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UNITED STATES DEPARTMENT OF COMMERCE

U.S. WEATHER BUREAU

INTERNATIONAL CODE

FOR

RADIO WEATHER REPORTS FROM SHIPS

(Effective January 1, 1949)

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INTERNATIONAL CODE FOR RADIO WEATHER REPORTS FROM SHIPS

(Effective January 1, 1949)

This code book is for use in decoding ships' weather observations in the bulletins issued by the United States Weather Bureau for broadcast.

It is the new International Code adopted in 1947 by the International Meteorological Organization. It will become effective for use by ships and meteorological services beginning with the first observation (0000 G. C. T.) on January 1, 1949.

The principal changes from the old ships' weather code are (1) a rearrangement of data groups and (2) reporting certain elements in two code figures instead of one figure as in the past. Groups of data in the coded message will contain five figures each as heretofore. Ships of all maritime countries will use the new code, hence rapid translation of the message is assured, regardless of the nationality of the ship sending the report.

The code tables and explanations herein will also be useful to vessel masters and ships' officers in coding radiograms containing weather reports to be sent from ships.

DESCRIPTION OF CODE

Codes given below have been assigned FM (Form of Message) numbers for identification purposes. These identification numbers are not to be included in coded messages prepared for transmission by radio. It will be noted that Codes FM 22 and FM 23 are abridged forms of Code FM 21. Each item of data is given a distinctive symbol. The symbols and group arrangements are as follows:

FM 21: $YQL_aL_aL_a$ $L_oL_oL_oGG$ Nddff VVwwW PPPTT $N_hC_Lh_sC_MC_H$ D_sv_sapp ($8N_sC_Lh_s$) ($0T_sT_sT_dT_d$) ($1d_wd_wP_wH_w$)—ICE followed by plain language or (c_2KD_ire)

FM 22: $YQL_aL_aL_a$ $L_oL_oL_oGG$ Nddff VVwwW PPPTT $N_hC_Lh_sC_MC_H$

FM 23: $YQL_aL_aL_a$ $L_oL_oL_oGG$ Nddff VVwwW

The groups enclosed in parentheses ( ) are drop-out groups which are omitted from the coded message when data therefor are not observed. The omission of any drop-out group(s) from the message will be apparent to the recipient of the message because the first figure of each of these groups is a distinct identifying figure, e. g., "0," "1," etc. There is one exception; some ships using Code FM 21 do not have barographs, hence data for the group D_sv_sapp are omitted from the message. In case the group D_sv_sapp is omitted from the report in Code FM 21, 30 is added to the time of observation (GG). For example, in an 0600 G. C. T. report when GG will be coded as 36, i. e., 06+30.

In addition, the groups "$8N_sC_Lh_s$" and "$1d_wd_wP_wH_w$" may be repeated in the observation message when there is more than one significant cloud layer below 20,000 feet or more than one train of waves respectively to report. Repetition of groups in the message will be obvious since each of these groups contains the identifying figure "8" or "1," as the case may be.

Weather reports from ships at sea included in United States Weather Bureau bulletins broadcast for the benefit of merchant shipping will as a rule, contain only the first 5 groups of Code FM 21.

EXPLANATION OF SYMBOL LETTERS

a=Characteristic of barometric tendency during the period of 3 hours preceding the time of observation. (See table XVI, p. 19.)

C=Significant cloud. (See table XVIII, p. 21.)

C_H=Clouds of types cirrus, cirrostratus, cirrocumulus. (See table XIII, p. 18.)

C_L=Clouds of types stratocumulus, stratus, cumulus, cumulonimbus. (See table X, p. 15.)

C_M=Clouds of types altocumulus, altostratus, nimbostratus. (See table XII, p. 17.)

c_2=Description of kind of ice. (See table XXII, p. 23.)

D_1=Bearing of ice limit. (See table XXIV, p. 23.)

D_s=Ship's course—direction toward which ship is moving. (See table XIV, p. 19.)

dd=Direction (true) in 10's of degrees, FROM which wind is blowing. Scale 00–36. (See table IV, p. 8.)

d_wd_w=Direction from which waves are coming. (See table IV, p. 8.)

e=Orientation of ice limit from reporting ship. (See table XXVI, p. 24.)

ff=Wind speed in knots. (See table V, p. 9.)

GG=Greenwich civil time of observation (00=midnight, 06=6 a. m., 12=noon, and 18=6 p. m., etc.).

H_w=Mean maximum height of waves. (See table XXI, p. 22.)

h=Height above ground (or sea) of the lowest cloud. (See table XI, p. 16.)

h_sh_s=Height above station (or ship) of the significant cloud layer (See table XIX, p. 21.)

K=Effect of ice on navigation. (See table XXIII, p. 23.)

$L_aL_aL_a$=Latitude, in degrees and tenths, the tenths being obtained by dividing the number of minutes by 6 and neglecting the remainder.

$L_oL_oL_o$=Longitude, in degrees and tenths, the tenths being obtained as for latitude, $L_aL_aL_a$. The initial "1" is omitted if longitude of ship is 100 degrees or more.

N=Total amount of sky covered with cloud, in eighths. (See table III, p. 7.)

N_h=Amount of low cloud, in eighths, the height of which is reported by "h." (See table III, p. 7.)

N_s=Amount, in eighths, of the significant cloud layer. (See table III, p. 7.)

PPP=Barometric pressure, in tens, units, and tenths of millibars (initial 9 or 10 omitted). The values refer to sea level and include all corrections for index errors, temperature and gravity. (See table IX, p. 13.)

P_w=Period (in seconds) of waves. (See table XX, p. 22.)

pp=Amount of barometric change during the 3 hours preceding the time of observation expressed in units of one-tenth of a millibar. When the amount of change equals 9.9 millibars or more, an extra group "99ppp" is inserted in the message and the total amount of change coded "ppp." For example, if the amount of change is 9.9 millibars,

"app 99ppp" is coded "799 99099"; 10.2 millibars is coded "799 99102." (See table XVII, p. 20.)

Q=Octant of the globe in which the ship is located. (See table II, p. 6.)

r=Distance of ice from the ship. (See table XXV, p. 24.)

TT=Temperature of the air, in whole degrees Fahrenheit.

T_dT_d=Temperature of the dew point in whole degrees Fahrenheit.

T_sT_s=Difference between air temperature and sea temperature in whole degrees Fahrenheit. If the air temperature is below the sea temperature, 50 is added to the value of the difference in coding the data. For example, if air temperature is 5° F. above sea temperature, T_sT_s is coded as 05; if air temperature is 11° F. below the sea temperature, T_sT_s is coded as 61; i. e., 11+50.

VV=Visibility or horizontal distance at which objects can be seen in daylight or at which lights can be seen at night. (See table VI, p. 9.)

v_s=Speed of ship in knots. (See table XV, p. 19.)

W=Past weather. (See table VIII, p. 12).

ww=Present weather at the time of observation. (See table VII, p. 10.)

Y=Day of the week. (See table I, p. 6.)

The following is an example of an observation coded using FM (Form of Message) 21:

Description of data	Symbol letter	Code table		Observation as coded	
Day of week	Y	I	Tuesday	3	
Octant of globe	Q	II	North latitude 0° to 90° W.	0	1st group
Latitude	$L_aL_aL_a$	-------	North 47°38′	476	1st group
Longitude	$L_oL_oL_o$	-------	West 46°22′	463	2d group
Time of observation (G. c. t.).	GG	-------	0000 G. c. t.	00	2d group
Total cloud amount	N	III	7 eighths	7	3d group
Wind direction (true) in 10's of degrees.	dd	IV	354°	35	3d group
Wind speed in knots	ff	V	Moderate breeze	13	3d group
Visibility	VV	VI	1 nautical mile	95	4th group
Present weather	ww	VII	Rain showers—moderate	81	4th group
Past weather	W	VIII	Cloudy	2	4th group
Barometric reading	PPP	IX	1,007.1 millibars (29.74 inches.).	071	5th group
Temperature of air F.°	TT	-------	42° F	42	5th group

Description of data	Symbol letter	Code table		Observation as coded	
Amount of low cloud, whose height is reported by "h"	N_h	III	5 eighths	5	6th group
Type of low cloud	C_L	X	Stratocumulus	5	
Height of base of low cloud above sea.	h	XI	2,500 feet	5	
Type of middle cloud	C_M	XII	Altocumulus and altostratus at different levels.	7	
Type of high cloud	C_H	XIII	Strands of cirrostratus, scattered, not increasing.	1	
Direction toward which ship is moving.	D_s	XIV	Southwest	5	7th group
Ship's speed	v_s	XV	13 knots	5	
Barometric tendency during last 3 hours.	a	XVI	Falling then rising	5	
Amount of barometric change during last 3 hours.	p p	XVII	1.2 millibars	1 2	
Identifying figure	8			8	8th group
Amount of significant cloud layer.	N_s	III	5 eighths	5	
Significant cloud	C	XVII	Stratocumulus	6	
Height of significant cloud layer.	h_s h_s	XVIII	2,500 feet	2 5	
Identifying figure	0			0	9th group
Difference between air and sea temperature.	T_s T_s		3° F. below	5 3	
Dew point temperature	T_d T_d		40° F	4 0	
Identifying figure	1			1	10th group
Direction of waves	d_w d_w	IV	350°	3 5	
Period of waves	P_w	XX	5 seconds	2	
Height of waves	H_w	XXI	3 feet (1 meter)	2	
Identifying term	ICE			I C E	11th group
Description of kind of ice.	c_2	XXII	Drift ice	3	
Effect of ice on navigation.	K	XXIII	Navigation unobstructed for steamers.	1	
Bearing of ice limit	D_l	XXIV	Ice limit toward NW	7	
Distance to ice limit	r	XXV	1½ miles	1	
Orientation of ice limit	e	XXVI	Ice NE. to SW. with ice to the NW.	1	

NOTE.—As a rule, the group $8N_sC_hh_s$ will be omitted from ships' radio messages.

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

CODE TABLE I

Symbol Y—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

Symbol N—Total cloud amount

Symbol N_h—Amount of low cloud, the height of which is reported by "h"

Symbol N_s—Amount of significant cloud layer

Code figures	Cloud amount (eighths of sky covered	*Approximate cloud amount (tenths of sky covered)*
0	None	*None*
1	1	1
2	2	2–3
3	3	4
4	4	5
5	5	6
6	6	7–8
7	7	9
8	8	10
9	Sky obscured	*Sky obscured*

NOTES

1. "Fragments of clouds" are coded as 1.
2. "Overcast but with openings" is coded as 7.
3. The full International specification for code figure 9, is "Sky obscured or cloud amount cannot be estimated owing to darkness."

CODE TABLE IV

Symbol dd—True direction, in 10's of degrees, FROM which wind is blowing (00–36)

Symbol $d_w d_w$—Direction, in 10's of degrees, FROM which waves come

Code figures	Direction	Code figures	Direction
00	Calm.	19	185° to 194°.
01	5° to 14°.	20	195° to 204° SSW.
02	15° to 24° NNE.	21	205° to 214°.
03	25° to 34°.	22	215° to 224°.
04	35° to 44°.	23	225° to 234° SW.
05	45° to 54° NE.	24	235° to 244°.
06	55° to 64°.	25	245° to 254° WSW.
07	65° to 74° ENE.	26	255° to 264°.
08	75° to 84°.	27	265° to 274° W.
09	85° to 94° E.	28	275° to 284°.
10	95° to 104°.	29	285° to 294° WNW.
11	105° to 114° ESE.	30	295° to 304°.
12	115° to 124°.	31	305° to 314°.
13	125° to 134°.	32	315° to 324° NW.
14	135° to 144° SE.	33	325° to 334°.
15	145° to 154°.	34	335° to 344° NNW.
16	155° to 164° SSE.	35	345° to 354°.
17	165° to 174°.	36	355° to 4° N.
18	175° to 184° S.		
Used only with $d_w d_w$			
49	Waves confused, direction indeterminate.	99	Waves confused, direction indeterminate, but higher than 14 feet (4½ meters).

NOTE.—In case a vessel is equipped with an anemometer and the true wind speed exceeds 99 knots, 50 will be added to "dd" and only the wind speed in excess of 100 knots will be coded. For example, if direction = 163° and speed = 121 knots, the wind will be coded as "6621" (dd = 16 + 50; ff = 121 − 100).

CODE TABLE V

Symbol ff—Wind speed in knots

Code figures	Beaufort No.	Description	Equivalent speed in knots
00	Zero	Calm	0
02	One	Light airs	1–3
05	Two	Light breeze	4–6
09	Three	Gentle breeze	7–10
13	Four	Moderate breeze	11–16
18	Five	Fresh breeze	17–21
24	Six	Strong breeze	22–27
30	Seven	High wind (moderate gale)	28–33
37	Eight	Gale (fresh gale)	34–40
44	Nine	Strong gale	41–47
52	Ten	Whole gale	48–55
60	Eleven	Storm	56–63
68	Twelve	Hurricane	64 and above

NOTE.—In case a vessel is equipped with an anemometer and the true wind speed exceeds 99 knots, 50 will be added to "dd" and only the wind speed in excess of 100 knots will be coded. For example, if the direction=163° and speed=121 knots, the wind will be coded as "6621" (dd=16+50; ff=121−100).

CODE TABLE VI

Symbol VV—Visibility

Code figures	Visibility range
90	Less than 50 yards (50 meters).
91	50 yards (50 meters).
92	200 yards (200 meters).
93	¼ nautical mile (500 meters).
94	½ nautical mile (1,000 meters).
95	1 nautical mile (2,000 meters).
96	2 nautical miles (4,000 meters).
97	5 nautical miles (10 kilometers).
98	10 nautical miles (20 kilometers).
99	25 nautical miles or more (50 kilometers).

800024—48—2

CODE TABLE VII

Symbol ww—Present weather

ww=00–49 NO PRECIPITATION AT THE STATION AT THE TIME OF OBSERVATION

00–19: NO PRECIPITATION, FOG, DUSTSTORM, SANDSTORM OR DRIFTING SNOW AT THE STATION (OR SHIP) AT THE TIME OF OBSERVATION OR DURING THE PRECEDING HOUR, EXCEPT FOR 09.

Haze, dust, sand or smoke. See note 2:

- 00 Cloud development not observed or not observable
- 01 Clouds generally dissolving or becoming less developed
- 02 State of sky on the whole unchanged
- 03 Clouds generally forming or developing

(Characteristic change of the state of sky during the past hour.)

- 04 Visibility reduced by smoke, e. g., veldt or forest fires, industrial smoke, or volcanic ashes.
- 05 Dry haze.
- 06 Widespread dust in suspension in the air, not raised by wind at or near the station (or ship) at the time of observation.
- 07 Dust or sand raised by wind at or near the station (or ship) at the time of observation, but no well developed dust devil(s) and no duststorm or sandstorm seen.
- 08 Well developed dust devil(s) seen at or near the station (or ship) within last hour, but no duststorm or sandstorm.
- 09 Duststorm or sandstorm within sight of station (or ship) or at station (or ship) during the last hour.

- 10 Light fog, visibility 1,000 meters (1,100 yards) or more.
- 11 Patches of
- 12 More or less continuous

(Shallow fog at the station (or ship) not deeper than about 2 meters (6½ feet) on land or 10 meters (33 feet) at sea.)

- 13 Lightning visible, no thunder heard.
- 14 Precipitation within sight, but not reaching ground at the station (or ship).
- 15 Precipitation within sight, reaching ground, but distant [i. e., estimated to be more than 5 kilometers (3 miles) from station (or ship)].
- 16 Precipitation within sight, reaching ground, near to but not at the station (or ship).
- 17 Thunder heard, but no precipitation at the station (or ship).
- 18 Squall(s)
- 19 Funnel cloud(s) (tornado or waterspout)

(within sight during the past hour.)

20–29: PRECIPITATION, FOG OR THUNDERSTORM AT THE STATION (OR SHIP) DURING THE PRECEDING HOUR BUT NOT AT THE TIME OF OBSERVATION.

- 20 Drizzle (not freezing)
- 21 Rain (not freezing)
- 22 Snow
- 23 Rain and snow
- 24 Freezing drizzle or freezing rain

(not falling as showers.)

- 25 Shower(s) of rain.
- 26 Shower(s) of snow, or of rain and snow.
- 27 Shower(s) of hail, or of hail and rain.
- 28 Fog.
- 29 Thunderstorm (with or without precipitation).

30–39: DUSTSTORM, SANDSTORM OR DRIFTING SNOW.

- 30 Slight or moderate duststorm or sandstorm (has decreased during the preceding hour.)
- 31 Slight or moderate duststorm or sandstorm (no appreciable change during the preceding hour.)
- 32 Slight or moderate duststorm or sandstorm (has increased during the preceding hour.)
- 33 Severe duststorm or sandstorm (has decreased during the preceding hour.)
- 34 Severe duststorm or sandstorm (no appreciable change during preceding hour.)
- 35 Severe duststorm or sandstorm (has increased during the preceding hour.)

36 Slight or moderate drifting snow } generally low.
37 Heavy drifting snow }
38 Slight or moderate drifting snow } generally high.
39 Heavy drifting snow }

40–49: FOG AT THE TIME OF OBSERVATION.

40 Fog at a distance at the time of observation, but not at the station (or ship) during the last hour, the fog extending to a level above that of the observer.
41 Fog in patches.
42 Fog, sky discernible } has become thinner during the preceding hour.
43 Fog, sky not discernible }
44 Fog, sky discernible } no appreciable change during the preceding hour.
45 Fog, sky not discernible }
46 Fog, sky discernible } has begun or has become thicker during the
47 Fog, sky not discernible } preceding hour.
48 Fog, depositing rime, sky discernible.
49 Fog, depositing rime, sky not discernible.

50–99 PRECIPITATION AT THE STATION (OR SHIP) AT THE TIME OF OBSERVATION

50–59: DRIZZLE AT TIME OF OBSERVATION.

50 Drizzle, not freezing, intermittent } slight at time of observation.
51 Drizzle, not freezing, continuous }
52 Drizzle, not freezing, intermittent } moderate at time of observation.
53 Drizzle, not freezing, continuous }
54 Drizzle, not freezing, intermittent } thick at time of observation.
55 Drizzle, not freezing, continuous }
56 Drizzle, freezing, slight.
57 Drizzle, freezing, moderate or thick.
58 Drizzle and rain, slight.
59 Drizzle and rain, moderate or heavy.

60–69: RAIN AT TIME OF OBSERVATION.

60 Rain, not freezing, intermittent } slight at time of observation.
61 Rain, not freezing, continuous }
62 Rain, not freezing, intermittent } moderate at time of observation.
63 Rain, not freezing, continuous }
64 Rain, not freezing, intermittent } heavy at time of observation.
65 Rain, not freezing, continuous }
66 Rain, freezing, slight.
67 Rain, freezing, moderate or heavy.
68 Rain or drizzle and snow, slight.
69 Rain or drizzle and snow, moderate or heavy.

70–79: SOLID PRECIPITATION NOT IN SHOWERS AT TIME OF OBSERVATION.

70 Intermittent fall of snowflakes } slight at time of observation.
71 Continuous fall of snowflakes }
72 Intermittent fall of snowflakes } moderate at time of observation.
73 Continuous fall of snowflakes }
74 Intermittent fall of snowflakes } heavy at time of observation.
75 Continuous fall of snowflakes }
76 Ice needles (with or without fog).
77 Granular snow (with or without fog).
78 Isolated starlike snow crystals (with or without fog).
79 Ice pellets.

80–89: SHOWERY PRECIPITATION, OR PRECIPITATION WITH CURRENT OR RECENT THUNDERSTORM.

80 Rain shower(s), slight.
81 Rain shower(s), moderate or heavy.
82 Rain shower(s), violent.
83 Shower(s) of rain and snow mixed, slight.
84 Shower(s) of rain and snow mixed, moderate or heavy.
85 Snow shower(s), slight.
86 Snow shower(s), moderate or heavy.
87 Shower(s) of soft or small hail with or without rain or rain and snow mixed } slight.
88 Shower(s) of soft or small hail with or without rain or rain and snow mixed } moderate or heavy.

89	Shower(s) of hail with or without rain or rain and snow mixed, not associated with thunder	slight.
90	Shower(s) of hail, with or without rain or rain and snow mixed, not associated with thunder	moderate or heavy.
91	Slight rain at time of observation	thunderstorm during the preceding hour but not at time of observation.
92	Moderate or heavy rain at time of observation	
93	Slight snow or rain and snow mixed or hail* at time of observation	
94	Moderate or heavy snow, or rain and snow mixed or hail* at time of observation	
95	Thunderstorm, slight or moderate, without hail* but with rain and/or snow at time of observation	thunderstorm at time of observation.
96	Thunderstorm, slight or moderate, with hail* at time of observation	
97	Thunderstorm, heavy, without hail* but with rain and/or snow at time of observation	
**98	Thunderstorm combined with duststorm or sandstorm—at time of observation	
99	Thunderstorm, heavy, with hail* at time of observation	

NOTES

1. In general, when coding ww the highest applicable figure is selected.
2. The amount of cloudiness at the time of observation is reported by symbol "N" in the group "Nddff." Code figures 00 to 03, inclusive, are used only when there is no other applicable code figure in the "ww" table to report. Code figure 00 is used when no clouds are present at the time of observation; 01 for clouds generally dissolving or becoming less developed; 02 for state of sky on the whole unchanged and 03 for clouds generally forming or developing.
3. Whenever the description "intermittent" is used, precipitation has not continued without a break during the preceding hour.

CODE TABLE VIII

Symbol W—Past weather

Code figures	Description
0	Clear or few clouds.
1	Partly cloudy or variable sky.
2	Cloudy or overcast.
3	Sandstorm or duststorm or drifting or blowings now.
4	Fog, smoke, or thick dust haze.
5	Drizzle.
6	Rain.
7	Snow or rain and mixed snow or sleet.
8	Shower(s).
9	Thunderstorm with or without precipitation.

NOTES

1. In 0000, 0600, 1200 and 1800 G. C. T. reports, "Past Weather" covers the preceding 6-hour period while in 0300, 0900, 1500, and 2100 G. C. T. reports, "W" covers the preceding 3-hour period.
2. The code figure for "W" is selected in order that "W" and "ww" together give as complete a description as possible of the weather in the time interval concerned. For example, if the type of weather undergoes a complete change during the time interval concerned, the code figure selected for "W" will describe the weather prevailing before the type of weather indicated by "ww" began.

*Hail, small hail, soft hail.
**In reporting code figure 98, the observer is allowed considerable latitude in the presumption that precipitation is or is not occurring if it is not actually visible.

CODE TABLE IX

Symbol PPP—Corrected barometer reading

Coded in "tens," "units," and "tenths" of millibars, initial 9 or 10 omitted. For example, 982.1 millibars is coded as 821; 1,010.9 millibars as 109, etc.

Inches	Millibars	Inches	Millibars	Inches	Millibars	Inches	Millibars
27. 50	931. 3	28. 06	950. 2	28. 62	969. 2	29. 18	988. 2
27. 51	931. 6	28. 07	950. 6	28. 63	969. 5	29. 19	988. 5
27. 52	931. 9	28. 08	950. 9	28. 64	969. 9	29. 20	988. 8
27. 53	932. 3	28. 09	951. 2	28. 65	970. 2	29. 21	989. 2
27. 54	932. 6	28. 10	951. 6	28. 66	970. 5	29. 22	989. 5
27. 55	933. 0	28. 11	951. 9	28. 67	970. 9	29. 23	989. 8
27. 56	933. 3	28. 12	952. 3	28. 68	971. 2	29. 24	990. 2
27. 57	933. 6	28. 13	952. 6	28. 69	971. 6	29. 25	990. 5
27. 58	934. 0	28. 14	952. 9	28. 70	971. 9	29. 26	990. 9
27. 59	934. 3	28. 15	953. 3	28. 71	972. 2	29. 27	991. 2
27. 60	934. 6	28. 16	953. 6	28. 72	972. 6	29. 28	991. 5
27. 61	935. 0	28. 17	953. 9	28. 73	972. 9	29. 29	991. 9
27. 62	935. 3	28. 18	954. 3	28. 74	973. 2	29. 30	992. 2
27. 63	935. 7	28. 19	954. 6	28. 75	973. 6	29. 31	992. 6
27. 64	936. 0	28. 20	955. 0	28. 76	973. 9	29. 32	992. 9
27. 65	936. 3	28. 21	955. 3	28. 77	974. 3	29. 33	993. 2
27. 66	936. 7	28. 22	955. 6	28. 78	974. 6	29. 34	993. 6
27. 67	937. 0	28. 23	956. 0	28. 79	974. 9	29. 35	993. 9
27. 68	937. 4	28. 24	956. 3	28. 80	975. 3	29. 36	994. 2
27. 69	937. 7	28. 25	956. 7	28. 81	975. 6	29. 37	994. 6
27. 70	938. 0	28. 26	957. 0	28. 82	976. 0	29. 38	994. 9
27. 71	938. 4	28. 27	957. 3	28. 83	976. 3	29. 39	995. 3
27. 72	938. 7	28. 28	957. 7	28. 84	976. 6	29. 40	995. 6
27. 73	939. 0	28. 29	958. 0	28. 85	977. 0	29. 41	995. 9
27. 74	939. 4	28. 30	958. 3	28. 86	977. 3	29. 42	996. 3
27. 75	939. 7	28. 31	958. 7	28. 87	977. 7	29. 43	996. 6
27. 76	940. 1	28. 32	959. 0	28. 88	978. 0	29. 44	997. 0
27. 77	940. 4	28. 33	959. 4	28. 89	978. 3	29. 45	997. 3
27. 78	940. 7	28. 34	959. 7	28. 90	978. 7	29. 46	997. 6
27. 79	941. 1	28. 35	960. 0	28. 91	979. 0	29. 47	998. 0
27. 80	941. 4	28. 36	960. 4	28. 92	979. 3	29. 48	998. 3
27. 81	941. 8	28. 37	960. 7	28. 93	979. 7	29. 49	998. 6
27. 82	942. 1	28. 38	961. 1	28. 94	980. 0	29. 50	999. 0
27. 83	942. 4	28. 39	961. 4	28. 95	980. 4	29. 51	999. 3
27. 84	942. 8	28. 40	961. 7	28. 96	980. 7	29. 52	999. 7
27. 85	943. 1	28. 41	962. 1	28. 97	981. 0	29. 53	1, 000. 0
27. 86	943. 4	28. 42	962. 4	28. 98	981. 4	29. 54	1, 000. 3
27. 87	943. 8	28. 43	962. 8	28. 99	981. 7	29. 55	1, 000. 7
27. 88	944. 1	28. 44	963. 1	29. 00	982. 1	29. 56	1, 001. 0
27. 89	944. 5	28. 45	963. 4	29. 01	982. 4	29. 57	1, 001. 4
27. 90	944. 8	28. 46	963. 8	29. 02	982. 7	29. 58	1, 001. 7
27. 91	945. 1	28. 47	964. 1	29. 03	983. 1	29. 59	1, 002. 0
27. 92	945. 5	28. 48	964. 4	29. 04	983. 4	29. 60	1, 002. 4
27. 93	945. 8	28. 49	964. 8	29. 05	983. 7	29. 61	1, 002. 7
27. 94	946. 2	28. 50	965. 1	29. 06	984. 1	29. 62	1, 003. 1
27. 95	946. 5	28. 51	965. 5	29. 07	984. 4	29. 63	1, 003. 4
27. 96	946. 8	28. 52	965. 8	29. 08	984. 8	29. 64	1, 003. 7
27. 97	947. 2	28. 53	966. 1	29. 09	985. 1	29. 65	1, 004. 1
27. 98	947. 5	28. 54	966. 5	29. 10	985. 4	29. 66	1, 004. 4
27. 99	947. 9	28. 55	966. 8	29. 11	985. 8	29. 67	1, 004. 7
28. 00	948. 2	28. 56	967. 2	29. 12	986. 1	29. 68	1, 005. 1
28. 01	948. 5	28. 57	967. 5	29. 13	986. 5	29. 69	1, 005. 4
28. 02	948. 9	28. 58	967. 8	29. 14	986. 8	29. 70	1, 005. 8
28. 03	949. 2	28. 59	968. 2	29. 15	987. 1	29. 71	1, 006. 1
28. 04	949. 5	28. 60	968. 5	29. 16	987. 5	29. 72	1, 006. 4
28. 05	949. 9	28. 61	968. 8	29. 17	987. 8	29. 73	1, 006. 8

Inches	Millibars	Inches	Millibars	Inches	Millibars	Inches	Millibars
29. 74	1, 007. 1	30. 06	1, 018. 0	30. 38	1, 028. 8	30. 69	1, 039. 3
29. 75	1, 007. 5	30. 07	1, 018. 3	30. 39	1, 029. 1	30. 70	1, 039. 6
29. 76	1, 007. 8	30. 08	1, 018. 6	30. 40	1, 029. 5	30. 71	1, 040. 0
29. 77	1, 008. 1	30. 09	1, 019. 0	30. 41	1, 029. 8	30. 72	1, 040. 3
29. 78	1, 008. 5	30. 10	1, 019. 3	30. 42	1, 030. 1	30. 73	1, 040. 6
29. 79	1, 008. 8	30. 11	1, 019. 6	30. 43	1, 030. 5	30. 74	1, 041. 0
29. 80	1, 009. 1	30. 12	1, 020. 0	30. 44	1, 030. 8	30. 75	1, 041. 3
29. 81	1, 009. 5	30. 13	1, 020. 3	30. 45	1, 031. 2	30. 76	1, 041. 7
29. 82	1, 009. 8	30. 14	1, 020. 7	30. 46	1, 031. 5	30. 77	1, 042. 0
29. 83	1, 010. 2	30. 15	1, 021. 0	30. 47	1, 031. 8	30. 78	1, 042. 3
29. 84	1, 010. 5	30. 16	1, 021. 3	30. 48	1, 032. 2	30. 79	1, 042. 7
29. 85	1, 010. 8	30. 17	1, 021. 7	30. 49	1, 032. 5	30. 80	1, 043. 0
29. 86	1, 011. 2	30. 18	1, 022. 0	30. 50	1, 032. 9	30. 81	1, 043. 3
29. 87	1, 011. 5	30. 19	1, 022. 4	30. 51	1, 033. 2	30. 82	1, 043. 7
29. 88	1, 011. 9	30. 20	1, 022. 7	30. 52	1, 033. 5	30. 83	1, 044. 0
29. 89	1, 012. 2	30. 21	1, 023. 0	30. 53	1, 033. 9	30. 84	1, 044. 4
29. 90	1, 012. 5	30. 22	1, 023. 4	30. 54	1, 034. 2	30. 85	1, 044. 7
29. 91	1, 012. 9	30. 23	1, 023. 7	30. 55	1, 034. 5	30. 86	1, 045. 0
29. 92	1, 013. 2	30. 24	1, 024. 0	30. 56	1, 034. 9	30. 87	1, 045. 4
29. 93	1, 013. 5	30. 25	1, 024. 4	30. 57	1, 035. 2	30. 88	1, 045. 7
29. 94	1, 013. 9	30. 26	1, 024. 7	30. 58	1, 035. 6	30. 89	1, 046. 1
29. 95	1, 014. 2	30. 27	1, 025. 1	30. 59	1, 035. 9	30. 90	1, 046. 4
29. 96	1, 014. 6	30. 28	1, 025. 4	30. 60	1, 036. 2	30. 91	1, 046. 7
29. 97	1, 014. 9	30. 29	1, 025. 7	30. 61	1, 036. 6	30. 92	1, 047. 1
29. 98	1, 015. 2	30. 30	1, 026. 1	30. 62	1, 036. 9	30. 93	1, 047. 4
29. 99	1, 015. 6	30. 31	1, 026. 4	30. 63	1, 037. 3	30. 94	1, 047. 8
30. 00	1, 015. 9	30. 32	1, 026. 8	30. 64	1, 037. 6	30. 95	1, 048. 1
30. 01	1, 016. 3	30. 33	1, 027. 1	30. 65	1, 037. 9	30. 96	1, 048. 4
30. 02	1, 016. 6	30. 34	1, 027. 4	30. 66	1, 038. 3	30. 97	1, 048. 8
30. 03	1, 016. 9	30. 35	1, 027. 8	30. 67	1, 038. 6	30. 98	1, 049. 1
30. 04	1, 017. 3	30. 36	1, 028. 1	30. 68	1, 038. 9	30. 99	1, 049. 5
30. 05	1, 017. 6	30. 37	1, 028. 4				

NOTE.—1 inch = 33.86395 millibars; 1 millibar = 0.02952993 inch; 1 millimeter = 0.039370 inch; 1 inch = 25.40005 millimeters; 1 millibar = 0.7500616 millimeter; 1 millimeter = 1.33322387 millibars.

CODE TABLE X

Symbol C_L—Clouds of types stratocumulus, stratus, cumulus, and cumulonimbus

Code figures	Technical language specifications	Plain language specifications
0	No clouds C_L	No Stratocumulus, stratus, cumulus, or cumulonimbus clouds.
1	Cumulus humilis	Cumulus with little vertical development and seemingly flattened.
2	Cumulus congestus, with or without cumulus humilis or stratocumulus at the same level of base	Cumulus of considerable development, generally towering, with or without other cumulus or stratocumulus; bases all at the same level.
3	Cumulonimbus calvus, with or without cumulus, stratocumulus or stratus	Cumulonimbus with tops lacking clearcut outlines but distinctly not cirriform or anvil-shaped; with or without cumulus, stratocumulus, or stratus.
4	Stratocumulus cumulogenitus or vesperalis	Stratocumulus formed by the spreading out of cumulus; cumulus also often present. (Note: Since the spreading out of the scattered parcels of air that have been warmed by the surface may take place, as in Sc vesperalis as soon as the condensation level is reached, observers should be warned that, though Cu may normally have been seen earlier, the formation of a particular piece of Sc vesperalis may not come from a Cu.)
5	Stratocumulus other than cumulogenitus and vesperalis	Stratocumulus not formed by the spreading out of cumulus.
6	Stratus and/or fractostratus, but not fractostratus of bad weather.	Stratus or fractostratus or both, but not fractostratus of bad weather.
7	Fractostratus and/or fractocumulus of bad weather ("scud") usually under altostratus and nimbostratus	Fractostratus and/or fractocumulus of bad weather ("scud") usually under altostratus and nimbostratus. (By "bad weather" is meant the conditions usually prevailing before, during or after precipitation.)
8	Cumulus humilis or congestus and stratocumulus other than cumulogenitus and vesperalis with bases at different levels	Cumulus and stratocumulus other than those formed by the spreading out of cumulus, with bases at different levels.
9	Cumulonimbus capillatus (often with anvil) with or without cumulus, stratocumulus, stratus or "scud"	Cumulonimbus having a clearly fibrous (cirriform) top, often anvil-shaped, with or without cumulus, stratocumulus, stratus or "scud."

NOTE.—When the sky is obscured by rain, snow, fog, duststorm, smoke, or other phenomena and clouds of C_L type cannot be observed, a slant (/) will be reported for C_L.

CODE TABLE XI

Symbol h—Height of base of low cloud above sea

Code figures	Feet	Meters
0	0 to 150	0 to 50.
1	150 to 300	50 to 100.
2	300 to 600	100 to 200.
3	600 to 1,000	200 to 300.
4	1,000 to 2,000	300 to 600.
5	2,000 to 3,000	600 to 1,000.
6	3,000 to 5,000	1,000 to 1,500.
7	5,000 to 6,500	1,500 to 2,000.
8	6,500 to 8,000	2,000 to 2,500.
9	No low cloud below 8,000	No low cloud below 2,500.

NOTES

1. If the height of the base of cloud is exactly equal to a height given in the table, the higher code figure is used. For example, a height of 600 feet is coded as 3.
2. With fog such that sky cannot be seen "h" is coded as 0 and "N_h" as 9.

CODE TABLE XII

Symbol C_M—Clouds of types altocumulus, altostratus, and nimbostratus

Code figures	Technical language specifications	Plain language specifications
0	No clouds C_M	No altocumulus, altostratus, or nimbostratus clouds.
1	Altostratus translucidus	Thin altostratus (semitransparent everywhere) through which the sun or moon would be seen dimly as through ground glass.
2	Altostratus opacus, or nimbostratus.	Thick altostratus, or nimbostratus (through portions of the sheet the position of the sun or moon may be indicated by a light patch).
3	Altocumulus translucidus more or less stable and at a single level.	Thin (semitransparent) altocumulus; cloud elements not changing much; at a single level.
4	Altocumulus translucidus in patches (often lenticular) continually transforming and/or occurring at different levels.	Thin (semitransparent) altocumulus in patches (often almond or fish-shaped); cloud elements continually changing and/or occurring at more than one level.
5	Altocumulus translucidus in bands or in a layer systematically invading the sky and usually thickening as a whole, even partly into altocumulus opacus or duplicatus.	Thin (semitransparent) altocumulus in bands or in a layer gradually spreading over the sky and usually thickening as a whole; it may become partly opaque or double-layered.
6	Altocumulus cumulogenitus	Altocumulus formed by the spreading out of cumulus.
7	Altocumulus duplicatus or opacus, not increasing; or altostratus and altocumulus.	Any of the following cases: (a) Double-layered altocumulus, usually opaque in parts, not increasing; (b) a thick (opaque) layer of altocumulus, not increasing; (c) altostratus and altocumulus both present at the same or different levels.
8	Altocumulus cumiliformis (floccus or castellatus).	Altocumulus in the form of cumulus-shaped tufts or altocumulus with turrets.
9	Altocumulus of a chaotic sky; generally at different levels; Cirrus densus in patches usually present.	Altocumulus of a chaotic sky; generally at different levels; dense Cirrus in patches is usually also present.

NOTE.—When the sky is obscured by rain, snow, fog, duststorm, smoke, or other phenomena and clouds of C_M type cannot be observed, a slant (/) is reported for C_M.

CODE TABLE XIII

Symbol C_H—Clouds of types cirrus, cirrostratus, and cirrocumulus

Code figures	Technical language specifications	Plain language specifications
0	No clouds C_H	No cirrus, cirrocumulus, or cirrostratus clouds.
1	Cirrus filosus, scattered and not increasing.	Filaments or strands of cirrus, scattered and not increasing (often "mares' tails").
2	Cirrus densus in patches or twisted sheaves usually not increasing, sometimes presumably being the remains of the upper part of cumulonimbus.	Dense cirrus in patches or twisted sheaves usually not increasing; possibly but not certainly the remains of the upper part of cumulonimbus.
3	Cirrus nothus: either the remains of cumulonimbus or part of a distant cumulonimbus the rest of which is not visible.	Cirrus, often anvil-shaped; either the remains of the upper portions of cumulonimbus or part of a distant cumulonimbus the rest of which is not visible. (If there is doubt as to the cumulonimbus origin or association, code C_H2 should be used.)
4	Cirrus (often cirrus uncinus) systematically invading the sky and usually thickening as a whole.	Cirrus (often hook-shaped) gradually spreading over the sky and usually thickening as a whole.
5	Cirrus, often in polar bands, and/or cirrostratus systematically invading the sky and usually thickening as a whole, but the continuous layer not reaching 45° altitude.	Cirrus and cirrostratus, often in bands converging toward the horizon; or cirrostratus alone; in either case gradually spreading over the sky and usually thickening as a whole, but the continuous layer not reaching 45° altitude.
6	Cirrus, often in polar bands, and/or cirrostratus systematically invading the sky and usually thickening as a whole, and the continuous layer exceeding 45° altitude.	Cirrus and cirrostratus, often in bands converging toward the horizon; or cirrostratus alone; in either case gradually spreading over the sky and usually thickening as a whole, and the continuous layer exceeding 45° altitude.
7	Cirrostratus covering the whole sky.	Cirrostratus covering the whole sky.
8	Cirrostratus not increasing and not covering the whole sky.	Cirrostratus not increasing and not covering the whole sky; cirrus and cirrocumulus may be present.
9	Cirrocumulus the dominant cirroform cloud.	Cirrocumulus alone or cirrocumulus with some cirrus or cirrostratus, but the cirrocumulus being the main cirriform cloud present. (Cirrocumulus may be present in C_H 1 to C_H 8.)

NOTE.—When the sky is obscured by rain, snow, fog, duststorm, smoke, or other phenomena and clouds of type C_H cannot be observed, a slant (/) will be reported for C_H.

CODE TABLE XIV

Symbol D_s—Ship's course—direction toward which ship is moving

Code figures	True direction	Code figures	True direction
0	Ship hove to.	5	SW.
1	NE.	6	W.
2	E.	7	NW.
3	SE.	8	N.
4	S.	9	No information.

CODE TABLE XV

Symbol v_s—Ship's speed

Code figures	Speed	Code figures	Speed
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.

CODE TABLE XVI

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

Code figures	Description	
0	Rising, then falling	Barometer now higher than or the same as 3 hours ago.
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	Barometer now lower than 3 hours ago.
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*	

CODE TABLE XVII

Symbols pp—Amount of barometric change in the last 3 hours

Coded in units of 1/10 of a millibar. For example, 1/10 millibar is coded as 01; 1.2 millibars as 12.

Amount of rise or fall		Amount of rise or fall		Amount of rise or fall		Amount of rise or fall	
Millibars	Inch	Millibars	Inch	Millibars	Inch	Millibars	Inch
0. 2	0. 01	5. 2	0. 16	10. 2	0. 31	15. 2	0. 46
. 4	. 01	5. 4	. 16	10. 4	. 31	15. 4	. 46
. 6	. 02	5. 6	. 17	10. 6	. 32	15. 6	. 47
. 8	. 02	5. 8	. 17	10. 8	. 32	15. 8	. 47
1. 0	. 03	6. 0	. 18	11. 0	. 33	16. 0	. 48
1. 2	. 04	6. 2	. 19	11. 2	. 34	16. 2	. 49
1. 4	. 04	6. 4	. 19	11. 4	. 34	16. 4	. 49
1. 6	. 05	6. 6	. 20	11. 6	. 35	16. 6	. 50
1. 8	. 05	6. 8	. 20	11. 8	. 35	16. 8	. 50
2. 0	. 06	7. 0	. 21	12. 0	. 36	17. 0	. 51
2. 2	. 07	7. 2	. 22	12. 2	. 37	17. 2	. 52
2. 4	. 07	7. 4	. 22	12. 4	. 37	17. 4	. 52
2. 6	. 08	7. 6	. 23	12. 6	. 38	17. 6	. 53
2. 8	. 08	7. 8	. 23	12. 8	. 38	17. 8	. 53
3. 0	. 09	8. 0	. 24	13. 0	. 39	18. 0	. 54
3. 2	. 10	8. 2	. 25	13. 2	. 40	18. 2	. 55
3. 4	. 10	8. 4	. 25	13. 4	. 40	18. 4	. 55
3. 6	. 11	8. 6	. 26	13. 6	. 41	18. 6	. 56
3. 8	. 11	8. 8	. 26	13. 8	. 41	18. 8	. 56
4. 0	. 12	9. 0	. 27	14. 0	. 42	19. 0	. 57
4. 2	. 13	9. 2	. 28	14. 2	. 43	19. 2	. 58
4. 4	. 13	9. 4	. 28	14. 4	. 43	19. 4	. 58
4. 6	. 14	9. 6	. 29	14. 6	. 44	19. 6	. 59
4. 8	. 14	9. 8	. 29	14. 8	. 44	19. 8	. 59
5. 0	. 15	10. 0	. 30	15. 0	. 45		

CODE TABLE XVIII

Symbol C—Form of significant cloud

Code figures	Form of cloud	Abbreviation
1	Cirrus	Ci.
2	Cirrostratus	Cs.
3	Cirrocumulus	Cc.
4	Altocumulus	Ac.
5	Altostratus	As.
6	Stratocumulus	Sc.
7	Nimbostratus	Ns.
8	Cumulus or fractocumulus	Cu. or Fc.
9	Cumulonimbus	Cb.
0	Stratus or fractostratus	St. or Fs.

CODE TABLE XIX

Symbol h_sh_s—Height above station (or ship) of significant cloud layer

Code figures	Feet	Meters	Code figures	Feet	Meters
00	Lower than 100	Lower than 30.	84	13,000	4,000.
01	100	30.	85	16,000	5,000.
02	200	60.	86	20,000	6,000.
03	300	90.	87	23,000	7,000.
04	400	120.	88	26,000	8,000.
05	500	150.	89	30,000 or higher	9,000 or higher.
06	600	180.	90	0 to 150	0 to 50.
07	700	210.	91	150 to 300	50 to 100.
08	800	240.	92	300 to 600	100 to 200.
09	900	270.	93	600 to 1,000	200 to 300.
10	1,000	300.	94	1,000 to 2,000	300 to 600.
etc.	etc	etc.	95	2,000 to 3,000	600 to 1,000.
79	7,900	2,370.	96	3,000 to 5,000	1,000 to 1,500.
80	8,000	2,400.	97	5,000 to 6,500	1,500 to 2,000.
81	9,000	2,700.	98	6,500 to 8,000	2,000 to 2,500.
82	Not used	Not used.	99	8,000 or more or no clouds.	2,500 or more or no clouds.
83	10,000	3,000.			

NOTES

1. For each code figure 01 to 80, inclusive, in the above table, the height increases 100 feet (30 meters); i. e., figure 21=2,100 feet (630 meters); 63=6,300 feet (1,890 meters).
2. Code figures 90–99: If the base of cloud is exactly equal to a height given in the table, the higher code figure is used. For example, a height of 600 feet is coded as 93.

CODE TABLE XX

Symbol P_w—Period of waves

Code figures	Period
2	5 seconds or less.
3	5 to 7 seconds.
4	7 to 9 seconds.
5	9 to 11 seconds.
6	11 to 13 seconds.
7	13 to 15 seconds.
8	15 to 17 seconds.
9	17 to 19 seconds.
0	19 to 21 seconds.
1	Over 21 seconds.
x	Calm or period unable to be determined.

NOTE.—If the exact number of seconds for the period of the waves corresponds to 2 code figures, the lower code figure is reported.

CODE TABLE XXI

Symbol H_w—Mean maximum height of waves

Code figures	Height
0	Less than 1 foot (¼ meter).
1	1½ feet (½ meter).
2	3 feet (1 meter).
3	5 feet (1½ meters).
4	6½ feet (2 meters).
5	8 feet (2½ meters).
6	9½ feet (3 meters).
7	11 feet (3½ meters).
8	13 feet (4 meters).
9	14 feet (4½ meters).
x	Height impossible to determine.
	(When 50 is added to $d_w d_w$, the height of waves is as follows):
0	16 feet (5 meters).
1	17½ feet (5½ meters).
2	19 feet (6 meters).
3	21 feet (6½ meters).
4	22½ feet (7 meters).
5	24 feet (7½ meters).
6	25½ feet (8 meters).
7	27 feet (8½ meters).
8	29 feet (9 meters).
9	30½ feet (9½ meters).
x	Height impossible to determine.

NOTES

1. Each code figure except "zero" covers a range of ¾ meter; e. g., code figure 1=¼ meter to ¾ meter, code figure 2=¾ meter to 1¼ meters.
2. If the wave height is exactly between the heights corresponding to 2 code figures, the lower code figure is reported.
3. For wave heights greater than 31 feet (9¾ meters), the code figure for 30½ feet (9½ meters) is reported followed by the word "WAVES" and the actual height of the waves in feet or meters; e. g., "WAVES 37."

CODE TABLE XXII

Symbol c_2—Description of kind of ice

Code figures	Description
0	No ice: ("0" will be used to report "ice blink," and then a direction must be reported.)
1	Slush or young ice.
2	Fast ice.
3	Drift ice.
4	Packed (compact) slush or strips of hummock ice.
5	Open lead near shore.
6	Heavy fast ice.
7	Heavy drift ice.
8	Hummocked ice.
9	Ice jamming.

CODE TABLE XXIII

Symbol K—Effect of the ice on navigation

Code figures	Description
0	Navigation unobstructed.
1	Navigation unobstructed for steamers; difficult for sailing ships.
2	Navigation difficult for low-powered steamers; closed to sailing ships.
3	Navigation possible only for powerful steamers.
4	Navigation possible only for steamers constructed to withstand ice pressure.
5	Navigation possible with the assistance of icebreakers.
6	Channel open in the solid ice.
7	Navigation temporarily closed.
8	Navigation closed.
9	Navigation conditions unknown (e. g., owing to bad weather).

CODE TABLE XXIV

Symbol D_1—Bearing of ice limit

Code figures	Description
0	No ice limit can be stated.
1	Ice limit towards NE.
2	Ice limit towards E.
3	Ice limit towards SE.
4	Ice limit towards S.
5	Ice limit towards SW.
6	Ice limit towards W.
7	Ice limit towards NW.
8	Ice limit towards N.
9	Ice limit in several directions.

NOTE.—If more than 1 ice limit can be stated, the nearest or most important is reported.

CODE TABLE XXV

Symbol r—Distance to ice limit from reporting ship

Code figures	Distance
0	Up to 1 mile.
1	1 to 2 miles.
2	2 to 4 miles.
3	4 to 6 miles.
4	6 to 8 miles.
5	8 to 12 miles.
6	12 to 16 miles.
7	16 to 20 miles.
8	More than 20 miles.
9	Unspecified or no observations.

NOTE.—If the exact bounding distance for the ice limit corresponds to 2 code figures, the lower code figure is reported.

CODE TABLE XXVI

Symbol e—Orientation of ice limit

Code figures	Orientation of ice limit
0	Orientation of ice limit impossible to estimate—ship *outside* the ice.
1	Ice edge lying in a direction NE. to SW. with ice situated to the NW.
2	Ice edge lying in a direction E. to W. with ice situated to the northward.
3	Ice edge lying in a direction SE. to NW. with ice situated to the NE.
4	Ice edge lying in a direction S. to N. with ice situated to the eastward.
5	Ice edge lying in a direction SW. to NE. with ice situated to the SE.
6	Ice edge lying in a direction W. to E. with ice situated to the southward.
7	Ice edge lying in a direction NW. to SE. with ice situated to the SW.
8	Ice edge lying in a direction N. to S with ice situated to the westward.
9	Orientation of ice limit impossible to estimate—ship *inside* the ice.

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