MSC-16—GUAM AND THE NORTHERN MARIANA ISLANDS

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

MARINE WEATHER SERVICES CHART
GUAM AND THE NORTHERN MARIANA ISLANDS

NOT TO BE USED FOR NAVIGATION

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". Threshold conditions for Small Craft Advisories for Guam and the Northern Mariana Islands are sustained winds of 18 knots or greater and/or gusts of 26 knots or greater.

HIGH SURF ADVISORY: To indicate surf conditions are expected to be 9 feet (3 meters) or greater (or less if conditions are determined to be hazardous).

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.

TYPHOON WARNING: To indicate winds 64 knots or greater are expected for the area. Issued only in connection with a tropical cyclone (typhoon).

NOTE: A "Watch" is an announcement issued whenever a tropical cyclone (tropical storm or typhoon) might be a potential threat to a coastal area. The "Watch" announcement is not a warning rather it indicates that the tropical storm or typhoon is near enough that everyone in the area covered by the "Watch" should listen to their radios for subsequent advisories and be ready to take precautionary action in case a warning is issued.

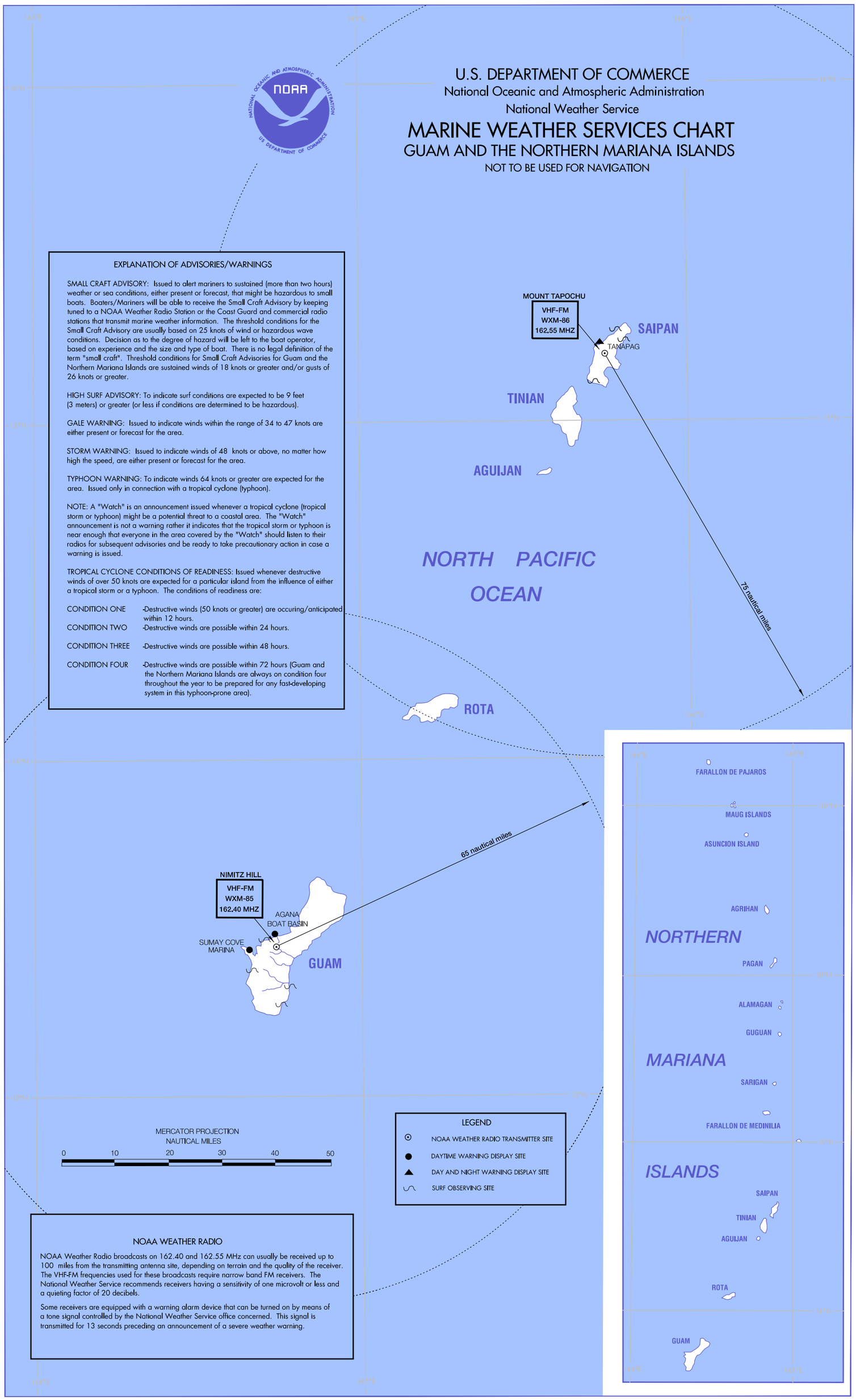
TROPICAL CYCLONE CONDITIONS OF READINESS: Issued whenever destructive winds of over 50 knots are expected for a particular island from the influence of either a tropical storm or a typhoon. The conditions of readiness are:

CONDITION ONE -Destructive winds (50 knots or greater) are occuring/anticipated within 12 hours.

CONDITION TWO -Destructive winds are possible within 24 hours.

CONDITION THREE -Destructive winds are possible within 48 hours.

CONDITION FOUR -Destructive winds are possible within 72 hours (Guam and the Northern Mariana Islands are always on condition four throughout the year to be prepared for any fast-developing system in this typhoon-prone area).



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.

USCOMM-NOAA-DC-A5741
NOAA-PA-200358

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

HIGH SEAS RADIOTELEPHONE WEATHER BROADCASTS

LOCATION	STATION	CARRIER FREQUENCY (kHz)	BROADCAST TIMES (UTC)
Honolulu, HI	NMO (USCG)	6501.0 8764.0 13089.0	0600, 1200 0005, 0600, 1200, 1800 0005, 1800
Guam	NRV (USCG)	6501.0 13089.0	0930, 1530 0330, 2130

BROADCASTS OF MARINE WEATHER FORECASTS AND WARNINGS BY MARINE RADIOTELEPHONE STATIONS

LOCATION	STATION	FREQUENCY, kHz/MHz	BROADCAST TIMES (UTC)
Guam	NRV (USCG)	~ CH 22A °# 2670 kHz	0900, 2100 0705, 2205

° Preceded by announcement on 2182 kHz
~ Preceeded by announcement on ch. 16.
# Single Sideband, suppressed carrier, carrier frequency.

RADIOFACSIMILE WEATHER BROADCASTS FOR PACIFIC FROM JAPAN

TOKYO 1, JAPAN

CALL SIGNS	FREQUENCIES	TIMES
JMH	3622.5 kHz	Continuous
JMH2	7305 kHz	Continuous
JMH3	9970 kHz	Continuous
JMH4	13597 kHz	Continuous
JMH5	18220 kHz	Continuous
JMH6	23522.9 kHz	Continuous

RADIOFACSIMILE WEATHER BROADCASTS FOR PACIFIC FROM HAWAII

CITY	STATION	CARRIER FREQ (kHz)	BROADCAST TIMES/UTC
Honolulu, HI	KVM 70	9982.5 11,090 16,135 23,331.5	0533, 1030, 1733, 2230

NOAA WEATHER RADIO BROADCASTS FROM THE MARIANA ISLANDS

LOCATION	STATION	FREQUENCY	BROADCAST TIMES
Guam	WXM-85	162.40 MHz	Continuously, 24 hrs a day
Saipan	WXM-86	162.55 MHz	Continuously, 24 hrs a day

These VHF-FM radio stations, locations shown on the map, are operated by the National Weather Service. This is a continuous broadcast, 24 hours a day. The broadcast includes the latest costal waters and local island weather forcasts and warnings for Guam, Rota, Tinian and Saipan.

HIGH SEAS RADIOTELEX (SITOR) WEATHER BROADCASTS

LOCATION	STATION	FREQUENCY (kHz)	BROADCAST TIMES (UTC)
Honolulu, HI	NMO (USCG)	8416.5 12579.0 22376.0 518 NAVTEX(O)	0130, 0730, 1330, 2030 0130, 0730, 1330, 2030 0130, 2030 0040, 0440, 0840 1240, 1640, 2040
Guam	NRV (USCG)	12579.0 16086.5 22376.0 518 NAVTEX(V)	0500, 1500, 1900, 2315 0500, 1500, 1900, 2315 0500, 1500, 1900, 2315 0100, 0500, 0900 1300, 1700, 2100

RADIO WWV/WWVH STORM INFORMATION BROADCASTS

HIGH SEAS STORM INFORMATION for the North Atlantic and North Pacific is provided mariners through a cooperative program of two Department of Commerce agencies: the National Weather Service of the National Oceanic and Atmospheric Administration and the National Institute of Standards and Technology. Bulletins are compiled by the National Weather Service and broadcast every hour by the National Institute of Standards and Technology's Frequency and Time Broadcast Services Radio Stations — WWV, Fort Collins, Colorado and WWVH, Kauai, Hawaii. These are the radio stations that sailors and others listen to for daily time checks.

WWVH (KAUAI, HAWAII)

FREQENCIES : 2.5, 5, 10, 15 MHz

The weather broadcast is in 45-second segments separated by a 15-second interval.

TIMES OF BROADCAST	BROADCAST AREA
48 minutes past the hour 49 minutes past the hour 50 minutes past the hour 51 minutes past the hour	Information on storms, and lessor systems as time permits, for the North Pacific and for the South Pacific to 25°S between 160°E and 110°W.

OTHER MARINE WEATHER SERVICES CHARTS AVAILABLE

MSC-1	Eastport, ME to Montauk Point, NY	MSC-8	Mexican Border to Point Conception, CA
MSC-2	Montauk Point, NY to Manasquan, NJ	MSC-9	Point Conception, CA to Point St. George, CA
MSC-3	Manasquan, NJ to Cape Hatteras, NC	MSC-10	Point St. George, CA to Canadian Border
MSC-4	Cape Hatteras, NC to Savannah, GA	MSC-11/12	Great Lakes
MSC-5	Savannah, GA to Apalachicola, FL	MSC-13	Hawaiian Waters
MSC-6	Apalachicola, FL to Morgan City, LA	MSC-14	Puerto Rico and Virgin Islands
MSC-7	Morgan City, LA to Brownsville, TX	MSC-15	Alaskan Waters
		MSC-16	Guam and the Northern Mariana Islands

MSC charts can be viewed at:
http://www.nws.noaa.gov/om/marine/pub.htm
Nautical charts for navigation purposes for these coastal areas are available from local marinas, marine supply stores, and the address below.
Copies of these charts are available for $1.25 each from:
FAA, National Aeronautical Charting Office
Distribution Division, AVN-530
Telephone Toll Free: (800) 638-8972
E-mail: 9-AMC-Chartsales@FAA.gov

WINDS OF GUAM, ROTA, TINIAN, AND SAIPAN

Winds offshore of Guam and the Northern Mariana Islands are predominately trade winds which blow from the east and northeast. They are strongest from December through May, with speeds of 15 to 25 knots. Seas have a western set with heights ranging from 5 to 8 feet. Winds and seas can be greater in the channels between the islands. During the rest of the year, there is often a breakdown of the trades. Sea breeze effects are usually mininal, although the strength of the trade winds may be affected (enhanced on the coastal waters east of the island and lessened on the western side during the late afternoon). At night there is little evidence of a land breeze. The land masses usually cool to about the temperature of the sea surface during the early morning hours.

Although frontal passages are rare over the islands, frontal remnants (shear lines) occasionally move this far south during the winter months. At such times the winds continue generally out of the east and northeast, but can increase to near-gale force.

Winds associated with tropical cyclones can be any speed and from any direction, depending on the intensity of the storms and their path relative to the islands. When they increase to tropical storm or typhoon intensity, destructive winds and seas can result. They can occur at any time of the year, but are more frequent from June through November. The chance of having a typhoon move directly over an island is about 1 in 11 years. However the chance of having one pass close enough to produce high winds and seas is about 1 in 3 years. There are no protective refuges for yachts, except on Guam. However, space is limited so cruising sailors should avoid these islands during the typhoon season.

TROPICAL CYCLONES

Definitions:

1. Tropical Cyclone - A nonfrontal low pressure system originating over tropical or subtropical waters and having a definite organized circulation.
2. Tropical Disturbance - A discrete system of apparently organized convection originating in the tropics or subtropics having nonfrontal character and having maintained it's identity for 12 to 24 hours.
3. Tropical Depression - A tropical cyclone with maximum sustained one minute mean surface winds of 33 knots or less.
4. Tropical Storm - A tropical cyclone with maximum sustained one minute mean surface winds of 34 to 63 knots.
5. Typhoon - A tropical cyclone with maximum sustained one minute mean surface winds of 64 to 129 knots.
6. Super Typhoon - A typhoon with maximum sustained one minute mean surface winds of 130 knots or greater.

INTERNET ADDRESSES

National Weather Service Current Weather Data
http://www.nws.noaa.gov

National Data Buoy Center
http://www.ndbc.noa.gov

U.S. Coast Guard Navigation Center
http://www.navcen.uscg.mil

National Weather Service Pacific Region Headquarters
http://www.prh.noaa.gov/pr/hg

Marine Product Dissemination Information
http://www.nws.noaa.gov/data.html#mar

National Weather Service in Tiyan, Guam
http://www.prh.noaa.gov/guam/

MARINE RADIOFACSIMILE CHARTS THROUGH E-MAIL

National Weather Service radiofax charts broadcast by the U.S. Coast Guard from Point Reyes, CA are available via E-mail. Marine text products are also available through this service. This allows Internet access for mariners who do no have direct access to the World Wide Web, but who are equipped with an E-mail system. Users can request files from NWS and have them automatically E-mailed back to them. To get started, send an E-mail to:

Address: ftpmail@weather.noaa.gov
Subject: (not required)
Body: help

Direct any questions to 301-713-1677, extension 128,
or 301-713-0882, extension 122.

WEATHER RULES FOR SAFE BOATING

Before setting out:

Obtain the latest available weather forecast for the boating area. The NOAA Weather Radio continuous broadcasts (VHF-FM) are the best way to keep informed of the expected weather and sea conditions.

If you hear on the radio that warnings are in effect, don't venture out on the water unless you are confident your boat can be navigated safely under forecast conditions of wind and sea.

While afloat:

1. Keep a weather eye out for: the approach of dark, threatening clouds, which may foretell a squall or thunderstorm; any steady increase in wind or sea; any increase in wind velocity opposite in direction to a strong tidal current. A dangerous rip tide condition may form steep waves capable of broaching a boat.
2. Check radio weather broadcasts for latest forecasts and warnings.
3. Heavy static on your AM radio may be an indication of nearby thunderstorm activity.
4. If a thunderstorm catches you while afloat, you should remember that not only gusty winds but also lightning poses a threat to safety.
   - stay below deck if possible.
   - keep away from metal objects that are not grounded to the boat's protection system.
   - don't touch more than one grounded object at the same time (or you may become a shortcut for electrical surges passing through the protection system).
   - put on a life jacket and prepare for rough sea conditions.

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