

NOAA WEATHER RADIO BROADCASTS

CITY	STATION	FREQUENCY	BROADCAST TIMES
Boston, MA	KHB-35	162.475 MHz	Continuously, 24 hrs a day
Bourne/Hyannis, MA	KEC-73	162.55 MHz	Continuously, 24 hrs a day
Dresden, ME	WXM-60	162.475 MHz	Continuously, 24 hrs a day
Ellsworth, ME	KEC-93	162.40 MHz	Continuously, 24 hrs a day
Essex Marine, MA	WNG-574	162.425 MHz	Continuously, 24 hrs a day
Jonesboro Marine, ME	WNG-543	162.450 MHz	Continuously, 24 hrs a day
New London, CT	KHB-47	162.55 MHz	Continuously, 24 hrs a day
Portland, ME	KDO-95	162.55 MHz	Continuously, 24 hrs a day
Providence, RI	WXJ-39	162.40 MHz	Continuously, 24 hrs a day
Sratham, NH	KZZ-40	162.450 MHz	Continuously, 24 hrs a day
Worcester, MA	WXL-93	162.55 MHz	Continuously, 24 hrs a day

These VHF-FM radio stations, locations shown on the map, are managed by the National Weather Service. Information is updated every 3 to 6 hours and amended as required. Broadcast contents vary, but in general contain the following types of information.

1. Descriptions of the weather patterns affecting the eastern United States and coastal waters.
2. Regional and state forecasts.
3. Marine forecasts and warnings for coastal waters.
4. Weather observations from selected stations.
5. Radar summaries and reports.
6. Local weather observations and forecasts.
7. Watches, warnings, statements and bulletins concerning adverse and severe weather.
8. Tide reports.

BROADCASTS OF MARINE WEATHER FORECASTS AND WARNINGS BY MARINE RADIOTELEPHONE STATIONS

CITY	STATION	CARRIER FREQUENCY (kHz) VHF CH NO.	BROADCAST TIMES/UTC
Southwest Harbor, ME (USCG)	NMF-44	*#2670 ~Ch. 22A	1135, 2335 1135, 2335
Portland, ME (USCG)		*#2670 Ch. 22A	1105, 2305 1105, 2305
Boston, MA (USCG)	NMF	*#2670 ~Ch. 22A	1035, 2235 1035, 2235
Moriches, NY (USCG)	NMY-41	*#2670 ~Ch. 22A	0010, 1210 0010, 1210
Woods Hole, MA (USCG)		*#2670 ~Ch. 22A	0440, 1640 1005, 2205
Long Island Sound (USCG)		~Ch. 22A	1120, 2320
Activities, NY (USCG)		~Ch. 22A	1050, 2250

USCG VHF broadcasts normally contain coastal forecasts.
HF broadcasts normally contain offshore forecasts.
Marine warnings are broadcast upon receipt.

* Preceded by announcement on 2182 kHz. (2187.5 kHz future calling frequency)
~ Preceded by announcement on Ch. 16.
Single Sideband, Suppressed carrier, carrier frequency.

RADIO WWW/WWWH 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 WWWH, Kauai, Hawaii. These are the radio stations that sailors and others listen to for daily time checks.

WWW (FORT COLLINS, CO)

FREQUENCIES : 2.5, 5, 10, 15, 20 MHz

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

TIMES OF BROADCAST	
8 minutes past the hour	Atlantic High Seas Warnings,
9 minutes past the hour	Atlantic High Seas Warnings

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 expedited 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 life jacket on and 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 weather radio 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).
 - Prepare for rough sea conditions.

Physical Oceanographic Real-Time System (PORTS)

PORTS is an integrated system of water level data, winds, pressure, air/water temperatures, Mean Lower Low Water (MLLW) datum, water density, visibility, waves, and other elements. PORTS was developed in response to stress on national waterways. High water can cause floods while low water can cause ships to ground. For more information, and access to PORTS for Narragansett Bay, please check out: <http://co-ops.nos.noaa.gov/nbports/nbports.html>

HIGH SEAS RADIOTELEX (SITOR) WEATHER BROADCASTS FOR ATLANTIC

CITY	STATION	CARRIER FREQUENCY (kHz)	BROADCAST TIMES/LOCAL
Boston, MA (USCG)	NMF	6314	0030*, 0140
		8416.5	0030*, 0140, 1218*, 1630
		12579	0030*, 0140, 1218*, 1630
		16806.5	1218*, 1630

*Ice (Seasonal)

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/wradio.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>

The NOAA Weather Radio coverage areas indicated are estimates. For these maps, transmitter antenna performance are assumed to be omni-directional. As a result, actual coverage can be different from that depicted on this map. Coverage that is significantly different than depicted on this map should be reported to the local NWS forecast office.

DIAL-A-BUOY

Dial-A-Buoy gives mariners an easy way to obtain reports via a cell phone. Dial-A-Buoy provides wind and wave measurements taken within the last hour at National Data Buoy Center (NDBC) buoy and Coastal Marine Automated Network (C-MAN) stations. The stations operated by NDBC, part of the National Weather Service, are located in the Atlantic, Pacific, Gulf of Mexico, and the Great Lakes. The Dial-A-Buoy service has since expanded to include stations owned and operated by other organizations including the United Kingdom Met Office and Environment Canada. To access Dial-A-Buoy, dial (228) 688-1948 using any touch tone or cell phone. For internet users, more information is at: <http://seaboard.ndbc.noaa.gov/dial.shtml>.

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

These charts are also posted at: <http://www.nws.noaa.gov/om/marine/pub.htm>

Copies of these charts are available from:
FAA Distribution Division, AJW-3550
National Aeronautical Charting Office
Glenn Dale, MD 20769-9700
(301) 436-8301
(800) 638-8972 toll free, U.S. only
(301) 436-6829 FAX
Email: 9-AMC-chartsales@faa.gov

THE NW ATLANTIC RADIOFACSIMILE BROADCAST SCHEDULE IS POSTED AT:

<http://weather.noaa.gov/pub/fax/hmmarsh.txt>

Comments on the schedule or quality of charts
Email: Timothy.Rulon@noaa.gov

ORDERING NAUTICAL CHARTS

Nautical charts for navigation purposes for these coastal areas are available from local marinas, marine supply stores, or at: <http://chartmaker.ncd.noaa.gov/nsd/states.html>

Nautical Charts are also available from your local nautical agent. A complete listing of nautical agents can be found at: <http://www.naco.faa.gov/Agents.asp>

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>, or e-mail (FTPMAIL).

Via http://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 gdl1.txt
quit

INTERNET ADDRESSES

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

National Weather Service Marine Dissemination
<http://www.nws.noaa.gov/om/marine/home.htm>

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

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

National Weather Service Eastern Region Headquarters
<http://www.erh.noaa.gov/er/hq/>

National Weather Service Caribou, ME
<http://www.erh.noaa.gov/er/car/>

National Weather Service Portland/Gray, ME
<http://www.erh.noaa.gov/er/gyx/>

National Weather Service Boston/Taunton, MA
<http://www.erh.noaa.gov/er/box/>

National Weather Service New York/Upton, NY
<http://www.erh.noaa.gov/er/okx/>

Environment Canada
<http://weatheroffice.ec.gc.ca/>

NATIONAL WEATHER SERVICE PRODUCTS AND TEXT FORECASTS AVAILABLE VIA E-MAIL (FTPMAIL)

National Weather Service radiofax charts and text forecasts are available via E-mail. The FTPMAIL server is intended to allow Internet access for mariners and other users who do not have direct access to the World Wide Web but who are equipped with an e-mail system. Turnaround is generally in under three hours, however, performance may vary widely and receipt cannot be guaranteed. To get started in using the NWS FTPMAIL service, follow these simple directions to the FTPMAIL "help" file (11 bytes).

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

Direct any questions to 301-713-1677, extension 128, or marine.weather@noaa.gov

HIGH SEAS AND OFFSHORE RADIOTELEPHONE (USB) WEATHER BROADCASTS FOR ATLANTIC

CITY	STATION	CARRIER FREQUENCY (kHz)	BROADCAST TIMES/UTC
Chesapeake, VA (USCG)	NMN	4426.0	0330*, 0515, 0930*
		6501.0	0330*, 0515, 0930*, 1115 1530*, 2130*, 2315
		8764.0	0330*, 0515, 0930*, 1115 1530*, 1715, 2130*, 2315
		13089.0	1115, 1530*, 1715, 2130*, 2315
* offshore		17314.0	1715

CANADIAN WEATHER BROADCASTS

Forecasts issued by Meteorological Service of Canada for the Maritime areas.

CITY	FREQUENCY (kHz)	BROADCAST TIMES/UTC
Halifax, Nova Scotia	2749	0110, 0810, 1540, 2010 Seven Days a Week
Sydney, Nova Scotia	2749	0040, 0740, 1440, 2110 Seven Days a Week
St. John, New Brunswick	2749	0140, 1040, 1640, 2040 Seven Days a Week

Also, the marine forecasts bulletins are broadcast via Weather Radio Canada on the following frequencies at 162.4 MHz, 162.475 MHz, and 162.55 MHz.