DAILY SYNOPTIC SURFACE REPORTS

The daily synoptic reports shown in this publication are accumulated from special forms prepared by the various countries in the Northern Hemisphere, from published data prepared by those countries, and from telegraph reports published by those countries. The data are used to complete the presentation. Data for stations in the United States are telegraphed from WSPC to WSPC to WSPC the Telecommunication Unit at New Orleans. The WSPC observation is shown for most stations. For those stations that do not have a synoptic observation at the particular hour, the observation for the nearest hour therein is shown, whenever possible. The time of the observation for the nearest hour, is shown for each station. In preparation of this observation, it has been our aim to present so complete a coverage for the Northern Hemisphere as possible. With this consideration in mind, it was deemed advisable to delete data from certain stations where the coverage was already considered adequate, and to show all reports for areas where data are scarce, even though those data might not be available for all days. The data are subject to observational and transmission errors which have been corrected insofar as personnel and time considerations permit.

Station Names and Index Numbers:

All stations for which data are presented are identified by the station name and the station index number. The numbers assigned in accordance with IMO agreements effective January 1, 1949, are used in all cases except where the stations concerned are still using the old numbers. The latter are shown in a separate group, with appropriate heading.

Method of Presentation:

In preparing the data for publication, the entire collection of reports (mailed, published, and telegraph) are placed on punched cards, then sorted by block numbers, and numerically by station number within blocks. The data are presented in that manner. It is further divided into three groups as follows:

1. Data for all days for stations reporting in the new code.
2. Data for all days for ship reports.
3. Data for all days for stations reporting in the old code.

It is recognized that some inconvenience may result from these divisions. However, the recent change in codes which were adopted by some stations and not by others, left us little alternative. It is expected that the remaining stations will adopt the new codes in the near future, at which time all surface data will be combined.

Description of Codes:

Three different codes are at present being used in reporting surface synoptic data. We shall call these Type I, II and III for purposes of identification. Type I is the code adopted by the IMO for use effective January 1, 1949. It is used by the vast majority of nations in the Northern Hemisphere. Data for all stations for which new station numbers (with block numbers) are shown, will be in this code. Type II is used by ships reporting weather and Type III is being used by those stations still using the old code numbers. These are the stations referred to in previous paragraphs, as having listings in a separate group. A listing of stations using each type of code will not be attempted here since that can be easily determined by seeing if the station is in the general listings or in the later group. It is further expected that gradually all stations will change to the new code. At any rate, no fear need be felt concerning misinterpretation of the data, since headings, abbreviations, etc., are shown above all data. The form of codes used in not shown here since it is apparent from the headings.

The meaning of the heading symbols are as follows:

Type I - New code.

1. 33 Station number (the block number is at the head of each group of stations). 

Type II - Old code, 1943.

1. III Station number (the block number is at the head of each group of stations). 

2. N Total amount of clouds in 0-1/10 (0-10). 

3. W Wind direction from which wind is blowing, in 0-10 points.

4. WW Visibility. IMO Code 1-1-49.

5. WW Present weather, IMO Code 1-1-49.

6. WW Past weather, IMO Code 1-1-49.

7. PWW Pressure, mean sea level - 0-10hPa. Mean and 100hPa - hundreds of miles - hundreds of feet.

8. TT Temperature, nearest degree F.

The meaning of the symbols in the above codes, whose values will be found in tables of international codes and symbols, is as follows:

a. Characteristic of the barometric tendency in preceding three hours.

b. Form of cloud.

c. Form of middle cloud.

d. Form of high cloud.

E Wind direction.

F Direction from which ship is moving (from line of ship).

G Speed of ship in knots (see Table XVI).

H Characteristic of barometric tendency, 3 hours (see Table XVI).

P Pressure amount of barometric change, 3 hours (see Table XVII).

O Group designator.

P Temperature difference between air temperature and sea temperature, nearest degree F. (Air temperature below sea temperature, 0 is added to value of difference).

R Degree of dew point - nearest degree F.

S Group designator.

T Direction from which waves are coming (see Table IV).

W Period of seconds (see Table XXII).

X Mean maximum height of waves (see Table XXII).

Y All references are to "International Code, for Radio Weather Reports From Ships".

Type II - Old code, 1943.

1. D Ship course - direction toward which ship is moving (see Table XIV).

2. Speed of ship in knots (see Table XVI).

3. Characteristic of barometric tendency, 3 hours (see Table XVI).

4. Amount of barometric change, 3 hours (see Table XVII).

5. Group designator.

6. Temperature difference between air temperature and sea temperature, nearest degree F. (Air temperature below sea temperature, 0 is added to value of difference).

7. Degree of dew point - nearest degree F.

8. Group designator.

9. Direction from which waves are coming (see Table IV).

10. Period of seconds (see Table XXII).

11. Mean maximum height of waves (see Table XXII).

The meaning of the symbols in the above codes, whose values will be found in tables of international codes and symbols, is as follows:

a. Characteristic of the barometric tendency in preceding three hours.

b. Form of low cloud.

c. Form of middle cloud.

d. Form of high cloud.

E Direction of wind.

F Direction from which ship is moving (from line of ship).

G Speed of ship on Beaufort scale, 0-9.

H Amount of wind speed over Beaufort scale 9.

J Hour in Greenwich time (12 noon: 12:00 P.M., etc.).

K Height of lowest clouds.

L Height of ceiling in hundreds of feet.

M International index number.

N State of swell in open sea.

P Distance in miles.

Q Distance in miles.

R Distance in miles.

S Distance in miles.

T Temperature difference between air temperature and sea temperature.

U Temperature in whole degrees.

V Temperature in whole degrees.

W Relative humidity.

X Humidity.

Y Speed of ship.

Z Speed of ship.

w Present weather.

x Present weather.

y Present weather.

z Present weather.

1 Group designator.