.48 feet				

Wave Period Distribution

No. of Records	Wave Period (sec)	%	Mean Height (feet)
1	13 to 14	4	19.0
2	12 " 13	9	17.0
2	11 " 12	9	19.7
1	10 " 11	4	11.0
7	9 " 10	30	9.9
10	8 " 9	44	9.1

Wave Height Distribution

No. of Records	Wave Height (feet)	%	Mean Period (sec)
1	20 to 25	4	11.0
6	15 " 20	26	11.1
5	10 " 15	22	9.2
11	5 " 10	48	8.8

NOVEMBER 1953

Day	Time	Wind Speed (knots)	Significant Period (sec)	Maximum Wave Height (feet)
<u>Position I</u>				
1	1200	15	8	14
1	2400	17	9.5	17
2	1200	25	9.5	17
2	2400	30	10	19
3	1200	10	11	17
3	2400	15	11.5	13
4	1200	30	9.5	17
4	2400	25	12	22
5	1200	25	12	19
5	2400	25	10.5	21
6	1200	25	9	20
6	2400	25	12	20
7	1200	15	14	28
7	2400	15	14	17
8	2400	20	10.5	13
9	1200	20	9.5	10
9	2400	30	8.5	12
10	2400	33	12	36
11	1200	25	11	17
11	2400	37	10.5	23
12	2400	25	9.5	13
13	1200	7	9.5	12
13	2400	15	9.5	9
14	1200	20	8.5	13
14	2400	20	8.5	8
15	2400	48	13	46
16	1200	43	15	45
16	2400	37	18	44
21	1200	37	11	30
21	2400	30	12.5	24
22	2400	37	11	21
23	1200	37	12	35
23	2400	20	12	27
Mean period = 11.05 sec Mean maximum height = 21.18 feet				

Wave Period Distribution

No. of Records	Wave Period (sec)	%	Mean Height (feet)
1	18 to 19	3	44.0
-	17 " 18	-	-
-	16 " 17	-	-
1	15 " 16	3	45.0
2	14 " 15	6	22.5
1	13 " 14	3	46.0
7	12 " 13	21	26.1
5	11 " 12	15	19.6
4	10 " 11	12	19.0
8	9 " 10	24	14.4
4	8 " 9	12	11.8

Wave Height Distribution

No. of Records	Wave Height (feet)	%	Mean Period (sec)
3	Over 40	9	15.3
2	35 to 40	6	12.0
1	30 " 35	3	11.0
2	25 " 30	6	13.0
6	20 " 25	18	11.1
9	15 " 20	27	10.9
8	10 " 15	24	9.4
2	5 " 10	6	9.0

DECEMBER 1953

Day	Time	Wind Speed (knots)	Significant Period (sec)	Maximum Wave Height (feet)
<u>Position I</u>				
14	2400	20	13	19
15	1200	5	11	14
15	2400	37	11	18
16	2400	30	12	17
17	2400	20	10.5	30
18	1200	25	11	21
18	2400	20	12	20
19	1200	37	9.5	20
22	1200	30	10	8
22	2400	30	12	35
24	2400	7	11.5	15
25	1200	30	8.5	17
25	2400	30	9	20
26	1200	25	10.5	22
27	1200	25	13	28
27	2400	37	11	21
28	1200	15	10.5	16
28	2400	25	10.5	14
29	1200	37	9.5	16
30	2400	25	13	25
31	1200	30	12	20
Mean period = 11.00 sec Mean maximum height = 19.81 feet				

Wave Period Distribution

No. of Records	Wave Period (sec)	%	Mean Height (feet)
3	13 to 14	14	24.0
4	12 " 13	19	23.0
5	11 " 12	24	17.8
5	10 " 11	24	18.0
3	9 " 10	14	18.7
1	8 " 9	5	17.0

Wave Height Distribution

No. of Records	Wave Height (feet)	%	Mean Period (sec)
1	35 to 40	5	12.0
1	30 " 35	5	10.5
2	25 " 30	10	13.0
7	20 " 25	33	10.7
7	15 " 20	33	10.9
2	10 " 15	10	10.7
1	5 " 10	5	10.0

JANUARY 1954

Day	Time	Wind Speed (knots)	Significant Period (sec)	Maximum Wave Height (feet)
<u>Position J</u>				
21	1200	15	10	11
22	1200	20	12	26
23	1200	25	10	17
23	2400	20	10	21
24	1200	25	13	25
25	1200	10	12	28
25	2400	10	12	17
26	1200	25	10	15
26	2400	15	11	16
27	1200	37	9.5	15
28	2400	25	13	31
29	1200	25	12	25
29	2400	25	10.5	16
30	1200	5	9	10
30	2400	20	9	8
31	1200	37	8.5	12
Mean period = 10.72 sec Mean maximum height = 18.31 feet				

Wave Period Distribution

No. of Records	Wave Period (sec)	%	Mean Height (feet)
2	13 to 14	12	28.0
4	12 " 13	25	24.0
1	11 " 12	6	16.0
5	10 " 11	31	16.0
3	9 " 10	19	11.0
1	8 " 9	6	12.0

Wave Height Distribution

No. of Records	Wave Height (feet)	%	Mean Period (sec)
1	30 to 35	6	13.0
4	25 " 30	25	12.2
1	20 " 25	6	10.0
6	15 " 20	38	10.5
3	10 " 15	19	9.2
1	5 " 10	6	9.0

FEBRUARY 1954

Day	Time	Wind Speed (Beaufort Force)	Significant Period (sec)	Maximum Wave Height (feet)
<u>Position J</u>				
2	1200	6	11	21
2	2400	6	11	19
3	1200	6	10	12
3	2400	8	10	23
4	2400	8	14	31
5	1200	5	13	31
5	2400	3	10	12
6	1200	10	10	35
7	1200	6	11	21
7	2400	4	14	30
8	2400	2	11	13
9	1200	5	8	9
9	2400	4	9	9
10	1200	4	8	8
10	2400	3	9	9
11	1200	6	10	12
11	2400	6	9	12
12	1200	7	9	18
12	2400	8	10	32
Mean period = 10.37 sec Mean maximum height = 18.79 feet				

Wave Period Distribution

No. of Records	Wave Period (sec)	%	Mean Height (feet)
2	14 to 15	11	30.5
1	13 " 14	5	31.0
-	12 " 13	-	-
4	11 " 12	21	18.5
6	10 " 11	31	21.0
4	9 " 10	21	12.0
2	8 " 9	11	8.5

Wave Height Distribution

No. of Records	Wave Height (feet)	%	Mean Period (sec)
1	35 to 40	5	10.0
4	30 " 35	21	12.7
-	25 " 30	-	-
3	20 " 25	16	10.7
2	15 " 20	11	10.9
5	10 " 15	26	10.0
4	5 " 10	21	8.5

MARCH 1954

Day	Time	Wind Speed (Beaufort Force)	Significant Period (sec)	Maximum Wave Height (feet)
<u>Position J</u>				
6	2400	4	9.1	16
7	1200	4	13.4	22
7	2400	2	11.2	18
8	1200	3	12.0	25
8	2400	3	11.3	15
9	1200	2	13.2	16
9	2400	4	11.3	18
10	2400	6	10.4	19
11	1200	3	9.2	16
11	2400	0	10.4	20
12	1200	3	10.3	16
12	2400	3	9.9	10
13	1200	2	8.8	11
13	2400	4	10.6	9
14	1200	5	10.9	12
14	2400	6	8.4	9
15	1200	7	6.9	9
15	2400	7	8.2	11
16	1200	6	9.1	18
16	2400	5	10.2	17
17	2400	6	9.9	12
18	1200	6	8.2	15
18	2400	4	10.2	12
19	1200	4	8.4	11
20	1200	2	11.9	26
20	2400	3	10.7	11
21	2400	4	10.3	10
22	1200	6	9.6	9
23	1200	6	8.4	12
23	2400	2	9.7	12
24	1200	5	9.4	12
24	2400	4	9.9	10
25	1200	6	10.4	16
25	2400	5	10.7	12
26	1200	5	11.2	13
26	2400	6	8.4	9
27	1200	7	9.7	16
Mean period = 10.05 sec Mean maximum height = 14.19 feet				

Wave Period Distribution

No. of Records	Wave Period (sec)	%	Mean Height (feet)
2	13 to 14	5	19.0
1	12 " 13	3	25.0
5	11 " 12	13	18.0
11	10 " 11	30	14.0
10	9 " 10	27	13.1
7	8 " 9	19	11.1
-	7 " 8	-	-
1	6 " 7	3	9.0

Wave Height Distribution

No. of Records	Wave Height (feet)	%	Mean Period (sec)
2	25 to 30	5	11.9
2	20 " 25	5	11.9
13	15 " 20	35	10.3
15	10 " 15	41	9.8
5	5 " 10	14	8.8

APRIL 1954

Day	Time	Wind Speed (Beaufort Force)	Significant Period (sec)	Maximum Wave Height (feet)
<u>Position I</u>				
17	1200	5	10.7	11
18	1200	7	8.8	12
19	1200	4	9.3	13
20	1200	6	9.0	17
20	2400	4	8.4	9
21	1200	4	8.5	8
21	2400	4	9.0	5
22	1200	4	9.2	5
22	2400	3	9.2	8
23	1200	4	9.6	8
23	2400	4	10.0	9
24	1200	4	9.1	10
24	2400	5	8.2	5
25	1200	4	6.6	4
26	1200	4	6.9	5
26	2400	3	8.5	9
27	1200	3	8.1	6
27	2400	4	9.3	5
28	1200	4	10.4	6
28	2400	3	7.2	6
29	1200	6	8.2	8
29	2400	6	10.6	10
30	2400	7	9.8	17
Mean period = 8.90 sec Mean maximum height = 8.52 feet				

Wave Period Distribution

No. of Records	Wave Period (sec)	%	Mean Height (feet)
4	10 to 11	17	9.0
9	9 " 10	39	9.8
7	8 " 9	30	8.1
1	7 " 8	4	6.0
2	6 " 7	9	4.5

Wave Height Distribution

No. of Records	Wave Height (feet)	%	Mean Period (sec)
2	15 to 20	9	9.4
5	10 " 15	22	9.7
15	5 " 10	65	8.7
1	0 " 5	4	6.6

MAY 1954

Day	Time	Wind Speed (Beaufort Force)	Significant Period (sec)	Maximum Wave Height (feet)
<u>Position I</u>				
1	1200	7	9.6	26
2	1200	7	9.0	15
2	2400	6	9.2	15
3	2400	5	8.5	13
4	1200	6	9.0	13
4	2400	6	8.7	9
5	1200	6	8.2	14
5	2400	4	9.8	15
6	1200	2	8.8	14
6	2400	4	10.0	10
7	1200	4	9.1	11
<u>Position J</u>				
29	2400	5	7.8	6
30	1200	4	7.9	7
31	1200	6	7.9	9
31	2400	4	11.9	15
Mean period = 9.03 sec Mean maximum height = 12.8 feet				

Wave Period Distribution

No. of Records	Wave Period (sec)	%	Mean Height (feet)
1	11 to 12	7	15.0
1	10 " 11	7	10.0
6	9 " 10	40	15.8
4	8 " 9	27	12.5
3	7 " 8	20	7.3

Wave Height Distribution

No. of Records	Wave Height (feet)	%	Mean Period (sec)
1	25 to 30	7	9.6
-	20 " 25	-	-
4	15 " 20	27	10.0
6	10 " 15	40	8.9
4	5 " 10	27	8.1

JUNE 1954

Day	Time	Wind Speed (Beaufort Force)	Significant Period (sec)	Maximum Wave Height (feet)
<u>Position J</u>				
1	1200	3	11.3	13
1	2400	4	8.5	8
2	1200	4	8.5	7
2	2400	6	8.5	8
3	2400	4	8.1	10
4	1200	6	7.3	9
4	2400	6	9.6	11
5	1200	5	8.7	9
6	1200	2	7.9	5
6	2400	0	7.1	6
7	1200	3	6.0	3
7	2400	7	8.5	13
8	2400	6	8.7	15
9	1200	5	8.4	12
9	2400	4	8.1	9
10	1200	4	8.5	9
10	2400	3	8.4	9
11	1200	4	9.7	9
11	2400	3	9.4	6
12	1200	3	8.8	5
13	1200	3	6.9	2
13	2400	4	6.3	3
14	1200	5	7.1	11
15	1200	6	7.3	7
16	1200	6	8.7	11
16	2400	5	9.8	13
17	2400	5	8.2	9
18	1200	7	9.4	14
18	2400	6	8.8	13
Mean period = 8.36 sec Mean maximum height = 8.93 feet				

Wave Period Distribution

No. of Records	Wave Period (sec)	%	Mean Height (feet)
1	11 to 12	3	13.0
-	10 " 11	-	-
5	9 " 10	17	10.6
15	8 " 9	52	13.3
5	7 " 8	17	7.6
3	6 " 7	10	2.7

Wave Height Distribution

No. of Records	Wave Height (feet)	%	Mean Period (sec)
1	15 to 20	3	8.7
10	10 " 15	34	9.0
15	5 " 10	52	8.3
3	0 " 5	10	6.4

JULY 1954

Day	Time	Wind Speed (Beaufort Force)	Significant Period (sec)	Maximum Wave Height (feet)
<u>Position I</u>				
10	2400	6	8.1	13
11	1200	5	7.1	9
12	1200	4	7.4	7
12	2400	5	7.9	6
13	1200	4	7.5	6
13	2400	4	7.6	6
14	1200	4	7.6	7
14	2400	5	7.5	4
15	2400	4	9.1	8
16	1200	4	6.6	6
16	2400	4	8.7	9
17	1200	6	9.0	19
17	2400	2	8.8	12
18	1200	3	9.9	10
18	2400	4	9.4	12
19	1200	7	7.5	10
19	2400	6	9.1	18
20	1200	6	9.3	19
20	2400	6	9.0	19
21	1200	6	8.1	15
21	2400	4	7.8	13
22	1200	3	7.2	6
22	2400	4	5.6	7
23	1200	6	7.8	11
24	1200	7	7.9	15
24	2400	6	7.2	13
25	1200	5	7.5	12
25	2400	5	7.4	8
26	1200	4	9.0	12
26	2400	6	7.9	14
27	1200	5	7.2	12
27	2400	6	8.4	14
28	1200	5	8.4	16
28	2400	5	6.5	16
29	1200	5	7.1	9
29	2400	6	8.2	16
30	1200	5	7.9	13
Mean period = 7.95 sec Mean maximum height = 11.41 feet				

Wave Period Distribution

No. of Records	Wave Period (sec)	%	Mean Height (feet)
8	9 to 10	22	14.6
7	8 " 9	19	13.6
19	7 " 8	51	9.5
2	6 " 7	5	11.0
1	5 " 6	3	7.0

Wave Height Distribution

No. of Records	Wave Height (feet)	%	Mean Period (sec)
9	15 to 20	24	8.4
14	10 " 15	38	8.2
13	5 " 10	35	7.4
1	0 " 5	3	7.5

AUGUST 1954

Day	Time	Wind Speed (Beaufort Force)	Significant Period (sec)	Maximum Wave Height (feet)
<u>Position J</u>				
21	2400	5	8.2	7
22	1200	4	7.6	6
22	2400	5	8.4	6

OCTOBER 1954

Day	Time	Wind Speed (Beaufort Force)	Significant Period (sec)	Maximum Wave Height (feet)
<u>Position I</u>				
3	1200	4	9.4	7
3	2400	6	7.1	10
4	1200	7	8.8	15
4	2400	4	9.9	23
5	1200	6	9.4	15
5	2400	6	10.6	20
6	2400	7	7.8	12
7	1200	6	10.6	21
7	2400	6	11.2	25
8	1200	8	13.2	29
8	2400	8	9.7	25
9	2400	8	11.0	29
10	1200	8	12.5	32
10	2400	7	12.2	32
11	2400	7	11.2	28
12	1200	7	10.9	22
13	1200	6	10.6	11
13	2400	5	9.7	15
14	1200	2	8.5	10
14	2400	3	10.6	9
15	1200	3	8.8	8
15	2400	2	8.8	7
16	1200	3	10.2	12
16	2400	5	9.1	11
17	1200	9	9.7	33
17	2400	9	11.0	33
18	1200	7	9.3	16
18	2400	5	9.0	15
19	2400	10	13.2	41
20	1200	7	12.1	35
20	2400	8	13.1	25
21	1200	6	10.4	20
21	2400	4	10.3	13
22	1200	2	9.1	9
22	2400	4	8.8	10
Mean period = 10.22 sec Mean maximum height = 19.37 feet				

Wave Period Distribution

No. of Records	Wave Period (sec)	%	Mean Height (feet)
3	13 to 14	9	31.7
3	12 " 13	9	33.0
4	11 " 12	11	28.7
8	10 " 11	23	16.0
10	9 " 10	29	16.9
5	8 " 9	14	10.0
2	7 " 8	6	11.0

Wave Height Distribution

No. of Records	Wave Height (feet)	%	Mean Period (sec)
1	Over 40	3	13.2
1	35 to 40	3	12.1
4	30 " 35	11	11.3
6	25 " 30	17	11.6
5	20 " 25	14	10.5
5	15 " 20	14	9.2
8	10 " 15	23	9.1
5	5 " 10	14	9.3

NOVEMBER 1954

Day	Time	Wind Speed (Beaufort Force)	Significant Period (sec)	Maximum Wave Height (feet)
<u>Position J</u>				
14	1200	6	9.0	13
15	1200	5	10.0	17
15	2400	0	9.7	13
16	1200	5	10.4	16
16	2400	6	10.0	12
17	1200	5	9.8	13
17	2400	5	9.5	12
18	1200	2	12.8	17
18	2400	6	11.9	15
19	1200	7	7.6	15
19	2400	6	10.0	19
20	1200	4	10.7	15
21	1200	6	9.8	19
21	2400	8	10.6	20
22	2400	4	10.9	15
23	1200	4	9.6	23
23	2400	6	10.2	16
24	1200	8	9.6	14
24	2400	8	10.4	24
25	2400	6	10.0	16
26	1200	7	9.6	22
27	1200	6	12.3	29
28	2400	7	12.3	28
29	1200	5	11.2	24
29	2400	7	10.4	18
30	2400	7	11.9	32
Mean period = 10.39 sec Mean maximum height = 18.35 feet				

Wave Period Distribution

No. of Records	Wave Period (sec)	%	Mean Height (feet)
3	12 to 13	12	24.7
3	11 " 12	12	23.7
11	10 " 11	42	17.1
8	9 " 10	31	16.1
-	8 " 9	-	-
1	7 " 8	4	15.0

Wave Height Distribution

No. of Records	Wave Height (feet)	%	Mean Period (sec)
1	30 to 35	4	11.9
2	25 " 30	8	12.3
5	20 " 25	19	10.3
12	15 " 20	46	10.4
6	10 " 15	23	9.6

DECEMBER 1954

Day	Time	Wind Speed (Beaufort Force)	Significant Period (sec)	Maximum Wave Height (feet)
<u>Position J</u>				
1	1200	8	9.5	16
1	2400	7	10.5	22
2	1200	9	12.5	35
2	2400	8	12.0	32
3	1200	7	11.5	24
3	2400	8	11.5	21
4	1200	6	11.0	26
<u>Position I</u>				
26	2400	7	12.5	23
30	2400	4	10.0	25
31	1200	3	10.0	14
31	2400	8	8.0	11
Mean period = 10.82 sec Mean maximum height = 22.64 feet				

Wave Period Distribution

No. of Records	Wave Period (sec)	%	Mean Height (feet)
3	12 to 13	27	30.0
3	11 " 12	27	23.7
3	10 " 11	27	20.3
1	9 " 10	9	16.0
1	8 " 9	9	11.0

Wave Height Distribution

No. of Records	Wave Height (feet)	%	Mean Period (sec)
1	35 to 40	9	12.5
1	30 " 35	9	12.0
2	25 " 30	18	10.5
4	20 " 25	37	11.5
1	15 " 20	9	9.5
2	10 " 15	18	9.0

