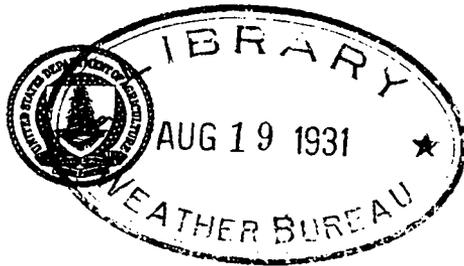


UNITED STATES DEPARTMENT OF AGRICULTURE
WEATHER BUREAU

INTERNATIONAL CODE
FOR
RADIO WEATHER REPORTS
FROM SHIPS

HE
7669
. IS7
1931

Used by the United States Weather Bureau
in broadcasting ships' weather reports from
United States Navy Radio Stations in accord-
ance with schedules given in United States
Weather Bureau Radio Circulars



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INTERNATIONAL CODE FOR RADIO WEATHER REPORTS FROM SHIPS

This code book is for use in the decoding of weather observations from ships that are included in the bulletins issued by the United States Weather Bureau and broadcast through United States Navy radio stations.

It is the international code adopted by the International Meteorological Organization at a conference held at Copenhagen, Denmark, in September, 1929. Marked advantages of the code are convenience and certainty of translation regardless of the nationality of the ship from which a weather report is sent. The code tables and explanations herein will also be useful to vessel masters in coding radiograms containing weather reports sent from ships on call.

DESCRIPTION OF CODE

The first four groups, of five figures each, designated as the Universal Data, are invariably the same. Additional data may be included but they are restricted to a choice of two combinations, designated Supplemental Data. Only one of the Supplemental Data combinations may be used in the same message with the Universal Data, and then in the prescribed arrangement and order. The first figure of the Supplemental Data always identifies the combination code that is being used.

In preparing radiograms in which this code is used, each item of data is given a distinctive symbol. The symbols and group arrangements are as follows:

Universal Data: PQLLL III GG DDF_{ww} BBVTT.

Supplemental Data: 6KdCN t_dd₁AWC_R.

(The identifying figure for this combination of groups is always the figure 6.)

Supplemental Data: 3C_LC_MC_HN t_dKdWN_L d₁fabb.

(The identifying figure for this combination of groups is always the figure 3.)

Ship reports included in bulletins broadcast by the Weather Bureau through Navy radio stations contain as a rule only the four Universal Groups.

KEY TO SYMBOL LETTERS

A = Amount and characteristic of barometric tendency expressed by a single figure. (See Table IX.)

a = Characteristic of barometric tendency during the period of three hours preceding the time of observation. (See Table X.)

BB = Pressure in whole millibars (initial 9 or 10 omitted). The values refer to sea level and include all corrections for index error, temperature, and gravity. (See Table VIII.)

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- bb = Amount of barometric tendency during the three hours preceding the time of observation expressed in units of one-fifth of a millibar. (See Table XI.)
- C = Form of predominating cloud. (See Table XVI.)
- C_H = Form of Upper (Cirrus) Cloud. (See Table XV.)
- C_L = Form of Low Cloud. (See Table XIII.)
- C_M = Form of Middle Cloud. (See Table XIV.)
- DD = Direction of the wind (True) near the surface. (See Table III.)
- d = Direction (True) from which swell comes. (See Table IV.)
- d_s = Direction of ship's course on scale (0-8). (See Table IV.)
- F = Force of the wind on the Beaufort scale. (Forces above 9 are reported as 9, with the actual force in a word at the end.) (See Table V.)
- f = Speed of ship in knots. (See Table XX.)
- GG = Greenwich mean time of observation (00 = midnight, 12 = noon, etc.).
- K = Swell in the open sea. (See Table XIX.)
- LLL = Latitude in degrees and tenths, the tenths being obtained by dividing the number of minutes by 6 and neglecting the remainder.
- lll = Longitude in degrees and tenths, the tenths being obtained as for latitude LLL.
- N = Total amount of sky covered with cloud. (See Table XVII.)
- N_L = Amount of Low Cloud. (See Table XVII.)
- P = Day of week. (See Table I.)
- Q = Octant of globe in which ship is situated. (See Table II.)
- TT = Temperature of the air in whole degrees Fahrenheit.
- t_a = Difference between air and sea temperature. (See Table XVIII.)
- V = Visibility or distance at which objects can be seen in daylight (or at which lights can be seen at night). (See Table XII.)
- W = Past weather—the weather in the interval preceding the time of observation. (See Table VII.)
- ww = The actual weather at the time of observation. (See Table VI.)

The following is an example of an observation coded, using only the four Universal Groups:

Description of data	Code index	Code table	Observation as taken	Observation as coded
Day of week.....	P	I.....	Tuesday.....	3
Octant of globe.....	Q	II.....	North latitude: 0° to 90° W.....	0
Latitude.....	L L L	}	North 42° 38'.....	4
				2
				6
Longitude.....	1 1	}	West 46° 22'.....	4
				6
Time of observation (G. M. T.).	G G	}	0000 G. M. T.....	3
				0
Wind direction (true).....	D D	} III.....	SSE.....	1
				4
Wind force (Beaufort).....	F	V.....	Moderate gale.....	7
Present weather.....	w w	} VI.....	Cloudy.....	0
				2
Barometer.....	B B	} VIII.....	29.74.....	0
				7
Visibility.....	V	XII.....	Poor visibility.....	5
Temperature of air °F.....	T T	}	54° F.....	5
				4

NOTE.—The letter "X" is sent for any missing or unavailable datum in any of the figure groups.

TABLES FOR DECODING RADIO WEATHER REPORTS FROM SHIPS AT SEA IN INTERNATIONAL CODE

CODE TABLE I

Symbol P—Day of the week

Day	Code figures
Sunday.....	1
Monday.....	2
Tuesday.....	3
Wednesday.....	4
Thursday.....	5
Friday.....	6
Saturday.....	7

CODE TABLE II

Symbol Q—Octant of the globe

Longitude	Code figures
North latitude:	
0° W. to 90° W.....	0
90° W. to 180° W.....	1
180° E. to 90° E.....	2
90° E. to 0° E.....	3
South latitude:	
0° W. to 90° W.....	5
90° W. to 180° W.....	6
180° E. to 90° E.....	7
90° E. to 0° E.....	8

CODE TABLE III

Symbols DD—Wind direction

(Direction from which wind is blowing)

Code figures	True directions	Code figures	True directions
00	Calm.	17	S. by W.
01	N. by E.	18	SSW.
02	NNE.	19	SW. by S.
03	NE. by N.	20	SW.
04	NE.	21	SW. by W.
05	NE. by E.	22	WSW.
06	ENE.	23	W. by S.
07	E. by N.	24	W.
08	E.	25	W. by N.
09	E. by S.	26	WNW.
10	ESE.	27	NW. by W.
11	SE. by E.	28	NW.
12	SE.	29	NW. by N.
13	SE. by S.	30	NNW.
14	SSE.	31	N. by W.
15	S. by E.	32	N.
16	S.		

NOTE 1.—Observers on United States selected ships record and code wind direction to 16 points only, using the directions shown in black-faced type in the table.

NOTE 2.—When unusual squalliness or gustiness has occurred during the hour preceding the observation, the observer adds 33 to the number for wind direction (DD), as given in the above table. When a squall or line squall (ligne de grain) has occurred in the hour preceding the observation, the observer adds 67 to the wind direction number given in the table. Example: For west-south-west wind the observer will use the number 22 from the table, but if unusual gustiness or squalliness has occurred he will add 33 and encipher 55 for the wind direction (DD), and if a line squall has occurred he will add 67 and encipher 89 as the wind direction (DD).

CODE TABLE IV

Symbol d—Direction from which swell is moving
Symbol d_s—Direction toward which ship is moving

True direction	Code figures
No sea or swell or ship hove to.....	0
NE.....	1
E.....	2
SE.....	3
S.....	4
SW.....	5
W.....	6
NW.....	7
N.....	8
No observation or no information.....	9

CODE TABLE V

Symbol F—Wind force, Beaufort scale

Beaufort number		Code figures
Zero.....	Calm.....	0
One.....	Light airs.....	1
Two.....	Light breeze.....	2
Three.....	Gentle breeze.....	3
Four.....	Moderate breeze.....	4
Five.....	Fresh breeze.....	5
Six.....	Strong breeze.....	6
Seven.....	High wind (moderate gale).....	7
Eight.....	Gale (fresh gale).....	8
Nine.....	Strong gale.....	9
Ten.....	Whole gale ¹	9
Eleven.....	Storm ¹	9
Twelve.....	Hurricane ¹	9

¹ When force is in excess of strong gale the observer uses code figure 9 and adds word "gale," "storm," or "hurricane" (as the case may be) to the end of the message.

CODE TABLE VI

Symbols ww—Present weather

ABBREVIATED DESCRIPTION OF SKY AND SPECIAL PHENOMENA

- 00 Cloudless.
 01 Partly cloudy.
 02 Cloudy.
 03 Overcast.
 04 Fog over sea (coast station); fog on lower ground (inland station).
 05 Haze (but visibility greater than 2,000 m., 1¼ miles).
 06 Dust devils seen.
 07 Distant lightning.
 08 Mist (visibility between 1,000 and 2,000 m., 1,100 yards and 1¼ miles).
 09 —
 10 Precipitation within sight.
 11 Thunder, without precipitation at the station.
 12 —
 13 Ugly, threatening sky.
 14 Squally weather.
 15 Heavy squalls } in last 3 hours.
 16 Waterspouts seen }
 17 —
 18 Signs of tropical storm forming.
 19 Signs that tropical storm has formed.

PRECIPITATION IN LAST HOUR BUT NOT AT TIME OF OBSERVATION

- 20 Precipitation (rain, drizzle, hail, snow, or sleet).
 21 Drizzle }
 22 Rain } other than showers.
 23 Snow }
 24 Sleet }
 25 Rain shower (s). } In last hour but not at
 26 Snow shower (s). } time.
 27 Hail or rain and hail shower (s).
 28 Slight thunderstorm.
 29 Heavy thunderstorm.

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DUST STORMS AND STORMS OF DRIFTING SNOW

(Visibility less than 1,000 m., 1,100 yards)

- 30 Dust or sand storm.
 - 31 Dust or sand storm has decreased.
 - 32 Dust or sand storm, no appreciable change.
 - 33 Dust or sand storm has increased.
 - 34 Line of dust storms.
 - 35 Storm of drifting snow.
 - 36 Slight storm of drifting snow
 - 37 Heavy storm of drifting snow
 - 38 Slight storm of drifting snow
 - 39 Heavy storm of drifting snow
- } generally low.
- } generally high.

FOG

(Visibility less than 1,000 m., 1,100 yards)

- 40 Fog.
 - 41 Moderate fog in last hour.
 - 42 Thick fog in last hour.
 - 43 Fog, sky discernible
 - 44 Fog, sky not discernible
 - 45 Fog, sky discernible
 - 46 Fog, sky not discernible
 - 47 Fog, sky discernible
 - 48 Fog, sky not discernible
 - 49 Fog in patches.
- } has become thinner during last hour.
- } no appreciable change during last hour.
- } has become thick during last hour.

DRIZZLE

(Precipitation consisting of numerous minute drops)

- 50 Drizzle.
 - 51 Intermittent
 - 52 Continuous
 - 53 Intermittent
 - 54 Continuous
 - 55 Intermittent
 - 56 Continuous
 - 57 Drizzle and fog.
 - 58 Slight or moderate
 - 59 Thick
- } slight drizzle.
- } moderate drizzle.
- } thick drizzle.
- } drizzle and rain.

RAIN

- 60 Rain.
 - 61 Intermittent
 - 62 Continuous
 - 63 Intermittent
 - 64 Continuous
 - 65 Intermittent
 - 66 Continuous
 - 67 Rain and fog.
 - 68 Slight or moderate
 - 69 Heavy
- } slight rain.
- } moderate rain.
- } heavy rain.
- } rain and snow.

SNOW

- 70 Snow or sleet.
 - 71 Intermittent
 - 72 Continuous
 - 73 Intermittent
 - 74 Continuous
 - 75 Intermittent
 - 76 Continuous
 - 77 Snow and fog.
 - 78 Granular snow.
 - 79 Ice crystals.
- } slight snow in flakes.
- } moderate snow in flakes.
- } heavy snow in flakes.

SHOWER (S)

- 80 Shower (s).
- 81 Shower (s) of slight or moderate } rain.
- 82 Shower (s) heavy } rain.
- 83 Shower (s) of slight or moderate } snow.
- 84 Shower (s) of heavy } snow.
- 85 Shower (s) of slight or moderate } rain and snow.
- 86 Shower (s) of heavy } rain and snow.
- 87 Shower (s) of granular snow.
- 88 Shower (s) of slight or moderate } hail, or rain and hail.
- 89 Shower (s) of heavy } hail, or rain and hail.

THUNDERSTORM

- 90 Thunderstorm.
- 91 Rain at time } thunderstorm during last hour, but not at time of
- 92 Snow or sleet at } observation.
- 93 Thunderstorm, slight without hail or soft hail, but with rain } at time of
- 94 (or snow) } observation.
- 94 Thunderstorm slight with soft hail } at time of
- 95 Thunderstorm moderate without hail, but with rain (or } observation.
- 96 snow) } observation.
- 96 Thunderstorm moderate with soft hail } at time of
- 97 Thunderstorm heavy without hail, but with rain (or snow) } observation.
- 98 Thunderstorm combined with dust storm } at time of
- 99 Thunderstorm heavy with hail } observation.

NOTE.—United States selected ship observers use only the meteorological conditions and corresponding figures shown in **black-face** type in the above table.

CODE TABLE VII

Symbol *W*—Past weather

Weather	Code figures
Fair (clear or slightly clouded)-----	0
Variable sky-----	1
Mainly overcast-----	2
Fog or thick dust haze (visibility less than 3,500 feet, about 5 cables)-----	3
Drizzle-----	4
Rain-----	5
Snow or sleet-----	6
Showers-----	7
Sandstorm or duststorm-----	8
Thunderstorm-----	9

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CODE TABLE VIII

Symbols BB—Corrected barometer reading

(In millibars and inches)

Code figures	Millibars	Inches	Code figures	Millibars	Inches	Code figures	Millibars	Inches
25	925	27.32	70	970	28.65	15	1,015	29.97
26	926	27.35	71	971	28.67	16	1,016	30.00
27	927	27.38	72	972	28.70	17	1,017	30.03
28	928	27.41	73	973	28.73	18	1,018	30.06
29	929	27.44	74	974	28.76	19	1,019	30.09
30	930	27.46	75	975	28.79	20	1,020	30.12
31	931	27.49	76	976	28.82	21	1,021	30.15
32	932	27.52	77	977	28.85	22	1,022	30.18
33	933	27.55	78	978	28.88	23	1,023	30.21
34	934	27.58	79	979	28.91	24	1,024	30.24
35	935	27.61	80	980	28.94	25	1,025	30.27
36	936	27.64	81	981	28.97	26	1,026	30.30
37	937	27.67	82	982	29.00	27	1,027	30.33
38	938	27.70	83	983	29.03	28	1,028	30.36
39	939	27.73	84	984	29.06	29	1,029	30.39
40	940	27.76	85	985	29.09	30	1,030	30.42
41	941	27.79	86	986	29.12	31	1,031	30.45
42	942	27.82	87	987	29.15	32	1,032	30.48
43	943	27.85	88	988	29.18	33	1,033	30.51
44	944	27.88	89	989	29.21	34	1,034	30.53
45	945	27.91	90	990	29.24	35	1,035	30.56
46	946	27.94	91	991	29.26	36	1,036	30.59
47	947	27.97	92	992	29.29	37	1,037	30.62
48	948	28.00	93	993	29.32	38	1,038	30.65
49	949	28.03	94	994	29.35	39	1,039	30.68
50	950	28.05	95	995	29.38	40	1,040	30.71
51	951	28.08	96	996	29.41	41	1,041	30.74
52	952	28.11	97	997	29.44	42	1,042	30.77
53	953	28.14	98	998	29.47	43	1,043	30.80
54	954	28.17	99	999	29.50	44	1,044	30.83
55	955	28.20	00	1,000	29.53	45	1,045	30.86
56	956	28.23	01	1,001	29.56	46	1,046	30.89
57	957	28.26	02	1,002	29.59	47	1,047	30.92
58	958	28.29	03	1,003	29.62	48	1,048	30.95
59	959	28.32	04	1,004	29.65	49	1,049	30.98
60	960	28.35	05	1,005	29.68	50	1,050	31.01
61	961	28.38	06	1,006	29.71	51	1,051	31.04
62	962	28.41	07	1,007	29.74	52	1,052	31.07
63	963	28.44	08	1,008	29.77	53	1,053	31.10
64	964	28.47	09	1,009	29.80	54	1,054	31.13
65	965	28.50	10	1,010	29.83			
66	966	28.53	11	1,011	29.86			
67	967	28.56	12	1,012	29.89			
68	968	28.59	13	1,013	29.92			
69	969	28.62	14	1,014	29.94			

NOTE.—It will be seen that the code figures may represent two values of barometric pressure, but this takes place only with a very high or very low barometer reading. In such cases the recipients of a message will be able to decide which value is intended. Code figures which correspond closest to exact barometer reading are used.

CODE TABLE IX

Symbol A—Barometric tendency

Code figures	Barometric tendency
0	Barometer steady. (Has not fallen or risen more than 0.01 inch (½ millibar) in last 3 hours.)
1	Barometer rising slowly. (Has risen 0.03 to 0.04 inch (1 to 1½ millibars) in last 3 hours.)
2	Barometer rising. (Has risen 0.06 to 0.10 inch (2 to 3½ millibars) in last 3 hours.)
3	Barometer rising quickly. (Has risen 0.12 to 0.18 inch (4 to 6 millibars) in last 3 hours.)
4	Barometer rising very rapidly. (Has risen more than 0.18 inch (6 millibars) in last 3 hours.)
5	Barometer falling slowly. (Has fallen 0.03 to 0.04 inch (1 to 1½ millibars) in last 3 hours.)
6	Barometer falling. (Has fallen 0.06 to 0.10 inch (2 to 3½ millibars) in last 3 hours.)
7	Barometer falling quickly. (Has fallen 0.12 to 0.18 inch (4 to 6 millibars) in last 3 hours.)
8	Barometer falling very rapidly. (Has fallen more than 0.18 inch (6 millibars) in last 3 hours.)

CODE TABLE X

Symbol a—Characteristic of changes of barometer in the last 3 hours

Code figures	Description
0	Rising, then falling-----
1	Rising, then steady, or rising, then rising more slowly-----
2	Unsteady-----
3	Steady or rising-----
4	Falling or steady, then rising; or rising, then rising more quickly-----
5	Falling, then rising-----
6	Falling, then steady; or falling then falling more slowly-----
7	Unsteady-----
8	Falling-----
9	Steady or rising, then falling; or falling then falling more quickly-----

} Barometer now higher than or the same as 3 hours ago.

} Barometer now lower than 3 hours ago.

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CODE TABLE XI

Symbols bb—Barometer change

(Amount of rise or fall of the barometer in the last three hours)

Code figure	Amount of rise or fall		Code figure	Amount of rise or fall		Code figure	Amount of rise or fall	
	Millibars	Inch		Millibars	Inch		Millibars	Inch
01	0.2	0.01	31	6.2	0.19	61	12.2	0.37
02	.4	.01	32	6.4	.19	62	12.4	.37
03	.6	.02	33	6.6	.20	63	12.6	.38
04	.8	.02	34	6.8	.20	64	12.8	.38
05	1.0	.03	35	7.0	.21	65	13.0	.39
06	1.2	.04	36	7.2	.22	66	13.2	.40
07	1.4	.04	37	7.4	.22	67	13.4	.40
08	1.6	.05	38	7.6	.23	68	13.6	.41
09	1.8	.05	39	7.8	.23	69	13.8	.41
10	2.0	.06	40	8.0	.24	70	14.0	.42
11	2.2	.07	41	8.2	.25	71	14.2	.43
12	2.4	.07	42	8.4	.25	72	14.4	.43
13	2.6	.08	43	8.6	.26	73	14.6	.44
14	2.8	.08	44	8.8	.26	74	14.8	.44
15	3.0	.09	45	9.0	.27	75	15.0	.45
16	3.2	.10	46	9.2	.28	76	15.2	.46
17	3.4	.10	47	9.4	.28	77	15.4	.46
18	3.6	.11	48	9.6	.29	78	15.6	.47
19	3.8	.11	49	9.8	.29	79	15.8	.47
20	4.0	.12	50	10.0	.30	80	16.0	.48
21	4.2	.13	51	10.2	.31	81	16.2	.49
22	4.4	.13	52	10.4	.31	82	16.4	.49
23	4.6	.14	53	10.6	.32	83	16.6	.50
24	4.8	.14	54	10.8	.32	84	16.8	.50
25	5.0	.15	55	11.0	.33	85	17.0	.51
26	5.2	.16	56	11.2	.34	86	17.2	.52
27	5.4	.16	57	11.4	.34	87	17.4	.52
28	5.6	.17	58	11.6	.35			
29	5.8	.17	59	11.8	.35			
30	6.0	.18	60	12.0	.36			

CODE TABLE XII

Symbol V—Visibility

Code figures	Visibility
0	Dense fog. (Objects not visible at 50 yards.)
1	Thick fog. (Objects not visible at 200 yards.)
2	Fog. (Objects not visible at 500 yards.)
3	Moderate fog. (Objects not visible at $\frac{1}{2}$ nautical mile.)
4	Mist or haze, or very poor visibility. (Objects not visible at 1 nautical mile.)
5	Poor visibility. (Objects not visible at 2 nautical miles.)
6	Moderate visibility. (Objects not visible at 5 nautical miles.)
7	Good visibility. (Objects not visible at 10 nautical miles.)
8	Very good visibility. (Objects not visible at 30 nautical miles.)
9	Excellent visibility. (Objects visible at more than 30 nautical miles.)

CODE TABLE XIII

Symbol C_L—Form of low cloud

Code figures	Form of cloud
0	No low clouds.
1	Cumulus of fair weather.
2	Cumulus (large, without anvil).
3	Cumulo-nimbus.
4	Strato-cumulus (spread from cumulus).
5	Stratus or strato-cumulus (in layer).
6	Nimbus (ragged low clouds of bad weather).
7	Cumulus <i>and</i> strato-cumulus of fair weather.
8	Cumulus, large (or cumulo-nimbus) <i>and</i> strato-cumulus.
9	Cumulus, large (or cumulo-nimbus) <i>and</i> nimbus.

CODE TABLE XIV

Symbol C_M—Form of middle cloud

Code figures	Form of cloud
0	No middle cloud.
1	Alto-stratus, typical thin.
2	Alto-stratus, typical thick (sun or moon invisible).
3	Alto-cumulus or high strato-cumulus, single layer.
4	Alto-cumulus, in bands, decreasing.
5	Alto-cumulus, in bands, increasing.
6	Alto-cumulus, spread out from cumulus.
7	Alto-cumulus, with alto-stratus; or alto-stratus with parts resembling alto-cumulus.
8	Alto-cumulus castellatus (alto-cumulus in ragged fragments).
9	Alto-cumulus in several layers, generally with fibrous veils and chaotic appearance of sky.

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CODE TABLE XV

Symbol C_H—Form of upper cloud

(Cirrus cloud)

Code figures	Form of cloud
0	No upper clouds (cirrus type).
1	Cirrus, fine, not increasing; scarce.
2	Cirrus, fine, not increasing; plentiful but not a continuous layer.
3	Cirrus, anvil.
4	Cirrus, fine, increasing.
5	Cirrus or cirro-stratus increasing, below 45° altitude.
6	Cirrus or cirro-stratus increasing, and reaching above 45° altitude.
7	Cirro-stratus, veil covering entire sky.
8	Cirro-stratus, not increasing, and not covering whole sky.
9	Cirro-cumulus predominating, and a little cirrus.

CODE TABLE XVI

Symbol C—Form of predominating cloud

Code figures	Form of cloud	Abbreviation
1	Cirrus.....	Ci.
2	Cirro-stratus.....	Ci. St.
3	Cirro-cumulus.....	Ci. Cu.
4	Alto-cumulus.....	A. Cu.
5	Alto-stratus.....	A. St.
6	Strato-cumulus.....	St. Cu.
7	Nimbus.....	Nb.
8	Cumulus or fracto-cumulus.....	Cu. or Fr. Cu.
9	Cumulo-nimbus.....	Cu. Nb.
0	Stratus or fracto-stratus.....	St. or Fr. St.

CODE TABLE XVII

Symbol N_L—Total amount of all clouds

(Regardless of kind of clouds)

Symbol N_L—Amount of lower cloud

Code figures	Proportion of sky covered (in tenths)
0	0.
1	Less than 0.1.
2	0.1.
3	0.2 to 0.3.
4	0.4 to 0.6.
5	0.7 to 0.8.
6	0.9.
7	More than 0.9 but with openings.
8	Sky completely covered with clouds.
9	Sky obscured by fog, duststorm, or other phenomenon.

CODE TABLE XVIII

Symbol t_a—Temperature difference (air and water)

(Difference between temperature of air and temperature of water at or near surface)

Code figures		
0	More than 9° F.....	} Air temperature same as or higher than sea temperature.
1	6° to 9°.....	
2	3° to 6°.....	
3	1° to 3°.....	
4	No difference or less than 1° F. higher.....	
5	Less than 1° F.....	} Air temperature lower than sea temperature.
6	1° to 3°.....	
7	3° to 6°.....	
8	6° to 9°.....	
9	More than 9°.....	

CODE TABLE XIX

Symbol K—Swell

Code figures		Code figures	
0	No swell.	5	Moderate swell, long.
1	Low swell, short or average length.	6	Heavy swell, short.
2	Low swell, long.	7	Heavy swell, average length.
3	Moderate swell, short.	8	Heavy swell, long.
4	Moderate swell, average length.	9	Confused swell.

CODE TABLE XX

Symbol f—Ship's speed

Code figures	Speed in knots per hour	Code figures	Speed in knots per hour
0	Ship stopped.	5	13 to 15 knots.
1	1 to 3 knots.	6	16 to 18 knots.
2	4 to 6 knots.	7	19 to 21 knots.
3	7 to 9 knots.	8	22 to 24 knots.
4	10 to 12 knots.	9	More than 24 knots.