The daily synoptic reports show 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 from all countries available to all of the services cooperating in the preparation of the publication. Wheresoever possible, data taken from the first two named sources, and teletype data are used to complete the presentation. Data for stations in the United States are tabulated from punched cards prepared on the stations for this purpose and mailed to the Tabulating Unit at New Orleans. The NHC's observatory is shown to be made up of stations throughout the globe, and for each such station, it has been our aim to present as complete a coverage for the Northern Hemisphere as possible. With this in mind, it was deemed advisable to delete data from stations where the coverage was already considered adequate, and to show all reports for areas where data are sparse, even though these are not made available for all days. The data are subject to observation error 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 utilizing 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 teletype) have been 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 3 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 sets of 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 stations 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 fact can be easily determined by seeing if the station is in the general listings or in the later group. It is far easier to identify all stations which will change to the new code. At any rate, no fear need be felt concerning misinterpretation of the data, since headings, showing elements represented, are shown above all data. The form of codes used is not shown here since it is apparent from the headings.

The meaning of the heading symbols are as follows:

Type I - New code.

1. III Station number (the block number at the head of each group of station members).
2. Td Temperature of dew point, in nearest whole degree F.
3. N Total amount of clouds. IMO Code 1-49.
4. W Wind direction from which wind is blowing, to 36 points.
5. M Wind speed in knots.
7. WW Present weather. IMO Code 1-49.
8. WP Fast weather. IMO Code 1-49.
9. PPP Pressure, mean sea level - 0.1", units, and 10ths of mbe - hundreds figures are omitted.
10. TT Temperature, to nearest degree F.

Type II - Ship reports.

1. Y Day of week.
2. G Quadrant of globe. (See Note II.)
3. Lh Latitude in degrees and tenths.
4. Ll Longitude in degrees and tenths, the l being omitted if ship is 100 degrees or more.
5. J Time of observation, GMT.
6. PAS热水

Type III - Old code, 1945.

1. EC Country code.
2. DWS Direction from which ship is coming.
3. WW Present weather.
4. WP Fast weather.
5. PPP Pressure, mean sea level.
6. TT Temperature, to nearest degree F.

Extra groups - any of which may be included:

1. Indicator figure.
2. NN Amount of significant cloud layer. IMO Code 1-49.
3. C Type of significant cloud layer. IMO Code 1-49.
4. Hb Height above layer of significant clouds. IMO Code 1-49.
5. Indicator figure for special phenomena.
7. Special phenomena, detail description. IMO Code 1-49.

Other groups:

1. Indicator figure for wave group.
2. Direction (00-330) from which waves come.
3. Period of the waves.
5. Indicator figure for 600 mb pressure group.
6. Height of 850 mb surface, 10° of mean. ± above sea level.
7. Characteristic of barograph trace ending 3 hours ago. IMO Code 1-49.
8. Indicator figure for 24 hour precipitation.
9. Amount of precipitation in last 24 hours - ten, units, tenths, and hundredths of inches.
10. Indicator figure for maximum and minimum temperature.
11. Maximum temperature for previous 24 hours, nearest whole degree F.
12. Minimum temperature for previous 24 hours, nearest whole degree F.

Additional data:

- Characteristic of the barometric tendency in preceding three hours.
- Form of low cloud.
- Form of high cloud.
- Wind direction.
- Direction from which swell comes (knots).
- Direction toward which ship is moving (knots).
- Wind speed on Beaufort scale, 0-9.
- Amount of wind over Beaufort scale 9.
- Hour in Greenwich time (10:00: 11:00; 12:00; 13:00; 14:00; etc.).
- Height of the lowest cloud.
- Height of ceiling in hundreds of feet.
- International index number.
- State of swell in open sea.
- Latitude in degrees and tenths.
- Longitude in degrees and tenths, with initial hundreds digit omitted.
- Method of determining ceiling.
- Total amount of sky covered by clouds.
- Amount of sky covered by clouds whose height is reported by h.
- Pressure in millibars, first figure (9 or 10 omitted).
- Pressure in millibars and tenths, first figure (9 or 10) omitted.
- Amount of barometric tendency for preceding three hours in fiftieths of millibars.
- Time precipitation began or ended.
- Amount of precipitation in 1-hour period preceding time of observation.
- Amount of precipitation over ninety-nine in the 1-hour period preceding time of observation.

Additional information:

- Amount of precipitation in inches and hundredths.
- State of the sea.
- Temperature difference between air and water.
- Temperature in whole degrees.
- Temperature of the dew point in whole degrees.
- Relative humidity.
- Horizontal visibility.
- Speed of the ship.
- Past weather.
- Present weather.