

**LOCAL WEATHER.**—For extended remarks on the marine climate along foreign coasts, see the appropriate Sailing Directions and Planning Guides prepared and published by the National Imagery and Mapping Agency; for the coasts of the United States and its possessions, see the appropriate Coast Pilot prepared and published by the National Ocean Service. The trimester publication "Mariners Weather Log" prepared and published by the National Oceanic and Atmospheric Administration, National Weather Service, carries informative articles on marine climate conditions and tropical cyclone information.

## FEBRUARY

**PRESSURE.**—Centered near 36°S, 98°W, the average central pressure of the South Pacific subtropical high runs just over 1023 millibars in February. The subtropical high extends from 8°S to 50°S at 100°W and from South America to Australia. The equatorial trough is centered north of the equator between South America and 170°W, then swings southwest between Australia and New Guinea. A strong zonal pressure gradient remains south of 50°S.

**TEMPERATURE.**—At the equator, mean air temperatures range from 25°C off the coast of South America to over 28°C west of 15°-5°W. Along the equator 98% of the observations fall between 22°C and 32°C. At 60°S, means range from 4°C to 5°C, with approximately 98% of the observations occurring between 0°C and 8°C.

**WINDS.**—Southeast trade winds range north of 40°S from the coast of South America to as far west as 130°W. Easterly winds extend from here to 170°W, northerly winds prevail north of Australia, and southeasterly winds prevail between Australia and New Zealand. Westerly winds continue to prevail south of 40°S where scalar winds average force 4 to 5. North of 40°S winds average force 3 to 5.

**GALES.**—Although gale force winds (force 8 or greater) are infrequently observed north of 40°S, the probability of occurrence is slightly greater at these latitudes over the western Pacific due to tropical storm activity. Gale force winds are reported 10% or more of the time south of 50°S; frequencies reach 20% off the southwest coast of Chile and over the central South Pacific between 55°S and 60°S.

**TROPICAL CYCLONES.**—February brings the highest frequency of tropical storms to the South Pacific, observed solely within the northwest quadrant. During an average 10-year period, 41 tropical storms (> 34 knots) can be expected to occur and of these, 11 should attain hurricane strength (> 64 knots).

**VISIBILITY.**—In general, poor visibilities (less than 2 miles) occur 10% or more of the time south of 45°S. Frequencies increase to a maximum of over 30% south of 55°S.

**WAVE HEIGHTS.**—Wave height frequencies of 12 feet or greater are at a minimum between the equator and 20°S. Most areas south of 20°S report frequencies of 10% or more except for the coastal areas of New Zealand and Australia. Between 50°S and 60°S, frequencies of 40% or higher are reported, except south of New Zealand (30%) and South America (20%).

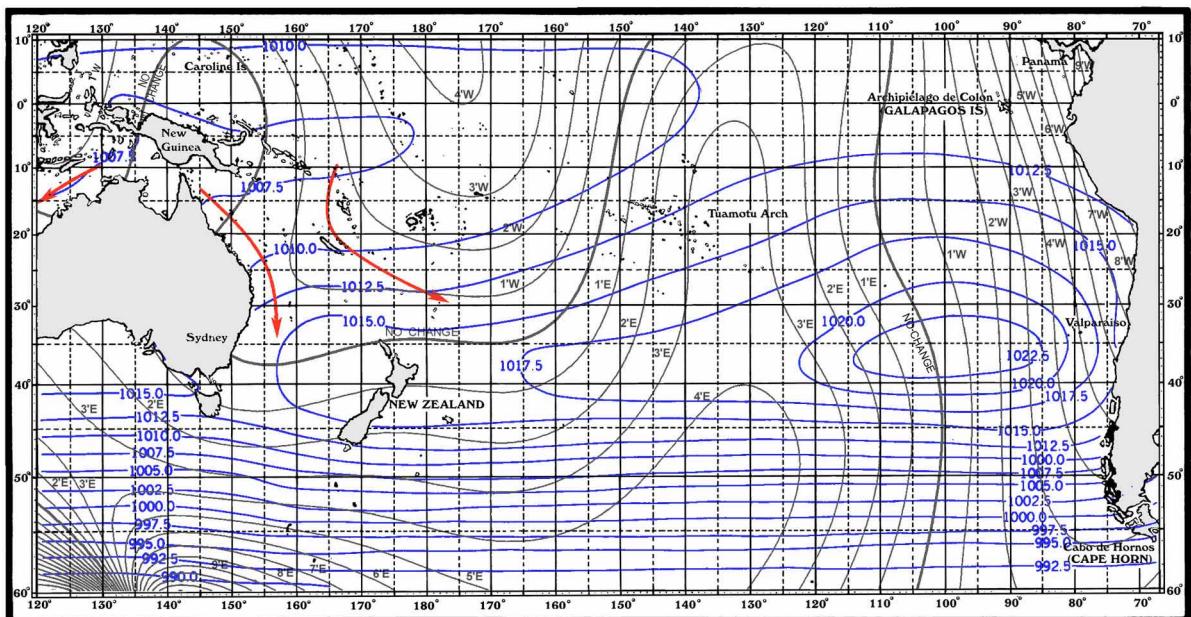
### CHART #1

#### TROPICAL CYCLONES

The mean tracks of tropical storms and hurricanes are shown in red. These tracks represent averages, and movements of individual systems may vary widely.

#### SURFACE PRESSURE

This chart shows the average barometric pressure reduced to sea level. Isobars are solid blue lines for every 2.5 millibars difference in pressure.



### CHART #2

#### AIR TEMPERATURE

The mean air temperature (°C) in red lines is shown for every 2 degrees. All weather narratives refer to air tempera-

#### VISIBILITY

Blue lines show percentages of observations reporting visibilities less than 2 miles.

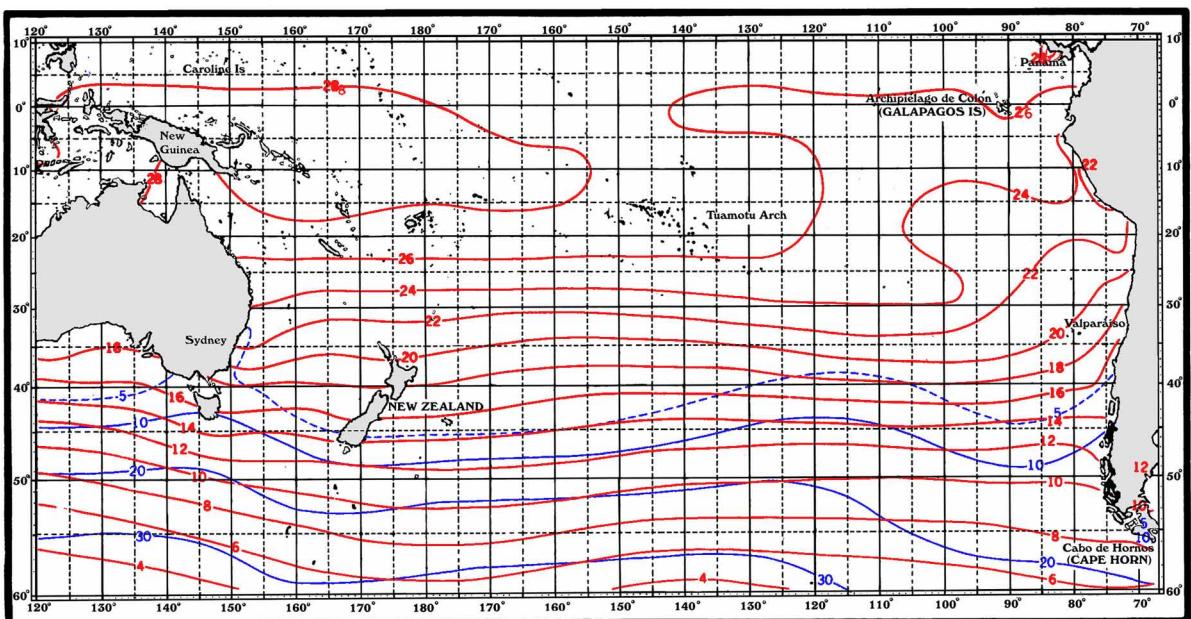
### CHART #3

#### GALES

The red numerals in the center of each 5-degree square on this inset chart show the average percentage of ship reports in which winds of at least force 8 have been recorded for the month. In cases where the observation count is low the gale frequency may be nonrepresentative and therefore different from the values used in the text. Where "0" is given, gales may have been recorded, but too infrequently to give a percentage value.

#### SEA SURFACE TEMPERATURE

The mean sea surface temperature (°C), in blue lines, is shown for every degrees.



### EXPLANATION OF WIND ROSES

**PREVAILING WINDS AND CALMS.**—The wind rose in blue color is located in the center of each 5° square where there was sufficient data. The rose shows the distribution of the winds that have prevailed in the area over a considerable period. The wind percentages are summarized for the eight points and calm. 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 using the scale below, gives the percent 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 to fit conveniently in the 5° square, anything over 29 percent, the shaft is broken and the percentage is indicated by numerals.

**FOR EXAMPLE.**—The sample wind rose should read thus: In the reported observations the wind has averaged as follows:  
From N. 3 percent, force 3; N.E. 16 percent, force 4; E. 61 percent, force 4; S.E. 17 percent, force 5; S. 1 percent, force 4; S.W. less than 1 percent, force 3; W. 1 percent force 2; N.W. 1 percent, force 4; calms 0 percent.



SCALE OF WIND PERCENTAGES

