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FINAL REPORT

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- (e) si des tendances de température, des géopotentiels et des épaisseurs sont indiqués, ils le seront soit à droite, soit au-dessous de l'élément auquel ils se réfèrent ;
- (f) direction et vitesse du vent. Aucune recommandation n'est faite pour le moment, en attendant l'étude plus approfondie de la question par les Commissions techniques intéressées et l'adoption d'un système approuvé universellement ;
- (g) les nuages seront représentés par les mêmes symboles que ceux employés pour les cartes de surface, et des dispositions seront prises pour inscrire la hauteur de la base des nuages et celle de leur sommet ;
- (h) les symboles suivants seront employés pour le résultat des analyses :

isohypes	noir — lignes pleines
lignes d'épaisseur	noir — lignes de tirets
isothermes	rouge — lignes de tirets ou pleines
lignes d'humidité	vert — lignes pleines

100 (CSWI TORONTO 1947 : XXXVI). **100** (CSWI TORONTO 1947 : XXXVI).
Depth of Snow (s). *Epaisseur de la neige (s).*

The Conference recommends the following specification for depth of snow (s) when this is reported:

Code for Depth of Snow (s).

0	no snow
1	up to 2 cm
2	up to 5 cm
3	up to 10 cm
4	up to 15 cm
5	up to 25 cm
6	up to 50 cm
7	up to 100 cm
8	up to 200 cm
9	200 cm or more.

La Conférence recommande la spécification suivante pour l'épaisseur de la neige (s) quand celle-ci est indiquée :

Code pour l'épaisseur de la neige (s).

0	pas de neige
1	jusqu'à 2 cm
2	jusqu'à 5 cm
3	jusqu'à 10 cm
4	jusqu'à 15 cm
5	jusqu'à 25 cm
6	jusqu'à 50 cm
7	jusqu'à 100 cm
8	jusqu'à 200 cm
9	200 cm ou plus.

101 (CSWI TORONTO 1947: XXXVIII). **101** (CSWI TORONTO 1947: XXXVIII).
Temperature in Coded Reports.

The Conference recommends that countries using °C should be invited to consider coming to an agreement to use $\frac{1}{2}^{\circ}\text{C}$ in coded surface reports.

Température dans les messages chiffrés.

La Conférence recommande que les pays qui emploient les degrés centigrades soient invités à rechercher un accord pour employer les $\frac{1}{2}^{\circ}\text{C}$ dans les messages de surface chiffrés.

Les observations de nuit, chiffrées selon les relations données par ce tableau (ou par interpolation quand il s'agit de valeurs intermédiaires) seront :

- (a) comparables, pour les besoins d'ordre pratique, aux observations de jour ;
- (b) directement applicables à la détermination de la distance à laquelle des sources d'intensité connue seront visibles.

Cette Résolution remplace la Résolution suivante : CD Varsovie 1935 : 51 (RR p. 284).

115 (CSWI TORONTO 1947 : XLIX). 115 (CSWI TORONTO 1947 : XLIX).
Value to be used for $T_s T_s$. Valeur à employer pour $T_s T_s$.

The Conference recommends that $T_s T_s$ should be used to report the difference between the air temperature and the sea temperature in half degrees centigrades or in whole degrees Fahrenheit. If the air temperature is below the sea temperature, 50 is added to the numerical value of the difference for coding the report; e. g., if the air temperature is 17.5° C below the sea temperature, $T_s T_s$ is coded as 85. The same method is used both for $^{\circ}$ C and $^{\circ}$ F; e. g., if the air temperature is 17° F below the sea temperature, the coded value is 67.

La Conférence recommande d'employer $T_s T_s$ pour indiquer la différence entre la température de l'air et la température de la mer en demi-degrés centigrades ou en degrés entiers Fahrenheit. Si la température de l'air est inférieure à celle de la mer, on ajoute 50 à la valeur numérique de la différence pour chiffrer le message; par exemple, si la température de l'air est de 17.5° C au-dessous de celle de la mer, $T_s T_s$ est chiffré 85. La même méthode est employée pour les degrés centigrades et pour les degrés Fahrenheit; par exemple, si la température de l'air est de 17° F au-dessous de la température de la mer, la valeur chiffrée est de 67.

This Resolution supersedes the following Resolution : CD Copenhagen 1929 : 77d (RR p. 270) and modifies the following Resolution : IMC Paris 1946 : 28, 2nd part.

Cette Résolution remplace la Résolution suivante : CD Copenhague 1929 : 77d (RR p. 270) et modifie la Résolution suivante : CMI Paris 1946 : 28, 2^{me} partie.

116 (CBP TORONTO 1947 : I).
Dispositions concernant le tirage et la lecture des microfilms.

La Conférence recommande aux Services météorologiques de tous

116 (CBP TORONTO 1947 : I).
Facilities for Making and Reading Micro-Films.

The Conference recommends that the Meteorological Services

137 (CIMO TORONTO 1947 : XX).*Earth Temperature Measurements.*

The Conference recommends that:
 (1) the standard depths for earth temperature measurements should be 10, 20, 50 and 100 cm (4, 8, 20, and 40 ins.). Where other depths have been employed and a large amount of data collected they may be maintained;

(2) the character of the soil and cover described.

137 (CIMO TORONTO 1947 : XX).*Mesure de la température du sol.*

La Conférence recommande :
 (1) de fixer à 10, 20, 50 et 100 cm (4, 8, 20 et 40 pouces) les profondeurs standard pour les mesures de la température du sol. Partout où des mesures ont été faites à d'autres profondeurs et où un grand nombre d'observations ont été recueillies, des mesures aux mêmes profondeurs pourront continuer à être faites ;

(2) de décrire la nature du sol et ce qui le recouvre.

138 (CIMO TORONTO 1947 : XXI).*Temperature Observations on Shipboard.*

The Conference recommends for shipboard observations that:

- (1) for determining humidity or dew point at sea, fixed thermometer shelters be not used as they have the disadvantage of (a) poor exposure under certain wind conditions, and (b) wetting by sea spray ;
- (2) that the sling or ventilated psychrometer be used as the most suitable instrument for obtaining wet and dry bulb temperatures ;
- (3) that observations be taken on the windward side at the level of the bridge of the ship.

138 (CIMO TORONTO 1947 : XXI).*Observations de température à bord de navires.*

En ce qui concerne les observations à bord des navires, la Conférence recommande :

- (1) pour la détermination de l'humidité ou du point de rosée en mer, de ne pas utiliser des abris fixes de thermomètres, car ils ont le désavantage (a) d'être médiocrement exposés dans certaines conditions de vent et (b) d'être mouillés par les embruns ;
- (2) d'utiliser le psychromètre-fronde ou le psychromètre à ventilation comme étant les instruments les plus convenables pour obtenir les températures des thermomètres sec et mouillé ;
- (3) de faire les observations au niveau du pont, du côté au vent du navire.

161 (CSWI TORONTO 1947: XVI). *Standard Forms of Message for Reports of Surface Observations.*

The Conference recommends the following form of message for surface observations:

SYNOP	999 II (when necessary) iii T _d T _d Nddff VVwwW PPPTT N _h C _L hC _M C _H (6japp) (7RRjj) (8N _s Ch _{shs}) (9S _P S _P s _p s _p)
AERO	999 II (when necessary) iii Nddff VVwwW (8N _s Ch _{shs}) (see note a)
SHIP	YQL _a L _a L _a L _o L _o L _o GG Nddff VVwwW PPPTT N _h C _L hC _M C _H D _s v _s app (8N _s Ch _{shs}) (9S _P S _P s _p s _p) (0T _s T _s T _d T _d) (1d _w d _w P _w H _w) ICE followed by plain language or (c ₂ KD _i re)

The symbols have the meaning given in Resolution IMC Paris 1946: 5 (IMO, Publication No. 55, page 375) with the exception of the following:

II	Block number
iii	Station number
dd	True direction, in tens of degrees, from which wind is blowing (00-36)
ff	Wind speed in knots. (For reporting winds greater than 99 knots see Resolution CD Washington 1947: 108.)
N _h	Amount of cloud, in oktas, whose height is reported by h (Resolution IMC Paris 1946: 11)
C _L	Clouds of genera (types) Sc, St, Cu, Cb
C _M	Clouds of genera (types) Ac, As, Ns
C _H	Clouds of genera (types) Ci, Cs, Cc
h	Height above ground of the base of the cloud (Code No. 43, IMO Publication No. 9, Fasc. I, 3rd ed. (1946), page 70)
j	Element to be included by regional agreement (such as E, D _c , R _c , etc.)
jj	Element(s) to be included by regional agreement (such as T _e T _e , etc.)
N _s	Amount (in oktas) of the significant cloud layer
C	Genus (type) of significant cloud (Code 10, IMO Publication No. 9, Fasc. I, 3rd ed. (1946), page 61)
h _{shs}	Height above station of the layer to which N _s refers
d _w d _w	Direction from which waves come (Resolution CD Washington 1947: 200)
P _w	Period of the waves (Resolution CD Washington 1947: 200)
H _w	Mean maximum height of the waves (Resolution CD Washington 1947: 200)
c ₂	Description of kind of ice (Resolution CD Washington 1947: 67)

K	Effect of ice on navigation (Resolution CD Washington 1947 : 67)
D _i	Bearing of ice limit (Resolution CD Washington 1947 : 67)
r	Distance to ice limit from reporting ship (Resolution CD Washington 1947 : 67)
e	Orientation of ice limit (Resolution CD Washington 1947 : 67)
D _s	Direction toward which ship is moving (ship's course)
T _s T _s	Difference between air and sea temperature
()	Indicates self-identifying groups which may or may not be included in the message depending on specified conditions
6, 7, 8, 9, 0, 1	Group indicators

Notes :

- (a) To the AERO message may be added the group (0TTT_dT_d) and/or Q signals, e. g., QNH, QMU, and also plain language remarks on turbulence, icing, and other hazardous phenomena. For example: iii Nddff VVwwW (8N_sCh_sh_s) (0TTT_dT_d) etc.
- (b) The AERO form is intended primarily for the issue of information in half-hourly or hourly broadcasts for aviation, usually broadcasts of short duration (in Europe at present three minutes). It may also be used in response to a QFY signal. An additional group giving temperature and dew point may be included by regional agreement. Information exchanged for forecast purposes should be in the SYNOP.
- (c) The group PPPTT is not included in the AERO messages and provision has been made for appropriate Q-signals to be added when required. If the group PPPTT is required in messages, the SYNOP form should be used.
- (d) Messages from ships are divided into three categories viz.,

Short message	containing only 4 groups
Abbreviated message	containing 6 groups
Full message	containing all standard groups and "drop-out" groups. If in a full message the group D _{svsapp} is not reported, 30 is added to GG.
- (e) The form of the full message is considered suitable not only for selected ships but also for ocean weather stations.
- (f) The group (9SpSps_ps_p) will not normally be reported in ships' messages (other than "stationary ships" reports).
- (g) Light-vessels on station are considered to be in the same category as land stations with regard to codes and observing procedures. The SYNOP code form, with the omission of certain optional groups and the addition of such national and regional supplementary groups as may be required, should be used.

- (h) Coastal stations and light-vessels may include the wave group ($1d_w d_w P_w H_w$) in their reports in accordance with national or regional instructions. (See Resolutions CD Washington 1947 : 200, 203 and 204.)
- (i) The indicator figures 2, 3, 4, and 5 may be used for additional supplementary groups by regional agreement.
- (j) The groups with indicator figures may be repeated as necessary.
- (k) The group $N_h C_L h C_M C_H$ should be included also when $N = 0$, to render the synoptic portion of the code invariable.
- (l) The significant cloud layers are :
 - (i) The lowest layer of cloud below 20,000 feet covering more than half the sky,
 - (ii) The lowest layer of cloud, if any, below the layer given in (i) preceding.
 - (iii) If no layer of cloud below 20,000 feet covers more than half the sky, the significant cloud layer is the lowest layer of cloud below 20,000 feet.
- (m)* If both significant cloud layers described in note (l) (i and ii) are present, both the layers are reported and two separate 8-groups are used.
- (n) When the sky is not discernible due to fog, sandstorm, duststorm, blowing snow or other obscuring phenomena and the 8-group is included in the message, it is suggested that the vertical visibility be reported for h_{sh_s} ; i. e., the group to be coded 89x_{shs} with the appropriate vertical visibility value being coded for h_{sh_s} . If the sky is discernible, the partially obscuring phenomena will be disregarded and the 8-group will be included or omitted in accordance with instructions for reporting clouds.
- (o) When the pressure tendency (pp) equals or exceeds 9.9 mb, the group 99ppp will be inserted in the message after the 6japp group. The total pressure tendency will be reported for ppp and 99 will be reported for pp.
- (p) It is considered that for the present the cloud group 8N_sCh_{shs} should be optional as far as merchant ships are concerned.

This Resolution supersedes the following Resolutions : IMC London 1921 : 38 (RR p. 153); IMC Vienna 1926 : 21 (RR p. 284); CD Copenhagen 1929 : 28 (RR p. 218); CD Copenhagen 1929 : 57 (RR p. 224); CD Copenhagen 1929 : 58 (RR p. 224); CD Copenhagen 1929 : 64 (RR p. 225); CD Copenhagen 1929 : 75 (RR p. 226); CD Warsaw 1935 : 36 (RR p. 227); CD Warsaw 1935 : 44 (RR p. 257); CD Warsaw 1935 : 54 (RR p. 229); CD Warsaw 1935 : 99 (RR p. 159); IMC Salzburg 1937 : 26 (RR p. 241); IMC Salzburg 1937 : 34 (RR p. 246); IMC Salzburg 1937 : 49 (RR p. 248); IMC Salzburg 1937 : 72 (RR p. 133); IMC Berlin 1939 : 16 (RR p. 250); CD London 1946 : 19 — the sentence "F 233 Ship Code"; IMC Paris 1946 : 5; IMC Paris 1946 : 14; IMC Paris 1946 : 15; IMC Paris 1946 : 16.*

179 (CSWI TORONTO 1947 : XXX A).*Symbols for Cloud Amount.*

The Conference recommends that the following table of symbols for cloud amount should replace the corresponding symbols appended to Table I of Resolution CD Warsaw 1935 : 71.

N=	0	1	2	3	4	5	6	7	8	9
	○	○ ⊖	○ ⊗	○ ⊘	○ ⊙	○ ⊚	○ ⊛	○ ⊜	○ ⊝	○ ⊞

The following table is also permissible :

N=	0	1	2	3	4	5	6	7	8	9
	○	⊖	○ ⊖	○ ⊘	○ ⊙	○ ⊚	○ ⊛	○ ⊜	○ ⊝	○ ⊞

This Resolution modifies the following Resolution : CD Warsaw 1935 : 71 (RR p. 236) — (remains valid only for W symbols).

180 (CSWI TORONTO 1947 : XXXVII).*Temperature, approximate tenths (T_x).*

The Conference recommends :

- (a) That groups of the form TTUuu in Resolution IMC Paris 1946 : 10 (Form of Message for Upper Air Reports) be changed to TTTdTdTx, where TT is the

179 (CSWI TORONTO 1947 : XXX A).*Symboles pour la quantité de nuages.*

La Conférence recommande de remplacer par le tableau suivant de symboles pour la quantité de nuages, les symboles correspondants annexés au tableau I de la Résolution CD Varsovie 1935 : 71.

L'usage du tableau suivant est également permis :

Cette Résolution modifie la Résolution suivante : CD Varsovie 1935 : 71 (RR p. 236) — (ne reste valable que pour les symboles W).

180 (CSWI TORONTO 1947 : XXXVII).*Dixièmes approximatifs de la température (T_x).*

La Conférence recommande :

- (a) Que les groupes de la forme TTUuu dans la Résolution CMI Paris 1946 : 10 (forme de message pour les observations en altitude) soient changés en des

temperature, $T_d T_d$ is the dew point temperature, and T_x is a code figure representing the approximate tenths value for both temperature and dew point temperature. The table and method of using T_x is explained in paragraph (b).

- (b) When two temperatures (e. g., TT, and $T_d T_d$) are reported in whole degrees, the tenths of degrees should be reported approximately in one figure (T_x) so that a five-figure group is sufficient to report both temperatures with the accuracy indicated (see table below). The tenths of degrees in the value of the first temperature (e. g., TT) are represented in the vertical column and the tenths of degrees in the value of the second temperature, (e. g., $T_d T_d$) are indicated in the top horizontal column. The values of T_x are shown in the table. If the number of tenths in both temperatures is zero, T_x is also zero. In decoding the figure reported for T_x the middle value is taken; e. g., if $T_x = 6$ the corresponding numbers of tenths in the two temperatures are 5 and 8.

groupes de la forme $TTT_d T_d T_x$, où TT est la température, $T_d T_d$ est la température du point de rosée, et T_x est un chiffre de code indiquant la valeur de dixièmes approximatifs pour les deux températures, la température de l'air et la température du point de rosée. Le tableau et la méthode pour employer T_x sont expliqués au paragraphe (b);

- (b) Que lorsque deux températures (par exemple TT et $T_d T_d$) sont indiquées en degrés entiers, les dixièmes de degrés soient signalés approximativement en un seul chiffre (T_x), de façon qu'un groupe de cinq chiffres suffise à indiquer les deux températures avec la précision qui s'impose. (Voir le tableau ci-après.) Les dixièmes de degrés de la valeur de la première température (c'est-à-dire TT) figurent dans la colonne verticale, et les dixièmes de degrés de la valeur de la deuxième température (par exemple $T_d T_d$) figurent dans la colonne horizontale supérieure. Les valeurs de T_x sont indiquées dans le tableau. Si le nombre de dixièmes dans les deux températures est zéro, T_x est aussi zéro. En déchiffrant le chiffre donné pour T_x , on prend la valeur moyenne des dixièmes; par exemple si $T_x=6$, les nombres correspondant de dixièmes des deux températures sont 5 et 8.

Table for T_x

T_d	0	1 2 3	4 5 6	7 8 9
0	0			
1				
2	1	2	3	
3				
4				
5	4	5	6	
6				
7				
8	7	8	9	
9				

Tableau pour T_x

T_d	0	1 2 3	4 5 6	7 8 9
0	0			
1				
2		1	2	3
3				
4				
5		4	5	6
6				
7				
8		7	8	9
9				

This Resolution supersedes the following Resolution : CD Warsaw 1935 : 44 (RR p. 257) and modifies the following Resolution : CD Copenhague 1929 : 8 (RR p. 20).

181 (CSWI TORONTO 1947 : XLV).
Special Phenomena.

The Conference recommends that provisionally the specifications for $S_p S_{p,p} S_{p,p}$ should be fixed by regional agreement and that the preparation of definitive specification for universal use should be based on the experience obtained by the use of these regional specifications.

182 Date of Introduction of the New Codes and Specifications.

The Conference decides that the new codes and specifications adopted in Washington (1947) and other codes and specifications adopted at Paris (1946) which are not amended by decisions taken

Cette Résolution remplace la Résolution suivante : CD Varsovie 1935 : 44 (RR p. 257) et modifie la Résolution suivante : CD Copenhague 1929 : 8 (RR p. 20).

181 (CSWI TORONTO 1947 : XLV).
Phénomènes spéciaux.

La Conférence recommande de fixer provisoirement, par accord régional, les spécifications pour $S_p S_{p,p} S_{p,p}$ et de baser, sur l'expérience acquise par l'usage de ces spécifications régionales, la préparation de spécifications définitives, d'un emploi universel.

182 Date d'introduction des nouveaux codes et spécifications.

La Conférence décide que les nouveaux codes et spécifications adoptés à Washington (1947) et les autres codes et spécifications adoptés à Paris (1946) qui n'ont pas été modifiés par des décisions

at Washington, shall be introduced at 0001 GMT, January 1, 1949, except that the date of introduction of the code for reports from transport aircraft will be subject to agreement with ICAO.

This Resolution supersedes the following Resolution : IMC Paris 1946 : 56.

prises à Washington, seront mis en vigueur à 0001 TMG, le 1^{er} janvier 1949, exception faite du code pour les messages provenant d'aéronefs de transport, dont la date d'introduction fera l'objet d'un accord avec l'OACI.

Cette Résolution remplace la Résolution suivante : CMI Paris 1946 : 56.

183 Specification for Temperature.

183 Spécification pour la température.

The Conference requests the CSWI to study the question of a universal specification for air temperature, sea temperature and dew point temperature to enable reports to be made to a greater degree of accuracy than one degree centigrade.

La Conférence demande à la Commission des Renseignements synoptiques du Temps d'étudier la question d'une spécification universelle pour la température de l'air, celle de la mer et celle du point de rosée, afin de permettre de donner, dans les messages, une précision inférieure au degré centigrade.

184 Use of Dew point in Synoptic Surface Reports.

The Conference recommends the use of dew point (not frost point) in synoptic surface reports in circumstances where the vapour pressures are lower than the saturated water vapour pressure of 0° C.

185 (CR I SALISBURY 1947 : XV).
Cost of Transmission of Weather Reports from Ships at Sea.

The Conference requests that in view of the desirability of the provision of an adequate number

184 Emploi du point de rosée dans les messages synoptiques de surface.

La Conférence recommande l'emploi du point de rosée (et non pas du point de gelée) dans les messages synoptiques de surface dans des cas où les tensions de vapeur sont inférieures à la tension de la vapeur d'eau saturante à 0° C.

185 (CR I SALISBURY 1947 : XV).
Coût de transmission des messages météorologiques des navires en mer.

Considérant qu'il est désirable de disposer d'un nombre suffisant de messages de navires, la Confé-

Symbolic form of further groups which may be added to make up a "full message" of more than six groups, known as Code Form No. FM 21:

NOTE 3: These groups must be included if any further groups are to be employed, but an "X" or the appropriate number of "X's" will then be used to replace any missing data.

NOTE 4: Any of these groups is to be omitted when the phenomena in the complete group are absent or unobservable. "X's" are to be used to fill out partially complete groups. This card contains only the selection of drop-out groups intended for the use of merchant ships.

A full message, from an ocean weather ship for example, could contain more.

NOTE 5: If Dvapp is being omitted, but further groups are to follow, 30 is to be added to 30.

CODE TABLE IX					
Symbol C _M - Clouds of types Ac, As, Ns					
When a precision barometer is available, the third digit should give the value to the tenth of a mb.					
Code					Code
Milli-bars	Code figs.	Inches	Code figs.	Form of cloud	Form of cloud
650	28.50	965	050	29.68	1005
660	28.53	966	060	29.71	1006
670	28.56	967	070	29.74	1007
680	28.59	968	080	29.77	1008
690	28.62	969	090	29.80	1009
700	28.65	970	100	29.83	1010
710	28.67	971	110	29.86	1011
720	28.70	972	120	29.89	1012
730	28.73	973	130	29.92	1013
740	28.76	974	140	29.94	1014
750	28.79	975	150	29.97	1015
760	28.82	976	160	30.00	1016
770	28.85	977	170	30.03	1017
780	28.88	978	180	30.06	1018
790	28.91	979	190	30.09	1019
800	28.94	980	200	30.12	1020
810	28.97	981	210	30.15	1021
820	29.00	982	220	30.18	1022
830	29.03	983	230	30.21	1023
840	29.06	984	240	30.24	1024
850	29.09	985	250	30.27	1025
860	29.12	986	260	30.30	1026
870	29.15	987	270	30.33	1027
880	29.18	988	280	30.36	1028
890	29.21	989	290	30.39	1029
900	29.24	990	300	30.42	1030
910	29.26	991	310	30.45	1031
920	29.29	992	320	30.48	1032
930	29.32	993	330	30.51	1033
940	29.35	994	340	30.53	1034
950	29.38	995	350	30.56	1035
960	29.41	996	360	30.59	1036
970	29.44	997	370	30.62	1037
980	29.47	998	380	30.65	1038
990	29.50	999	390	30.68	1039
000	29.53	1000	400	30.71	1040
010	29.56	1001	410	30.74	1041
020	29.59	1002	420	30.77	1042
030	29.62	1003	430	30.80	1043
040	29.65	1004	440	30.83	1044

To convert barometer readings above 30.83" or below 28.50" to millibars, multiply by .33.9. Encode the tens, units and first decimal digits of the result.

Symbol TT - Temperature of air to nearest whole degree, omitting initial 1 if 100 or over; subtracted from 100 without regard to sign if below zero F., e.g., -2 would be encoded as 98.

Symbol N_h - Amount of cloud at height h same code as for N

CODE TABLE X

Symbol C_L - Clouds of types Sc, St, Cu, Ob

Code

Form of cloud

Code

Speed

Code

</

SHIP CODE CARD

Synthetic form of groups for "short message", consisting
of four groups, known as Code Form No. FN 23:

Y Q L_a L_a L_a

INTERNATIONAL METEOROLOGICAL CODE - SELECTION OF GROUPS FOR SHIPS' WEATHER REPORTS

- 8 JUN 1950

L_a L_a G_a N d d f f V V w w w

LIBRARY

CODE TABLE I

Symbol **Y** - Day of the week

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

CODE TABLE II

Symbol **Q** - Octant of the globe

Code figures	Longitude	Code figures	Latitude
0	0° - 90°W	5	S. Lat.
1	90°W - 180°	6	
2	180° - 90°E	7	
3	90°E - 0°	8	

Symbol

L_a L_a - Latitude, degrees and tenths

L_a L_a - Longitude, degrees and tenths, omitting initial 1 if 100 or over

G G - Time of observation to nearest hour G.M.T., 00 to 23

CODE TABLE III

Symbol **N** - Total amount of all clouds

Code figs.	Proportion of sky covered	Code figs.	Proportion of sky covered
0	Cloudless	6	3/4
1	Trace or 1/8	7	7/8 or overcast
2	1/4		with holes
3	3/8	8	Completely overcast
4	1/2		Sky obscured by fog
5	5/8	9	or other phenomenon

CODE TABLE IV

Symbol **aa** - Wind direction

True direction from which the wind is blowing, to the nearest ten degrees

Code figs.	Directions	Code figs.	Directions
00	Calm	09	East
01	N 10° E	18	South
02	N 20° E	27	West
03	And so on by 10° steps right around to north	36	North
04			
05			

CODE TABLE V

Symbol **ff** - Wind speed in knots

Wave heights given below are roughly average for the open sea. Fetch should be 150 miles for winds above Beaufort 2. Wave heights 2/3 of average with 50 mi. fetch. It takes some hours for average wave heights to adjust when the wind has sprung up. A strong wind from a new direction will flatten waves in a few hours. Depth, swell, heavy rain, and tides affect the sea. It is difficult at night to use the sea criterion for wind force.

Code beau-forts Description Appearance of the sea if the fetch and duration of the blow have been sufficient to develop the sea fully

00	0	Calm	Sea like a mirror.....	Code figs. in ft.
02	1	Light air	Scalpelike ripples without crests.....	Aver. Max.
05	2	Lgt breeze	Small wavelets; crests glossy, do not break.....	
09	3	Gentle breeze	Large wavelets; crests break, foam glossy; perhaps scattered.....	
15	4	Mit breeze	White horses.....	
18	5	Fresh breeze	Small waves; fairly frequent white horses.....	
24	6	Strong breeze	Large waves; white crests everywhere; probably some spray.....	
30	7	High wind or mit gale	Sea heaps up; white foam begins to be blown in streaks along the direction of the wind; spindrift begins.....	
37	8	Gale or fresh gale	Moderately high waves; well-marked streaks of foam along the wind; edges of crests break into spindrift.....	
44	9	Strong gale	Very high waves with long overhanging crests; foam in great patches blown in dense white streaks along wind; see surface mostly white; rolling heavy and shocklike; visibility affected.....	
52	10	Whole gale	Exceptionally high waves (medium-sized ships may be lost to view behind waves); sea covered with long white patches of foam lying along wind; everywhere edges of crests are blown into froth; visibility affected.....	
60	11	Storm	Very seriously affected.....	
68	12	Hurricane	Sea white with spray; foam and spray fill air; visibility 45	

The Beaufort Force is not used as a code here, but as a means of estimating the actual wind speed. It is permissible for an experienced observer to report a speed interpolated between the average equivalents of the Beaufort number; e.g., a high force 4 might be reported as 15 knots. For winds 100-199 knots, add to dd, and if gives tens and units digits.

CODE TABLE VI

Symbol **VV** - Visibility

The 90 degree recommended for ordinary marine use.*

Code figs. Direct expression of visual range

X1 to X9 incl. In tenths of a cable 00 to 80 inols. In nautical miles and tenths, up to 8 miles

40-49 FOG

Code Visibility figs.

81	10 n. miles	*	90 Under 50 yards
82	20	92	200
83	30	93	500
84	40	94	1000
85	50	95	1 n. mile
86	75	96	2
87	100	97	5
88	150	98	10
89	250 or more	99	25 or more

Code Visibility figs.

81	10 n. miles	*	90 Under 50 yards
82	20	92	200
83	30	93	500
84	40	94	1000
85	50	95	1 n. mile
86	75	96	2
87	100	97	5
88	150	98	10
89	250 or more	99	25 or more

Code Visibility figs.

81	10 n. miles	*	90 Under 50 yards
82	20	92	200
83	30	93	500
84	40	94	1000
85	50	95	1 n. mile
86	75	96	2
87	100	97	5
88	150	98	10
89	250 or more	99	25 or more

Code Visibility figs.

81	10 n. miles	*	90 Under 50 yards
82	20	92	200
83	30	93	500
84	40	94	1000
85	50	95	1 n. mile
86	75	96	2
87	100	97	5
88	150	98	10
89	250 or more	99	25 or more

Code Visibility figs.

81	10 n. miles	*	90 Under 50 yards
82	20	92	200
83	30	93	500
84	40	94	1000
85	50	95	1 n. mile
86	75	96	2
87	100	97	5
88	150	98	10
89	250 or more	99	25 or more

Code Visibility figs.

81	10 n. miles	*	90 Under 50 yards
82	20	92	200
83	30		