U.S. DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration

National Weather Service

MARINE WEATHER SERVICE CHART

MANASQUAN INLET, NJ TO CAPE HATTERAS, NC

NOT TO BE USED FOR NAVIGATION

NATIONAL WEATHER SERVICE TELEPHONE NUMBERS

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

NWS OFFICE	TELEPHONE	OFFICE HOURS/LOCAL TIME
Mt. Holly, NJ http://www.erh.noaa.gov/phil	609-261-6600	7:30a.m - 2:30p.m. M-F otherwise recorded information 24 hours / 7 days
Baltimore, MD/ Washington, DC http://www.erh.noaa.gov/er/lwx	703-260-0107	24 hours
Wakefield, VA http://www.erh.noaa.gov/er/akq	757-899-4200	24 hours
Morehead City, NC http://www.erh.noaa.gov/er/mhx	252-223-5737	24 hours

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 Chesapeake Bay and Delaware River and Bay, please check out:

http://co-ops.nos.noaa.gov/d_ports.html

COASTAL MARINE FORECAST AREAS

Coastal marine forecasts are issued for the following areas:

Marine Zone ID Number	Marine Zone Name
ANZ451	Coastal waters from Manasquan Inlet, NJ to Little Egg Inlet, NJ
ANZ452	Coastal waters from Little Egg Inlet, NJ to Great Egg Inlet, NJ
ANZ453	Coastal waters from Great Egg Inlet, NJ to Cape May, NJ
ANZ454	Coastal waters from Cape May, NJ to Cape Henlopen, DE
ANZ455	Coastal waters from Cape Henlopen, DE to Fenwick Island, DE
ANZ430	Delaware Bay waters north of East Point, NJ to Slaughter Beach, DE
ANZ431	Delaware Bay waters south of East Point, NJ to Slaughter Beach, DE
ANZ530	Chesapeake Bay north of Pooles Island, MD
ANZ531	Chesapeake Bay from Pooles Island, MD to Sandy Point, MD
ANZ532	Chesapeake Bay from Sandy Point, MD to North Beach, MD
ANZ533	Chesapeake Bay from North Beach, MD to Drum Point, MD
ANZ534	Chesapeake Bay from Drum Point, MD to Smith Point, VA
ANZ535	Tidal Potomac from Key Bridge to Indian Head, MD
ANZ536	Tidal Potomac from Indian Head, MD to Cobb Island, MD
ANZ537	Tidal Potomac from Cobb Island, MD to Smith Point, VA
ANZ630	Chesapeake Bay from Smith Point, VA to Windmill Point, VA
ANZ631	Chesapeake Bay from Windmill Point, VA to New Point Comfort, VA
ANZ632	Chesapeake Bay from New Point Comfort, VA to Cape Henry, VA
ANZ650	Coastal waters from Fenwick Island, DE to Chincoteague, VA
ANZ652	Coastal waters from Chincoteague, VA to Parramore Island, VA
ANZ654	Coastal waters from Parramore Island, VA to Cape Charles Light, VA
ANZ656	Coastal waters from Cape Charles Light, VA to VA-NC border
ANZ658	Coastal waters from VA-NC border to Currituck Beach Light, NC
ANZ633	Currituck Sound
AMZ150	Coastal waters from Currituck Beach Light, NC to Oregon Inlet, NC
AMZ152	Coastal waters from Oregon Inlet, NC to Cape Hatteras, NC
AMZ154	Coastal waters from Cape Hatteras, NC to Ocracoke Inlet, NC

WAVE FORECASTS APPEARING IN COASTAL MARINE FORECASTS:

Wave height forecasts are for average wave conditions to be encountered in open coastal waters except if otherwise indicated. Values are for waves produced by wind and do not take into account areas of normally higher or steeper waves found near bars, shoals or restricted entrances into sounds or inlets. Occasionally, waves can combine and peak out at twice the forecast value. Where possible, swell waves will be separatly described.

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 Washington, DC 703-260-0107

EXPLANATION OF MARINE ADVISORIES/WARNINGS

SMALL CRAFT ADVISORY: Issued to alert mariners to sustained winds 20 to 33 knots and/or seas/waves 5 to 7 feet and greater, area dependent. Decision as to degree of hazard is left to the boat operator, based on experience and the size of the boat.

GALE WARNING: A warning of sustained winds or frequent gusts in the range of 34 to 47 knots inclusive, either predicted or occuring, and not directly associated with a tropical cyclone.

STORM WARNING: A warning of sustained winds or frequent gusts in the range of 48 to 63 knots, either predicted or occuring, and not directly associated with a tropical cyclone.

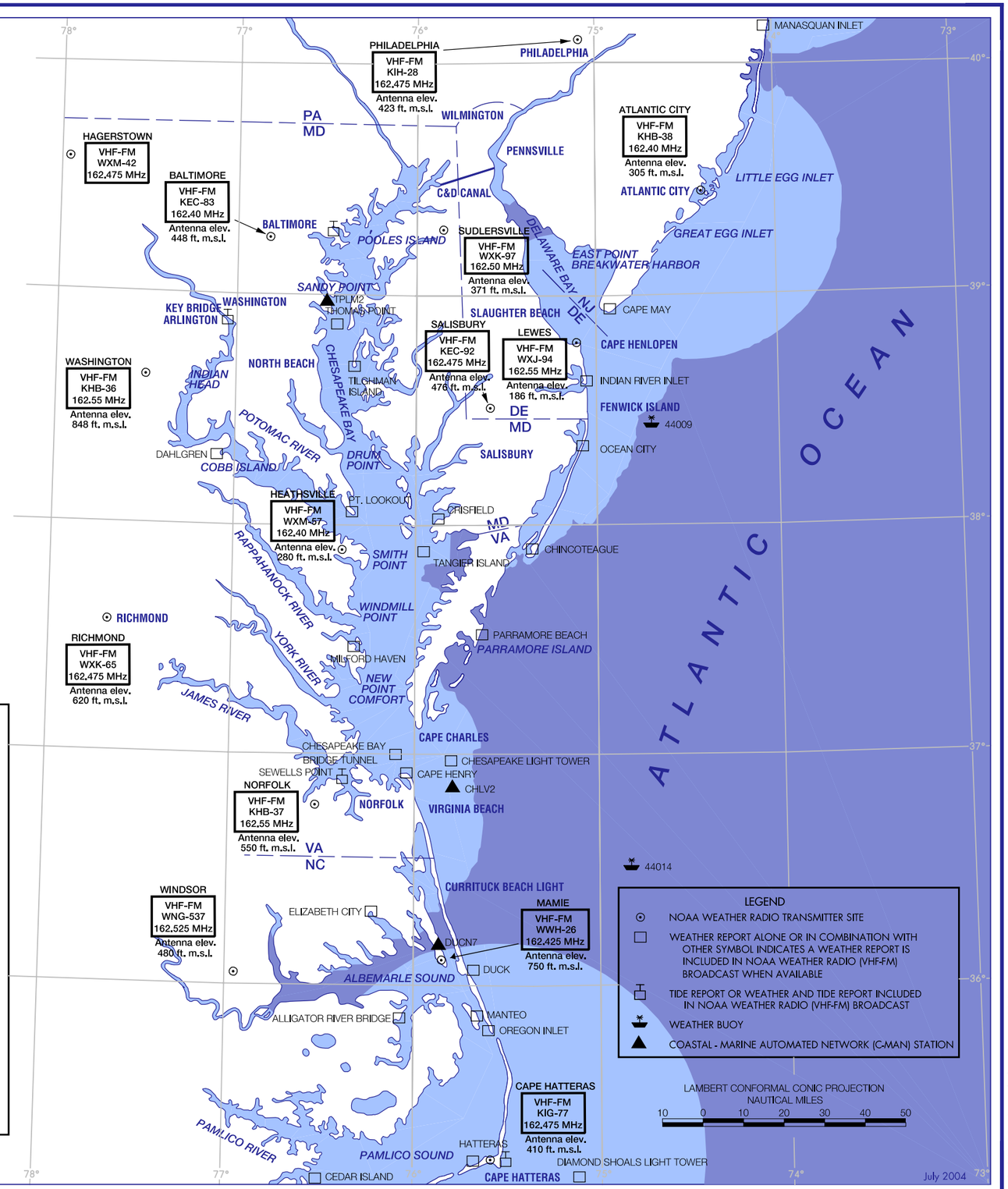
HURRICANE FORCE WIND WARNING: A warning of sustained winds or frequent gusts 64 knots or greater, either predicted or occuring, NOT associated with a tropical cyclone.

SPECIAL MARINE WARNING: Issued for severe local storms for winds 34 knots or greater, and/or hail three-quarters inch in diameter or larger, and/or waterspouts.

TROPICAL STORM WARNING: Issued for a tropical cyclone in which the maximum sustained surface wind ranges from 34 to 63 knots inclusive.

HURRICANE WARNING: Issued for a tropical cyclone in which the maximum sustained surface wind is 64 knots or greater.

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.



USCOMM-NOAA-DC-A5741
NOAA-PA-200410

DISCREPANCY REPORTS SOLICITED

If you find any discrepancies on this chart or have any questions or comments, please e-mail them to: marine.weather@noaa.gov.
Your input is appreciated and it will be considered when preparing the next edition.

MSC-3—MANASQUAN INLET, NJ TO CAPE HATTERAS, NC

NOAA WEATHER RADIO BROADCASTS

CITY	STATION	FREQUENCY	BROADCAST TIMES
Lewes, DE	WXJ-94	162.550 MHz	Continuously, 24 hrs a day
Philadelphia, PA	KIH-28	162.475 MHz	Continuously, 24 hrs a day
Atlantic City, NJ	KHB-38	162.400 MHz	Continuously, 24 hrs a day
Baltimore, MD	KEC-83	162.400 MHz	Continuously, 24 hrs a day
Washington, DC	KHB-36	162.550 MHz	Continuously, 24 hrs a day
Hagerstown, MD	WXM-42	162.475 MHz	Continuously, 24 hrs a day
Salisbury, MD	KEC-92	162.475 MHz	Continuously, 24 hrs a day
Sudlersville, MD	WXK-97	162.500 MHz	Continuously, 24 hrs a day
Norfolk, VA	KHB-37	162.550 MHz	Continuously, 24 hrs a day
Richmond, VA	WXK-65	162.475 MHz	Continuously, 24 hrs a day
Heathsville, VA	WXM-57	162.400 MHz	Continuously, 24 hrs a day
Windsor, NC	WNG-537	162.525 MHz	Continuously, 24 hrs a day
Mamie, NC	WWH-26	162.425 MHz	Continuously, 24 hrs a day
Cape Hatteras, NC	KIG-77	162.475 MHz	Continuously, 24 hrs a day

These VHF-FM radio stations, locations shown on the map, are operated by the National Weather Service. Broadcast tapes are 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 with outlook for the third day.
3. Marine forecasts and warnings for coastal waters.
4. Weather observations from selected National Weather Service and Coast Guard stations.
5. Radar summaries and reports.
6. Local weather observations and forecasts.
7. Watches, warnings, statements and bulletins concerning adverse and severe weather.

BROADCASTS OF MARINE WEATHER FORECASTS BY US COAST GUARD RADIO STATIONS

The fifth U.S. Coast Guard District stations listed below announce all Broadcast Notice to Mariners (initial call-up) on 2182 kHz (SSB) and /or 156.8 MHz (channel 16 VHF-FM) and shift to 2670 kHz (SSB) and /or 157.1 MHz (channel 22A VHF-FM) where the complete text is broadcast. These stations broadcast marine information and weather information upon receipt and on the following listed times and frequencies.

STATION	CARRIER FREQUENCY (kHz)	BROADCAST TIMES/UTC
Coast Guard Group, Eastern Shore	Ch. 22A 2670 kHz	0200, 1145 0233, 1403
Coast Guard Group, Hampton Roads	Ch. 22A 2670 kHz	0230, 1120 0203, 1333
Coast Guard Group, Cape Hatteras	Ch. 22A 2670 kHz	0100, 1055 0133, 1303
Coast Guard Group, Fort Macon	Ch. 22A 2670 kHz	0130, 1030 0103, 1233
Coast Guard Group, Atlantic City	Ch. 22A 2670 kHz	1103, 2303 1103, 2203
Activities, Baltimore	Ch. 22A 2670 kHz	warnings only
Chesapeake (NMN), CAMSLANT	518 NAVTEX "N"	0130, 0530, 0930 1330, 1730, 2130

HIGH SEAS RADIOTELEPHONE WEATHER BROADCASTS FOR THE ATLANTIC

CITY	STATION	CARRIER FREQ. (kHz)	BROADCAST TIMES/UTC
CHESAPEAKE, VA (USCG)	NMN	4426.0	0330, 0500, 0930
		6501.0	0330, 0500, 0930, 1130 1600, 2200, 2330
		8764.0	0330, 0500, 0930, 1130 1600, 1730, 2200, 2330
		13089.0	1130, 1600, 1730, 2200 2330
		17314.0	1730

HIGH SEAS RADIOTELEX (SITOR) WEATHER BROADCASTS FOR THE ATLANTIC

CITY	STATION	ASSIGNED FREQ. (kHz)	BROADCAST TIMES/UTC
BOSTON, MA (USCG)	NMF	6314.0	0140
		8416.5	0140, 1630
		12579.0	0140, 1630
		16806.5	1630

THE ATLANTIC RADIOFACSIMILE BROADCAST SCHEDULE IS POSTED AT:

http://www.opc.ncep.noaa.gov

Then click Atlantic FAX

Comments on the schedule or quality of charts
E-Mail: Timothy.Rulon@noaa.gov

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 are 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 been expanded to include stations owned and operated by other organizations including the United Kingdon 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

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 alert device that can be turned on by means of a tone signal controlled by the National Weather Service. This signal is transmitted for 13 seconds preceeding an announcement of a severe weather warning.

In addition, the Federal Communications Comission (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 your receiver.

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.

RADIO WWV/WWVH STORM INFORMATION BROADCASTS

HIGH SEAS STORM INFORMATION for the North Atlantic and North Pacific is provided to 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.

WWV (FT 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	BROADCAST AREA
8 minutes past the hour	Atlantic High Seas Warning
9 minutes past the hour	Atlantic High Seas Warning

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:

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

Via ftp:

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

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 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.

INTERNET ADDRESSES

National Weather Service Home Page
http://www.nws.noaa.gov

National Weather Service Marine Home Page
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/index.html

National Weather Service Marine Products
http://www.nws.noaa.gov/om/marine/forecast.htm

National Weather Service Radiofax Products
http://weather.noaa.gov/fax/marine.shtml

NATIONAL WEATHER SERVICE RADIOFAX AND TEXT FORCASTS 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 time is generally under 1 hour, however, performance may vary widely and receipt cannot be guarenteed. 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 301-713-0882, extension 127.

OTHER MARINE WEATHER SERVICES CHARTS AVAILABLE

MSC-1	Eastport, ME to Montauk Point, NY
MSC-2	Montauk Point, NY to Manasquan, NJ
MSC-3	Manasquan, NJ to Cape Hatteras, NC
MSC-4	Cape Hatteras, NC to Savannah, GA
MSC-5	Savannah, GA to Apalachicola, FL
MSC-6	Apalachicola, FL to Morgan City, LA
MSC-7	Morgan City, LA to Brownsville, TX
MSC-8	Mexican Border to Point Conception, CA
MSC-9	Point Conception, CA to Point St. George, CA
MSC-10	Point St. George, CA to Canadian Border
MSC-11/12	Great Lakes
MSC-13	Hawaiian Waters
MSC-14	Puerto Rico and Virgin Islands
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/National Aeronautical Charting Office
Distribution Division, AVN-530
6303 Ivy Lane, Suite 400
Greenbelt, MD 20770
Telephone: (301) 436-8301
(800) 638-8972 toll free, U.S. only
(301) 436-6829 FAX
E-mail: 9-AMC-chartsales@faa.gov
http://chartmaker.ncd.noaa.gov
or your local chart agent
http://chartmaker.ncd.noaa.gov/nsd/states.html

Nautical charts for navigation purposes for these coastal areas are available from local marinas, marine supply stores, and the above address.

July 2004

USCOMM-NOAA-DC-A5741
NOAA-PA-200410

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