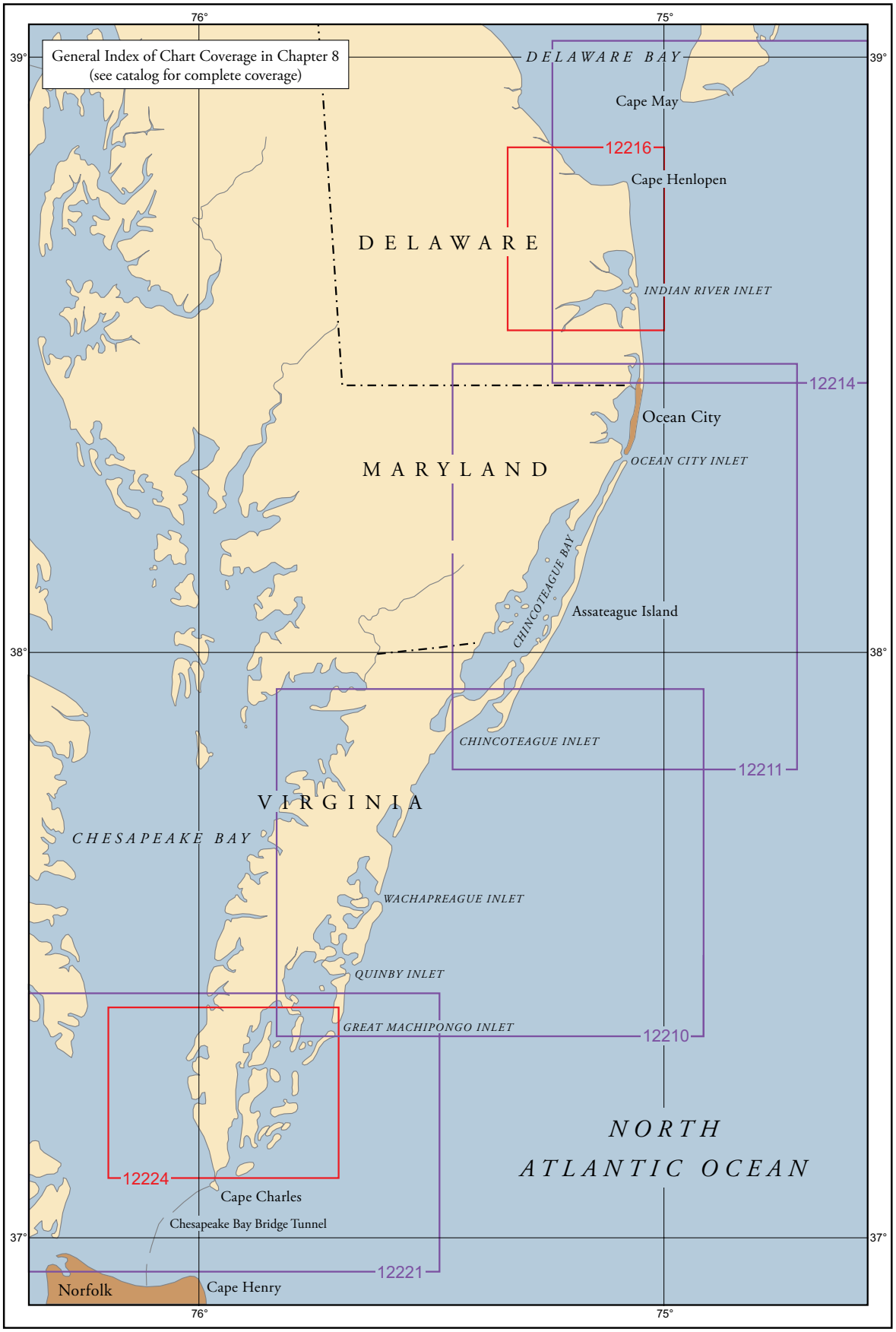
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Delaware-Maryland-Virginia Coast

(1) This chapter describes that section of the Delaware, Maryland, and Virginia coastline extending from Cape Henlopen to Cape Charles and the Virginia Inside Passage. Included in the discussion are Roosevelt Inlet, the Delaware Bay entrance to the Lewes and Rehoboth Canal, Indian River Inlet, Assawoman Canal and Bay, Isle of Wight Bay, Ocean City Inlet, Chincoteague Bay and Inlet, and the various inlets that lead through the barrier beach to the Virginia Inside Passage.

(2) Also described are the cities of Lewes, Rehoboth, Ocean City, and Chincoteague, and several of the smaller communities on these waterways.

North Atlantic Right Whales

(3) Endangered North Atlantic right whales may occur within 30 miles of the Delaware, Maryland and Virginia coasts (peak season: October through November and February through May). (See **North Atlantic Right Whales**, indexed as such in Chapter 3, for more information on right whales and recommended measures to avoid collisions.)

(4) All vessels 65 feet or greater in length overall (L.O.A.) and subject to the jurisdiction of the United States are restricted to speeds of 10 knots or less in a Seasonal Management Area existing around the Delaware Bay and the entrance to the Chesapeake Bay between November 1 and April 30. The areas are defined as the waters within a 20-nm radius of 38°52'27.4"N., 75°01'32.1"W. (Delaware Bay) and 37°00'36.9"N., 75°57'50.5"W. (Chesapeake Bay). (See **50 CFR 224.105** in Chapter 2 for regulations, limitations, and exceptions.)

COLREGS Demarcation Lines

(5) The lines established for Delaware Bay and the inlets of the Delaware-Maryland-Virginia coast are described in **80.503 and 80.505**, chapter 2.

Charts 12210, 12211, 12214, 12221

(6) The coast extends southward for 21 miles from Cape Henlopen to the Delaware-Maryland boundary line, thence south-southwestward for 27 miles to the Maryland-Virginia boundary, and thence 63 miles to Cape Charles. The low sand beaches are backed by bays, rivers, and creeks which are bordered by marsh and woodland. Broken ground fringes the coast, and depths of 36 feet or less are found as far as 12 miles from shore.

(7) Visible from seaward are the summer resorts of Rehoboth Beach, Bethany Beach, Dewey Beach, and Ocean City, all within 30 miles of Cape Henlopen. The most prominent marks south of Ocean City are the light structures and the Coast Guard stations.

(8) The bays and connecting channels back of the barrier beaches form a continuous inside passage from Delaware Bay to Chesapeake Bay, but Assawoman Canal and Little Assawoman Bay are now navigable only for rowboats and outboards.

(9) There are no harbors of refuge for deep-draft vessels along this coast. The inlets are subject to frequent change, and their navigation requires local knowledge.

Fishtrap

(10) **Fishtrap** areas along the coast from Cape Henlopen to Cape Charles have been established under Federal authority and are shown on the charts. Numerous pile remains of former traps are said to menace inshore navigation.

Navigational aids

(11) Most of the navigable inlets are marked by buoys, but the channels shift and the buoys cannot always be depended upon to mark the best water. Breakers form on the shoals even in ordinary weather and are good marks. Some of the interior channels are marked by daybeacons and lights, but others are marked only by bush stakes. The channels through the flats can be followed best at low water when the flats are visible.

Tides

(12) High and low waters occur at about the same time as at Sandy Hook. Levels in the inside waters are greatly affected by winds, westerly winds producing low water and easterly winds high water. In Assawoman, Isle of Wight, Sinepuxent, and Chincoteague Bays, northerly and southerly winds drive the water to the ends of the bays. With strong winds of long duration, depths may be as much as 3 feet above or below the normal level.

Currents

(13) The currents have considerable velocity in the inlets and in the narrow channels connecting the inlets with adjacent bays and sounds. Velocities of as much as 3 knots may be encountered at times in places where the currents are strongest.

Weather

(14) From Cape Henlopen to Cape Charles this coast is exposed to the rigors of the North Atlantic. Winter gales

can be expected about 5 percent of the time while winds of 28 knots or more are twice as frequent. Strongest and most prevalent are those out of the northwest through north, averaging 18 to 20 knots. Wave heights of 10 feet (3 m) or more are encountered 8 to 12 percent of the time from December through March. Winter visibilities suffer from precipitation and fog; visibilities fall below 2 miles (3.2 km) about 3 percent of the time and below 0.5 mile, (0.8 km) 1 to 2 percent of the time. Precipitation occurs about 8 percent of the time.

(15) Spring brings milder conditions. Gales and wind speeds of 28 knots or more occur about one-half as frequently as they did in winter. Directions are variable, but south and southwest winds are most frequent by April. Waves of 10 feet (3 m) or more become increasingly less frequent; by May they are encountered less than 3 percent of the time. However, warm air blowing over still cold water brings fog. Visibilities of less than 0.5 mile (0.8 km) occur about 3 percent of the time; about one-half that fo visibilities less than 2 miles (3.2 km). Precipitation occurs about 6 percent of the time.

(16) Summer, except for the threat of thunderstorms and a rare tropical cyclone, brings good sailing weather. Winds are out of the south and southwest about one-half of the time; westerlies and northeasterlies are also common. Strong winds are unlikely outside of thunderstorms, tropical cyclones, and an occasional frontal passage. Poor visibilities are also uncommon and waves of 10 feet (3 m) or more occur 1 to 2 percent of the time. Precipitation is encountered about 4 percent of the time and about one-half of the time is in the form of thunderstorms. Thunderstorms are most likely from May through September and often occur during the late night and early morning hours at sea. In squall lines winds can reach hurricane force in gusts.

(17) With autumn, comes more of a threat of both tropical and extra tropical storms, variable, strong winds and rough seas. Tropical cyclones are a threat throughout the fall, but particularly in September and October when recurving storms tend to brush this coast on occasion. Extra tropical storms pick up in October and are partially responsible for the increase in northerlies and northwesterlies. Winds out of the east, southwest and northwest are also common. In October, gales occur about 2 percent of the time compared to winds of 28 knots or more, which are encountered about 6 percent of the time. Wave heights of 10 feet (3 m) or more are generated 7 to 8 percent of the time during autumn. At sea visibilities remain good; less than 0.5 mile (0.8 km) less than 1 percent of the time, while less than 2 miles (3.2 km) about 2 percent of the time. Precipitation falls about 5 percent of the time.

Ice

(18) The inside waters north of Chincoteague Bay occasionally are closed by ice during ordinary winters. The tributary waters south of the bay are closed during severe winters, but remain so only for short periods. The principal inlets are rarely closed and are used by local boats throughout the winter.

(19) During the ice navigation season, the inside waters of Maryland, described in this chapter, are a **Regulated Navigation Area**. (See **165.10, 165.33 and 165.503,** chapter 2, for limits and regulations.)

Chart 12216

(20) **Cape Henlopen**, on the southwest side of the entrance to Delaware Bay, is described in chapter 6.

(21) **Roosevelt Inlet**, 3 miles west of Cape Henlopen, is the Delaware Bay entrance to the Lewes and Rehoboth Canal and to Broadkill River. The inlet is protected by jetties that are awash at low water; each jetty is marked by a light on its outer end. The channel is marked by the jetty lights and a **213°** lighted range. In Roosevelt Inlet, the current velocity is about 0.9 knot. (See Notice to Mariners and latest edition of charts for controlling depths.) Gasoline and diesel fuel can be obtained at a yacht club on the northeast side of the inlet.

(22) **Broadkill River** is entered by way of an inside passage that extends northwestward for 2 miles from the Roosevelt Inlet jetties to the old mouth of the river; the river then extends 9 miles westward to the town of **Milton**. (See the latest chart and notice to mariners for the controlling depth in the river.)

(23) Overhead power cables at the entrance to the Broadkill River, just N of the Coast Guard station, have a clearance of 50 feet. Twin fixed highway bridges over Broadkill River have a clearance of 18 feet. The overhead power cable just northwestward of the bridges has a clearance of 64 feet. Above the bridges, the river has numerous snags and much floating debris.

(24) The **Lewes and Rehoboth Canal** is a tidal waterway that extends southeastward and southward for 8 miles from Roosevelt Inlet to Rehoboth Bay. The canal passes northeastward of Lewes and westward of Rehoboth Beach; the entrance to Rehoboth Bay is between marked, submerged, stone jetties a mile southwest of Dewey Beach. (See Notice to Mariners and latest edition of charts for controlling depths.) In 1999, a sunken vessel, marked by a white light, was reported 500 yards south of the State Route 1 highway bridge in about 38°42.3'N., 75°05.6'W. The posted **speed limit** is 4 miles per hour in the canal.

(25) **Lewes**, 1.7 miles inside Roosevelt Inlet, has rail connections and is the southern terminal for the Cape May-Lewes ferry.

(26) Several small-craft facilities are in the vicinity of the first and second bridges at Lewes. Gasoline, diesel fuel, berths, and marine supplies can be obtained, and hull and engine repairs can be made. A 70-foot marine railway and a 25-ton mobile hoist are available.

Bridges and cables

(27) The U.S. Route 9 Business highway bridge over the canal at Lewes has a bascule span with a clearance of 15 feet. The overhead power cable to the west of the bridge has a clearance of 68 feet. The railroad bridge, 0.2 mile southeastward of the highway bridge, has a 46-foot swing span with a clearance of 10 feet; the span remains in the open position except for infrequent passage of trains; the overhead cable at the bridge has a clearance of 68 feet. The U.S. Route 9 fixed highway bridge 100 yards southeastward of the railroad bridge has a 46-foot span with a clearance of 35 feet.

(28) These bridges restrict the normal water flow in the canal and produce very strong currents. Small craft should proceed with caution in these areas.

(29) The State Route 1 Alternate highway bridge over the canal at Rehoboth Beach, 6.5 miles from Roosevelt Inlet, has a 49-foot bascule span with a clearance of 16 feet; the overhead power cables on the north side of the bridge have a least clearance of 55 feet. The State Route 1 fixed highway bridge, 0.3 mile farther southward has a clearance of 35 feet. The overhead power cables on the north and south side of the bridge have a least clearance of 55 feet. (See **117.1 through 117.59 and 117.239**, chapter 2, for drawbridge regulations.)

(30) A yacht club at which slips, gasoline, and some marine supplies are available is in a basin on the east side of the canal 4 miles southeastward of Lewes.

(31) **Rehoboth Bay** has depths of 1 to 7 feet. The 5-mile route down Rehoboth Bay from the Lewes and Rehoboth Canal to Indian River Bay is marked by lighted and unlighted buoys, lights, and daybeacons. Reported depths of 4 feet can be carried through the marked-bay channel to near Light 9, thence in 2004, 3 feet in the dredged section of the channel which leads between the islands separating the two bays. Gasoline, some supplies, and slips are available at the northeast end of Rehoboth Bay at **Dewey Beach**.

(32) **Love Creek**, at the northwest corner of Rehoboth Bay, is navigable for small craft to a milldam near **Robinsonville**, 4 miles above the mouth. An unmarked, privately dredged channel leads from Rehoboth Bay to about 3 miles above the mouth of the creek. In 2000, the channel had a reported centerline controlling depth of 2.0 feet. The fixed highway bridge 2.3 miles above the mouth has an 18-foot channel span with a clearance of 7 feet. Above the bridge are berthing facilities in depths of 1 to 2 feet.

(33) **Herring Creek**, at the southwest corner of Rehoboth Bay, has depths of 3 to 5 feet to the forks 2 miles above the mouth, thence 1 to 3 feet for 0.5 mile up the northern prong and 3 to 5 feet for 1 mile up the southern prong. The creek, partially marked by private buoys, is little used except by local residents.

(34) **Indian River Inlet**, 12 miles south of Cape Henlopen, is the first opening in the barrier beach south of Delaware Bay. The entrance is marked by buoys, and a light is on the end of the south jetty. **Indian River Inlet Coast Guard Station** is on the north side 0.5 mile inside the inlet.

(35) A channel leads from Indian River Inlet through Indian River Bay and up Indian River to Millsboro, 12 miles above the inlet. The channel from the entrance to Buoy 20 in Indian River Bay is subject to continual change due to severe shoaling. The channel is marked by uncharted buoys that are frequently shifted to mark the best water. The channel to Millsboro is marked by daybeacons and seasonal buoys.

Currents

(36) The current velocity is about 2 knots; caution is necessary, because the buoys sometimes tow under.

(37) The fixed highway bridge over Indian River Inlet has a clearance of 35 feet for a midwidth of 100 feet or 32 feet for a width of 200 feet. The stub ends of a former drawbridge, now used as fishing piers, are close westward of the bridge. In 2010, a replacement fixed highway bridge was under construction close W of the existing bridge with a design clearance of 45 feet. An overhead power cable with a clearance of 66 feet crosses the inlet about 100 yards westward of the bridge.

Supplies

(38) Gasoline, diesel fuel, slips, and some marine supplies are available in the small-boat basin on the north side, 0.8 mile inside Indian River Inlet, and at a marina on the south side 0.9 mile inside the inlet. Hull and engine repairs can be made at both facilities. The boat basin has a 10-ton lift, and the marina a 25-ton lift.

Anchorages

(39) A **special anchorage** is on the south side of Indian River Inlet 1.2 miles above the jetties. (See **110.1** and **110.65**, chapter 2, for limits and regulations.)

(40) **Indian River Bay**, a shallow lagoon with depths of 1 to 6 feet, extends for about 5 miles west of Indian River Inlet, then becomes **Indian River**, which is navigable for an additional 7 miles to Millsboro. Overhead power cables with a least clearance of 61 feet crosses Indian River about 2.9 miles above the mouth of the river. The 5-mile route down the bay from Rehoboth Bay to Assawoman Canal is marked by seasonal buoys and daybeacons; the controlling depth is about 2 feet.

(41) The State of Delaware has established State-leased clam and oyster grounds, which extend westward from a line connecting Lingo Point (38°36.4'N., 75°09.4'W.) and Ellis Point (38°35.6'N., 75°08.1'W.) to Daybeacon 30 at the entrance to Indian River and Daybeacon 4 inside Pepper Creek. Mariners are advised to use caution when navigating outside the marked channel in this

area because of numerous unlighted stakes, wood spar buoys, and other dangerous markers.

(42) **Pepper Creek**, on the south side of Indian River Bay near its western end, has a dredged channel marked by daybeacons and buoys extending for 3 miles above the entrance. In 1984, the centerline controlling depths were 2 feet to Daybeacon 12, thence 1 foot to Daybeacon 13. A clam plant is at the upper end of the creek. Gasoline and slips are available 2 miles above the entrance.

(43) Most of the piers and facilities on the north side of Indian River are private.

(44) An overhead power cable with a clearance of 61 feet was reported about 3.5 miles above the entrance to the river.

(45) **Millsboro**, on the south side of Indian River at the head of navigation, has a town bulkhead; gasoline and some supplies are available. About 100 yards below the causeway at Millsboro, there is an overhead power cable with a clearance of 43 feet. The town has railroad-freight service.

(46) **White Creek** is on the south side of Indian River Bay 1.5 miles back of the outer beach. A channel, marked by seasonal buoys and daybeacons, passes through the bay and creek to Assawoman Canal and **Ocean View**. In 2002, the controlling depth in the channel was 1.7 feet to Assawoman Canal, thence depths less than 1 foot to Ocean View. Gasoline and some supplies are available at Ocean View.

Chart 12214

(47) **Assawoman Canal,** a 3-mile land cut that connects White Creek with the north end of Little Assawoman Bay, had a reported controlling depth of .5 foot in 1977. Logs were reported to obstruct the channel at several points. Three fixed highway bridges over the canal have a minimum width of 14 feet and clearance of 4 feet. The power cables over the canal have a minimum clearance of 28 feet.

(48) **Little Assawoman Bay**, behind the barrier beach of **Fenwick Island**, is 3 miles long. The bay, marked by private daybeacons, has depths of 2 to 4 feet, but in some areas shoals to bare.

Chart 12211

(49) **Fenwick Island Light** (38°27'06"N., 75°03'18"W.), 83 feet above the water, is shown from a white tower, about 0.3 mile back of the beach. The tower, just north of the Delaware-Maryland boundary line, is 9 miles south of Indian River Inlet and 21 miles south of Cape Henlopen.

(50) **Fenwick Shoal**, about 5.5 miles eastward of the northern end of Fenwick Island, has a least depth of 14 feet, but the westerly of two wrecks near the crest of the shoal is covered only 6 feet. A lighted buoy marks the southwest end of the shoal.

(51) **Isle of Wight Shoal**, about 8.5 miles northeastward of Ocean City Inlet, has a depth of 20 feet. A 25-foot shoal is about midway between Isle of Wight Shoal and Fenwick Shoal.

(52) A narrow thoroughfare links the southern end of Little Assawoman Bay with Assawoman Bay; the controlling depth is about 2 feet. It is navigable by small boats with local knowledge. The fixed highway bridge near the north end of the thorofare has a width of 37 feet and a clearance of 11 feet.

(53) **Assawoman Bay** and **Isle of Wight Bay** form a continuous lagoon that extends from close southward of Little Assawoman Bay to Ocean City. The bays have depths of 4 to 6 feet along their western sides, and are frequented by boats from Ocean City.

(54) The State Route 90 fixed highway bridge with a clearance of 35 feet crosses Isle of Wight Bay between Isle of Wight and Fenwick Island.

(55) **Ocean City Inlet** (38°19.4'N., 75°05.2'W.), between Fenwick Island and Assateague Island, is 29 miles south of Cape Henlopen and is the only break in the barrier beach between Indian River Inlet and Chincoteague Inlet. The entrance is between stone jetties, but the north jetty and the outer end of the south jetty are covered at high water. A 200-foot-long fishing pier is 0.2 mile north of the north jetty.

No-Discharge Zone

(56) The State of Maryland, with the approval of the Environmental Protection Agency, has established a No-Discharge Zone (NDZ) in the northern Coastal Bays. The NDZ includes the waters of the Ocean City Inlet, Ocean City commercial fish harbor (Swordfish Basin), Isle of Wight Bay and Assawoman Bay. The area covered is defined as follows: Ocean City Inlet – west of a line beginning at a point at or near the east end of the north Ocean City Inlet jetty at 38°19'27.0"N., 75°05'05.5"W., then running approximately 248° to a point at or near the east end of the south Ocean City Inlet jetty at 38°19'20.7"N., 75°05'24.9"W.; and Sinepuxent Bay – north of a line beginning at a point at or near the shore of the southeast entrance of the Ocean City commercial fish harbor (Swordfish Basin) at 38°19'37.0"N., 75°06'06.0"W., then running approximately 110° to a point at or near the shore at the northwest tip of Assateague Island at 38°19'32.0"N., 75°05'49.0"W.; and Maryland-Delaware line – south of the Maryland-Delaware line beginning at a point at or near the east side of Assawoman Bay at 38°27'04.5"N., 75°04'11.2"W., then running approximately 270° to a point at or near the west side of Assawoman Bay at 38°27'04.4"N., 75°05'09.3"W. (see chart 12211 for limits).

(57) Within the NDZ, discharge of sewage, whether treated or untreated, from all vessels is prohibited. Outside the NDZ, discharge of sewage is regulated by **40 CFR 140** (see chapter 2).

Coast Guard

(58) **Ocean City Coast Guard Station** is 0.6 mile inside the inlet on the southwest side of Ocean City.

(59) **Little Gull Bank**, 2.5 miles southeastward of Ocean City Inlet, has a depth of 15 feet and is marked at its southwest end by a buoy. **Great Gull Bank**, 5 miles southeastward of the inlet, has a depth of 17 feet at its southwest end and is marked at its northern end by a lighted buoy.

(60) **Ocean City**, that part of Fenwick Island barrier beach in Maryland, is a large summer resort visited by many small boats and is a shipping point for a large amount of seafood. Numerous water tanks and numerous high-rise condominiums are prominent along the beach of this resort.

(61) Ocean City Inlet is subject to continual change. A dredged channel leads westward from the west end of the entrance jetties to the head of Commercial Fish Harbor. In 2010, the controlling depths were 8.4 feet in the south half and 7.5 feet in the north half of the approach to the harbor, thence 2.1 feet (6.4 feet at midchannel) to the head of the harbor. Another dredged channel leads northward from inside the inlet along the inner side of Ocean City to the middle of Isle of Wight Bay. In 1976, the midchannel controlling depth was 6 feet to Isle of Wight Bay Warning Buoy C. Between Buoy C and deep water in the northern part of Isle of Wight Bay is a shoal area where the buoys are periodically moved to mark the best water; caution is advised.

(62) The entrance to Ocean City Inlet is marked by a light near the outer end of the north jetty and lighted buoys that are shifted in position with changing channel conditions. During the summer months fishing vessels anchor at the entrance to the inlet near the north and south jetties. Within the inlet a strong ebb current exists. Caution is advised when entering and transiting the inlet.

(63) A large, cylindrical water tank, about 1.5 miles west of Ocean City Inlet, is prominent and is a good landmark while entering the inlet.

(64) Lights, lighted and unlighted buoys, and a daybeacon mark the channel to Isle of Wight Bay.

(65) The U.S. Route 50 highway bridge over Isle of Wight Bay from the mainland to Ocean City, 0.9 mile above the entrance jetties, has a bascule span with a clearance of 18 feet. The bridgetender monitors VHF–FM channel 16 and works on channels 13, and 68; call sign KYU–698. (See **117.1 through 117.59 and 117.559**, chapter 2, for drawbridge regulations.) Pile remains of an abandoned highway bridge are 0.2 mile south of the bridge.

(66) There are numerous privately owned pile and timber piers and bulkhead wharves on the inner side of Ocean City. The **Commercial Fish Harbor**, on the mainland side 1 mile directly back of the inlet, has a 1,000-foot public bulkhead landing and several private bulkhead wharves open to the public for transaction of business with the owners.

Small-craft facilities

(67) There are several small-craft facilities at Ocean City and in Commercial Fish Harbor. Gasoline, diesel fuel, water, berths, and marine supplies can be obtained at most of the facilities, and hull and engine repairs can be made at some.

(68) **Sinepuxent Bay**, narrow and mostly shoal, and **Chincoteague Bay**, with depths of 4 to 7 feet along its western side but shoal along its eastern side, are behind **Assateague Island** and provide a 30-mile inside route for small boats from Ocean City to Chincoteague. The bays are used by fishing and pleasure boats. The Maryland-Virginia boundary line is marked by an orange and white buoy and by orange-bordered daymarks on piles.

(69) A dredged channel, marked by lights, lighted buoys, and daybeacons, extends 12 miles through Sinepuxent Bay to open water in Chincoteague Bay where the route to Chincoteague follows lights marking the shoal areas. In 1991, the controlling depths were 5 feet to Coffins Point; thence 3 feet to Sinepuxent Bay Channel Light 13; thence 4 feet to Chincoteague Bay. Sinepuxent Bay channel is subject to frequent shoaling, and lesser depths may be encountered. In 1990 a submerged rock was reported about 60 yards W of Sinepuxent Bay Daybeacon 1 in about 38°19'34"N., 75°05'54"W.

(70) The State Route 611 fixed highway and pedestrian bridge across Sinepuxent Bay has a clearance of 35 feet. Submerged pilings from a former overhead cable cross the bay in the vicinity of Sinepuxent Bay Channel Daybeacons 27A and 28.

(71) **Public Landing** (38°08.9'N., 75°17.2'W.), on the mainland side of Chincoteague Bay 15 miles from Ocean City Inlet, has a public wharf, private landings, and fish piers; all have depths of about 4 feet alongside. A highway leads westward from the landing to **Snow Hill** on Pocomoke River. A small-boat basin with depths of 3 feet and a launching ramp is entered just north of the piers.

(72) A marina at the entrance to **Tanhouse Creek**, 1 mile south of Public Landing, has gasoline, diesel fuel, and an 8-ton mobile hoist for hauling out boats for minor hull and engine repairs. The entrance to the creek is marked by a light.

(73) **George Island Landing** is a small town on the mainland 0.8 mile northward of **Purnell Point** (38°01'42"N., 75°21'36"W.). The public wharf at the town is reached from the southward from Chincoteague Bay through a private channel marked by lights and daybeacons. In 1970, depths of 5 feet were reported in the channel and alongside the wharf. An overhead power cable with a clearance of 28 feet crosses the channel near the wharf.

(74) **Greenbackville**, 1.5 miles southwestward of Purnell Point, is a village on the mainland side of Chincoteague Bay just south of the Maryland-Virginia boundary line

and 4 miles north of Chincoteague. In 2007, the channel into the harbor, marked by lights, had a controlling depth of 3.0 feet (4.2 feet at midchannel). A repair yard in the harbor has a marine railway that can handle craft up to 45 feet for minor hull and engine repairs.

(75) The narrow dredged channel marked by lights and daybeacons, 4.5 miles south of Purnell Point, is usually used to reach Chincoteague from Chincoteague Bay. In 1997, the channel had a controlling depth of 6 feet. The other passages between Chincoteague Bay and Chincoteague Inlet through marshy islands west of Chincoteague Island are used only by small boats with local knowledge. Controlling depths through these passages range from 1 to 6 feet, and the fixed bridges over them have clearances of 4 to 12 feet.

(76) **Assateague Light** (37°54'40"N., 75°21'22"W.), 154 feet above the water, is shown from a 142-foot red and white horizontally banded conical tower 3 miles from the south end of Assateague Island. The light stands well above the surrounding trees.

(77) **Winter Quarter Shoal,** 11 miles east-northeast of Assateague Light has several depths of 12 to 19 feet, but a wreck just west of the highest part is covered only 5 feet; a buoy marks the west side of the wreck. During periods of high winds and seas, breakers have been observed over the shoal.

(78) **Blackfish Bank**, about 6 miles eastward of the south end of Assateague Island, has several depths of 11 to 16 feet along its 5-mile length, and near its southwest end is a depth of 11 feet over a wreck. A buoy is 0.6 mile south of the wreck. A 25-foot shoal 2.5 miles east of the wreck is marked on its east side by a lighted gong buoy. Coasting vessels seeking protection from westerly weather pass westward of Blackfish Bank. In 1981, a wreck, covered 25 feet, was reported about 10 miles east of Blackfish Bank in about 37°52'07"N., 75°03'30"W. A possible wreck, reported covered 25 feet, is about 5 miles south-southeast of Blackfish Bank.

(79) **Chincoteague Shoals**, extending about 3 miles east and south of the lower end of Assateague Island, have depths of 4 to 18 feet. An unlighted buoy and a lighted bell buoy are near the 5-fathom curve southerly of the shoals. Breakers have been observed over the 5-foot shoals when winds are southerly.

(80) **Chincoteague Inlet** (see also chart 12210), between Assateague Island and Wallops Island, is 30 miles south-southwestward from Ocean City Inlet. The marked channel through the inlet to **Chincoteague Channel** is subject to frequent change; the buoys are shifted with changing conditions. Breakers are evident on either side of the channel. A sunken wreck is about 0.4 mile southwest of Fishing Point in 37°51'52"N., 75°24'03"W. Caution is advised when navigating the inlet.

(81) Assateague Light and the lookout tower on the southern tip of Assateague Island are good marks for approaching Chincoteague Inlet.

(82) **Fishing Point**, the hook-shaped sandspit forming the south side of **Toms Cove**, is continually making out to the westward, requiring caution when in the vicinity.

(83) **Chincoteague**, occupying most of **Chincoteague Island**, is between the mainland and the south end of Assateague Island. The highway bridge to Chincoteague has a swing span with a clearance of 15 feet over the main channel. (See **117.1 through 117.49 and 117.1005**, chapter 2, for drawbridge regulations.) The town is principally a shellfish and fishing center, but pleasure craft operate from here during the summer. The wharves and piers along the waterfront have depths of 3 to 10 feet alongside. There are small-craft facilities at Chincoteague that can provide gasoline, diesel fuel, water, berths, and limited marine supplies. Hull and engine repairs can be made; a 40-ton marine railway at Chincoteague can handle craft up to 80 feet.

(84) A boat basin is at the extreme southwest end of Chincoteague Island. In 2005, the dredged entrance channel, marked by a light, had a controlling depth of 5 feet; thence 6.8 to 8 feet was in the basin.

Coast Guard

(85) **Chincoteague Coast Guard Station** is on the east side of Chincoteague Channel, 0.3 mile south of the highway bridge.

Chart 12210

(86) The 35-mile stretch of coast between Chincoteague Inlet and Great Machipongo Inlet is formed by six islands of about equal length. The islands are separated from each other by narrow inlets and from the mainland by marsh and flats through which are numerous sloughs and channels.

(87) **Wallops Island**, northernmost of the six, is on the southwest side of Chincoteague Inlet.

Danger zone

(88) A **danger zone** extends for about 5 miles off the coast of Wallops Island and covers the entrance to Chincoteague Inlet. A strobe light is displayed at night from a tower in about 37°15'16"N., 75°29'06"W., about 30 minutes prior to the commencement of and during rocket launching operations. (See **334.130** chapter 2, for limits and regulations.)

(89) **Assawoman Inlet**, the ocean entrance between **Wallops Island** and **Assawoman Island**, is very shallow and is not used. **Gargathy Inlet**, the ocean inlet separating Assawoman Island and **Metompkin Islands**, is not used.

(90) **Metompkin Inlet**, the ocean entrance between Metompkin Islands and **Cedar Island**, is used by some small local fishing and oyster boats. The changeable entrance channel is unmarked and should not be entered without local knowledge.

(91) **Porpoise Banks**, 10 miles offshore from Metompkin Inlet, have irregular bottom with depths of 34 to 40 feet.

(92) **Wachapreague Inlet**, between Cedar Island and **Parramore Island**, is 20 miles south-southwestward of Chincoteague Inlet. The entrance is marked by a lighted bell buoy and unlighted buoys that are shifted in position with changing channel conditions. The controlling depth is about 5 feet through the inlet, which is used by many fishing boats and by some boats seeking shelter, but should be entered only with local knowledge.

Anchorages

(93) The best anchorage is in **Horseshoe Lead**, southwest of the entrance, where there are depths of 20 to 30 feet west of the middle ground.

Coast Guard Station

(94) **Wachapreague Coast Guard Station** is about 4.0 miles WNW of Wachapreague Inlet in the town of Wachapreague. The remains of the inactive Coast Guard Station Parramore Beach are located 0.5 mile south of the inlet.

(95) **Parramore Banks** extend about 8 miles offshore from Wachapreague Inlet. The area is lumpy and has numerous depths of 18 to 30 feet. A lighted gong buoy is east of the banks.

(96) Two fish havens are about 2.6 miles and 7.5 miles east-southeast, respectively, from Wachapreague Inlet.

(97) **Wachapreague,** a town on the mainland about 4 miles west-northwest of Wachapreague Inlet, is an oystering and fishing center, and is a base for some pleasure boats during the summer. A depth of about 4 feet can be carried from Wachapreague Inlet through **Hummock Channel** and **Wachapreague Channel,** marked by lights, to the wharves and marinas at the town. Gasoline, diesel fuel, berths, and some marine supplies can be obtained. Hull and engine repairs can be made; largest marine railway, 50 feet.

(98) **Quinby Inlet**, the ocean entrance between Parramore Island and Hog Island, has a fan of breakers across the bar at the entrance. The buoys marking the inlet are frequently shifted and not charted. In 2006, a draft of 5 feet could be carried through the inlet. The inlet should not be used without local knowledge.

(99) **Quinby** is a village on the mainland about 6 miles north-northwest of Quinby Inlet. A channel to the village, marked by lights, follows **Sandy Island** Channel to **Upshur Bay**, thence through a slough in the mudflats to a dredged channel leading to a basin that has a public landing with a pump-out station available. In 2010, the controlling depth was 1 foot in the dredged channel, thence 2.6 feet in the basin. A no-wake **speed limit** is enforced.

(100) **Great Machipongo Inlet**, the ocean entrance between Hog Island and **Cobb Island**, has breakers that form on the shoals on either side of the entrance at all times, but on the bar only in heavy weather. The inlet is marked by buoys that are shifted in position with changing channel conditions. The controlling depth is about 12 feet over the bar.

(101) **Great Machipongo Channel** extends northwestward through Hog Island Bay from the inlet to the mainland where it continues as **Machipongo River**. **Willis Wharf**, on the west bank of **Parting Creek** 1 mile above the junction with Machipongo River, is a base for shellfish and fishing boats. A public launching ramp is available. A marine railway here can handle craft up to 60 feet for do-it-yourself repairs. In 2005, the controlling depth in the dredged channel in Parting Creek was 1.7 feet in the west half and 6.5 feet in the east half to the turning basin at Willis Wharf, thence 8 feet to the head of the project about 275 yards above the wharf. The turning basin just above Daybeacon 18 had depths of 2.1 to 8.0 feet.

(102) A state-owned boat harbor is just below Willis Wharf on the west side of Parting Creek. In 1994, depths of 2 feet were available in the channel leading to the harbor. An area with about 41 slips available for commercial fishing boats. The harbor has electricity, water, and a launching ramp.

Chart 12224

(103) **Sand Shoal Inlet**, the ocean entrance between Cobb Island and **Wreck Island**, may be entered through three channels. **Northeast Channel**, protected by extensive shoaling to northward and marked by buoys shifted in position with changing channel conditions, leads along the south end of Cobb Island; the controlling depth is about 10 feet over the bar. **Southeast Channel** is straight, but the bar breaks in heavy weather; the controlling depth is about 10 feet over the bar. **South Channel**, east of Wreck Island, has a controlling depth of about 8 feet. The latter two channels are not marked and should not be used by strangers.

Anchorages

(104) A good fair-weather anchorage is in the channel near the discontinued Coast Guard station east of **Little Cobb Island** for boats able to cross the entrance bar with 3 feet over it.

(105) **Sand Shoal Channel**, marked by lights and daybeacons, extends westward from Sand Shoal Inlet for 6 miles where it joins a marked dredged channel leading to the wharves and public bulkhead at **Oyster** on the mainland. In 2010, the midchannel controlling depth was 3 feet, thence 5 feet was in the basin at Oyster. Public piers and a launching ramp are on the northern side of the basin. Numerous wrecks are reported near these facilities; caution is advised. Oyster is the shipping point for large amounts of clams and oysters.

(106) **Ship Shoal Inlet**, the ocean entrance between Ship Shoal Island and **Myrtle Island**, is shallow and unmarked; it is used only by local oyster boats. There is deep water back of the inlet, but the channels to the inside passages are shallow and tortuous.

Danger zone

(107) The **danger zone** of a bombing and gunnery range is centered on Myrtle Island, 6 miles northeastward of Cape Charles Light. (See **334.330**, chapter 2, for limits and regulations.)

(108) **Little Inlet**, between Myrtle Island and Smith Island, is shallow and is little used. Small boats can connect with the inside passage at high water.

(109) **Cape Charles** and the islands on the north side of the entrance to Chesapeake Bay are described in chapter 9.

(110) **Smith Island Inlet**, between Smith Island and Fishermans Island, is fairly wide, but the narrow, changeable channel lies between sandbars and breakers. The inlet is used by many local boats with drafts of 3 to 4 feet, but it is unmarked and should not be used by strangers. The controlling depth over the bar is said to be 1.5 feet.

Charts 12211, 12210, 12221

(111) **Virginia Inside Passage** is between the barrier beach along the Atlantic Ocean on the east and the Virginia portion of the mainland peninsula on the west. The passage extends 74 miles from the south end of Chincoteague Bay through creeks, thorofares, marshy cuts, and bays to enter Chesapeake Bay at Cape Charles. The route is marked with lights and daybeacons which have daymarks with white reflector borders to distinguish them from aids to navigation marking other waterways. Buoys are temporarily established from time to time to mark destroyed aids or critical places.

(112) The Federal project depth is 6 feet for the waterway. Maintenance dredging is performed to provide a 6-foot controlling depth, but due to continuous shoaling 3 feet or less may be found in places, particularly inside the ocean inlets. The overhead clearance is limited only by the 40-foot fixed bridge across Cat Creek, 8 miles southward of Chincoteague, the 50-foot clearance of the power cable over Longboat Creek inshore from Metompkin Inlet, 22 miles southward of Chincoteague, and the 40-foot fixed bridge at Cape Charles.

Tides

(113) The mean range of tide varies in the inlets along the Virginia coast; greater fluctuations in the water level in the inside waters are caused by high winds and storms.

Supplies

(114) Gasoline, diesel fuel, and some marine supplies are available at Wachapreague, 29 miles south of Chincoteague; at Quinby, 33 miles south of Chincoteague; at Willis Wharf, 37 miles south of Chincoteague; and at Oyster, 60 miles south of Chincoteague and 12 miles north of Cape Charles. Hull and engine repairs can be made at Wachapreague.

(115) From Chincoteague, the Virginia Inside Passage follows Chincoteague Channel across Chincoteague Inlet to **Walker Point**, thence through **Ballast Narrows**, **Island Hole Narrows**, the dredged cut in **Bogues Bay**, and **Cat Creek** to the sloughs marked by lights and daybeacons back of Assawoman Inlet, 10 miles southwestward of Chincoteague. The fixed highway bridge over Cat Creek has a clearance of 40 feet. The overhead power cable just north of the bridge has a clearance of 60 feet.

(116) From 1 mile back of Assawoman Inlet, the inside passage continues through **Northam Narrows**, thence through dredged cuts in **Kegotank Bay** and back of Gargathy Inlet to **Wire Passage**, 15 miles southwestward of Chincoteague.

(117) From Gargathy Inlet, the inside passage goes through Wire Passage into a dredged cut in **Metompkin Bay**, and enters Folly Creek westward of Metompkin Inlet. A dredged channel with a controlling depth of 1.5 feet in 2006, extends about 0.8 mile up **Parkers Creek** from Virginia Inside Passage Light 80. The channel is marked by a light, buoys, and daybeacons. **Folly Creek**, which leads westward from the south end of Metompkin Bay, has a depth of 1 foot to the landing at its head, 3 miles above the mouth. A launching ramp and a pier are on the south side of Folly Creek about 1 mile west of Light 87.

(118) The passage continues through a dredged cut from Folly Creek into **Longboat Creek**, which has a power cable over its northern part with a clearance of 50 feet, thence through cuts in **Cedar Island Bay**, **Teagles Ditch**, and **Burtons Bay** into Wachapreague Channel which leads to Wachapreague, 29 miles southward of Chincoteague. Supplies and repair facilities are available at Wachapreague. (Refer to previous description in this chapter.)

(119) From Wachapreague Channel, the passage continues through a cut in **Bradford Bay**, a part of **Millstone Creek**, a cut in **Swash Bay**, a part of **The Swash,** and **Little Sloop Channel** to Sandy Island Channel, 3 miles inside Quinby Inlet and 36 miles southward of Chincoteague.

(120) The passage southward of Quinby Inlet follows **Sloop Channel** and a dredged cut into **Cunjer Channel**, thence westward in **North Channel** at the north end of **Hog Island Bay** to Great Machipongo Channel, 43 miles southward of Chincoteague.

(121) After passing through Great Machipongo Channel to a point 2 miles inside Great Machipongo Inlet, the route goes westward through **Gull Marsh Channel**, thence southwestward through a natural channel and

cut in **Outlet Bay** and **Spidercrab Bay** to **Eckichy Channel**, thence southeastward to Sand Shoal Channel, 1.5 miles inside Sand Shoal Inlet, 56 miles southward of Chincoteague.

(122) From inside of Sand Shoal Inlet, the passage continues westward through Sand Shoal Channel and southward through **Mockhorn Channel** to Magothy Bay.

(123) **Magothy Bay,** which extends southward from Mockhorn Channel to Smith Island Inlet, is shallow except in the well-marked inside passage which passes through the bay to Cape Charles. **Magotha** is a village on the west side of the bay 3.5 miles northwestward of Cape Charles Light.

(124) From the southern part of Magothy Bay, the passage continues southwestward through a dredged cut across Cape Charles into the deep water in Chesapeake Bay. The fixed highway bridge over the passage from Cape Charles to Fishermans Island has a clearance of 40 feet.

TIDAL INFORMATION					
Chart	Station	LAT/LONG	Mean Higher High Water*	Mean High Water*	Mean Low Water*
12210	Harbor of Refuge, Chincoteague Island	37º54'N/75º24'W	2.8	2.6	0.1
12210	Metomkin Inlet	37º40'N/75º36'W	4.1	3.8	0.2
12211	Ocean City	38º20'N/75º05'W	3.9	3.5	0.2
12211	Chincoteague Channel, south end	37º54'N/75º24'W	2.5	2.3	0.1
12214	Cape May Point, Delaware Bay	38º57'N/74º58'W	5.4	5.0	0.2
12216	Rehoboth Beach	38°43'N/75°05'W	4.4	4.1	0.2
12216	Breakwater Harbor	38°47'N/75°07'W	4.7	4.2	0.2
12221	Fishermans Island, Chesapeake Bay	37°06'N/75°59'W	3.4	3.2	0.1
12221	Wolf Trap Light, Chesapeake Bay	37°23'N/76°11'W	1.8	1.7	0.1
12221	Tue Marshes Light, York River entrance	37°14'N/76°23'W	2.5	2.3	0.1
12221	Old Point Comfort	37°00'N/76°19'W	2.8	2.6	0.1
12224	Sand Shoal Inlet, Cobb Island	37°18'N/75°47'W	4.5	4.2	0.2
12224	Cape Charles Harbor, Chesapeake Bay	37°16'N/76°01'W	2.7	2.4	0.1

* Heights in feet referred to datum of sounding MLLW.
Real-time water levels, tide predictions, and tidal current predictions are available at:
http://tidesandcurrents.noaa.gov
To determine mean tide range subtract Mean Low Water from Mean High Water.
Data as of November 2011