

COMMISSION FOR BASIC SYSTEMS
ABRIDGED FINAL REPORT OF THE EXTRAORDINARY SESSION
Geneva, 1-12 November 1976
WMO – No. 457

GENERAL SUMMARY

5. CODES (INCLUDING THE REPORT BY THE CHAIRMAN OF THE WORKING GROUP ON CODES)
(Agenda item 5)
- 5.9 Codes for exchange of data from automatic stations
- 5.9.7 The Commission noted that codes FM 14-V and FM 24-V had been published in Volume I of the Manual on Codes in a form which did not conform to the format used in the Technical regulations. It was therefore agreed that a revised text of the codes should be included in Volume I of the Manual on Codes. Recommendation 12 (CBS-Ext. (76)) was adopted.

Rec. 12 (CBS-Ext. (76)) – REVISION OF THE NOTES ON CODES FM 11-V, FM 14-V AND FM 24-V

THE COMMISSION FOR BASIC SYSTEMS,
NOTING:

- (1) Paragraph 3.2.5.4 of the general summary of the abridged report of Cg-VII,
- (2) Recommendation 16 (CBS-VI) – Editorial revision of the notes in Volume I of the Manual on Codes,

RECOMMENDS that the revised text of the notes on codes FM 11-V, FM 14-V and FM 24-V given in the annex to this recommendation should replace the corresponding text now appearing in appearing in Volume I of the Manual on Codes from 1 January 1978;

REQUESTS the Secretary-General to arrange for the necessary amendments to be included in Volume I of the Manual on Codes.

Annex to Recommendation 12 (CBS-Ext. (76))

REVISION OF THE NOTES ON CODES FM 11-V, FM 14-V, FM 21-V, FM 22-V, FM 23-V, FM 24-V and FM 26-IV

CODE FORM FM 21-V

1. Replace Notes (1) and (2) on page I-A-34 of Volume I of the Manual on Codes by the new Notes (1), (2) and (3) below:

- (1) The code form FM 21-V SHIP is used for reporting surface synoptic observations from a sea station, whether manned or automatic. However, the code form FM 24V SHIP, rather than the code form FM 21-V SHIP, should be used when the sea station at which the observations are made is permanently automatic.
- (2) Sea stations, which are sometimes manned and sometimes operated, automatically always draw up their reports in a single code, preferably FM 21-V.
- (3) A SHIP report coded in FM 21-V, or a bulletin of these reports, is identified by the symbolic letters $M_i M_j M_k M_l = NNXX$.

2. Renumber the present Notes (3), (4) and (5) on page I-A-34 of Volume I of the Manual on Codes as (4), (5) and (6) respectively.

CODE FORM FM 22-V

Replace Notes (1) and (2) on page I-A-40 of Volume I of the Manual on Codes by the new Notes (1) and (2) below:

- (1) The code form FM 22-V SHIP is used for reporting surface synoptic observations from a sea station, whether manned or automatic, in abbreviated form. However, the code form FM 24-V

SHIP, rather than the code form FM 22-V SHIP, should be used when the sea station at which the observations are made is permanently automatic.

- (2) A SHIP report coded in FM 22-V, or a bulletin of these reports, is identified by the symbolic letters $M_i M_j M_k M_l = NNXX$.

CODE FORM FM 23-V

Replace the text of Note (1) on page I-A-43 by the following:

- (1) The code form FM 23-V SHRED is used for reporting surface synoptic observations from a sea station, whether manned or automatic, in reduced form. However, the code form FM 24-V SHIP, rather than the code form FM 23-V SHRED, should be used when the sea station at which the observations are made is permanently automatic.

CODE FORM FM 24-V SHIP

Replace the notes to this code form on page I-A-46 of Volume I of the Manual on Codes by the following notes and regulations:

NOTES:

- (1) The code form FM 24-V SHIP is used for the reporting of synoptic surface observations from an automatic sea weather station. The code form, rather than the code form FM 21-V, should be used when the sea station at which the observations are made is permanently automatic.
- (2) Sea stations, which are sometimes manned and sometimes operated, automatically always draw up their reports in a single code, preferably FM 21-V.
- (3) A SHIP report coded in FM 24-V, or a bulletin of these reports, is identified by the symbolic letters

- $M_i M_j M_k M_l = BBXX$.
- (4) Except for the group 0ddff, which is always included on all reports, the groups with numerical indicators may be included or omitted under the conditions stated in the regulations set out below. The omission of some of them is indicated by an appropriate code figure of the group $s_i r NV^+h$.
 - (5) In principle, the observing criteria used in FM 24-V should agree as far as possible with those given under FM 21-V, except where the observing conditions prescribed for FM 24-V require otherwise.

REGULATIONS

24.1

General

24.1.1

The code name SHIP shall not be included in the report.

24.1.2

In a meteorological bulletin of SHIP reports coded in FM 24-V, the group $M_i M_j M_k M_l$ shall be included only as the first line of the text.

24.1.3

Regulation 21.1.3 shall apply to the code FM 24-V.

24.1.4

The bracketed groups to be included in a report shall be determined by the Member who operates the automatic station.

24.2

Group YYGGi

Regulation 11.2 shall apply.

24.3

Group s_ti_RNV⁺h

24.3.1

The group s_ti_RNV⁺h shall always be included.

NOTES:

- (1) For the use of s_t, see Regulation 14.5.1.2.
- (2) For the use of i_R, see Regulation 14.11.2.

24.3.2

Visibility V⁺

Regulation 11.4.1 shall apply to the coding of V⁺, as appropriate.

24.4

Group Oddff

24.4.1

The group Oddff shall be included in all reports from automatic weather stations.

24.4.2

Regulations 11.3.2.1 and 11.3.2.3 shall apply to this group as appropriate.

24.5

Group 1w⁺w⁺WW

24.5.1

Omission of the group

24.5.1.1

Omission of the group 1w⁺w⁺WW shall be considered only when neither present weather nor past weather can be expressed by code figures other than 00.

24.5.1.2

The code figure s_t shall indicate whether or not the group 1w⁺w⁺WW is included in the report.

24.5.1.3

The decision whether or not to include the group 1w⁺w⁺WW in reports from automatic weather stations shall be taken at the national level.

24.5.2

Present weather w⁺w⁺

NOTE: See Notes (1) to (4) to Code table 4677⁺w⁺w⁺.

24.5.3

Past weather WW

24.5.3.1

Regulations 14.5.3.1 to 14.5.3.3 inclusive shall apply.

24.5.4

Weather phenomena

Regulations 14.5.4.1 to 14.5.4.4 inclusive shall apply.

24.6

Group 2s_nTTT

Regulations 14.6.1 and 14.6.2 shall apply.

24.7

Group (3s_nT_dT_dT_d)

24.7.1

Regulation 14.7.1 shall apply.

NOTE: It is recommended that the dew-point (and not the frost-point) temperature shall be included in synoptic surface reports when the vapour pressure is lower than the saturated water vapour pressure of 0°C.

24.7.2

Regulation 14.7.2 shall apply.

24.7.3

Regulation 14.6.2 shall apply either to group 2s_nT_dT_dT_d or to group 39UUU.

24.8

Group 5PPPP

24.8.1

The group 5PPPP shall indicate air pressure reduced to mean sea-level.

24.8.2

Regulation 14.6.2 shall apply.

24.9

Group (6a⁺p_vp_vp_v)

24.9.1

Mobile sea stations and, in non-tropical areas, fixed sea stations shall report in this group, when used (see Regulation 24.1.4), the three-hour pressure tendency.

24.9.2

The use of this group by fixed sea stations in tropical areas to report 24-hour pressure change shall be determined by regional decision. Where, under a regional agreement, it is required to report both the three-hour pressure tendency and the 24-hour pressure change, the group shall be repeated.

NOTE: Information on these regional agreements is given in Volume II of the Manual on Codes.

24.9.3

Regulation 14.6.2 shall apply.

24.10

Group (7RRRt_R)

24.10.1

The group 7RRRRt_R, when used (see Regulation 24.1.4), shall be included only when it has been possible to measure precipitation and there has been precipitation during the six hours preceding the observation time.

24.10.2

Regulation 14.11.2 and 14.11.3 shall apply.

24.11

Group (8N_nC_LC_MC_H)

Regulation 14.12.1 and 14.12.2 shall apply.

24.12

Group (9I_sE_sE_sR⁺_s)

The group (9I_sE_sE_sR⁺_s) shall be included in the report whenever ice accretion on the station is measured.

24.13

Groups (s_wT_wT_wT_wn_w P_wP_wH_wH_wP_w P_wH_wH_wd_wd_w (P_wP_wH_wd_wd_w))

24.13.1

The code figure for n_w shall indicate the number of wave groups that follow (0, 1, 2 or 3).

24.13.2

The first four code figures of the first wave group shall be used to report wind waves. When swell cannot be detected the final P_w in this group shall be reported as /.

24.13.3

When swell can be distinguished from wind waves, the predominant swell system shall be reported by the six code figures following the figures for wind waves.

24.13.4

When a second swell system is observed, it shall be reported by the third wave group. This group shall be omitted if a second swell system cannot be detected or if reporting of this swell system is not required.

24.13.5

If there is a swell with no wind waves, the first wave group shall be reported as 0000 P_w .

24.13.6

When it is impossible to distinguish between wind waves and swell, one wave group shall be reported in the form $P_w P_w H_w H_w /$ and n_w shall be coded 6.

24.13.7

A confused sea shall be reported by the first wave group in the form $//H_w H_w /$.

24.13.8

When the sea is calm and there is no significant swell (periods of sea and swell each less than 0.5 second and

heights each less than 0.25 metre), the wave groups shall be omitted and n_w shall be coded 0.

24.13.9

If the wave groups are not included for any other reason than the one given in Regulation 24.13.8, and the group $s_n T_w T_w T_w n_w$ is included, n_w shall be coded /.

CODE FORM FM 26-IV

Replace the text of the note on page I-A-47 of Volume I of the Manual on Codes by the following:

“The code form FM 26-IV SPESH is used for a special report from a sea station weather manned or automatic. However, the code form FM 24-V SHIP, rather than code form FM 26-IV SPESH, should be used when the sea station at which the observations are made is permanently automatic.