

NWS PRODUCTS VIA WWV, WWVH HF VOICE

The National Institute of Standards and Technology (NIST) broadcasts a time and frequency service from stations WWV in Fort Collins, CO and WWVH in Kauai, HI, commonly known to mariners as the "Time Tick" used as an aid in celestial navigation. Included in these are hourly voice broadcasts of current highseas storm warnings for the Atlantic, Pacific and the Gulf of Mexico provided by the National Weather Service.

WWV (Fort Collins, CO)
FREGUENCIES : 2.5, 5, 10, 15, 20 MHz (AM)

<u>TIMES OF BROADCAST</u> 8 minutes past the hour 9 minutes past the hour 10 minutes past the hour	<u>BROADCAST AREA</u> Atlantic highseas warnings Atlantic highseas warnings Pacific highseas warnings
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WWVH (Hawaii)
FREGUENCIES : 2.5, 5, 10, 15 MHz (AM)

<u>TIMES OF BROADCAST</u> 48 - 51 Minutes past the hour	<u>BROADCAST AREA</u> Pacific highseas warnings
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DIAL-A-BUOY

Mariners can obtain the latest coastal and offshore weather observations through a new telephone service called Dial-A-Buoy. This service provides wind and wave measurements taken within the last hour at stations located in coastal waters around the United States and in the Great Lakes.

To access Dial-A-Buoy, dial 1-228-688-1948 using a touch tone or cellular phone. Enter the five-digit station identifier in response to the prompt. The Dial-A-Buoy menu tree has a selection for the caller to receive a map of buoy station identifiers via return call fax. Station identifiers also can be obtained at the following web site: <http://www.ndbc.noaa.gov>.

Commercial Broadcast AM and FM Radio Stations That Broadcast NWS Forecasts and Warnings

Location	Station	Frequency
Anchorage	KHAR	590 AM
Anchorage	KENI	650 AM
Anchorage	KSHA	91.1 FM
Barrow	KBRW	680 AM
Bethel	KYUK	640 AM
Cordova	KLAM	1450 AM
Craig	KRBD	101.7 FM
Dillingham	KDLG	670 AM
Fort Yukon	KZPA	910 AM
Galena	KIYU	900 AM
Glennallen	KCAM	790 AM
Haines/Skagway	KHNS	102.7 FM
Homer	KGTL	620 AM
Homer	KBBI	890 AM
Homer/Soldotna	KPEN	101.7 FM
Homer	KWVV	103.5 FM
Juneau	KJNO	630 AM
Juneau	KINY	800 AM
Juneau	KSUP	106.3 FM
Juneau	KTOO	104.3 FM
Kenai/Soldotna	KSRM	920 AM
Kenai	KWHQ	100.1 FM
Ketchikan	KTKN	930 AM
Ketchikan	KFMJ	99.9 FM
Ketchikan	KRBD	105.9 FM
Ketchikan	KGTV	106.7 FM
Kodiak	KVOK	560 AM
Kodiak	KMXT	100.1 FM
Kodiak	KIJZ	101.1 FM
Kotzebue	KOTZ	720 AM
McGrath	KSKO	870 AM
Naknek	KAKN	100.9 FM
Nome	KNOM	780 AM
Nome	KICY	850 AM
Nome	KNOM	96.1 FM
Petersburg	KFSK	100.9 FM
Saint Paul	KUHB	91.9 FM
Sand Point	KSDP	840 AM
Seward	KRXA	950 AM
Siika	KIFW	1230 AM
Siika	KCAW	104.7 FM
Unalaska	KIAL	1450 AM
Valdez	KCHU	770 AM
Valdez	KVAK	1230 AM
Whittier	KCHU	88.1 FM
Wrangell	KSTK	101.7 FM
Yakutat	KCAW	90.1 FM

Marine and aviation weather for Alaska are given every evening on "Alaska Weather", on most Alaska PBS television stations.

Radio Broadcasts of Marine Weather Warnings and Forecasts by Coast Guard Stations

I. Voice Broadcasts
HF Weather Broadcasts are on 2670 Khz and 6501 Khz (USB) from Kodiak at 0200 and 1645 UCT.

Weather warnings are broadcast immediately upon receipt.

Location	Station	Frequency	Time (UCT)
Kodiak	J	518 Khz	0300, 0700, 1100, 1500, 1900, 2300
Adak*	X	518 Khz	Same as above except at 40 min. past the hour.

*Adak area information broadcast from Kodiak.

National Weather Service Points of Contact

Marine weather forecasts and warnings, when issued can be obtained, by telephone, as follows:

- Telephone Access to Continuous Weather Broadcasts:	- Office telephone numbers:
Cordova 907-424-3333	Annette 907-886-3241
Juneau 907-586-3997	Anchorage 907-266-5105
Siika 907-747-6011	Barrow 907-852-6484
Wrangell 907-874-3232	Bethel 907-543-2236
Yakutat 907-784-3654	Cold Bay 907-532-2448
	Fairbanks 907-458-3700
	Homer 907-266-5105
	Juneau 907-790-6824
	King Salmon 907-246-3303
	Kodiak 907-487-4338
	Kotzebue 907-442-3231
	Nome 907-443-2321
	St. Paul 907-546-2215
	Valdez 907-835-4505
	Yakutat 907-784-3322

The complete weather line menu can be found at: <http://www.arh.noaa.gov/info/awl.html>

NOAA Weather Radio (NWR), Specific Area Message Encoder (SAME), and NWR Coverage

NOAA Weather Radio broadcasts on 162.40, 162.425, 162.45, 162.475, 162.50, 162.525 and 162.55 MHz can usually be received 20-40 miles from the transmitting antenna site, depending on terrain and the quality of the receiver used. Where transmitting antennas are on high ground, the range is somewhat greater, reaching 60 miles or more. 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 for 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.

In addition, the Federal Communications Commission (FCC) has approved the special SAME code to delineate marine areas. Mariners with NWR receivers equipped with SAME should check out: <http://www.nws.noaa.gov/om/marine/wxradio.htm> for information on how to program their receivers.

For a listing of marine area and zone codes for SAME, go to: <http://www.nws.noaa.gov/geodata/catalog/wsom/html/marinewreas.htm>

BUOY AND C-MAN DATA AVAILABLE VIA E-MAIL (FTPMAIL)

Current buoy and C-MAN data is now available in a very compact form via http://ftp://www.ndbc.noaa.gov/data/latest_obs/ or e-mail (FTPMAIL).

Via http://ftp://www.ndbc.noaa.gov/data/latest_obs/

Via ftp://www.ndbc.noaa.gov/data/latest_obs/

Via e-mail (FTPMAIL) <http://weather.noaa.gov/pub/fax/buoydata.txt> (instructions)

Send an e-mail to: ftpmail@weather.noaa.gov

Subject Line: Put anything you like

Body: open www.ndbc.noaa.gov
cd data
cd latest_obs
get 42007.txt
get gdil1.txt
quit

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, VA
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

INTERNET ADDRESSES

National Weather Service Alaska Region
<http://www.arh.noaa.gov>

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

National Data Buoy Center
<http://www.ndbc.noaa.gov>

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

Marine Product Dissemination Information
<http://www.nws.noaa.gov/om/marine/home.htm>

National Weather Service - MSC charts
<http://www.nws.noaa.gov/om/marine/pub.htm>

Meteorological Services of Canada
<http://www.weatheroffice.com>

WFO Anchorage
<http://pafc.arh.noaa.gov>

WFO Fairbanks
<http://pafg.arh.noaa.gov>

WFO Juneau
<http://pajk.arh.noaa.gov>

MARINE RADIOFACSIMILE CHARTS THROUGH E-MAIL

National Weather Service radiofax charts broadcast by the U.S. Coast Guard from Pt. Reyes, CA are available via E-mail. Marine text products are also available through this service. This allows Internet access for mariners who do not 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.

NOAA Weather Radio Continuous VHF Weather Broadcast

Location	Station	Frequency (Mhz)
Anchorage	KEC-43	162.55
Barrow	KZZ-53	162.55
Bethel	WNG-675	162.55
Cape Gull	WNG-529	162.50
Cordova	WXJ-79	162.40
Craig	WXI-80	162.475
Dillingham	WNG-681	162.50
Dutch Harbor	WXK-89	162.55
Haines	WXM-97	162.40
Homer	WXJ-24	162.40
Juneau	WXJ-25	162.55
Ketchikan	WXJ-26	162.55
Kodiak	WXJ-78	162.55
Kotzebue	KWN-30	162.55
Marmot Island	WNG-716	162.50
Ninilchik	KZZ-97	162.55
Nome	WXJ-62	162.55
Potato Point	WNG-527	162.425
Sand Point	WNG-525	162.55
Seward	KEC-81	162.55
Siika	WXJ-80	162.55
Sitkinak Dome	WNG-718	162.50
Soldotna	WWG-39	162.475
Tripod Mountain	WNG-75	162.450
Valdez	WXJ-63	162.55
Wasilla	KZZ-98	162.40
Whittier	KXI-29	162.40
Wrangell	WXJ-83	162.40
Yakutat	WXK-69	162.40

NOAA Weather Radio as USCG High Sites

Location	Station	Frequency (Mhz)
Althorp Peak	KZZ-86	162.425
Bede Mountain	WNG-528	162.450
Cape Fanshaw	KZZ-88	162.425
Cape Gull	WNG-529	162.500
Cape Hinchinbrook	TBD	162.525
Dillingham	WNG-681	162.500
Duke Island	KZZ-92	162.450
East Point	WNG-530	162.500
Gravina Island	KZZ-96	162.525
Marmot Island	WNG-716	162.500
Mount McArthur	KZZ-95	162.525
Mt. Robert Barron	KZZ-87	162.450
Pillar Mountain	WNG-531	162.525
Point Pigot	KZZ-93	162.450
Potato Point	WNG-527	162.425
Rugged Island	WNG-526	162.425
Raspberry Island	KZZ-90	162.425
Sitkinak Dome	WNG-718	162.500
Sukkawan Island	KZZ-89	162.425
Tripod Mountain	WNG-715	162.450
Tuklung Mountain	WNG-525	162.425
Zarembo Island	KZZ-91	162.450

Marine Weather Radio VHF Broadcast Frequencies

Channel 1 ~ 162.550 MHz
Channel 2 ~ 162.400 MHz
Channel 3 ~ 162.475 MHz
Channel 4 ~ 162.425 MHz
Channel 5 ~ 162.450 MHz
Channel 6 ~ 162.500 MHz
Channel 7 ~ 162.525 MHz

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

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 23 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 within the range of 48 to 63 knots, are either present or forecast for the area.

HURRICANE FORCE WIND WARNING: Issued to indicate winds of 64 knots or above, no matter how high the speed, are either present or forecast for the area. Not associated with a tropical storm.

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

HEAVY FREEZING SPRAY: An accumulation of freezing water droplets on a vessel at a rate of 2 cm per hour or greater caused by a combination of cold water, wind, cold air temperature, and vessel movement.

TSUNAMI WARNING/WATCH: Issued by the National Weather Service, West Coast/Alaska Tsunami Warning Center, Palmer Alaska, for long period water waves which were generated by an earthquake, and when issued as a warning are less than 2 hours travel time to the warning area. A watch is issued when waves are more than 2 hours travel time to the warning area.

NATIONAL WEATHER SERVICE MARINE WEATHER CHARTS U.S. COAST GUARD COMMS STATION KODIAK, ALASKA

CALL SIGN	FREQUENCIES (kHz)	TIMES
NOJ	2054	CONTINUOUS
	4298	CONTINUOUS
	8459	CONTINUOUS
	12412.5	CONTINUOUS

WEATHER RADIOFACSIMILE TRANSMISSION SCHEDULE

Select a carrier frequency 1.9kHz below those listed when using a single sideband radio in the USB mode to receive these broadcasts.

Transmission Time (UTC)	Title
0400/1600	TEST PATTERN
0403/1603	SURFACE ANALYSIS
0427/1627	REBROADCAST 24HR SURFACE FORECAST
0437/1637	REBROADCAST 48HR SURFACE FORECAST
0447/1647	COASTAL MARINE FORECAST TABLES (ALASKA)
0456/1656	SEA STATE ANALYSIS/REBROADCAST
0506/1706	GOES IR SATELLITE IMAGE
0517/1717	500 MB ANALYSIS
0527/1727	SYMBOLS AND CONTRACTIONS/SCHEDULE
0548/1748	REQUEST FOR COMMENTS/PRODUCT NOTICE
0558/1758	24 HOUR 500 MB FORECAST
0950/2150	TEST PATTERN
0953/2153	SURFACE ANALYSIS
1017/2217	24HR WIND/WAVE FORECAST
1027/2227	24HR SURFACE FORECAST
1037/2237	48HR SURFACE FORECAST
1047/2247	48HR WIND/WAVE FORECAST
1057/2257	5-DAY SEA ICE FORECAST/SEA ICE ANALYSIS
1117/2317	GOES IR SATELLITE IMAGE
1128/2328	48HR WAVE PERIOD, SWELL DIRECTION
1138/2338	48HR 500 MB ANALYSIS
1148/----	SEA SURFACE TEMPERATURE ANALYSIS
1159/----	COOK INLET SEA ICE FORECAST
---/2348	96HR SURFACE FORECAST
---/2358	96HR WIND/WAVE FORECAST
---/0008	96HR WAVE PERIOD, SWELL DIRECTION
---/0018	96HR 500 MB ANALYSIS

A comprehensive set of NWS Marine Weather Charts for the Eastern Pacific are broadcast from U.S. COAST GUARD STATION POINT REYES, CALIFORNIA

CALL SIGN	FREQUENCIES (kHz)	TIMES
NMC	4346	NIGHT
	8682	CONTINUOUS
	12590.5	CONTINUOUS
	17151.2	CONTINUOUS
	22527	DAY