



Western Long Island Sound

- (1) This chapter describes the western part of Long Island Sound along the north shore from Bridgeport to Throgs Neck, the south shore from Old Field Point to Willets Point and the East and Harlem Rivers. Also described are the many bays and their tributaries that make into this part of the sound including Bridgeport Harbor, Stamford Harbor, Captain Harbor, Mamaroneck Harbor, Norwalk Harbor, Eastchester Bay, Huntington Bay, Oyster Bay, Hempstead Harbor, Manhasset Bay, Flushing Bay and New Rochelle Harbor and the commercial and small-craft facilities found in these waters.

(2) **COLREGS Demarcation Lines**

- (3) The lines established for Long Island Sound are described in **33 CFR 80.155**, chapter 2.

(4) **No-Discharge Zone**

- (5) The States of New York and Connecticut, with the approval of the Environmental Protection Agency, have established a No-Discharge Zone (NDZ) covering all coastal waters described in this chapter east of the Hell Gate Bridge.

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

(7) **Western Long Island Sound**

- (8) **Western Long Island Sound** is that portion of the deep navigable waterway between the shores of Connecticut and New York and the northern coast of Long Island westward of the line between Bridgeport and Old Field Point.

- (9) This region has boulders and broken ground, with little or no natural change in the shoals. The waters are well marked by navigational aids so that strangers should experience no difficulty in navigating them. As all broken ground is liable to be strewn with boulders, vessels should proceed with caution when in the vicinity of broken areas where the charted depths are within 8 feet of the draft. All of the more frequented places are entered through dredged channels. During fog, vessels are advised to anchor until the weather clears before attempting to enter. The numerous oyster grounds in this region are usually marked by stakes and flags. These stakes may become broken off and form obstructions dangerous to

small craft that, especially at night, should proceed with caution when crossing oyster areas.

(10) **Anchorage**

- (11) There is anchorage for large vessels in the bight between the entrance channels of Bridgeport Harbor and Black Rock Harbor. Cockenoe Harbor is sometimes used by small vessels, but Sheffield Island Harbor is preferred and is sometimes used by tows. Westward of Norwalk Islands, seagoing vessels can anchor toward the north shore and, with good ground tackle, hold on in northerly winds. Captain Harbor affords good shelter but is rarely used except by local vessels. On the south shore, Huntington Bay and Hempstead Harbor are available for large vessels; Oyster Bay is also used, and Manhasset Bay is available for light-draft vessels. City Island Harbor is a fine resort for coasters.

- (12) Several general anchorages are in Long Island Sound. (See **33 CFR 110.1** and **110.146**, chapter 2, for limits and regulations.)

(13) **Tides**

- (14) The time of tide is nearly simultaneous throughout Long Island Sound, but the range of tide increases from about 2.5 feet at the east end to about 7.3 feet at the west end. Daily predictions of the times and heights of high and low waters are available at the tide prediction service at tidesandcurrents.noaa.gov. Links to a user guide for this service can be found in chapter 1 of this book.

- (15) The effect of strong winds, in combination with the regular tidal action, may at times cause the water to fall several feet below the plane of reference of the charts.

(16) **Current**

- (17) About 1.3 miles northward of Eatons Neck Light the ebb runs about 5 hours longer than the flood. The current has a velocity of 1.4 knots; the flood sets 283° and the ebb sets 075°.

- (18) The direction and velocity of the currents are affected by strong winds that may increase or diminish the periods of flood or ebb. Currents in East River are described in the latter part of this chapter.

(19) **Weather, Western Long Island Sound and vicinity**

- (20) These waters are more protected than the eastern Sound resulting in fewer gales. However, winters are colder and summers warmer due to this sheltering effect. Fog is not so frequent either and tends to burn

off quicker than farther east. Winter winds of 16 knots or more are likely about 12 to 15 percent of the time and are predominantly from the west through northwest. Harbors such as Cold Spring, Oyster Bay, Hempstead and Manhasset offer additional shelter. In summer thunderstorms may develop on 4 to 5 days per month. These are most likely during the afternoon or evening.

(21) In Long Island Sound the north and south shores are equally subject to fog, except that on spring and summer mornings, when there is little or no wind, fog will often hang along the Connecticut shore while it is clear offshore and southward.

(22) In the western end of Long Island Sound, although fogs are liable to occur at any time, they are not encountered so often nor do they generally last so long as farther eastward.

(23)

Ice

(24) In ordinary winters the floating and pack ice in Long Island Sound, while impeding navigation, does not render it absolutely unsafe. In exceptionally severe winters, waterways may become impassable for some vessels.

(25) Drift ice, which is formed principally along the northern shore of the sound under the influence of the prevailing northerly winds, drifts across to the southern side and accumulates there, massing into large fields, and remains until removed by southerly winds that drive it back to the northerly shore.

(26) In ordinary winters ice generally forms in the western end of the sound as far as Eatons Neck; in exceptionally severe winters ice may extend to Falkner Island and farther eastward.

(27)

Effects of winds on ice

(28) In Long Island Sound northerly winds drive the ice to the southern shore of the sound and southerly winds carry it back to the northern shore. Northeasterly winds force the ice westward and cause formations heavy enough to prevent the passage of vessels of every description until the ice is removed by westerly winds. These winds carry the ice eastward and, if of long enough duration, drive it through The Race into Block Island Sound, from where it goes to sea and disappears.

(29) In Bridgeport Harbor winds from north to northwest clear the harbor of drift ice, and those from southeast through south to southwest force the ice into the harbor from the sound. The outer buoys may be carried out of position by heavy ice during severe winters.

(30) Additional information concerning ice conditions in the waters adjoining Long Island Sound is given under the local descriptions.

(31) **Vessel Traffic Service, New York**, operated by the U.S. Coast Guard, serves New York Harbor. (See **33 CFR 161.1** through **161.25**, chapter 2, for regulations).

(32)

Pilotage, Western Long Island Sound

(33)

Pilotage by a state-licensed pilot is compulsory in Long Island Sound for foreign flag vessels and U.S. vessels that are under register (i.e., engaged in foreign trade), Enrolled vessels (i.e., U.S. vessels engaged in coastwise trade) may be required to have a U.S. Coast Guard federally licensed pilot unless the master has recency for the intended area. For vessels entering Long Island Sound from the east (from sea via Block Island Sound) see Pilotage, Long Island Sound (indexed as such), chapter 8. For vessels entering Long Island Sound from the west (East River) see Pilotage, New York and Approaches to New York (indexed as such), chapter 11.

(34)

Recommended Vessel Route, Western Long Island Sound

(35)

Recommended vessel routes have been established for deep draft vessels (including tugs and barges) transiting Western Long Island Sound and the approaches to the East River. While not mandatory, deep draft commercial vessels (including tugs and barges) are requested to follow the designated routes at the master's discretion. Other vessels, while not excluded from these routes, should exercise caution in and around these areas and monitor VHF-FM channel 16 or 13 for information concerning deep draft vessels (including tugs and barges) transiting these routes. (See NOS charts and Local Notice to Mariners for route limits.)

(36)

Bridgeport Harbor to Sherwood Point

(37)

Bridgeport Harbor, on the north side of Long Island Sound north-northwestward of Stratford Shoal (Middle Ground) Light and about 52 miles from New York, consists of two widely separated units. The main harbor and its branches serve the east and central portions of the city of **Bridgeport**, and Black Rock Harbor and its tributaries serve the western part. Black Rock Harbor and Cedar Creek are described under separate headings. Waterborne commerce at Bridgeport consists mostly of petroleum products, lumber, sand and gravel, building materials and scrap iron.

(38)

Prominent features

(39)

The large red and white horizontally banded stack of a powerplant on Tongue Point is the most prominent landmark in this area. Other prominent landmarks include several church spires, the radio towers at Pleasure Beach and Bridgeport Harbor Light 7. An aerolight about 1.3 miles northwestward of Stratford Point can be seen from offshore.

(40)

Bridgeport Harbor Light 7 (41°09'24"N., 73°10'47"W.), 50 feet above the water, is shown from a black skeleton tower with small white house, on a black base, on the west side of the entrance channel near the end of the west breakwater.

(47)

Structures across Tributaries of Bridgeport Harbor				
Name•Description•Type	Location	Clear Width of Draw or Span Opening (feet)	Clear Height above Mean High Water (feet)	Information
Johnsons Creek				
Highway Bridge (swing)	41°09'58"N., 73°10'03"W.	65	7	
Yellow Mill Channel				
Stratford Avenue Bridge (basculer)	41°10'36"N., 73°10'35"W.	82	11	Note 1
Interstate 95 Bridge (fixed)	41°10'42"N., 73°10'33"W.	105	39	
Pequonnock River				
Interstate 95 Bridge (fixed)	41°10'38"N., 73°11'08"W.	134	60	
Overhead power cable	41°10'38"N., 73°11'10"W.		150	
Stratford Avenue Bridge (vertical lift)	41°10'45"N., 73°11'09"W.	103	8 (down), 68 (up)	Notes 2 and 3
Peck Railroad Bridge (basculer)	41°10'58"N., 73°11'09"W.	105, 65 (open)	26	Note 2
Overhead power cables	41°10'58"N., 73°11'11"W.		160	
Congress Street Bridge	41°11'01"N., 73°11'15"W.	—	—	Draw spans removed
East Washington Avenue Bridge (fixed)	41°11'10"N., 73°11'21"W.	69	4	
Note 1 – See 33 CFR 117.1 through 117.59 and 117.225, chapter 2, for drawbridge regulations.				
Note 2 – See 33 CFR 117.1 through 117.59 and 117.219, chapter 2, for drawbridge regulations.				
Note 3 – Bridgetender monitors VHF-FM channel 13; call sign KU-6033.				

(41)

Channels

(42)

From deep water in Long Island Sound the dredged channel extends north-northeastward between two converging breakwaters into the main harbor, and thence into the three tributaries; Johnsons Creek, Yellow Mill Channel and Pequonnock River. For detailed channel information and minimum depths as reported by the U.S. Army Corps of Engineers (USACE), use NOAA Electronic Navigational Charts. Surveys and channel condition reports are available through a USACE hydrographic survey website listed in Appendix A.

(43)

A power plant is at **Tongue Point**. A privately dredged channel leads from the main channel to the power plant's offshore oil wharf on the south side of the point. In 1980, the channel, except for a 17-foot depth on the southwesterly side of the widener, had a reported controlling depth of about 26 feet; depths of 31 to 37 feet are reported alongside the wharf. Another privately dredged channel, used by barges, leads from the main channel to the powerplant's facilities on the east side of the point. In 2009, the controlling depth in the channel was 13.5 feet.

(44)

Johnsons Creek, northward of Pleasure Beach, is entered eastward of Tongue Point through a marked dredged channel leading to anchorage basins, two on the west side, and one at the head of the creek. Private yacht clubs and two oil-receiving piers are on the creek.

(45)

Yellow Mill Channel is entered through a dredged channel that leads for about 0.8 mile north-northeastward from just above the first bend in the main channel to the head of the creek. Flats, largely bare at low water, are on both sides of the channel. Depths at the wharves are 8 to 15 feet.

(46)

Pequonnock River, the most westerly of the tributaries, is easily followed by small craft, but larger vessels may need the assistance of a tug to get around the sharp bends. The river is entered through a dredged channel that leads northward from the main channel just below Connecticut Turnpike bridge to the head of navigation just below the Berkshire Avenue Dam, about 1.1 miles above the entrance. Depths at some of the wharves are 10 to 15 feet.

(48)

Anchorage

(49)

Bridgeport Harbor has three anchorage areas inside the breakwaters. An anchorage is on the east side of the main channel northwestward of Pleasure Beach. A second is on the west side of the channel south of Tongue Point, and a third runs parallel to the west side of the main channel from Tongue Point to Steel Point. The rest of the harbor area consists of broad and shallow sand flats. Vessels seeking shelter from strong northerly winds sometimes anchor off the entrance; the holding ground is good.

(50)

A **general anchorage** is in Johnsons Creek. (See 33 CFR 110.1 and 110.148, chapter 2, for limits and regulations.)

(51)

Dangers

(52)

The entrance is clear, and the only dangers are the previously discussed shoals on the east, south of Stratford Point, and on the west, the Penfield Reef shoals.

(53)

Current

(54)

The velocity of flood or ebb is about 0.7 knot in the entrance between the breakwaters. Inside the harbor the currents are generally weak. See the Tidal

Current prediction service at *tidesandcurrents.noaa.gov* for specific information about times, directions, and velocities of the current at numerous locations throughout the area. Links to a user guide for this service can be found in chapter 1 of this book.

(55)

Ice

(56)

Ice does not interfere seriously with navigation in Bridgeport Harbor, although its tributaries are closed at times. The winds from the north and northwest clear the harbor of drift ice, and those from the southeast through the southwest force the ice into the harbor from the sound. The outer buoys may be carried out of position by heavy ice during severe winters.

(57)

Weather, Bridgeport and vicinity

(58)

The terrain of the mainland is of glacial origin and rises in a rolling, mostly wooded manner to the foothills of the Berkshires, 30 miles to the north, and the Catskills, about 60 to 70 miles to the northwest. There is some foehn effect (chinook) with north and northwest winds, and the upslope effect with the approach of a coastal low is quite pronounced. The most pronounced topographical effect, however, is that of the land-sea breeze that is most pronounced in the spring, summer, and early autumn. The land-sea breeze effect during this period will inevitably cause a shift in the wind direction, even with a moderately strong isobaric flow.

(59)

As a result of the sea breeze, mean monthly temperatures during the summer average 3 to 5 degrees (2 to 3°C) lower than nearby inland stations. Likewise, temperatures during the fall and winter are moderated several degrees owing to the proximity of Long Island Sound. The average annual temperature at Bridgeport is 52°F (11.1°C). The average high is 60°F (15.6°C) and the average low is 44°F (6.7°C). July is the warmest month with average extremes of 82°F (27.8°C) and 66°F (18.9°C). January is the coolest with average extremes of 37°F (2.8°C) and 23°F (-5°C). The record high temperature is 103°F (39.4°C) set in July 1957 while the all-time low temperature is -7°F (-21.7°C) recorded in January 1984.

(60)

Precipitation is slightly heavier than at nearby inland stations the year around since coastal low-pressure systems move quite consistently on a track to the south of Bridgeport. One of the greater hazards along the coastal areas in the vicinity of Bridgeport is the accumulation of water (especially during periods of high tide) with the approach of a slowly moving, deepening, low-pressure system from the south. Severe storms occasionally cause inundation of 4 to 5 feet (1.2 to 1.5 m). The average annual precipitation is 41 inches (1041 mm). Precipitation is evenly distributed throughout the year with the difference between the wettest (March) and driest month (February) averaging only 0.89 inches (23 mm). Snowfall averages 26 inches (660 mm) per year and has fallen from October

through May. The greatest 24-hour snowfall on record was 16 inches (406 mm) recorded in February 1969.

(61)

Bridgeport has been directly affected by many tropical storms since 1871. Tropical storm Belle passed over the site in August 1976. Highest winds were only 60 knots. One day earlier, Belle was packing winds of 105 knots. In September 1985, Hurricane Gloria passed about five miles west of the Bridgeport weather station placing the site in the roughest sector of the storm. Highest gusts approached 75 knots and highest sustained winds were 64 knots. Two days earlier, Gloria had supported winds of 125 knots.

(62)

The National Weather Service maintains an office at the Bridgeport Municipal Airport; barometers may be compared here.

(63)

Pilotage, Bridgeport

(64)

Pilotage by a state-licensed pilot is compulsory in Long Island Sound for foreign flag vessels and U.S. vessels that are under register (i.e., engaged in foreign trade). Such vessels can arrange for a state licensed pilot by contacting the joint rotation administrator, Block Island Pilots at 243 Spring Street, Newport, RI 02840; telephone 401-847-9050 (24 hours), 800-274-1216; FAX 401-847-9052. Enrolled vessels (i.e., U.S. vessels engaged in coastwise trade) may be required to have a U.S. Coast Guard federally licensed pilot unless the master has recency for the intended area. See Pilotage, Long Island Sound (indexed as such), chapter 8. See also Pilotage, Narragansett Bay and Other Rhode Island Waters (indexed as such), chapter 6, and Pilotage Pickup Locations Off Montauk Point (indexed as such), chapter 7.

(65)

Pilot services are generally arranged in advance through ships' agents or directly by shipping companies.

(66)

Towage

(67)

Tug service is available from New Haven, Providence, Brooklyn or Staten Island on advance notice. Deep-draft vessels usually require tugs for mooring in Bridgeport Harbor.

(68)

Launch service is available to vessels at anchor.

(69)

Bridgeport is a **customs port of entry**.

(70)

Quarantine, customs, immigration and agricultural quarantine

(71)

(See chapter 3, Vessel Arrival Inspections, and Appendix A for addresses.)

(72)

Quarantine is enforced in accordance with the regulations of the U.S. Public Health Service. (See Public Health Service, chapter 1.)

(73)

Bridgeport has several hospitals.

(74)

Harbormaster

(75)

The control of the port is vested in the harbormaster, who maintains an office at the Bridgeport City Hall and

can also be contacted through the Bridgeport Police Department.

(76)

Wharves

(77)

Bridgeport has three principal privately owned and operated deep-draft facilities; one is on the south side of Tongue Point and the other two are on the east side of the harbor opposite Tongue Point. Facilities for smaller vessels and barges are along the sides of the harbor and on Johnsons Creek, Yellow Mill Channel and Pequonnock River. Most of the facilities at Bridgeport are of the marginal-type wharf, particularly those in the constricted tributaries. Only the deep-draft facilities are described. The alongside depths for the facilities described are reported; for information on the latest depths contact the private operators. All of these facilities have highway connections, and most have water connections.

(78)

Cargo in the port is usually handled by ship's tackle; special handling equipment, if available, is mentioned in the description of the particular facility.

(79)

Santa Buckley Energy Terminal: head of the east branch of Cedar Creek, Black Rock Harbor; 150-foot breasting face with two dolphins; 18 feet alongside; 350 feet plus total berthing space; provides marine fuel to large commercial vessels and private yachts up to 350 feet long.

(80)

United Illuminating Co. Fuel Oil Dock: on the south side of Tongue Point; an offshore wharf with 345-foot breasting face, 900 feet with dolphins; 31 to 37 feet alongside; deck height, 20 feet; receipt of fuel oil; owned and operated by United Illuminating Co.

(81)

Shell Oil Co. Dock: on the east side of the harbor opposite Tongue Point; 190-foot face, 700 feet with shore moorings; 35 feet alongside; deck height, 13 feet; vessels usually moor portside-to; receipt and shipment of petroleum products; owned by Shell Oil Co. and operated by Shell Oil Co. and International Petroleum Terminals Co.

(82)

Cilco Terminal Co. Wharf: 0.3 mile northwestward of Shell Oil Co. Dock; 930-foot face; 33 feet alongside; deck height, 13 feet; 90,000 square feet covered storage, 16 acres of open storage; receipt and shipment of general cargo; receipt of lumber, steel products, and pumice, and shipment of scrap metal; owned and operated by Cilco Terminal Co., Inc.

(83)

The city-owned recreational pier, seldom used for mooring vessels, is on the northwest end of Pleasure Beach; the end of the pier has depths of about 20 feet.

(84)

The municipal dock, a marginal-type wharf, is on the west side of Pequonnock River, just below the Interstate 95 Bridge. A ferry to Port Jefferson ties up at the dock.

(85)

Supplies

(86)

Diesel oil, diesel fuel, gasoline, lubricants, water, provisions and marine supplies can be obtained at Bridgeport.

(87)

Repairs

(88)

Bridgeport has no facilities for making major repairs or for drydocking deep-draft vessels; the nearest facilities are at the ports of Boston, MA and New York, NY. Bridgeport, however, does have facilities for making above- and below-the-waterline repairs to fishing boats, tugs and recreational craft and hull and engine repair facilities for small craft. The largest marine railway in the area can handle vessels to 120 feet and 400 tons. A 10-ton crane is available.

(89)

Communications

(90)

Bridgeport is served by air, rail and bus. Ferry service to Port Jefferson is available year round.

(91)

Black Rock Harbor, part of Bridgeport Harbor, although not connected with it other than by Long Island Sound, is entered through a dredged channel about 2 miles westward of the main harbor entrance to Bridgeport. The channel leads northward through Black Rock Harbor, and thence to the head of **Cedar Creek** where it divides into **East Branch** and **West Branch**. Black Rock Harbor and Cedar Creek are the approach by water to the large factories of the western part of the city of Bridgeport. The federal project depth in the dredged channel is 18 feet from the entrance to the head of the project. For detailed channel information and minimum depths as reported by the U.S. Army Corps of Engineers (USACE), use NOAA Electronic Navigational Charts. Surveys and channel condition reports are available through a USACE hydrographic survey website listed in Appendix A. The channel is marked by buoys and lights for about 1.7 miles above the entrance. Caution is advised to avoid an obstruction reported at about 41°08'12"N., 073°13'12"W., on the west side of the entrance channel covered 14 feet.

(92)

Anchorage in depths of 18 to 22 feet and exposed to southeasterly and northeasterly winds can be found off the entrance, northeast of the bar that makes out from Shoal Point to Black Rock. Small craft drawing less than 6 feet can select anchorage on either side of the dredged channel as far as the yacht club on the east side of Grover Hill.

(93)

Depths of 8 to 18 feet are reported alongside some of the wharves in Black Rock Harbor.

(94)

To avoid a shoal off the point separating East Branch and West Branch at the head of Cedar Creek, enter East Branch, pass about 100 feet off the wharf on the southeast side below the entrance and head up the middle. To enter the West Branch, pass 100 feet off the wharves on the southeast side of the branch.

(95)

Fayerweather Island, on the eastern side of the entrance of Black Rock Harbor, is marked at its south end by the white tower of an abandoned lighthouse. A breakwater and a seawall connect its northern part with the shore eastward.

(96) **Burr Creek**, northward of the town of Black Rock, on the west side of the channel, is the site of a large marina. Berths, gasoline, diesel fuel, electricity, water, ice, a lift and repair facilities are available. In 1986, depths of about 4 to 5 feet were reported at the face of the gasoline dock and alongside the boat slips. Burr Creek has many shoals; mariners are advised to seek local knowledge before entering.

(97) **Ash Creek**, about 0.7 mile westward of Fayerweather Island, is entered through a privately dredged channel protected on its southwest side by a jetty. The entrance channel is marked by private buoys and a private seasonal **314°** lighted range. The channel leads northwestward to a marina. In 2012, depths of 6 feet were reported in the entrance channel, with 5 feet reported in the basin. A 5 mph **speed limit** is enforced in the creek.

(98) **Penfield Reef**, on which there are rocks bare at low water, is about 1.4 miles south of Black Rock Harbor and 1.3 miles eastward of **Shoal Point**, to which it is joined by a bar that bares at low water. **Black Rock**, marked by a daybeacon and a lighted buoy, is the outermost danger of this reef. A dangerous submerged rock, reported covered 1 foot, is about 40 yards southward of the daybeacon and lighted buoy. **The Little Cows**, about 0.2 mile northward of Black Rock, consist of rocks awash, and is marked by a lighted buoy.

(99) **Penfield Reef Light** (41°07'02"N., 73°13'20"W.), 51 feet above the water, is shown from a white tower on a granite dwelling on a pier, on the south side of the reef, south of the entrance to Black Rock Harbor. A sound signal at the light is operated by keying the microphone five times consecutively on VHF-FM channel 83A.

(100) A reef, partly bare at low water and with little depth over any part of it, extends over 0.5 mile southward from **Pine Creek Point**, 1.1 miles southwest of Shoal Point. A lighted bell buoy is off the south end of the shoal.

(101) **Southport Harbor**, about 1 mile westward of Pine Creek Point, comprises the lower portion of Mill River and is used primarily for recreational boating. A breakwater, marked at its end by a light, is off the east side of the entrance to the harbor. The harbor is entered through a dredged channel that leads from Long Island Sound to a harbor basin and anchorage, about 1.1 miles above the channel entrance. The channel is marked on its west side by a light and by buoys up to the breakwater. Caution is advised to avoid oyster stakes in the area southeastward of the harbor entrance. A 5 mph **speed limit** is enforced in the harbor.

(102) **Southport** is a village on the west side of the harbor. A yacht club landing and the town dock are on the west side of the harbor; depths of about 6 feet are alongside the town dock and about 6 to 8 feet alongside the yacht club landing. Gasoline, diesel fuel, ice, water and some marine supplies can be obtained. Minor engine repairs can be made. The **harbormaster** can be contacted through the Fairfield Police Department.

(103) **Frost Point**, 1 mile westward of Southport entrance, is marked by many residences and several private piers in

disrepair on its southeast side. A reef partly bare at low water extends about 0.4 mile southward from the point.

(104) **Sherwood Point**, a mile westward of Frost Point, is marked by a bare boulder on the reef which extends about 250 yards off the point. A rocky patch, on that the least depth found is 11 feet, is about 0.8 mile southward of the point.

(105)

Saugatuck River to Stamford Harbor

(106) **Saugatuck River**, 6 miles westward of Penfield Reef Light and northward of Cockenoe Island, has its entrance between **Cedar Point** on the east and **Bluff Point** on the west. The river is shallow, full of ledges and boulders, and is used chiefly for receipt of petroleum products, sand and gravel and for recreational boating. Freshets do not appreciably affect the height of the water in the navigable part of the river. During the winter, ice usually covers the entire river to its mouth.

(107) Anchorage exposed to southeasterly winds can be had in the entrance to Saugatuck River in 12 to 22 feet, about 0.4 mile southward of **Cedar Point**.

(108) The channel in Saugatuck River is narrow and crooked; vessels should proceed with caution, preferably on a rising tide. In 2001, a reported depth of about 4 feet could be carried in the river from the entrance to about 0.7 mile above the Connecticut Turnpike Bridge at Saugatuck; thence in 2022, the 4-foot channel to Westport had a controlling depth of 1 foot, with shoaling to bare in the east branch. The channel is buoyed to **Stony Point**, about 1.9 miles above the entrance. A 5 mph **speed limit** is enforced on the river.

(109) **Compo Yacht Basin** is in the bight about 0.3 mile northwestward of Cedar Point. In 1995, the privately dredged channel that leads to the basin had a reported depth of 8 feet with 7 feet reported in the basin. The channel is marked by private buoys and a private lighted entrance range. A yacht club with landing and mooring facilities is in the basin. Gasoline, berths, electricity and water are available at the landing.

(110) A yacht club in a privately dredged basin on the west side of Bluff Point has berths with electricity, gasoline and ice.

(111) **Duck Creek**, on the west side of the river about 0.6 mile above Bluff Point, is the site of a private yacht club. The reported controlling depth in the creek was about 7 feet in 1981. The entrance and basin are privately marked.

(112) **Bermuda Lagoon**, southward of Duck Creek, is a large privately owned and maintained basin for the use of the residents in the immediate area.

(113) **Saugatuck**, a village in the town of Westport, is 2.5 miles above the entrance. Commercial traffic consists mostly of barges that call at a sand and gravel company at Saugatuck; depths at the wharf are about 5 feet.

(114) At Saugatuck the river is crossed by a railroad bridge having a bascule span with a clearance of 13 feet. Overhead power cables at the bridge have a clearance

of 192 feet. The Connecticut Turnpike Bridge, 0.1 mile above, has a fixed span with a clearance of 59 feet. About 0.1 mile farther up is a highway swing bridge with a clearance of 7 feet. (See **33 CFR 117.1** through **117.59** and **117.221**, chapter 2, for drawbridge regulations.)

(115) **Westport** is a town at the head of navigation on the Saugatuck River, about 1.4 miles above Saugatuck.

(116) There are several small-craft facilities on the river in the vicinity of the bridges. Gasoline, water, marine supplies and a 3-ton lift are available; hull and engine repairs can be made. Depths of 6 feet are reported alongside the facilities.

(117) **Norwalk Islands**, privately owned with the exception of Shea and Grassy Islands, which are owned by the city of Norwalk, and Cockenoe Island, which is owned by the town of Westport, are 1 to nearly 2 miles off the north shore of Long Island Sound and extend from Georges Rock to Greens Ledge Light, a distance of 6 miles. **Cockenoe Harbor** and **Sheffield Island Harbor**, the two approaches to Norwalk River, are good anchorages for drafts of 9 to 12 feet and are easily made. The bottom is very irregular around the islands and rocks in the group; vessels should proceed with caution when crossing shoal areas and avoid all broken ground. In the vicinity are some oyster stakes and spars, which occasionally are towed under or broken off; caution is recommended, especially at night, for small craft.

(118) **Cockenoe Island**, at the eastern end of Norwalk Islands, is marked on its south side by two knolls; the remainder of the island is low and level. A bar, dry in places at low water but with general depths of 1 to 2 feet, connects the island with the mainland at **Seymour Point**.

(119) **Cockenoe Shoal** is an extensive and dangerous area that extends 1.3 miles eastward and east-southeastward from Cockenoe Island. The entire area is exceedingly broken and should be avoided by strangers, even in small craft. **Cockenoe Reef** extends about 0.5 mile eastward from the northern end of Cockenoe Island. **Georges Rock**, with a least depth of 2 feet, is at the eastern end of the shoal; a lighted buoy is off the northeast side of the rock. A lighted bell buoy marks the southeast end of the shoal.

(120) **Channel Rock**, covered 1½ feet, is about 0.2 mile southwestward of Cockenoe Island and is marked by a buoy to the southward. **Peck Ledge**, on the western side of Cockenoe Harbor entrance, is marked by Peck Ledge Light and Norwalk East Approach Buoy 5.

(121) **Cockenoe Harbor**, westward of Cockenoe Island, is marked by Peck Ledge Light. The best anchorage is in depths of 9 to 12 feet, northward and northwestward of the light.

(122)

Routes

(123) To enter Cockenoe Harbor from the eastward, pass southward of Cockenoe Island Shoal Lighted Bell Buoy 24, steer **254°** until Peck Ledge Light bears northward of **285°**, then steer for the light until up with Norwalk East

Approach Buoy 4 that marks Channel Rock, and then pass eastward and northward of the light at a distance of 200 to 300 yards.

(124) To enter Cockenoe Harbor from the westward, give the edge of the shoals southward of the Norwalk Islands a good berth until Peck Ledge Light bears westward of **348°**, and then steer **north** and pass 400 yards eastward of the light and midway between Norwalk East Approach Buoy 4 that marks Channel Rock and Norwalk East Approach Buoy 5.

(125) The islands and rocks on the west side of Cockenoe Harbor include **Calf Pasture Island**, with several houses and a few trees; **Sheep Rocks**, which uncover 2 feet; **East White Rock**, high and white; and **Grassy Hammock Rocks**, which uncover and are marked by a light.

(126) The larger islands southwestward are in general hilly and partly settled. **Chimon Island** is marked by several houses; **Copps Island** by large boulders that extend east from it; and **Sheffield Island**, the westernmost of the group, by an abandoned lighthouse tower.

(127) Rocks that uncover extend nearly 0.3 mile southwestward of Sheffield Island.

(128) **Greens Ledge** is a rock and sand ridge that extends 1.1 miles southwestward from Sheffield Island. Depths of 10 to 15 feet extend about 400 yards westward and southwestward from Greens Ledge Light. **Greens Ledge Light** (41°02'30"N., 73°26'38"W.), 62 feet above the water, is shown from a conical tower, the upper half white and lower half brown, on a black cylindrical pier on the north side of the west end of the ledge. A mariner radio activated sound signal at the light is initiated by keying the microphone five times consecutively on VHF-FM channel 83A.

(129) **Cable and Anchor Reef** covers an area about 0.4 mile in diameter about 2 miles southeastward of Greens Ledge Light. The least found depth is 25 feet. A lighted bell buoy marks the southern side.

(130) **Sheffield Island Harbor**, entered between Greens Ledge and the mainland, is the main approach to Norwalk Harbor and Norwalk River. Anchorage in depths of 12 to 20 feet can be found northwestward of Sheffield Island. The shoal flats on the north side of the harbor have rocks and boulders in places.

(131) **Norwalk River** empties through **Norwalk Harbor** into the north side of Long Island Sound, northward of the Norwalk Islands and about 40 miles east of New York.

(132)

Channels

(133) Norwalk Harbor and River are entered through a dredged channel that extends 3 miles northeasterly from Sheffield Island Harbor between **Manresa Island** on the west and **White Rock** and numerous islets and foul ground on the east, to the first highway bridge at South Norwalk, and thence northerly for another 1.3 miles to the basin at the head of navigation at Norwalk. The tall stack on Manresa Island, marked on top by red lights, is very prominent and can be seen for many miles from sea.

(134) A federal project provides for a depth of 12 feet from Sheffield Island Harbor to the State Route 136 bridge, thence 10 feet to a 10-foot basin at the head of navigation at Norwalk; an anchorage basin opposite Fitch Point has a project depth of 10 feet. The channel is marked by buoys and lights to the South Anchorage Basin. For detailed channel information and minimum depths as reported by the U.S. Army Corps of Engineers (USACE), use NOAA Electronic Navigational Charts. Surveys and channel condition reports are available through a USACE hydrographic survey website listed in Appendix A.

(135) **Caution**

(136) Chemically contaminated material has been buried in the navigation channel off Oyster Shell Point about 140 yards below Interstate Route 95 bridge. The material is covered with a layer of noncontaminated dredged material not less than 3 feet thick.

(137) **Bridges**

(138) Three bridges cross Norwalk River between South Norwalk and Norwalk. The first, State Route 136 highway bascule bridge at South Norwalk, has a clearance of 8 feet. The second, a railroad swing bridge just above the highway bridge, has a clearance of 16 feet; an overhead power cable with a clearance of 203 feet crosses the river near the railroad bridge. The third, a turnpike highway fixed bridge, about 0.6 mile above the railroad bridge, has a clearance of 60 feet. (See **33 CFR 117.1** through **117.59** and **117.217**, chapter 2, for drawbridge regulations.) The bridgetenders at the State Route 136 bridge and the railroad bridge monitor VHF-FM channel 13; call signs KXJ-707 and KU-6035, respectively.

(139) **Tavern Island**, with several houses and foul ground on all sides, is just northwestward of the dredged channel entrance to Norwalk Harbor.

(140) **Gregory Point**, marked by a clubhouse and wharf, is on the east side of Norwalk Harbor 1.9 miles above the channel entrance. The boat basin immediately eastward of Gregory Point, locally known as **Norwalk Cove**, is entered through a privately maintained channel. In 1987, the controlling depth was 8 feet in the channel, thence in 1981, 6 feet in the eastern part of the basin. A 220-yard-long detached timber breakwater is on the north side of channel entrance.

(141) **East Norwalk Harbor**, at the town of **East Norwalk**, is on the east side of the river about 2 miles above the main channel entrance. The harbor is entered through a dredged channel that leads westward of **Fitch Point** to the head and to North Anchorage Basin on the westerly side of the harbor. A federal project provides for a depth of 6 feet from Fitch Point Light 1 to and in an anchorage basin at East Norwalk. For detailed channel information and minimum depths as reported by the U.S. Army Corps of Engineers (USACE), use NOAA Electronic Navigational Charts. Surveys and channel condition reports are available through a USACE hydrographic survey website

listed in Appendix A. The channel is marked to near the southern end of the basin.

(142) **South Norwalk** is an important commercial and manufacturing city on the west side of Norwalk River, about 3 miles above the channel entrance. The depths at the wharves below the bridges range from 5 to 10 feet. Commercial traffic is mainly in building materials, petroleum products and shell fishing.

(143) **Norwalk**, 1.3 miles above South Norwalk, is a city on both sides of the river at the head of navigation. The wharves have depths of about 7 feet alongside. The channel from South Norwalk to Norwalk is winding, with extensive flats on both sides, and requires local knowledge to follow it even at high water.

(144) Local regulations provide penalties for exceeding the posted 5 mph **speed limit** or for dumping refuse in the harbor. These regulations are enforced by the Marine Division of the Norwalk Police Department. Police patrol boats operate the year round and are equipped to handle radio traffic on VHF-FM channel 16 (156.80 MHz).

(145) The **harbormaster** at Norwalk can be reached through the police department.

(146) **Current**

(147) The tidal currents in Long Island Sound off Norwalk have a velocity of about 1 knot. In Norwalk River, off Gregory Point, the velocity of current is about 0.6 knot. The currents in the harbor follow the direction of the channel, the ebb current being somewhat stronger than the flood. See the Tidal Current prediction service at tidesandcurrents.noaa.gov for specific information about times, directions, and velocities of the current at numerous locations throughout the area. Links to a user guide for this service can be found in chapter 1 of this book.

(148) The channel up to South Norwalk is navigable throughout the year. The harbor and river above South Norwalk are covered with **ice** during a part of the winter. A channel is ordinarily kept open to the highway bridge, but the East Norwalk Channel and the channel in the river are usually closed for about 6 weeks each winter.

(149) **Pilotage, Norwalk**

(150) Pilotage by a state-licensed pilot is compulsory in Long Island Sound for foreign flag vessels and U.S. vessels that are under register (i.e., engaged in foreign trade). Such vessels can arrange for a state-licensed pilot by contacting the joint rotation administrator, Block Island Pilots at 243 Spring Street, Newport, RI 02840; telephone 401-847-9050 (24 hours), 800-274-1216; FAX 401-847-9052. Enrolled vessels (i.e., U.S. vessels engaged in coastwise trade) see Pilotage, Long Island Sound (indexed as such), Chapter 8.

(151) **Small-craft facilities**

(152) There are excellent small-craft facilities at South Norwalk and East Norwalk and in Norwalk Cove.

(153)

Communications

(154) Rail and bus lines serve the city and area.

(155) **Wilson Cove**, on the north side of Sheffield Island Harbor, is entered about 0.6 mile northwestward of the dredged channel entrance to Norwalk Harbor between **Wilson Point** on the north and Bell Island on the southwest. The ruins of a former oil-receiving pier are on the southwestern extremity of Wilson Point. A yacht club is on the east side of the cove, about 150 yards northward of the wharf ruins, and a marina is at the head of the cove. Gasoline, limited marine supplies, ice, an 18-ton crane, a 20-ton mobile hoist and engine and hull repair facilities are available at the marina.

(156) **Noroton Point**, at the southern end of **Bell Island**, is marked by a flagpole and a prominent house with a cupola. Rocks, bare at low water, are about 300 yards northward of the point. **Pine Point**, just westward of Noroton Point, has a wharf in ruins at its southern end. A shoal with depths of 8 to 12 feet extends about 0.3 mile from the shore westward of Noroton Point. The bottom is broken with boulders in places, and small vessels crossing the shoal should proceed with caution. **Ballast Reef**, about 0.2 mile westward of Pine Point and off the southeast side of the entrance to Fivemile River, is almost bare at low water and extends 300 yards off **Roton Point**; a buoy marks the outer end of the reef.

(157) **Fivemile River** is a narrow inlet about 0.6 mile westward of Noroton Point and about 0.9 mile northward of Greens Ledge Light. A federal project provides for a depth of 8 feet to a point about 1 mile up the river. For detailed channel information and minimum depths as reported by the U.S. Army Corps of Engineers (USACE), use NOAA Electronic Navigational Charts. Surveys and channel condition reports are available through a USACE hydrographic survey website listed in Appendix A. The river is shallow except in the dredged channel and rocks exposed 2 feet at low water have been reported on the east side of the channel near the channel edge in about 41°03'37"N., 73°26'47"W. The channel is marked by buoys.

(158) In 1981, depths of 2 to 5 feet were reported alongside the small-craft facility wharves on the east side of the river. The river is used chiefly by pleasure craft.

(159) A **special anchorage** is in Fivemile River. (See **33 CFR 110.1** and **110.55a**, chapter 2, for limits and regulations.)

(160) **Rowayton** is a village at the head of Fivemile River. Several **small-craft facilities** are on the east side of the river.

(161) **Scott Cove**, about 0.8 mile westward of Fivemile River and about a mile northwest of Greens Ledge Light, is a rocky shelter with a channel good for about 6 feet to the shallow area northward. There are rocks and broken ground in the entrance. The channel into **Zieglers Cove**, just west of Scott Cove and south of **Great Island**, is good for about 9 feet. A rock, covered 4 feet, lies almost

in mid-entrance to this cove. Local knowledge is required to navigate both coves.

(162) **Long Neck Point**, about 2 miles southwestward of Fivemile River, has many summer residences and boat landings on both of its sides. Shoals extend about 0.3 mile off the point. Numerous obstructions exist up to 1.2 miles west-southwest of Long Neck Point.

(163) From Long Neck Point to Shippan Point, about 2.6 miles to the southwestward, there are many reefs and boulders, and the bottom is very broken, necessitating caution. This area is the approach to several shallow coves, none of which is commercially important.

(164) **Goodwives (Darien) River** is a small and shallow stream on the west side of Long Neck Point. Along the western shore and about 0.3 mile above the south end of the point, foul ground extends nearly 200 yards offshore. A private seasonal, **352°** lighted range and buoys mark the best water to a yacht club and basin on the southeast side of **Noroton Neck**. In 2002, a depth of 4.5 feet could be carried to the yacht club landing thence in 1981, 3 feet through **The Gut** to the boat club landing just above **Peartree Point**. Above the boat club landing, the river is practically dry at low water. Goodwives River and its entrance is a **special anchorage**—see **33 CFR 110.1** and **110.56**, chapter 2, for limits and regulations. A 5 mph **speed limit** is enforced on the river.

(165) **Smith Reef**, about 0.9 mile southwestward of Long Neck Point, consists of two rocks that uncover 2 feet. The south end of the reef is marked by a lighted buoy. **Bold Rock**, which uncovers 4 feet, is on the east edge of the rocky ridge extending northward from the reef. Many oyster stakes are on the ridge.

(166) **Cove Harbor**, northward of Smith Reef and about 1 mile westward of Long Neck Point, has depths of about 5 to 10 feet. Local knowledge is necessary to avoid several rocky areas in the approach to the harbor and to the basin at the northwestern end of the harbor at Cove Mills. A depth of about 1 foot can be carried across the bar at the entrance to the basin; private buoys, one of which is a seasonal speed limit buoy, mark the approach. A municipal marina is in the basin.

(167) **Westcott Cove**, just westward of Cove Harbor, has a dredged channel marked by buoys that leads along its westerly side to a basin 0.5 mile above the channel entrance, thence for 0.2 mile through the south arm of the basin. The east side of the entrance to the basin is protected by a jetty. A yacht club is in the northwesterly arm of the basin and a municipal marina is in the southeasterly arm. A marina on the west side of the south arm of the basin can provide gasoline, diesel fuel and water.

(168) **Stamford Harbor**, on the north side of Long Island Sound about 33 miles east of New York, comprises the bay north of a line from Shippan Point on the east through Stamford Harbor Ledge Obstruction Light to the west shore north of Greenwich Point. The harbor is shoal, and the approach is obstructed to a large extent by ledges and rocks. **Shippan Point**, the eastern point at the entrance, is surrounded by rocks which show at low water. **Stamford**

is a manufacturing city on the peninsula at the head of the harbor. Barges and small coastal tankers constitute the main waterborne traffic in the harbor. Petroleum products, scrap metal, sand and gravel and crushed rock are the principal products handled.

(169)

Prominent features

(170)

Stamford Harbor Ledge Obstruction Light (41°00'49"N., 73°32'34"W.), 80 feet above the water, shown from a white conical tower on a red cylindrical pier, is a private light visible from a considerable distance offshore. Also prominent are a microwave tower westward of the city and the large brown office buildings locally known as Harbor Plaza on Ware Island. **Stamford Harbor West Breakwater Light 3** (41°00'54"N., 73°32'17"W.), 37 feet above the water, is shown from a tower with a square green dayboard at the east end of the west breakwater. **Stamford Harbor East Breakwater Light 4** (41°00'54"N., 73°32'06"W.), 21 feet above the water, is shown from a skeleton tower with a triangular red dayboard at the west end of the east breakwater.

(171)

Channels

(172)

Stamford Harbor is entered through a dredged entrance channel that leads northward from Long Island Sound between two detached breakwaters. The breakwater ends nearest the channel are marked by lights. About 1 mile above the entrance, the channel divides into **East Branch** and **West Branch**. The channels are marked by buoys and a **356.8°** lighted range. The 100-foot-wide channel in East Branch is constricted to 90 feet by a hurricane barrier crossing the channel about 300 yards northward of Ware Island. The opening in the barrier will be kept in the open position during fair weather but will be closed on the approach of a storm or unusually high tides. A lighted sign on either side of the barrier indicates whether the barrier is in the open or closed position. A flashing red light is shown from the control tower when the gate is about to be closed.

(173)

Anchorage

(174)

A dredged anchorage area with depths of 10 to 18 feet is north of the breakwaters and just westward of the line of the range lights, about 0.1 mile eastward of **Highwater Rock**. Small craft can anchor off the yacht club and southward or southeastward of **Rhode Island Rocks** in depths of 5 to 7 feet. All anchorages in the outer harbor are exposed to southerly and southwesterly winds.

(175)

Dangers

(176)

The Cows comprise a cluster of rocks, almost bare at low water, about 0.8 mile south-southeast of Shippan Point. Between them and the point is an area of foul ground and rocks bare and awash that extends 0.4 mile southward of Shippan Point. A lighted bell buoy is about 0.2 mile south of The Cows. **Harbor Ledge**, about 200

yards south of the west breakwater, consists of rocks and a ledge marked by a private light.

(177)

Current

(178)

The flood current at the entrance to the harbor has a velocity of 0.4 knot and sets 329°; the ebb has a velocity of 0.8 knot and sets 134°. Inside the harbor the currents have little velocity and usually set fair with the channel.

(179)

Ice

(180)

The channel in West Branch is usually navigable throughout the year, but in East Branch it is closed by ice for several weeks during severe winters. Ice forms in the harbor during most winters and usually extends to a point just northward of the breakwaters. The channels are kept open as far as practicable by passing traffic.

(181)

Prevailing winds are from the south and southwest in the summer and from northeast during the winter season.

(182)

No particular directions are required. The range favors the east side of the channel and does not show plainly until eastward of Stamford Harbor West Breakwater Light 3. In East Branch, caution is advised when making the turn abreast Ware Island to avoid a rock nearly awash at high water, eastward of the channel line.

(183)

The **harbormaster** at Stamford can be contacted through the Stamford Police Department. A police boat makes routine patrols of the harbor during the boating season. A 6 mph **speed limit** is enforced in the harbor.

(184)

Wharves

(185)

The commercial wharves along East Branch and West Branch are of the bulkhead and apron type, all are privately owned, and some are open to the public. Spur tracks from the railroad serve the facilities in East Branch.

(186)

Small-craft facilities

(187)

There are excellent facilities for small craft in both East and West Branches.

(188)

Dolphin Cove, 0.6 mile west of the entrance channel to Stamford Harbor, is a privately owned Lagoon and marine facility. No anchoring is allowed.

(189)

Captain Harbor to Pine Island

(190)

Captain Harbor, on the north shore of Long Island Sound westward of Greenwich Point and northward of Great and Little Captain Islands, affords shelter from all winds for vessels drawing 12 feet or less. The depths at the anchorage in the deeper part of the harbor, about 0.5 mile northward of Great and Little Captain Islands, are 15 to 30 feet. Vessels of less than 7-foot draft anchor on the flats. The bottom is soft, but the entire harbor and entrances are characterized by boulders. Strangers should proceed with caution, especially on the flats and other shoal areas. The eastern entrance to Captain Harbor, between Flat Neck Point and Little Captain Island, is the

(206)



clearer and better one for strangers. The western entrance, northwestward of Great Captain Island, is easy of access, but the broken ground there requires caution.

- (191) **Greenwich Point**, 1.7 miles southwestward of Stamford Harbor West Breakwater Light 3, is characterized by a low grassy hill. Reefs extend 0.3 mile southeastward from Greenwich Point. **Woolsey Rock** near the easterly end of the reefs is covered 2 feet. A buoy marks these dangers.

- (192) **Flat Neck Point**, the western end of Greenwich Point, is wooded. A reef with bare and submerged rocks extends nearly 0.3 mile southwestward and westward from Flat Neck Point.

- (193) **Greenwich Cove** opens into Captain Harbor from eastward, north of Flat Neck Point. The cove is used for mooring local craft. Depths decrease from 8 feet in the outer cove to less than 3 feet in the eastern part of the cove. **Old Greenwich** is on Greenwich Cove.

- (194) **Cos Cob Harbor** is on the northeast side of Captain Harbor. A dredged channel, with its entrance 0.2 mile north of Lowther Point, extends 1.3 miles northward through Mianus River to the head of navigation at Mianus. Shoaling is reported to be abrupt along both edges of the channel. The channel is buoyed to the first bridge; above this point the channel may be followed by steering a midchannel course between the marsh banks.

(195)

Anchorage

- (196) **Special anchorages** are in Cos Cob Harbor—see **33 CFR 110.1** and **110.58**, chapter 2, for limits and regulations.

- (197) There are several dangers off the entrance of Cos Cob Harbor that must be avoided; most are buoyed. These include **Newfoundland Reef**, covered 4 feet, a mile northeastward of Little Captain Island; **Red Rock**, which uncovers 7 feet, 0.5 mile west of Newfoundland Reef; **Hitchcock Rock**, awash at low water, 0.3 mile northwestward of Newfoundland Reef; and **Pecks Rock**, bare at low water, 0.2 mile north of Hitchcock Rock.

- (198) The Riverside Yacht Club, on the east side of Cos Cob Harbor and about 0.5 mile below the first bridge, is prominent.

- (199) **Mianus River** is crossed by a railroad bascule bridge with a clearance of 20 feet, and by a highway fixed bridge with a clearance of 45 feet, about 0.4 mile to the northward—see **33 CFR 117.1** through **117.59** and **117.209**, chapter 2, for drawbridge regulations.

- (200) Several marinas and boatyards are along the west side of the river from above the railroad bridge to the head of navigation.

- (201) **Indian Harbor** is a narrow inlet on the north side of Captain Harbor, about 1 mile west of Cos Cob Harbor. A channel with a depth of about 7 feet passes about 200 feet westward of Tweed Island and follows the west bank to

the bulkhead on the west side of the cove 300 yards above the entrance. Small craft can anchor in the channel just above this point, favoring the bulkhead. A large prominent white residence with red roof and adjacent white clock tower is on the point separating **Smith Cove** and Indian Harbor. A 5 mph **speed limit** is enforced in the harbor.

- (202) Depths of 6 feet or less extend 250 yards southward from the point separating Smith Cove and Greenwich Harbor. Bare ledges extend 200 feet southward of the point. The yacht club on the point usually maintains lights on a flagstaff during the summer. The depth is about 7 feet at the landing of the Indian Harbor Yacht Club.

- (203) **Greenwich Harbor**, on the north side of Captain Harbor and northeastward of Field Point, is entered through a dredged channel that leads northward 1.2 miles to the head. The channel is buoyed for about 0.8 mile. A 5 mph speed limit is enforced in the harbor.

- (204) **Greenwich** is a city on the railroad at the head of the harbor. The wharves are along the point on the east side of Greenwich Harbor. The **harbormaster** at Greenwich can be contacted through the Greenwich Police Department. A police boat patrols the harbor during the summer season.

- (205) There are several private yacht and boat clubs within Greenwich Harbor and a pump-out facility at the Grass Island Marina. There are no fuel docks reported to exist within Greenwich Harbor. Fuel is available a few miles to the East on the Mianus River. During the summer, a ferry operates from the town landing at the head of the harbor to Little Captain Island and Great Captain Island.

- (207) **Byram Harbor**, a bight used by small craft, is at the northwest end of Captain Harbor, just northward of **Calf Islands**. **Wilson Head**, 2 feet high, on a reef that uncovers, is in the middle of the entrance of the bight and is marked by a buoy off the eastern end. The entrance to Byram Harbor from eastward lies between Otter Rocks and Bowers Island. **Otter Rocks**, which uncover 3 feet, are marked by a lighted buoy about 150 yards to the southward; a submerged rock is close northward of the buoy. **Bowers Island**, just eastward of Calf Islands, is surrounded by a drying reef; a buoy marks the north end of the reef. A rocky ledge makes out from the point 300 yards northwestward of Otter Rocks and is marked by a buoy. A narrow channel also leads to the harbor from southwestward, passing between **Shore Island** and northernmost of the Calf Islands. Private small-craft facilities are on the west side of the harbor.

- (208) **Grassy Rocks**, 0.3 mile westward of the southerly tip of Calf Islands, uncover 7 feet. The four large ledges northwestward and westward of Grassy Rocks generally show at low water.

- (209) Foul ground extends 0.2 mile east and southeast from the southern tip of Calf Islands. The eastward extent terminates in **Jones Rocks** which are partly bare at high water and marked by a light. The southeastern extent is marked by a buoy at the outer end.

- (210) **Cormorant Reef**, northward of Great Captain Island, partly bare at high water, has a rock 4 feet high on the eastern end. A buoy is off the southern end of the reef.

- (211) **Great Captain Island**, 2.6 miles southwestward of Greenwich Point, is 0.4 mile long, fringed with reefs and marked near its southeast end by a light. A municipal bathing beach and ferry landing are on the island. The landing has reported depths of about 3 feet. A buoy marks the reef making off 0.3 mile from the southwestern end. The passage between Great and Little Captain Islands is foul and not recommended.

- (212) **Great Captain Island Light** (40°58'57"N., 73°37'23"W.), 62 feet above the water, is shown from a skeleton tower with a red and white diamond-shaped dayboard on the southeast part of the island. A sound signal at the light is operated by keying the microphone five times consecutively on VHF-FM channel 83A.

- (213) **Little Captain Island**, a summer resort about 0.6 mile northeast of Great Captain Island, has a municipal bathing beach and ferry landing. The landing has reported depths of about 8 feet. A reef extends about 250 yards northeasterly to **Wee Captain Island**. An area of boulders and broken ground extends 0.4 mile eastward and northeastward from the island and is marked by a lighted gong buoy. **Hen and Chickens**, a group of rocks and boulders about 0.4 mile northeastward of Little Captain Island, is marked by a buoy on the north side.

(214) **Current**

- (215) The tidal current in the entrance between Little Captain Island and Flat Neck Point has a velocity of about 0.7 knot. Between Jones Rocks and Cormorant Reef the estimated velocity is 1 knot.

(216) **Ice**

- (217) Ice forms in the winter in all the coves and over the greater part of Captain Harbor. It sometimes extends out of the line of Little and Great Captain Islands.

(218) **Routes**

- (219) From eastward, a course of about **298°** midway between the buoys marking the shoals off Flat Neck Point on the east and Wee Captain Island on the west will bring a vessel to a point 0.2 mile north of Hen and Chickens Buoy 1A. From here a heading of **250°**, with the southerly tip of Calf Islands ahead, will lead to anchorage off the entrance of Greenwich Harbor.

- (220) From westward, a course of **014°** for Jones Rocks Light 3 will lead into the Captain Harbor anchorage. Proceed with caution when crossing the broken rocky area on which the least found depth is 12 feet, extending 0.4 mile westward from the western end of Great Captain Island. Vessels should pass 100 yards southeastward of Jones Rocks Light 3 and over 100 yards northward of the buoy northwestward of Cormorant Reef and steer **070°** in the harbor.

(221) **Port Chester Harbor**, about 1.2 miles westward of Great Captain Island, is the entrance to Byram River that leads to the city of **Port Chester** and the town of **Byram (East Port Chester)**. The harbor entrance is between the breakwater that extends southward from **Byram Point** on the north and **North Manursing Island** on the south; a light is on the outer end of the breakwater. The lower section of the river forms the boundary between New York and Connecticut.

(222) The harbor is entered from Long Island Sound through a dredged channel that leads northward for 1.2 miles to a turning basin in **Byram River**, and thence for another 0.15 mile to just below the Mill Street fixed bridge, the head of practical navigation on the river. The channel is marked to a point about 0.3 mile above the entrance. The New England Thruway fixed bridge, with a clearance of 60 feet, crosses the river about 0.8 mile above the channel entrance.

(223)

Routes

(224) The approach to Port Chester is obstructed by rocks but is not difficult with the aid of the chart. From southward it is safer to pass eastward of **Bluefish Shoal**. **Fourfoot Rocks** may be passed on either side, remembering that the buoy is at the south end of the rocks. Entering the harbor, pass westward of Great Captain Rocks, eastward of **Manursing Island Reef** and 150 feet southward of Port Chester Light 4 on the end of the breakwater. The channel in Byram River is fairly well defined at low water but requires local knowledge for the best water; strangers should take it on a rising tide and proceed with caution.

(225) Principal commerce is in building materials, fuel oil and petroleum products, carried in vessels drawing 5 to 14 feet. Barges discharge oil cargoes at a terminal with reported depths of 12 feet alongside.

(226)

Small-craft facilities

(227) There are several small-craft facilities in Port Chester Harbor and on the Byram River at Port Chester and Byram.

(228) The area from Great Captain Island southwestward is fringed with rocks, bare and submerged, and foul ground. **Great Captain Rocks**, part of a reef 0.3 mile southeastward of Port Chester Light 4, uncover 5 to 6 feet; a buoy marks the southern end of the reef. **Transport Rock**, about 0.3 mile south-southwestward of Manursing Island, is part of several ledges generally bare at high water that extend some 0.3 mile offshore. An opening suitable for small craft leads to Rye Beach; it is buoyed.

(229) **Playland**, a recreational center at **Rye Beach**, about 2.4 miles southwest of Great Captain Island, has prominent twin towers at the entrance that are conspicuous from a southeasterly direction. Westward and close to the north breakwater is a former ferry landing in disrepair. A breakwater extends eastward from the south end of Rye Beach. The area between the former ferry landing and the south breakwater is reserved for swimming.

(230) **Forbes Rocks**, about 0.4 mile south of the Rye Beach breakwater, are partly bare at low water, on a reef with depths of 4 to 11 feet that extends 250 yards to the southward and eastward. A buoy marks the east end of the reef.

(231) **Porgy Shoal**, about 0.8 mile south of the Rye Beach breakwater, has a least found depth of 5 feet; it is marked by a lighted buoy.

(232) **Scotch Caps** are three rocky islets 1.4 miles southwestward from Porgy Shoal and on the northwest side of the extensive reefs that make out 0.9 mile southwestward of **Milton Point**. The southerly end of the reefs is marked by a lighted bell buoy about 0.6 mile southward of Scotch Caps. The entire area of the reef northward and northeastward of the lighted bell buoy is very broken and should be avoided even by small craft in the absence of local knowledge.

(233) **West Rock**, just south of the south end of Scotch Caps, is marked by a buoy.

(234) **Milton Harbor**, between **Peningo Neck** and Hen Island, is used as a summer anchorage by small pleasure craft. It is protected from all but southwesterly winds. The harbor depths decrease from 8 feet between Scotch Caps and the southwest end of Hen Island to 6 feet abreast Milton Point.

(235) Foul ground is on the northwest side near **Hen Island**; otherwise the principal danger in the harbor is a rock bare at low water, midway between Milton Point and the northeast end of Hen Island. The best entrance is between the buoys 0.4 mile southwestward of Scotch Caps.

(236) A yacht club and landing are near the southwest end of Milton Point. Near the clubhouse is a prominent white flagstaff from which lights are exhibited from sunset to sunrise during the summer.

(237) A dredged channel, marked by buoys, leads through the harbor from about 400 yards northward of Milton Point to the city boat basin and marina below **Mill Pond**. Two boatyards are in the harbor. The largest marine railway can handle craft up to 40 feet in length; gasoline, water, ice, marine supplies, and complete engine and hull repairs are available. The city **harbormaster** is at the boat basin.

(238) **Mamaroneck Harbor**, an open bight between Hen Island and **Delancey Point**, is exposed to southerly winds but affords shelter against northerly weather. Depths in the outer harbor range from 7 to 12 feet. Important dangers are buoyed; these include **Outer Steamboat Rock**, near the dredged channel entrance, and **Ship Rock**, about 0.5 mile southeastward of Outer Steamboat Rock.

(239) About 1 mile northwest of Outer Steamboat Rock is the incinerator tower, a red brick building with a large glass tower, which is a prominent landmark.

(240)

Channels

(241) A federal project provides for a 10-foot channel entering the harbor and leading about 0.5 mile

(250)



west-northwestward to the intersection with two dredged branch channels leading to basins northward and westward of the junction. The channel leading northward to the east basin has a project depth of 10 feet, thence 6 feet in the main anchorage area; to the west of the junction, the channel and anchorage area have a project depth of 6 feet. For detailed channel information and minimum depths as reported by the U.S. Army Corps of Engineers (USACE), use NOAA Electronic Navigational Charts. Surveys and channel condition reports are available through a USACE hydrographic survey website listed in Appendix A. The entrance channel and the branch channel to the northern basin are marked by lighted and unlighted buoys. The basins are usually filled with moorings of local craft.

(242)

Caution

(243) A pipeline covered about 6 feet crosses the western branch channel about 50 yards above the junction. Mariners are advised to exercise caution and reduce speed while transiting this area.

(244) The **harbormaster** has an office on the south side of Harbor Island. The harbormaster controls all moorings and can be contacted on VHF-FM channel 16; call sign WZX-8038. A **speed limit** of 5 mph is enforced in the harbor. A village police boat patrols the harbor during the summer season.

(245) The town of **Mamaroneck** extends from both sides of the harbor. Petroleum products, carried by barges, are the main commerce in the harbor.

(246)

Supplies and repairs

(247) There are numerous boatyards and marinas in Mamaroneck Harbor.

(248) Foul ground extends southwesterly from eastward of Delancey Point to the Larchmont Harbor breakwater off **Edgewater Point**, on the east side of the harbor entrance; a light is on the end of the breakwater. **Hen and Chickens**, a reef bare at low water in places, lies off the harbor entrance; surrounding depths are 8 to 17 feet on the outer parts of the reef. About 0.3 mile westward of the breakwater light is **Dauntless Rock**, covered 8 feet and surrounded by depths of 14 to 16 feet. These dangers are buoyed.

(249) **Larchmont Harbor** is between Edgewater Point and **Umbrella Point** and about 2.5 miles northward of Execution Rocks Light. The harbor is the headquarters of the Larchmont Yacht Club. Anchorage depths range from about 12 feet in the entrance to 5 feet near the north central part of the harbor. In summer the harbor is full of mooring buoys for small yachts. The rocks on the west side are marked, whereas unmarked shoals extend 200 yards from the eastern shore. The anchorage for larger vessels is westward of the breakwater.

(251) **Umbrella Rock**, marked by a buoy, is 250 yards eastward of Umbrella Point. A few rocks of a breakwater, which was started on Umbrella Rock, are awash at high water. **North Ledge**, bare at half tide and marked by private daybeacons, is near the western shore southeastward of the yacht club. The principal landing, with a reported depth of about 6 feet alongside, is on the southeast side of the yacht club and is lighted from sunset to sunrise.

(252) Larchmont Harbor may be entered on either side of Hen and Chickens. The easterly entrance, about 100 yards southwestward of the end of the breakwater, is about 300 yards wide and has a depth of about 15 feet.

(253) **Horseshoe Harbor** is a small cove just westward of Larchmont Harbor. A prominent gray building is at the head. The cove is used as a small-boat anchorage.

(254) **Echo Bay**, about 1 mile southwestward of Umbrella Point and 2 miles northwestward of Execution Rocks Light, is the principal approach to New Rochelle. The bay is entered between **Premium Point** on the northeast and **Davenport Neck** on the southwest. **Hicks Ledge**, about 0.5 mile off the entrance, is covered 6 feet and marked on the south side by a buoy.

(255) **Middle Ground**, an extensive shoal with a reef that uncovers 6 feet, lies about 0.5 mile south-southwestward of Hicks Ledge. **Emerald Rock**, covered 9 feet, is off the west side of the shoal and marked by a buoy. A buoy marks the north end of the shoal.

(256) **Bailey Rock** is near the end of a reef that extends about 200 yards off the northeast point of Davenport Neck. The rock uncovers 3 feet and is marked by a lighted buoy.

(257) Echo Bay is an anchorage for small craft and generally is fully occupied during the summer. Depths range from 4 to 15 feet. Small craft can anchor in the shallow cove on the northeast side of the harbor, entering between **Harrison Island** and the rocky, grassy islet off the northwest side of **Echo Island**. Vessels should not anchor near the sewer lines in the middle of the bay. A **special anchorage** is in Echo Bay—see **33 CFR 110.1** and **110.60**, chapter 2, for limits and regulations. A 4 mph **speed limit** is enforced in the bay.

(258) On the northwest side of Echo Bay, a dredged channel leads to a municipal wharf and turning basin at Beaufort Point. The channel is marked by buoys to the turning basin. The area northward of the turning basin, locally known as Ferris Creek, is shoal with extensive mud flats that bare at low water. Southwesterly of the turning basin, the depth varies from 9 feet to bare at the head of the harbor. **New Rochelle** is a city on the western shore of Echo Bay.

(259) The municipal wharf is on the northeast side of **Beaufort Point**. The city police patrol boats usually moor alongside the wharf. A small-craft facility and a municipal marina are in the northern part of Echo Bay. Berths, electricity, gasoline, diesel fuel, water, ice and lifts to 25 tons are available; hull and engine repairs

can be made. The municipal marina monitors VHF-FM channel 16.

(260) **Pine Island**, between Davenport Neck and Middle Ground, is rocky and covered with brush. A small private landing is on the west side of the island. A series of bare and submerged rocks and ledges that cover and uncover with foul ground in between are southwestward of the island.

(261)

Dauids Island to Locust Point

(262) **Dauids Island**, southward of Davenport Neck, is owned by the city of New Rochelle. Reefs, partly bare at low water and marked by a lighted buoy, extend about 0.2 mile northward of the island. Dauids Island is surrounded on its east and south sides by a foul area of islands and rocks, the passages between which should not be used by strangers, even in small craft. **Huckleberry Island**, at the eastern end of the group, is wooded. **Pea Island**, about 0.3 mile southeastward of Dauids Island, is grass covered, and rocks bare at low water are southeastward of it. **Columbia Island** has been improved by a seawall, making it about 150 feet square, with a pier 150 feet long on the west side.

(263) The wreck of a barge, covered 17 feet, is about 0.3 mile south-southeastward of Pea Island; mariners are advised to exercise caution while navigating in this area.

(264) **Execution Rocks**, about 1.4 miles eastward of Dauids Island, consist of many boulders and shoals of considerable extent. **Execution Rocks Light** (40°52'41"N., 73°44'16"W.), 62 feet above the water, is shown from a white stone tower with a brown band midway of its height, attached to a granite dwelling; a racon is at the light. Broken bottom, covered 5 to 18 feet, extends about 0.7 mile northward from the light. Bouys mark the north, east, southeastern and southwestern extent of the broken bottom surrounding the rocks.

(265) **Middle Reef**, 0.5 mile southward of Dauids Island, has some boulders that show at high water. **East Nonations** and **South Nonations** are rocks that uncover 4 feet between Middle Reef and Hart Island. South Nonations is marked on its south side by a lighted bell buoy.

(266) **Aunt Phebe Rock**, 300 yards west of Dauids Island, is bare at half tide and marked by a light. Mariners are advised to exercise caution while navigating in this area.

(267) **Goose Island**, between Dauids Island and Glen Island, is almost completely surrounded by a rock breakwater and has several bare rocks to the westward and southward. A house on pilings is prominent on the island.

(268) **Glen Island**, west of Dauids Island, is a public park. Special permits are required prior to using the launching ramp on the island. A light is on the north end of the island. A beach protected by two jetties is on the southeast end of the island. The channel between Glen Island and Davenport Neck is frequently used as an anchorage

by small craft; a **no wake** speed limit is enforced. The channel between Glen Island and Hunter Island is marked by buoys and is entered just north of Hog Island. A special anchorage is on the southwest and west side of Glen Island—see **33 CFR 110.1** and **110.60**, chapter 2, for limits and regulations.

(269) **New Rochelle Harbor** lies between the mainland, and westward of Davenport Neck, and Glen Island; it is off the southerly part of the city of New Rochelle. However, the main access of New Rochelle is through Echo Bay, previously discussed.

(270) New Rochelle Harbor is entered between Glen Island and Davenport Neck. An approach channel, with a depth of about 13 feet, is entered south-southwest of Davids Island and continues north off the east side of Goose Island. The route continues through deeper natural water between **Aunt Phebe Rock**, marked by a light on the east and **Corning Rock**, covered 3 feet and marked by a buoy on the west, thence northward to the harbor entrance. A reef, bare at low water, makes off the west side of Davids Island opposite the buoy marking Corning Rock. Another approach channel, through deeper water, leads from the northeast between Davids Island and Davenport Neck to the entrance—both channels are well marked. In 1990, the narrow dredged channel in the harbor had a controlling depth of 6 feet at midchannel to within 100 yards of the dam at the head.

(271)

Anchorage

(272) Anchorage is not recommended in the harbor because of its congestion. A general anchorage extends to the south from the harbor entrance to City Island and Locust Point—see **33 CFR 110.1**, **110.160**, and **110.155**, chapter 2, for limits and regulations.

(273) Several yacht clubs, marinas and boatyards are in New Rochelle Harbor.

(274) A bascule bridge connecting Glen Island with **Neptune Island** has a clearance of 13 feet—see **33 CFR 117.1** through **117.49**, chapter 2, for drawbridge regulations. Just south of the bridge is a yacht club on the east side of Neptune Island.

(275) **Orchard Beach**, about 1 mile southwestward of Davids Island, is a park developed by the State of New York on the filled-in area between Hunter Island, to the north, and Rodman Neck, to the south. The inshore water areas off the crescent beach are a swimming area and are closed to general navigation. The swimming area is marked by private buoys. A bathing pavilion and a flagstaff are prominent. **Chimney Sweeps Islands** are two prominent bare rocks, about 0.4 mile east of the beach.

(276) **Hart Island**, about 1.8 miles southwest of Execution Rocks Light, is the site of a New York Department of Correction facility. Buildings on the island are prominent. A reef extends about 200 yards southeastward from the south end of the island and is marked by a light. There are several wrecks and obstructions off the southwest end

of Hart Island which are shown on the chart; caution is advised when navigating the area.

(277) **Rat Island** is a high bare rock about 0.4 mile west of Hart Island. **The Blauzes**, 13 feet high, are a part of the reef that extends 0.3 mile northwestward from the north end of Hart Island.

(278) **City Island**, on the northeast side of Eastchester Bay, is narrow and over 1 mile in length. It is thickly settled and has a commercialized appearance. The west side is residential and the east side is industrialized with several shipyards and other marine-related facilities.

(279)

Pilotage, City Island

(280) A pilot boat of United New York New Jersey Sandy Hook Pilot Association moors at City Island—see Pilotage, New York Harbor from Long Island Sound (indexed as such), chapter 11.

(281) **High Island** is 200 yards northeastward of the north end of City Island to which it is connected by a fixed footbridge with a clearance of 11 feet. The ground under the bridge is reported to bare about 1 foot at low water. A 528-foot-high radio tower, marked on top by red lights, is prominent on High Island.

(282)

Anchorage

(283) The usual anchorage for deep-draft vessels is southeastward of City Island, southward of a line joining the south ends of Hart and City Islands. When anchoring, avoid **Deep Reef**, a small rocky patch covered 29 feet. Other **general** and **special anchorages** are in the vicinity—see **33 CFR 110.1**, **110.60**, and **110.155**, chapter 2, for limits and regulations.

(284) A long pier in ruins and a wide stone pier, the top of which is used as a parking area, are at the south end of City Island at **Belden Point**. The western shore of Hart Island and the wharves on City Island should be given a berth of about 150 yards.

(285) The channel between City Island and Rodman Neck is used extensively as an anchorage by small pleasure craft during the summer. A **no wake** speed limit is enforced. Boat clubs and railways for small craft are on the northwest side of City Island. The shores are generally fringed with boulders and should be approached with caution. The north shores of High Island and City Island northeastward of the bridge are very foul, and boats should avoid the shoals with depths less than 12 feet on that side.

(286) City Island is connected with Rodman Neck by a fixed highway bridge with a clearance of 15 feet. Currents at the bridge are variable and at times exceed 1.5 knots—see the Tidal Current prediction service at tidesandcurrents.noaa.gov for specific information about times, directions, and velocities of the current at numerous locations throughout the area. Links to a user guide for this service can be found in chapter 1 of this book.

(301)

Structures across Hutchinson River

Name•Description•Type	Location	Clear Width of Draw or Span Opening (feet)	Clear Height above Mean High Water (feet)	Information
Pelham Parkway Bridge (bascule)	40°51'44"N., 73°48'58"W.	59	13	Notes 1 and 2 Call sign KU-9758 and KU-6095
Amtrak Bridge (rolling lift)	40°51'48"N., 73°49'06"W.	68	8	Notes 1 and 2 Call sign KXS-298
Overhead power cable			130	
Hutchinson River Parkway Bridge (bascule)	40°52'09"N., 73°49'18"W.	130	30	Note 1
New England Thruway/I-95 Bridge (fixed)	40°53'08"N., 73°49'13"W.	100	50	
Boston Post Road Bridge (fixed)	40°53'16"N., 73°49'27"W.	121	50	
Overhead pipeline	40°53'34"N., 73°49'23"W.		130	
South Fulton Avenue Bridge (bascule)	40°53'38"N., 73°49'22"W.	80	6	Note 1
Note 1 – See 33 CFR 117.1 through 117.59 and 117.793 , chapter 2, for drawbridge regulations.				
Note 2 – Bridgetender monitors VHF-FM channel 13.				

(287) **City Island Harbor**, also called **Hart Island Roads**, is between Hart Island and City Island. It is well sheltered from easterly and westerly winds and is an important anchorage for coasting vessels in the western end of Long Island Sound. Numerous wrecks and obstructions are located throughout the harbor. Besides serving as a harbor of refuge, it is often used by vessels desiring pilots or towboats or awaiting orders. A spire in the center of City Island and a steeple in the northerly part of the island are conspicuous objects.

(288)

Current

(289) The tidal current has a velocity of about 0.3 knot.

(290)

Ice

(291) Ice seldom interferes with navigation of powered vessels.

(292)

Supplies

(293) Gasoline, lubricants and marine supplies of all kinds are available at City Island. Water is piped to some of the wharves; ice, electrical connections, guest moorings and dry and wet storage are readily available.

(294)

Communications

(295) Buses serve the subway system of New York City.

(296) **Eastchester Bay**, between City Island and Throgs Neck, has general depths of 7 to 10 feet in the lower part and 3 to 5 feet in the upper part. The shores of the bay are fringed with boulders, and there are many shoals and several wrecks. Caution is essential, especially where the depths are not more than 3 feet greater than the drafts.

(297) **Hutchinson River** empties into the north end of Eastchester Bay. A dredged channel marked by buoys leads from the river mouth for about 2.5 miles to the head of navigation at the city of Pelham.

(298) **Special anchorages** are in Eastchester Bay—see **33 CFR 110.1** and **110.60**, chapter 2, for limits and regulations.

(299) A **safety and security zone** has been established in Eastchester Bay surrounding much of the shoreline of Rodman Neck.—see **33 CFR 165.169**, chapter 2, for limits and regulations.

(300) The dangers in Eastchester Bay include **Big Tom** on the east side near the entrance, covered 2 feet and marked by buoys on the east and west sides, and **Cuban Ledge**, covered at half tide and marked by a daybeacon and Cuban Ledge Lighted Buoy 2 close southwestward. Numerous rocks and shoals are on both sides of the channel near the entrance to Hutchinson River.

(302) **Eastchester** is a village on the west side of the Hutchinson River about 1.5 miles above the Pelham Parkway Bridge. Commerce on the river to Eastchester is in building materials, fuel oil and petroleum products. **Pelham** is on the east side of the river above Eastchester.

(303) **Weir Creek** is a bight on the west side of the bay near the entrance.

(304) **Locust Point** is about 0.8 mile southeastward of Weir Creek. A cove just southwestward of the point provides small-boat shelter. Rocks, bare at low water, are on the north side of the approach. The entrance has a depth of about 5 feet. Inside the cove, depths range from 20 feet at the south end to about 4 feet at the north end. A yacht club and marina are in the cove. A marina at the head of the cove has a mobile hoist that can handle craft to 30 tons for engine and hull repairs. Gasoline, water, ice and marine supplies are available at the marina; depths of about 7 to 10 feet are reported at the wharf.

(305) The northern approach viaduct of the Throgs Neck Bridge crosses the cove from Locust Point to Throgs Neck. The fixed spans of the viaduct have a minimum clearance of 123 feet.

(306)

Current

(307) Tidal currents have a velocity of 0.4 knot in the vicinity of Big Tom and 0.8 knot at Pelham Bridge.

(308)

Old Field Point to Nissequogue River

(309) **Old Field Point**, about 5 miles southward of Stratford Shoal (Middle Ground) Light, is a low bluff with a light and an abandoned tower on its summit. Boulders extend a short distance off the point, and the light should be given a berth of about 0.3 mile, even by small craft. A gong buoy is 0.6 mile northward of the point. Depths of 14 to 18 feet are found about 0.4 mile northward of the light.

(310) **Crane Neck Point**, 2 miles westward of Old Field Point, is a bare conspicuous bluff about 90 feet high and covered on top with brush.

(311) **Smithtown Bay**, a broad open bight on the south side of the sound, extends 7 miles westward from Crane Neck Point. Rocky shoals extend 1 mile in places from the shore, the water shoaling abruptly from 51 feet in places. A good summer anchorage in 30 to 50 feet sheltered from easterly winds is found about 1 mile southward of Crane Neck Point.

(312) **Stony Brook Harbor** is a narrow shallow bay in the southeastern part of Smithtown Bay. The approach to the harbor from the bay is over a bar that extends 0.8 mile off the entrance; the outer end of the bar is marked by a seasonal lighted buoy and the approach to the harbor is marked by private lighted buoys. In 1981, 3½ feet was reported over the bar. Two branch channels lead from the entrance into the harbor; one leads southwestward to a steel bulkheaded yacht club wharf and pavilion at the village of **Stony Brook**, 0.5 mile inside the entrance, and the other, **Porpoise Channel**, leads westward to a yacht club at the northwestern end of the harbor; gasoline is available at both clubs. In 1994, a depth of 6 feet was reported in both the southwesterly channel and Porpoise Channel. The channels are marked by private seasonal lighted and unlighted buoys. The buoys are periodically moved to mark the best water.

(313) A **speed limit** of 5 mph is enforced in Stony Brook Harbor and Porpoise Channel.

(314)

Small-craft facilities

(315) Small-craft facilities are in the harbor.

(316) The railroad station is about 1 mile from the wharf at Stony Brook.

(317) A high bluff is between Stony Brook Harbor and Nissequogue River, another between Nissequogue River and **Sunken Meadow Creek**, and bluffs in places between Sunken Meadow Creek and Northport Bay.

(318) **Nissequogue River**, a shallow crooked stream about 4 miles westward of the entrance to Stony Brook Harbor, is entered through a privately dredged channel that leads southward from Smithtown Bay for about 1.4 miles into the river. Rocks and shoals, bare at low water, are on the bar outside the entrance. Private seasonal lighted buoys mark the channel. Strong tidal currents are reported in the channel. A **speed limit** of 5 mph is enforced on the river. Guest moorings, gasoline, water and limited supplies

are available at a marina on the west side of the river, about 0.9 mile above the channel entrance. In 1995, a depth of 3 feet was reported alongside the marina. A state hospital, a group of buildings with green roofs, and two large red brick chimneys are prominent about 0.5 mile southwestward of the river entrance. Farther westward, a brick building and a stack are also prominent. The railroad station is at **Kings Park**.

(319)

Northport to Oak Neck Creek

(320) **Northport Basin**, about 10.5 miles westward of Old Field Point Light and 2.7 miles southeastward of Eatons Neck Point, is a small privately maintained basin with general depths of 7 to 15 feet and formed by gravel dredges working into the high bank. The channel is marked by a private lighted buoy and unlighted buoys; submerged jetties extend northward from the east and west sides of the entrance. A dangerous rock is close northward of the seaward end of the west jetty. The four stacks of a power and light company on the east side of the basin are prominent. A town launching ramp is in the basin.

(321) An aquaculture site, marked by a private buoy, is about 1.2 miles northwestward of the entrance to Northport Basin.

(322)

Offshore Terminal, Northport

(323) An offshore platform for the receipt of oil is off Northport. The terminal is owned and operated by National Grid Generation LLC. The platform, with off-lying mooring buoys, is about 1.6 miles northward of the entrance to Northport Basin and about 2.4 miles eastward of Eatons Neck Light. Submerged pipelines extend from the shore to the platform. The platform is marked at its eastern end by a private light and at the western end by a private light and sound signal.

(324) Upon the scheduled approach of an incoming vessel to the platform, voice call "Northport Power Station." Northport Power Station control room monitors VHF-FM channel 19.

(325)

Pilotage, Offshore Terminal, Northport

(326) Pilotage by a state-licensed pilot is compulsory in Long Island Sound for foreign flag vessels and U.S. vessels that are under register (i.e., engaged in foreign trade). Such vessels can arrange for a state-licensed pilot by contacting the joint rotation administrator, Block Island Pilots at 243 Spring Street, Newport, RI 02840; telephone 401-487-9050 (24 hours), 800-274-1216; FAX 401-847-9052. Enrolled vessels (i.e., U.S. vessels engaged in coastwise trade) may be required to have a U.S. Coast Guard Federally licensed pilot unless the master has recency for the intended area. See Pilotage, Long Island Sound (indexed as such), chapter 8 and Pilotage, New York Harbor and Approaches (indexed as such), chapter 11.

(327)

Tugs

(328) Tug service is available from New Haven, Providence, Brooklyn or Staten Island on advance notice.

(329) **Eatons Neck** is a prominent wooded headland with elevations of 100 feet or more and marked at its north end by a light and tower of **Eatons Neck Coast Guard Station**.(330) **Eatons Neck Light** (40°57'14"N., 73°23'43"W.), 144 feet above the water, is shown from a white stone tower on the north end of Eatons Neck.(331) The northwest end of the neck is a spit in the form of a hook that encloses **Eatons Neck Basin**. Eatons Neck Coast Guard Station is at the head of the basin. The basin is entered through a privately dredged cut between two small riprap jetties about 0.5 mile southwestward of the light; the jetties are covered at half tide. The channel between the jetties is buoyed, and there are buoys farther inside the basin. The basin is subject to frequent changes and the buoys in the basin are not charted because they are frequently shifted in position. In 1994, depths of 10 feet could be carried through the entrance. An obstruction is in the entrance channel around 40°56'50"N., 73°24'06"W.

(332)

Caution

(333) Eatons Neck Basin Channel is maintained expressly to enhance the Eatons Neck Coast Guard Station's rescue response. Further, Eatons Neck Basin has become one of the most congested small-boat anchorages in the area in the summer. Mariners are cautioned that heavy wakes from rescue craft departing the station may be experienced by small craft anchoring in this area.

(334) Shoals with depths of 4 to 18 feet extend about 0.9 mile northward of Eatons Neck, and broken ridges extend northward for another 1.8 miles. The northern end of each area is marked by a buoy.

(335) **Huntington Bay**, just westward of Eatons Neck, is the approach to Northport Bay and Harbor, Centerport Harbor, Huntington Harbor and Lloyd Harbor. The bay, protected against all but northerly winds, is an excellent anchorage for large vessels. Depths range from 25 to 36 feet, fairly close to its southern end, and anchorage can be selected according to draft and wind direction.(336) A **017°56'–197°56' measured half nautical mile** is on the west side of Eatons Neck. Triangular orange shore ranges mark the ends of the course.

(337) Anchorage with shelter from northwesterly winds can be had for small vessels at the southwesterly end of Huntington Bay, 0.4 mile northeastward of Huntington Harbor Light, in 18 to 36 feet. The arms of the bay provide secure harbors; Northport Bay is used generally by the larger vessels.

(338)

Current

(339) In Huntington Bay the velocity of the tidal current is 0.5 knot off East Fort Point and 0.4 knot in the entrance to Northport Bay. See the Tidal Current prediction service

at tidesandcurrents.noaa.gov for specific information about times, directions, and velocities of the current at numerous locations throughout the area. Links to a user guide for this service can be found in chapter 1 of this book.(340) **Duck Island Harbor** is a shallow cove on the north side of Northport Bay westward of **Duck Island Bluff**. Depths range from 6 to 9 feet in the entrance. The south side of Duck Island Bluff and the southeast side of **Winkle Point** should be given berths of 300 and 400 yards, respectively, to avoid shoal water and inshore rocks.(341) A 5 mph **speed limit** is enforced in Duck Island Harbor.(342) **Northport Bay**, which opens off the southeast end of Huntington Bay, provides good anchorage in 20 to 50 feet in its western part and in 8 to 11 feet in the eastern half. The entrance to the bay is marked by a lighted buoy, and the entrance channel, privately dredged to about 12 feet, is buoyed.

(343) An amber light, maintained at the public landing by the town of Northport, is a conspicuous mark at night for vessels making the wharves at Northport.

(344) A privately dredged channel at the eastern end of Northport Bay leads to a dredge basin formerly used by a sand and gravel company on the north side of **Bluff Point**. Several private landings and moorings are in the basin.(345) **Northport Harbor** is at the southeastern end of Northport Bay and is entered by a dredged channel that leads along the waterfront of Northport and an anchorage basin west of the village. The channel is marked by private seasonal buoys. In 2016–2021, the controlling depth was 4.9 feet in the channel; 6 feet was available in the anchorage basin in 2015. A channel leads from the town landing to a boatyard and marina at the southeast end of the harbor and is marked by private seasonal buoys. The boatyard channel is marked by buoys and by a lighted buoy at the entrance; these aids are seasonal and privately maintained. An alternate channel, marked by private buoys, leads from opposite the public landing along the west side of the harbor to the head. A 5 mph **speed limit** marker is in the entrance to the harbor.(346) **Bird Island**, a bird sanctuary in the southern part of the harbor, is a low, grass-covered man-made island.

(347)

Ice

(348) During severe winters, ice may close the harbor for about 2 months.

(349)

Anchorage

(350) Vessels select anchorage according to draft in the harbor; bottom is soft.

(351) A **special anchorage** is in Northport Harbor. (See **33 CFR 110.1 and 110.60 (a-2)**, chapter 2, for limits and regulations.)(352) **Northport** is a village with bus communications on the eastern shore of Northport Harbor. Depths at the

principal wharves are about 6 to 8 feet. The greatest depth that can be taken to Northport is about 14 feet at high water.

(353)

Small-craft facilities

(354) Several small-craft facilities are on the east side and the head of the harbor, and a yacht club is on the west side.

(355) **Centerport Harbor** is a shoal bight on the south shore of Northport Bay just eastward of the entrance. The harbor serves the small-boat interests of the village of Centerport. In 1981, a reported depth of about 7 feet could be taken through the privately dredged channel to the spit extending southwesterly from Little Neck, thence about 3 feet to a boatyard on the west side of the harbor just below the bridge. The channel is marked by private seasonal buoys. Berths, moorings, electricity, water, storage, marine supplies and a launching ramp are available. A flatbed trailer can haul out craft to 32 feet; hull and engine repairs can be made.

(356)

Anchorage

(357) A **special anchorage** is in Centerport Harbor. (See **33 CFR 110.1** and **110.60 (a-1)**, chapter 2, for limits and regulations.)

(358) **Huntington Harbor**, at the southwest end of Huntington Bay, is entered through a marked channel that leads to an anchorage off Huntington Town Dock, about 2 miles above the channel entrance. A depth of about 8 feet can be carried in the channel. **Huntington Harbor Light** (40°54'39"N., 73°25'52"W.), 42 feet above the water and shown from a square concrete tower attached to a dwelling on a rectangular pier, is on the west side of the entrance to Huntington Harbor and on the south side of the entrance to Lloyd Harbor. A sound signal at the light is operated by keying the microphone five times consecutively on VHF-FM channel 83A.

(359) The channel is marked by a light and by lighted, unlighted and private unlighted buoys. Some of the private buoys are seasonal.

(360) The wharf just southward of Huntington Town Dock South is used by sand and gravel barges. The **bay constable** has an office at the head of the harbor immediately southward of Huntington Town Dock North.

(361) A boulder reef, on the west side of the entrance, extends out to Huntington Harbor Light. An obstruction, reported covered 4½ feet, is 0.35 mile eastward of the light.

(362) In 1991, a dangerous wreck was reported between Buoys 9 and 11 in about 40°53'54.9"N., 73°25'46.1"W.

(363)

Current

(364) The tidal currents in the entrance channel have an estimated velocity of 2 knots.

(365)

Anchorage

(366) A **special anchorage** is in Huntington Harbor. (See **33 CFR 110.1** and **110.60**, chapter 2, for limits and regulations.)

(367) A 5-mph **speed limit** is enforced in the harbor.

(368) **Huntington** and **Halesite** are villages at the head of the harbor. The yacht club landing on the east side of the harbor has a depth of about 10 feet alongside. Gasoline, diesel fuel, berths, electricity, water and ice can be obtained here. Yachts may anchor off the landing but must keep clear of the channel.

(369) Coindre Hall, a large brick building with a red roof and numerous chimneys at the entrance to the harbor, and Huntington Hospital, well lighted at night, at the head of the harbor are prominent.

(370)

Small-craft facilities

(371) There are several marinas, boatyards and private boat clubs in Huntington Harbor.

(372) **Lloyd Harbor** extends westward from Huntington Bay nearly to Oyster Bay, from which it is separated by a narrow strip of land. Vessels can anchor just inside the entrance, in depths of 7 to 11 feet. The entrance to the harbor is marked by buoys. A **speed limit** of 5 mph is enforced in the harbor.

(373) **Oyster Bay**, on the south side of Long Island Sound about 5 miles westward of Eatons Neck Light, lies between Lloyd Neck and Rocky Point and is the approach to Cold Spring Harbor and Oyster Bay Harbor. The harbor is marked by **Cold Spring Harbor Light** (40°54'51"N., 73°29'35"W.), 37 feet above the water, and shown from a skeleton tower on a caisson with a red and white diamond-shaped dayboard. The entrance and harbor are characterized by extensive shoals, boulder reefs and broken ground making off from the shores. Vessels should proceed with caution if obliged to approach or cross shoal areas. The bay south of Cold Spring Harbor Light is a secure harbor, available for vessels of less than 18-foot draft.

(374) **Lloyd Neck**, between Huntington and Oyster Bays, is high and wooded and has a high, yellow bluff on its north side 0.8 miles eastward of Lloyd Point. Many patches of boulders having least depths of 2 to 8 feet extend 0.2 to 0.5 mile offshore from **East Fort Point** to Lloyd Point. Small craft skirting this shore should keep well outside the line of buoys.

(375) **Lloyd Point**, the north end of Lloyd Neck, is a low spit. A rocky shoal extends 0.5 mile north-northeastward from Lloyd Point. A lighted gong buoy about 1 mile northward of Lloyd Point marks the northern limit of the 30-foot curve in this vicinity. The buoy is removed when endangered by ice.

(376) **Morris Rock**, about 0.5 mile eastward of Lloyd Point, is awash at low water—the rock is marked by a buoy.

(377) The long jetty, about 0.6 mile southwestward of Lloyd Point, forms the southern entrance point to **The Sand Hole**, a pond that has been dredged into the spit by a sand and gravel company. The pond is state controlled and may be entered by steering a midchannel course through the entrance. It is used considerably by local boats as an anchorage and harbor of refuge. The holding ground is good. In 1981, reported depths of about 12 feet were in the entrance channel and about 4 to 22 feet in the basin.

(378) **Rocky Point**, the northern promontory of **Centre Island**, is a small bluff on whose summit is a large prominent house. An extensive foul area with depths of 2 to 17 feet extends about 1 mile northward of Rocky Point. A buoy marks the northern end of this foul area. The area is dangerous and should be avoided.

(379) A shoal area with depths of 4 to 11 feet extends eastward from Rocky Point nearly across Oyster Bay and is marked near its eastern end by Cold Spring Harbor Light. Small craft with local knowledge cross the shoal at a distance of about 0.4 mile westward of the light, but strangers should not attempt it.

(380)

Currents

(381) About 0.4 mile northwest of Cold Spring Harbor Light the velocity is about 0.5 knot; about 0.2 mile north of Cove Point, 1.2 miles southwestward, it is about 0.8 knot. For predictions, see the Tidal Current prediction service at tidesandcurrents.noaa.gov. Links to a user guide for this service can be found in chapter 1 of this book.

(382)

Ice

(383) During severe winters ice has been known to extend the full length of the bay during part of January and February.

(384) **Plum Point**, the easternmost point of Centre Island, is marked at its south end by a small stone tower; boat landings are on the southwest side of the point. A yacht club with a prominent flagstaff is about 0.3 mile west of Plum Point. The yacht club landing has reported depths of about 9½ feet.

(385) **Cooper Bluff**, at the northeast end of Cove Neck is prominent. A boulder reef extends nearly 0.3 mile northward from **Cove Point** at the northwest end of **Cove Neck**, and is marked by a lighted buoy that is replaced with an unlighted buoy in the winter.

(386) **Cold Spring Harbor**, the southeasterly end of Oyster Bay, extends about 2.3 miles southward of Cooper Bluff. The tower on top of a dome of a seminary on the hill of **West Neck**, on the east side of the harbor, is prominent. A depth of about 14 feet can be carried to near the head of the harbor by giving the shores a berth of about 0.3 mile.

(387) The village of **Cold Spring Harbor** is on the eastern shore near the head of the harbor. A small-craft facility is on the east side of the cove at the head of Cold Spring

Harbor. Gasoline, diesel fuel, water, ice, marine supplies, berthings and dry storage are available. A reported depth of about 3 feet is available alongside the facility. A town launching ramp is available in the harbor. A **speed limit** of 5 mph is enforced in the harbor.

(388)

Anchorage

(389) **Special anchorage areas** are in Cold Spring Harbor and Oyster Bay Harbor—see **33 CFR 110.1** and **110.59**, chapter 2, for limits and regulations.

(390) **Oyster Bay Harbor**, a long, crooked arm in the western side of Oyster Bay, has a channel with a depth over 30 feet leading into the area westward of **Moses Point**. Good anchorage is available southward of Moses Point. West of this point, the channel is narrow and suitable only for vessels drawing less than 10 feet. Vessels of less than 7-foot draft can anchor in the bight between Cove Neck and the wharf at Oyster Bay and also in **West Harbor**, the large bight on the northwest side of Centre Island. A **speed limit** of 5 mph is enforced in the harbor.

(391) The village of **Oyster Bay** is on the shore south of Oyster Bay Harbor. A harbor channel leads westward between the two anchorage areas south of Centre Island. Three separate channels lead south from the harbor channel to an oyster wharf, boat basin and launching ramps—all the channels are marked by private buoys. The oyster wharf has reported depths of about 10 feet along the face and southeast side. Parallel to and about 200 feet off the northwest side of the wharf is a row of sunken barges. An oil receiving wharf is about 125 yards southward of the oyster wharf.

(392) The waters of Oyster Bay Harbor and Mill Neck Creek are part of the **Oyster Bay National Wildlife Refuge**.

(393)

Small-craft facility

(394) Two small-craft facilities are at Oyster Bay, one in the basin and the other just east of the entrance to the basin. Berths and moorings, electricity, gasoline, diesel fuel, water, ice, pump-out facilities, a launching ramp, storage and full repairs are available.

(395) **Brickyard Point**, about 0.5 mile westward of Moses Point, should be given a berth of at least 0.2 mile off its westerly side to avoid several dangerous rocks to the northwestward of the point. None of these rocks is marked. Extensive privately owned oyster beds, marked by stakes, are in this area.

(396) **Mill Neck Creek**, at the northwest end of Oyster Bay Harbor, is crossed by a highway bridge having a bascule span with a clearance of 9 feet—see **33 CFR 117.1** through **117.59** and **117.800**, chapter 2, for drawbridge regulations. A marina, with an approach depth of 6 feet, is on the north side of the river near the bridge. The marina can provide gasoline, diesel fuel, electricity, water, ice, pump-out, marine supplies, launching ramp and full repairs.

- (397) **Oak Neck Creek**, northwest of Mill Neck Creek, is entered at high water as the creek is practically bare at low water.

(398)

Oak Neck Point to Little Neck Bay

- (399) **Oak Neck Point** (40°54.9'N., 73°34.1'W.), 4 miles west-southwestward of Lloyd Point, is marked by many large residences. Several stone jetties extend a short distance from the shore just westward of the point. A shoal, strewn with boulders and marked by a buoy, extends 0.3 mile from the shore for part of the distance between Oak Neck Point and Matinecock Point to the westward.

- (400) **Frost Creek**, locally known as Guthries Creek, 2 miles westward of Oak Neck Point, has a channel at the entrance that is well defined when the water is below half tide. The creek is protected by a stone jetty that extends a short distance from the shore about 50 yards eastward of the channel. The channel has a reported depth of about 1 foot near the entrance. The creek is not recommended without local knowledge.

- (401) **Peacock Point** is just west of Frost Creek. A stone jetty to protect a private boat landing extends a short distance from the west side of the point.

- (402) **Matinecock Point** is 1.1 miles westward of Frost Creek—a prominent flagpole is on the point. A shoal extends about 600 yards off the point and is marked at its end by a lighted gong buoy that is removed if endangered by ice.

- (403) **Hempstead Harbor**, 4 miles wide at the entrance between Matinecock Point and Prospect Point, is free from dangers if the shores, between the entrance and Mosquito Cove, are given a berth of 0.3 mile. It is much used by vessels seeking shelter in any but strong northerly winds and affords excellent anchorage with good holding ground. Vessels can anchor in any part of the harbor according to draft and direction of wind. A good anchorage for vessels drawing less than 20 feet is just inside a line from Mott Point to the breakwater at Glen Cove Landing. Small vessels can anchor behind the breakwater. Vessels should avoid anchoring in the pipeline area between Glenwood Landing and Bar Beach. A 5 mph **speed limit** is enforced in the harbor.

- (404) Waterborne commerce in the harbor is in sand, gravel, petroleum products and building material. Vessels engaged in this commerce usually draw from 3 to 12 feet.

(405)

Anchorage

- (406) A **special anchorage** is in Hempstead Harbor—see **33 CFR 110.1** and **110.60**, chapter 2, for limits and regulations.

- (407) **Weeks Point**, on the eastern side near the entrance, is marked by a breakwater that protects a private boat landing. Nearly 0.5 mile southward of Weeks Point is the entrance to a basin protecting a private wharf that has a reported depth of 8 feet at the end. The basin shoals to

the head, and there are rocks bare at low water near the northern end.

(408)

Glen Cove is a city with rail and bus communication on Glen Cove Creek, about 1 mile back from the eastern shore of the bay. The breakwater extends 500 yards west-southwestward from **Glen Cove Landing** and is marked at its end by a light. The anchorage behind the breakwater has depths ranging from 18 to 22 feet behind its outer half and 7 to 9 feet near shore. A ramp is located north of the Glen Cove Creek entrance.

(409)

Glen Cove Creek, 0.6 mile southward of the breakwater, is entered through a dredged channel from **Mosquito Cove**. An overhead power cable near the head of the creek has a clearance of 65 feet. The entrance is marked by buoys. There are several small-craft facilities in Glen Cove Creek.

(410)

A dredged channel, entered between Bar Beach and Glenwood Landing, leads alongside Glenwood Landing to South Glenwood Landing at Motts Cove. A natural channel continues south through extensive flats for about 0.5 mile with a depth of about 5 feet; local knowledge is advised.

(411)

Sea Cliff is a village on the steep hill on the south side of Glen Cove Creek. From Sea Cliff southerly to the northerly wharves at Glenwood Landing, a shoal extends 300 yards from the east side of the harbor and is marked by a buoy at the north end and a light at the south end. A dredged entrance channel, marked by two private lights, leads from deep water in the harbor northeastward to a municipal marina just north of Glenwood Landing. In 1999, the reported controlling depths were 8 feet in the entrance channel, thence 7 feet in the marina basin.

(412)

Glenwood Landing is a village on the eastern shore abreast Bar Beach. An overhead power cable crossing from Bar Beach to Glenwood Landing has a clearance of 90 feet. Depths of about 8 to 10 feet are available at the Glenwood Landing wharves.

(413)

Current

(414)

In the channel west of the breakwater the tidal currents are weak and variable. At Bar Beach the tidal currents have a velocity of about 0.8 knot through the narrow channel—see the Tidal Current prediction service at tidesandcurrents.noaa.gov for specific information about times, directions, and velocities of the current at numerous locations throughout the area. Links to a user guide for this service can be found in chapter 1 of this book.

(415)

Ice

(416)

In severe winters ice has been known to close navigation for about 6 weeks during January and February.

(417)

The shore between Prospect Point and **Mott Point** (40°51.4'N., 73°40.6'W.), to the southeastward, is marked by prominent bluffs. A shoal with boulders extends 0.2 mile from shore between the points and for a short distance south of Mott Point. Buoys mark the limits of the

shoal eastward and northeastward of Mott Point. **Picket Rock**, with 2 feet over it, is 350 yards offshore northward of Mott Point.

- (418) **Prospect Point**, marked by prominent houses on the bluff, has a rocky shoal making out nearly 0.5 mile northward from it—the shoal rises abruptly from a depth of 60 feet. A lighted gong buoy is off the north end of the shoal.

- (419) **Sands Point**, 0.7 mile west of Prospect Point, is marked by a prominent stone tower. A boulder reef extends about 0.3 mile off the point and is marked by a lighted buoy off the northwest end. The boulders show at low water for a distance of about 300 yards from shore. The outer end of these visible boulders is marked by a daybeacon.

- (420) **Barker Point**, about 1 mile south-southwest of Sands Point, is a high bluff on the northeast side of the entrance of Manhasset Bay. **Gangway Rock**, marked by a light and gong buoy, is at the northwesterly end of a broken line of rocks and shoal water that extends 0.6 mile northwestward from Barker Point. **Success Rock**, awash at low water and marked by a buoy, is about 0.2 mile southeastward of the light.

- (421) **Manhasset Bay**, between Barker Point and Hewlett Point, affords excellent shelter for vessels of about 12 feet or less draft and is much frequented by yachts in the summer. The depths in the outer part of the bay range from 12 to 17 feet and 7 to 12 feet in the inner part inside Plum Point. The extreme south end of the bay is shallow with extensive mudflats. Depths of about 6 to 2 feet can be taken through a natural channel almost to the head of the bay. A 5 mph **speed limit** is enforced.

- (422) Waterborne commerce is in petroleum products, carried in vessels drawing 6 to 10 feet.

(423) **Anchorage**

- (424) Special anchorages are in Manhasset Bay—see **33 CFR 110.1** and **110.60**, chapter 2, for limits and regulations. The bottom is soft and affords good holding ground.

- (425) A seaplane **restricted area** is off Manorhaven—see **33 CFR 162.15**, chapter 2, for limits and regulations.

- (426) **Plum Point** is a low spit extending southward from the eastern shore about 0.6 mile southward of Barker Point. A lighted entrance buoy is about 150 yards southwest of Plum Point—the buoy is replaced with an unlighted buoy when endangered by ice. The bight eastward of Plum Point is shoal.

- (427) **Port Washington** is a village with rail communication on the south side of a shoal bight about 1.2 miles southeastward of Plum Point. An apartment complex on **Toms Point**, 0.9 mile east of Plum Point, is prominent. Depths of about 8 feet can be carried in the buoyed approach from the lighted buoy off Plum Point to the docks at Port Washington, thence through the unmarked channel along the east side of the bight to its north end northeastward of Toms Point. In 1981, depths

of 5 feet were reported on the north side of the town dock with 2 and 4 feet on the west and south sides, respectively. Depths at the other wharves are reported to range from 4 to 9 feet. The town's Bay Constable monitors VHF-FM channels 9 and 16 from the town dock.

(428) **Small-craft facilities**

- (429) There are extensive small-craft facilities at Port Washington and to the eastward and westward of Toms Point at **Manorhaven**.

- (430) **Hewlett Point** (40°50.3'N., 73°45.2'W.) is on the west side of the entrance to Manhasset Bay. A boulder reef, mostly bare at low water and marked by a lighted buoy at its northern end, extends about 0.2 mile northward from the point.

(431) **Anchorage**

- (432) A special anchorage is north of Elm Point—see **33 CFR 110.1** and **110.60**, chapter 2, for limits and regulations.

- (433) **Stepping Stones Light** (40°49'28"N., 73°46'29"W.), 46 feet above the water, is shown from a red brick structure on a granite pier, 1.3 miles southwest of Hewlett Point. The **Stepping Stones**, a dangerous boulder reef that dries in places, extends 0.8 mile southeastward from the light to the Long Island shore.

- (434) **Kings Point Coast Guard Station** is located at the northern end of the Kings Point boat basin.

- (435) **Kings Point**, marked by a private light, is 1.6 miles south-southwestward of Hewlett Point and is the site of the **U.S. Merchant Marine Academy**. The 172-foot unguyed steel flagpole at the academy is said to be the country's tallest; the top of the pole is 216 feet above the water. A boat basin, partially enclosed by an L-shaped pier, is at the point. In 1991, the basin had a reported depth of 11 feet.

- (436) **Little Neck Bay** is entered between Kings Point and Willets Point, 1.2 miles to the south-southwestward. Depths are 10 to 12 feet in the entrance, decreasing gradually to the head, about 2 miles inland, where the bay divides into two branches that almost dry; there are boulders in places close to the shores.

- (437) The shores of Little Neck Bay are thickly settled, and there are many private boat landings. A much used anchorage, in depths of 2½ to 7 feet, is in the cove midway along the east side of the bay.

(438) **Small-craft facility**

- (439) A small-craft facility is on the west side of the bay. Water, ice and limited marine supplies are available. In 1981, the facility had a reported depth of 4 feet alongside.

(440) **Anchorage**

- (441) A **special anchorage** is in Little Neck Bay—see **33 CFR 110.1** and **110.60**, chapter 2, for limits and regulations.

(442)

East River

(443) **East River** is a 14-mile-long tidal strait that connects Long Island Sound with New York Upper Bay and separates the western end of Long Island from the New York mainland. The Sound entrance is between Throgs Neck and Willets Point; the Upper Bay entrance is between The Battery and Governors Island. Hell Gate, about halfway between Throgs Neck and The Battery, is noted for its strong tidal currents. Harlem River extends northward from Hell Gate to the Hudson River. Both sides of the East River, from The Battery to Port Morris, a distance of 9 miles, present an almost continuous line of wharves except where shoals or currents prevent access.

(444)

Channels

(445) A federal project provides for main-channel depths of 35 feet from Throgs Neck to the inactive New York Naval Shipyard, about 2 miles from the western entrance, and thence 40 feet to deep water in New York Upper Bay. For detailed channel information and minimum depths as reported by the U.S. Army Corps of Engineers (USACE), use NOAA Electronic Navigational Charts. Surveys and channel condition reports are available through the USACE hydrographic survey website listed in Appendix A.

(446)

Caution

(447) Mariners transiting East River in the vicinity of Rikers Island and/or South Brother Island Channel are advised of the following:

(448) East River Main Channel Lighted Buoy 5 has been established northeast of Rikers Island in 40°47'47"N., 73°51'57"W. to ensure that no vessel penetration of air space exists over that portion of the East River that coincides with the glide path of the northeast-southwest runway of La Guardia Airport. Vessels with mast heights in excess of 125 feet shall pass 100 yards to the north of this buoy so as to avoid interference with the glide path.

(449) Vessels transiting South Brother Island Channel and using the turning basin at its southern terminus shall ballast prior to entry and are cautioned that mast heights in excess of 125 feet may penetrate the glide path to the northwest-southeast runway to La Guardia Airport. If mast heights cannot be lowered below 125 feet, La Guardia Air Traffic Control Tower shall be notified at 212-779-0242 prior to terminal departure or channel entry.

(450)

Anchorage

(451) Several **general** and **special anchorages** are in East River—see **33 CFR 110.1**, **110.60**, and **110.155**, chapter 2, for limits and regulations.

(452)

Current

(453) In East River the flood current sets eastward and the ebb sets westward. **Note:** this is the direct opposite of conditions in Long Island Sound where the flood is generally westward and the ebb eastward.

(454) The velocity of current is 0.7 knot at Throgs Neck, 1.6 knots at Port Morris, 4 knots in Hell Gate, 3 knots at Brooklyn Bridge, and 1.5 knots north of Governors Island. In Hell Gate (off Mill Rock) the velocity is 3.4 knots for the eastward current and 4.6 knots for the westward current.

(455) The direction and velocity of the currents are affected by strong winds that may increase or diminish the periods of flood or ebb. The currents generally set with the channel, but heavy swirls are found in Hell Gate.

(456)

Tides

(457) See the Tidal Current prediction service at tidesandcurrents.noaa.gov for the daily predictions of slack water and times and velocities of strengths of currents in Hell Gate and at other places on the East River. Mariners should exercise caution and discretion in the use of published tidal current predictions.

(458)

Pilotage, East River

(459) See Pilotage, New York Harbor from Long Island Sound (indexed as such), chapter 11.

(460)

Towage

(461) Vessels intending to employ a tug should arrange to do so before proceeding westward of Rikers Island.

(462)

Throgs Neck to Unionport

(463) **Throgs Neck**, on the northwest side of the entrance to East River, is marked by a light. **Throgs Neck Light** (40°48'16"N., 73°47'26"W.), 60 feet above the water, is shown from a skeleton tower with a black and white diamond-shaped dayboard on the outer end of the neck. The shoal ground that extends 0.1 mile southward and eastward from the light is marked by a lighted bell buoy.

(464) **Fort Schuyler**, on the outer end of Throgs Neck, is used as a base for the **New York Maritime College**. The 550-foot-long wharf, on the southwest side of the fort, is used to moor the school's training ship. Depths of about 25 feet are reported alongside the face.

(465) **Throgs Neck Bridge**, a highway suspension bridge with a channel clearance of 138 feet and 152 feet at the center, crosses East River from Throgs Neck to the Long Island Shore.

(466) **Willets Point**, 0.7 mile southeastward across the entrance to East River from Throgs Neck, is marked by **Fort Totten**, the granite walls of which are prominent. **Little Bay**, westward of Willets Point, has general depths of 6 to 10 feet and is used by local small craft. Depths

(469)



of about 9 feet can be taken in the buoyed channel to the piers on the Little Bay side of Willets Point. The southern approach viaduct of the Throgs Neck Bridge crosses the west part of Little Bay. The fixed spans of the viaduct have a minimum clearance of 30 feet.

(467) **Whitestone Point**, 2 miles westward of Willets Point, is a small bluff marked by a light. The town of **Whitestone** is between Little Bay and Whitestone Point. Several private boat clubs are at Whitestone. In 1981, reported depths alongside the boat club docks ranged from ½ to 6 feet.

(468) The **Bronx-Whitestone Bridge** is a suspension structure that crosses East River from Old Ferry Point on the Bronx side to a Long Island landing 0.4 mile southwestward of Whitestone Point. The bridge has a clearance of 130 feet with 135 feet at the center; a traveling maintenance platform reduces vertical clearances by 14 feet when in operation.

(470) **Powell Cove**, between the Long Island end of the Bronx-Whitestone Bridge and Tallman Island, 0.6 mile to the westward, has general depths of 2 to 5 feet. Pier ruins are on the east side of the cove entrance. **Tallman Island**, now joined to the Long Island shore, is marked by the prominent tanks of the NYC DEP Water Pollution Control Plant.

(471) **Old Ferry Point** is on the north side of East River 2 miles westward of Throgs Neck. The bight between Throgs Neck and Old Ferry Point affords anchorage,

with good holding ground, in depths of 15 to 35 feet; the water shoals abruptly from 18 feet, 0.3 mile from shore, to depths of 4 to 5 feet. Several private landings are on the north side of this bight. Tug and barge companies maintain unlit commercial mooring buoys in Anchorage Ground 6 for their own vessels.

(472) Numerous obstructions exist in East River between Throgs Neck and the entrance to Westchester Creek. Mariners are advised to use the chart as a guide.

(473) **Westchester Creek**, on the north side of East River, is entered through a dredged channel that leads northward through a shallow bight between Old Ferry Point and Clason Point—0.7 mile westward—to the head of navigation at **Westchester**, about 2.3 miles above the channel entrance. The channel is buoyed to a point about 0.8 mile above the entrance. Waterborne traffic on the creek consists chiefly of petroleum products, sand, gravel and crushed rock.

(474) Several highway bridges, three fixed and one bascule, cross Westchester Creek at **Unionport**, 1.5 miles above the channel entrance. The Bruckner Expressway bascule bridge is under construction (2019), and the fixed bridges have a least clearance of 52 feet—see **33 CFR 117.1** through **117.59** and **117.815**, chapter 2, for drawbridge regulations. The bridgetender at the Bruckner Expressway bridge monitors VHF-FM channel 13; call sign KX-8289.

(475)

Small-craft facilities

(476) There is a small-craft facility on the west side of the creek at Unionport. Water, limited supplies and storage facilities are available.

(477)

Clason Point to Mill Rock

(478) **Clason Point** (40°48.3'N., 73°50.9'W.) is on the north side of East River about 3 miles west of Throgs Neck. **Pugsley Creek**, which empties into Westchester Creek and East River along the east side of Clason Point, is very shallow and should not be entered without local knowledge. Small boats anchor on the flats west of Clason Point.

(479) **College Point** is on the Long Island side of East River opposite Clason Point. **College Point Reef**, covered 6 feet and marked by a light, is 0.2 mile north-northeastward of the point.

(480) The town of **College Point** is south of the point and on the east side of the entrance to Flushing Bay. The wharves on the west side of the town have depths alongside ranging from ½ to 10 feet. The shallow bight north of the town has depths of 2 to 5 feet and is used as a small-boat anchorage.

(481)

Small-craft facilities

(482) Several small-craft facilities are at College Point. Marine railways to 45 feet, mobile cranes to 35 tons, water, ice, marine supplies, storage and hull and engine repairs are available.

(483) **Flushing Bay** extends southeast between the town of College Point and La Guardia Airport, 0.6 mile to the southwest. **Flushing Creek** flows into the east side of the head of the bay. A dredged channel extends from the East River into the creek; the channel is marked by lighted and unlighted buoys. A turning basin is on the west side of the dredged channel west of the entrance to Flushing Creek and a small-craft anchorage area is on the northwest side of the turning basin. Flushing Bay is mostly shallow, with depths of less than 6 feet outside the channel.

(484)

Anchorage

(485) **General and special anchorages** are in Flushing Bay—see **33 CFR 110.1, 110.60 and 110.155**, chapter 2, for limits and regulations. Small-craft anchor south of College Point in depths of 4 to 8 feet.

(486) A **restricted area** is in a portion of the southern part of the channel through Flushing Bay—see **33 CFR 162.20**, chapter 2, for limits and regulations.

(487) A 0.6-mile-long dike, covered at high water, runs close along the west side of the channel to within 0.3 mile of the head of the bay. The dike is marked by lights at the ends and by lighted buoys along its length.

(488) The L-shaped pier at the head of Flushing Bay partially encloses a small-boat basin. Inside the small-boat basin, depths of about 7 feet were reported in 1981.

The marina to the westward has a reported depth of about 5 feet inside. Gasoline, diesel fuel, berths, electricity, water, ice, storage and a 30-ton hoist are available; limited electronic and engine repairs can be made.

(489)

Ice

(490) Ice generally obstructs navigation in Flushing Bay and Flushing Creek during a part of January and February.

(491) The fixed spans of the Whitestone Expressway highway bridges over Flushing Creek, 0.2 mile above the mouth, have a clearance of 34 feet. The Van Wyck Expressway fixed highway bridge, also 0.2 mile above the mouth, is under construction (2005). The Northern Boulevard Bridge, 0.4 mile above the mouth, has a fixed span with a clearance of 35 feet.

(492) **Flushing** is on the east side of Flushing Creek. Waterborne traffic consists chiefly of sand, gravel, crushed rock and petroleum products. Drafts of inbound and outbound vessels seldom exceed 12 feet. Vessels must go directly to the marginal wharves because the creek has no room for anchorage.

(493) The east entrance to **Rikers Island Channel**, between Rikers Island and the mainland, is obstructed by a lighted runway approach to **La Guardia Airport**. The approach to Bowery Bay is from westward of Rikers Island.

(494) **Bronx River**, on the north side of East River, has a project depth of 10 feet and is subject to shoaling throughout. It is entered through a dredged channel that leads north-northwestward through a shallow bight between Clason Point and Hunts Point, 1.1 miles to the westward, to the head of river navigation at East 172nd Street, about 2.3 miles above the channel entrance—see Notice to Mariners and latest editions of charts for controlling depths. Waterborne traffic on the Bronx River consists chiefly of sand, gravel and crushed rock.

(495) Bronx River is crossed by four bridges to East 172nd Street. Bruckner Expressway Bridge, 1.7 miles above the entrance, has a bascule span with a clearance of 27 feet—see **33 CFR 117.1** through **117.59** and **117.771**, chapter 2, for drawbridge regulations. Westchester Avenue Bridge, 2 miles above the entrance, has a fixed span with a clearance of 18 feet. The elevated railway structure over Westchester Avenue Bridge has a fixed span with a clearance of 61 feet. The railroad bridge, 2.1 miles above the entrance, has a rolling-lift span with a clearance of 8 feet, but the draw is no longer opened—see **33 CFR 117.771(b)**, chapter 2, for drawbridge regulations. The Bruckner Expressway Bridge is equipped with radiotelephone. The bridgetender can be contacted on VHF-FM channel 13; call sign KX-8189.

(496) **Hunts Point** is on the north side of East River about 4 miles west of Throgs Neck. Small craft anchor in depths of 9 to 17 feet on the flats east of the point.

(497) **Rikers Island**, in the middle of East River between Hunts Point and La Guardia Airport, is partly occupied by buildings of the Department of Correction of New York.

The island is about a mile long, southeast to northwest, and 0.6 mile wide.

- (498) East River main channel leads northward of Rikers Island. A much-used general anchorage, with depths of 21 to 30 feet, is between the south side of the channel and the flats off the north side of the island—see **33 CFR 110.1** and **110.155**, chapter 2, for limits and regulations.

(499)

Caution

- (500) East River Main Channel Lighted Buoy 5 has been established northeast of Rikers Island in 40°47'47"N., 73°51'59"W. to ensure that no vessel penetration of air space exists over that portion of the East River that coincides with the glide path of the northeast-southwest runway of La Guardia Airport. Vessels with mast heights in excess of 125 feet shall pass 100 yards to the north of this buoy so as to avoid interference with the glide path.

- (501) **North Brother Island**, 0.3 mile northwest of Rikers Island, is occupied by the ruins of former municipal buildings. East River main channel leads northward and westward of the island; a light marks the main channel side of the island.

- (502) The buoyed channel between North Brother Island and **South Brother Island**, 0.1 mile to the southward, has a controlling depth of about 25 feet. The channel is marked by a light off the north side of South Brother Island. The channel is narrow and subject to strong currents and should not be used by vessels of limited maneuverability.

- (503) A ledge, partly bare at low water, extends 0.2 mile southward from South Brother Island; the outer part of the ledge is marked by a light.

- (504) **Port Morris**, 0.2 mile westward across East River main channel from North Brother Island, is occupied by several oil terminals.

- (505) **South Brother Island Channel**, with a project depth of 35 feet, leads from deep water east of North Brother Island and along the west side of Rikers Island to a turning basin on the west side of Bowery Bay. For detailed channel information and minimum depths as reported by the U.S. Army Corps of Engineers (USACE), use NOAA Electronic Navigational Charts. Surveys and channel condition reports are available through the USACE hydrographic survey website listed in Appendix A. The channel is marked by lighted and unlighted buoys.

(506)

Caution

- (507) Vessels transiting South Brother Island Channel and using the turning basin at its southern terminus shall ballast prior to entry and are cautioned that mast heights in excess of 125 feet may penetrate the glide path of the northwest-southeast runway of La Guardia Airport. If mast heights cannot be lowered below 125 feet, La Guardia Air Traffic Control Tower shall be notified at 212-779-0242 prior to terminal departure or channel entry.

- (508) **Bowery Bay**, across Rikers Island Channel from Rikers Island, has depths of about 10 feet. A **general** and **special anchorages** are in the west part of the bay—see **33 CFR 110.1**, **110.60** and **110.155**, chapter 2, for limits and regulations. A pipeline area is in the southeast part of the anchorage area. A fixed highway bridge crosses Rikers Island Channel and Bowery Bay and connects Rikers Island with the Borough of Queens, New York; clearance over the channel is 52 feet for a width of 125 feet.

- (509) Bowery Bay may be approached from the East River main channel from the northward through South Brother Island Channel and from the northwestward through a 100-yard-wide channel that leads between the ledges that make off from Lawrence Point on the southwest and South Brother Island on the northeast. The controlling depth in the 100-yard-wide channel is about 19 feet. Caution is advised in the northwestern approach as the channel is narrow, the bottom is rocky and uneven and tidal currents are strong.

- (510) **Lawrence Point**, on the southeast side of East River 0.7 mile westward of Rikers Island, is occupied by an extensive gas and electric plant. A light marks the outer part of the ledge, partly bare at low water, which extends 0.3 mile northeastward from the point.

- (511) **Randalls Island** and Wards Island are on the northwestern side of East River between Port Morris and Hell Gate, separating that river from Harlem River, which is described later. The islands provide recreational facilities for the residents of the city of New York.

- (512) **Bronx Kill**, which separates Randalls Island from Port Morris, is a narrow passage that extends westward from the East River to the Harlem River. A fixed railroad bridge with a clearance of 68 feet and a fixed highway bridge with a clearance of 51 feet cross the passage. Bronx Kill is navigable but not recommended as a route of travel. It is shoal and obstructed throughout.

- (513) **Sunken Meadow** is the reclaimed area now joined to the northeast end of Wards Island and southeast end of Randalls Island.

- (514) **Hell Gate Bridge**, which crosses East River from Wards Island to Long Island 7.1 miles from The Battery, has a fixed railroad span with a clearance of 134 feet.

- (515) **Negro Point** is the southernmost point of Wards Island. **Triborough Bridge**, which crosses East River from Negro Point to Long Island 6.8 miles from The Battery, has a highway suspension span with a clearance of 138 feet.

- (516) **Holmes Rock** and **Hog Back** are two bare rocks, which are on the eastern and northern parts, respectively, of a reef in the bight on the south side of Wards Island westward of Negro Point. The southwest extremity of this reef is marked by a light.

- (517) **Hallets Point**, on the Long Island side of East River about 0.3 mile southwestward of Negro Point, is marked by a light. There are main-channel depths close to the point.

(523)

Structures across Harlem River					
Name•Description•Type	Location	Miles*	Clear Width of Draw or Span Opening (feet)	Clear Height above Mean High Water (feet)	Information
103rd Street Bridge (lift)	40°47'10"N., 73°56'14"W.	0.0	300	55 (down) 136 (up)	Notes 1 and 3 Call sign KIL-820
Triborough Bridge (lift)	40°48'02"N., 73°55'42"W.	1.3	204	54 (down) 136 (up)	Notes 1 and 3 Call sign KGW-326
Willis Avenue Bridge (swing)	40°48'14"N., 73°55'45"W.	1.5	109	25	Note 1
Third Avenue Bridge (swing)	40°48'27"N., 73°55'57"W.	1.9	118	27	Note 1
Metro North Railroad Bridge (lift)	40°48'41"N., 73°56'00"W.	2.1	225	25 (down) 135 (up)	Notes 1, 2 and 3 Call sign KAW-326
Madison Avenue/138th Street Bridge (swing)	40°48'51"N., 73°55'59"W.	2.3	104	25	Note 1
149th Street Bridge (swing)	40°49'10"N., 73°55'59"W.	2.8	104	30	Note 1
Macombs Dam Bridge (swing)	40°49'41"N., 73°56'02"W.	3.2	164	27	Note 1
High Bridge (fixed)	40°50'35"N., 73°55'50"W.	4.3	322	77 102 (center)	
Alexander Hamilton Bridge (fixed)	40°50'44"N., 73°55'43"W.	4.5	366	79 103 (center)	
Washington Bridge (fixed)	40°50'48"N., 73°55'40"W.	4.6	354	134	
University Heights Bridge (swing)	40°51'46"N., 73°54'53"W.	6.0	85	25	Note 1
Broadway Bridge (lift)	40°52'25"N., 73°54'40"W.	6.8	288	24 (down) 135 (up)	Note 1
Henry Hudson Bridge (fixed)	40°52'40"N., 73°55'20"W.	7.2	418	53 142 (center)	
Spuyten Duyvil Railroad Bridge (swing)	40°52'42"N., 73°55'32"W.	7.9	100	5	Notes 1, 2 and 3 Call sign KU-9797
* Distance is in nautical miles proceeding from the East River					
Note 1 – See 33 CFR 117.1 through 117.59 and 117.789, chapter 2, for drawbridge regulations					
Note 2 – bridge is kept in the open to navigation position except for the passage of trains or maintenance					
Note 3 – bridgetenders monitor VHF-FM channel 13					

(518) **Hell Gate** is the part of East River between Wards Island and Roosevelt Island, 0.7 mile to the southwest. The crooked channel, the strong tidal currents, and the heavy traffic in Hell Gate require extra caution on the part of the navigator to avoid accident or collision. Vessels navigating Hell Gate on a rising tide sometimes find it necessary to pass starboard-to-starboard because of the strong currents between Negro Point and Hallets Point. This situation may arise when one of the vessels does not maneuver readily or is handling a tow. Northeastward of Negro Point and southwestward of Hallets Point, the customary port passings are made.

(519) **Mill Rock**, on the northwestern side of the main channel through Hell Gate, is 0.2 mile southwest of Wards Island and the same distance northwest of Hallets Point. The islet is marked by lights on its north and south ends.

(520)

Harlem River to Roosevelt Island

(521) **Harlem River**, which joins East River in Hell Gate between Wards Island and Manhattan Island, extends northward about 7 miles and connects with Hudson River through Spuyten Duyvil Creek. The channel through Harlem River is narrow, tortuous, and navigable only for powered vessels. By taking care to avoid several

isolated 11- to 13-foot spots, a depth of about 14 feet can be carried to the Hudson River; the chart is the guide.

(522) Traffic is heavy in Harlem River. Vessels with heights too great to pass under the closed drawbridges should make the passage against the current.

(524)

Current

(525) The tidal currents in Harlem River run southward from Hudson River to East River while the east-going current is running in Hell Gate, and the reverse. The south-going current in Harlem River is considered the flood. The times of slack water are subject to variations depending upon freshet conditions in Hudson River. The velocity of the current is 2 knots or more in the narrower parts of the channel—see the Tidal Current prediction service at tidesandcurrents.noaa.gov for specific information about times, directions, and velocities of the current. Links to a user guide for this service can be found in chapter 1 of this book.

(526) **Roosevelt Island (Welfare Island)**, 1.6 miles long and 0.1 mile wide, is in the middle of East River southwest of Hell Gate. A gray stone tower is on the north end of the island.

(527) The currents on both sides of Roosevelt Island are strong, and caution is advised while navigating in these areas.

(538)

Structures across Newtown Creek and Tributaries				
Name•Description•Type	Location	Clear Width of Draw or Span Opening (feet)	Clear Height above Mean High Water (feet)	Information
Newtown Creek				
Pulaski Bridge (basculer)	40°44'21"N., 73°57'09"W.	150	46 (center) 39 (fenders)	Notes 1 and 2 Call sign KX-8178
Greenpoint Avenue Bridge (basculer)	40°44'00"N., 73°56'25"W.	149	30 (center) 24 (fenders)	Notes 1 and 2 Call sign KX-8182
Kosciusko Memorial Bridge (fixed)	40°43'40"N., 73°55'45"W.	130	90	
English Kills				
Metropolitan Avenue Bridge (basculer)	40°42'51"N., 73°55'52"W.	81	10 (center)	Notes 1 and 2 Call sign KX-8179
Montrose Avenue Bridge (fixed)	40°42'33"N., 73°55'50"W.	46	4	
East Branch				
Grand Avenue Bridge (swing)	40°42'59"N., 73°55'22"W.	88 (west draw)	8	Notes 1 and 2 Call sign KX-8187
Dutch Kills				
Long Island Railroad Bridge (swing)	40°44'17"N., 73°56'44"W.	46	2	
Long Island Railroad Bridge (basculer)	40°44'19"N., 73°56'39"W.	50	14	Note 2
Borden Avenue Bridge (retractable span)	40°44'20"N., 73°56'34"W.	49	4	Note 2
Queens Midtown Expressway Bridge (fixed)	40°44'22"N., 73°56'30"W.	90	83	
Hunters Point Avenue Bridge (basculer)	40°44'26"N., 73°56'26"W.	50	5	Note 2
Note 1 – Bridgetender monitors VHF-FM channel 13.				
Note 2 – See 33 CFR 117.1 through 117.59 , and 117.801 , chapter 2, for drawbridge regulations.				

(528) The 36th Avenue highway bridge that crosses the eastern channel from Roosevelt Island to Long Island 5.6 miles from The Battery has a vertical-lift span with clearances of 40 feet down and 99 feet up—see **33 CFR 117.1** through **117.59** and **117.781**, chapter 2, for drawbridge regulations. The bridgetender monitors VHF-FM channel 13; call sign KX-8184.

(529) **Queensboro Bridge**, which crosses from Manhattan Island to Roosevelt Island and thence to Long Island 5.0 miles from The Battery, has fixed spans with clearances of 131 feet over the main channel and 133 feet over the eastern channel. An overhead cable car with overhead power cables crosses the main channel immediately north of the bridge. The low point of travel of the cabin is not less than 135 feet.

(530)

Roosevelt Island Reef

(531) **Roosevelt Island Reef (Welfare Island Reef)**, with bare islets, rocks awash and submerged rocks, extends 0.3 mile southwestward from the island. **Belmont Island**, near the southwest end of the reef, is marked by a light.

(532)

Newtown Creek

(533) **Newtown Creek** is entered on the eastern side of East River 3.6 miles from The Battery. The creek extends 3.3 miles eastward and southward and has several short tributaries or basins. Traffic is fairly heavy and consists chiefly of petroleum products, sand, gravel and crushed

rock; drafts of vessels navigating the creek seldom exceed 15 feet.

(534) Tributary basins are **Dutch Kills**, on the north side of Newtown Creek 0.8 mile from East River; **Whale Creek**, on the south side opposite Dutch Kills; **Maspeth Creek**, on the east side 2.2 miles from East River; **East Branch**, on the east side 2.5 miles from the river; and **English Kills**, which extends westward and southward from the East Branch entrance and forms the last 0.8 mile of Newtown Creek.

(535)

Channels

(536) A federal project provides for a 23-foot channel in Newtown Creek from the East River to and in a turning basin about 240 yards above the Kosciusko Memorial Bridge, thence 20 feet in East Branch and in English Kills to the Metropolitan Avenue bridge, and thence 12 feet in English Kills to the head of the project at Montrose Avenue. For detailed channel information and minimum depths as reported by the U.S. Army Corps of Engineers (USACE), use NOAA Electronic Navigational Charts. Surveys and channel condition reports are available through the USACE hydrographic survey website listed in Appendix A.

(537) The tidal **current** is weak and variable.

(539) From abreast the entrance to Newtown Creek, the 35-foot-project main channel of the East River crosses from the west side of the river to the east side. **Poorhouse Flats Lighted Range** (Front Light; 40°43'28"N., 73°57'46"W.), bearing **160.4°**, is on the Brooklyn side of the river and marks the best water in the crossover.

(540) **Williamsburg Bridge**, which crosses East River 2 miles northeast of The Battery, has a suspension span with a clearance of 133 feet.

(541) The site of the inactive **New York Naval Shipyard** is in **Wallabout Bay**, on the Brooklyn side of East River 1.7 miles northeast of The Battery.

(542) **Manhattan Bridge**, which crosses East River 1 mile northeast of The Battery, has a suspension span with a clearance of 134 feet. The clearance under the

maintenance platform installed at the west channel edge is 115 feet.

(543) **Brooklyn Bridge**, which crosses East River 0.7 mile northeast of The Battery, has a suspension span with a clearance of 127 feet. The clearance under the maintenance platform is 110 feet.

(544) The channel between The Battery and Governors Island is very congested and subject to strong currents. Caution should be exercised while navigating in the area.

