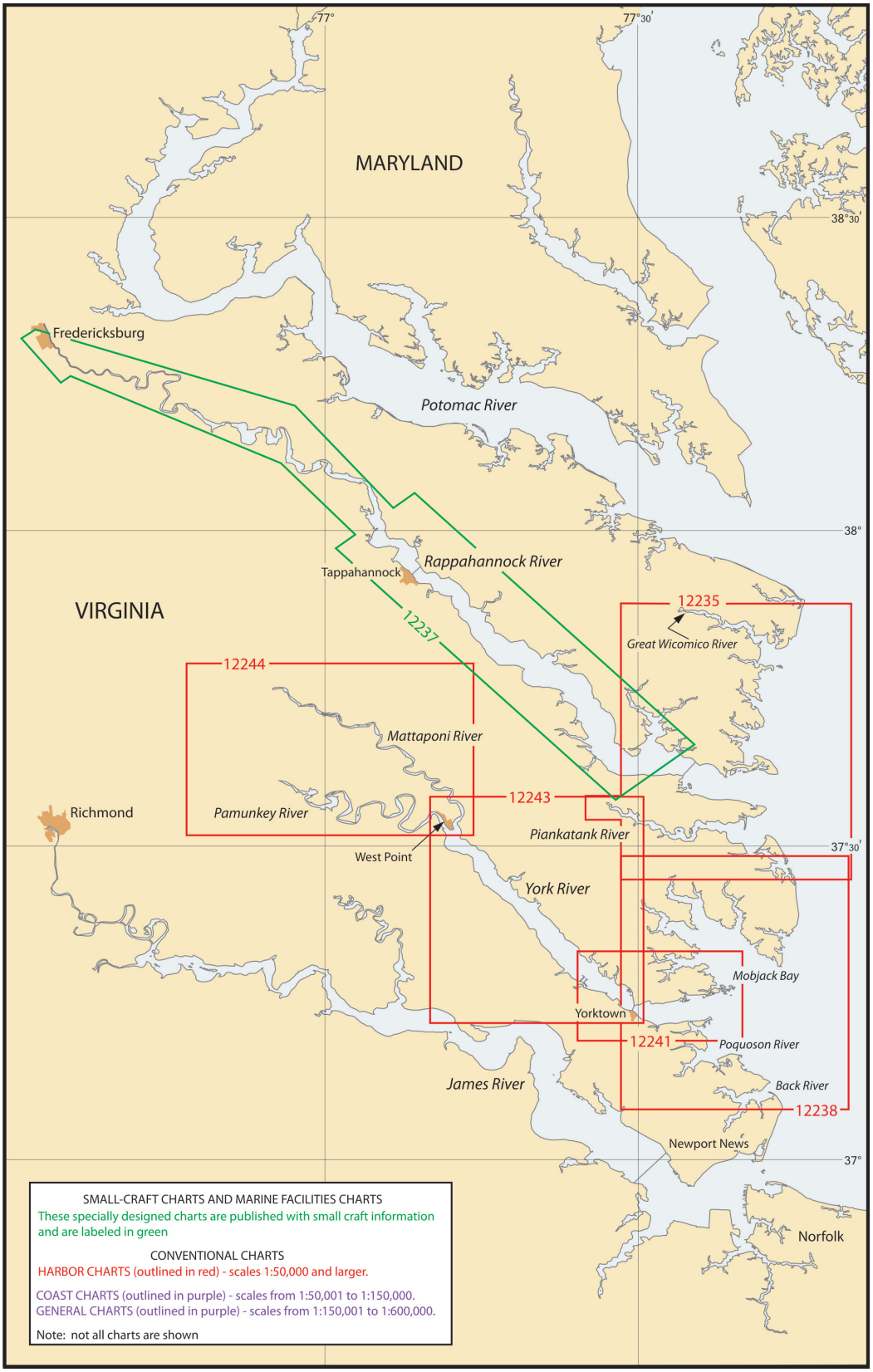
77°
77°30′
MARYLAND
38°30′
Fredericksburg
Potomac River
38°
Rappahannock River
Tappahannock
VIRGINIA
12237
12235
Great Wicomico River
12244
Mattaponi River
12243
Richmond
Pamunkey River
Piankatank River
West Point
37°30′
York River
Mobjack Bay
Yorktown
12241
Poquoson River
James River
Back River
12238
Newport News
37°
Norfolk
SMALL-CRAFT CHARTS AND MARINE FACILITIES CHARTS
These specially designed charts are published with small craft information and are labeled in green
CONVENTIONAL CHARTS
HARBOR CHARTS (outlined in red) - scales 1:50,000 and larger.
COAST CHARTS (outlined in purple) - scales from 1:50,001 to 1:150,000.
GENERAL CHARTS (outlined in purple) - scales from 1:150,001 to 1:600,000.
Note: not all charts are shown

Chesapeake Bay, York and Rappahannock Rivers

(1) This chapter describes the western shore of Chesapeake Bay from Old Point Comfort to the Potomac River including its principal tributaries Back, Poquoson, York, Piankatank, Rappahannock, and Great Wicomico Rivers, and Mobjack Bay. Also discussed are the ports of Yorktown, Fredericksburg, West Point, Tappahannock, Kilmarnock, and Reedville, as well as several of the smaller ports and landings on these waterways.

COLREGS Demarcation Lines

(2) The lines established for Chesapeake Bay are described in **80.510**, chapter 2.

Charts 12221, 12225

(3) The western shore of Chesapeake Bay from Old Point Comfort to the Potomac River is mostly low. York and Rappahannock Rivers are broad and deep at their entrances and are navigable for long distances.

(4) **Fishtraps** are thicker in this area than in any other part of the bay.

Ice

(5) Ice is seldom encountered this far south in the bay, but may be found in the upper parts of some of the tributaries.

Channels

(6) The Federal project for Chesapeake Bay provides for depths of 50 feet in the main channel between the Virginia Capes and Fort McHenry, Baltimore. There are three dredged sections in the lower Chesapeake Bay: the first off Cape Henry, just above the Virginia Capes; the second off York Spit, 11 to 22 miles above the Capes; and the third off Rappahannock Spit, 40 to 46 miles above the Capes; they are well marked. (See Notice to Mariners and latest editions of the charts for controlling depths.)

(7) **York Spit Channel** begins 11 miles above the Capes and extends northward another 11 miles. The current velocity is about 1.0 knot in the channel.

Chart 12222

(8) **Horseshoe** is a shoal that extends several miles out from the shore between Old Point Comfort and Back River, 6.5 miles to the northward. The southern edge of the shoal lies along the north side of the main channel into Hampton Roads; the eastern half has depths of 13 to 18 feet, and the western half, 6 to 11 feet. Local vessels drawing 7 feet or less use the lanes through the fishtraps on the Horseshoe when navigating between Hampton Roads and York River or Mobjack Bay. The tidal current velocity is 0.5 knot over the Horseshoe and is rotary, turning clockwise.

(9) A naval **restricted area** extends eastward and southward of Old Point Comfort, and a **danger zone** of the **Fort Monroe** firing range extends to seaward from a point 1.5 miles northward of the point. (See **334.350 and 334.360**, chapter 2, for limits and regulations, respectively.)

(10) **Salt Ponds** is entered through a privately dredged inlet on the west side of Chesapeake Bay about 4 miles north of Old Point Comfort. The entrance is marked by private aids. In 1980, the controlling depth just inside the inlet was 6½ feet. Sand dunes protect Salt Ponds from the open waters of the bay. A marina is on the east and west sides of Salt Ponds.

(11) **Back River** empties into the west side of Chesapeake Bay 7 miles northward of Old Point Comfort between **Northend Point** and **Plumtree Island**, 1 mile to the northward. A firing and bombing **danger zone** is north of the entrance to Back River. (See **334.340**, chapter 2, for limits and regulations.) The approach to Back River, from southeastward through a lane in the fishtraps, is well marked. The mean range of tide is 2.3 feet at the entrance.

(12) About 2 miles above the mouth, Back River divides into **Northwest Branch** and **Southwest Branch,** which have general depths of 2 to 5 feet. The **Langley Field** hangars, water tanks, and wind tunnel back of Willoughby Point, between the branches, can be seen for many miles. In 1979, the marked channel that extends 3 miles from the mouth of the river to the Langley Field fuel pier on the west side of Southwest Branch had a

controlling depth of about 12 feet. In August 1982, shoaling to 3 feet was reported on the south side of the channel about 150 yards east-northeastward of Light 9. In December 1985, a bare shoal was reported to extend about 60 feet north of Light 9. The Langley Yacht Club, just south of the fuel pier, has gasoline and supplies; the depth in the basin is about 4 feet. A marked side channel to the Langley Field boathouse, on the south side of Northwest Branch 3 miles above the river mouth, has a controlling depth of about 7 feet.

(13) A **restricted area** extends along the shoreline of Langley Air Force Base on the west shore of southwest Branch and Northwest Branch. (See **334.275,** chapter 2, for limits and regulations.)

(14) A marina on the south side of Back River, just east of **Windmill Point** 1 mile above the mouth, has gasoline, diesel fuel, and supplies; marine railways can handle boats up to 40 feet. The reported depth to the marina is about 6½ feet.

(15) **Harris River**, on the south side of Back River west of **Windmill Point,** has depths of 6 feet in a marked channel that leads to a marina inside **Stony Point.** Some supplies, gasoline, diesel fuel, and berths are available. Repairs can be made; mobile lift, 20 tons.

(16) **Messick Poin**t is on the north side of Back River, 1.5 miles above the mouth. A dredged channel leads northward of Back River Channel Daybeacon 16 to a small-craft facility and turning basin on the east side of Messick Point. In December 2007, the controlling depth was 5.3 feet.

(17) The side-by-side highway and rail bridges over Southwest Branch, 1.5 miles above Willoughby Point, have fixed spans with a minimum width of 20 feet and a clearance of 6 feet.

(18) Between Back River and Poquoson River are shoals that extend 1 to 3 miles from shore; on the shoals are scattered oyster rocks that bare, or nearly bare, at low water. Strangers should stay outside the 6-foot curve. A buoyed lane, about 0.6 mile outside the 6-foot curve, extends northwestward through a fishtrap area from about 2.4 miles east-southeast of Northend Point to about 1.6 miles west-southwest of York Spit Light. In September 1980, poles were reported in the lane in about 37°09'54"N., 76°16'21"W., 37°10'45"N., 76°16'42"W., and 37°10'51"N., 76°16'48"W.

Chart 12238

(19) **Poquoson River**, which empties into Chesapeake Bay 5 miles northwest of Back River, has depths of 7 feet to the village of **Yorkville,** on the west side 2.5 miles above the mouth. The marked approach to the river is from northeastward and is clear of fishtraps for a width of 400 yards. There is a light on either side of the entrance. The mean range of tide is 2.4 feet.

(20) **Bennett Creek**, on the southeast side of the Poquoson River mouth, has depths of 6 feet or more for 1.3 miles to **Easton Cove,** which makes off to the eastward. The channel is marked as far as White House Cove, on the west side of Bennett Creek 0.8 mile above the mouth; the channel in White House Cove is marked by daybeacons and has depths of 8 to 2 feet for 0.7 mile above the mouth. A 50-ton mobile hoist at the basin on the north side of the cove entrance can handle boats for hull repairs. Gasoline and diesel fuel are available at a marina near the south end of the cove. A "no wake" **speed limit** is in effect in White House Cove.

(21) **Chisman Creek**, on the north side of the Poquoson River mouth, has depths of 9 feet or more in a narrow channel for 1.3 miles above its entrance. There are boatyards on the south side, 1 mile above the entrance; gasoline is available; the largest marine railway can handle boats up to 100 feet for hull repairs. The creek is marked by daybeacons and a light.

(22) **Back Creek**, 1.5 miles south of York River, has depths of 7 feet for 2 miles. The entrance is marked by lights and daybeacons. The creek is used by oystering and fishing boats. A State-owned wharf on the south side, 1.4 miles above the mouth, has a depth of about 9 feet at the face. Gasoline, diesel fuel, limited berthing, and some supplies are available at a marina on the south side, 1.8 miles above the mouth; repairs can be made.

(23) Passage northward from Back Creek to York River can be made through the **Thorofare,** about 0.8 mile from the mouth of Back Creek. In October 2003, the dredged channel, marked by lights and daybeacons, had a controlling depth of 2.9 feet, except for shoaling to 1.7 feet in the east half between Daybeacons 12 and 13.

Charts 12238, 12241, 12243

(24) **York River** formed by the junction of Mattaponi and Pamunkey Rivers 29 miles above the mouth, is 15 miles northward of Old Point Comfort and 26 miles by the main channel from Cape Henry. Traffic on York River consists chiefly of pulpwood, petroleum products, military supplies, and shellfish. Drafts of vessels using the river are mostly 18 feet or less, but deep-draft vessels navigate the lower reaches.

(25) York River has a broad and fairly straight channel, is well marked and easily followed. Depths are as much as 80 feet off Yorktown. In April 2003, the controlling depth in the dredged sections of the river was 16.6 feet to West Point. With the exception of the naval areas

described later, vessels can anchor in the wider parts of York River channel.

(26) The mean range of tide is 2.2 feet at the entrance to York River, 2.4 feet at Yorktown, and 2.8 feet at West Point. The currents in York River follow the general direction of the channel except in the narrowest parts where there is a tendency to set a vessel onto the shoals. The velocity varies throughout the river; the times of slack water and strengths of current are later going up the river. The normal conditions are subject to change by winds and freshets.

Ice

(27) **Ice** sometimes interferes with navigation of York River for short periods during severe winters, but in ordinary winters there is no interruption below West Point.

(28) **Caution**.–Mariners transiting the York River are advised to use caution in the vicinity of the Goodwin Islands. The Virginia Pilots periodically anchor large tankers in about 37°14'06"N., 076°25'25"W. These vessels may be as large as 900 feet in length. The Virginia Pilot Tower may be contacted on VHF-FM channel 11 for further information. Ships and craft underway in York River are to proceed at reduced speed and exercise extreme caution in order to reduce generated water motion and to prevent damage to the Virginia Institute of Marine Science equipment and facilities located downstream from the Coleman Memorial Bridge, near Gloucester Point, ships and craft loading volatile fuels at the Giant Industries refinery pier, and other craft and property close to the shores of the river. In no instance should the **speed** of ships underway upriver from the Tue Marshes Light exceed 12 knots.

(29) **Chesapeake Bay National Estuarine Research Reserve** is located along the York River and includes the Goodwin Islands, Catlett Islands. Taskinas Creek and Sweet Hall Marsh. (See **MPA 11-1**, Appendix C, for additional information.)

Pilotage, York River

(30) Pilotage on the York River is compulsory for all foreign vessels and for U.S. vessels under register in the foreign trade. Pilotage is optional for U.S. vessels in the coastwise trade which have on board a pilot licensed by the Federal Government to operate in these waters.

(31) The Chesapeake and Interstate Pilots Association offers pilot services to U.S. vessels, engaged in the coastwise trade, and public vessels to Yorktown. Arrangements for pilots may be made through ships' agents or the pilot office in Norfolk (telephone, 757-855-2733). Pilots will meet vessels entering from sea at Cape Henry (discussed in chapter 9), and will meet a vessel at its port if it is on the Chesapeake Bay and its tributaries or Delaware Bay and River and provide pilot services directly to the York River. The Virginia Pilots Association offers pilotage to all vessels. Pilot service above Cheatham Annex is available only during daylight. (See Pilotage, chapters 3 and 9.)

Supplies

(32) **Supplies** are available at Yorktown, West Point, and at other places described in this chapter.

Repairs

(33) Repairs can be made to small vessels in Perrin River, Sarah Creek, Wormley Creek, and at other places.

Chart 12238

(34) **York Spit** extends outward along the northeast side of the York River approach channel for 7 miles from Guinea Marshes; the inner half of the spit has depths of 1 to 6 feet, and the outer half 10 to 20 feet.

(35) **York Spit Light** (37°12'35"N., 76°15'15"W.), 30 feet above the water, is shown from a multi-pile structure with a red and white diamond-shaped daymark, in depths of 11 feet near the outer end of the spit. The light is 19.8 miles above Cape Charles.

(36) The York River entrance channel is well marked and extends from about 7 miles southeast of York Spit Light to about 3 miles northwest of the light. A Federal project provides for a depth of 37 feet in the entrance channel. (See Notice to Mariners and latest editions of the charts for controlling depths). There are natural depths in excess of 37 feet from the north end of the dredged section to the naval installation 5 miles above Yorktown bridge.

(37) About 1.5 miles northwest of York Spit Light, a buoyed lane extends northeastward through an area where submerged fishtraps are commonly found. The lane has depths of 15 feet or more and can be used by medium-draft vessels approaching York River from northward.

(38) The Swash Channel, which bisects York Spit about 5 miles northwest of York Spit Light has a controlling depth of about 7 feet; it is marked by a light and daybeacons. The channel shows up well on a bright day.

Chart 12241

(39) The entrance to York River is between **Tue Point** and **Guinea Marshes**, 25.9 miles above the Virginia Capes.

(40) **Tue Marshes Light** (37°14'07"N., 76° 23'11"W.), 41 feet above the water, is shown from a platform with a green and white diamond-shaped daymark, in depths of 4 feet 0.3 mile north of Tue Point.

(41) In May 2002, a submerged piling was about 600 yards east-northeast of Tue Marshes Light in about 37°14'16"N., 76°22'47"W. Another submerged piling was about 700 yards west-northwest of the light in about 37°14'09"N., 76°23'35"W.

(42) **Perrin River**, on the north side of York River 2 miles above the mouth, has depths of 6 feet or more in the approach and through a narrow marked channel to the wharf at **Perrin,** on the north side 0.3 mile above the entrance. A marina on the east side has gasoline, diesel fuel, some supplies, and a 20-ton mobile hoist; hull and engine repairs can be made. Gasoline and diesel fuel can be obtained at several of the oysterhouse wharves, on the east side of the river entrance; depths of 4 to 7 feet are alongside the wharves.

(43) The Amoco offshore pier, on the south side of York River 3.3 miles above the mouth, has reported depths of 40 feet along the 1,240-foot outer face. The pier, connected to shore by a 0.5 mile long catwalk, is marked at its easterly end by a private light.

(44) The intake for an electric powerplant, on the south side of the river 4.2 miles above the mouth, is marked by two lights.

(45) **Wormley Creek** and **West Branch** have a common entrance on the south side of York River, 4.5 miles above the mouth; a light marks the entrance. A privately dredged channel leads through the entrance to the Coast Guard Reserve Training Center basin and pier on the north side of West Branch 0.8 mile above the entrance light. In November 2000, the channel marked by a light, buoys and daybeacons, had a controlling depth of 4.8 feet to the Coast Guard Basin, thence 5 feet in the northern half and 2.6 to 5 feet in the southern half of the basin, except for shoaling to 1.5 feet along the western edge. In February 2008, it was reported that the channel to the Coast Guard Basin had a controlling depth of 5 feet at or near the centerline. Local knowledge is advised. Gasoline, diesel fuel, berths, water, electricity, a 37-ton mobile lift, and marine supplies can be obtained at a marina on the east side of Wormley Creek just above the entrance; hull and engine repairs can be made.

(46) The Coast Guard T-pier (37°13.6'N., 76°28.7'W.), on the south side of York River 5 miles above the mouth, has depths of 30 feet reported at the outer end.

(47) A **naval explosives handling berth** is northward of the Coast Guard pier. (See **334.260,** chapter 2, for limits and regulations). In May 2002, an obstruction was within the naval explosives handling berth 1150 yards northward of the Coast Guard T-pier in about 37°14'09"N., 76°28'36"W.

(48) **Sarah Creek**, on the north side of York River 6 miles above the mouth, has depths of 7 feet through the marked entrance channel and for about 0.8 mile up both its branches. A large yacht haven, on the west side 0.3 mile above the entrance, has supplies, gasoline, diesel fuel, a 35-ton lift, a pumpout station and numerous berths. Repairs can be made at a boatyard 0.3 mile up Northwest Branch; marine railway, 76 feet; largest lift, 60 tons.

(49) A fixed highway bridge with a clearance of 6 feet and channel width of 47 feet crosses Northwest Branch about 0.8 mile above its mouth.

(50) **Yorktown**, the historic Revolutionary War town, is on the southwest side of York River 6.7 miles above the mouth. High on the bluff in the southerly part is the **Yorktown Monument**, and a group of buildings is prominent on the shore behind the wharves. The main part of the town is not visible from the river. **George P. Coleman Memorial Bridge,** from Yorktown to Gloucester Point, has twin spans with clearance of 60 feet; the two spans open clockwise simultaneously. The bridgetender monitors VHF-FM channel 13; call sign KQ-7166. (See **117.1 through 117.49 and 117.1025,** chapter 2, for drawbridge regulations.)

(51) The waterfront in Yorktown was completely rebuilt in 2005. It has two floating dock piers which can handle vessels up to 53 feet in length. Depths of 10 feet are reported to be alongside the dock piers. A pumpout station is available. There is no fuel available with a pumpout facility available. The dockmaster can be contacted on VHF-FM Channel 16 or by writing; Dockmaster, 425 Waterstreet, P.O. Box 219, Yorktown, VA 23690.

(52) **Gloucester Point** is a village at the northeast end of Coleman Bridge. There are several piers and buildings on the low point, and the red brick building of the Virginia Institute of Marine Science is about 500 yards northeastward. The long T-head pier (37°14'46"N., 76°30'02"W.), owned by the Institute, has reported depths of 8 feet at the face. A shorter pier of the Institute is about 150 yards to the northward; depths of 6 feet are reported at the face.

(53) The **Yorktown Naval Weapons Station** piers on the southwest side of York River, 8 miles above the mouth, have depths of about 36 to 39 feet at their outer ends. In October 2007, an obstruction was reported at about 37°15'20"N., 76°31'47"W. with a least depth of 31 feet. A **prohibited area** and a **restricted area** for mine service testing are off the piers. (See **334.260,** chapter 2, for limits and regulations.) A **naval anchorage** begins off the Naval Weapons Station piers and extends upriver

about 4 miles. (See **110.166,** chapter 2, for limits and regulations.)

(54) The **Naval Supply Center** piers at **Cheatham Annex Depot**, on the southwest side of York River 11.5 miles above the mouth, have reported depths of 22 feet at the southeasterly T-pier, and 20 feet alongside the inside face and 21.5 feet alongside the outside face of the northwesterly L-pier; greater depths are close off the outside faces of both piers. The piers are within a **naval restricted area.** (See **334.270,** chapter 2, for limits and regulations.)

Chart 12243

(55) **Queen Creek** (37°18.1'N., 76°36.9'W.), on the southwest side of York River 13 miles above the mouth, has depths of about 5 feet with local knowledge through a marked channel across the flats at the entrance and deeper water through a narrow channel inside for 2.7 miles to **Hawtree Landing**. The channel inside is marked by daybeacons to a point about 0.6 mile below Hawtree Landing. Stakes on either side of the entrance mark the limits of the State's experimental oyster beds.

(56) **Aberdeen Creek**, on the northeast side of York River 14 miles above the mouth, has a marked dredged channel leading to a turning basin and public landing 0.4 mile above the entrance. In November 2004, the midchannel controlling depth was 1.3 feet, thence depths of 1 to 2 feet in the basin. Gasoline and diesel fuel are available at a seafood company wharf just north of the public landing.

(57) The ruins of a long T-head pier are at **Clay Bank,** on the northeast side of York River 15 miles above the mouth.

(58) **Poropotank Bay**, on the northeast side of York River 22 miles above the mouth, has depths of 5 feet at the entrance; the best water favors the eastern side which is marked by bush stakes. From the entrance, depths of about 5 feet can be carried 4 miles through **Morris Bay** and **Poropotank River** to **Miller Landing.** There are several other landings along the river. The channel is usually marked by bush stakes, but is crooked and narrow in places and difficult to navigate without local knowledge.

(59) **West Point**, at the junction of Mattaponi and Pamunkey Rivers 29 miles above the mouth of York River, has waterborne commerce in pulpwood, paper products, and petroleum. The town is the terminus of a Southern Railway branch line. The pulp, paper, and paperboard wharves just above the Eltham Bridge have reported depths of 16 feet alongside.

(60) At West Point, the maximum current velocity is 0.8 knots on the flood in Mattaponi River, and 0.9 knots on the ebb in Pamunkey River. Broken-off piling extends off the south side of West Point.

(61) A public pier is at the southeast end of West Point, at the mouth of Mattaponi River. Gasoline is available at an oil wharf with depths of 5 to 15 feet alongside 0.4 mile south of the Lord Delaware Bridge; diesel fuel can be delivered by truck. An oil pier 0.2 mile above the bridge has depths of 18 feet alongside. Supplies can be obtained in town.

Chart 12244

(62) **Mattaponi River**, which empties into York River eastward of West Point (37°31.7'N., 76°47.7'W.), is one of two tributaries that combine to form York River. Traffic on Mattaponi River consists chiefly of pulpwood. Drafts of vessels using the river above West Point usually do not exceed 10 feet.

(63) Controlling depths in Mattaponi River are as follows: 12 feet to **Courthouse Landing,** 13 miles above the mouth; thence 9 feet for 10 miles to **Locust Grove;** and thence 2 feet to **Aylett,** 32 miles above the mouth.

(64) The channel in Mattaponi River is unmarked and is difficult to navigate without local knowledge. The mean range of tide is 2.8 feet at West Point and 3.9 feet at Walkerton. Freshets occur at irregular intervals, being more severe in March and April, and have reached a height of 17 feet above low water at Aylett, though this is exceptional; the freshet rise is negligible at and below West Point.

(65) The Lord Delaware Bridge over Mattaponi River at West Point has a swing span with a clearance of 12 feet; the eastern opening is used as there are no fenders on the western opening. (See **117.1 through 117.59 and 117.1015,** chapter 2, for drawbridge regulations.) Overhead power cables about 1.8 and 13 miles above the mouth have clearances of 62 feet and 90 feet, respectively.

(66) The **Walkerton** highway bridge, 24.5 miles above the mouth of Mattaponi River, has a fixed span with a clearance of 20 feet. Two fixed bridges cross the river at Aylett, 32 miles above the mouth; minimum clearance is 20 feet. The minimum clearance of the overhead power cables between the bridges at Walkerton and Aylett is 42 feet.

(67) **Pamunkey River**, the westerly of the two tributaries that form York River, has many landings along its banks. Traffic on the river consists chiefly of pulpwood; there is a grain elevator platform at **Port Richmond,** 2 miles above the mouth. Vessels with drafts up to 12 feet navigate the river to Port Richmond.

(68) Controlling depths in Pamunkey River are about 12 feet from the mouth to **Cumberland Landing,** 20 miles above the mouth, thence 8 feet to **White House,** 28 miles above the mouth, and 4 feet to the Newcastle Bridges 46 miles above the mouth. The mean range of tide is 2.7 feet at **Sweet Hall Landing,** 15 miles above the mouth, and 3.3 feet at **Northbury,** 35 miles above the mouth. Freshets occur at irregular intervals, being more severe in March and April.

(69) Pamunkey River is easy to navigate as far as **Brickhouse Landing,** 16 miles above the mouth; farther up, navigation is difficult without local knowledge. Freshwater is available at some of the landings, and the river water is fresh above Cumberland Landing. Several narrow cutoffs have depths enough for small boats, but their use requires local knowledge. Above **Retreat,** 36 miles above the mouth, the river is covered with floating debris and snags.

(70) The Eltham Bridge over Pamunkey River at West Point has a bascule bridge with a clearance of 56 feet. The bridgetender monitors VHF-FM channel 13; call sign KQ-7168. (See **117.1 through 117.59 and 117.1023**, chapter 2, for drawbridge regulations.) Power cables crossing the river about 2 and 14.6 miles above the mouth have clearances of 60 and 90 feet, respectively. The railroad bridge at White House has a swing span with a clearance of 4 feet; the easterly opening is used. (See **117.1 through 117.49,** chapter 2, for drawbridge regulations.)

Chart 12238

(71) **Mobjack Bay**, which is entered between Guinea Marshes at the shore end of York Spit, and New Point Comfort, 4 miles east-northeastward, includes several tributaries, the most important being East, North, Ware, and Severn Rivers. The bay is obstructed by extensive shoals, but has depths of 22 feet in the entrance and 15 feet for considerable distances into the tributaries. Many of the shoals are marked by lights and buoys.

(72) The only prominent marks in the approach to Mobjack Bay are York Spit Light on the south and the white tower of the abandoned lighthouse on New Point Comfort on the north. The approach channel extends between fishtrap buoys; numerous crab pots exist shoreward of these buoys. Good anchorage, sheltered from all but southerly and southeasterly winds, can be found in the bay. Small craft find safe anchorage in the bight westward of New Point Comfort and in the rivers and creeks. The mean range of tide is 2.3 feet at the entrance.

(73) **New Point Comfort** is the south end of a low, partly wooded island which is separated from the mainland by **Deep Creek,** a crooked and unmarked natural channel. The pile remains of **Bayside Wharf,** visible at high water 1.5 miles northwest of New Point Comfort, extend about 0.4 mile channelward.

(74) **Davis Creek**, 1.6 miles northwest of New Point Comfort, has a marked dredged channel leading to a public landing in the western arm about 0.8 mile above the entrance. In August 2006, the controlling depth was 1.2 feet from the entrance to the turning basin, thence 9.2 feet in the basin. Depths of 10 feet are alongside the face of the public landing. Several wharves are on the shore in the upper part of the creek; gasoline and diesel fuel are available.

(75) **Pepper Creek**, 3 miles northwest of New Point Comfort, has depths of 4 feet for about 0.7 mile above the entrance. The approach is marked by daybeacons.

(76) **East River**, 5 miles northwest of New Point Comfort, has a marked narrow channel with depths of 10 feet for 3.5 miles above the entrance, and thence 4 feet for another 2 miles to the head. Shoals, sometimes marked by bush stakes, extend for some distance off many of the points above the entrance, but the midchannel is clear.

(77) **Diggs Wharf**, on the east side of East River just inside the entrance, is in ruins. There are no commercial facilities at **Mobjack** opposite Diggs Wharf.

(78) **Williams Wharf**, on the northeast side of East River about 2.5 miles above the entrance, has reported depths of 10 feet alongside the abandoned oysterhouse bulkhead. A boatyard on the western shore opposite Williams Wharf has a 50-foot marine railway; repairs can be made.

(79) **North River**, which empties into the head of Mobjack Bay from northward, is wide, but has long shoals making off from many of the points. The channel has depths of 12 feet for 4 miles and is well marked; depths of 7 feet can be carried 2 miles farther. **Blackwater Creek** empties into North River 3 miles above the mouth. The entrance is marked by a light and depths of 7 feet can be carried for 0.5 mile to a boatyard and a marina just inside the entrance of **Greenmansion Cove;** gasoline, diesel fuel, and some supplies are available. The depth at the face of the dock is 4½ feet. Hull and engine repairs can be made; marine railway, 42 feet; lift capacity, 5 tons.

(80) **Ware River**, which flows into the head of Mobjack Bay from northwestward, has depths of 15 feet to the mouth of **Wilson Creek**, on the west side 3 miles above the entrance, and 7 feet for another 2 miles. Long shoals, some of which are marked by lights and daybeacons, extend off many of the points. The only commercial landing on Ware River is the J. C. Brown Co. wharf, on the east side about 4 miles above the entrance, which has a depth of about 5 feet off the end;

gasoline is available. **Schley**, 0.5 mile inland from the wharf, has a store.

(81) **Severn River**, on the west side of Mobjack Bay, has depths of 18 feet to the junction with **Northwest Branch** and **Southwest Branch,** 8 feet for 1.3 miles in Southwest Branch, and 8 feet for 1.8 miles in Northwest Branch. The most prominent shoals are marked by lights or daybeacons.

(82) A wharf at **Glass,** on the north side of Southwest Branch 1.1 miles above the fork, has depths of about 7 feet to the outer end. Mariners are advised to stay within the marked channel to avoid the 1-foot shoal extending from the point 0.4 mile eastward of the wharf. Gasoline, diesel fuel, and marine supplies are available. Hull and engine repairs can be made; marine railway, 60 feet. A marina on the west side of **Rowes Creek,** 0.5 mile southeast of the Glass Wharf, has gasoline, diesel fuel, marine supplies, and a 10-ton mobile hoist.

(83) **Browns Bay**, 1 mile south of Severn River, is marked by lights at the entrance and by bush stakes inside. Gasoline and diesel fuel are available at a wharf, with a depth of 4 feet at the end, at the head of the bay. A store is at **Severn,** about 1 mile westward of the wharf.

(84) **Dyer Creek**, which empties into Chesapeake Bay 2 miles north of New Point Comfort, has depths of 3 feet in the entrance and 4 to 5 feet inside. The creek is bush-staked, but local knowledge is essential. Overhead power cables across the creek have a least clearance of 17 feet.

(85) **Horn Harbor** is entered through a dredged channel marked by lights 2.4 miles northward of New Point Comfort; lights and daybeacons mark the channel in the upper part of the harbor. In August 2006, the controlling depth was 5.5 feet (6.5 feet at midchannel) in the dredged channel; thence in 1997, about 5 feet to a point 3.5 miles above the entrance. A cluster of submerged piling of a former fishhouse is on the east side of the channel about 1 mile above the entrance. Traffic consists chiefly of fish, shellfish, and pleasure craft.

(86) The ruins of a fish wharf are at **New Point,** 0.7 mile above the Horn Harbor entrance. A marina, 3.5 miles above the entrance, has berths with electricity, gasoline, diesel fuel, water, ice, a pump-out station, a 15-ton lift, and some supplies. A 50-foot marine railway can haul out boats for repairs.

(87) **Winter Harbor** is entered through a dredged channel marked by lights and daybeacons 4.3 miles north-northeast of New Point Comfort. The channel leads to a turning basin and public landing 1.5 miles above the entrance. In February 2007, the controlling depth in the channel to the turning basin has shoaled to 0.7 foot, with 2.5 to 5.9 feet in the turning basin. Commerce in the harbor consists chiefly of fish and shellfish.

(88) **Wolf Trap**, the area of broken ground 6 miles northward of New Point Comfort, has numerous shoal spots 5 to 10 feet deep which extend as much as 3 miles from the western shore of Chesapeake Bay. All the shoal area lies in the fishtrap limits. **Wolf Trap Light** (37°23'26"N., 76°11'22"W.), 52 feet above the water, is shown from an octagonal red-brick dwelling with a square tower on a brown cylinder, in depths of 12 feet near the outer end of the shoal area. The light is 5 miles due west of a point in the main channel 28.8 miles above the Capes.

Chart 12225

(89) The **danger zone** of a naval firing range begins about 4 miles north-northeastward of Wolf Trap Light and extends northward to Tangier Sound Light, just south of **Tangier Island.** (See **334.220**, chapter 2, for limits and regulations.) The danger zone also contains a designated hurricane anchorage for shallow and deep-draft naval vessels. During hurricane warnings, naval ships may be anchored in the fairway; caution is advised.

(90) The ruins of a former degaussing range control tower, 6.2 miles eastward of Wolf Trap Light, are covered 3½ feet. A lighted bell buoy, 150 yards to westward, marks the obstruction.

Chart 12235

(91) **Piankatank Rive**r is 11 miles northward of Wolf Trap Light. The entrance is between **Cherry Point** (37°31.0'N., 76°17.8'W.), at the north end of **Gwynn Island,** and **Stingray Point,** 2.5 miles to the northward. The entrance point is 45.3 miles above the Virginia Capes. **Stingray Point Light** (37°33'41"N., 76°16'22"W.), 34 feet above the water, is shown from a platform with a green and white diamond-shaped daymark on piles in depths of 6 feet 1.3 miles east of the point.

(92) Traffic on Piankatank River consists of fish, shellfish, and shells. Drafts of vessels using the river are mostly 6 feet, but drafts up to 11 feet are on record. The river has depths of about 18 feet in the approach from northeastward through a buoyed lane in the fishtraps, 16 feet or more to the fixed bridge 9 miles above the mouth, and 7 feet to Freeport, 13.5 miles above the mouth. Lights and buoys mark the lower 6 miles of the river channel.

(93) The mean range of tide is 1.2 feet in the lower part of Piankatank River. During severe winters, the river is sometimes closed by ice for short periods. Hull repairs can be made to medium-size vessels in Fishing Bay; gasoline and diesel fuel are available.

(94) **Jackson Creek**, on the north side of Piankatank River 1 mile above the mouth, has a dredged entrance channel marked by a light and daybeacons. In August 2006, the controlling depth was 4.3 feet in the right half of the channel with shoaling to 1.7 feet in the left half to Daybeacon 7, thence 5.5 feet (8.0 feet at midchannel) to Daybeacon 10; inside Jackson Creek, above Daybeacon 10, natural depths of about 8 to 9 feet were available in the middle of the creek channel. Stakes usually define the channel edges. **Deltaville** is at the head of the north arm.

(95) There is a marina along Jackson Creek where fuel, supplies, and berths can be obtained. The largest lift can handle boats to 50 tons for hull and engine repairs.

(96) **Hills Bay**, on the south side of Piankatank River 2 miles above the mouth, has general depths of 14 to 20 feet, and is the approach to Queens Creek and Milford Haven.

(97) **Queens Creek**, at the head of Hills Bay, is entered by a dredged channel that leads across the bar at the entrance and thence to a turning basin about 0.6 mile above the entrance. In November 2007, the controlling depths were 1.7 feet in the left half of the entrance channel and 0.6 foot in the right half of the entrance channel to Daybeacon 8, thence 6.0 feet to the basin, thence 6 feet in the basin. The channel across the bar and to the turning basin is marked by lights and daybeacons. A few broken piles that remain of the wooden jetty on the north side of the entrance are marked at the outer end by a daybeacon.

(98) **Milford Haven**, the strait between Gwynn Island and the mainland to the southwestward, is entered from the head of Hills Bay. Traffic on the waterway consists chiefly of fish and shellfish carried in vessels drawing up to 7 feet. A marked channel with a controlling depth of 1.3 feet in the left half and 8.1 feet in the right half of the channel, in May 2007, leads from Hills Bay to natural depths of 15 to 8 feet in Milford Haven.

(99) The jetty on **Narrows Point,** at the north side of the Hills Bay entrance to Milford Haven, is marked by a light. The highway bridge from the mainland to Gwynn Island has a swing span with a clearance of 12 feet in the north opening. (See **117.1 through 117.49,** chapter 2, for drawbridge regulations.)

(100) A marina on Gwynn Island just west of the bridge has gasoline, diesel fuel, supplies, and berths; hull and engine repairs can be made; lift, 40 tons, railway, 60-foot long. A public landing pier is on Gwynn Island just east of the bridge. **Milford Haven Coast Guard Station** is 0.2 mile east of the south end of the bridge.

(101) **Callis Wharf** at **Grimstead,** on the Gwynn Island side of Milford Haven 0.7 mile from the jetty, has depths of 9 feet at the face. Gasoline, diesel fuel, and some other supplies are available. A marine railway on the southeast side of the entrance to **Edwards Creek,** 0.5 mile eastward of Callis Wharf, can handle boats up to 35 feet for hull repairs.

(102) A wharf at **Cricket Hill,** on the west side of **Lanes Creek**, opposite Edwards Creek, has gasoline, diesel fuel, and ice; depths of 8 feet are reported at the face.

(103) Milford Haven can also be entered from Chesapeake Bay at the south end of Gwynn Island. This passage, known as **The Hole in the Wall** has a reported controlling depth of about 4 feet and is used by small local boats, but is exposed to heavy seas. The passage is marked by lights, daybeacons, and a buoy. Local knowledge is recommended when transiting the passage.

(104) A fish haven, marked by a private buoy, is about 1.3 miles northeast of the entrance to Hole in the Wall.

(105) **Stutts Creek** enters the southern part of Milford Haven from the southwestward. There are depths of 6 feet or more from Milford Haven to a yacht club on the north side of Stutts Creek, 1.8 miles above the mouth; gasoline and some supplies can be obtained.

(106) **Fishing Bay**, on the north side of Piankatank River 4 miles above the mouth, has depths of 12 to 30 feet and provides good protection from north and east winds. On the east side of the bay is narrow 1-mile-long **Stove Point Neck.** A private 700-foot-long pier with a depth of 8 feet at the outer end extends westward from the middle of the neck. Repairs can be made at boatyards at the north end of the bay; largest marine railway, 150 feet; lift 50 tons. Gasoline, diesel fuel, and supplies are available.

(107) **Moore Creek**, just westward of Fishing Bay, has a privately dredged and maintained channel which is marked by daybeacons and protected by jetties on either side of the channel. In 2002, the controlling depth was reported to be 6½ feet.

(108) **Cobbs Creek** is on the south side of Piankatank River, 7 miles above the mouth. A channel marked with daybeacons at the entrance and with reported depths of about 6 feet leads to a marina 0.2 mile inside on the west side of the creek. Gasoline, diesel fuel, supplies, and berths are available; repairs can be made; 40-foot marine railway. An overhead power cable with a clearance of 50 feet crosses the creek about 0.4 mile above the mouth. In August 2000, the overhead cable was reported not found.

(109) **Dixie**, a village on the south side of Piankatank River, is 9 miles above the mouth; gasoline is available in the town. The former oil wharf has depths of about 10 feet off its outer end. The fixed highway bridge just west of the village has a clearance of 43 feet; an overhead power cable close westward of the bridge has a clearance of 68 feet.

(110) About 5.7 miles above the fixed highway bridge, an overhead power cable with a clearance of 64 feet crosses the river.

Charts 12235, 12237

(111) **Rappahannock River** flows into the west side of Chesapeake Bay 45.7 miles by channel from the Virginia Capes. Fredericksburg, 93 miles above the mouth, is the head of practical navigation.

(112) Traffic on the river consists chiefly of pulpwood, shellfish and shells, chemicals, and some sand and gravel. Drafts of vessels using the river seldom exceed 11 feet and are mostly 6 feet or less.

(113) **Mileages** on Rappahannock River, such as Mile 15N and Mile 32W, are the nautical miles above the midchannel point on a line drawn from Stingray Point to Windmill Point. The letters N, S, E, or W following the numbers denote by compass points the side of the river where each feature is located.

(114) The river has natural depths of 15 feet or more to the bridge at Tappahannock, 37.4 miles above the mouth. Above this point, a Federal project provides for dredging of the bars to provide a channel 12 feet deep to Fredericksburg. In 1955-December 1977, the controlling depths were 8½ feet from the bridge at Tappahannock to the bridge at Port Royal, Mile 68.3, thence 9 feet to the Fredericksburg Bar, Mile 93.0, thence 6½ feet to Steamboat Wharf and 4 feet to the Standard Oil Co. Wharf, Miles 93.1 and 93.2, respectively, at Fredericksburg.

(115) In general, vessels can anchor anywhere near the channel of Rappahannock River where the bottom is soft and the depth suitable. Deep-draft vessels will find good anchorage 3 to 5 miles from the mouth. Carter and Urbanna Creeks are used extensively as harbors by small craft.

(116) The channel from the mouth of Rappahannock River to Tappahannock is comparatively straight, but gradually decreases in width and leads between shoals that make out from both banks. The principal dangers are marked. Strangers can take a draft of 10 feet to Tappahannock by day with the aid of the chart, but navigation of the narrow, crooked channel farther up requires local knowledge. There are rocks in places on both sides of the channel for 4 miles below Fredericksburg, and the shores should be given a good berth. Strangers can safely carry a draft of 5 feet to Fredericksburg with the aid of the chart.

Tide

(117) The mean range of **tide** is 1.2 feet at the mouth of Rappahannock River, 1.7 feet at Tappahannock, and 2.8 feet at Fredericksburg. The river water is fresh above Port Royal.

Currents

(118) The **currents** follow the general direction of the channel. The velocities throughout the river are usually weak, averaging less than 1 knot at the entrance to 1.4 knots at Tappahannock. Times of slack water and strength of current become later going upriver. These normal conditions are subject to change by winds and changes in drainage flow.

Ice

(119) During severe winters, **ice** closes the river nearly to Tappahannock, but in ordinary winters the channels are usually kept open by the river traffic. Ice sufficient to interfere with navigation of small craft will usually be encountered in January and February, particularly above Port Royal.

Freshets

(120) **Freshets** occur during the spring and fall, but are of short duration and ordinarily are not dangerous to shipping. The highest level on record was 33 feet above low water at Fredericksburg, but the usual height due to freshets is not more than 9 to 12 feet and only occasionally rises above the wharves. The freshet effect on the water level decreases rapidly below Fredericksburg and is ordinarily negligible 11 miles downriver.

Supplies and Repairs

(121) The principal places along Rappahannock River for supplies and small-vessel **repairs** are Broad Creek, Carter Creek, and Urbanna Creek.

Charts 12235, 12237

(122) The entrance to Rappahannock River is between Stingray Point and **Windmill Point,** 45.7 miles above the Capes. This is the **Mile 0.0** for distances on the Rappahannock. The shores on both sides of the entrance are wooded; the two lights, off Stingray and Windmill Points, are the most prominent landmarks.

(123) **Rappahannock Spit** extends southeastward from Windmill Point for about 4.5 miles, and has depths of 4 to 18 feet. **Windmill Point Light** (37°35'49"N., 76°14'10"W.), 34 feet above the water, is shown from a platform with a red and white diamond-shaped daymark, in depths of 12 feet on the spit 2.3 miles from the point.

(124) Depths of 10 feet can be carried across Rappahannock Spit anywhere outside Windmill Point Light. About 0.4 mile outside the light, a buoyed lane that

extends southwestward through the fishtraps is a short cut for lightdraft vessels approaching the river from northward.

(125) A 6-foot marked channel leads to a marina basin on the south side of **Fleets Island** west of Windmill Point. Gasoline, diesel fuel, berths, electricity, sewage pump-out, and a launching ramp are available.

(126) **Broad Creek**, Mile 0.7S, is used by oystermen, fishing boats, and yachts. A dredged entrance channel, marked by a light, buoys, and daybeacons, leads from Rappahannock River to natural depths of 7 to 5 feet inside the creek. In October 2007, the controlling depth was 2.9 feet (5.3 feet at midchannel). There are several boatyards and marinas, and a machine shop on the creek; berths, gasoline, diesel fuel, water, ice, a sewage pump-out station, and marine supplies are available. Hull and engine repairs can be made. Maximum haul–out capacities are: marine railway, 100 feet; lift, 50 tons.

(127) At Mile 5.0S, a dredged channel, marked by a light and a daybeacon, leads to a turning basin and wharf 0.5 mile eastward of **Mill Creek** entrance. In October 2002, the reported controlling depth was 8.9 feet in the channel; thence in 1974, 9 feet was in the basin.

(128) **Locklies Creek**, Mile 6.0S, has depths of about 5 feet through a marked entrance with depths decreasing to about 2 feet inside. An overhead power cable near the head has a clearance of 34 feet. There are marinas on the north and south sides near the entrance. The largest marine railway on the south side of the creek can handle craft up to 45 feet for repairs. Some marine supplies, water, ice, gasoline, diesel fuel, wet and dry storage, berthing with electricity, launching ramp, and a pump-out station are available.

(129) A dredged channel westward of Parrott Island forms an inside passage between Mill Creek and Locklies Creek. In October 2002, the channel had a reported controlling depth of 1.4 feet.

(130) An inactive fish factory and wharf with depths of 18 feet at the face are on **Cherry Point,** Mile 6.3N.

(131) A fixed highway bridge crosses the river at Mile 7.0; the channel span has a clearance of 110 feet. An overhead power cable at the bridge has a clearance of 122 feet.

(132) **Carter Creek**, Mile 8.3N, is the approach to the villages of **Weems** on the west side and **Irvington** on the east side. Traffic on the creek consists chiefly of recreational boats. Drafts using the creek seldom exceed 11 feet and are mostly 6 feet or less.

(133) In February 2005, the controlling depth in Carter Creek was 15 feet at midchannel in the entrance channel, thence depths of 7.1 to 12.0 feet at midchannel in Eastern Branch to the wharves at Irvington. Depths of about 6 feet have been reported in **Carter Cove,** the western branch. The entrance is marked by lights and daybeacons. The mean range of tide is 1.4 feet.

(134) There are several oysterhouses and yacht facilities in Carter Creek. Most vessels go alongside the wharves with depths of about 8 feet, but the creek also is used as an anchorage. (See the small-craft facilities tabulation on chart 12237 for services and supplies available.)

(135) **Corrotoman River**, Mile 10.0N, has depths of 14 feet or more for 4 miles to the junction of Eastern and Western Branches. The river channel is obstructed by shoal spits and middle grounds, but the principal shoals as far as the fork, and for 0.5 mile above in Western Branch, are marked. The mean range of tide is 1.3 feet in the river.

(136) **Whitehouse Creek**, on the west side of Corrotoman River 0.8 mile above the mouth, has depths of 7 feet to the landing at **Bertrand,** on the north side 0.5 mile from the entrance. **Town Creek,** on the west side of Corrotoman River 2 miles above the mouth, has depths of 2 to 4 feet. Gasoline is available near the head. **Taylor Creek,** on the east side of Corrotoman River 2.5 miles above the mouth, has depths of 2 to 5 feet in the entrance and 4 to 8 feet inside the creek.

(137) **Eastern Branch** of Corrotoman River has depths of 13 feet for 1.4 miles, thence 8 feet for 1.5 miles. **Western Branch** has depths of 12 feet or more for 2.5 miles, thence 5 feet for 2 miles.

Cable ferry

(138) A cable ferry crosses Western Branch from **Ottoman Wharf,** on the southwest side about 1.3 miles above the fork, to **Merry Point,** on the opposite side. The ferry carries passengers and vehicles. The ferry operates between the hours of 0700 and 1900, Monday through Saturday, and 0700 to dark during the winter months. When the ferry is underway, the unmarked cable is suspended about 3 feet above the water's surface, and is dropped to the bottom when not underway. **DO NOT ATTEMPT TO PASS A MOVING CABLE FERRY.**

(139) **Whiting Creek**, Mile 10.5S, is entered from Rappahanock River by a dredged channel marked by buoys. In July 2006, the controlling depth was 1.9 feet in the channel to the head of the project.

Chart 12237

(140) **Urbanna Creek**, Mile 13.8W, is used by many pleasure craft. The town of **Urbanna** is on the west bank, near the entrance.

(141) A dredged channel leads from Rappahannock River to a turning basin and wharves just below the bridge. In

August 2002, the controlling depths were 2.6 feet in the channel (7.6 feet at midchannel) and 7.9 to 8.1 feet in the basin. Above this point, depths of 6 feet or more for about 0.7 mile, and small craft can go another mile upstream. In May 1981, shoaling to 4 feet was reported about 0.4 mile above the fixed highway bridge in about 37°37'34"N., 76°34'34"W. The marked entrance is protected by a riprap jetty on the north. The mean range of tide is 1.4 feet.

(142) The wharves at Urbanna have reported depths of 4 to 12 feet alongside. Marine supplies, gasoline, diesel fuels, ice, water and berths with electricity are available. Engine, hull and electronic repairs are available. The largest mobile lift is 40 tons.

(143) The fixed highway bridge over Urbanna Creek 0.7 mile above the entrance has a 40-foot channel span with a reported clearance of 20 feet. A "no wake" **speed limit** is in effect in Urbanna Creek.

(144) **Robinson Creek**, Mile 14.1W, has depths of 5 feet through the entrance to the head. **Urbanna Wharf,** on the south side of the entrance, is about 900 feet long with depths of 6 feet at the outer end. A yacht yard is at the wharf.

(145) **Lagrange Creek**, Mile 14.8W, has depths of 7 feet in the marked entrance and 4 feet for 1 mile to a boatyard on the southwest side. A 42-foot marine railway, a machine shop, gasoline, diesel fuel, water, ice, a pump-out station, berthing; some with electric and hull and engine repairs are available. The lift capacity is 40 tons. The wharf has depths of 4 feet at the outer end.

(146) **Greenvale Creek**, Mile 16.9E, is used mostly by local fishermen. A dredged channel, marked by a light and daybeacons, leads from Rappahannock River to a landing about 0.3 mile above the mouth of the creek. In October 2007, the controlling depth was 1.6 feet in the left half of the channel and shoaling to bare in the right half of the channel from the entrance to Daybeacon 10, thence 4.9 feet to Daybeacon 14. The oyster house landings on the west side have reported depths of 5 feet alongside. Gasoline, diesel fuel, ice, water, a pump-out station, supplies, berthing; some with electric, hull, engine and electronic repairs and a 45-foot marine railway are available; lift capacity, 18 tons.

(147) **Parrotts Creek**, Mile 20.0W, has a dredged channel marked by lights and daybeacons from the entrance to the public landing at **Water View,** 0.5 mile above the mouth. In 1990-September 2002, the controlling depth was 2.6 feet (3.4 feet at midchannel). An overhead power cable across the creek just above the mouth has a clearance of 50 feet. Oyster wharves near the entrance have depths of 5 to 8 feet at their faces.

(148) **Deep Creek**, Mile 21.0E, has depths of 2 feet across the flats at the entrance and 3 to 5 feet in the several branches. The creek usually is bush-staked. The overhead power cables at **Boer** have a minimum clearance of 30 feet.

(149) **Mulberry Creek**, Mile 22.4N, in 1974, had reported depths of 4 feet in the dredged cut at the entrance. Above the dredged cut there are depths of about 4 feet for 1 mile upstream. A light marks the west side of the entrance, and a shell islet awash at high water is at the inner end of the channel cut. A daybeacon marks a submerged shell pile 0.3 mile southwestward of the light. The daybeacon also marks the entrance to a privately dredged channel passing immediately to the west of the shell pile. This channel had a depth of 3 feet in 1974. Gasoline and some supplies are obtainable at **Morattico,** on the northwest side of the entrance.

(150) **Lancaster Creek**, Mile 23.5N, has depths of 5 feet in the marked entrance, and thence from 4 to 2 feet for 4 miles to **Woodhouse Landing**. About 2 miles above the entrance, the creek is crossed by an overhead power cable with a clearance of 27 feet. A marina on the west side of the entrance has about 3 feet in its basin; some supplies are available and mechanical repairs can be made.

(151) **Morattico Creek** enters Rappahannock River just westward of Lancaster Creek. Oysterhouses are on both sides of the entrance. In 1980, the controlling depth was reported to be 6 feet through the entrance and alongside the wharves.

(152) At **Butylo,** Mile 24.2W, a jetty extends 0.4 mile into the river; depths of 4 feet are reported alongside. An oysterhouse is on the jetty.

(153) A small-boat harbor is at **Wildwood Beach,** Mile 28.3W. The entrance to the harbor is protected on the north side by a 300-foot-long jetty, and on the south side by a point of land extending to seaward about the same distance. A light is off the jetty. In July 2001, the reported controlling depth was 5 feet in the entrance and basin. Gasoline, water, ice, some marine supplies, and a 15-ton lift are available; minor hull and engine repairs can be made.

(154) **Rappahannock River Light 19** (37°49.5'N., 76°44.0'W.), 23 feet above the water, is shown from a cylindrical base, with a square green daymark, in depths of 6 feet at Mile 28.5. **Bowlers Rock,** covered 7 feet and buoyed, is on the east side of the channel about 500 yards eastward of the light. A submerged wreck is on the southwest edge of the channel 100 yards north-northeastward of the light; and foul ground extends upriver along the southwest edge of the channel for 1.3 miles from the light.

(155) **Totuskey Creek**, Mile 30.8N, is entered by a marked dredged channel which leads to a turning basin below the Totuskey Bridge, 4 miles above the mouth. In April 2001, the midchannel controlling depth in the entrance channel and in the creek channel to the bridge

was 4.2 feet. The channel is narrow in places and difficult to follow, deeper water is available with local knowledge. A timber-and-bush dike on the northeast side, 2.5 miles above the entrance, is barely visible. An overhead power cable about 3.2 miles above the entrance has a clearance of 75 feet. **Totuskey Bridge** is a fixed concrete span with a clearance of 10 feet. A wharf on the southeast bank, just below the bridge, has depths of 10 feet at the face and is used by grain barges. Barges load pulpwood at a landing on the opposite shore, about 0.2 mile below the bridge.

(156) An overhead power cable over the Rappahannock River at Mile 32.1 has a clearance of 80 feet over the main channel and 50 feet elsewhere.

(157) **Piscataway Creek**, Mile 35.0W, has depths of 4 feet in the entrance with greater depths for 5 miles upstream. A highway bridge, 4 miles above the entrance, has a fixed span with a clearance of 7 feet. Overhead power cables between the entrance and the bridge have a minimum clearance of 16 feet.

(158) **Hoskins Creek** is at Mile 36.8W. A marked dredged channel extends from the entrance to a turning basin about 0.4 mile above the mouth, thence to the highway bridge about 0.6 mile above the mouth. In March 2007, the controlling depth was 4.3 feet (5.2 feet at midchannel) to the mouth of the creek, thence 6.6 feet to the turning basin, thence 4.5 to 6.7 feet in the turning basin, thence 8.4 feet to the head of the project just below the highway bridge. A grain depot is near the bridge, and there is a public wharf about 0.3 mile below the bridge. The fixed highway bridge has a 34-foot channel span with a clearance of 8 feet; the nearby overhead power cable has a clearance of 43 feet. A small marina is near the first bend. A "no wake" **speed limit** is enforced.

(159) **Tappahannock** is at Mile 37.4W. The highway bridge over the river at Tappahannock has a fixed span with a clearance of 50 feet. A wharf just below the bridge is in ruins.

(160) A privately marked channel with a depth of about 4 feet leads to a small-boat basin at Tappahannock, 0.2 mile above the bridge. Water, ice, gasoline, a 6-ton lift and some supplies are available; repairs can be made.

(161) **Mount Landing Creek**, Mile 38.4W, has depths of 3 feet across the flats at the entrance and deeper water inside for 3.5 miles. Twin fixed highway bridges cross the creek near its entrance; minimum width is 34 feet and clearance is 9 feet. The overhead power cable just north of the bridges has a clearance of 18 feet. The creek is used by fishermen.

(162) **Cat Point Creek**, Mile 39.5E, has depths of about 4 feet across the bar at the entrance. In September 2000, shoaling to bare was reported in the section of the creek beginning at a point about 1.5 miles above the mouth. Depths of about 3 feet can be carried to **Menokin Landing,** about 7 miles above the mouth, by using the cutoff in 37°59'16"N., 76°50'19"W., about 1.7 miles above the mouth; local knowledge is advised. A highway bridge over the entrance has a retractile span with a width of 31 feet and a clearance of 7 feet. The bridge is maintained in the closed position. (See **117.1 through 117.59 and 117.1001,** chapter 2, for drawbridge regulations.) In 1983, the bridge was being replaced by a fixed bridge with a design width of 41 feet and a design clearance of 7 feet. An overhead power cable 200 yards above the bridge has a clearance of 21 feet. The highway bridge 6 miles above the entrance has a 31-foot fixed span with a clearance of 4 feet.

(163) **Occupacia Creek**, Mile 44.2W, has depths of 3 feet across the bar at the entrance and 4 feet for 6 miles up the middle branch; an overhead cable 2.5 miles above the entrance has a clearance of 35 feet, and the overhead cable 6 miles above the entrance has a clearance of about 30 feet. **Bridge Creek,** the eastern branch, has depths of 2 feet to a fixed bridge 1 mile above the entrance.

(164) **Layton** is at Mile 50.5W. In 1980, the lower pier was in poor condition and the upper pier was in ruins. Pulpwood is shipped by barge from **Leedstown,** Mile 52.4N.

(165) **Port Royal** is at Mile 68.5S. The highway bridge from Port Royal to **Port Conway** has a fixed span with a clearance of 50 feet.

(166) **Newton Rock**, Mile 91.2S, is 50 feet from shore and almost awash at high tide; the best water is 100 feet off the rock, which is marked by a buoy.

(167) In January 1983, a fixed highway bridge with a design clearance of 37 feet was under construction at Mile 92.9N.

(168) **Fredericksburg**, Mile 93.5W, the historic colonial city, has little trade by water, but can accommodate motor vessels and barges drawing up to 10 feet. Practical navigation terminates at the Old City Dock at the southern end of the city, but small boats can go about 1 mile farther upriver. Anchorage space is limited. The fixed highway bridge about 0.5 mile below the dock and the fixed railroad bridge just above the dock have clearances of 37 feet. The fixed highway bridge, 700 yards farther up, has a clearance of 50 feet.

Chart 12235

(169) **Fleets Bay**, just northward of Rappahannock River entrance, is the approach to Little Bay and Antipoison, Tabbs, Dymer, and Indian Creeks.

(170) Depths of 8 feet can be taken through **Little Bay**, on the south side of Fleets Bay, westward in a narrow

channel into **Antipoison Creek** and upstream for over 1 mile. The bay and creek are used by boats with drafts up to 6 feet. Two herring processing plants on the south side of Antipoison Creek 0.6 mile above the entrance have wharves with depths of 6 feet reported at the faces; another plant directly across the creek has a wharf with depths of 6 feet at the face.

(171) **Tabbs Creek**, on the west side of Fleets Bay 1.5 miles northward of Antipoison Creek, has depths of 2 feet with local knowledge over the bar at the entrance, thence reported depths of 3.5 or more feet for about 1 mile.

(172) **Dymer Creek**, on the west side of Fleets Bay about 2 miles northward of Antipoison Creek, had a reported depth of 4.2 feet in 2005 for 2 miles. The approach through Fleets Bay is well marked. An inactive fish factory is on the south side of the creek 1 mile above the entrance; the wharf is in ruins. The boatyard in **Poplar Neck Creek,** just below the fish factory, makes hull and minor engine repairs; marine railway, 65 feet.

(173) In 2003, **Indian Creek**, at the northwest corner of Fleets Bay about 3 miles northward of Antipison Creek, had reported depths of 12.4 feet in the approach and 9.2 feet for about 2 miles above the entrance, and then shoals to 5 feet 0.8 mile farther up. Traffic on the creek consists chiefly of pulpwood, shellfish, shells, and grain. Drafts of vessels using the creek seldom exceed 13 feet and are mostly 6 feet or less. The approach through Fleets Bay and the channel in the creek are well marked.

(174) A country club pier is about 1 mile above the mouth of Indian Creek, on the northeast side in a cove. The pier has depths of about 6 feet at the face. **Kilmarnock Wharf,** on the west side 2 miles above the entrance, is at the foot of a paved road that leads 1.5 miles inland to the town of **Kilmarnock.** A marina at the wharf has gasoline, diesel fuel, pumpout, electricity, water, ice, and nautical supplies. In 2005, an alongside depth of 10 feet was reported. General engine repairs can be made. Depths of 6 feet can be carried for 0.5 mile up the western branch above Kilmarnock Wharf to a marine railway that can handle boats up to 40 feet for repairs.

(175) **Dividing Creek** is 8.7 miles north-northwestward of Windmill Point Light. The creek has reported depths of 13 feet in the approach and 6.5 feet for 1.6 miles above the entrance, then shoaling to about 3 feet 0.7 mile farther up. The creek is used by boats with drafts of 5 feet or less. The approach between the shoals off the entrance is well marked by lights and daybeacons.

Chart 12225

(176) In addition to the danger zone of a naval firing range that extends from north of Wolf Trap Light to south of Tangier Sound Light, previously described, several danger areas are in Chesapeake Bay between Windmill Point Light and Smith Point Light.

(177) **San Marcos Wreck**, 10.5 miles northeast of Windmill Point Light, is covered by about 20 feet of water, but the depth over it is subject to change, due to the shifting steel.

(178) The **danger zone** of a naval missile target area is centered about 3.5 miles west-southwest of **Tangier Island.** (See **334.210**, chapter 2, for limits and regulations.) Sunken ships and other obstructions are within the area.

Chart 12235

(179) **Great Wicomico River**, on the west side of Chesapeake Bay 13 miles northward of Windmill Point Light, is entered between **Dameron Marsh** and **Bull Neck,** 1.7 miles to the northward. The principal marks for the entrance are Great Wicomico River Light and the buildings at Fleeton, on Bull Neck.

(180) **Great Wicomico River Light** (37°48'12"N., 76°15'59"W.), 42 feet above the water, is shown from a skeleton tower with a red and white diamond-shaped daymark, in depths of 9 feet 0.6 mile southeast of Bull Neck. The light is 4.5 miles due west of a point on the main channel 56 miles above the Capes.

(181) Great Wicomico River has depths of 17 feet or more for 5.5 miles above the entrance, and thence 9 feet or more for 3 miles. The river is navigable for small craft for another 2 miles. Vessels seeking shelter usually anchor in depths of 15 to 20 feet off and in the entrance to Cockrell Creek or in the large bay just W of Sandy Point. Fishtraps usually will be found on the shoals at the entrance; the approach can be made on a due west course between the buoys marking the trap areas.

(182) The channel in Great Wicomico River is marked by lights for 4 miles from the entrance.

Tide

(183) The mean range of tide is 1.1 feet at the entrance.

Ice

(184) Ice does not close the river to navigation except in severe winters, and then only for brief periods; Cockrell Creek is considered a secure harbor from ice.

(185) **Cockrell Creek**, on the northeast side of Great Wicomico River 1 mile above the mouth, is entered between **Fleeton (Fleet) Point** on the south and Cockrell

Point on the north; a light marks the entrance. There are depths of 15 feet for 1.5 miles above the entrance, thence gradual shoaling to 6 feet 1 mile farther up. Traffic consists chiefly of fish, shellfish, construction material, and petroleum products. Several fish factories operate along its shores. Drafts of vessels are mostly 12 feet and under, but drafts up to 14 feet use the creek. There are depths of 8 to 15 feet at the faces of the wharves.

(186) A menhaden fleet is based on each side of Cockrell Creek, about 1 mile above Fleeton Point.

(187) **Reedville** is on the east side of Cockrell Creek 1.5 miles above the entrance. A petroleum pier and a barge wharf with depths of about 8 feet alongside are on the east side of the peninsula at Reedville. Gasoline, diesel fuel, and some marine supplies are available.

(188) Reedville is a **customs port of entry.**

(189) The boatyards along Cockrell Creek can handle vessels up to 70 feet for hull, engine, and electronic repairs.

(190) **Mill Creek**, on the southwest side of the river 1.5 miles above the entrance, has reported depths of 7 feet or more through a crooked channel across the flats to the entrance and 5 feet to about 0.4 mile above the entrance. An abandoned grain wharf is 1.5 miles above the mouth.

(191) **Towles Creek** is entered through a channel privately marked by daybeacons about 1.7 miles west of Great Wicomico River Light. In August 2002, the reported controlling depth was 8.3 feet through the entrance, thence 6.0 feet in the creek. A marina on the south shore has gasoline, diesel fuel, and limited supplies.

(192) **Cranes Creek** is on the west side of Great Wicomico River 1.5 miles above the mouth. The entrance channel, marked by daybeacons, in September 2006, had a controlling depth of 6 feet. Greater depths are inside. Several small privately owned wharves along the banks of the creek are used by boats drawing up to 3 feet. Overhead power and telephone cables with a least reported clearance of 25 feet cross the creek near its head.

(193) **Mila**, on the west side of Great Wicomico River 3.5 miles above the mouth, has a landing with a depth of 5 feet at the outer end.

(194) The highway bridge over Great Wicomico River 6 miles above the mouth a fixed span with a clearance of 55 feet. The overhead power cable about 50 yards above the bridge has a clearance of 54 at midchannel and 40 feet elsewhere. A marina on the east side of **Glebe Point** at the north end of the bridge can provide gasoline, diesel fuel, and supplies. Hull and engine repairs can be made; a marine railway can handle boats up to 65 feet. Gasoline is also obtainable at a wharf on Ferry Point, 0.7 mile east of the bridge.