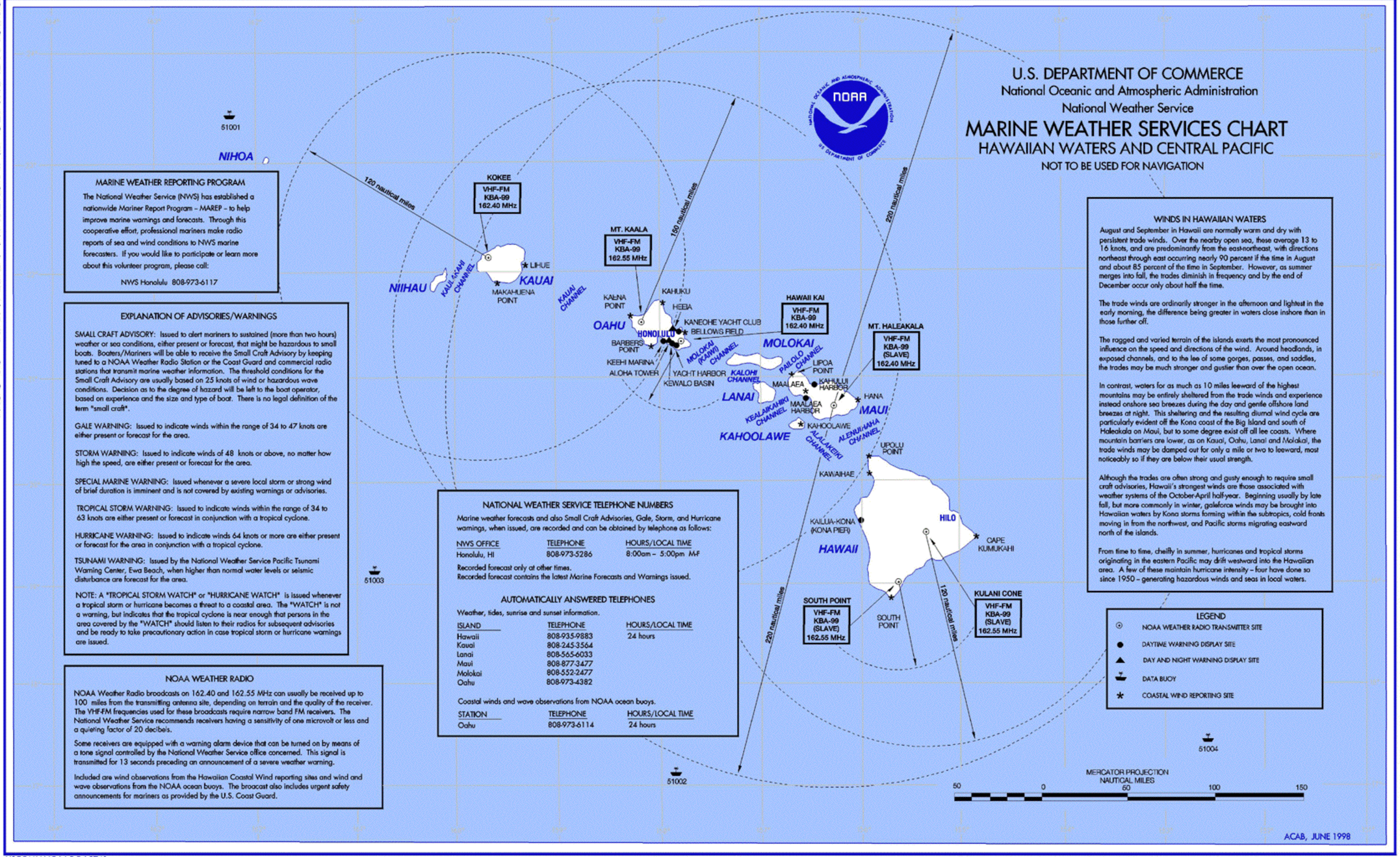
MSC-13—HAWAIIAN WATERS AND CENTRAL PACIFIC

U.S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
National Weather Service

MARINE WEATHER SERVICES CHART
HAWAIIAN WATERS AND CENTRAL PACIFIC

NOT TO BE USED FOR NAVIGATION



MARINE WEATHER REPORTING PROGRAM

The National Weather Service (NWS) has established a nationwide Mariner Report Program – MAREP – to help improve marine warnings and forecasts. Through this cooperative effort, professional mariners make radio reports of sea and wind conditions to NWS marine forecasters. If you would like to participate or learn more about this volunteer program, please call:

NWS Honolulu 808-973-6117

EXPLANATION OF ADVISORIES/WARNINGS

SMALL CRAFT ADVISORY: Issued to alert mariners to sustained (more than two hours) weather or sea conditions, either present or forecast, that might be hazardous to small boats. Boaters/Mariners will be able to receive the Small Craft Advisory by keeping tuned to a NOAA Weather Radio Station or the Coast Guard and commercial radio stations that transmit marine weather information. The threshold conditions for the Small Craft Advisory are usually based on 25 knots of wind or hazardous wave conditions. Decision as to the degree of hazard will be left to the boat operator, based on experience and the size and type of boat. There is no legal definition of the term "small craft".

GALE WARNING: Issued to indicate winds within the range of 34 to 47 knots are either present or forecast for the area.

STORM WARNING: Issued to indicate winds of 48 knots or above, no matter how high the speed, are either present or forecast for the area.

SPECIAL MARINE WARNING: Issued whenever a severe local storm or strong wind of brief duration is imminent and is not covered by existing warnings or advisories.

TROPICAL STORM WARNING: Issued to indicate winds within the range of 34 to 63 knots are either present or forecast in conjunction with a tropical cyclone.

HURRICANE WARNING: Issued to indicate winds 64 knots or more are either present or forecast for the area in conjunction with a tropical cyclone.

TSUNAMI WARNING: Issued by the National Weather Service Pacific Tsunami Warning Center, Ewa Beach, when higher than normal water levels or seismic disturbance are forecast for the area.

NOTE: A "TROPICAL STORM WATCH" or "HURRICANE WATCH" is issued whenever a tropical storm or hurricane becomes a threat to a coastal area. The "WATCH" is not a warning, but indicates that the tropical cyclone is near enough that persons in the area covered by the "WATCH" should listen to their radios for subsequent advisories and be ready to take precautionary action in case tropical storm or hurricane warnings are issued.

NOAA WEATHER RADIO

NOAA Weather Radio broadcasts on 162.40 and 162.55 MHz can usually be received up to 100 miles from the transmitting antenna site, depending on terrain and the quality of the receiver. The VHF-FM frequencies used for these broadcasts require narrow band FM receivers. The National Weather Service recommends receivers having a sensitivity of one microvolt or less and a quieting factor of 20 decibels.

Some receivers are equipped with a warning alarm device that can be turned on by means of a tone signal controlled by the National Weather Service office concerned. This signal is transmitted for 13 seconds preceding an announcement of a severe weather warning.

Included are wind observations from the Hawaiian Coastal Wind reporting sites and wind and wave observations from the NOAA ocean buoys. The broadcast also includes urgent safety announcements for mariners as provided by the U.S. Coast Guard.

NATIONAL WEATHER SERVICE TELEPHONE NUMBERS

Marine weather forecasts and also Small Craft Advisories, Gale, Storm, and Hurricane warnings, when issued, are recorded and can be obtained by telephone as follows:

NWS OFFICE	TELEPHONE	HOURS/LOCAL TIME
Honolulu, HI	808-973-5286	8:00am – 5:00pm M-F

Recorded forecast only at other times.
Recorded forecast contains the latest Marine Forecasts and Warnings issued.

AUTOMATICALLY ANSWERED TELEPHONES

Weather, tides, sunrise and sunset information.

ISLAND	TELEPHONE	HOURS/LOCAL TIME
Hawaii	808-935-9883	24 hours
Kauai	808-245-3564	
Lanai	808-565-6033	
Maui	808-877-3477	
Molokai	808-552-2477	
Oahu	808-973-4382	

Coastal winds and wave observations from NOAA ocean buoys.

STATION	TELEPHONE	HOURS/LOCAL TIME
Oahu	808-973-6114	24 hours

WINDS IN HAWAIIAN WATERS

August and September in Hawaii are normally warm and dry with persistent trade winds. Over the nearby open sea, these average 13 to 16 knots, and are predominantly from the east-northeast, with directions northeast through east occurring nearly 90 percent if the time in August and about 85 percent of the time in September. However, as summer merges into fall, the trades diminish in frequency and by the end of December occur only about half the time.

The trade winds are ordinarily stronger in the afternoon and lightest in the early morning, the difference being greater in waters close inshore than in those further off.

The ragged and varied terrain of the islands exerts the most pronounced influence on the speed and directions of the wind. Around headlands, in exposed channels, and to the lee of some gorges, passes, and saddles, the trades may be much stronger and gustier than over the open ocean.

In contrast, waters for as much as 10 miles leeward of the highest mountains may be entirely sheltered from the trade winds and experience instead onshore sea breezes during the day and gentle offshore land breezes at night. This sheltering and the resulting diurnal wind cycle are particularly evident off the Kona coast of the Big Island and south of Haleakala on Maui, but to some degree exist off all lee coasts. Where mountain barriers are lower, as on Kauai, Oahu, Lanai and Molokai, the trade winds may be damped out for only a mile or two to leeward, most noticeably so if they are below their usual strength.

Although the trades are often strong and gusty enough to require small craft advisories, Hawaii's strongest winds are those associated with weather systems of the October-April half-year. Beginning usually by late fall, but more commonly in winter, gale-force winds may be brought into Hawaiian waters by Kona storms forming within the subtropics, cold fronts moving in from the northwest, and Pacific storms migrating eastward north of the islands.

From time to time, chiefly in summer, hurricanes and tropical storms originating in the eastern Pacific may drift westward into the Hawaiian area. A few of these maintain hurricane intensity – four have done so since 1950 – generating hazardous winds and seas in local waters.

LEGEND

- NOAA WEATHER RADIO TRANSMITTER SITE
- DAYTIME WARNING DISPLAY SITE
- DAY AND NIGHT WARNING DISPLAY SITE
- DATA BUOY
- COASTAL WIND REPORTING SITE

ACAB, JUNE 1998

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NOAA-PA-96065

DISCREPANCY REPORTS SOLICITED
Reports of discrepancies in this chart and any other comments are appreciated and will be used in preparing the next edition.

Please mail to: National Weather Service (W/OM12)
1325 East-West Highway, Room 14126
Silver Spring, MD 20910

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