

Cape Henry to Cape Lookout

Charts 12200, 11520

This chapter describes a 190-mile section of the Virginia and North Carolina coastline between Cape Henry and Cape Lookout, known as The Outer Banks, and the series of sounds and tributary waters behind the banks through which the Intracoastal Waterway passes from Chesapeake Bay southward. 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. The Intracoastal Waterway is described in chapter 12.

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. These inlets are used principally by fishing vessels.

Discussed in this chapter are the waters of Albemarle Sound and its tributaries Little, Perguimans, Chowan, and Roanoke Rivers, and the towns of Hertford, Edenton, and Plymouth; Croatan and Roanoke Sounds, Roanoke Island, and the towns of Kitty Hawk, Nags Head, Manteo, and Wanchese; Pamlico Sound and the towns of Rodanthe, Avon, Buxton, Hatteras, and Ocracoke which are on the western side of The Outer Banks; Pamlico River and the towns of Swanguarter, Bath, and Washington; Neuse River and the town of New Bern; and Core Sound, Cedar Island, and the towns of Atlantic, Sealevel, Davis, and Marshallberg. These ports and waters support considerable traffic in barges and pleasure craft, and a large fishing and boatbuilding industry.

There are many off-lying shoals and other hazards along this coast including Diamond Shoals and Cape Lookout Shoals. Deep-draft vessels should give these dangers a wide berth.

Many restricted and danger areas are located offshore and in the inland waters. (See 165 and 334, chapter 2 for rules and regulations.)

The low sandy beaches of the coastline do not present any good radar targets. However, four Navy-maintained offshore towers, 16 to 32 miles east to northeast of Oregon Inlet, are reported to be prominent and to be good radar targets. The towers, each 72 feet high and marked by lights and fog signals, are in about

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35°57'00"N., 75°15'58"W.;
(7)
        36°13'35"N., 75°15'01"W.;
(8)
        36°03'53"N., 74°58'59"W.; and
(9)
        35°47'11"N., 75°05'42"W.
(10)
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The Traffic Separation Scheme at the entrance to Chesapeake Bay is described in United States Coast Pilot 3, Atlantic Coast-Sandy Hook to Cape Henry.

North Atlantic Right Whales

Endangered North Atlantic right whales are often (12) seen within 30 miles of the Virginia and North Carolina coasts from November through April. (See North Atlantic right whales, indexed as such, chapter 3).

COLREGS Demarcation Lines

The lines established for this part of the Virginia and North Carolina coasts are described in 80.515 and 80.520, chapter 2.

Weather, Cape Henry to Cape Lookout and vicinity.

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 "Gravevard of the Atlantic."

Winter (November through April) 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 predominant 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 (2.4 m) or more are encountered about 20 to 25 percent of the time near Diamond Shoals and even more often to the east. Conditions improve somewhat in other directions. Maximum wave heights have been estimated at more than 40 feet (12 m). Steep waves of 5 feet or more (1.5 m) with periods of less than 6 seconds are uncommon. However, those of 5 feet or more (1.5 m) with 6- to 9-second periods occur about 30 percent of the time creating problems for vessels in the 100- to 400-foot

(31 to 122 m) range. Winter storms also produce rain and snow which can hamper visibility along the routes through this region. Visibilities drop below 0.5 mile (<0.9 km) less than 3 percent of the time, except in late winter and spring.

During March, April and May the air is often warmer than the water between Cape Charles and Oregon Inlet, sometimes creating sea fog; visibilities drop below 0.5 mile (<0.9 km) about 2 to 5 percent of the time in spring. Farther out to sea the warmer Gulf Stream inhibits fog formation. To the south, fog occasionally develops west of the Gulf Stream.

Tropical cyclones, while infrequent, can create havoc when they strike. Hurricanes are most likely along this coast during August and September.

COASTAL TROPICAL CYCLONES (1842-1995) Within 50 nm of the indicated site					
	Cape Fear	Cape Lookout	Cape Hatteras	Nags Head	False Cape
June-July	18	14	13	13	12
August	17	21	26	20	15
September	25	26	34	24	23
October	18	21	20	12	14
NovDec.	5	4	3	2	1

In addition to winds of 100 knots or more and waves of 30 feet (9 m) or more, hurricanes can generate extreme storm tides, which cause damage to coastal facilities. These tides can also occur in severe extratropical storms. From the Virginia-North Carolina border to Cape Lookout it has been estimated that in an average 100-year period, tides could reach 8 to 10 feet (2.4 to 3 m) above mean sea level. South to the North Carolina-South Carolina border, they could reach 10 to a little more than 13 feet (3 to 4 m) above mean sea level.

Charts 12207, 12205

The summer resort of Virginia Beach is about 5 miles southward of Cape Henry Light. Many high-rise buildings and two water tanks are prominent. Some of these are lighted at night. A hotel cupola, 3.4 miles south of Cape Henry Light, is distinctive.

Rudee Inlet, at the southern end of Virginia Beach and about 6 miles south of Cape Henry Light, is protected by two jetties at the entrance. A dredged channel leads between the jetties to a basin just inside the jetties, thence westward to a safety area about 0.2 mile above the jetties, thence northwestward to Lake Rudee. In December 2007-February 2008, the controlling depth was 6.0 feet to the safety area, thence 6.8 to 11.2 feet in the basin inside Lake Rudee entrance jetties, thence 5.5 feet in the safety area, and in the short channel to Lake Rudee. Rudee Inlet is marked by lighted buoys and a light. A lighted whistle buoy is about 1 mile east-northeast of the jetties.

The inlet leads northward to Lake Rudee, and southward to Lake Wesley. Two fixed highway bridges with a least clearance of 28 feet crosses the arm of the inlet leading to Lake Rudee. Several overhead power and telephone cables with a least known clearance of 54 feet cross eastward of the bridge. A municipal marina and two private marinas are on the north shore of Lake Rudee west of the bridge. Berths, electricity, gasoline, diesel fuel, water, ice, and marine supplies are available; engine and electrical repairs can be made.

Local magnetic disturbance

Differences of as much as 6° from the normal variation have been observed 3 to 17 miles offshore from Cape Henry to Currituck Beach Light.

A naval restricted area extends northward, eastward, and southeastward from Cape Henry. (See **334.320**, chapter 2, for limits and regulations.)

A naval prohibited area is off Camp Pendleton, 7.4 miles southward of Cape Henry. (See 334.400, chapter 2, for limits and regulations.)

Danger zones of naval firing ranges are about 8 and 9 miles southward of Cape Henry. (See 334.380 and 334.390, chapter 2, for limits and regulations.)

Two radar towers and a blue water tank, 158 feet above the water, are prominent at the Dam Neck Naval Station about 9 miles southward of Cape Henry Light.

Sandbridge Beach, about 11 miles south of Cape Henry Light, has a tower and a green water tank that are prominent. There are about 3 miles of beach residences south of Sandbridge Beach.

Part of Back Bay National Wildlife Refuge extends from 15 to 18.5 miles south of Cape Henry Light along The Outer Banks.

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(30)

False Cape, so called because of its resemblance to Cape Henry when approaching from southward, is about 22 miles southward of Cape Henry Light. Several spots with depths of 10 to 17 feet are 0.8 to 1.5 miles offshore from False Cape.

Sand dunes in this area have a tendency to alternately erode and then build up again as the seasons change, generally working to the southward; they should not be depended upon as navigational marks.



Charts 12204, 12205

Currituck Beach Light (36°22'37"N., 75°49'47"W.), 158 feet above the water, is shown from a red conical tower on the beach near the settlement of Corolla.

Local magnetic disturbance

Differences of as much as 11° from the normal variation have been observed 5 to 7 nautical miles offshore from Currituck Beach Light to Wimble Shoals $(36^{\circ}22.6^{\circ}N., to 35^{\circ}35.0^{\circ}N.).$

(33) Many homes are prominent along the beach from Duck to Whalebone, 17 miles and 31 miles south of Currituck Beach Light, respectively. A conspicuous steel tower is just eastward of Kitty Hawk, 20 miles southward of Currituck Beach Light. Wright Monument, a high stone memorial on the highest of the Kill **Devil Hills,** 3.5 miles southward of Kitty Hawk, is very prominent and is a good landmark on this low sandy coast. Water tanks at Kill Devil Hills and Nags Head, 1 mile north and 5.6 miles south of Wright Monument, respectively, are also prominent.

Bodie Island Light (35°49'07"N., 75°33'48"W.), 156 feet above the water, is shown from a conical tower, with alternate white and black horizontal bands above the granite base, about 2 miles northward of the southern end of Bodie Island, and 36 miles southward of Currituck Beach Light. A water tank 1.2 miles north of Bodie Island Light is prominent.

Oregon Inlet, about 2.5 miles southward of Bodie Island Light, is entered over a shifting bar. A lighted whistle buoy marks the approach; other buoys, not charted, are frequently shifted in position to mark the best water. A fish haven is about 4.5 miles southeast of the lighted whistle buoy. The inlet, used by local fishing vessels, but not recommended to strangers, requires continuous dredging; it deepens with northwest winds and fills in with northeast winds.

Currents

Tidal currents in the inlet are reported to be as much as 5 knots, but with southwesterly winds as much as 6 to 8 knots.

Oregon Inlet Crab Spawning Sanctuary, a Marine (37) Protected Area (MPA), is located in the inlet. (See Appendix C for additional information.)

The Herbert C. Bonner (State Route 12) highway bridge crosses the inlet; the fixed channel span has a clearance of 65 feet over the main channel. Oregon Inlet Jetty Light (35°46'26"N., 75°31'30"W.), 28 feet above the water, is shown from a pile with a black and white diamond-shaped daymark.

(39)

Three marked dredged channels with a Federal project depth of 12 feet lead from Oregon Inlet into Pamlico Sound. Oregon Inlet Channel leads westward from the inlet to a junction with Old House Channel, which then leads southwestward into Pamlico Sound. From the junction, the inlet channel continues northward to a junction with Roanoke Sound Channel, which continues northward to a turning basin at Manteo. A side channel of the same project depth leads westward to a turning basin at Wanchese at the south end of Roanoke Island. A connecting channel with a project depth of 6 feet continues northward into Albemarle Sound from the north end of the Roanoke Sound Channel. (See Notice to Mariners and latest editions of charts for controlling depths.)

On the southern end of Bodie Island, just west of the bridge, there is a National Park Service small-boat basin operated by a concessionaire and the **Oregon Inlet Coast Guard Station**. A channel, marked by lights and daybeacons, leads east-northeastward passing through Walter Slough, ending at the small-boat basin. In May 2007, the controlling depth was 2.0 feet in the channel with 5.9 feet in the basin.

Pea Island, on the south side of the entrance to Oregon Inlet, and the waters to the westward of the island, have been designated as a National Wildlife Refuge. Pea Island is the northern extension of Hatteras Island.

Roanoke Island, close westward of Bodie Island, separates Roanoke Sound on the east from Croatan Sound on the west.

Wanchese is a small town near the south end of Roanoke Island west of the entrance to Mill Landing **Creek (Mill Creek).** Gasoline, diesel fuel, water, limited marine supplies, and small charter boats can be obtained at the fishhouses and small docks. A 75-ton mobile lift in Mill Landing Creek can haul out boats to 120 feet for hull and engine repairs.

Just south of Mill Landing Creek is a marine railway that can haul out craft up to 50 feet; there is a small-boat launching ramp.

A marine railway that can handle craft up to 60 feet and a 25-ton mobile lift are on the unnamed creek on the western side of Roanoke Island opposite Mill Landing Creek, about 500 yards southward of Baum Creek. Berthage, electricity, gasoline, diesel fuel, water, and a surfaced launching ramp are available, and hull and engine repairs can be made.

The Washington Baum highway bridge over Roanoke Sound connects Roanoke Island with Bodie Island and U.S. Route 64-264 highway to Norfolk. It has a fixed span with a clearance of 65 feet.

An unnamed creek on Roanoke Island just north of the bridge is privately dredged with a controlling depth of 4.5 feet in January 2006. A marina in the creek has

transient berths, water, electricity, ice, diesel fuel, gasoline, pump-out station, and limited marine supplies.

Manteo, the principal town on Roanoke Island and the seat of Dare County, is at the head of Shallowbag Bay, which indents the island near its northeast end. Berths, electricity, water, ice, diesel fuel, gasoline, hull and engine and electronic repairs, a marine railway that can handle craft to 35 feet in length, marine supplies, and a launching ramp are available in Manteo. Oil is barged into an oil terminal at Manteo.

Fort Raleigh National Historic Site is at the northern end of Roanoke Island in Fort Raleigh City.

Nags Head is a summer resort on the east side of Roanoke Sound, 3.5 miles northeastward of Manteo. Other inland waters are described in another section.

Platt Shoals, consisting of several spots covered 30 to 39 feet, are east-southeastward of Oregon Inlet and 2.5 to 4 miles offshore. Between the shoals and the shoal water off the shore the depths are 30 to 71 feet. In easterly gales the shoaler spots are marked by breakers.

Wimble Shoals, 15 miles southward of Oregon Inlet, are a number of ridges extending offshore about 4 miles, with depths ranging from 21 to 36 feet. In easterly gales the shoaler parts are marked by breakers. A lighted buoy is outside the shoals.

Local magnetic disturbance

Differences of as much as 8° from the normal variation have been observed in 35°32.0'N., 75°21.2'W. (chart 11555). Differences of as much as 3° from the normal variation have been observed 6 to 12 miles offshore from Wimble Shoals to Cape Hatteras.

(54) A microwave tower at Waves about 12.8 miles southward of Oregon Inlet Light is a prominent object.

Chart 11555

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Cape Hatteras, where the coast makes a sharp turn westward, is low and sandy. Cape Hatteras Light $(35^{\circ}15'02"N., 75^{\circ}31'44"W.)$, 192 feet above the water, is shown from a black and white spirally banded tower on red brick base. About 1 mile northwest of Cape Hatteras Light, a telephone tower, a green water tower, and a radar sphere, in close proximity to each other, are prominent.

Weather, Cape Hatteras and vicinity. Due to its maritime exposure and proximity to the Gulf Stream this area has a marine climate with an average of only five days when summer temperatures climb above 90°F (32.2°C); freezing temperatures are about one-half as frequent as at inland stations and average only 29 days each year. In addition, rain occurs on 8 to 12 days per month on the average. Rainfall reaches a maximum in

July, August and September when it often occurs as brief, heavy showers or thunderstorms. Occasionally rains are prolonged and are associated with offshore storms, either tropical or extratropical. Both types can generate strong winds and extreme tides along the Outer Banks where the average elevation is less than 10 feet (3 m) above mean sea level.

The average temperature for Cape Hatteras is 62.6°F (17°C). July is the warmest month with average extremes of 85°F (29.4°C) and 72°F (22.2°C). January is the coldest month with average extremes of 53°F (11.7°C) and 38°F (3.3°C). The warmest temperature on record is 96°F (35.6°C) recorded in July 1992. The coldest temperature on record is 6°F (-14.4°C) recorded in January 1985.

The annual average precipitation is 57 inches (1,448 mm). The wettest month, August, averages 6.24 inches (158 mm) and the driest month, April, averages 3.27 inches (83 mm). Due to the coastal location, the annual average snowfall totals only two inches (51 mm). Historical distribution is relatively uniform for the months December through March, each averaging about one-half inch (13 mm). Snow has fallen in each month, November through April. The 24-hour record snowfall is 8.2 inches (208 mm) recorded in December 1989.

Prevailing wind direction varies with the seasons. During the cooler season, prevailing winds are from the North through Northeast and during the summer, Southwest winds are dominate.

Since 1842, 81 tropical systems have passed within 50 nautical miles of Cape Hatteras, North Carolina. The most infamous of recent time was Hurricane Gloria in 1985. Gloria passed nearly overhead on the morning of September 27th. Highest winds reported were 119 knots at Cape Point. Less than 48-hours earlier, the lowest pressure ever recorded in a North Atlantic storm had been documented by a reconnaissance aircraft (919 mb). Due to geographical orientation, nearly all tropical systems approach the coastline from the south or southeast.

(See page 443 for Cape Hatteras climatological table.)

Diamond Shoals extend off Cape Hatteras in a southeasterly direction for about 9 miles. Depths of 3 feet have been found on the shoaler parts. Diamond Shoals include Hatteras Shoals, Inner Diamond Shoal, and Outer Diamond Shoal. Hatteras Shoals, with little water over them, are usually marked by breakers. Outer Diamond Shoal consists of irregular patches, with depths of 3 to 18 feet, which are usually marked by breakers. A buoy marks the east extremity of Outer Diamond Shoal.

Caution

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Hydrography is not charted on Diamond Shoals due to the changeable nature of the area. Navigation in the area is extremely hazardous for all types of craft. During strong winds the currents set across the shoals with great velocity.

The difficulty of making proper allowance for the Gulf Stream, and the strong currents near the shoals, may cause considerable error in the reckoning. When approaching in thick weather, and uncertain of the position, care should be taken to stay in at least 120 feet, or preferably 180 feet. Diamond Shoal Lighted Buoy 12 marks the remaining structure of Diamond Shoal Light (35°09'04"N., 75°17'57"W.) and is the guide for clearing the shoals.

The submerged wreckage of the Civil War Ironclad **MONITOR**, about 7.7 miles south of the eastern limit of Diamond Shoals, has been designated USS Monitor National Marine Sanctuary, by the Secretary of Commerce. The sanctuary, administered by the Administrator, NOAA, Department of Commerce, is about 1 mile in diameter centered in 35°00'23"N., 75°24'32"W. (See 15 CFR 922, chapter 2, for limits and regulations and Appendix C for additional information.)

From Cape Hatteras to Cape Lookout the coast trends generally southwestward for 64 miles and is broken by several inlets. For 6 miles from Cape Hatteras it is thickly wooded near the beach, and between the woods and the beach is a range of sand dunes 10 to 40 feet high. For the remainder of the distance the coast is a narrow barrier beach with numerous sand dunes. The coast is fairly bold, and depths of 4 to 7 fathoms will be found within 0.5 mile offshore, except off Hatteras Inlet, where shoals extend out 1.2 miles, and off Ocracoke Inlet, where they make out 1.6 miles.

Hatteras Inlet, 11 miles westward of Cape Hatteras (67) Light, is entered over a shifting bar which is subject to continual change; local knowledge is recommended. The approach is marked by a lighted buoy; buoys marking the channel over the bar are not charted because they are frequently shifted in position. An 88-foot lookout tower showing a white light on the east side of the inlet is a conspicuous mark. Hatteras Inlet Crab **Spawning Sanctuary**, a Marine Protected Area (MPA), is in the inlet near Hatteras Island and Pamlico Sound. (See Appendix C for additional information.)

Hatteras, a town 3 miles northeast of Hatteras Inlet, has several stores, a hotel, several motels, and restaurants. Hatteras Inlet Coast Guard Station is on Austin Creek, 0.8 mile southwest of the town. There are several small wharves in the basin at Hatteras where berths, gasoline, diesel fuel, and limited marine supplies can be obtained. A mobile lift can handle craft



up to 45 feet for emergency repairs. Extensive repairs can be made at Wanchese.

Hatteras Inlet Channel is a dredged channel that leads from Hatteras Inlet to Rollinson Channel in the vicinity of the basin entrance at Hatteras. The channel is reported to shoal rapidly between dredgings. In 1981-May 2000, the controlling depth was 6 feet. (For information on the latest reported shoaling, consult the Coast Guard Local Notice to Mariners.) The channel is marked by lights, buoys, and daybeacons. In September 1999, a side channel to Austin Creek had a controlling depth of 5½ feet to the Coast Guard pier and the ferry landing. The creek channel is marked by two lights.

Rollinson Channel, the approach to Hatteras from Pamlico Sound, is discussed later in this chapter.

A small ferry carries vehicles and passengers across (71) Hatteras Inlet from Austin Creek to Ocracoke Island.

Tides

(70)

The mean range of tide is 2 feet on the bar. In the channels the height of the water depends upon the direction and force of the wind. (See the Tide Tables for predictions.)

Currents

The tidal currents in the channel through the inlet (73) are influenced by winds and attain velocities of about 2 knots. (For predicted times and velocities see the Tidal Current Tables.)

Other channels in Pamlico Sound are described in (74) another part of this chapter.

Chart 11550

Ocracoke Inlet, 27 miles west-southwest of Cape Hatteras Light (chart 11555), is entered over a shifting bar between the southern end of Ocracoke Island and the northern end of Portsmouth Island; the bar is subject to frequent changes. A lighted whistle buoy marks the approach. Other buoys marking the inlet are not charted, because they are frequently shifted in position; local knowledge is advised. Ocracoke Inlet Crab Spawning Sanctuary, a Marine Protected Area (MPA), is in the inlet near Ocracoke Island and Pamlico Sound. (See Appendix C for additional information.)

Ocracoke Light (35°06'32"N., 75°59'10"W.), 75 feet above the water, is shown from a white tower near a clump of woods on the western part of Ocracoke Island and about 3 miles northeastward of Ocracoke Inlet. Ocracoke Coast Guard Station is 0.4 mile north of the light.

A microwave tower about 1 mile east-northeast of (77)Ocracoke Light is reported to be prominent.

Several channels or sloughs lead from Ocracoke Inlet through the shoals to deep water in Pamlico Sound. Teaches Hole Channel follows the western side of Ocracoke Island and connects with Silver Lake through a dredged channel at Ocracoke. It also joins Big Foot Slough Channel northwest of Ocracoke which leads to Pamlico Sound. In 1977-June 1978, the midchannel controlling depth in the entrance channel to Silver Lake was 10 feet. Teaches Hole Channel is subject to frequent changes; buoys are frequently shifted in position. In April 1998, the controlling depth in Big Foot Slough Channel was 11 feet except for shoaling along the eastern edge; thence in December 2007, shoaling to 3.0 feet was reported between Daybeacon 10B and Daybeacon 11; caution is advised. The channel is reported to shoal considerably between dredgings. Strong currents have been experienced in these channels. Mariners are advised to exercise caution while navigating in the area.

A swash channel, marked by a light and daybeacons, connects Big Foot Slough Channel with Nine Foot Shoal Channel, which leads off in a northwesterly direction. The controlling depth is about 5 feet through the swash channel to Pamlico Sound. Some local vessels use this channel as a short cut, but Big Foot Slough Channel is the recommended channel.

There are other unmarked shallow channels leading from Ocracoke Inlet to Pamlico Sound, but they should not be used without local knowledge because of the shifting shoals.

The town of **Ocracoke**, 3.5 miles inside the inlet, is frequented by numerous fishing vessels. Supplies in limited quantities are available. Gasoline, diesel fuel, water, and ice may be obtained at the piers.

A toll ferry transports passengers and autos daily from Ocracoke to a ferry landing on the north side of Cedar Island, about 12 miles by road north of Atlantic on the mainland and also to a ferry landing at Swanguarter, about 25 miles north-northwest of Ocracoke. There are several motels and restaurants in the village. There are numerous points of interest on the island, and the National Park Service has a museum at the village and also maintains camp sites for tourists. Facilities for repairing boats are limited.

Silver Lake, a circular basin at Ocracoke, affords good anchorage in depths of 12 feet, and has several wharves extending from the shore to depths of 10 or more feet. Vessels are requested to anchor only in the southern end of the lake so as not to interfere with ferry traffic. Diesel fuel, gasoline, marine supplies, a pumpout station, water, ice, berthing with electricity and a launching ramp are available nearby. The National Park Service piers on the north side of the basin have berths with electricity and water.

(84) Portsmouth is a small abandoned town overseen by the National Park Service on the west shore of Ocracoke Inlet. A spire and a cupola here are prominent landmarks. The inactive Coast Guard Station, the largest building, is near the inlet.

Tides

(85) The mean range of tide is 1.9 feet over the bar at Ocracoke Inlet and 1 foot in Silver Lake. In the channels, the height of the water depends upon the direction and force of the wind. (See the Tide Tables for predictions.)

Currents

(86) The currents in the inlet and connecting channels are influenced by the winds. The ebb current usually has a greater velocity than the flood. Velocities up to 4 knots have been observed. Current predictions for several locations in the channels may be obtained from the Tidal Current Tables.

New Drum Inlet (see chart 11545), 19 miles southwestward of Ocracoke Inlet, is an opening in the barrier beach leading to deep water in Core Sound. The channel is not maintained by dredging and is constantly shifting. In July 1983, the inlet was reported to be dangerous and not recommended for use by anyone.

Chart 11544

Cape Lookout is the extremity of a long and very narrow sand beach projecting into the sea where the coast angles sharply westward. Cape Lookout Light $(34^{\circ}37'22''N., 76^{\circ}31'28''W.)$, 156 feet above the water, is shown from a black and white diagonally checkered tower on the north point of the cape. Cape Lookout National Seashore, a Marine Protected Area (MPA), is located between Ocracoke Inlet and Beaufort Inlet. (See Appendix C for additional information.)

Cape Lookout Shoals extend about 9 miles south-southeastward from the cape where they are marked by a lighted buoy. Their greatest width is about 2 miles, and depths over the shoals range from 2 to 18 feet. Lookout Breakers is the local name for the ridge, covered 2 feet, about 4 miles out on the shoals south of the cape. Between Lookout Breakers and the cape are several other spots which break heavily.

Outside the shoals proper is an irregular shoal with a depth of 29 feet over it in about 34°25'26"N., 76°23'41"W.; thence about 3 miles south-southeastward

there is a wreck cleared to 39 feet. These can be avoided by passing south of the lighted bell buoy about 18 miles south-southeastward of the cape. In thick weather a vessel should stay in 14 fathoms or more if uncertain of its position. A number of wrecks and fish havens with varying depths over them are in the vicinity of the shoals; some are marked.

Chart 11545

Lookout Bight, on the west side of Cape Lookout, affords good anchorage for large vessels, except with winds from south through west to northwest. Power Squadron Spit, the west side of Lookout Bight, is subject to continual change and is partially protected by a rubblestone breakwater awash at low water and hardly visible when a heavy sea is running; its outer end is marked by a lighted buoy about 300 yards northwestward of its seaward end. Mariners should give it a wide berth in bad weather.

Large oceangoing vessels usually anchor north or northwest of the breakwater in 39 to 45 feet, soft sand and mud bottom.

Good anchorage for small vessels can be had in the inner bight northeast of Catfish Point in 7 to 14 feet, good holding ground of soft mud. Prevailing swell from the southwest is effectively excluded, but the surrounding terrain is too low to greatly restrain the force of wind. A severe blow from the northerly direction may cause a vessel to drag, but most boats drop an extra anchor if the wind reaches gale force from any direction.

A channel extends from deep water in Lookout Bight through Barden Inlet and Lighthouse Bay to deep water in Back Sound. The channel is very unstable and has a tendency to fill; strangers should use extreme caution. The channel is well marked; however, the uncharted buoys and daybeacons through Barden Inlet are frequently shifted in position to mark the best water. Local knowledge is advised. Barden Inlet Crab **Spawning Sanctuary**, a Marine Protected Area (MPA), is in the inlet near Schackleford Banks and Beaufort Inlet. (See Appendix C for additional information.)

The channels in Back Sound and Core Sound are described in another section.

INLAND WATERS

COLREGS Demarcation Lines

The lines established for the inlets, rivers, and bays of this part of the coast are described in 80.515 **through 80.525**, chapter 2.

Charts 12207, 12204, 12205

Currituck Sound is a narrow and shoal body of water which extends for 25 miles in a north-south direction behind the barrier beach near Currituck Beach Light. The southern part of the sound is navigable for craft drawing 4 or 5 feet to the junction with Albemarle Sound, but navigation among the extensive shoals depends on local knowledge of the channels and on the level of the water. The northern part of the sound is practically unnavigable due to dense grass. There are no periodic tides in Currituck Sound; the water level depends upon the force and direction of the winds.

There are several small-craft facilities on Knotts **Island** at the northern end of Currituck Sound. Berths, electricity, water, ice, and launching ramps are available.

Charts 12207, 12205

Back Bay and its connections with Currituck Sound extends a little over 10 miles northward from the northeastern end of the sound. This shoal bay is navigable only for small boats. Back Bay is a Marine Protected Area (MPA). (See Appendix C for additional information.) Northward of Back Bay are shallow Shipps Bay and North Bay. Facilities with small-boat launching ramps, and some with gasoline, water, ice, and bait and tackle, are along the western shore of Back Bay, Mackay Island National Wildlife Refuge, a Marine Protected Area (MPA), is located from Back Bay to Currituck Sound. (See Appendix C for additional information.)

North Landing River extends in a north-north-(100)westerly direction from the north end of Currituck Sound. The river is a part of the Intracoastal Waterway and is described in chapter 12.

Naval aircraft bombardment target areas are in North Landing River off Troublesome Point, and in Currituck Sound east of Bell Point. (See 334.410, chapter 2, for limits and regulations.)

Charts 12204, 12205

Several landings are on the east shore of Whale Head Bay, just southward of Currituck Beach Light (36°22'37"N., 75°49'47"W.).

A cable area, marked by private daybeacons, crosses (103)Currituck Sound from Corolla to Aydlett.

The landing at Poplar Branch, on the western (104)shore of Currituck Sound, about 6 miles south-southwestward of Currituck Beach Light, is frequented by local fishermen and duck hunters. In July 1983, depths of

3 feet were reported in the approach to the pier and 7 feet alongside. In July 1983, a midchannel controlling depth of 2 feet was reported in the channel to **Gaffy Landing.** about 2 miles south of Poplar Branch.

Piper Hill, on the outer beach, about 4 miles east of Poplar Branch, is approached through Lone Oak Chan**nel** and **Beasley Bay.** Lights mark the channel. In July 1983, the reported midchannel controlling depth was 2 feet. Dense grass covers the whole area.

Wright Memorial (U.S. Route 158) Highway Bridge over the south end of Currituck Sound between Sampson Point and the outer beach, has a 40-foot fixed span over the navigation channel with a clearance of 35 feet.

Charts 12205, 12206, 11553, 12204

Albemarle Sound is about 45 miles long in an east-west direction, and in width ranges from 11 miles near its eastern end to 3 miles about 10 miles from the western end. The sound has good navigable depths for any vessel able to pass through the canals and, with its numerous tributaries, forms the approach to many towns and landings. Albemarle Sound Herring Management Area, a Marine Protected Area (MPA), includes Albemarle, Currituck, Roanoke and Croatan Sounds. See Appendix C for additional information.)

There are depths of 10 to 18 feet along the routes from North River and Pasquotank River to Croatan Sound and Alligator River, and less water farther eastward. Fish stakes and nets, extending long distances from shore are often found on the shoals, especially at the northern entrance to Croatan Sound. The shores of Albemarle Sound are low and generally wooded; there are no prominent natural features.

A naval aircraft bombardment target area is on the south side of Albemarle Sound westward of the entrance to Alligator River. (See 334.410, chapter 2, for limits and regulations.)

The eastern end of Albemarle Sound, which is separated from the Atlantic Ocean by the barrier beach about 15 miles north of Bodie Island Light, is connected northward with Currituck Sound and southward with Croatan and Roanoke Sounds, and by the latter sounds with Pamlico Sound.

Westward of Laurel Point, about 33 miles from the east end of Albemarle Sound, the water is usually fresh or slightly brackish. The rise and fall of the water level depends on the direction of the winds.

Charts 12204, 12205

Kitty Hawk Bay, with depths of about 3 to 8 feet, is at the east end of Albemarle Sound. Daybeacons mark the best water into the bay. Kitty Hawk is a small town on the north side of the bay. There are several private landings along its shores. A public marina is at Avalon **Beach** at the southeastern end of the bay; berths, electricity, water, ice, and a launching ramp are available during the summer.

North River, on the north side of Albemarle Sound near the eastern end, is a part of the Intracoastal Waterway and is described in chapter 12.

Chart 12206

Pasquotank River Entrance Light PR (36°09'22"N., 75°58'39"W.), 23 feet above the water, shown from a multi-pile structure with a black and white diamondshaped daymark, marks entrance to Pasquotank River. A light is about 2.2 miles westward of the entrance light. The river, entered between Wade Point on the west and Camden Point on the east, and Elizabeth City are described in connection with the Dismal Swamp Route of the Intracoastal Waterway, chapter 12.

Chart 12205

Flatty Creek, about 7.5 miles westward of (115) Pasquotank River Entrance Light (36°09'23"N., 75°58'39"W.), is shoal and little used. In July 1983, depths were reported to be 2 feet over the bar, thence 3 feet for a distance of 3.5 miles.

Little River is on the north side of Albemarle Sound and 4 miles westward of Flatty Creek. The channel at the entrance is about 0.3 mile wide between shoals, and is marked by a daybeacon. The river has a general northwesterly trend to the village of **Nixonton**, which is on the east bank 7 miles above the entrance. There are no facilities at the village. In July 1983, depths of 5 feet were reported to the village. Spits, with little water over them and generally steep-to, make out some distance in places from the shores, especially off the points. The channel in the upper reaches of the river is well marked by the outer ends of the fishweir stakes which make out from shore. A launching ramp and limited supplies are available to sport fishermen in Hall Creek, about 1.5 miles above Nixonton.

Perguimans River, on the north side of Albemarle (117) Sound, about 4 miles westward of Little River, has its entrance between Harvey Point on the west and Reed **Point** on the east. A light is about 1.2 miles southward of Reed Point, and a light is close eastward of Harvey

Point. Numerous submerged piles are south and southeastward of Harvey Point. A depth of about 8.8 feet can be carried to Hertford, about 11.5 miles above the entrance, thence about 7 feet for about 1 mile to the Norfolk Southern railroad bridge.

Two other bridges cross Perguimans River. U.S. Route 17 bypass highway bridge, between **Ferry Point** and **Crow Point**, about 10.5 miles above the entrance, has a fixed span with a clearance of 33 feet, and U.S. Route 17 highway swing bridge, about 0.6 mile above and crossing the narrow part of the river at Hertford, has a clearance of 7 feet. (See 117.1 through 117.59 and 117.835, chapter 2, for drawbridge regulations.)

Obstructions have been reported near midriver about 0.5 mile and 1 mile below the highway fixed bridge.

Hertford, on the southwest bank of Perguimans River, has rail connections with the Norfolk Southern Railway and highway connections with U.S. Route 17 to Edenton and Elizabeth City. Oil is barged into Hertford to an oil pier on the south side of the river just above the highway swing bridge. The river water is fresh at Hertford.

Above Hertford the river is narrow and crooked, but has fairly good depths for about 8 miles to a point near Goodwin Creek. Navigation is restricted to very small boats, about a mile above the highway swing bridge, by the Norfolk Southern railroad bridge, which has a 22-foot fixed span with a clearance of 3 feet.

Yeopim River, 6 miles west of Perguimans River, is (122) shoal and unimportant. A shoal area, marked at its southeastern extremity by a daybeacon, extends from the entrance. Stumps and other obstructions are near the center of the shoal. This area should be avoided. In crossing the shoal, mariners should leave the daybeacon to the eastward and slightly favor **Drummond Point,** the southern entrance point of Yeopim River. Local knowledge is advised.

Six miles southwestward from Drummond Point, (123)State Routes 32-37 highway bridge crosses Albemarle Sound from **Sandy Point** to the south shore. The fixed span has a clearance of 65 feet. About 4 miles W of the highway bridge, an overhead power cable crosses the sound. The cable clearance is 94 feet over the main channel and 54 feet elsewhere.

Edenton Bay is on the north side of Albemarle Sound just westward of the ruins of the railroad trestle which crosses the sound. Edenton, a town at the head of the small bay, has rail and highway communications with Norfolk and the south. Lumber is shipped by rail, truck, and by barge. The main industries are peanuts, lumber, veneer, inks, textiles, plywood, and boatbuilding. The river water is fresh.

Two large water tanks in the town are the most prominent objects from the sound. Also prominent is a radio tower near the city wharf.

A dredged channel leads from deep water in (126) Albemarle Sound to the head of the bay where it separates into dredged reaches leading in northwesterly and northeasterly directions along the town waterfront. In June 1977, the midchannel controlling depths were 7½ feet in the entrance channel, thence 7½ feet in the eastern portion of the northwestern reach, and 5½ feet in the remainder of the northwestern reach and in the northeasterly reach. The channel is well marked by lights and daybeacons.

The inner anchorage, close eastward of the channel (127) entrance, has a depth of 9 feet, but is small. The larger anchorage is on the western side of the entrance. Numerous fish stakes, some of which are covered at low water, are reported inside the 12-foot contour on the west side of the entrance to Edenton Bay from Reedy Point eastward.

The city wharf, which has a light, is at the head of (128) the entrance channel. In July 1983, depths of 10 feet were reported alongside the west bulkhead. A fish wharf and an oil wharf are close westward of the city wharf; depths of 10 feet were reported alongside in July 1983.

Pembroke Creek is a small nontidal stream flowing (129) easterly into the head of Edenton Bay. U.S. Route 17 highway bridge, 0.6 mile above the mouth of the creek, has a 20-foot fixed span with a clearance of 5 feet. With local knowledge a draft of 5 feet can be carried to the bridge. In August 1978, a submerged obstruction was reported in the channel near the mouth of the creek in about 36°03'25"N., 76°37'04"W.

Chowan River empties into the western end of Albemarle Sound from northward, and with its tributaries forms one of the largest rivers in North Carolina. In June 1977, the controlling depth was 12 feet to Winton, about 32 miles above the mouth, and to the confluence of Blackwater and Nottoway Rivers, 45 miles above the mouth. For about 17 miles above its mouth, Chowan River has an average width of 1.5 miles. Snags, many of which are underwater, are generally found on the shoals in this part of the river; the worst place, known as Stumpy Reach, is between Colerain Landing and Bennetts Creek, a distance of about 6 miles. The channel must be followed closely passing through this reach.

Chowan River is marked by lights and daybeacons (131) to a point about a mile below Winton.

Traffic on the river is mainly in pulpwood barges, and there is some commercial fishing. Gasoline, limited supplies, and launching ramps are available for small craft at various marinas along the river as far as Winton.

Salmon Creek is a small stream which flows east-(133) erly into the west side of Chowan River just above the mouth. The entrance to the creek is a good harbor for boats of drafts up to 6 feet. Avoca is a village on the south bank about a mile above the entrance. In 1963, the controlling depth was 7 feet to Avoca, thence 5 feet for another 0.5 mile.

The U.S. Route 17 highway bridge, between Emperor Landing and Edenhouse Point, about 2 miles above the mouth of Chowan River, has a fixed span with a clearance of 65 feet.

Gasoline, berthing, limited supplies, and a launch-(135) ing ramp are available at a marina in Rockyhock Creek on the east bank of the river about 6 miles above the mouth. Depths in the approaches and alongside were reported to be 4 feet in July 1983.

Colerain Landing, on the west bank of the Chowan River, 12 miles above the entrance, is the site of a large herring factory. Just above it is an oil dock. The village of **Colerain** is on a hill 0.5 mile inland.

Limited supplies, gasoline, and a launching ramp (137)are available at a marina on the south bank of the river about 20 miles above the mouth.

Tunis is a landing on the south bank of Chowan River 30 miles above the mouth. An overhead power cable at Tunis has a clearance of 74 feet. Gasoline, limited supplies, and a launching ramp are available at a marina on the west side of Catherine Creek just above the overhead power cable.

Winton is a small town on the west bank of the river 32 miles above the mouth. U.S. Route 13 highway bridge at Winton has a fixed span with a clearance of 35 feet. A small wharf is below the bridge on the south bank and eastward of a ramp used by barges for loading pulpwood.

Meherrin River joins the Chowan River from westward 2.5 miles above Winton. A cable ferry crosses Meherrin River about 0.4 mile above the mouth. The ferry, operated during daylight hours only, carries passengers and vehicles. The ferry is guided by a cable that passes over pulleys 3 feet above the water at each end of the ferry and then runs below the water surface about 15 feet from each end of the ferry. The cable is dropped to the bottom when the ferry is not underway. Warning signs are posted 1 mile from each side of the crossing. DO NOT ATTEMPT TO PASS A MOVING CABLE **FERRY.** Murfreesboro is a small town 10.5 miles above the mouth. U.S. Route 258 highway bridge here has a fixed span with a clearance of 24 feet. In 1965, the controlling depth was 10 feet to Murfreesboro; the turning basin here had a controlling depth of about 12 feet.

About 13 miles above Winton, Chowan River is formed by the confluence of Blackwater River and Nottoway River near the Virginia State line. In 1983-July 2003, the controlling depth in Blackwater River was reported to be 8.3 feet to Franklin, VA. There are reports of numerous snags in the river. Small craft are able to reach Burdette, Va., 10.5 miles above Franklin. A highway bridge across Blackwater River, 8 miles above its mouth at South Quay, has a swing span with a clearance of 15 feet. (See 117.1 through 117.59 and 117.999, chapter 2, for drawbridge regulations.) In January 1980, a fixed highway bridge with a design clearance of 35 feet was under construction on Blackwater River about 9 miles above its mouth. Five other bridges cross the river between Franklin and Burdette; the fixed bridges have a minimum channel width of 22 feet and a minimum clearance of 12 feet. Navigation of Nottoway River is restricted by seven fixed bridges; the minimum channel width of the bridges is 13 feet and the clearance 7 feet.

Roanoke River rises in the Blue Ridge Mountains, (142) west of Roanoke, Va., and flows southeasterly into Batchelor Bay, a shoal bight at the southwestern end of Albemarle Sound; about halfway it is joined by the **Dan** River, its principal tributary. There are a number of flood control and power dams on the rivers. The largest of these, about 17 miles below Clarksville, Va., forms the John H. Kerr Reservoir. The reservoir extends upstream about 48 miles on the Roanoke and about 30 miles on the Dan River. Another dam is at Roanoke **Rapids** about 120 miles from the mouth of the river.

In June 1977, the midchannel controlling depth (143) was 10 feet at midchannel from Albemarle Sound to Plymouth, thence 2½ feet to Hamilton, 52 miles above the mouth, with shoaling to bare between Hamilton and Palmyra Landing, 67 miles above the mouth. The river is marked by lights and daybeacons to a mile below Plymouth. In May 1982, a foul area was reported between Daybeacon 12 and Light 13. Traffic on the river is mainly in petroleum products, and some plywood products hauled by barges.

A fixed highway bridge, which spans the Roanoke, Middle, and Cashie Rivers, crosses the Roanoke 2.5 miles above the mouth with a clearance of 50 feet.

Plymouth is an important town 6 miles above the mouth of Roanoke River. The town has good highway and rail connections. Water, gasoline, diesel fuel, marine supplies, and a launching ramp are available. There are several small wharves at Plymouth with 12 feet reported alongside. A veneer factory is on the river front below the town, and 1 mile above the town is the large wharf of a pulpmill, which has 15 to 18 feet of water alongside.

Williamston is 26 miles above the mouth of the (146)river. U.S. Routes 13 and 17 highway bridge at Williamston has a fixed span with a clearance of 45 feet. Just below the bridge are a fertilizer plant and an oil dock. Several oil piers are above the bridge. Logs and oil comprise most of the shipping.

About 9 miles above Hamilton, a fixed bridge with a clearance of 14 feet crosses the river.

Cashie River flows southeasterly for about 50 miles to its intersection with the Thorofare, connecting Cashie and Roanoke Rivers; thence it flows northeasterly for about 6 miles and empties into Batchelor Bay. In June 1977, the midchannel controlling depth was 9 feet to Windsor. Mariners are advised, however, that shoaling and many obstructions have been reported in Cashie River. A fixed highway bridge, which spans the Cashie, Middle, and Roanoke Rivers, crosses the Cashie River about 1 mile above Batchelor Bay and has a clearance of 16 feet.

A cable ferry crosses Cashie River about 6 miles above the mouth. The ferry, operated during daylight hours only, carries passengers and vehicles. The ferry is guided by a cable that passes over pulleys 3 feet above the water at each end of the ferry and then runs below the water surface about 15 feet from each end of the ferry. The cable is dropped to the bottom when the ferry is not underway. Warning signs are posted 1 mile from each side of the crossing. DO NOT ATTEMPT TO PASS A MOVING CABLE FERRY.

The Thorofare has several sharp bends, and at its (150) junction with the Cashie River there are two small islands. Pass eastward of the islands. The head of navigation in Cashie River is the fixed highway bridge at Windsor. Gasoline is available. An overhead power cable crossing the river about 0.5 mile below the bridge has a clearance of 55 feet.

Kendrick Creek is on the south side of Albemarle (151) Sound just westward of the overhead power cable which crosses the sound. Several fisheries with gasoline and marine supplies, and a launching ramp are on the creek. In August 2007, the reported controlling depth at the entrance to the creek was 6 feet; thence in 1977, 5½ feet at midchannel to Mackeys, about 0.5 mile above the entrance, thence, in 1963, 7 feet for a distance of 4 miles up the creek, which is the head of navigation; the creek is obstructed by trees and logs above this point. The entrance is marked by a light and daybeacon.

The channel into Kendrick Creek is marked on either side by rows of piles. There are stumps in places on the shoals at the mouth of the creek. An overhead power cable just above the mouth has a clearance of 49 feet. Mackeys is a small town 0.5 mile above the entrance. The highway bridge about 0.5 mile above Mackeys has a 34-foot fixed span with a clearance of 8 feet. An overhead power cable just south of the bridge has a reported clearance of 9 feet.

Bull Bay is on the south side of Albemarle Sound, (153) about 13 miles eastward of Kendrick Creek. Bunton Creek (Bull Creek) and Deep Creek empty into the western side of the bay. A channel, with a reported depth of 5 feet in July 1983, leads through the flats to the entrance of Bunton and Deep Creeks.

Scuppernong River empties into the eastern end of (154) Bull Bay from southeastward. Lights, a buoy, and daybeacons mark the channel from the bay to Columbia. In June 1977, the midchannel controlling depths were 8½ feet in the bar channel, thence 7 feet to Columbia, thence 3 feet to Spruills Bridge, thence 2½ feet to a turning basin at Cherry, about 16 miles above the mouth. A marina on the south side of the river, 3 miles above the mouth, has berths with electricity, gasoline, diesel fuel, ice, some marine supplies, and a launching ramp. A 40-ton mobile lift is available; hull and engine repairs can be made.

Columbia, a small town 4 miles above the mouth of the river, has two inactive oil docks and several landings. The landings have depths of 14 to 16 feet alongside, but are in poor condition and not able to accommodate more than one boat at a time. A marina, on the east side of the river close above the first highway swing bridge, has gasoline, diesel fuel, some supplies, and a launching ramp.

The U.S. Route 64 highway bridge, about 4.3 miles above the entrance, has a 35-foot fixed span with a clearance of 12 feet; the navigation span of this bridge is removable.

Cross Landing Bridge, 12 miles above the mouth (157)of Scuppernong River, has a fixed span with a channel width of 32 feet and a clearance of 5 feet. Spruills Bridge, 15 miles above the mouth near Creswell, has a 32-foot removable span with a clearance of 6 feet. An overhead power cable at the bridge has a clearance of 25 feet.

Charts 12205, 11553

Alligator River is on the south side of Albemarle Sound directly opposite Pasquotank River. For about 18 miles above the mouth (see also chart 11548), Alligator River has a southerly direction, is 2 to 3 miles wide, and has general depths of 8 to 11 feet. Above this, the river has a further length of about 24 miles, is narrow and crooked, but, in July 1983, had a reported centerline controlling depth of 8 feet to Cherry Ridge **Landing:** the upper part, however, is too narrow to turn

Good anchorages in depths of about 6 to 8 feet are (159)reported in Milltail Creek, Whipping Creek, and Swan Creek, which make into the east side of Alligator River about 10 miles, 19 miles, and 20 miles above its mouth, respectively. Mariners should take care to avoid stumps along the banks of these creeks.

The entrance to Alligator River is full of shoals, but the channel of the Intracoastal Waterway, described in chapter 12, has been dredged through the shoals and along the entire length of the wider part of the river. Numerous fish stakes are reported to exist on the east side of the river extending about 0.5 mile offshore.

On the eastern side of Alligator River and just above the mouth is the entrance to East Lake and South Lake (see also chart 12204), which in July 1983, had reported depths of 6 feet. The village of East Lake is on the east side of Alligator River, 4 miles above the mouth. U.S. Route 64 highway bridge crossing the river at East Lake has a swing span with a clearance of 14 feet. VHF-FM channel 16 and 13 are monitored at the bridge. (See 117.1 through 117.49, chapter 2, for drawbridge regulations.)

Little Alligator River empties into Alligator River (162)from westward just inside the entrance. The narrow, crooked channel of Little Alligator River, in July 1983, had a reported controlling depth of 4 feet to the head of the river, 6 miles above the mouth. The river is reported to be a good anchorage for boats drawing 3 feet or less.

Charts 12204, 12205

Croatan Sound, between Roanoke Island and the mainland, connects Albemarle and Pamlico Sounds. In October 2002-September 2004, the controlling depth through the dredged channel was 6.8 feet. The channel is well marked, but strangers should not attempt passage at night. Fish stakes are numerous in season.

Height of water in Croatan Sound depends entirely on the wind, which under exceptional conditions may lower or raise the level as much as 1.5 feet from normal; easterly winds lower the water and westerly winds raise it. Strong northerly or southerly winds produce currents which are especially marked when the wind shifts suddenly to the opposite direction.

There is a good harbor in **Peter Mashoes Creek**, westward of Croatan Sound Approach Light 3CS, but entrance is possible only for small craft. The fixed highway bridge (U.S. Routes 64 and 264) between Redstone Point on the mainland and Weir Point on Roanoke Island has a clearance of 45 feet.

A fixed highway bridge across Croatan Sound about 2.75 miles southward of the U.S. Routes 64/264 fixed highway bridge has a clearance 66 feet.

(167) Roanoke Sound and the towns on the east side of Roanoke Island are described in another section.

Charts 12204, 11548, 11555

Pamlico Sound, the largest body of water in North Carolina, extends from Roanoke Island to Cedar Island. On the east it is separated from the Atlantic Ocean by a narrow barrier beach extending from Oregon Inlet to the southern end of Portsmouth Island. To the west it is joined by the Pamlico and Neuse Rivers, and to the south by Core Sound. It is about 65 miles long and has a maximum width of about 25 miles. Oregon, Hatteras, and Ocracoke Inlets pierce the narrow beach, giving access to the ocean, but all are blocked by inside bars with little water over them; they are described in another section. Cape Hatteras National Seashore and Swanquarter National Wildlife Refuge are Marine Protected` Areas (MPA) along Pamlico Sound. (See Appendix C for additional information.)

Caution

Numerous fishtraps, stakes, and pound nets have (169) been reported in Pamlico Sound; some may be submerged. Small craft should use caution when operating outside the main channel. Pamlico Sound Light PS (35°25'29"N., 75°50'01"W.), 35 feet above the water, shown from a skeleton tower on a multi-pile structure with a red and white octagonal-shaped daymark, marks a dangerous wreck, reported covered 12 feet.

The northern and western shores of Pamlico Sound are broken by numerous small bays and two large rivers, Pamlico River and Neuse River. General depths in the middle of the sound are 14 to 24 feet, but shoals extend miles from shore in many places. Bluff Shoal, northward of Ocracoke Inlet, has 7 to 12 feet over it and extends completely across the sound. It is marked by a light. A dangerous wreck, reported covered 4 feet, is close northward of the light.

In the exposed parts of the sound, strong winds (171) from any direction raise a short, choppy sea uncomfortable to small craft and even dangerous to open boats; but protected anchorage for small craft can be found in the many bays along the northern shore, and along the southern shore in several sloughs which lead to sheltered berths in the lee of shoals. Middletown Anchorage and the anchorage in the bight formed by the hook of Royal Shoal can be made either day or night, with caution.

Tides and currents

Tides at the inlets have a mean range of 2 feet. (For daily predictions see the Tide Tables.) In other parts of the sound the periodic tide is less than 0.5 foot. Easterly and westerly winds produce the greatest change in water level. Currents are negligible except in the vicinity of the inlets.

Chart 12204

Stumpy Point Bay, on the west side of Pamlico Sound 10 miles from the south end of Roanoke Island and about 11 miles southwestward of Oregon Inlet, affords good anchorage in depths of about 3 to 4 feet. A dredged channel leads from Pamlico Sound to a turning basin at Lake Worth, the small town at the head of the bay. In April 2001, the controlling depth was 3.9 feet to the basin, thence 6.2 to 8.4 in the basin. The channel is well marked by lights and daybeacons. Two fishhouses at the upper end of the basin have diesel fuel, gasoline, water, ice, and marine supplies.

Long Shoal River, which flows southerly into Pamlico Sound about 8 miles southwestward of Stumpy Point Bay, is 1.5 miles wide at the mouth and is a good anchorage for vessels with drafts of 8 feet or less. Shoals with 1 to 2 feet over them on both sides of the entrance break up the sea from southward. In July 1983, the channel had a reported controlling depth of 7 feet to the anchorage off **Pains Bay**, thence 7 feet for another mile, thence 4 feet for 2 miles. Long Shoal, to the east of the entrance, and Pingleton Shoal, on the west, are marked by lights, and daybeacons mark the points of shoals in the entrance. In June 1984, shoaling to 5 feet was reported about 150 yards northward of Pingleton Shoal Light 1 PS. In May 1985, shoaling to 6 feet was reported extending southeast from Long Shoal Light. With the aid of the chart, strangers should have little difficulty entering Long Shoal River in daytime. The danger zone of a naval ordnance test area is centered at targets on Long Shoal. (See 334.410, chapter 2, for limits and regulations.)

Rodanthe is a town on the narrow barrier beach on the east side of Pamlico Sound 12 miles southward of Oregon Inlet and nearly opposite Stumpy Point Bay. **Chicamacomico Channel** is a dredged channel leading from the sound to the basin at Rodanthe. Two landings are in the basin in addition to the bulkhead area. In 1995, there was a controlling depth of 2½ feet in the channel and 1 foot in the basin. The channel approach and channel are marked by lights and daybeacons.

Chart 11555

Avon is a town on the barrier beach on the southeast side of Pamlico Sound 5.7 miles northward of Cape Hatteras Light (35°15'02"N., 75°31'44"W.). Shoal water extends about 3 miles from shore. A dredged channel leads from Pamlico Sound to the basin at Avon. In 1995, the controlling depth was about ½ foot, thence 6 feet in the basin. The channel is marked by lights. Gasoline and diesel fuel are available at a fishhouse landing in the basin.

Cape Channel (Buxton Harbor Channel), a natural opening in the shoal about 5 miles southwestward of Avon, was formerly part of a channel leading to Avon. It is now used by local fishermen passing from Pamlico Sound to anchorage north of Buxton. Local knowledge is advised. The channel is partially marked by lights and daybeacons.

Buxton is a small town about a mile north-northwest of Cape Hatteras Light. The town of Frisco is about 4 miles westward, on the southeast side of Pamlico Sound. There are no wharves at either place, and anything but light-draft vessels must anchor well offshore. Local fishermen usually approach Buxton through Cape Channel.

Rollinson Channel, about 12 miles southwestward of Avon, is a dredged channel leading from deep water in Pamlico Sound to the basin at Hatteras; it also joins with Hatteras Inlet Channel which leads to Hatteras Inlet. In 1977-February 1988, the midchannel controlling depth was 4 feet in the channel, thence in March 1977, 6 feet in the basin. In June 1984, shoaling to 1 foot was reported in the northeast part of the basin. The channel is well marked by lights. In July 1983, it was reported that the lights were difficult to distinguish from the background lights on shore. Caution is advised, and strangers should not attempt passage at night. A light, off the end of Oliver Reef, is about 1.5 miles southwestward of the Pamlico Sound entrance to Rollinson Channel.

Hatteras Inlet, Hatteras Inlet Channel, and the facilities at Hatteras were described previously in another section.

Far Creek (35°30.5'N., 75°58.0'W.) is on the north-(181) west side of Pamlico Sound between Pingleton Shoal and Gibbs Shoal. A dredged channel leads from deep water in the sound to the basin at the town of **Engelhard.** In 1977, the midchannel controlling depth was 6 feet to the basin, thence 11 feet in the basin. The channel is marked by lights and daybeacons.

An oil dock and several piers, with depths of 7 to 12 (182)feet alongside, are on the south side of the basin just below U.S. Route 264 fixed highway bridge at Engelhard. There is barge traffic in oil, grain, and sand

and gravel. Fishing vessels unload here, and seafood is shipped from the town by truck. Gasoline, diesel fuel, ice, and some marine supplies are available.

Middletown Anchorage, a broad open bight in the northwestern shore of Pamlico Sound just southward of Far Creek, has depths of 9 to 13 feet and is sheltered from eastward by Gibbs Shoal, which has 1 to 4 feet over it. There is no shelter from southeasterly or southerly winds. The anchorage is large and easy of access, and is used by tows and other vessels. Middletown, a short distance inland from the anchorage, is reached by light-draft boats by way of Middletown Creek (see chart 11548). In July 1983, the reported controlling depth over the bar and to the fixed bridge over the creek at Middletown was 3 feet. Vessels must pass south of the light on the southeast end of Gibbs Shoal in entering. Gasoline is obtainable in the town.

Caution

Caution should be used in approaching Middletown Anchorage at night, as the low marshy shore extends long distances from the woods in places and does not show well. In rough weather vessels with drafts less than 4 feet prefer to pass inside Gull Shoal Light GS when bound southwestward from Middletown Anchorage. They enter Wysocking Bay, pass westward of Gull Rocks, and thence eastward of the light 0.4 mile eastward of Hog Island.

Wysocking Bay, about 7.5 miles southwestward of Far Creek, indents the north shore of Pamlico Sound northwestward of Gull Shoal Light GS. It is a convenient anchorage for small craft drawing less than 5 feet when following the north shore of the sound. In July 1983, the bay had reported depths of 5 feet from the entrance to its head. The entrance is obstructed by shoals. Daybeacons and lights mark the channel which leads northward of Gull Shoal and into the bay. Gull Rocks, on the south side of the entrance to the bay, are covered at ordinary water levels.

Nebraska Canal (see chart 11548) leads from the head of Wysocking Bay to a fixed bridge south of Nebraska, 2 miles inland. The privately maintained canal is marked by a light at its entrance, and, in July 1983, had a reported depth of 1 foot. Local knowledge is advised in the canal.

Chart 11548

Bluff Point Shoal Light (35°19'19"N., 76°07'14"W.), 15 feet above the water, shown from a multi-pile structure with a white and black diamond shaped daymark, marks the end of the shoal making eastward about 1.8 miles from **Bluff Point.** The point, low and marshy, separates East Bluff Bay and West Bluff Bay, two unimportant bights southwestward of Wysocking Bay. A daybeacon marks the 4-foot shoal 2 miles southsoutheastward of Bluff Point. Extending southward from Bluff Point is a large area of shoal water, a tongue of which, called **Bluff Shoal**, extends completely across Pamlico Sound, Depths of Bluff Shoal are 7 to 12 feet, A light is near the middle of the shoal. Close northward of this light is a wreck reported covered 4 feet. A 12-foot slough through the shoal is about 1 mile northward of the light.

(188) **Juniper Bay,** on the north side of Pamlico Sound 4 miles westward of Bluff Point, is about 1.5 miles wide at the entrance, but narrows gradually toward its head, to a narrow, crooked stream 3 miles above the entrance. Shoals extend from both shores. A light marks the shoal extending from the east point at the entrance. The bay has considerable traffic in small craft with drafts less than 5 feet; these make the passage to and from Belhaven by way of Swanguarter Narrows, Swanquarter Bay, and **The Haulover** to Deep Bay.

Great Island, on the west side of the approach to Juniper Bay, is low and grassy. A light marks the shoal extending southeast from the island. Swanguarter Narrows, between Great Island and the mainland to the north, had a reported centerline controlling depth of 5 feet in July 1983. A light marks the western entrance to the narrows.

Swanguarter Bay, northwestward of Great Island, is about 2 miles wide at the mouth, but narrows gradually toward its head 4 miles above. Oyster beds are numerous in the bay. A water tank, painted orange, near the northwest end of town in about 35°24.5'N., 76°19.9'W., is reported prominent from the bay.

A privately dredged channel leads through Swanquarter Bay to a ferry terminal basin at Swanguarter just north of Long Point. In July 1983, the channel had a reported controlling depth of 5 feet. Another dredged channel leads from near the northern end of the bay to a boat basin at Swanguarter. In September 2003, the controlling depth in the entrance channel and in the basin was 7.9 feet. The channels through Swanguarter Bay are marked by lights and a daybeacon.

Swanguarter, the seat of Hyde County, is the center of trade for much of this area. Gasoline, diesel fuel, water, marine supplies, and a launching ramp are available in the basin. The town has highway connections with U.S. Route 264.

A dredged channel leads through a land cut, known as **The Haulover**, from the west side of Swanguarter Bay, about 3.5 miles above the entrance, and connects with Deep Bay to the westward. In May 2001, the reported controlling depth through The Haulover was 13 feet. A light is at each end of the cut. Local vessels use this route.

(194) Rose Bay, westward of Swanquarter Bay on the north side of the entrance to Pamlico River, is 1.8 miles wide at the entrance, but shoals extending from both sides restrict the entrance channel to a width of 0.6 mile. A small marina is at the head of the bay. Berths, gasoline, water, limited marine supplies, and two launching ramps are available. A light is at the entrance, and daybeacons and lights mark the best water in the bay. The bay is used mostly by local fishing boats.

Deep Bay, leading eastward from just inside the entrance of Rose Bay, is the approach to The Haulover, a dredged land cut to Swanquarter Bay which was described previously. Local vessels use this route. The Blowout is a privately maintained channel cut through the narrow neck of Judith Island from Deep Bay to Deep Cove on the Pamlico Sound side. The channel is used considerably by local fishermen; strangers should not attempt it. In July 1983, the reported controlling depth through The Blowout was 1½ to 2 feet.

Charts 11548, 11554

Pamlico River and Tar River are the two names applied to the same river; it is known as the Pamlico below Washington, N.C., and as the Tar above that point. The river rises in Person County, flows in a general southeasterly direction, and empties into the northwestern part of Pamlico Sound. Pamlico River, in 1963, had depths of 12 feet or more for a distance of 20 miles above the mouth to a point just above Core Point.

Above this point a dredged channel leads to Wash-(197)ington, and, in Tar River, a natural channel leads for about 15 miles to the entrance to Hardee Creek, thence for another 3 miles to Greenville. In October 1975, the midchannel controlling depth in the dredged channel was 9 feet to a point about 0.4 mile above the second bridge at Washington; thence in Tar River, in 1956-October 1975, centerline depths of 2½ feet to Hardee Creek, except for shoaling to less than 1 foot at the entrance to Hardee Creek, and thence 21/2 feet from Hardee Creek to Greenville. The channel is marked by lights to Washington.

Pamlico River is nontidal; variations in the water level at Washington, due to prevailing winds, seldom exceed 2 feet. The extreme range of the flood or freshet stage for Tar River is 34 feet at Tarboro, 75 miles above the mouth. For the lower section, the extreme range due to winds is 8.5 feet.

Charts 11548, 11553

Pungo River empties into Pamlico River from northward about 5 miles above the mouth. The channel through the lower 15 miles of the river, part of the Intracoastal Waterway, is well marked by lights and daybeacons. Above the Intracoastal Waterway, the river narrows. In July 1983, the reported centerline controlling depth in this section of the river was 5 feet to **Leechville**, a town 18 miles above the mouth. The U.S. Route 264 highway bridge at Leechville has a 30-foot fixed span with a clearance of 7 feet. An overhead power cable on the north side of the bridge has a clearance of about 28 feet. Tributaries to the Pungo River include several navigable creeks. The most important in order of ascension are Wright, Slade, Pungo, Pantego, and Wilkerson, which empty into the northeast end of the river. The route of the Intracoastal Waterway, described in chapter 12, follows Pungo River from Wilkerson Creek to and across Pamlico River.

Wright Creek empties into the west side of Pungo River 2 miles above the mouth and about 8 miles south of Belhaven. The creek is entered from deep water in Pungo River through a dredged channel that leads to a turning basin at the head of **North Prong**, about 1.1 miles above the entrance. In July 1977, the channel had a midchannel controlling depth of 8 feet; thence in July 1983, a reported depth of 4 feet in the basin. The channel is marked by lights, daybeacons, and a buoy.

Two small marinas are on North Prong. Berths with electricity, diesel fuel, limited marine supplies, gasoline, and launching ramps are available; minor hull repairs can be made.

Slade Creek, which empties into Pungo River from eastward about 4 miles above the mouth, in February 2006, had reported depths of 3.6 feet or more. A pile was reported in the creek entrance about 0.2 mile NNW of July Point at about 35°27'32"N., 76°33'21"W. An unmarked fish haven is about 1 mile northwest of the creek entrance in about 35°28'15"N., 76°34'18"W.

Pungo Creek (see also chart 11554) empties into Pungo River from westward about 8 miles above the mouth of the river and 1.5 miles southwestward of Belhaven. A highway bridge, 2.5 miles above the mouth of the creek, has a 32-foot fixed span with a clearance of 8 feet. The overhead power cable just north of the bridge has a clearance of 35 feet. In July 1983, the creek had reported depths of 7 feet or more to the bridge and thence 5 feet for about 2 miles. A light and a daybeacon mark the entrance to the creek.

Pantego Creek (see also chart 11554) just north-(204)ward of Pungo Creek, empties into Pungo River northward about 9 miles above the mouth of the river. Timber breakwaters, in fair condition, extend from both shores of the entrance. The outer ends of the breakwaters are marked by lights.

A dredged channel leads from Pungo River through the breakwaters and to the basin at Belhaven just below State Route 92 highway bridge. In May 2000, the reported midchannel controlling depth to the basin was 8.9 feet. Above the dredged channel, in 1963, there were depths of about 7 feet for 1 mile above the bridge, thence 4 feet to the highway bridge at the town of Pantego; lights and daybeacons mark the dredged channel. State Route 92 highway bridge at Belhaven has a 32-foot fixed span with a clearance of 13 feet.

Belhaven, on the northeastern side of the entrance to Pantego Creek, has an excellent harbor for small craft. The town is connected with the interior by highway and railroad. Seafood, grain, and lumber are shipped from here. Marine supplies can be obtained in the town, and hotel accommodations are available.

Berthage, electricity, gasoline, diesel fuel, water, ice, and marine supplies can be obtained at the small-craft facilities on the north side of the creek at Belhaven, just inside of the breakwater. One of the facilities has a marine railway that can handle craft up to 60 tons for engine and hull repairs. A launching ramp is also available.

Goose Creek, opposite the entrance to Pungo River, empties into Pamlico River from southward about 7 miles above the mouth of the river. The dredged channel of the Intracoastal Waterway crosses the shoals, which obstruct the mouth of the creek, and passes southward to Upper Spring Creek and the land cut which connects with Bay River.

Chart 11554

South Creek, about 11 miles above the entrance to Pamlico River, empties into the river from the southward. The deeper entrance is southward of Indian Island and the shoal extending westward from that island to **Hickory Point** (35°21.8'N., 76°41.9'W.), the north point at the entrance to the creek. In July 1983, a reported draft of 5 feet could be taken through the channel across the shoal west of Indian Island; a light and a daybeacon mark the best water. The creek has depths of 7 feet or more for 4 miles above Hickory Point. Above this point, a dredged channel leads to Aurora, and thence to Idalia, about 9 miles above Hickory Point. In June 1977, the midchannel controlling depth was 4 feet to Aurora; thence in October 1976, a centerline depth of 3½ feet to Idalia. The channel is marked by daybeacons as far as Aurora.

Aurora is a town on the west side of South Creek, about 7 miles above Hickory Point. An oil dock here is in ruins. State Route 33 highway bridge, with a 37-foot fixed span and a clearance of 5 feet, crosses the creek at Aurora. Small boats use the creek as far as Idalia, about 2 miles above Aurora.

A channel, marked by private daybeacons, leads to a (211) barge slip at a phosphate plant on the north side of South Creek about 3.9 miles southwest of Hickory Point. In July 1983, the slip had reported depths of 10 feet.

Bond Creek and Muddy Creek share a common en-(212) trance close eastward of South Creek, about 1 mile southward of Hickory Point. The town of South Creek, about 0.5 mile above the entrance, is bordered on the west by Bond Creek, and on the east by Muddy Creek. The entrance is marked by daybeacons. A crabmeat packinghouse is on the east side of town. In July 1983, a reported depth of 5 feet could be taken in Bond Creek for about 2.3 miles. In June 1990, an obstruction was reported in Bond Creek in about 35°20'26"N., 76°41'49"W. Gasoline and diesel fuel are available at the crabmeat packinghouse pier on Muddy Creek.

North Creek empties into Pamlico River directly opposite South Creek. The channel had a reported centerline depth of 4 feet for about 1.5 miles in July 1983, and is marked by a light and daybeacons, but its navigation should not be attempted by strangers. In East Fork, the channel, in July 1983, had a reported centerline depth of 5 feet for 1.5 miles above the entrance.

A ferry, operated by the State Roads Commission, crosses Pamlico River about 15 miles above the mouth. The marked channels leading to the northern terminal in Gaylord Bay, about 3.5 miles westward of North Creek, and to the southern terminal about 3 miles westward of Hickory Point, had reported depths of 7 feet in July 1983.

A privately dredged channel leads to a basin of a phosphate plant on the south side of Pamlico River, about 15.5 miles above the mouth and 4 miles westward of Hickory Point. The channel is marked by private daybeacons. In July 1983, the reported controlling depth was 10 feet. The structures at the plant are the most conspicuous objects in the area.

Durham Creek empties into Pamlico River from southward 17.5 miles above the mouth and 6.5 miles westward of Hickory Point. In July 1983, local knowledge was advised to pass over the bar across the entrance to the creek, thence depths of 3 feet were reported available to Bonnerton, 4 miles above the entrance. A fixed highway bridge with a clearance of 2 feet crosses the creek at Bonnerton. A daybeacon marks the entrance.

Bavview is a pleasure resort on the north bank of Pamlico River 6.5 miles northwestward of Hickory Point and about 2 miles eastward of the entrance to

(221)

Bath Creek. Small tourist cabins are available, and a good secondary road connects with State Route 92 highway northward. The nearest rail connections are at Washington, about 20 miles distant by highway. Gasoline and some supplies are available at Bayview, and there is a small-boat launching ramp. All of the docks at Bayview are in ruins. An unmarked fish haven is about 0.7 mile southwest of Bayview in about 35°25'55"N., 76°48'25"W.

Bath Creek, opposite Durham Creek, flows southward into Pamlico River 8 miles northwestward of Hickory Point. In July 1983, the reported controlling depths were 5 feet to the bridge at the town of Bath, thence 4 feet for about another 1.7 miles. The most difficult part of the channel to Bath is the entrance, where a shoal extends halfway across from the west side and drops off abruptly. The channel is marked by lights and daybeacons to a point about 0.35 mile southward of the highway bridge. The outer edge of the shoal is marked by a light. Numerous fish traps are off the creek entrance during the fishing season from January through

The State Route 92 highway bridge at Bath has a (219)37-foot fixed span with a clearance of 13 feet. Overhead cables close northward of the bridge have a clearance of 24 feet. In April 2004, the bulkhead below the bridge had a reported depth of 6 feet alongside; and in 1983, a small dock north of the bridge had a reported depth of 3 feet alongside. Gasoline and some supplies are available at Bath, and there is a small-boat launching ramp.

Back Creek empties into the east side of Bath Creek about 1 mile above its mouth. A highway bridge with a 41-foot fixed span and a clearance of 7½ feet crosses the creek about 0.5 mile above the mouth. An overhead power cable with a clearance of 43 feet crosses the creek just west of the bridge. A launching ramp is available just below the bridge.

Pamlico River above Bath Creek is usually fresh.

Blounts Creek flows northward into Blounts Bay, (222) which is on the south side of Pamlico River, about 25 miles above the mouth. A highway bridge, 0.2 mile above the entrance of the creek, has a 36-foot fixed span with a clearance of 15 feet. Overhead power and telephone cables immediately southward of the bridge have a reported clearance of 18 feet. The entrance to the creek is marked by a buoy, however, local knowledge is advised. Above the entrance, the creek, in 1963, had depths of 5½ feet or more for about 1 mile above the bridge and 3 feet for an additional 2 miles.

Broad Creek, on the north side of Pamlico River opposite Blounts Bay, in April 1975, had a reported centerline controlling depth of 5 feet from the entrance to the Washington Yacht and Country Club, a distance of 1 mile, thence 4 feet for another 1.3 miles. The channel is marked by lights, daybeacons, and "no wake" markers. Gasoline, water, and electricity are available at the piers of the private club, which has 4 feet of water alongside. Just south of the yacht club is a pier with 4 feet alongside where only covered storage is available. Two marinas about 0.25 mile below the yacht club have berths with electricity, marine supplies, and launching ramps. Both marinas have mobile 30-ton lifts; hull, engine, and electronic repairs can be made. An overhead power cable with a reported clearance of 30 feet crosses the creek about 0.3 mile northward of the yacht club.

Whichard Beach is on the south side of the Pamlico (224) River about 4 miles above Blounts Bay and about 0.4 mile above **Fork Point** at the junction of Pamlico River and Chocowinty Bay. A marina at Whichard Beach has berths, gasoline, limited marine supplies, water, ice, provisions, and launching ramps. Hull and outboard engine repairs can be made.

Runyon Creek is on the north side of Pamlico River (225) at Washington, N.C. Route 32 highway bridge and the Norfolk Southern railroad bridge crossing the creek just above the mouth have 18-foot fixed spans and a clearance of 4 feet. In July 1983, there was reported depth of 4 feet available in the channel immediately north of the highway bridge. A launching ramp near the bridge is available.

Washington, 32 miles above the mouth of Pamlico (226) River, is the seat of Beaufort County and an important business center with communications extending to nearly all points on Pamlico River and Pamlico Sound. The town has restaurants, hotels, and motels. Marine supplies are available.

Two swing bridges cross the river at Washington. The Norfolk Southern railroad bridge has a clearance of 7 feet; the west draw is closed to navigation. The U.S. Route 17 highway bridge, about 0.7 mile above, has a clearance of 6 feet. (See 117.1 through 117.59 and 117.831, chapter 2, for drawbridge regulations.) The overhead power cable close westward of the highway bridge has a clearance of 75 feet.

A county hospital is at Washington.

(228)

The Washington City Waterfront lies on the eastern side of the Pamlico River, after passing the Norfolk Southern Railway bridge and 0.3 mile before the U.S. Route 17 highway bridge. The bulkhead extends approximately 1,700 feet and has both small craft slips and tie-up dockage. Electricity, water and pump-out station are available. Depths range from 18 feet at the outermost slips to 9 feet at the inner slips and 7 feet along the bulkhead. Boats up to 60 feet in length can be accommodated in the outermost slips. The North Carolina Estuarium is located at the waterfront.

Washington has rail connections with the Seaboard System Railroad and the Norfolk Southern Railway, and highway connections with U.S. Route 17 and N.C. Route 32.

A highway swing bridge with a clearance of 5 feet at extreme high water and 10 feet at low-water stage crosses the Tar River at Grimesland, about 7 miles above Washington. (See 117.1 through 117.59 and 117.831, chapter 2, for drawbridge regulations.) An overhead power cable about 5 miles above Grimesland has a clearance of 77 feet.

Chart 11548

Mouse Harbor, Big Porpoise Bay, and Middle Bay are small unmarked shallow bays on the east side of Goose Creek Island on the western side of Pamlico Sound between **Pamlico Point Light PP** (35°18'49"N., 76°27'00"W.) and Jones Bay. The light marks the south side of the entrance to Pamlico River, and is shown 25 feet above the water from a multi-pile structure with a white and black diamond shaped daymark. Mouse Harbor Ditch and Leary Canal are two small-boat passages which connect Mouse Harbor with Clark Creek on Pamlico River, and Big Porpoise Bay with Middle Bay. These passages are not being maintained, and are used only by shallow-draft skiffs; local knowledge is advised. The three bays are frequented only by local fishermen.

Jones Bay is on the western side of Pamlico Sound about 7 miles southward of Pamlico Point Light PP and just northward of the entrances of Bay and Neuse Rivers. In July 1983, the bay had reported depths of 6 feet or more for 4 miles above its mouth. The entrance is somewhat obstructed by shoals through which a marked channel leads into the bay. On the north side, near the head of the bay, is the town of Hobucken. Small craft bound for the town can land in the cove 0.8 mile above Drum Creek, which indents the north shore of the bay about 3.5 miles above the entrance.

Ditch Creek, on the opposite side of Jones Bay from Drum Creek, leads to an old canal through which small boats can be taken at high water to Bay River. Hobucken is discussed further in chapter 12 in connection with the Intracoastal Waterway which crosses the head of Jones Bay and links it with Goose Creek on the north and Bay River on the south. Hobucken Coast Guard Station fronts the Intracoastal Waterway at Hobucken.

The approach to Jones Bay from eastward is over or around Brant Island Shoal, which extends for 10 miles in a southeasterly direction from the north side of the entrance to the bay. For 6 miles southeastward to Brant Island Slue Light 1, the shoal has depths of 2 to 3 feet; between that light and Brant Island Shoal Light BI at the outer end are depths of 5 to 8 feet. The wreck of the GOVERNOR SCOTT FERRY is about 0.7 mile east of Light BI and is marked by a light. In November 1991, a sunken wreck was reported between Brant Island Shoal and Royal Shoal in about 35°07'14"N., 76°12'44"W. Other wrecks and obstructions are west and south of Brant Island Shoal Light BI.

The **danger zone** of a bombing and rocket firing (236) area is in Pamlico Sound westward of the entrance to Jones Bay. Numerous lights and daybeacons mark the perimeter of the danger zone. (See 334.420, chapter 2, for limits and regulations.) In July 1983, Brant Island (35°12.6'N., 76°26.5 'W.) was reported no longer visible at low water.

Charts 11544, 11548, 11552

Bay River about 10 miles southward of Pamlico Point Light PP (35°18'49"N., 76°27'00"W.), empties into the western part of Pamlico Sound between Jones Bay and the mouth of Neuse River. The natural channel, from the entrance to off the mouth of Trent Creek about 12 miles above the entrance, is marked by lights and daybeacons and, in 1963, had depths of 9 feet or more. It can be followed readily. Above this point, a dredged channel leads to Bayboro, which is practically the head of navigation. In July 1983, the reported controlling depth was 10 feet. The dredged channel is marked by daybeacons to Stonewall. An overhead power cable crossing the river about 0.3 mile below Bayboro has a clearance of 75 feet.

In February 1986, a visible piling extending about 10 feet above the water was reported to be about 500 yards east of Bay River Light 1 in about 39°09'47"N., 76°31'42"W.; caution is advised.

(239) The route of the Intracoastal Waterway is along Bay River for 4 miles, thence northward through Gale Creek.

Vandemere is a town on the north side of Bay River 8 miles above the mouth. Gasoline, diesel fuel, a launching ramp, and some supplies are available. There are two marine railways that can haul out vessels up to 65 feet in length for hull repairs and there is a machine shop with engine repair service. In July 1983, the reported controlling depth was 8 feet to Vandemere, and thence 8 feet alongside the piers and 4 feet at end of railways.

Stonewall is a small town on the south side of the river 14 miles above the mouth; most of its docks are in ruins.

Bayboro, 15 miles above the mouth of the river, has (242)docks in fair condition on the east side of the creek leading to Mill Pond. In July 1983, depths of 7 feet were reported alongside the oil and fish docks. Gasoline, ice, and some supplies are obtainable here. Navigation above Bayboro is restricted by fixed bridges at the town.

Neuse River rises in the northern part of North Carolina and flows for about 250 miles in a general east-southeasterly direction into the western end of Pamlico Sound. Its mouth is about 5 miles wide, but is reduced to a navigable width of about 2 miles by shoals which extend from either side. The river has natural depths of 13 feet or more for 25 miles above its mouth. Strangers should not attempt to navigate the river above this point. The river channel is marked by lights, buoys and daybeacons to about 4 miles above the city of New Bern, 34 miles above its mouth.

Tides

Neuse River has practically no tide, the variation in (244) water level being due principally to winds. Easterly winds cause high water and westerly winds low water, the maximum variations with heavy gales amounting to about 2 feet above or below the normal in the lower part of the river, and about 3 or 4 feet at New Bern. Freshets of 10 to 20 feet occur in the upper reaches of the river above New Bern, but have little effect at or below the town.

Broad Creek empties into the north side of Neuse (245)River about 4 miles above the mouth. In July 1983, the reported controlling depth in the creek was 5 feet for 2.5 miles, thence 4 feet to Whortonsville. A light marks the entrance to the creek. Pamlico is a village on the south side of the creek, 3 miles above the entrance. Whortonsville is on the east side of the entrance to **Brown Creek** about 0.5 mile northeast of Pamlico, and on the opposite side of Broad Creek. Berthage, electricity, water, limited marine supplies and a launching ramp are available at the pier which has a depth of 5 feet alongside.

South River flows into the south side of Neuse River about 8 miles above the mouth. The entrance is marked by lights. In January 2001, the channel had a reported midchannel depth of 10 feet for about 3 miles; thence in December 2000, there was 6 feet for another 4.5 miles.

The danger zones of several bombing, rocket firing, and strafing areas are in Turnagain Bay and Rattan Bay, in Neuse River, and in Long Bay and West Bay in Pamlico Sound. (See 334.420, chapter 2, for limits and regulations.)

Charts 11552, 11541

Garbacon Shoal extends halfway across Neuse River from the southern shore 10 miles above the mouth, leaving a clear width of about 0.8 mile between the 12-foot contours. The outer end of the shoal is marked by a light.

Whittaker Creek, on the north side of Neuse River (249) opposite Garbacon Shoal, is marked by lights and daybeacons. In October 2003, the privately dredged entrance channel had a reported controlling depth of 6.1 feet. An uncharted private range marks the entrance channel. Several small-craft facilities are in the creek. (See the small-craft facilities tabulation on chart 11541 for services and supplies available.)

Oriental is a small town at the entrance to Smith **Creek** on the north bank of the Neuse River about 11 miles above the mouth. Fishing is the principal industry and seafood is trucked to the interior. The harbor is protected by a rubble-mound breakwater marked by a light off the end.

(251) A dredged channel, marked by lights and daybeacons, leads from Neuse River to a basin at Oriental. In 1987, the midchannel controlling depth to the basin was 6.5 feet; thence in 1977-1987, 8.5 feet in the basin. In July 1992, shoaling to 3 feet was reported northeast of Windmill Point, on the west side of the channel in about 35°01'14"N., 76°42'00"W. The harbor provides excellent anchorage for small craft. Two marinas are in the harbor and basin. (See the small-craft facilities tabulation on chart 11541 for services and supplies available.)

A fixed highway bridge 0.2 mile above the entrance to Smith Creek has a clearance of 45 feet. An abandoned railroad bridge, in ruins, crosses Morris Creek about 1 mile above the highway bridge. Greens Creek joins Smith Creek at **Dewey Point** just above the highway bridge. Good anchorage was reported in Greens Creek for vessels drawing less than 4 feet.

Adams Creek empties into the south side of Neuse (253) River about 13 miles above the mouth. The creek is part of the Intracoastal Waterway and is described in chapter 12.

Clubfoot Creek flows into Neuse River from south-(254) ward about 15 miles above the mouth. The approach is marked by a daybeacon and the entrance by a light and daybeacons. The channel southward of the light is narrow with shoals rising abruptly on both sides. Depths in the channel, in June 2002, were reported to be 4.5 feet or more for 3 miles above the light. A marina on the west shore of Clubfoot Creek, at the entrance to Mitchell Creek, has berths, electricity, gasoline, diesel fuel, pump-out station, water, and ice.

Dawson Creek, on the north side of Neuse River about 14 miles above the mouth, is entered through a dredged channel, marked by daybeacons, that leads from the river to the mouth of the creek. In July 1983, the reported controlling depth was 5 feet. A highway

bridge with a 32-foot fixed span and a clearance of 13 feet crosses the mouth of the creek at Janeiro.

A ferry crosses Neuse River about 18 miles above the mouth between Cherry Point and Minnesott Beach.

Hancock Creek is on the south side of Neuse River (257) about 20 miles above the mouth. In July 1983, the reported controlling depths were 7 feet through the narrow entrance channel to the Marine Corps Air Station basin just inside the mouth, thence 12 feet in the basin. Lights and daybeacons mark the channel. A launching ramp and pier are on the east side of the creek about 1.5 miles above the mouth.

A **restricted area** at the Cherry Point Marine Corps Air Station, which includes Hancock and Slocum Creeks and their tributaries, is described in 334.430,

A water tank at the air station is conspicuous. (259)

Slocum Creek, on the south side of Neuse River 22 miles above the mouth, in July 1983, had a reported controlling depth of 4 feet for 4 miles to the forks, and up the East Prong 0.1 mile to a foot bridge across the creek which obstructs passage for further navigation. A light and daybeacons mark the critical parts of the channel at the entrance to the creek. A highway bridge with 32-foot fixed span and a vertical clearance of 3 feet crosses 3 miles above the entrance. An overhead cable with a clearance of 39 feet crosses the creek just below the bridge.

Beard Creek is on the north side of Neuse River op-(261) posite Slocum Creek. The mouth of the creek is marked by a daybeacon. The reported controlling depth from the entrance to the highway bridge, 2.3 miles upstream, was 4 feet in July 1983. The bridge has a fixed span and a clearance of about 4 feet. Good anchorage may be found off the eastern side of the entrance.

Goose Creek, on the northeast side of Neuse River 27 miles above the mouth, in June 2000, had reported depths of 4.4 feet or more to Wood Landing, 3 miles above the entrance. **Upper Broad Creek**, on the northeast side of Neuse River 28 miles above the mouth, had reported depths of 5 feet or more, in 1983, to Lees Landing 4 miles above the entrance. Overhead power cables about 1.4 miles above the mouth and at the landing have clearances of 35 feet and 40 feet, respectively. The entrance is marked by daybeacons.

Fairfield Harbour is a resort and residential community on the east side of Northwest Creek, about 1 mile west of Upper Broad Creek. The entrance to Northwest Creek is marked by a light; depths of 4 feet can be carried through the unmarked creek. A marina is on the east side of the creek, about 0.7 mile above the entrance. In July 1983, depths of about 6 feet were alongside the marina piers; berths, electricity, gasoline, diesel fuel, water, ice, pump-out station and launching ramp are available.

(264) **New Bern,** a city on the west bank of Neuse River 34 miles above the mouth, is the seat of Craven County and an important center for this area. The city has many points of historical interest including Tryon Palace, an 18th century restoration. A county hospital is here, and there are numerous restaurants, hotels, and motels. Gasoline, diesel fuel, pump-out station, berthing with electricity, water, ice, marine supplies, and provisions are available. Hull, engine and electronic repairs can be made; lift to 30 tons.

(265) Barge traffic in petroleum products, crushed rock, pulpwood, and chemicals constitutes the principal commerce at New Bern. In addition to vessel repairs, the city supports a considerable boat and barge building industry.

(266) The rectangular lighted clock tower atop City Hall is visible for about 6 miles downriver and is an excellent landmark. Vessels proceeding up the river to New Bern are advised to stay in the channel because of the numerous fish traps scattered indiscriminately throughout the unmarked areas. The river is slightly brackish except during freshets.

Weather, New Bern and vicinity. New Bern's cli-(267) mate is influenced by both the Atlantic Ocean and Pamlico Sound, particularly in the winter. Winds blowing from a southerly or easterly direction have a moderating effect on temperatures.

The long hot summers begin in May when after-(268) noon temperatures occasionally reach 90°F (32.2°C), and reach a peak in July when they average 89°F (31.7°C); they begin to fall off by the end of September. The average high temperature in New Bern is 73°F (22.8°C) and the average low is 52°F (11.1°C). July is the warmest month with an average high of 80°F (26.7°C) and an average low of 71°F (21.7°C). January is the coolest month with an average high of 55°F (12.8°C) and an average low of 34°F (1.1°C). Each month, May through September has recorded temperatures in excess of 100°F (37.8°C) while each month, October through May has had temperatures below freezing. The warmest temperature on record in New Bern is 106°F (41.1°C) recorded in July 1952 while the coldest temperature on record is -4°F (-20°C) recorded on Christmas Morning 1989. The average number of days with a maximum temperature of 90°F (32.2°C) or warmer is 41 while the average number of days with a minimum temperature of 32°F (0°C) or cooler is 50.

Rainfall averages 52 inches (1,321 mm) annually; with July through September contributing most. The wettest month is July with 6.77 inches (172 mm) and the driest month is April with an average of 2.97 inches (75.4 mm). An average of 2 inches (51 mm) of snow falls at New Bern each winter and can be expected any time between late November and early April. The greatest snowfall during a 24-hour period was 13 inches (330.2 mm) in January 1965. Snowfall amounts in excess of one foot (304.8 mm) have been recorded in January and February. (See page 444 for the New Bern climatological table.)

(270) Most of the wharves and piers at New Bern handle barge traffic. These privately operated facilities are on the south side of the city on Trent River, and on the east side on Neuse River.

A marina on the south side of Trent River just southwestward of the railroad bridge has three 100-foot-long piers with depths of 9 feet alongside. Berths, electricity, gasoline, diesel fuel, water, and dry storage are available; hull and engine repairs can be

New Bern is served by two railroads; the Norfolk Southern and the CSX. The city is also served by commercial airlines.

U.S. Route 17 highway bridge over Neuse River just below New Bern has a fixed span with a clearance of 65 feet. The Norfolk Southern Railway bridge, 1.7 miles above the highway bridge, has a swing span with a clearance of 0 feet at extreme high water and 2 feet at low water. (See 117.1 through 117.49, chapter 2, for drawbridge regulations.) In 1984, the northeast draw of the bridge was reported closed to navigation. The overhead power cable at the railroad bridge has a clearance of 50 feet over the main channel.

A small-craft repair facility is on the northeast side of the river just above the bridge at Bridgeton, opposite New Bern. A 35-ton mobile hoist and surfaced ramp are available. Hull, engine, sail, electrical, and electronic repairs can be made.

Trent River empties into Neuse River on the south side of New Bern. The river channel above New Bern is marked by lights and daybeacons for a distance of about 5.5 miles.

U.S. Route 70 highway swing bridge over Trent River at the mouth has a clearance of 13 feet. (See 117.1 through 117.59 and 117.843, chapter 2, for drawbridge regulations.) the Norfolk Southern railroad bridge, about 0.2 mile westward of the highway bridge has a swing span with a clearance of 5½ feet. (See **117.1 through 117.49**, chapter 2, for drawbridge regulations.) Fixed twin highway bridges about 0.3 mile southwest of the Norfolk Southern railroad swing bridge, have clearances of 45 feet. Overhead power cables cross Trent River about 1.8, 4.8, 8.8, and 14 miles above its mouth; clearances are 65 feet, 48 feet, 55 feet, and 63 feet, respectively.

At Pollocksville, 15 miles above the mouth, U.S. Route 17 highway bridge has a 48-foot fixed span with a clearance of 5 feet.

(278) A fixed highway bridge with a 32-foot span and a clearance of 2 feet at high water and 12 feet at low water crosses Trent River, about 6.5 miles above Pollocksville.

Brice Creek enters Trent River from the east about 1.7 miles above the mouth. In July 1983, the reported controlling depth to the highway bridge 1 mile above the mouth was 5 feet. The highway bridge has a 35-foot fixed channel span with a clearance of 15 feet. An overhead power cable with a clearance of 14 feet is just north of the bridge.

Chart 11548

West Bay is a large irregularly shaped body of water on the southwest side of Pamlico Sound west of Cedar Island and just southeastward of Neuse River entrance. The shores of the bay and its numerous branches are marshy, and it is of little importance other than for its oyster beds. In July 1983, a reported depth of 6 feet could be taken into the three principal arms of the bay through narrow and devious channels. Lights and daybeacons mark the entrance to West Bay and the channels in West Thorofare Bay and Long Bay, the middle and west arms, respectively.

Hooked-shaped Royal Shoal extends northwest-(281)ward from the vicinity of Ocracoke Inlet. The shoal, which bares in one place and is covered 1 to 4 feet elsewhere, is marked by four lights and a daybeacon. Tows and other vessels sometimes anchor inside the hook when the seas are too rough to make headway in the sound. In July 1983, however, it was reported that this anchorage was not a good one.

A dangerous sunken wreck is reported to be about 0.4 mile north of Royal Shoal Light 5RS in about 35°09.8'N., 76°09.5'W. Caution is advised.

Charts 11550, 11545

Core Sound extends southwesterly along and just inside the barrier beach from the south side of Pamlico Sound to Cape Lookout, a distance of about 27 miles; the width varies between 2 and 3 miles. The sound is mostly shoal, but an improved channel, well marked by lights, extends along its entire length. Behind Cape Lookout, Core Sound is joined by Back Sound and The Straits, both of which connect with Beaufort Harbor.

Channels

The main route from Pamlico Sound to Beaufort (284) Harbor is via a marked channel through Wainwright Slue, Core Sound, The Straits, and Taylor Creek. The alternate route to Beaufort Harbor is via a marked channel which leads southward along the east side of Harkers Island from a point just eastward of The Straits, thence southward of the island through Back Sound, thence along the westerly side of the island where it rejoins the main route. In 1983, the midchannel controlling depth in the dredged sections was 4 feet in the main route to Taylor Creek, thence in May 1998, 8 feet was reported in the alternate route from Harkers Island East Channel Light 14 to Daybeacon 1.

From The Straits, the main route to Beaufort Harbor leads southwestward to the junction with the alternate route, westward of Harkers Island, thence westward along the north side of Middle Marshes to abeam Lenoxville Point where it turns sharply northward and then westward into Taylor Creek. The route is then westward through Taylor Creek to the wharves at Beaufort.

Tides

The mean range of tide in Core Sound is less than ½ foot, except near the inlets. Tidal currents of 1 to 2 knots may be experienced in the southern part of Core Sound.

The channels from Core Sound to Beaufort Inlet via The Straits and Back Sound are described later in this chapter.

Chart 11550

Wainwright Slue is a small anchorage used by local mariners in the northeastern entrance to Core Sound. Shelter from the sea is provided by surrounding shoals that have depths of 1 to 3 feet over them. The reported depth in the anchorage was 8 feet in July 1983. The marked channel into Core Sound is through Wainwright Slue and east of Wainwright Island.

Cedar Island Bay, off the northeast side of Cedar Island, makes into the northwest side of Core Sound. The bay is used mainly by fishing boats. An improved channel leads from the entrance, about 2.8 miles southwestward of Wainwright Island, to a small-craft basin on the west side of the bay. In December 2001, the reported midchannel controlling depth was 4 feet to the basin; thence in 1973, 5 feet in the basin. The channel is marked by lights and daybeacons, and by a light at the entrance. Gasoline, diesel fuel, and water can be obtained at the pier at the head of the basin. A radar dish antenna and a telephone tower are conspicuous on the south entrance point to the bay.

The terminal of the Ocracoke-Cedar Island ferry, marked by private lights at the entrance, is at the north end of Cedar Island about 5.2 miles westward of Wainwright Island. The passenger and vehicle ferry operates daily to Ocracoke on the outer beach.

Thorofare Bay, on the northwest side of Core (291) Sound and 8 miles from the northeastern entrance, indents the eastern shore of Cedar Island about 3 miles southward of Cedar Island Bay. The bay is connected with West Thorofare Bay by a land cut known as the Thorofare.

A dredged channel leads through Thorofare Bay, (292)and thence through the Thorofare to West Thorofare Bay. This passage provides a convenient route to local fishermen from Core Sound to West Bay and to the mouth of Neuse River. In December 2001, the reported midchannel controlling depth was 3 feet from West Thorofare Bay to Core Sound. The critical part of the channel is marked by lights and daybeacons.

A fixed highway bridge near the eastern end of the (293) Thorofare has a clearance of 45 feet.

Atlantic, a town on the northwest side of Core Sound about 2 miles southwestward of the eastern entrance to Thorofare Bay, has a restaurant and a motel. A cluster of four aluminum-colored fuel storage tanks on the beach and a tall church spire are prominent from seaward.

A marked, dredged channel leads northeastward from the main channel in Core Sound to a basin at Atlantic, about 0.5 mile above the entrance, thence continues northeastward behind a breakwater extending from White Point for another 0.3 mile to a basin at Little Port Brook. In April 2007, the controlling depth was 2.3 feet in the channel; thence in 2001, 5 feet was reported in the basin at Atlantic; thence in April 2007, there was shoaling to less than 1 foot in the channel to the basin at Little Port Brook; thence in 2000, 7 feet was reported in the basin. The basin at Atlantic is used mainly by fishing boats. Gasoline, diesel fuel, water, ice, provisions, and limited marine supplies are available. A spur channel, with a reported depth of 6 feet, leads to a marine railway just southward of the basin; craft up to 45 feet can be handled for hull repairs.

U.S. Route 70 highway connects with Beaufort and Morehead City.

Chart 11545

Sealevel is a small fishing community about 3 miles southwestward of Atlantic on the west shore of Core Sound. A restaurant and a motel are in town. A dredged channel leads from the sound to a basin at Sealevel. In 2001, the reported controlling depth was 3 feet to the basin and 4 feet in the basin. The channel is marked by a light and a buoy.

(298) A private hospital is in Sealevel.

A pier, used mainly by fishing vessels, is in the basin; depths of 8 feet are reported alongside. Gasoline, diesel fuel, water, and ice are available. Limited amounts of marine supplies can be obtained in town.

Sealevel is connected with Beaufort and Morehead (300) City by U.S. Route 70 highway.

Davis, another small fishing community, 5 miles (301)southwestward of Sealevel, ships seafood to the interior by truck. A dredged channel leads from Core Sound to a basin at Davis. In 1982, the controlling depth to the basin was 3 feet, with 3 to 4 feet in the basin. Gasoline, diesel fuel, water, and ice are available at a pier in the basin; depths of 4 feet are reported alongside. There are cabins and a restaurant at Davis; limited amounts of marine supplies also can be obtained here.

Davis is connected with Beaufort and Morehead City by U.S. Route 70 highway.

A pier, with reported depth of 6 feet alongside, is on (303) the north side of **Oyster Creek**, about 1 mile northward of Davis. The entrance channel into the creek is marked by a light and a daybeacon. A machine shop, near the pier, is available for engine repairs. U.S. Route 70 highway bridge, about 0.4 mile above the entrance, crosses Oyster Creek just above the pier. The bridge has a 41-foot fixed span with a clearance of 7 feet.

Marshallberg, about 6 miles southwestward of Davis, is on the west shore of Core Sound and on the north side of the eastern entrance to The Straits. A dredged channel leads from the main channel in Core Sound to a basin at Marshallberg. In July 1978, the midchannel controlling depth was 6 feet to and in the basin. The channel is marked by daybeacons. A boatyard on the south side of the basin has two marine railways. The longest can handle craft to 200 tons or 200 feet for complete hull and engine repairs. In July 1983, depths of 9 feet were reported alongside the boatyard. A boatyard is immediately westward of the marina. A marine railway here can handle vessels up to 125 feet in length for complete hull and engine repairs. Depths of 6 feet are reported alongside the marina and boatyard. A boatyard, about 900 yards west of the mouth of Sleepy **Creek**, 0.6 mile northwest of the basin at Marshallberg, has a marine railway that can handle craft up to 20 tons

or 50 feet long for hull repairs. In July 1983, the reported controlling depth to the railway was 4 feet.

(305) Back Sound, southward of Harkers Island, and The Straits, which parallel Back Sound on the opposite side of the island, provide two marked routes from Core Sound to a junction with the Morehead City Harbor Channel at Beaufort Inlet. The northern route leads westward through The Straits and along the northerly side of Middle Marshes; the southerly route leads westward through Back Sound and along the southerly side of Middle Marshes. Both routes have several shoals close to the channels. The chart is the best guide.

The improved channel from Back Sound to Lookout Bight has been discussed previously.

The Straits, with an average width of about 0.5 mile, but in places only 100 yards wide in the channel, also affords a through passage from Core Sound to Beaufort Harbor. The passage has been discussed previously in this chapter. A highway bridge over the western end of The Straits has a swing span with a channel width of 36 feet and a clearance of 14 feet. (See 117.1 **through 117.49**, chapter 2, for drawbridge regulations.) The overhead power cable close eastward of the fixed bridge has a clearance of 70 feet.

Westmouth Bay is a cove on The Straits side of (308) Harkers Island. A marine railway at a boatbuilding yard at the head of the bay can handle vessels to 40 feet for hull repairs. The town of Harkers Island in the central part of the island, has piers both on Back Sound and at the head of Westmouth Bay; depths to the piers were reported to be 2 feet in September 2000. Berths, electricity, gasoline, diesel fuel, water, ice, launching ramp, wet and dry storage, and some provisions may be obtained at the piers, and there is also a small machine shop. In Westmouth Bay, depths to the piers were reported to be 3 feet in July 1983. Gasoline, diesel fuel, water, ice, and some marine supplies may be obtained at the piers.

Several marinas are at Shell Point, at the eastern (309) end of Harkers Island. Berths, electricity, gasoline, diesel fuel, water, ice, marine supplies, launching ramps, and wet and dry storage is available.

Seafood is shipped by truck and boat from Harkers (310) Island.

A marina on the southwest point of the island has (311)gasoline, water, ice, and some marine supplies.