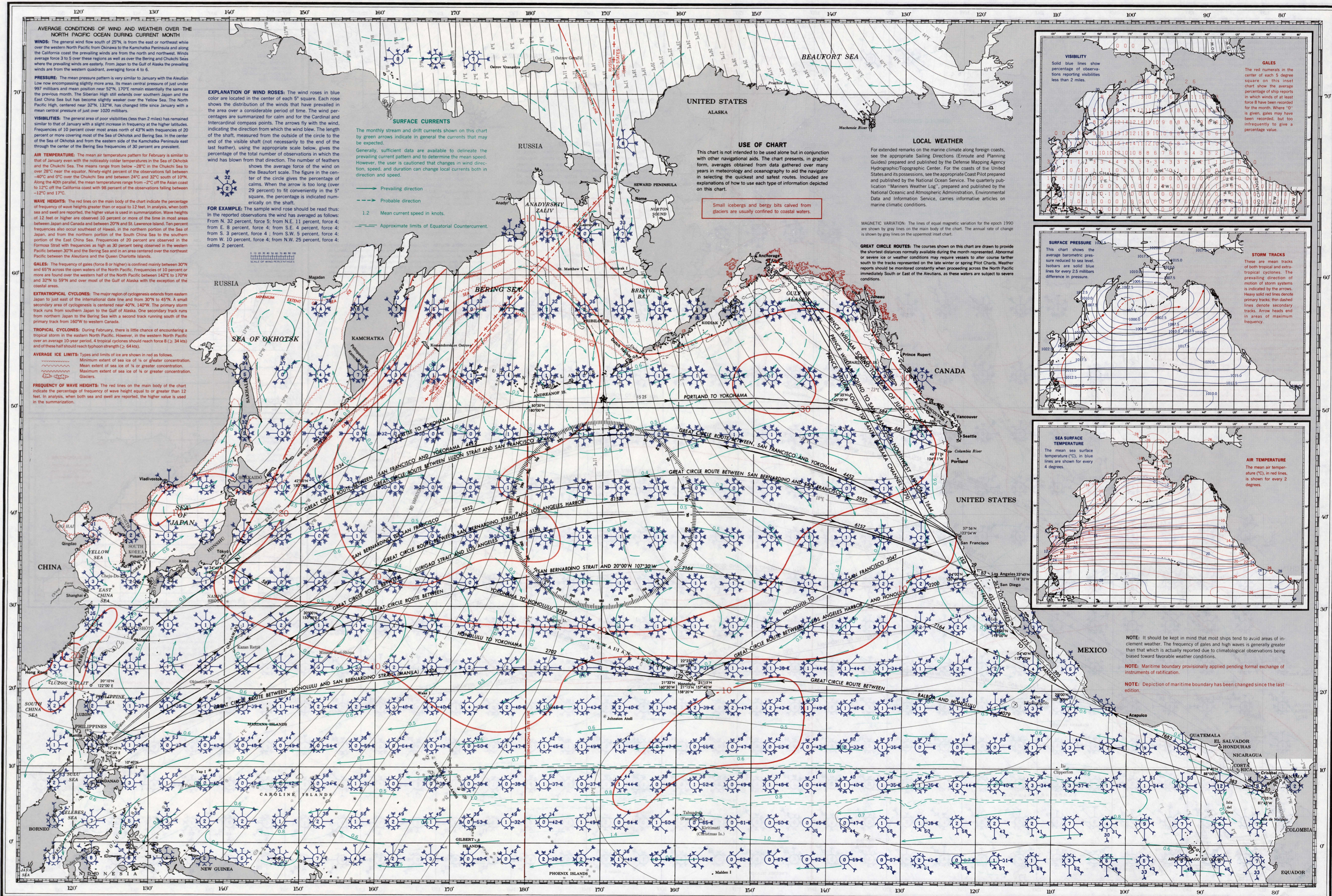


PILOT CHART OF THE NORTH PACIFIC OCEAN



AVERAGE CONDITIONS OF WIND AND WEATHER OVER THE NORTH PACIFIC OCEAN DURING CURRENT MONTH

WINDS: The general wind flow south of 25°N. is from the east or northeast while over the western North Pacific from Okinawa to the Kamchatka Peninsula and along the California coast the prevailing winds are from the north and northwest. Winds average force 3 to 5 over these regions as well as over the Bering and Chukchi Seas where the prevailing winds are easterly. From Japan to the Gulf of Alaska the prevailing winds are from the western quadrant, averaging force 4 to 6.

PRESSURE: The mean pressure pattern is very similar to January with the Aleutian low now encompassing slightly more area. Its mean central pressure of just under 997 millibars and mean position near 52°N. 170°E. remains the same as the previous month. The Siberian High still extends over southern Japan and the East China Sea but has become slightly weaker over the Yellow Sea. The North Pacific High, centered near 32°N. 132°W, has changed little since January with a mean central pressure of just over 1020 millibars.

VISIBILITIES: The general area of poor visibilities (less than 2 miles) has remained similar to that of January with a slight increase in frequency at the higher latitudes. Frequencies of 10 percent cover most areas north of 43°N with frequencies of 20 percent or more covering most of the Sea of Okhotsk and Bering Sea. In the center of the Sea of Okhotsk and from the eastern side of the Kamchatka Peninsula east through the center of the Bering Sea frequencies of 30 percent are prevalent.

AIR TEMPERATURE: The mean air temperature pattern for February is similar to that of January even with the noticeably colder temperatures in the Sea of Okhotsk and the Chukchi Sea. The means range from below -26°C in the Chukchi Sea to over 26°C near the equator. Ninety-eight percent of the observations fall between -40°C and 0°C over the Chukchi Sea and between 24°C and 32°C south of 10°N. Along the 40th parallel, the mean temperatures range from -2°C off the Asian coast to 12°C off the California coast with 98 percent of the observations falling between -12°C and 17°C.

WAVE HEIGHTS: The red lines on the main body of the chart indicate the percentage of frequency of wave heights greater than or equal to 12 feet. In analysis, when both sea and swell are reported, the higher value is used in summarization. Wave heights of 12 feet or higher are observed 10 percent or more of the time in most areas between Japan and Canada and between 20°N and St. Lawrence Island. Ten percent frequencies also occur southeast of Hawaii, in the northern portion of the Sea of Japan, and from the northern portion of the South China Sea to the southern portion of the East China Sea. Frequencies of 20 percent are observed in the Formosa Strait with frequencies as high as 30 percent being observed in the western Pacific between 30°N and the Bering Sea and in an area centered over the northeast Pacific between the Aleutians and the Queen Charlotte Islands.

GALES: The frequency of gales (force 8 or higher) is confined mainly between 30°N and 65°N across the open waters of the North Pacific. Frequencies of 10 percent or more are found over the western half of the North Pacific between 142°E to 170°W and 32°N to 59°N and over most of the Gulf of Alaska with the exception of the coastal areas.

EXTRATROPICAL CYCLONES: The major region of cyclogenesis extends from eastern Japan to just east of the international date line and from 20°N to 45°N. A secondary area of cyclogenesis is centered near 40°N, 140°W. The primary storm track runs from southern Japan to the Gulf of Alaska. One secondary track runs from northern Japan to the Bering Sea with a second track running south of the primary track from 140°W to western Canada.

TROPICAL CYCLONES: During February, there is little chance of encountering a tropical storm in the eastern North Pacific. However, in the western North Pacific over an average 10-year period, 4 tropical cyclones should reach force 8 (≥ 34 kts) and of these half should reach typhoon strength (≥ 64 kts).

AVERAGE ICE LIMITS: Types and limits of ice are shown in red as follows:
Minimum extent of sea ice of 1/4 or greater concentration.
Mean extent of sea ice of 1/4 or greater concentration.
Maximum extent of sea ice of 1/4 or greater concentration.
Glaciers.

FREQUENCY OF WAVE HEIGHTS: The red lines on the main body of the chart indicate the percentage of frequency of wave height equal to or greater than 12 feet. In analysis, when both sea and swell are reported, the higher value is used in the summarization.

EXPLANATION OF WIND ROSES

The wind roses in blue color are located in the center of each 5° square. Each rose shows the distribution of the winds that have prevailed in the area over a considerable period of time. The wind percentages are summarized for calm and for the Cardinal and Inter-cardinal compass points. The arrows fly with the wind, indicating the direction from which the wind blew. The length of the shaft, measured from the outside of the circle to the end of the visible shaft (not necessarily to the end of the last feather), using the appropriate scale below, gives the percentage of the total number of observations in which the wind has blown from that direction. The number of feathers shows the average force of the wind on the Beaufort scale. The figure in the center of the circle gives the percentage of calms. When the arrow is too long (over 29 percent) to fit conveniently in the 5° square, the percentage is indicated numerically on the shaft.

FOR EXAMPLE: The sample wind rose should be read thus: In the reported observations the wind has averaged as follows: From N. 32 percent, force 5; from N.E. 11 percent, force 4; from E. 8 percent, force 4; from S.E. 4 percent, force 4; from S. 3 percent, force 4; from S.W. 5 percent, force 4; from W. 10 percent, force 4; from N.W. 25 percent, force 4; calms 2 percent.

SCALE OF WIND PERCENTAGES

1.2 Mean current speed in knots.

Approximate limits of Equatorial Countercurrent.

SURFACE CURRENTS

The monthly stream and drift currents shown on this chart by green arrows indicate in general the currents that may be expected.

Generally, sufficient data are available to delineate the prevailing current pattern and to determine the mean speed. However, the user is cautioned that changes in wind direction, speed, and duration can change local currents both in direction and speed.

→ Prevailing direction

→ Probable direction

1.2 Mean current speed in knots.

Approximate limits of Equatorial Countercurrent.

USE OF CHART

This chart is not intended to be used alone but in conjunction with other navigational aids. The chart presents, in graphic form, averages obtained from data gathered over many years in meteorology and oceanography to aid the navigator in selecting the quickest and safest routes. Included are explanations of how to use each type of information depicted on this chart.

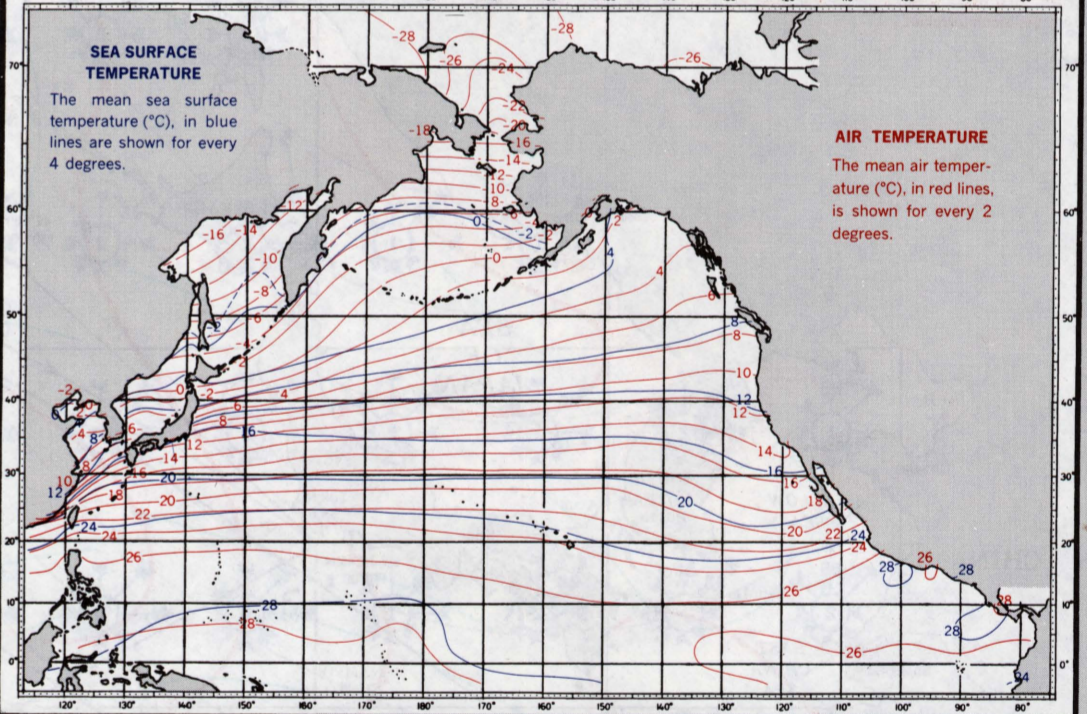
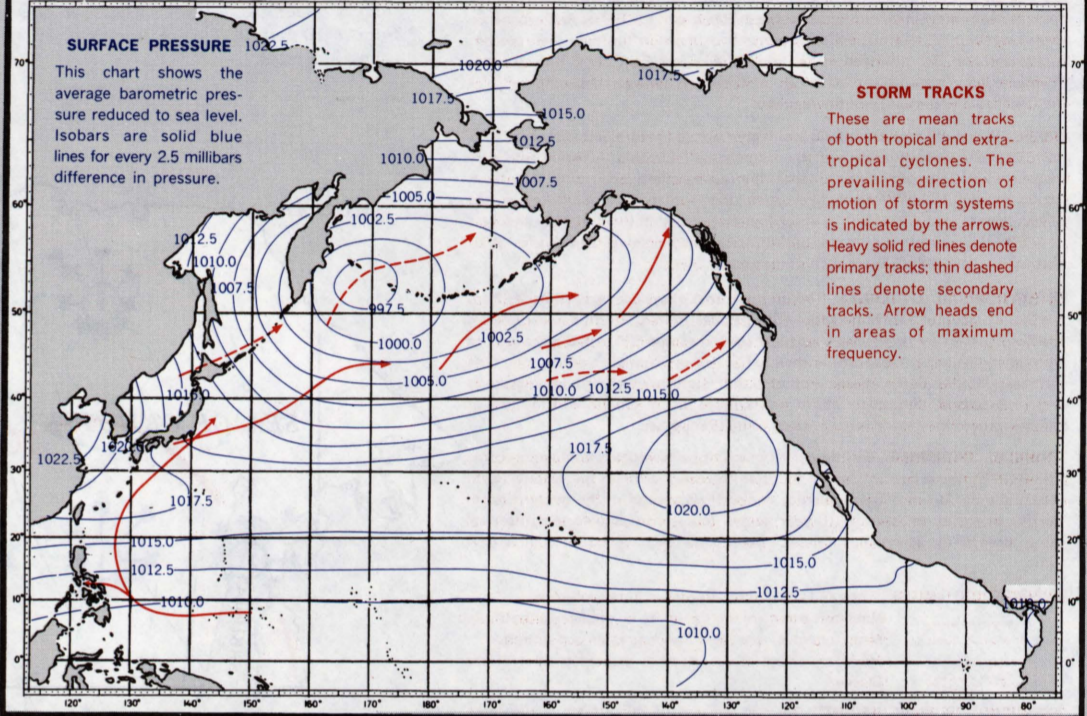
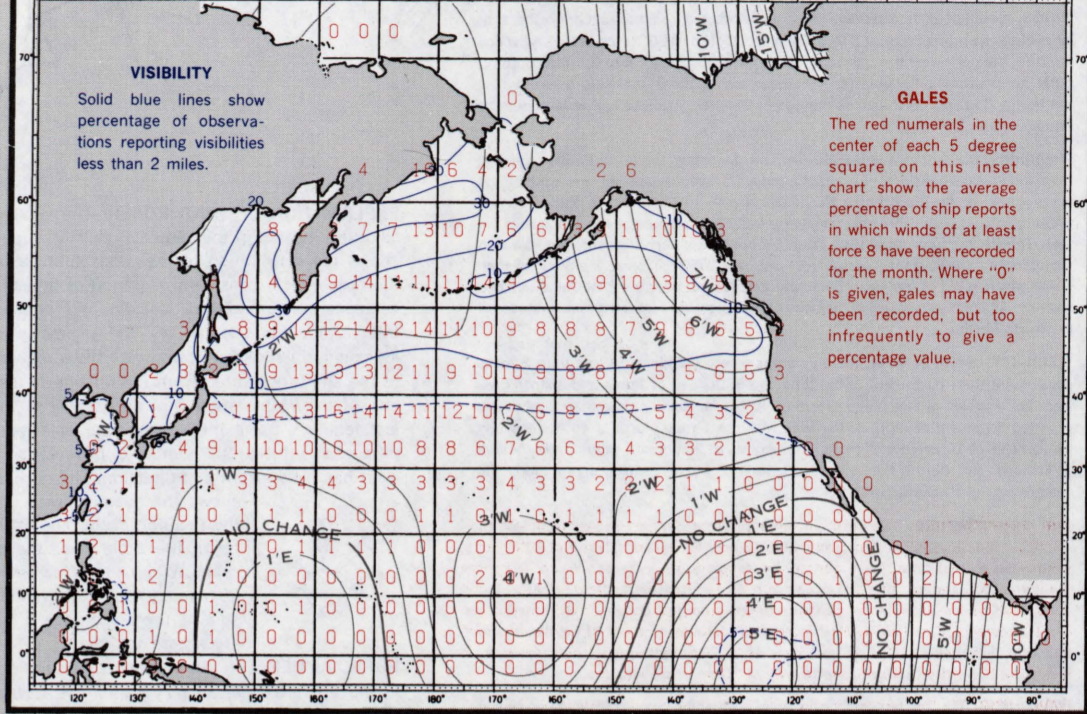
Small icebergs and bergy bits calved from glaciers are usually confined to coastal waters.

LOCAL WEATHER

For extended remarks on the marine climate along foreign coasts, see the appropriate Sailing Directions (Enroute and Planning Guides) prepared and published by the Defense Mapping Agency Hydrographic/Topographic Center. For the coasts of the United States and its possessions, see the appropriate Coast Pilot prepared and published by the National Ocean Service. The quarterly publication "Mariners Weather Log", prepared and published by the National Oceanic and Atmospheric Administration, Environmental Data and Information Service, carries informative articles on marine climatic conditions.

MAGNETIC VARIATION: The lines of equal magnetic variation for the epoch 1990 are shown by gray lines on the main body of the chart. The annual rate of change is shown by gray lines on the uppermost inset chart.

GREAT CIRCLE ROUTES: The courses shown on this chart are drawn to provide the shortest distances normally available during the month represented. Abnormal or severe ice or weather conditions may require vessels to alter course farther south to the tracks represented on the late winter or spring Pilot Charts. Weather reports should be monitored constantly when proceeding across the North Pacific immediately South or East of the Aleutians, as these waters are subject to severe conditions.



NOTE: It should be kept in mind that most ships tend to avoid areas of inclement weather. The frequency of gales and high waves is generally greater than that which is actually reported due to climatological observations being based toward favorable weather conditions.

NOTE: Maritime boundary provisionally applied pending formal exchange of instruments of ratification.

NOTE: Depiction of maritime boundary has been changed since the last edition.