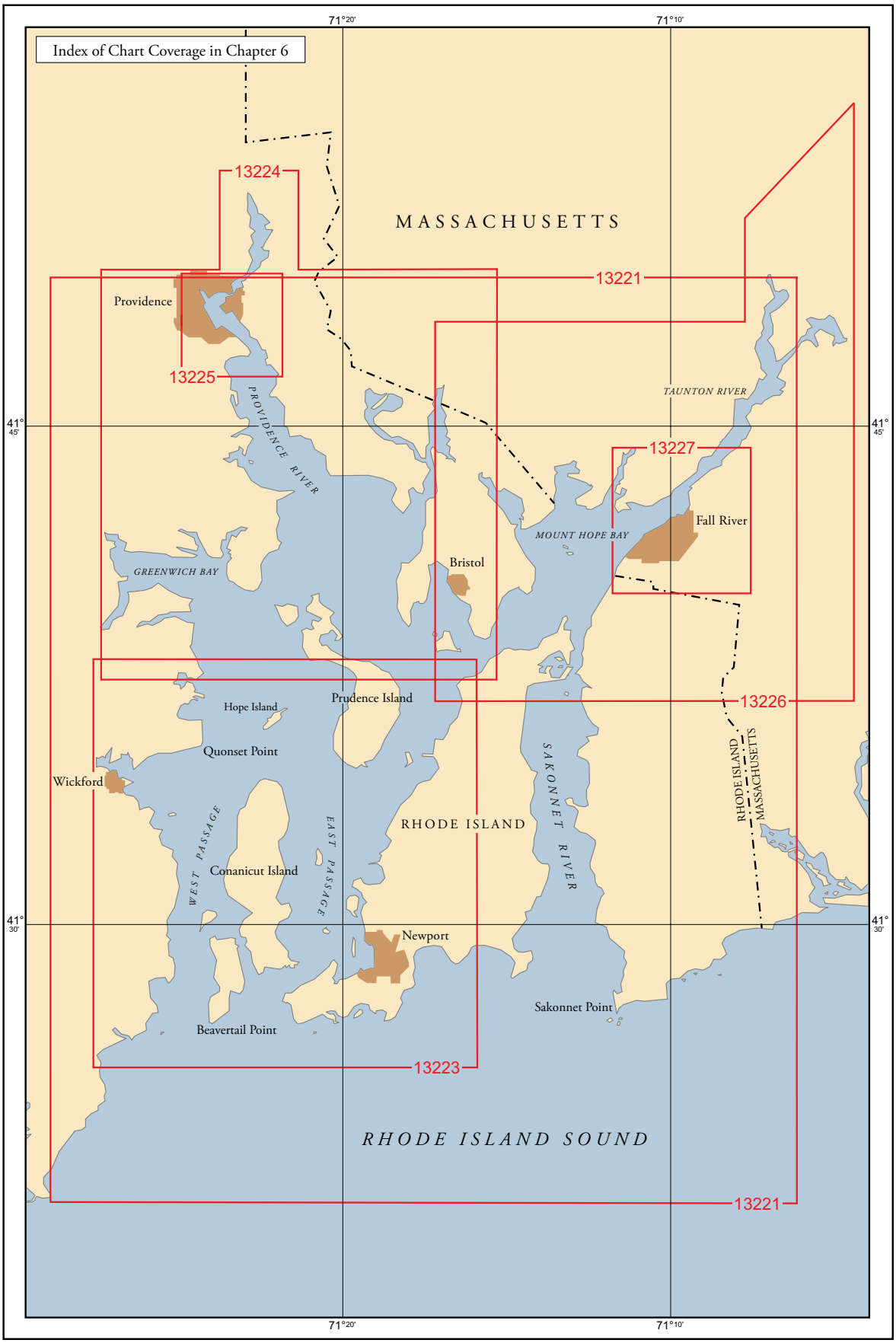
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MOUNT HOPE BAY
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Prudence Island
Hope Island
Quonset Point
Wickford
WEST PASSAGE
EAST PASSAGE
Conanicut Island
RHODE ISLAND
SAKONNET RIVER
RHODE ISLAND
MASSACHUSETTS
Newport
Sakonnet Point
Beavertail Point
RHODE ISLAND SOUND

Narragansett Bay

(1) This chapter describes the Sakonnet River, Narragansett Bay, Mount Hope Bay, and Taunton and Providence Rivers. Also discussed are the ports of Newport, Fall River, and Providence, as well as the numerous other yachting and fishing centers in this area.

(2)

COLREGS Demarcation Lines

(3) The lines established for this part of the coast are described in **33 CFR80.145,** chapter 2.

(4)

No-Discharge Zone

(5) The State of Rhode Island, with the approval of the Environmental Protection Agency, has established a No-Discharge Zone (NDZ) covering all coastal waters of Rhode Island, extending 3 miles offshore (see chart 13221).

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

(7)

Charts 13221, 13218

(8) **Narragansett Bay**, opening into the north side of **Rhode Island Sound** 17 miles westward of Buzzards Bay entrance, is the approach to the cities of Newport, Providence, Fall River, and Taunton, as well as numerous towns and villages. **Rhode Island** (Aquidneck Island), the largest island in the bay, forms the eastern shore of the bay proper. The entrance is between Brenton Point, the southwestern part of Rhode Island, on the east, and Point Judith Neck on the west. The bay is about 18 miles long from the entrance to the mouth of Providence River. Navigation of the bay is easy during day or night in clear weather as it is marked by navigational aids. The large **Conanicut Island** and **Prudence Island**, and several smaller islands, divide the bay into two passages. Sakonnet River, although not a part of Narragansett Bay, is included with it in the following discussion.

(9) East Passage is good for a least depth of about 60 feet for about 11 miles up the marked channel to the entrance of the dredged channel to Providence. West Passage is the approach to Dutch Island Harbor, Wickford, Greenwich Bay, and Providence River. Vessels of over 16-foot draft rarely go above Dutch Island Harbor without a pilot, but vessels of 16-foot draft or less should have no difficulty in going to the head of the bay and Providence River. Sakonnet River is good for a depth of 18 feet from the mouth to Mount Hope Bay.

(10) **Traffic Separation Scheme Narragansett Bay** has been established in the approach to Narragansett Bay through Rhode Island Sound. (See charts 13223, 13221, 13218, 12300.)

(11) The Scheme is composed basically of **directed traffic lanes** each with one-way inbound and outbound traffic lanes separated by a **defined traffic separation zone,** and two **precautionary areas,** one at the southern end and the other at the northern end of the directed traffic lanes and separation zones. The Scheme is recommended for use by vessels approaching or departing from Narragansett Bay, but is not necessarily intended for tugs, tows, or other small vessels which traditionally operate outside of the usual steamer lanes or close inshore.

(12) **The Traffic Separation Scheme has been designed to aid in the prevention of collisions at the approaches to major harbors, but is not intended in any way to supersede or alter the applicable Navigation Rules. Separation zones are intended to separate inbound and outbound traffic lanes and be free of ship traffic, and should not be used except for crossing purposes. Mariners should use extreme caution when crossing traffic lanes and separation zones.** (See **33 CFR 167.1 through 167.15 and 167.100 through 167.103,** chapter 2, for limits and regulations and Traffic Separation Schemes, chapter 1, for additional information.)

(13) The **southern precautionary area** in the southwest part of Rhode Island Sound has a radius of 5.4 miles centered on 41°06'00"N., 71°23'18"W., excluding those areas of the circle bounded by imaginary lines extending between the outer limits of the inbound and outbound traffic lanes. (Note that the southern precautionary area is common to the Traffic Separation Schemes for the approaches to both Narragansett Bay and Buzzards Bay. The Traffic Separation Scheme for the approach to Buzzards Bay is described in chapter 5.)

(14) The **separation zone** is a 2-mile-wide zone centered upon the following positions:

(15) (i) 41°22'42"N., 71°23'18"W.,

(16) (ii) 41°11'06"N., 71°23'18"W.

(17) The **inbound traffic lane** is a 1-mile-wide lane with a length of about 11.5 miles. Entering the traffic lane at a point in about 41°11'06"N., 71°21'24"W., a course of **000°** follows the centerline of the traffic lane to a junction with the northern precautionary area.

(18) The **outbound traffic lane** is a 1-mile-wide lane with a length of about 11.5 miles. Entering the traffic lane at a point in about 41°22'39"N., 71°25'24"W., a course of **180°** follows the centerline of the traffic lane to a junction with the southern precautionary area.

(19) The **northern precautionary area** has a 3.55-mile radius centered on a point in about 41°25'36"N., 71°23'18"W., excluding those areas of the circle bounded by imaginary lines extending between the outer limits of the inbound and outbound traffic lanes.

(20) A 2-mile-wide **restricted area** extends from the northern limits of the Narragansett Bay Approach traffic separation zone to 41°24.7'N. This restricted area within the precautionary area will only be closed to vessel traffic by the Naval Undersea Warfare Center Division, Newport, during periods of daylight and optimum weather conditions for torpedo range use. The closing of the restricted area will be indicated by the activation of red flashing lights on naval vessels supporting the torpedo range activities. There would be no vessel restrictions expected during inclement weather or when the torpedo range is not in use.

(21) The Traffic Separation Scheme is not buoyed. A group of buoys within the separation zone and the precautionary area mark the torpedo range; these buoys are not related to the Scheme.

(22) **Narragansett Bay Entrance Lighted Whistle Buoy NB** (41°23'00"N., 71°23'21"W.) is at the north end of the separation zone and is equipped with a racon.

(23) A **safety zone** has been established about 2 miles northward of Buoy NB for Liquefied Petroleum Gas (LPG) vessels. (See **33 CFR165.20, 165.23, and 165.121,** chapter 2, for limits and regulations.)

(24) **Recommended Vessel Route (Narragansett Bay)** has been established in the approach to Narragansett Bay through Rhode Island Sound.

(25) The U.S. Coast Guard Captain of the Port, Providence, in cooperation with the Southeastern Massachusetts and Rhode Island Port Safety and Security Committees, has established a Recommended Vessel Route for deep draft vessels and tugs/barges transiting Rhode Island Sound, Narragansett Bay, and Buzzards Bay. Deep draft vessels and tugs/barges are requested to follow the designated routes. These routes were designed to provide safe, established routes for these vessels, to reduce the potential for conflict with recreational boaters, fishing gear, and other small craft, and to reduce the potential for grounding or collision. Vessels are responsible for their own safety and are not required to remain inside the route nor are fisherman required to keep fishing gear outside the route. Small vessels should exercise caution in and around the Recommended Vessel Routes and monitor VHF channels 16 or 13 for information concerning deep draft vessels and tugs/barges transiting these routes.

(26)

Security Broadcast System, Narragansett Bay

(27) In conjunction with various maritime interests, the Coast Guard has developed a system of recommended radiotelephone procedures for Narragansett and Mount Hope Bays that is designed to supplement the Vessel Bridge-to-Bridge Radiotelephone Regulations (see **33 CFR 26,** chapter 2). These **voluntary** procedures consist of Security calls to be made by vessel masters, pilots, or operators on VHF-FM channel 13 (156.65 MHz) at designated points. The procedures are designed to give notice of unseen vessels, give notice of intended movement, clear channel 13 of traffic unrelated to navigation, give each vessel information on all others in the immediate vicinity, and to do so at little cost and with as little radiotelephone traffic as possible. These recommendations do not relieve a master, pilot, or operator of any requirements of law or regulation. There is no guarantee that every vessel will follow them.

(28) Inbound vessels should make Security calls when abeam of Narragansett Bay Entrance Lighted Whistle Buoy NB, when off Castle Hill Light, and when at the south end of Prudence Island (state whether bound for Providence or Fall River). The call at Castle Hill Light alerts outbound vessels so that they can pass East Passage Lighted Bell Buoy 11 close aboard, as during ebb current they tend to be set toward the center of the channel. Vessels bound for Providence should make additional Security calls when off Popasquash Neck and when approaching Bullock Point Light BP. Vessels bound for Fall River should call Brightman Street Bridge when they enter Mount Hope Bay to allow sufficient time for opening of the bridge.

(29) Vessels outbound from Providence should make Security calls when leaving their dock and when off Popasquash Neck. Vessels outbound from Fall River should make calls when leaving their dock, when approaching Mount Hope Bridge, and when off Gould Island.

(30)

Anchorages

(31) The principal anchorages for vessels seeking shelter are Newport Harbor in the East Passage and Dutch Island Harbor in the West Passage. These harbors afford anchorage with good holding ground for deep-draft vessels, and are sometimes used by coasting vessels on the passage between Vineyard Sound and Long Island Sound. Good anchorage will be found almost anywhere in the bay under the lee of islands or the shore, where vessels becalmed or at night frequently anchor. Point Judith Harbor of Refuge is just west of Point Judith. General and explosives anchorages are in Narragansett Bay. (See **33 CFR 110.1 and 110.145,** chapter 2, for limits and regulations.)

(32)

Routes

(33) Vessels approaching from eastward should shape their approach to pass well south of Seal Ledge and Brenton Reef. Brenton Reef and other dangers on the easterly side of the entrance will be avoided by keeping Castle Hill Light bearing eastward of 003° and passing westward of the lighted whistle buoy and the gong buoy off Brenton Reef and the bell buoy off Butter Ball Rock. Approaching from westward, from a position with Point Judith Light bearing 344° distant 2 miles, vessels may steer **028°** for about 9 miles to a position 0.5 mile west of Castle Hill Light, thence follow the navigational lights in the bay. The recommended route, however, for deep-draft vessels is via the Narragansett Bay Approach Traffic Separation Scheme, which is described earlier in this chapter.

(34)

Tides

(35) The tidal movement in Narragansett Bay with its vertical and horizontal constituents–tide and current, respectively–is a continuation of the tide wave of the Atlantic Ocean. This wave sweeps into the three entrances between Sakonnet Point and Point Judith and continues up the bay and into each of its tributaries until stopped by rapids or other obstructions. As is usual when oceanic tidal movements enter inland waterways, the nature of the movement is modified by the hydrographic features encountered. In this area the local features are such that the current movement in particular is subject to considerable distortion. (See the Tide Tables for predictions.)

(36)

Currents

(37) The flood current in Narragansett Bay frequently has two maximums of velocity separated by a minimum velocity which at times becomes an ebb flow. Over the greater part of the bay, the usual maximum flood or ebb velocity is from 0.2 knot in the broad portions of the waterways to 1.5 knots in the more constricted sections. Velocities of about 1.4 knots occur at the bridges in Seekonk River, a velocity of about 1.7 knots in the narrows at the mouth of Kickamuit River, and a velocity of 2.3 to 2.7 knots at the bridges in Sakonnet River. In Sakonnet River, from the highway bridge to its mouth, current velocities are small, being generally less than 0.5 knot. (See the Tidal Current Tables for predictions.)

(38)

Weather, Narragansett Bay and vicinity

(39) In the entrance to the bay and its approaches, fogs are more prevalent from April to October. The fogs are brought in by winds from east through south to southwest and are cleared off by northerly and westerly winds. The usual duration of the fog is 4 to 12 hours, but periods of 4 to 6 days have been known with only short clear intervals. The head of the bay will sometimes be free from fog while the entrance is completely shut in.

(40) Navigation of the bay and its tributaries is sometimes impeded by floating ice and in severe winters by packs of field ice. The ice which breaks up in Providence River and Mount Hope Bay is set by north and northeast winds down the bay through East Passage. If there is much ice, a gorge is sometimes formed at Fort Adams, but it is of short duration. The passages are rarely closed for any length of time below Gould Island in the East Passage and Dutch Island in the West Passage. During January and February, Mount Hope Bay, Bristol Harbor, Warren, Providence River, Greenwich Bay, and Wickford are usually closed to sailing vessels unaided by power. The inner harbor of Newport is also sometimes closed during these months with the exception of a channel kept open by vessels. It can get nasty at the mouth of Narragansett Bay when strong winds oppose the currents. Rounding Point Judith can be rough or interminable, due to the confluence of tidal currents. Also local wind conditions can cause the tide to turn earlier or later than predicted in the tables.

(41)

North Atlantic Right Whales

(42) Endangered North Atlantic right whales may occur in the Narragansett/Buzzards Bay Traffic Separation Scheme (peak season: November though April). The Northeast Marine Pilots distribute educational material to mariners in an effort to reduce right whale ship strikes. (See North Atlantic Right Whales, indexed as such, in chapter 3 for more information on right whales and recommended measures to avoid collisions.)

(43) All vessels 65 feet or greater in length overall (L.O.A.) and subject to the jurisdiction of the United States are restricted to speeds of 10 knots or less in the Block Island Sound Seasonal Management Area between November 1 and April 30. The area is defined as the waters bounded by:

(44) 40°51'53.7"N., 70°36'44.9"W.;

(45) 41°20'14.1"N., 70°49'44.1"W.;

(46) 41°04'16.7"N., 71°51'21.0"W.;

(47) 40°35'56.5"N., 71°38'25.1"W.; thence back to starting point. (See **50 CFR 224.105**, chapter 2 for regulations, limitations and exceptions.)

(48) The **Narragansett Bay National Estuarine Research Reserve**, a Marine Protected Area (MPA), includes the waters around Prudence, Patience, Dyer, and Hope Islands in Narragansett Bay. **Cape Cod South Closure Area** includes inshore waters of Narragansett Bay and offshore Federal waters of the south coasts of Massachusetts and Rhode Island.

(49)

Pilotage, Narragansett Bay and Other Rhode Island Waters

(50) Pilotage is compulsory for foreign vessels and U.S. vessels under register when entering and departing Narragansett Bay and all ports of the waters of the State of Rhode Island.

(51) Federal and State pilots for Narragansett Bay are available from Northeast Marine Pilots, Inc., Newport, RI 02840;*nemarinepilots*.com; telephone 401–847–9050 (24 hours), 800–274–1216; FAX 401–847–9052; email: dispatch@nemarinepilots.com.

(52) Pilots board vessels about 1.5 miles eastward of Narragansett Bay Entrance Lighted Whistle Buoy NB within an area bounded by

(53) 41°23.6'N., 71°22.4'W.,

(54) 41°22.6'N., 71°22.0'W.,

(55) 41°24.2'N., 71°20.0'W.,

(56) 41°22.6'N., 71°20.6'W. This pilot boarding area is southward of a line extending from Point Judith to Sakonnet Point. Vessels arriving from sea should approach this boarding station via the Narragansett Bay Traffic Separation Scheme inbound traffic lane.

(57) Vessels bound for Long Island Sound ports may board pilots at any point south or east of the Point Judith Pilot Station, centered on 41°17.0'N., 071°30.5'W., and outside the waters of the State of Rhode Island.

(58) Pilots board from the Northeast Marine Pilots, Inc. pilot boats NORTHEAST II, NORTHEAST III and NORTHEAST IV. NORTHEAST II is a 47-foot boat and NORTHEAST IV is a 52-foot boat; both have unpainted aluminum hulls and superstructures with the word PILOT in red on both sides. NORTHEAST III is a 33-foot boat with black hull and white superstructure. A vessel should confirm her ETA by VHF-FM radio at least 2 hours before arrival. All Northeast pilot boats monitor VHF-FM channels 16, 13 and 10, and work on 10.

(59) Pilots for Narragansett Bay serving U.S. enrolled vessels in coastwise trade are available from the Northeast Marine Pilots (see above for contact information) and the Connecticut State Pilots (a division of Interport Pilots Agency, Inc.), address: State Pier, New London, CT, telephone 800–346–4877 or 908–787–5554 (24 hours), cable PORTPILOTS Port Monmouth, NJ.

(60) Connecticut State Pilots board vessels from the pilot boat CONNECTICUT PILOT, 65 feet long with blue hull and white superstructure, and from pilot boat CONNECTICUT PILOT II, 47 feet long with blue hull and white superstructure. The boats monitor VHF-FM channels 16 and 13, 2 hours prior to the vessel's scheduled ETA, and work on channel 10. The pilots meet ships bound for Narragansett Bay at any point south or east of the Point Judith Pilot Station, centered on 41°17.0'N., 071°30.5'W., and outside the waters of the State of Rhode Island.

(61) Vessels to be boarded should provide a ladder 3 feet above the water on the lee side.

(62) Pilot services are generally arranged at least 24 hours in advance through ships' agents or directly by shipping companies.

(63)

Chart 13221

(64) **Sakonnet River**, on the easterly side of Narragansett Bay, is between the mainland and the eastern shore of Rhode Island. The width of the river varies from 0.7 to 2 miles except at its northern end where a least width of 0.3 mile is found. The river is little used except by fishing vessels and small craft. **Sakonnet Light** (41°27'11"N., 71°12'09"W.) is on the eastern side of the southern entrance and marks the western end of the foul ground west-southwest of Sakonnet Point.

(65) The channel of Sakonnet River is good for a depth of 16 feet from the mouth to Mount Hope Bay. There are numerous shoals and outlying rocks, but the dangers are well marked by buoys. Except for the breakwater light off Sakonnet Harbor, no lighted aids are in the river, and strangers should not attempt to navigate it at night.

(66) Good anchorage for vessels drawing up to 17 feet can be had in midriver just below High Hill Point in depths of 21 to 26 feet. Although open to the southward, a heavy sea seldom reaches as far as this anchorage. In southeasterly gales the water is comparatively smooth inside the mouth of the river. Fishermen seeking shelter frequently anchor on the flats in the bight northward of Fogland Point in depths of 10 to 14 feet.

(67) **Sakonnet Point**, at the eastern entrance to Sakonnet River, is surrounded by bare and submerged rocks. Several islets and islands are south of the point. **Schuyler Ledge**, with a least depth of 8 feet, is about 0.8 mile southward of the point, and is marked by a bell buoy. A seasonal fishtrap area marked by private buoys is about 0.7 mile southwest of the point.

(68) **Cormorant Rock**, a bare dark rock off the western side of the entrance to the river, is about 0.8 mile south of **Sachuest Point**, the southeastern extremity of Rhode Island. Vessels should not pass between Cormorant Rock and **Cormorant Reef**, 0.3 mile southward of the rock. The least depth on the reef is 4 feet; it is marked by a bell buoy.

(69) The two bridges and the remains of the abandoned highway bridge at the north end of Sakonnet River act as dams to maintain the water at different levels on either side of them, causing dangerous **currents** through the openings. The currents change with great rapidity both in velocity and in direction, and are characterized by a double flood. (See the Tidal Current Tables for predictions.) Vessels usually pass through the draws near the times of slack water.

(70) The river north of Fogland Point is usually closed by **ice** for short periods each winter. Ice packs occur at the railroad bridge.

(71) Vessels proceeding up Sakonnet River should follow a midriver course to the constricted part of the river, thence follow the channel marked by buoys into Mount Hope Bay.

(72) **Sakonnet Harbor**, a small-boat harbor on the northerly side of Sakonnet Point, is protected by an 800-foot breakwater extending in a northerly and easterly direction from **Breakwater Point**. A light marks the outer end. The holding ground in the harbor is reported to be poor. A marina on the southwest side of the harbor provides berths, gasoline, diesel fuel, electricity and a launching ramp. A surfaced launching ramp is also on the south side of the harbor.

(73) The western shore of Sakonnet River from the entrance to Sandy Point should be given a berth of 0.4 mile to avoid shoals with depths of 7 to 17 feet. Rocks extend up to 500 yards offshore between Sachuest Point and **Flint Point**, about 1 mile northward. **Flint Point Ledge**, about 0.5 mile north-northeast of Flint Point, has a least depth of 7 feet. **Black Point** is a rocky bluff on the western side of the river, 2.6 miles northward of Flint Point. **Sandy Point** and **McCorrie Point**, low and backed by high land, are 3.9 and 5.4 miles, respectively, northward of Flint Point.

(74) The channel passes eastward of **Gould Island**, a high wooded island, 2.5 miles north-northeastward of McCorrie Point. This Gould Island should not be confused with one of the same name in East Passage. A rock with a depth of 1 foot is northwestward of the island and is marked by a buoy.

(75) The eastern side of Sakonnet River is bolder than the western side. The east shore should be given a berth of 0.7 mile from Sakonnet Point to **Church Point**, a flat point with bluffs at the water, about 2.8 miles northward of Sakonnet Point. **Old Bull**, with a depth of 1 foot, is about 0.5 mile southward of Church Point and marked by a buoy. A church spire at **Little Compton**, about 1.7 miles east of Church Point, is prominent. **High Hill Point**, about 3 miles north of Church Point, is a prominent small hill with bluffs at the water. **Fogland Point**, about 0.9 mile northward of High Hill Point, is a projecting prominent point; the westerly and northerly sides should be given a berth of over 200 yards. **Almy Rock**, bare at low water, is 0.3 mile southwest of Fogland Point. The broad bights between Fogland Point and the bridge are shoal.

(76) **Nannaquaket Pond**, on the east side of Sakonnet River eastward of Gould Island, has a narrow entrance 8 feet deep crossed by a fixed bridge with a clearance of 12 feet. The deeper water in the entrance is along the northern shore; several rocks are off the southern shore. The currents have considerable velocity. The northern part of the pond has depths up to 26 feet; the remainder has depths of about 3 feet.

(77) **The Cove**, on the western side of the river south of the bridges, has a depth of about 9 feet in the entrance; the 31-foot-wide fixed highway bridge across the entrance has a clearance of 25 feet. Depths are generally 3 to 4 feet in the cove.

(78) **Tiverton** is a town on the eastern bank of Sakonnet River north and south of the bridges. Oil tankers call at Tiverton. The oil piers northward of the bridges have reported depths of about 32 to 35 feet alongside.

(79) There are small-craft facilities at Tiverton, across the Sakonnet River at **Almy Point**, and at Cedar Island Pond approximately 1.1 miles north of Almy Point. The facilities provide berths and mooring, electricity, gasoline, diesel fuel, water, ice, pump-out facilities, a launching ramp, a lift to 60 tons, storage, and full repairs. The facility at Tiverton has an approach depth of 35 feet with 12 feet alongside, at Almy Point has an approach depth of 25 feet with 11 feet alongside, and at Cedar Island Pond has an approach depth of 12 feet with 8 feet alongside.

(80) The channel at the north end of Sakonnet River, 0.6 mile above Gould Island, is restricted to a width of 100 feet between the abutments of a former highway bridge just south of the entrance to The Cove. A fixed highway bridge, 0.8 mile north, has a clearance of 65 feet; the bridge is under construction (2009). An overhead power, just north of the bridge, has a clearance of 81 feet.

(81)

Chart 13223

(82) The southern shore of Rhode Island is rocky with numerous offlying rocks and ledges. Numerous prominent residences are on the eastern side of **Newport Neck**, the southwestern part of Rhode Island. A large brick residence with several towers is on the southeastern point of Newport Neck. **Easton Point** is about 1.3 miles eastward of Newport Neck. A stone tower with a short spire at each corner can be seen from offshore, about 0.7 mile northward of Easton Point. Westward of Easton Point is a bathing beach with a prominent pavilion. Several private landings are northward of **Gooseberry Island**, a small islet south of Newport Neck. Local knowledge is required to proceed to the landings.

(83) **East Passage**, the principal passage in Narragansett Bay, extends between Rhode Island on the east and Conanicut and Prudence Islands on the west. It is the most direct route to Newport, Bristol, Providence, Mount Hope Bay, and Taunton River.

(84) The Pell Bridge Newport, a fixed highway suspension bridge locally known as the Newport Bridge, crosses East Passage about 3.6 miles above the entrance, between Jamestown and Newport. Clearances through the 1,500-foot center span are 213 feet at the center, 205 for the mid 1,000 feet, and 194 feet for the remainder of the center span. A racon and a sound signal are at the bridge.

(85) **Brenton Point** is the southwestern extremity of Rhode Island and the eastern entrance point of East Passage.

(86) **Brenton Reef**, bare in places, extends 0.5 mile south-southwestward of the point and is marked by a gong buoy. Another reef extends 0.5 mile offshore just

eastward of the point; **Seal Rock** is at the southeastern end of the reef.

(87) **Seal Ledge**, about 0.5 mile south of Seal Rock, has depths of 15 to 30 feet and is marked by a bell buoy. **Haycock Ledge**, 0.4 mile eastward of Seal Rock, has a least depth of 12 feet.

(88) **Beavertail Point** is the southern extremity of Conanicut Island, on the western side of the entrance to East Passage. **Beavertail Light** (41°26'58"N., 71°23'58"W.), 64 feet above the water, is shown from a square granite tower attached to a white dwelling at Beavertail Point. A sound signal is at the light and a radar tower is north of the light. **Newton Rock**, a covered rock, is about 0.1 mile southward of the point; a bell buoy is about 0.2 mile southwestward of the rock.

(89) **Hull Cove**, about 1 mile northeastward of Beavertail Light, is rocky and exposed to southerly winds. **Castle Hill**, the westernmost point of Rhode Island, is marked by Castle Hill Light; a mariner radio activated sound signal is at the light, initiated by keying the microphone five times on VHF-FM channel 83A. **Castle Hill Coast Guard Station** is close east of the light. **Butter Ball Rock**, about 0.2 mile south of the light and marked by a bell buoy, uncovers 1 foot.

(90) **Mackerel Cove** indents the southern shore of Conanicut Island about 1.6 miles northeastward of Beavertail Light. A house with a cupola is prominent on **Southwest Point**, the eastern entrance point of the cove. The cove is exposed to southerly weather and is seldom used. The Jamestown-Verrazzano Bridge shows prominently over the bar at the head of the cove on entering East Passage. **Kettle Bottom Rock**, about 0.2 mile southeastward of Southwest Point, is bare and marked by a gong buoy.

(91) **Bull Point**, the southeastern point of Conanicut Island, is rugged and rocky, and fringed by shoals which are marked by buoys. **Fort Wetherill** is on the point. **The Dumplings**, northeast of Bull Point, are numerous bare and covered rocks and islets. The most southerly islet has a tall house on it, covering almost the entire islet.

(92) **Fort Adams** is on a peninsula off the north side of Newport Neck. The buildings and masonry of the fort are prominent on the western slope of the peninsula. A dock extending northward from the fort is marked by a light and sound signal.

(93) **Newport Harbor**, on the western shore of Rhode Island and the eastern side of East Passage, 3.5 miles above Beavertail Light, is an important harbor of refuge for coasters, tows, and yachts. Its approach is well marked by navigational aids, and the harbor is of easy access day and night. A State regulatory buoy in the entrance to the inner harbor marks a 5 mph **no wake zone**. **Goat Island**, 0.6 mile long in a north-south direction, is a major pleasure boating center and divides Newport Harbor into an outer and inner harbor. The outer harbor, on the western side of Goat Island, is northward of The Dumplings and southward of Gould Island. The inner harbor is on the eastern side of Goat Island and extends along the western front of Newport.

(94) A marina, hotel, recreational and service facilities, and marine supplies are available on Goat Island.

(95) **Newport**, a city on the inner harbor, is one of the principal summer resorts on the Atlantic Coast. Some coastwise traffic uses the port, but few foreign vessels enter it. A Naval Education and Training Center is here, from which several Navy ships operate.

(96)

Prominent features

(97) The following objects are prominent when approaching Newport Harbor either from the southward or northward: a hotel on Goat Island; a white building of the yacht club near Ida Lewis Rock in the southerly part of the harbor; church spires in the town; and the buildings of the Naval Education and Training Center and Naval War College on Coasters Harbor Island in the north part of the harbor. To the westward on Conanicut Island are several large hotels and a standpipe. Numerous navigational aids mark the passages through the harbor.

(98) The entrance to the outer harbor from the southward is unobstructed; the entrance from northward, passing either side of Gould Island, is clear, but the passage eastward of Rose Island is partly obstructed by the rocks and ledges between Rose and Coasters Harbor Islands.

(99) The inner harbor has two entrances north and south of Goat Island. A fixed highway bridge with a 40-foot span and a clearance of 14 feet connects the Newport mainland to the northern part of Goat Island. This bridge limits the size of vessels that can enter the inner harbor from the northern approach.

(100) **General anchorages** are in the outer and inner harbor and, except in emergencies, vessels must anchor in these areas. (See **33 CFR 110.1** and **110.145**, chapter 2, for limits and regulations.) Vessels of more than 18-foot draft anchor in the outer harbor in depths of 36 to 100 feet with good holding ground.

(101) **Special anchorages** are in Brenton Cove and in the inner harbor east and northeast of Goat Island. (See **33 CFR 110.1** and **110.46**, chapter 2, for limits and regulations.) The anchorage is good in **Brenton Cove** and is used frequently by yachts. When entering the cove, the western shore should be given a berth of 200 yards.

(102) In 1981, the harbormaster requested that transient craft anchor only in the northern part of the Brenton Cove anchorage and in the anchorage northeast of Goat Island.

(103) Shoals with little water over them make out nearly 300 yards from the southern shore of the inner harbor to **Ida Lewis Rock** and **Little Ida Lewis Rock**; the latter is marked by a daybeacon.

(104) Goat Island is marked by a light at its northern end and a lighted bell buoy at its southern end. Buoys mark the shoals along the southeasterly and southwesterly sides of the island.

(105) **Rose Island**, privately owned, is surrounded by a shoal with little water over it. The shoal extends about 0.4 mile northeastward of the island where it rises abruptly from deep water. A rocky area extends southward from Rose Island and is marked by a buoy. A private light marks the southwest point of the island. **Mitchell Rock**, with a depth of 16 feet and marked by a gong buoy, is about 0.1 mile southeast of the dock on the southeast side of the island. **Citing Rock**, 2 feet high, is 350 yards east of the north end of the island and on the edge of the shoal surrounding Rose Island. **Tracey Ledge**, covered 11 feet, is about 0.3 mile eastward of Rose Island and marked by a buoy.

(106) **Gull Rocks** are about midway between Rose Island and Coasters Harbor Island. Buoys mark the ends of the shoals and rocks that extend northward and southward of the rocks. There is deep water between Gull Rocks, Rose Island, and Coasters Harbor Island. A rock, covered 19 feet and marked by a buoy, is about 0.3 mile north-northwestward of Gull Rocks.

(107) Off the northern and southern sides of **Coasters Harbor Island** are numerous rocks and ledges. A private light marks an obstruction in the channel south of the island. **St. Patrick Rock,** covered 5 feet, is about 0.3 mile southeastward of the island. The island has numerous buildings. Three fixed bridges connect the island to Newport. The southern highway bridge and the pedestrian bridge 0.3 mile above it have 31-foot spans with clearances of 3 feet. The northern highway bridge has a span of 85 feet with a clearance of 7 feet. Overhead power cables of unknown clearance cross the harbor below the northern bridge.

(108) The western portion of the outer harbor is generally free of dangers northward of The Dumplings.

(109)

Currents

(110) In the entrance off Bull Point the flood current is often irregular. There may be a long period of slack water preceding the flood, or there may be a double flood. The flood reaches a strength of about 1.2 knots; the ebb is regular and averages 1.5 knots at strength.

(111) Northward of Bull Point, tidal current velocities seldom exceed 1 knot. In the inner harbor they are usually less than 0.5 knot. (See the Tidal Current Tables for predictions.)

(112)

Weather, Newport and vicinity

(113) The prevailing winds are southwesterly in the summer and northwesterly in the winter. The heaviest gales are usually from the northwest and northeast.

(114) The harbor and its approaches are navigable throughout the year, although in severe winters **ice** may interfere with navigation in the inner harbor for short periods. Vessels and tugs keep ice well broken up in the main channel through the inner harbor.

(115) July is the warmest month with an average maximum of 79 °F and average minimum of 63 °F. January is the coldest month, having normal mean temperatures near freezing, that is, average maximum of 38 °F and average minimum of 23 °F. The extreme maximum temperature for Newport is 98 °F recorded in August 1975 while the extreme minimum is -9 °F recorded in January 1982.

(116) Precipitation is fairly evenly distributed throughout the year averaging about 45 inches (1143 mm) in any given year. The wettest month is November averaging 4.57 inches (116 mm) and the driest month is July averaging only 2.94 inches (75 mm). Total snowfall for the winter season averages about 20 inches (508 mm); however, melting is usually rapid and snow cover rarely lasts more than a few days. The greatest snowfall in a 24-hour period was 20.0 inches (508 mm) in February 1978. January is the snowiest month averaging over seven inches (178 mm). Snow is absent from May through September. An average of only five days each year has snowfall amounts greater than 1.5 inches (38 mm).

(117) See Appendix B for the **Newport climatological table.**

(118)

Pilotage, Newport

(119) See Pilotage, Narragansett Bay and Other Rhode Island Waters (indexed as such), early this chapter.

(120)

Quarantine, customs, immigration, and agricultural quarantine

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

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

(123) Newport is a **customs port of entry.**

(124) The Coast Guard **vessel documentation** office at Providence serves Newport. (See Appendix A for address.)

(125)

Harbor regulations

(126) The **harbormaster,** under the supervision of the Recreation Department, is charged with the enforcement of harbor regulations, the movement of vessels, and assignment of moorings and anchoring. The harbormaster may be contacted through the Police Department. The **speed limit** inside the harbor is 5 mph.

(127)

Wharves

(128) Facilities include a city wharf and numerous private piers. The depths alongside the principal piers range from about 7 to 18 feet.

(129)

Supplies

(130) Gasoline, diesel oil, diesel fuel, water, provisions, and marine supplies may be obtained at Newport.

(131) Launch services are available in the harbor.

(132)

Repairs

(133) Newport has a commercial shipyard specializing in repair, construction, and conversion of steel and aluminum vessels. The marine railway is at the shipyard in the inner harbor and can handle vessels to 330 feet long, 63 feet wide, and 21.6 feet in draft. Cranes to 60 tons are available.

(134)

Small-craft facilities

(135) There are numerous facilities in Newport harbor. Mobile hoists up to 60 tons are available. Complete small-craft hull and engine repairs can be made.

(136)

Communications

(137) Newport has bus and rail transportation. In the summer the ferry between Block Island and Providence calls at Newport.

(138) **Jamestown** is a town on the east side of Conanicut Island in a bight on the west side of East Passage. A standpipe in the southern part of the town and a hotel near the waterfront are prominent. The bight is a popular summer anchorage for local craft. A marina basin protected by a detached breakwater is in the center of the bight. Jamestown has two boatyards. The largest marine railway can handle craft to 80 feet, and the largest lift is 50 tons. Berths, electricity, gasoline, diesel fuel, water, ice, some marine supplies, and complete hull, engine, and electronic repairs are available.

(139) **Potter Cove** is about 1 mile above the marina basin just north of **Taylor Point**. This cove should not be confused with the Potter Cove off Prudence Island. About 1 mile north of Taylor Point are the ruins of a pontoon pier.

(140) **Coddington Point** is about 0.5 mile northward of Coasters Harbor Island on the east shore of East Passage. **Bishop Rock Shoal**, 0.6 mile southwestward of the point, is covered 9 feet and marked by a lighted bell buoy. **The Sisters**, rocks awash westward of the point, are marked by a buoy.

(141) **Coddington Cove**, eastward of Coddington Point, is protected on its north side by a curving breakwater 0.7 mile long, marked at its end by a light and sound signal. Two long finger piers are inside the cove; the north side of the northerly pier is used by the Navy, and the southerly pier is used by a shipyard. Depths of 30 feet are reported alongside both piers. Navy buildings on shore and buildings at the shipyard are conspicuous.

(142)

Restricted Areas

(143) Coddington Cove is within a naval restricted area. (See **33 CFR 334.81**, chapter 2, for limits and regulations).

(144) A naval restricted area covering a large area surrounds Gould Island and extends north to include waters between **Conanicut Island** and Prudence Island. The regulation states in part that no person or vessel shall at any time, under any circumstances, anchor or fish or tow a drag of any kind in the area because of the extensive cable system located therein. (See **33 CFR 334.80**, chapter 2, for limits and regulations.)

(145) **Gould Island,** a military reservation, is about 2 miles north of Rose Island and 0.8 mile east of Conanicut Island. A light is on the south end of the island. The island is sparsely wooded.

(146) **Halfway Rock** and **Fiske Rock** are about 1.8 miles northeastward of Gould Island, on a small ledge bare at its southern end. Halfway Rock is marked by a daybeacon and Fiske Rock by a buoy. Strangers should not pass between these aids.

(147) A mussel farming area is about 1.3 miles northeast of the breakwater at Coddington Cove in the vicinity of the pier at **Lawtons.** Submerged equipment and numerous buoys extend several hundred yards offshore and for about 0.5 mile north of the pier. Caution is advised in the area.

(148) **Dyer Island**, about 0.8 mile eastward of the southern portion of Prudence Island, is low and brush covered. A reef, partly bare, extends 0.4 miles southward and southwestward of the island, and is marked by a buoy. Between the shoal area south of Dyer Island and Rhode Island is a bar with depths of 9 to 18 feet over it. North of Dyer Island is a reef with depths of 6 to 18 feet.

(149) **Melville**, a military fueling facility, is on the west shore of Rhode Island, east of Dyer Island. Depths alongside the fuel piers range from 30 to 35 feet.

(150) A small-craft facility is in a basin at **Coggeshall Point,** just north of Melville. Berths, gasoline, diesel fuel, electricity, water, ice, complete marine supplies, and a 50-ton mobile hoist are available; engine, hull, and electronic repairs can be made. In 1981, depths of 9 to 15 feet were reported in the basin.

(151) A lighted wind turbine is about 0.9 mile northeast of Coggeshall Point. A boat ramp is about 1.6 miles north-northeast of Coggeshall Point, south of **Arnold Point**.

(152)

Chart 13224

(153) **Hog Island**, about 1 mile north of Arnold Point, lies in the entrance to Bristol Harbor, dividing the waters into two channels. The island has a rolling wooded terrain on which are a few houses and cottages. Shoal water surrounds the island extending as much as 0.4 mile southward and 0.8 mile northward. The shoal area is marked by lights and buoys.

(154) About 0.6 mile east-northeastward of Hog Island Shoal Light is **Musselbed Shoals**, marked on the outer end by a light. From the light structure a directional light is shown to mark the channel to Mount Hope Bay.

(170)

Structures across Taunton River				
Name•Description•Type	Location	Clear Width of Draw or Span Opening (feet)	Clear Height above Mean High Water (feet)	Information
Charles M. Braga Jr. Bridge (fixed)	41°42'23"N., 71°09'57"W.	400	135	A private sound signal is at the bridge
Overhead power cables	41°43'13"N., 71°09'35"W.		145	
Brightman Street Bridge (bascule)	41°43'26"N., 71°09'22"W.	98	27	Notes 1 and 2 Call sign WQA-833
Veterans Memorial Bridge (bascule)	41°43'35"N., 71°09'07"W.	200	60	Note 2
Overhead power cable	41°44'12"N., 71°08'28"W.		150	
Berkley Bridge (swing)	41°50'06"N., 71°06'30"W.	52	7	Bridge is under construction
Overhead power cable	41°50'51"N., 71°06'48"W.		75	
Overhead power cable	41°51'45"N., 71°06'18"W.		65	
Overhead power cable	41°52'29"N., 71°05'41"W.		65	
Weir Bridge (fixed)	41°53'08"N., 71°05'20"W.	35	10	
Railroad Bridge (fixed)	41°53'12"N., 71°05'06"W.	26	9	

Note 1 – Bridgetender monitors VHF-FM channel 16 and works on channel 13.
Note 2 – See 33 CFR 117.1 through 117.59 and 117.619, chapter 2, for drawbridge regulations.

(155)

Charts 13221, 13227

(156) **Mount Hope Bay**, in the northeastern part of Narragansett Bay, is the approach to the city of Fall River and **Taunton River**. There are two approaches to the bay. The approach from the Sakonnet River, previously discussed, is little used. The approach from East Passage is well marked, and with care 34 feet can be carried in the channel into the bay.

(157) **Fall River**, on the eastern shore of the mouth of Taunton River and head of Mount Hope Bay, is an important manufacturing center as well as distribution point of petroleum products. Principal products handled through the port are petroleum products, latex, shellac, cotton, and some lumber.

(158) **Somerset**, about 5.3 miles, and **Dighton**, about 7.5 miles above the Fall River, are towns on the west side of Taunton River. **Taunton**, a manufacturing city, is at the head of navigation about 12.5 miles above Fall River.

(159) **Mount Hope Bridge** crosses the entrance to Mount Hope Bay between **Bristol Point** and Rhode Island. The bridge has two lighted towers which are visible for many miles in clear weather, a sound signal, and a racon. It is a high-level suspension highway bridge with a clearance of 135 feet.

(160) **Mount Hope** is a prominent hill on the western side of the bay 2 miles northeastward of the suspension bridge. The eastern and western slopes are wooded. **Spar Island** is a small, low island near the center of Mount Hope Bay.

(161) **Borden Flats**, the shoal area northward of the channel in Fall River Harbor, is marked by a light equipped with a sound signal.

(162) Three shallow streams that empty into the northern part of Mount Hope Bay are entered only by local small craft. **Kickamuit River,** the westerly one, has a narrow buoyed entrance through which the currents have considerable velocity. The buoyed channel has a depth of about 6 feet. A ramp is on the western side of the bay, approximately 0.7 mile south of the entrance to Kickamuit River. **Cole River,** the middle of the three, is buoyed on the east side of the entrance. A highway bridge, about 1.5 miles above the entrance, has a 41-foot fixed span with a clearance of 7 feet.

(163) **South Swansea,** on the west shore of **Gardners Neck,** has a boatyard with a 25-ton mobile hoist and a marine railway that can handle craft up to 50 feet for hull, engine, and electronic repairs or storage. Berths, electricity, gasoline, diesel fuel, water, ice, and marine supplies are available. In 1981, a reported depth of 6 feet could be carried to the boatyard. **Lee River,** the easterly stream, is navigable to a fixed bridge about 1.2 miles above the entrance. A shoal in midchannel just north of the narrow opening through the fill, 0.8 mile above **Brayton Point,** has a depth of 1 foot.

(164)

Channels

(165) A Federal project provides for a channel 35 feet deep through Mount Hope Bay to about 0.9 mile above the Brightman Street Bridge across Taunton River at Fall River and a side channel 35 feet deep, about 0.2 mile north of **Common Fence Point** (41°39.3'N., 71°13.3'W.) at the north end of Rhode Island which leads eastward from the main channel into North and South Branch channels. (See Notice to Mariners and latest editions of the charts for controlling depths.)

(166) A privately dredged side channel, about 3.3 miles northeastward of Common Fence Point and marked by buoys and a **325.3°** private lighted range, leads northwestward from the main channel to a powerplant wharf on the east side of Brayton Point. (See Notice to Mariners and the latest editions of the charts for controlling depths.)

(167) A dredged channel in Taunton River leads from Somerset to **Peters Point**, 6.7 miles above the Brightman Street Bridge, thence to Taunton, 12.5 miles above Fall River. In 2001, the channel had a controlling depth of 6.4 feet to Peters Point, thence 4 feet was reported to be available to Taunton. Local knowledge is required from Dighton to Taunton. Buoys mark the channel to about a mile beyond the Berkley Bridge, about 3.5 miles below Taunton.

(168)

Anchorages

(169) Fall River Harbor has no designated anchorages. Vessels may anchor on either side of the dredged approach channel in the outer harbor or at any locality in Mount Hope Bay where depth and bottom are suitable; the chart is the best guide.

(171)

Currents

(172) In Taunton River the currents generally follow the direction of the channel and, except at bridges, do not hinder navigation. The ebb is usually stronger than the flood. (See the Tidal Current Tables for predictions.)

(173)

Weather, Narragansett Bay and vicinity

(174) The prevailing winds are northeasterly for all but the summer months, when the direction is southwesterly. The heaviest gales are usually from the northwest. The approach channel and harbor are generally free from **ice** and are navigable throughout the year. Taunton River is commonly closed from December to March. During severe winters the harbor and Mount Hope Bay are occasionally frozen over, but the channels to the principal wharves are kept open by vessels and tugs operating in the harbor.

(175)

Pilotage, Fall River

(176) See Pilotage, Narragansett Bay and Other Rhode Island Waters (indexed as such), early this chapter.

(177)

Towage

(178) Tugs to 2,200 hp are available at Fall River and tugs to 3,300 hp are available from Providence for use at Fall River. Vessels are usually met 2 miles below their berth. Large vessels normally require tugs for docking and undocking. Arrangements for tug service should be made at least 6 hours in advance, usually through ships' agents or directly by shipping companies. Tugs are dispatched 24 hours a day. The tugs monitor VHF-FM channels 10, 13, 16, and 18A, and use channel 7A as a working frequency.

(179)

Quarantine, customs, immigration, and agricultural quarantine

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

(181) Fall River is a **customs port of entry.**

(182) **Quarantine** is enforced in accordance with regulations of the U.S. Public Health Service. (See Public Health Service, chapter 1.) Fall River has several hospitals.

(183) The Coast Guard **vessel documentation** office at New Bedford, MA, serves Fall River. (See Appendix A for address.)

(184) The **harbormaster** can be contacted through Fall River City Hall.

(185)

Wharves

(186) The piers and wharves at Fall River are along the Taunton and Sakonnet Rivers and in Mount Hope Bay. Only the deep-draft facilities are described. For a complete description of the port facilities refer to Port Series No. 4, published and sold by the U.S. Army Corps of Engineers. (See Appendix A for address.) The alongside depths are reported; for information on the latest depths contact the operator. All the facilities described have highway connections. Fresh water is available at most of the piers and wharves. Cargo in the port is usually handled by ship's tackle.

(187) The **speed limit** is 5 knots in the channel off the piers and wharves.

(188) **Facilities at Tiverton, RI** (chart 13221):

(189) Texaco Inc. Tiverton Terminal: (41°38'50"N., 71°12'40"W.); 50-foot face, 721 feet with dolphins; 35 feet alongside; deck height, 11 feet; receipt of petroleum products; owned by Texaco, Inc.; not being operated in 1983.

(190) Northeast Petroleum Corp., Pier 1: about 250 yards north of Texaco Inc. Terminal; 120-foot face, 700 feet with dolphins; 32 feet alongside; deck height, 9 feet; receipt of petroleum products; owned and operated by Northeast Petroleum Corp.

(191) Northeast Petroleum Corp., Pier 2: about 250 yards north of Northeast Petroleum Corp., Pier 1; 40-foot face, 700 feet with dolphins; 34 feet alongside; deck height, 9 feet; receipt of petroleum products; owned and operated by Northeast Petroleum Corp.

(192) Fuel Storage Co., Tiverton Terminal Pier: east side of Mount Hope Bay, 1.5 miles northward of Northeast Petroleum Corp., Pier 2; 50-foot face, 795 feet with dolphins; 35 feet alongside; deck height, 9 feet; receipt of petroleum products; owned and operated by Fuel Storage Co.

(193) **Facilities at Fall River, east side of Taunton River** (chart 13227): Borden and Remington Corp. Wharf: (41°42'10"N., 71°10'09"W.); 380-foot face, 28 feet alongside; deck height, 10 feet; receipt of latex and caustic soda; owned by Tillotson Co. and operated by Borden and Remington Corp.

(194) State Pier: 0.2 mile northeast of Borden and Remington Corp. Wharf; 398-foot face, 18 to 35 feet alongside; lower side 620 feet long, 35 feet alongside; deck heights, 17 feet; 85,000 square feet covered storage, about 7 acres of open storage; receipt and shipment

of general and roll-on/roll-off cargo; owned by the Commonwealth of Massachusetts, operated by Fall River Line Pier, Inc.

(195) The battleship USS MASSACHUSETTS, World War II memorial, and three other U.S. Navy vessels are berthed just northward of the State Pier.

(196) Shell Oil Co. Wharf: about 2 miles above State Pier; 570-foot face, 700 feet with dolphins; 30 feet alongside; deck height, 13 feet; receipt and shipment of petroleum products, receipt of naphtha; owned and operated by Shell Oil Co.

(197) **Facilities on west side of Taunton River** (chart 13227):

(198) Brayton Point Station Dock: (41°42'33"N., 71°11'21"W.); 1,017 feet long; 34 feet alongside; deck height, 15 feet; coal unloading tower serves conveyor belt system, unloading rate 1,000 tons per hour; receipt of fuel oil and coal; owned and operated by New England Power Co.

(199) Montaup Electric Co. Wharf: about 2.5 miles above Brayton Station Dock; 645 feet long, 34 feet alongside; deck height, 10 feet; two coal unloading towers serve conveyor belts, combined unloading rate 1,200 tons per hour; receipt of coal and fuel oil; owned and operated by Montaup Electric Co.

(200)

Supplies

(201) Provisions, marine supplies, gasoline, and water can be obtained in Fall River. Water is available at most of the berths.

(202)

Repairs

(203) Fall River has no drydocking or major repair facilities for deep-draft vessels; the nearest such facilities are at Boston, MA.

(204) Fall River has two small shipyards, on the west side of the harbor about 0.6 mile above the fixed bridge and on the east side of the harbor about 0.9 mile below the fixed bridge. The northerly shipyard has a marine railway that can handle vessels to 100 feet long with drafts of 7 feet forward and 13 feet aft. The yard can make repairs to wooden, steel, and aluminum vessels at their berths. The southerly yard specializes in the construction and conversion of steel vessels. Cranes to 250 tons are available for hauling out vessels. In 1981, depths of 22 to 23 feet were reported alongside.

(205)

Small-craft facilities

(206) Small-craft facilities are at Fall River, **Somerset** opposite Fall River, Taunton, and at Dighton. Berths, moorings, electricity, gasoline, diesel fuel, water, ice, pump-out facilities, launching ramps, marine supplies, storage, hull, engine and electronic repairs are available. The largest marine railways, at Dighton, can handle craft to 55 feet. The largest marine lift is at Somerset with a capacity of 80 tons.

(207) A launching ramp is on the west side of Taunton River, about 1.6 miles above Somerset.

(208)

Chart 13224

(209) **Bristol Harbor**, between **Bristol Neck** on the east end and **Popasquash Neck** on the west, is in a cove about 2 miles long and 1.3 miles wide at its southern end, narrowing to 0.4 mile wide at its northern end. The harbor proper, the northern part of the cove, has depths of 15 to 17 feet.

(210) **Bristol** is a town on the eastern side of the harbor. In approaching the harbor the most prominent mark is Mount Hope Bridge. Also prominent are the navigation lights, a stone tower, a stack, and an elevated tank on high ground back of the town. The town has bus service. A ferry operates daily from Bristol to Prudence Island, and summer ferry service is available to Hog Island.

(211) **Hog Island** is in the middle of the entrance to Bristol Harbor. A natural channel with depths of 19 to 28 feet extends on each side of the island. Excellent anchorage may be found in the harbor abreast the town in depths of 15 to 17 feet, soft bottom. A **general anchorage** is in Bristol Harbor. (See **33 CFR110.1 and 110.145 (c)** and **(d),** chapter 2, for limits and regulations.)

(212) **Usher Rocks,** about 0.7 mile northeastward of Popasquash Point, are bare at low water. A buoy is eastward of the rocks and a lighted bell buoy is on the western side of the western passage to the harbor.

(213) Depths alongside the piers and wharves range from 9 to 13 feet.

(214) A Coast Guard vessel is moored at Bristol. The Coast Guard pier is marked by a light.

(215) A marina and yacht club are on the west side of the harbor. Guest moorings, electricity, water, ice, marine supplies, and hull and engine repairs are available. A mobile hoist at the marina can handle craft to 42 feet long. Launching ramps are available on the east side of the harbor. In 1993, a reported depth of about 8 feet could be carried to the marina.

(216) **Potter Cove,** on the northeast side of **Prudence Island,** is a small nearly landlocked harbor. Buoys mark the entrance channel off **Gull Point.** The north and south ends of Prudence Island are a State park. **Ohio Ledge,** about 2.5 miles northward of Potter Cove, has a least depth of 9 feet and is marked on its east side by a bell buoy.

(217) **Warren River**, emptying into the head of Narragansett Bay westward of Bristol Neck, is the approach to the towns of **Warren** and **Barrington**, and **Barrington River**, which joins Warren River at Warren. A church spire in Warren is prominent.

(218) From the bay, the channel to Warren passes between numerous shoals and rocks and is crooked and winding, but well marked.

(219) In 2002, a sunken wreck in about 41°43.65'N., 71°17.25'W. is on the west side of Warren River.

(220) A State regulatory buoy, about 0.9 mile above the mouth of Warren River, marks a **"Slow no wake" zone.**

(221) An excellent anchorage may be found at the mouth of the Warren River about 0.2 mile from the eastern shore in depths of 14 to 15 feet, soft bottom. There is not room for anchorage in the river for any but small craft. Abreast the lower end of Warren the channel is about 0.1 mile wide, with depths of 13 to 17 feet in midchannel, and small vessels can anchor temporarily at this point.

(222) Vessels approaching the river must take care to avoid **Rumstick Shoal**, which extends nearly 0.6 mile south of **Rumstick Point**, the southernmost point of **Rumstick Neck** and the western entrance point of the river. The shoal has depths of 2 to 12 feet and is marked by buoys. **Rumstick Rock**, 6 feet high, and **Rumstick Ledge**, with rocks that uncover 1 to 5 feet, are on the westerly side of the shoal.

(223) The Route 114 Bridge crosses the Barrington River about 0.5 mile above the mouth; it has a fixed span with a clearance of 10 feet. A fixed bridge just north of the highway bridge has a 30-foot east span with a clearance of 5 feet. Rocks were reported under the bridge in 1978.

(224) The **tidal current** off the town of Warren has a velocity of about 1 knot. Strong currents may be encountered in Barrington River.

(225) The **harbormaster** controls docking, mooring, and anchoring, and can be contacted through the Warren Police Department.

(226) A shipyard on the east side of the Warren River at Warren has a hydraulic lift that can handle vessels to 300 tons or 130 feet long. In 1981, a reported depth of 7 feet could be carried to the shipyard.

(227) Berths, electricity, gasoline, diesel fuel, water, ice, and marine supplies are available in Warren. Depths reported alongside the major wharves range from 7 to 20 feet. Small craft facilities are also available on the point near the confluence of the two rivers. Several boatyards are in the vicinity; mobile hoists to 25 tons are available. Covered storage and complete engine, electronic, and hull repairs are available. Mariners are cautioned of a reported rock, covered 2 feet, just off the gas dock of the Barrington Yacht Club in about 44°44'00"N., 71°17'37"W.

(228)

Charts 13224, 13225

(229) **Providence River**, which empties into the head of Narragansett Bay between **Nayatt Point** and **Conimicut Point**, is the approach to the city of Providence, numerous towns and villages, and to Seekonk River.

(230) **Providence** is at the head of navigation on the Providence River, about 7 miles above the entrance, at the junction of the Providence and Seekonk Rivers. The port area includes both sides of the upper navigable channel of the river. The port's chief waterborne commerce is in petroleum products, cement, lumber, steel scrap metal, general cargo, and automobiles.

(231) **Occupessatuxet Cove**, on the west side of the river north of Conimicut Point, is a shallow bight south of **Gaspee Point**. The cove is frequented only by small craft with local knowledge.

(232) **Pawtuxet Cove**, used by pleasure and fishing craft, on the west side of Providence River, is entered about 1 mile northward of Gaspee Point through a dredged channel. The entrance channel leads westward to the cove, thence the channel turns northward and leads to a turning basin at the head of the cove. An anchorage basin extends southward from the entrance channel. The entrance channel is marked by buoys. In 2011, the controlling depth was 6 feet in the entrance channel and the turning basin; 5 to 6 feet was available in the anchorage basin. A 12-foot-high protective dike along the east side of the anchorage basin extends southward from **Marsh Island**, on the south side of the entrance channel, to **Rock Island**. **Pawtuxet** is a village on the west side of the cove.

(233) The **harbormaster** in the cove controls anchoring and berthing; he can be contacted through the Warwick City Hall. Berths, electricity, gasoline, diesel fuel, water, ice, marine supplies, and a 15-ton mobile hoist are available. A flatbed trailer can haul out craft to 50 feet long for complete hull and engine repairs.

(234) A yacht club is on the west side of Providence River about 1 mile northward of the entrance to Pawtuxet Cove. Gasoline and guest berths are available.

(235) A privately dredged channel leads from the main channel in Providence River, eastward of Pawtuxet, to a small-craft facility about 0.45 mile southwestward of **Fields Point** (41°47.2'N., 71°22.9'W.). The channel is marked by buoys and, in 1998, had a reported controlling depth of 8 feet. The ruins of the piers of a former Naval Reserve facility are on the south side of Fields Point immediately eastward of the yacht club; this area should be avoided.

(236) **Bullock Cove** is on the east side of Providence River, 2 miles north of Conimicut Point. A dredged channel leads from the Providence River to a mooring basin on the east side of Bullock Point, thence northward 0.5 mile to a mooring and turning basin. The entrance channel is marked by buoys and daybeacons. In 1982, a sunken wreck was reported on the west side of the channel at Bullock Point. There are numerous small-craft facilities in Bullock Cove. The largest marine railway, on Bullock Neck about 300 yards northward of Bullock Point, can handle craft up to 60 feet; berths, electricity, gasoline, diesel fuel, water, ice, storage, launching ramps, marine supplies, a pump-out facility, a 45-ton mobile crane, a 99-ton mobile hoist, hull, engine and electronic repairs are available. Sail repairs can be arranged nearby.

(237) **Seekonk River**, which branches off northeasterly from Providence River at Providence, is the approach to **Phillipsdale** and **Pawtucket**. The head of navigation is at Pawtucket, 5 miles above the mouth. Commerce on the river is chiefly in petroleum products. A marina at Pawtucket can provide berths, electricity, water, gasoline,

(249)

Structures across Providence and Seekonk Rivers				
Name•Description•Type	Location	Clear Width of Draw or Span Opening (feet)	Clear Height above Mean High Water (feet)	Information
Providence River				
Providence River/I-195 Bridge (fixed)	41°48'55"N., 71°24'06"W.	357	35	
Overhead power cable	41°48'56"N., 71°24'09"W.		145	
Overhead power cable	41°49'00"N., 71°24'12"W.		60	
Point Street Bridge (fixed)	41°49'05"N., 71°24'14"W.	99	7	Note 1
Seekonk River				
Overhead power cable	41°48'58"N., 71°23'22"W.		130	
Washington/I-195/US 6 Bridges (fixed)	41°49'08"N., 71°23'16"W.	100	40	
Tunnel Railroad Bridge (bascule)	41°49'25"N., 71°23'05"W.	92	17	Note 2
New Red Bridge (fixed)	41°49'45"N., 71°22'41"W.	100	42	
Overhead power cables	41°51'56"N., 71°22'48"W.		125	
Overhead power cables	41°52'21"N., 71°26'05"W.		42	
Division Street Bridge (fixed)	41°52'21"N., 71°23'03"W.	50	30	
Pawtucket/I-95 Bridge (fixed)	41°52'24"N., 71°23'04"W.	54	152	
Note 1 – Piers of a former fixed bridge cross the river channel about 300 yards north of Point Street Bridge. Note 2 – The Tunnel Bridge has been abandoned and the span is locked in the open position.				

storage facilities, marine supplies, and hull and engine repairs. A flatbed trailer at the marina can haul out craft to 40 feet long.

(238)

Prominent features

(239) **Conimicut Light** (41°43'01"N., 71°20'42"W.), 58 feet above the water, is shown from a white conical tower on a brown cylindrical pier on the west side of the entrance to Providence River. A mariner radio activated sound signal at the light, is initiated by keying the microphone five times on VHF-FM channel 83A. An abandoned lighthouse on Nayatt Point is also prominent in the approach to the river. A white masonry conical tower, approximately 20 feet high, is west of the channel, 0.7 mile above Sabin Point. Three wind turbines are prominent on the west side of the river, about 0.6 mile above Fields Point.

(240)

Channels

(241) The Federal project for Providence River provides for a channel 40 feet deep from just below Prudence Island Light to **Fox Point** near the junction of Providence and Seekonk Rivers. (See Notice to Mariners and latest editions of the charts for controlling depths.) The channel is well marked with navigational aids.

(242) A **hurricane barrier** crosses the Providence River about 200 yards above Fox Point. The barrier includes three gates which normally will be kept in the opened position until the approach of hurricane weather. The clearances at each of the three river gates are: horizontal, 20 feet; vertical (gate fully opened), 21 feet at mean high water; and depth over the gate sill, 12.9 feet at mean low water. Red lights mark the channel ends of each gate.

(243) **Seekonk River** empties into the easterly side of Providence River at Fox Point. A dredged channel, marked by buoys, leads from **Cold Spring Point**, about 1.3 miles above Fox Point, to a point about 150 yards southward of Division Street Bridge at Pawtucket, about 2.9 miles above Cold Spring Point. (See Notice to Mariners and the latest edition of charts for controlling depths.) The lower section of the river, from Fox Point to Cold Spring Point, is crooked, winding and marked by buoys. Local knowledge and use of the chart are required to carry the best water.

(244) Three areas of submerged boulders with angle iron protrusions, the remains of the approaches and pivot pier of a former swing bridge, are in the river channel at Cold Spring Point in about 41°49'36"N., 71°22'48"W. A 5 mph no-wake-zone, marked by State regulatory buoys, is in the entrance channel and above Cold Spring Point.

(245)

Anchorages

(246) Vessels anchor as directed by the **harbormaster** on the edge of the channel between Fields Point and Fox Point. Eastward of Fox Point, a few vessels may anchor in the area where a portion of Green Jacket Shoal was removed. Preferred small-craft anchorages are in Bullock Cove and Pawtuxet Cove.

(247)

Dangers

(248) Numerous rocks and ledges border Providence River Channel on either side. Navigational aids mark the shoal areas off **Bullock Point**, about 1.5 miles above the mouth; off **Sabin Point**, about 3 miles above the Mouth; off **Pomham Rocks**, about 3.5 miles above the mouth; off **Fuller Rock**, about 5 miles above the mouth and **Green Jacket Shoal**, east of Fox Point about 7.4 miles above the mouth.

(250)

Currents

(251) Tidal currents are weak in the approach channel and the harbor, except in the constricted parts of Seekonk River. In Seekonk River the double flood is very pronounced. The velocity near the middle of the flood period is generally less than 0.5 knot and is sometimes in an ebb direction. (See the Tidal Current Tables for predictions.)

(252)

Weather, Providence and vicinity

(253) The proximity of Narragansett Bay and the Atlantic Ocean plays an important part in determining the climate for Providence and vicinity. In winter, the temperatures are modified considerably, and a good many of the major storms drop their precipitation in the form of rain, rather than snow. In summer, many days that would otherwise be uncomfortably warm are cooled by refreshing seabreezes. At other times of the year, sea fog may be advected over land by onshore winds. In fact, most cases of dense fog are produced in this way; but the number of such days is few, averaging 2 or 3 days per month.

(254) The temperature for the entire year averages around 51°F (10.6°C). January is the coldest month averaging 29°F (-1.7°C), and July the hottest month averaging 73°F (22.8°C). Freezing temperatures occur on the average about 117 days per year and the days with minimums below 5°F (-15°C) average six each year. An average nine days each year record maximums in excess of 90°F (32.2°C). The all-time maximum for Providence is 104°F (40°C) recorded in August 1975 and the all-time minimum is -13°F (-25°C) recorded in January 1976.

(255) Measurable precipitation occurs on about 178 days each year. November is the wettest month averaging 4.48 inches (114 mm) and June the driest averaging 2.89 inches (74 mm). Average annual precipitation is 45.12 inches (1144 mm).

(256) Thunderstorms are responsible for much of the rainfall from May through August. They usually produce heavy, and sometimes even excessive, amounts of rainfall but since the duration is relatively short, damage is ordinarily light. The summer thunderstorms are frequently accompanied by extremely gusty winds, which may cause some damage to property, especially small pleasure and fishing craft.

(257) The first measurable snowfall of winter usually comes in October. The month of greatest snowfall is usually February which averages about ten inches (254 mm). It is unusual for the ground to remain well covered with snow for any long period of time. The average annual snowfall total is 45 inches (1143 mm). Snow has fallen in every month, October through May. About seven days each year have snowfall greater than 1.5 inches (38 mm).

(258) In early fall, severe coastal storms of tropical origin sometimes bring destructive winds to this area. Even at other times of the year, it is usually coastal storms that produce the most severe weather. Between 1871 and 1996, twelve tropical storms have come within 25 miles of Providence. In August 1991, Hurricane Bob passed within 20 miles east of the city with 85-knot winds. Only twelve hours earlier, Bob was packing winds in excess of 100 knots. In September 1960, Hurricane Donna passed about 20 miles west of the city. At the time, Donna had maximum winds of 90 knots. Coastal areas of Rhode Island, Connecticut, and Long Island were raked with winds in excess of 100 knots compliments of Hurricane Donna.

(259)

Ice

(260) The approach channel and the harbor are generally free of ice and navigable throughout the year. During severe winters, the harbor and several miles of Providence River and Upper Narragansett Bay are occasionally broken over, but the ice is usually broken up in the channels to the principal wharves by the traffic in the harbor.

(261) The National Weather Service maintains an office at the T.F. Green State Airport; barometers may be compared here. (See Appendix A for address.)

(262) (See Appendix B for the **Providence climatological table**.)

(263)

Pilotage, Providence

(264) See Pilotage, Narragansett Bay and Other Rhode Island Waters (indexed as such), early this chapter.

(265)

Towage

(266) Tugs up to 3,300 hp are available at Providence. Large vessels normally require tugs for docking and undocking. Arrangements for tug service should be made 4 hours in advance, and usually through ships' agents or directly by shipping companies. Tugs are dispatched 24 hours a day. Tugs monitor VHF-FM channels 10, 13, 16, and 18, and use channel 7A as a working frequency.

(267) Providence is a **customs port of entry.**

(268)

Quarantine, customs, immigration, and agricultural quarantine

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

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

(271) Providence has several hospitals.

(272)

Coast Guard

(273) A **marine safety office** is in Providence. (See Appendix A for address.)

(274) **Harbor regulations** are enforced by the **harbormaster/port director,** whose headquarters are at the municipal wharf. The harbormaster regulates the

movement and anchoring of vessels in the harbor. The **speed** limit in the harbor is 5 knots.

(275)

Wharves

(276) The piers and wharves of the port of Providence are along both sides of the Providence River below Fox Point. Only the deep-draft facilities are described. For a complete description of the port facilities refer to Port Series No. 4, published and sold by the U.S. Army Corps of Engineers. (See Appendix A for address.) The alongside depths are reported; for information on the latest depths contact the operator. All the facilities described have highway connections, and most have rail connections. Water is available at most of the piers and wharves. Cargo in the port is usually handled by ship's tackle. Cranes to 200 tons are available.

(277) **Facilities on the east side of Providence River:**

(278) Mobil Oil Corp. Wharf: (41°46'56"N., 71°22'19"W.); 1,225-foot face, 700 feet of berthing space; 20 to 38 feet alongside; deck height, 8 feet; pipelines to storage tanks; receipt and shipment of petroleum products, bunkering vessels; owned and operated by Mobil Oil Corp.

(279) Amoco Oil Co. Wharf: at Kettle Point about 0.9 mile above Mobil Oil Corp. Wharf; 500-foot face, 700 feet with dolphins; 36 feet alongside; deck height, 12 feet; receipt and shipment of petroleum products, bunkering vessels; owned by Amoco Oil Co., operated by Amoco Oil Co. and Atlantic Richfield Co.

(280) Wilkes-Barre Pier: about 2 miles above Mobil Oil Corp. Wharf; 75-foot face, 700 feet of berthing space with dolphins; 40 feet alongside; deck height, 9 feet; receipt of petroleum products and naphtha; owned by Providence and Worcester Railroad Co., operated by Union Oil Co. of California, Getty Refining and Marketing Co., and Astroline Corp.

(281) **Facilities on the west side of Providence River**

(282) Municipal Wharf, Berths 5 and 6: (41°47'25"N., 71°22'54"W.); 1,283-foot face; 35 to 40 feet alongside; deck height, 10½ feet; two 45-ton container cranes; 60 acres open storage; electrical shore power connections; receipt and shipment of general and containerized cargo and heavy equipment; owned by city of Providence, operated by Cranes Associates.

(283) Municipal Wharf, Berths 1, 2, 3, and 4: immediately NW of Berths 5 and 6; 2,190-foot face, 35 to 40 feet alongside; deck height, 10½ feet; cranes to 200 tons; 47,000 square feet of covered storage; 12 acres open storage; electrical shore power connections; receipt and shipment of general cargo, lumber, paper products, automobiles, petroleum products, liquefied petroleum gas, scrap metal, pig iron, and caustic soda; owned by city of Providence; various operators.

(284) New England Bituminous Wharf: about 500 yards above Municipal Wharf; 384-foot face, 30 feet alongside; deck height, 10½ feet; receipt of asphalt; owned and operated by New England Bituminous, Division of John J. Hudson, Inc.

(285) Lehigh Portland Cement Co. Wharf: about 600 yards above Municipal Wharf; 350-foot face, 20 feet alongside; deck height, 10½ feet; receipt of bulk cement; owned by city of Providence, operated by Lehigh Portland Cement Co.

(286) Lone Star Industries Wharf: about 750 yards above Municipal Wharf; 210-foot face, 28 to 30 feet alongside; deck height, 12 feet; receipt of bulk cement; owned and operated by Lone Star Industries, Inc.

(287) Algonquin LNG Wharf: about 0.4 mile above Municipal Wharf; 450-foot face, 25 feet alongside; deck height, 12 feet; receipt of liquefied natural gas; owned by Providence Gas Co., operated by Algonquin LNG, Inc.

(288) Texaco U.S.A., Harbor Junction Pier: about 0.7 mile above Municipal Wharf; 80-foot face, south side 1,040 feet long, 720 feet usable, 32 feet alongside; north side 1,040 feet long, 600 feet usable, 25 feet alongside; deck height, 9 feet; receipt and shipment of petroleum products, bunkering vessels; owned and operated by Texaco, Inc.

(289) Promet Marine Services Pier: about 1 mile above Municipal Wharf; 120-foot face, 37 to 31 feet alongside; south side 596 feet long, 22 feet alongside; north side 596 feet long, 37 feet alongside; deck height, 12 feet; cranes to 100 tons; 11 acres of open storage; receipt and shipment of general cargo and dry bulk materials; repairs to vessels; owned and operated by Promet Marine Services Corp.

(290) Northeast Petroleum Corp. Pier: about 1.2 miles above Municipal Wharf; south side 620 feet long, 600 feet of berthing space; 30 feet alongside; deck height, 11 feet; receipt of petroleum products; owned and operated by Northeast Petroleum Corp.

(291) C. H. Sprague & Son Co. Pier: about 1.25 miles above Municipal Wharf; north side 500 feet long, 520 feet with platforms, 37 feet alongside; deck height, 12 feet; receipt and shipment of petroleum products; bunkering vessels; owned and operated by C. H. Sprague & Son Co.

(292) The principal wharves at Pawtucket have depths of 9 to 14 feet alongside.

(293)

Supplies

(294) Gasoline, diesel fuel, diesel oil, bunker fuels, provisions, and marine supplies of all kinds are available. Oil bunkering facilities, for deep-draft vessels, are available at most of the petroleum companies facilities in Providence. Fuel tank barges are also available for bunkering vessels anywhere in the harbor. Water is available at most of the wharves and piers.

(295)

Repairs

(296) Providence has no facilities for drydocking deep-draft vessels; the nearest such facilities are at Boston, MA. Repairs to boilers, machinery, electrical equipment, and hull can be obtained in the port. Several well-equipped machine and welding shops are also available. Some of these concerns also maintain portable equipment for making above-waterline repairs to vessels at their berths.

(297)

Small-craft facilities

(298) Small-craft facilities at Bullock Cove and Pawtuxet have been discussed earlier in this chapter. A marina on the west side of Providence River between Pawtuxet and Fields Point can provide berths, electricity, gasoline, diesel fuel, water, ice, storage, marine supplies, and hull and engine repairs; a flatbed trailer can haul out craft to 60 feet long. In 1981, 10 feet was reported in the approach to the marina, with 3 to 6 feet alongside.

(299)

Communications

(300) Providence is served by rail, bus, and air. A ferry operates daily in the summer to Newport and Block Island.

(301)

Chart 13223

(302) **West Passage**, between Conanicut and Prudence Islands on the east and Boston Neck on the west, is the approach to Dutch Island Harbor, Wickford, Quonset Point, and East Greenwich. Vessels may also go to Providence by West Passage, although the route through East Passage is deeper and generally used. Approaching from the eastward, steer for the lighted gong buoy off Whale Rock until southwest of Beavertail Light, and thence lay down a northerly course in midchannel with Dutch Island ahead. On the southward approach from off Point Judith Light, a north-northeasterly course will bring the vessel to the lighted gong buoy off Whale Rock. (See also chart 13218). At night a careful study of the light characteristics is necessary as the lights marking East Passage will be seen on the starboard bow when approaching from Point Judith.

(303) The course should pass westward of, and 500 yards off, Dutch Island; thence through the Jamestown-Verrazzano Bridge opening; and thence northerly until about 0.8 mile westward of, and abeam, the south tangent of Hope Island. From here a north-northeasterly course will make the buoys marking the entrance of the natural channel westward of Pine Hill Point on Prudence Island. Then a heading toward Warwick Light until abeam the lighted bell buoy off Northwest Point on Patience Island will bring the vessel in position to swing northeasterly and easterly to the dredged channel to Providence.

(304) **Narragansett Pier**, on the west side of West Passage about 3 miles west-southwestward of Beavertail Point, is a summer resort. The large hotels and a square granite tower are prominent. A municipal bathing beach and pavilion at the Upper Pier are prominent from an easterly direction.

(305) **River Ledge**, about 0.9 mile northeastward of Narragansett Pier, has a least depth of 9 feet and is marked by a buoy. **Whale Rock**, on the western side of the passage about 0.8 mile northeast of River Ledge, is marked by a lighted gong buoy to the eastward. **Little Whale**, covered 4 feet, is about 200 yards north of Whale Rock. Strangers should pass eastward of the lighted gong buoy off Whale Rock.

(306) **Bonnet Shores Beach** is on the north shore of the bight formed by **Bonnet Point**, the point about 1.5 miles north of Whale Rock. A bathing pavilion at the beach is prominent from a southeasterly direction.

(307) **The Bonnet**, a prominent hill with the shoreward face bold and rocky, is north of Bonnet Point. The shore between Bonnet Point and **South Ferry**, 1.3 miles northward, should be given a berth of 400 yards. Pilings extend 130 yards eastward just south of the old pier at South Ferry. A 200-foot L-shaped pier of the University of Rhode Island is about 150 yards southeastward of the old pier. In 1981, depths of 20 feet were reported along the outer face with 10 feet reported along the inner face. The buildings of the university, a church spire, and a standpipe are prominent from southward to north of Dutch Island.

(308) **Fox Hill**, on the southern side of the entrance to Dutch Island Harbor, 2.5 miles north of Beavertail Point, is a point which terminates to the northward in Beaverhead, a bluff rocky face.

(309) **Dutch Island Harbor** is in the West Passage of Narragansett Bay about 3 miles north of Beavertail Light. The harbor is a semicircular indentation 0.5 by 1 mile in extent in the west side of Conanicut Island.

(310) A boatyard in the southeastern part of the harbor has a marine railway that can handle craft up to 50 feet for hull and engine repairs. Berths, electricity, gasoline, diesel fuel (by truck), water, ice, storage, a launching ramp, some marine supplies, and a 20-ton lift are available.

(311) **Dutch Island**, a State park about 3.2 miles north of Beavertail Point, is surrounded by shoals and foul ground. A bell buoy marks the shoal area off the northern end of the island and a lighted gong buoy is off the southern end. A square white tower on the southern end of the island is prominent marked by a light.

(312) Dutch Island Harbor may be approached from northward or southward. As the harbor is of easy access, it is frequently used as a harbor of refuge. Excellent anchorage may be had in depths of 12 to 46 feet, sticky bottom. A **harbormaster** controls all mooring and berthing. Vessels of over 18-foot draft seeking anchorage should give the eastern shore of the harbor a berth of at least 0.4 mile. The eastern shore of Dutch Island should be given a berth of 100 yards.

(313) **General anchorages** are in West Passage of Narragansett Bay. (See **33 CFR110.1 and 110.145 (b) and (d),** Chapter 2, for limits and regulations.)

(314) A shoal extends about 200 yards westward and 350 yards northward of **Beaverhead**. At its northern extremity this shoal rises abruptly from depths of about 40 feet to a depth of 8 feet; a buoy marks the shoal. The southeastern part of the harbor has a shallow cove.

(315) Tidal currents of 1 to 1.5 knots may be encountered in the vicinity of Dutch Island. Elsewhere in West Passage velocities are usually less than 1 knot. (See the Tidal Current Tables for predictions.)

(316) **Saunderstown** is on the western shore of West Passage abreast Dutch Island. A former ferry dock off the town is in ruins. A yacht club is at Saunderstown.

(317) The **Jamestown-Verrazzano Bridge** crossing the passage from just north of Plum Beach has a fixed span with a clearance of 135 feet. The Jamestown-North Kingstown Bridge is about 300 feet south of the aforementioned highway bridge. The southerly fixed highway bridge is being removed.

(318) From the bridge northward, **Great Ledge** extends along the west shore of Conanicut Island for about 1.5 miles. This ledge is from 175 to 600 yards offshore, culminating in **America Ledge** at its northern end. Numerous rocks are on Great Ledge. Between Plum Beach and **Rome Point**, on the west side of the passage, 1.2 miles north of the bridge, are several rocks, including **Red Rock** and **Old Sergeant**. Bare and covered rocks are northeastward and eastward of Rome Point.

(319) **Fox Island**, 0.4 mile northeast of Rome Point and southward of Wickford Harbor, is small and low. A shoal with numerous submerged rocks including **Seal Rock** extends southward of the island. A narrow channel, suitable only for small craft, is between this shoal and the shoals extending northeastward of Rome Point. **Halfway Ledge** with a depth of 18 feet is about 0.5 mile east of Fox Island.

(320) **Wickford Harbor**, on the western side of Narragansett Bay 8 miles above Beavertail Light, comprises an outer and an inner harbor. The outer harbor is a broad bight between Quonset Point on the north and **Wild Goose Point**, about 0.6 mile westward of Fox Island, on the south. The entrance is about 2 miles wide. The inner harbor entrance is between **Poplar Point**, 1.3 miles northwest of Fox Island on the south, and **Sauga Point**, about 0.4 mile north of Poplar Point, on the north. The harbor is used chiefly by recreational craft, and by oyster and lobster boats. The town of **Wickford** is on the southwestern side of the inner harbor.

(321) Several prominent landmarks are visible when approaching Wickford Harbor. A standpipe (chart 13221) and a church spire in Wickford may be seen for many miles. An abandoned lighthouse on Poplar Point and the light off the point are prominent.

(322) The channel to the inner harbor, marked by buoys, is restricted to a width of about 150 yards by the breakwaters and the shoals off Sauga and Poplar Points. The north breakwater is marked by a light. The channel leads to the junction of three coves, **Fishing Cove** to the northward, **Mill Cove** to the northwestward, and Wickford Cove to the southwestward. A State regulatory buoy just inside the jetties marks a **"Slow no wake" zone.**

(323) **Wickford Cove** is the scene of considerable pleasure-boat activity. A dredged channel in the cove extends between flats, many of which are dry at low water, to a highway bridge about 0.9 mile above the breakwaters. Numerous piles, used as moorings, border the channel for about 0.35 mile below the highway bridge. In 2010, the channel had a controlling depth of 5.5 feet.

(324) A marked dredged channel in Mill Cove leads to an anchorage basin about 0.7 mile above the breakwaters. In 2010, the channel had a controlling depth of 8 feet except for shoaling to 4 feet in the north quarter of the channel between Cornelius Island and Point Wharf. The anchorage basin had a controlling depth of 6 feet except for shoaling to 5 feet in the northeast corner.

(325) Good anchorage may be had in the middle and southern parts of outer Wickford Harbor. The northern part of the outer harbor has numerous rocks and ledges. **General Rock**, with a depth of 9 feet over it, is the southerly limit of this shoal, 0.9 mile north-northeastward of Fox Island. A rock with a depth of 10 feet over it is about 500 yards westward of General Rock. **Brig Ledge**, about 0.5 mile north of General Rock, is covered 9 feet. The southern shore of the outer harbor is foul. **Charles Rock**, with a depth of 4 feet, is just inside of the northern breakwater.

(326) Vessels approaching Wickford Harbor from the southward, after passing through the main span of the Jamestown-Verrazzano Bridge, steer 340°. When northeastward of Fox Island, steer for Wickford Harbor Light 1 on any bearing between 313° and 290°, anchoring 0.2 mile or more southeastward of the light in depths of 13 to 15 feet, soft bottom.

(327) In severe winters the inner harbor is closed by ice, but the outer harbor is usually open although drift ice is occasionally encountered.

(328) Wickford has several small-craft facilities and boatyards. The largest marine railway, on the east of Wickford Cove, can handle craft up to 60 feet. Berths, electricity, gasoline, diesel fuel, water, ice, marine supplies, pump-out facilities, a launching ramp, mobile hoists to 30 tons, lifts to 70 tons, and hull, engine, and electronic repairs are available; wet and dry storage is also available. In 1981, a reported depth of about 7 feet could be carried to the marine railway at Wickford Cove.

(329) **Quonset Point**, on the north side of Wickford Harbor, is marked by elevated tanks. Near the eastern end of the point are the conspicuous buildings of the Quonset Point Industrial Park. The piers at Quonset Point, and at **Davisville**, about 1.5 miles northward, are usually approached from East Passage until north of Conanicut Island, thence through a buoyed dredged channel to a turning basin off the point from which a channel leads to the piers at Davisville. A depth of about 33 feet can be carried in the channel to the turning basin. Depths of 27 to 35 feet are available throughout the basin. An obstruction, covered 26 feet, is at 41°35′09.7"N., 71°24′34.0″W. A depth of about 32 feet can be carried in the channel to Davisville, thence about 26 feet through the turning basin to the piers.

(330) **Hope Island**, about 1.6 miles north of Conanicut Point, has low grassy hills with a few trees. The island is a State estuarine sanctuary and is off limits to visitors during the bird nesting season. Bare and submerged rocks surround the island for about 0.2 mile. **Despair Island** is on the outer end of a rocky ledge extending 0.2 mile

northeastward of Hope Island; a buoy is off the northeast side of the ledge. **Scup Rock** and **Round Rock** are off the eastern side of Hope Island, and **Gooseberry Island** and **Seal Rock** are off the western side. A hazardous reef with piles and a boiler awash on it is about 0.4 mile southwestward of the southwest point of Hope Island; a lighted buoy marks the area.

(331) **Allen Harbor** is 2 miles north of Quonset Point. The harbor is entered through a buoyed channel which has a depth of about 8 feet. Depths of 8 to 10 feet are inside. The town docks and a launching ramp are on the southeast side of the harbor.

(332) **Calf Pasture Point** is on the north side of the entrance to Allen Harbor. Abreast the point and for some distance northward of it, a shoal extends 0.5 mile from shore.

(333)

Chart 13224

(334) **Potowomut River**, entering the west side of West Passage, 1.7 miles north of Calf Pasture Point, is separated from Greenwich Bay on the north by **Potowomut Neck**. A dredged channel leads through the entrance of the river. In 2004, the channel had a controlling depth of 2.7 feet. Caution is necessary to avoid rocks with depths of 1 foot over them in the entrance. Strangers should not enter the river.

(335) **Round Rock**, about 0.7 mile eastward of Potowomut River entrance, uncovers 3 feet and is marked by a seasonal lighted buoy close eastward. Several other rocks, awash and submerged, lie between Round Rock and the entrance to the river; caution is advised.

(336) The natural channel of West Passage extends between the shoal area eastward of Round Rock and the shoal area westward of Patience Island. The channel has depths of 21 to 70 feet. Buoys mark the entrance from the southward, and a lighted bell buoy marks the northwestward edge of the shoal off Patience Island. The channel is the approach from southward to Greenwich Bay, Warwick Point, and the channel from West Passage to Providence River.

(337) **Patience Island**, 0.2 mile west of the northern end of Prudence Island, is surrounded by shoals and foul ground. The island is a State park and estuarine sanctuary.

(338) **Warwick Point**, the southernmost point of **Warwick Neck**, 0.7 mile northwest of Patience Island, is marked by a light and sound signal.

(339) **Greenwich Bay**, at the northwestern end of Narragansett Bay, is entered between Warwick Neck and Potowomut Neck. Shoal water borders the shore of the bay, but the general depths are 10 feet or more.

(340) **Warwick Cove**, between Warwick Neck and Horse Neck, is in the northeastern part of Greenwich Bay. A Federal project provides for a 6-foot channel from the bay to an anchorage basin at the head of the cove. Other anchorage basins in the cove are on the west side of the channel, 0.5 mile above the channel entrance and on each side of the channel 0.7 mile above the channel entrance. All of the anchorage basins have a project depth of 6 feet. A State regulatory buoy off Horse Neck marks a 5 mph **speed limit**. The cove is the scene of considerable pleasure boat activity.

(341) The **harbormaster** in the cove controls berthing and anchorage; contact can be made through the Warwick City Hall. The cove has several marinas and boatyards. Berths, electricity, gasoline, water, ice, storage, launching ramps, marine supplies, and hull and engine repairs are available. The largest lift, on the east side of the cove about 0.3 mile above the mouth, can handle craft up to 70 tons.

(342) **Brush Neck Cove**, about 0.5 mile west of Warwick Cove, is fronted by a flat with a general depth of about 2 feet. This channel is used by small local craft at high water as far as the pier at Oakland Beach. **Oakland Beach**, on **Horse Neck**, between Brush Neck and Warwick Coves, is a summer resort with bus communication.

(343) **Apponaug Cove**, in the northwestern part of Greenwich Bay, is entered through a marked Federal channel with a project depth of 6 feet that leads from the bay to an anchorage basin on the southwest side of the channel just below a fixed railroad bridge about 0.7 mile above the channel entrance. A State regulatory buoy at the entrance to the cove marks a 5 mph **speed zone**. (See Notice to Mariners and latest edition of chart for controlling depths.) Small-craft facilities can be found in the cove and at the west end of Greenwich Bay southwest of the entrance channel to the cove.

(344) **Chepiwanoxet Point**, on the western side of the bay northward of the entrance to Greenwich Cove, is a small neck of land with a yellow bluff facing eastward. From this island, shoals with little water over them extend about 500 yards northward and 300 yards eastward and southeastward. Shoals extend about 300 yards northward and westward of **Long Point**, the northwestern extremity of Potowomut Neck.

(345) **Greenwich Cove**, in the southwest end of Greenwich Bay, is about 1.3 miles long and 300 to 600 yards wide. Buoys mark the entrance channel into the cove. State regulatory buoys at the entrance mark a **"Slow no wake" zone.** On the western shore is the town of **East Greenwich**. Depths of about 7 to 11 feet are available in the cove to about 0.5 mile from the head. Good anchorage may be had off some of the small-craft facilities on the west side of the cove in depths of 8 to 11 feet.

(346) The cove has several boatyards. Berths, electricity, gasoline, water, diesel fuel, ice, marine supplies, wet and dry storage, launching ramps, lifts to 21 tons, and complete engine and hull repairs are available. The **harbormaster** in the cove controls anchoring and berthing; contact can be made through the Warwick City Hall.

(347) From **Sandy Point**, the eastern extremity of Potowomut Neck, shoals with depths of 2 to 9 feet extend northeasterly for about 0.6 mile. Extensive shoals extend off the eastern side of Warwick Neck to Ohio Ledge.

Rocky Point is on the eastern side of the neck, 1.7 miles north-northeastward of Warwick Point.

(348) The natural channel between the shoals off Warwick Neck and the shoals northward of Patience and Prudence Islands has depths of 19 to 50 feet. A buoy marks the shoal off **Providence Point**, the northernmost point of Prudence Island.

(349)

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(350) The shoreline of **Point Judith Neck** between West Passage and Point Judith should be given a berth of at least 0.6 mile. From Narragansett Pier to **Black Point**, a rocky promontory 1.9 miles southward, the shoreline is a rugged rocky ledge with deep water close inshore. The waters between Black Point and Point Judith are boulder-strewn and shoal up gradually.

(351) Three very prominent landmarks are Point Judith Light, the elevated water tank 1.7 miles north of Point Judith, and Hazard's Tower, a high, square stone tower 0.5 mile south of Narragansett Pier. Closer inshore the stone bathing pavilion at the State-operated **Scarborough Beach**, 0.5 mile south of Black Point, and an open stone tower on a house 0.4 mile north of Black Point are prominent.