## **BookletChart**<sup>TM</sup>

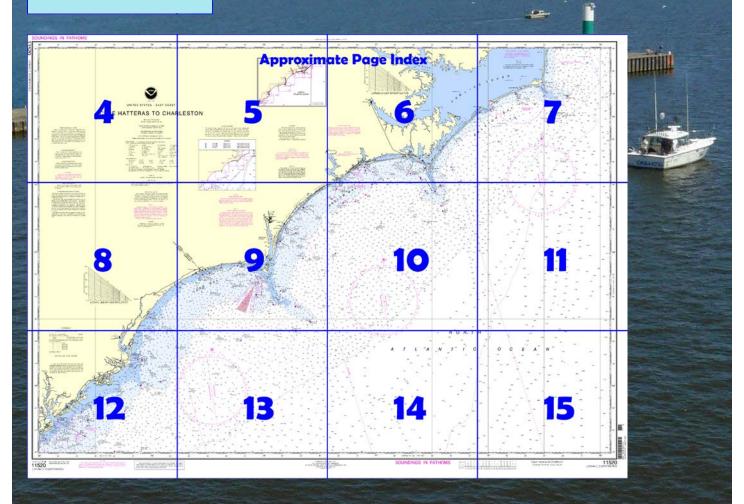
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### Cape Hatteras to Charleston NOAA Chart 11520

A reduced-scale NOAA nautical chart for small boaters When possible, use the full-size NOAA chart for navigation.



- Complete, reduced-scale nautical chart
- Print at home for free
- Convenient size
- Up-to-date with Notices to Mariners
- Compiled by NOAA's Office of Coast Survey, the nation's chartmaker



## Published by the National Oceanic and Atmospheric Administration National Ocean Service Office of Coast Survey

<u>www.NauticalCharts.NOAA.gov</u> 888-990-NOAA

#### What are Nautical Charts?

Nautical charts are a fundamental tool of marine navigation. They show water depths, obstructions, buoys, other aids to navigation, and much more. The information is shown in a way that promotes safe and efficient navigation. Chart carriage is mandatory on the commercial ships that carry America's commerce. They are also used on every Navy and Coast Guard ship, fishing and passenger vessels, and are widely carried by recreational boaters.

#### What is a BookletChart<sup>™</sup>?

This BookletChart is made to help recreational boaters locate themselves on the water. It has been reduced in scale for convenience, but otherwise contains all the information of the full-scale nautical chart. The bar scales have also been reduced, and are accurate when used to measure distances in this BookletChart. See the Note at the bottom of page 5 for the reduction in scale applied to this chart.

Whenever possible, use the official, full scale NOAA nautical chart for navigation. Nautical chart sales agents are listed on the Internet at <a href="http://www.NauticalCharts.NOAA.gov">http://www.NauticalCharts.NOAA.gov</a>.

This BookletChart does NOT fulfill chart carriage requirements for regulated commercial vessels under Titles 33 and 44 of the Code of Federal Regulations.

#### **Notice to Mariners Correction Status**

This BookletChart has been updated for chart corrections published in the U.S. Coast Guard Local Notice to Mariners, the National Geospatial Intelligence Agency Weekly Notice to Mariners, and, where applicable, the Canadian Coast Guard Notice to Mariners. Additional chart corrections have been made by NOAA in advance of their publication in a Notice to Mariners. The last Notices to Mariners applied to this chart are listed in the Note at the bottom of page 7. Coast Pilot excerpts are not being corrected.

For latest Coast Pilot excerpt visit the Office of Coast Survey website at <a href="http://www.nauticalcharts.noaa.gov/nsd/searchbychart.php?chart=115">http://www.nauticalcharts.noaa.gov/nsd/searchbychart.php?chart=115</a> <a href="http://www.nauticalcharts.noaa.gov/nsd/searchbycharts.noaa



#### (Selected Excerpts from Coast Pilot)

This chapter describes Virginia and North Carolina coastline between Cape Henry and Cape Lookout, known as The **Outer Banks**, and the sounds and tributary waters behind the banks through which the Intracoastal Waterway passes. The Outer Banks, a line of long, low, and narrow islands, include the Portsmouth Islands, the uninhabited Core Banks, and Bodie, Hatteras, and Ocracoke Islands, parts of which comprise the Cape Hatteras National Seashore.

There are no deepwater ports along this stretch of the coast. Oregon, Hatteras, and Ocracoke Inlets provide the main entrances to the shallow, sandy-bottom waters behind The Outer Banks.

Weather.—This stretch of coast is subject to strong winds and rough seas from both tropical and extratropical storms and occasionally to dense, spring, sea fog which hugs coastal routes landward of the Gulf Stream. Rough weather and numerous shoals have combined to give the seas off the Outer Banks the reputation of "Graveyard of the Atlantic." Winter provides the greatest likelihood of rough weather, due to the frequent extratropical storms. Fueled by the Gulf Stream, about 3 to 6 storms per month affect these waters. Their movement is toward the northeast or east at 25 to 30 knots. Not all of these systems are severe weather producers, but, in winter, gales blow about 5 percent of the time near Diamond Shoals and up to 10 percent to the east and northeast. From December through March, seas of 8 feet or more are encountered about 20 to 25 percent of the time near Diamond Shoals and even more often to the east. Maximum wave heights have been estimated at more than 40 feet. Steep waves of 5 feet or more with periods of less than 6 seconds are uncommon. However, those of 5 feet or more with 6- to 9-second periods occur about 30 percent of the time creating problems for vessels in the 100- to 400-foot range. Winter storms also produce rain and snow which can hamper visibility along the routes through this region. Visibilities drop below 0.5 mile less than 3 percent of the time, except in late winter and spring.

**Location of the Gulf Stream.**—Up-to-date information on the location, width, and maximum surface temperature of the Gulf Stream System is available in a variety of ways. Such information is broadcast by NOAA Weather Radio stations from Key West, Florida, to Cape Hatteras, North Carolina.

Extratropical Cyclones.—One of the more frequent weather features the mariner encounters along the coast is the winter storm or "Nor'easter." These extratropical systems can develop in any month. Their size can vary from an insignificant wave along a front to a gigantic circulation that covers most of the western North Atlantic. Winds can reach hurricane force and seas of 40 feet (12 m) and more have been encountered. While these storms are usually well forecasted they can develop or deepen explosively, particularly off Cape Hatteras, over the Gulf Stream, giving rise to the term "Hatteras Storms." These winter storms, present in all months, are most frequent and intense from November through March. December, January and February are the heart of the season, when an average of four to six

Tropical Cyclones.—A tropical cyclone is a warm core, low pressure system that develops over tropical oceans. It exhibits a rotary, counterclockwise circulation in the Northern Hemisphere around a center or "eye." In small tropical cyclones the diameter of the area of destructive winds may not exceed 25 miles (46 km) while in the greatest storms the diameter may reach 500 miles (925 km). At the center is a comparatively calm, sometimes clear, area known as the eye. The diameter of the eye can vary from about 5 to 25 miles (9 to 46 km). Winds are usually strongest near the center. They can reach 175 knots or more in an intense hurricane. (See Coast Pilot 4, Chapter 3 for an extensive discussion of Tropical Cyclones, Tropical Cyclone Climatology, Hurricane Warning and Forecasts, Hurricane Havens, Tropical Cyclones at Sea, Maneuvering for a Tropical Cyclone.)

U.S. Coast Guard Rescue Coordination Center 24 hour Regional Contact for Emergencies

RCC Miami Commander

storms per month roam these waters.

7th CG District (305) 415-6800

Miami, FL

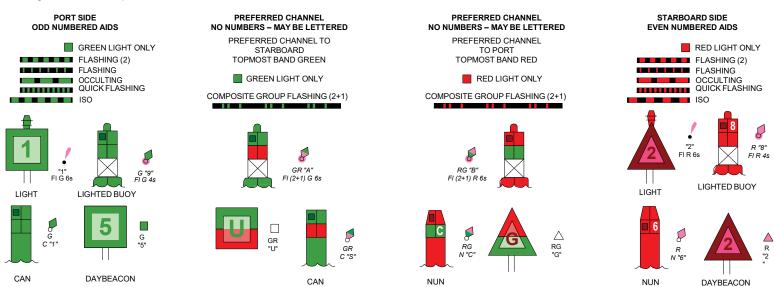
#### **Navigation Manager Regions**



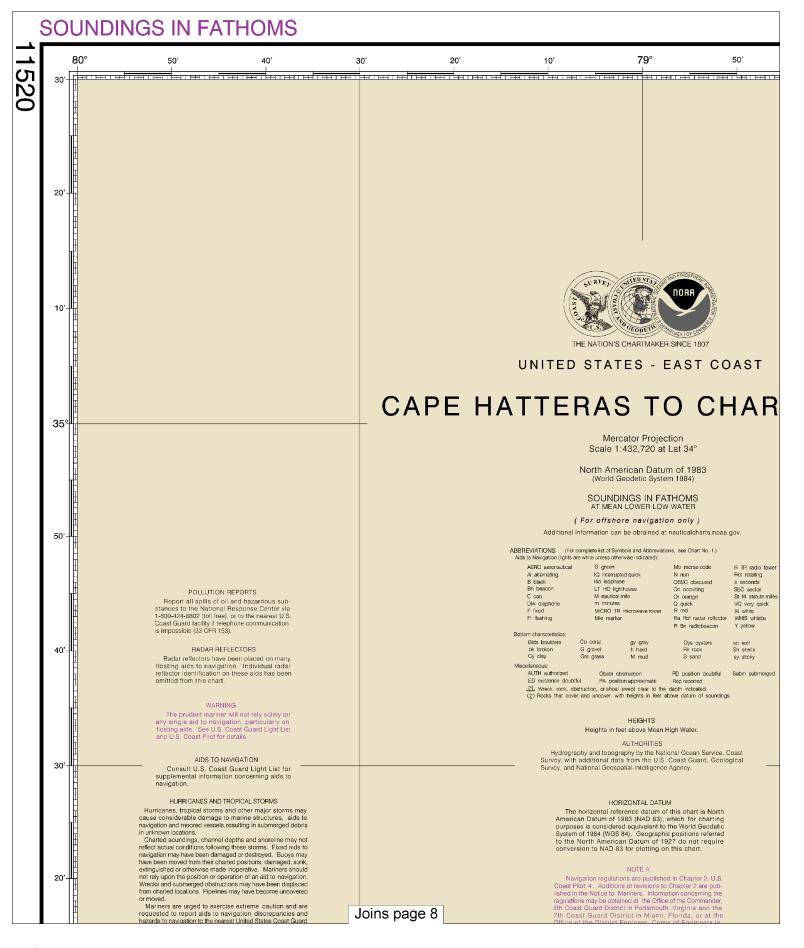
To make suggestions, ask questions, or report a problem with a chart, go to <a href="https://www.nauticalcharts.noaa.gov/customer-service/assist/">https://www.nauticalcharts.noaa.gov/customer-service/assist/</a>

#### Lateral System As Seen Entering From Seaward

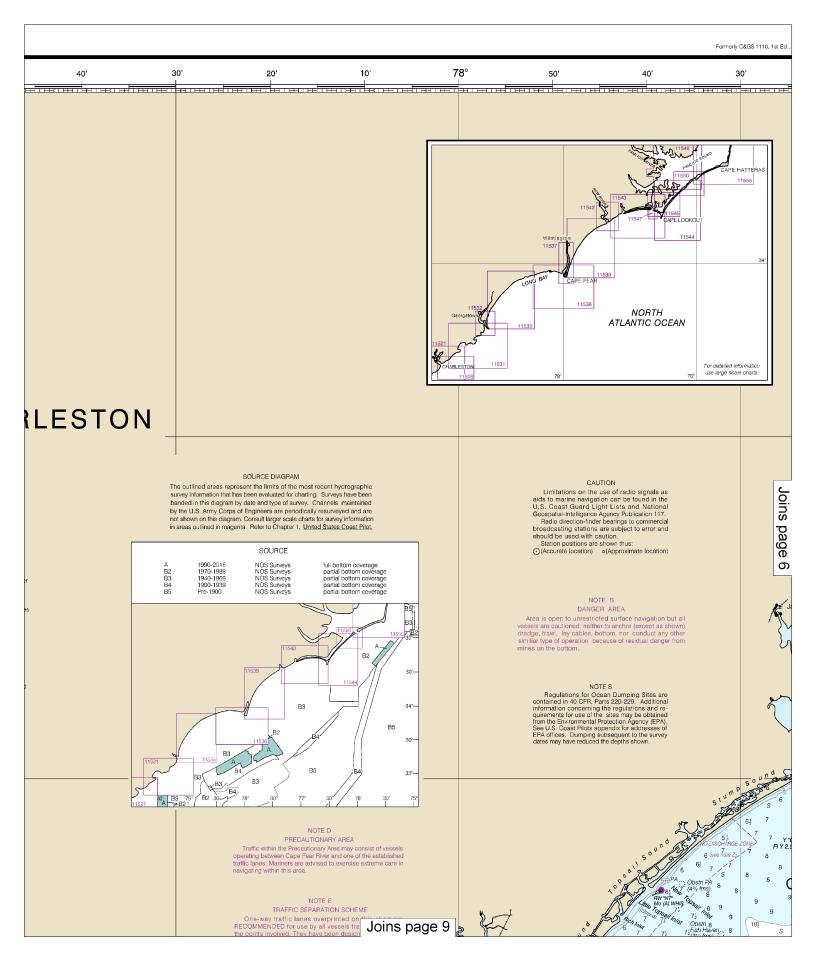
on navigable waters except Western Rivers

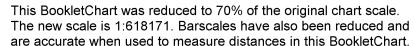


For more information on aids to navigation, including those on Western Rivers, please consult the latest USCG Light List for your area. These volumes are available online at <a href="http://www.navcen.uscg.gov">http://www.navcen.uscg.gov</a>

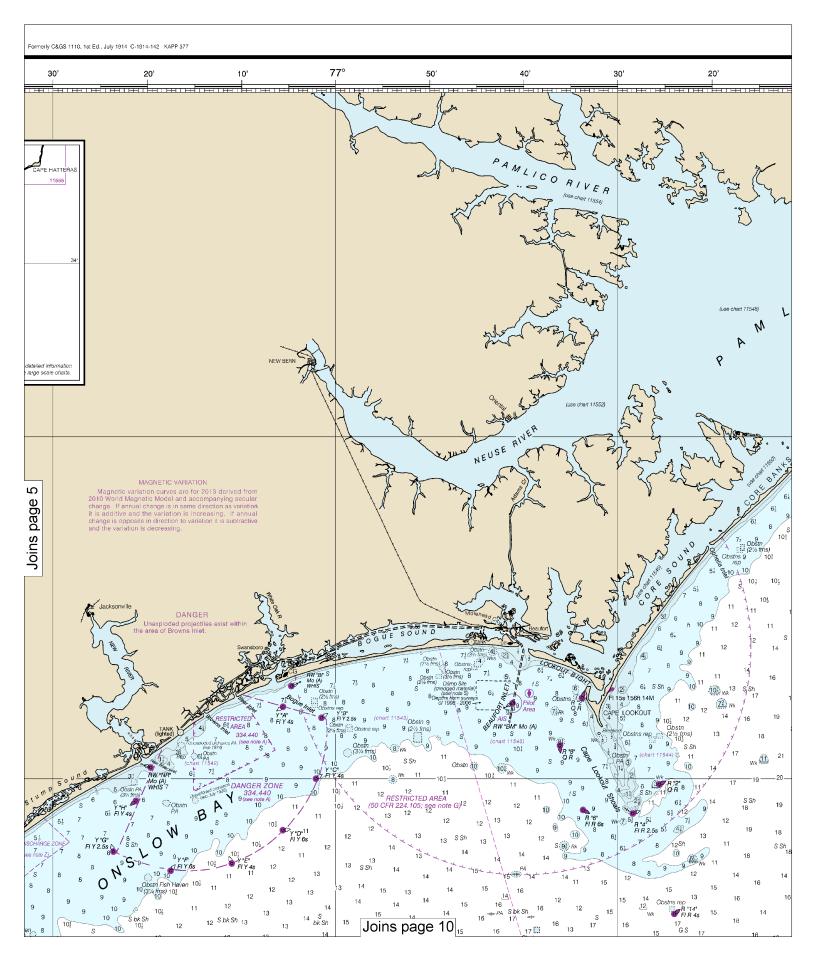




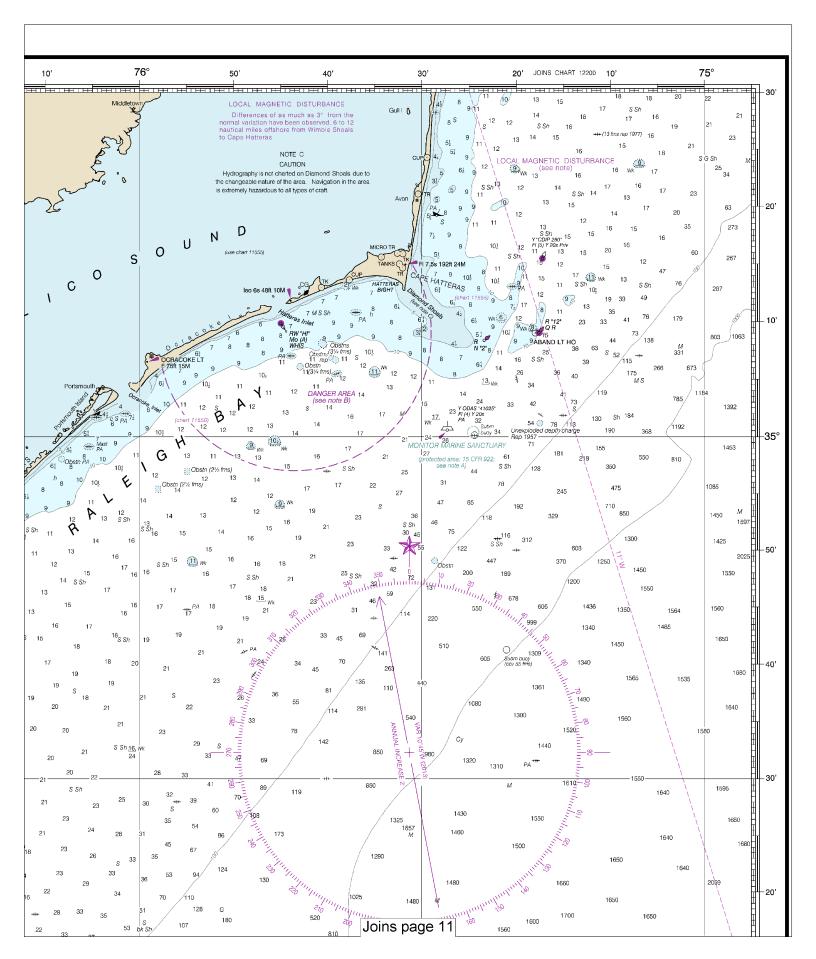


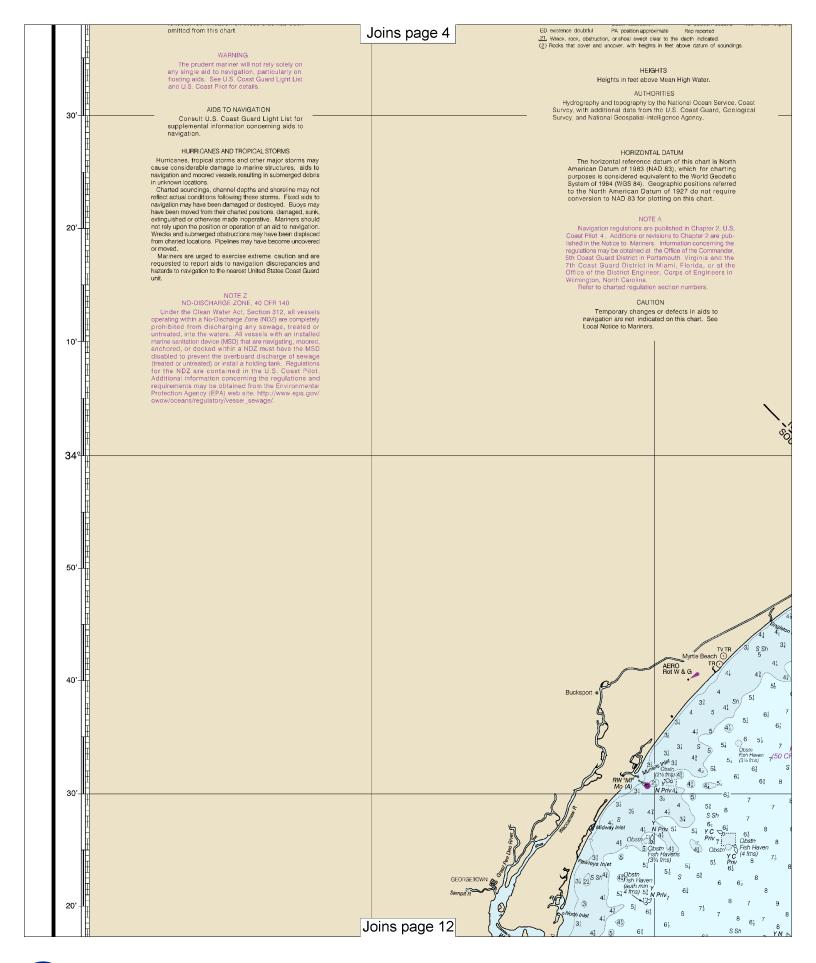




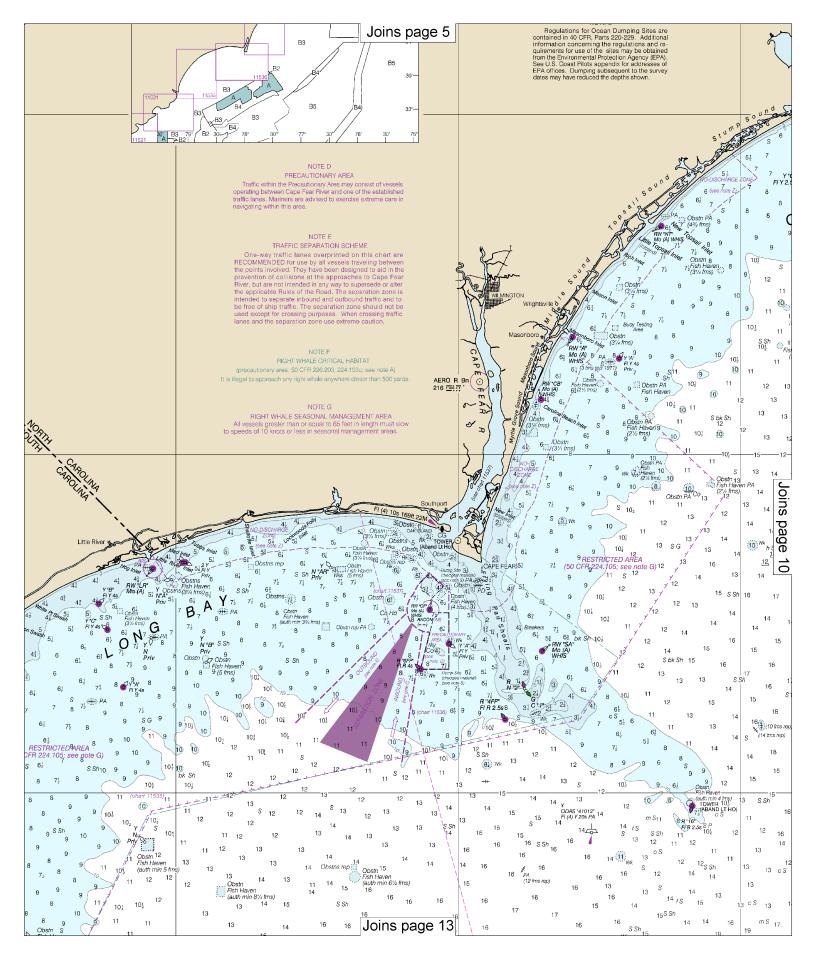


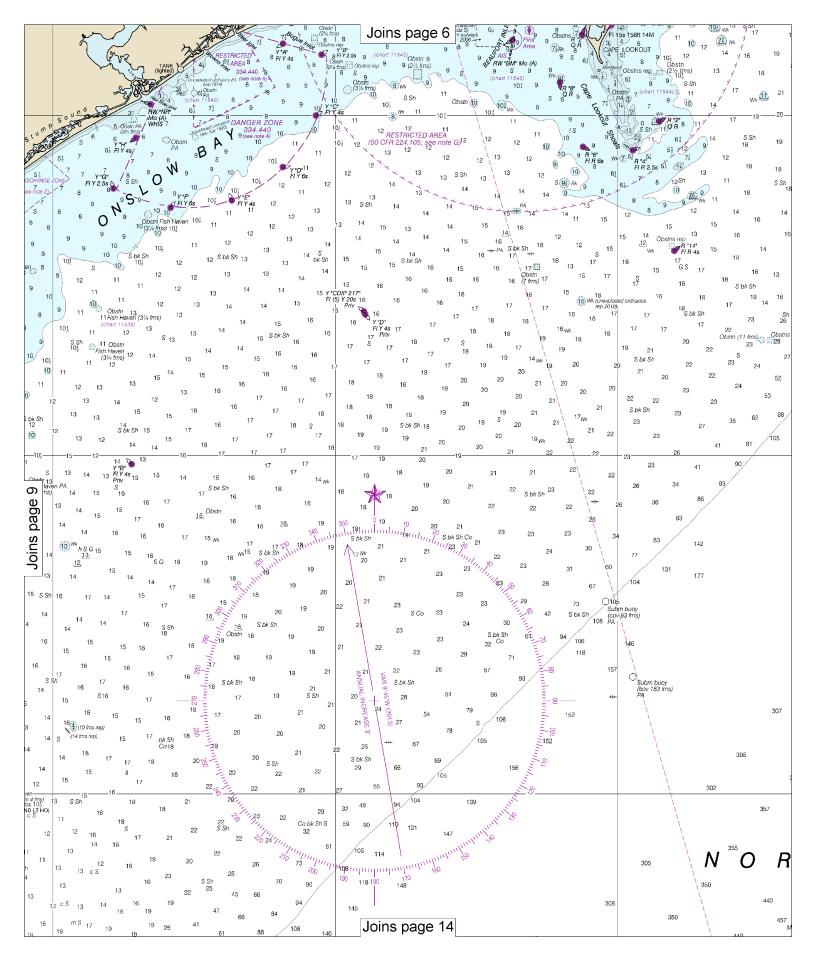




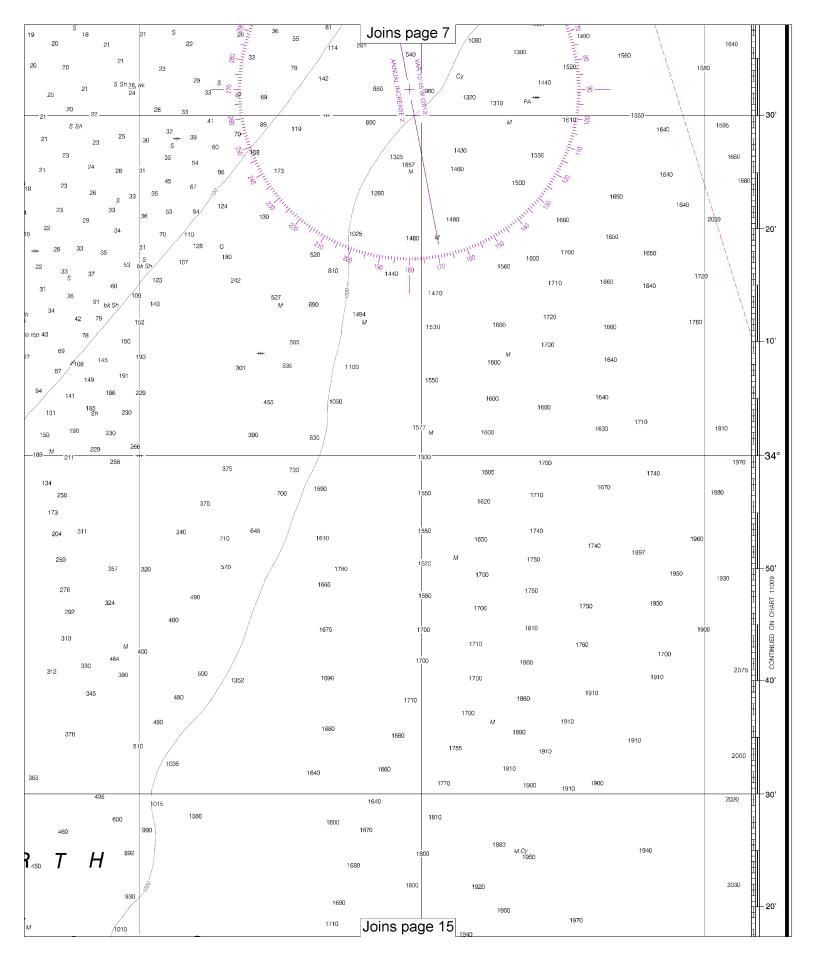


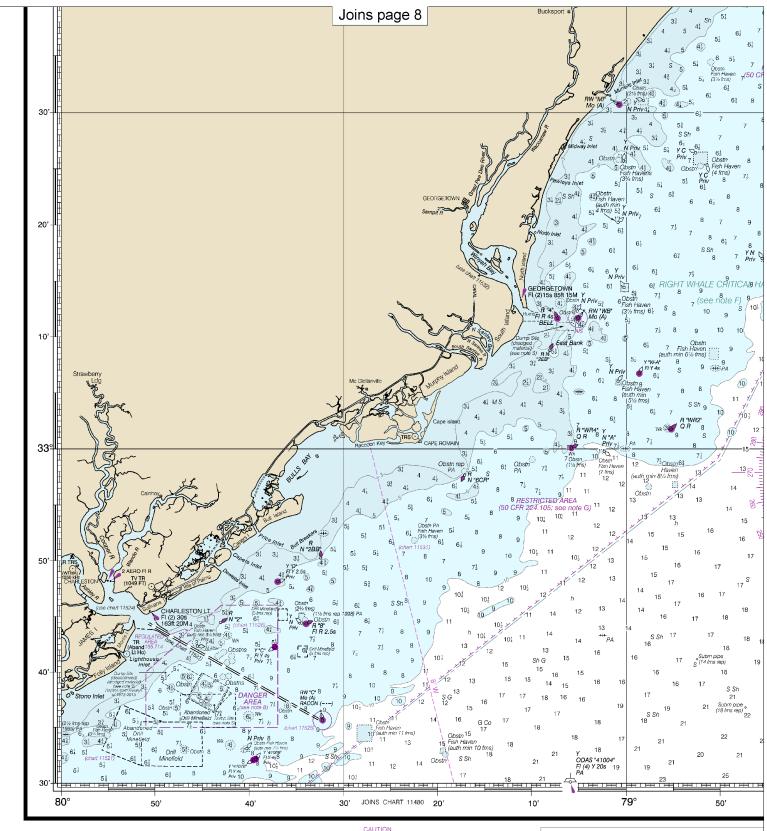






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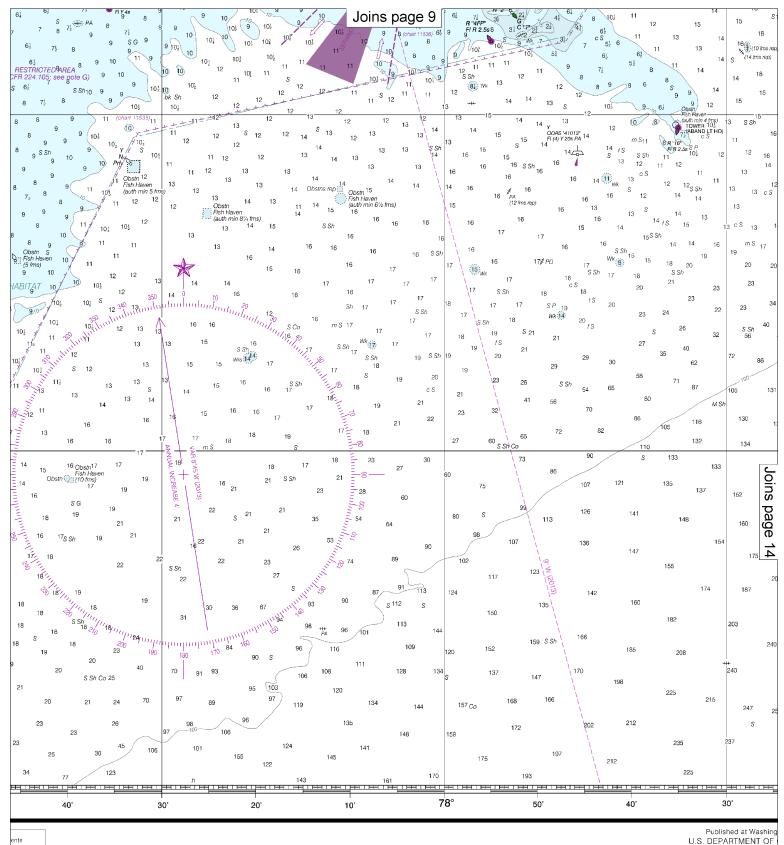
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This chart has been corrected from the Notice to Mariners (NM) published weekly by the National Geospatial-Intelligence Agency and the Local Notice to Mariners (LNM) issued periodically by each U.S. Coast Guard district to the dates shown in the lower left hand corner. Chart updates corrected from Notice to Mariners published after the dates shown in the lower left hand corner are available at

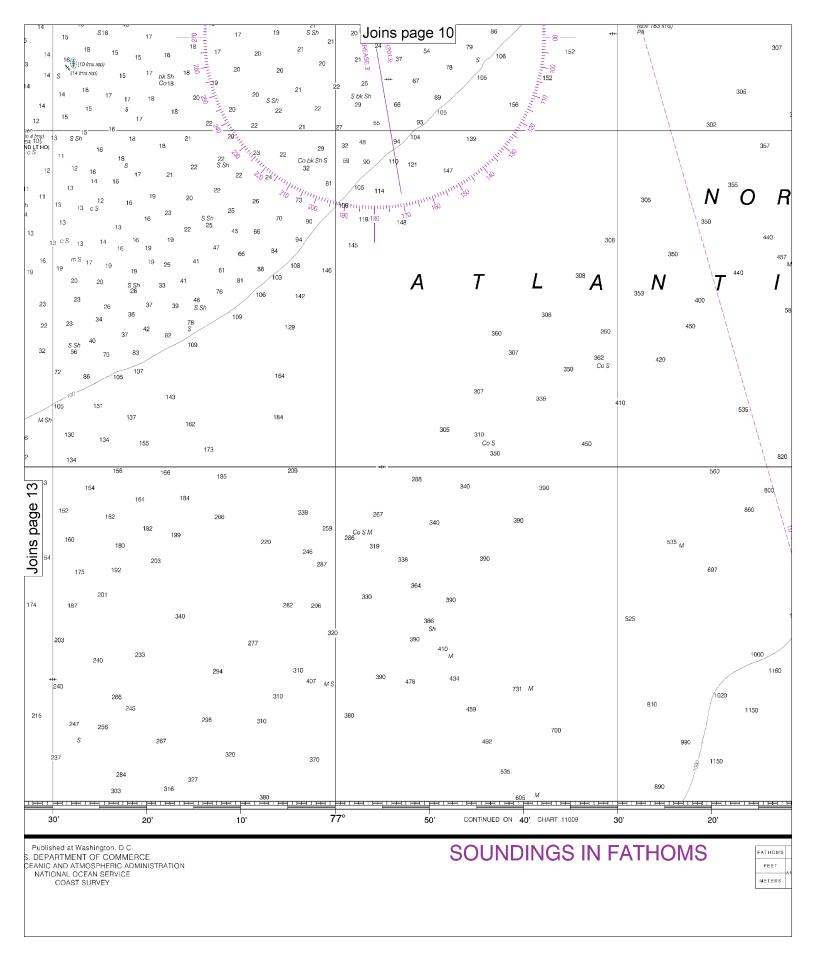
NOAA encourages users to submit inquiries, discrepancies or comme about this chart at http://www.nauticalcharts.noaa.gov/staff/contact.htm.

Use ENC charts for the most up to date information. References to other charts may no longer be applicable 45th Ed., Sep. 2013. Last Correction: 12/19/2023. Cleared through: [LMM: 1624 (44/62024), M.1. 1724 (42/72024).

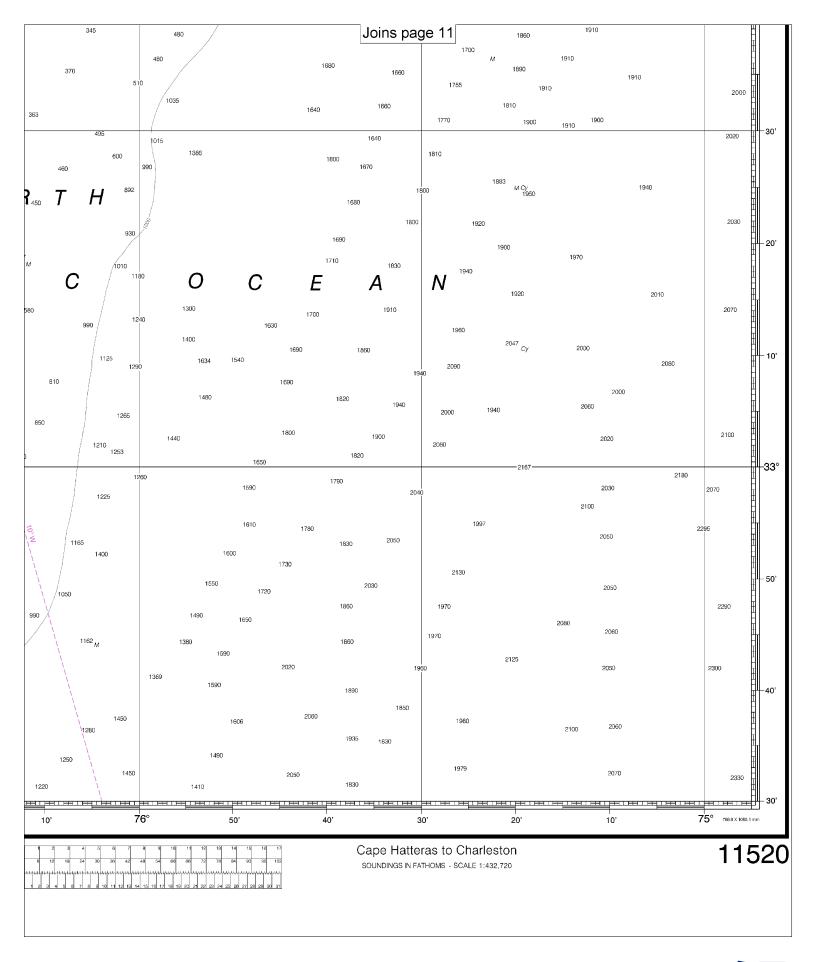




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#### VHF Marine Radio channels for use on the waterways:

**Channel 6** – Inter-ship safety communications.

Channel 9 – Communications between boats and ship-to-coast.

Channel 13 – Navigation purposes at bridges, locks, and harbors.

**Channel 16** – Emergency, distress and safety calls to Coast Guard and others, and to initiate calls to other

vessels. Contact the other vessel, agree to another channel, and then switch.

Channel 22A – Calls between the Coast Guard and the public. Severe weather warnings, hazards to navigation and safety warnings are broadcast here. Channels 68, 69, 71, 72 and 78A – Recreational boat channels.

**Getting and Giving Help** — Signal other boaters using visual distress signals (flares, orange flag, lights, arm signals); whistles; horns; and on your VHF radio. You are required by law to help boaters in trouble. Respond to distress signals, but do not endanger yourself.

#### **Distress Call Procedures**

- Make sure radio is on.
- Select Channel 16.
- Press/Hold the transmit button.
- Clearly say: "MAYDAY, MAYDAY, MAYDAY."
- Also give: Vessel Name and/or Description; Position and/or Location; Nature of

Emergency; Number of People on Board.

- · Release transmit button.
- Wait for 10 seconds If no response Repeat MAYDAY call.

HAVE ALL PERSONS PUT ON LIFE JACKETS!



NOAA Weather Radio All Hazards (NWR) is a nationwide network of radio stations broadcasting continuous weather information directly from the nearest National Weather Service office. NWR broadcasts official Weather Service warnings, watches, forecasts and other hazard information 24 hours a day, 7 days a week.

http://www.nws.noaa.gov/nwr/

#### **Quick References**

Nautical chart related products and information — http://www.nauticalcharts.noaa.gov

Interactive chart catalog — http://www.charts.noaa.gov/InteractiveCatalog/nrnc.shtml

Report a chart discrepancy — http://ocsdata.ncd.noaa.gov/idrs/discrepancy.aspx

Chart and chart related inquiries and comments — http://ocsdata.ncd.noaa.gov/idrs/inquiry.aspx?frompage=ContactUs

Chart updates (LNM and NM corrections) — http://www.nauticalcharts.noaa.gov/mcd/updates/LNM\_NM.html

Coast Pilot online — http://www.nauticalcharts.noaa.gov/nsd/cpdownload.htm

Tides and Currents — http://tidesandcurrents.noaa.gov

Marine Forecasts — http://www.nws.noaa.gov/om/marine/home.htm

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

NowCoast web portal for coastal conditions — http://www.nowcoast.noaa.gov/

National Weather Service — http://www.weather.gov/

National Hurrican Center — http://www.nhc.noaa.gov/

Pacific Tsunami Warning Center — http://ptwc.weather.gov/

Contact Us — http://www.nauticalcharts.noaa.gov/staff/contact.htm



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This Booklet chart has been designed for duplex printing (printed on front and back of one sheet). If a duplex option is not available on your printer, you may print each sheet and arrange them back-to-back to allow for the proper layout when viewing.