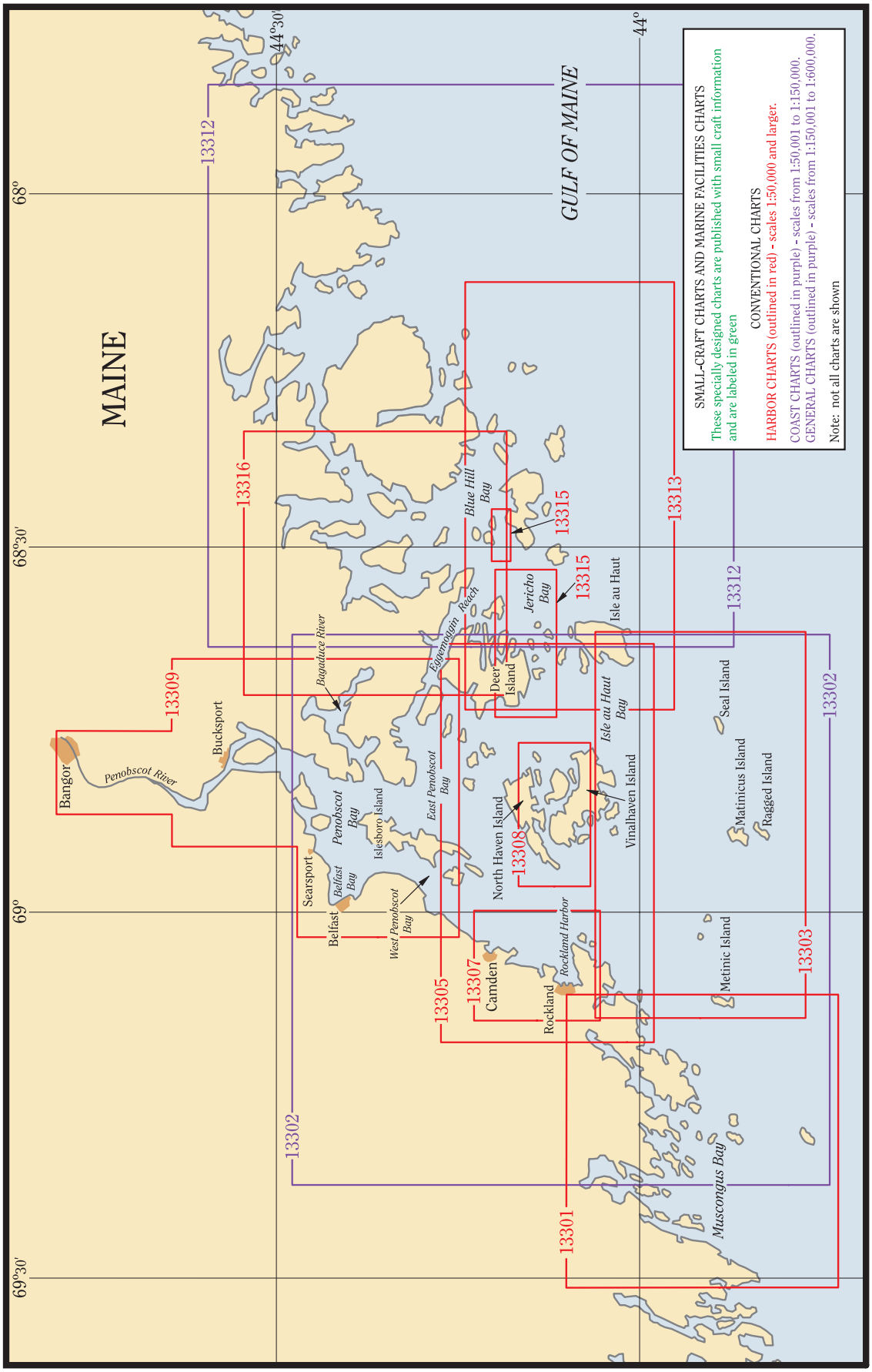
MAINE
GULF OF MAINE
44°30'
44°
68°
68°30'
69°
69°30'
SMALL-CRAFT CHARTS AND MARINE FACILITIES CHARTS
These specially designed charts are published with small craft information and are labeled in green
CONVENTIONAL CHARTS
HARBOR CHARTS (outlined in red) - scales 1:50,000 and larger.
COAST CHARTS (outlined in purple) - scales from 1:50,001 to 1:150,000.
GENERAL CHARTS (outlined in purple) - scales from 1:150,001 to 1:600,000.
Note: not all charts are shown
13312
13316
13309
13315
13313
13302
13305
13307
13308
13303
13301
Bangor
Penobscot River
Bucksport
Bagaduce River
Searsport
Belfast
Belfast Bay
Penobscot Bay
Islesboro Island
West Penobscot Bay
East Penobscot Bay
Eggemoggin Reach
Blue Hill Bay
Deer Island
Jericho Bay
Isle au Haut
Isle au Haut Bay
North Haven Island
Vinalhaven Island
Rockland Harbor
Rockland
Camden
Seal Island
Matinicus Island
Ragged Island
Metinic Island
Muscongus Bay

Jericho Bay to Penobscot Bay, Maine

(1) This chapter describes the Maine coast from Jericho Bay to but not including Muscongus Bay, and the waters and tributaries of East and West Penobscot Bays, Penobscot River, and the many passages and thorofares leading into and connecting these waterways. Also discussed are the important ports of Rockland, Searsport, Bucksport, and Bangor, and many smaller fishing ports and resort towns on these waterways.

COLREGS Demarcation Lines

(2) The lines established for this part of the coast are described in **80.105,** chapter 2.

Charts 13312, 13302

(3) Between Jericho Bay and Penobscot Bay are numerous islands. **Deer Isle,** 10 miles westward of Mount Desert Island, is the largest. Eggemoggin Reach, Deer Island Thorofare, and Merchant Row are the three principal passages between the bays. Eggemoggin Reach, between Deer Isle and the mainland, connects Blue Hill Bay and the head of Jericho Bay with Penobscot Bay near its head. The reach is 11 miles long and has a least width of about 0.4 mile at Byard Point. There are several villages along its shores.

Chart 13313

(4) **Jericho Bay** is between Swans and Marshall Islands on the east, and Isle au Haut and Deer Isle and adjoining islands on the west. The inside routes from Casco Passage and York Narrows to Deer Island Thorofare and Merchant Row, and the passage north of Pond Island to Eggemoggin Reach, lead across the head of Jericho Bay. This section of the bay is used by many craft.

(5) The part of the bay southward of these thorofares has deep water, but there are many ledges, rocks, and islets. This area is little used except by local fishermen and yachts.

(6) The dangers in the passages into Jericho Bay from the southward, eastward of Isle au Haut, in the channels between that island and Marshall Island, are for the most part not marked. This is the most direct way from the sea from that direction. There are, however, a number of unmarked shoal spots which must be avoided.

(7) **Halibut Rocks**, in Jericho Bay 0.8 mile northwest of Marshall Island, are two in number. **Halibut Rocks Light** (44°08'03"N., 68°31'32"W.), 25 feet above the water, is shown from a skeleton tower with a red triangular daymark on the northerly rock; a fog signal is at the light.

(8) **West Halibut Rock**, 1 mile westward of Halibut Rocks, is covered 2 feet; a buoy is off the rock. A rock covered 9 feet is 400 yards northeastward of the buoy. **Southern Mark Island Ledge,** 2.3 miles west of Halibut Rocks, has a rock bare at high water.

(9) **Colby Ledge**, 0.8 mile southwest of Southern Mark Island Ledge, uncovers about 5 feet. A daybeacon is on the ledge. A ledge covered 15 feet is 400 yards southward of the daybeacon. **Colby Pup,** covered 3 feet and marked by a buoy, is 0.5 mile south of the daybeacon. Unmarked **Channel Rock,** 0.6 mile southwest of Colby Pup, uncovers 8 feet.

(10) **McGlathery Island** (44°07.5'N., 68°37.0'W.), 2.5 miles southeast of Stonington, is the largest island on the west side of the bay and on the north side of Merchant Row. A rocky ledge with at least two rocks awash and a covered rock extends between the east side of the island and **Gooseberry Island.** The area is foul, and passage through it should be avoided. Vessels rounding the north side of McGlathery Island should take care to avoid the charted rock, reported to cover about 1 foot, about 160 yards north of the island. The remaining islands and dangers in the bay are described in connection with the various channels leading out of the bay.

Routes

(11) In approaching Jericho Bay from the southeastward, it is advisable to pass between Marshall Island and Swans Island, through Toothacher Bay where most of the dangers are marked, but then only in daytime. In clear weather, strangers should have no trouble navigating any of the passages, or through Merchant Row or Deer Island Thorofare, by giving strict attention to

the chart and following the aids, which are colored and numbered for passages to the northward and westward.

Charts 13316, 13309

(12) **Eggemoggin Reach** is a generally broad and deep thorofare which extends in a general northwesterly-southeasterly direction between the mainland and Deer Isle, and joins Jericho Bay with East Penobscot Bay.

(13) The eastern entrance to Eggemoggin Reach is well marked by **Devils Head** (44°13.3'N., 68°32.8'W.), a prominent, high, rock bluff on the south end of **Hog Island,** 2.8 miles west of Pond Island. Off the western entrance are **Head of the Cape** at the southwest extremity of **Cape Rosier,** high and thickly wooded; a light on Green Ledge, 1.3 miles south of Head of the Cape; and an abandoned lighthouse tower on **Pumpkin Island,** 3.6 miles east of Head of the Cape.

(14) The depth in the main channel through Eggemoggin Reach is sufficient for deep-draft vessels, but the channel is narrow and the bottom is irregular in places. The principal dangers are buoyed and can be easily avoided in the daytime and in clear weather. An unmarked rocky spot, covered 27 feet, lies about 250 yards southeastward of the north tower of the Deer Isle-Sedgwick Bridge.

(15) Vessels can anchor anywhere in the reach where the depth is suitable and the bottom soft, making a lee of either shore, according to the wind. Small craft anchor in the coves off the reach. A submarine cable extends northeasterly from Little Babson Island to the mainland. Caution is advised. The mean range of tide is about 10 feet.

Chart 13316

(16) **Devils Head Ledge**, extending 0.3 mile southeastward from Devils Head at the eastern end of Eggemoggin Reach, is partly bare at high water; a buoy is off the end of the ledge. **Hay Island Ledge,** 0.5 mile southeastward of Devils Head, is covered 7 feet, and marked by a buoy off its southern side. An unmarked 15-foot spot is 0.7 mile southeastward of the ledge. A fairway bell buoy, 300 yards southward of the ledge, marks the eastern entrance to Eggemoggin Reach.

(17) **Channel Rock**, 900 yards south of Devils Head and covered 2 feet, is marked by a buoy. **The Boulders,** 400 yards westward of Channel Rock, uncover 3 feet.

(18) **Greenlaw Cove**, on the southwest side of the eastern entrance to Eggemoggin Reach, has a narrow unmarked channel with shoals on both sides, and is suitable only for small craft with local knowledge. **Mountainville** is a village near the head of the cove. The landing is nearly bare at low water.

(19) **White Island**, **Bear Island**, and **Conary Island** are off the entrance to Greenlaw Cove and on the southern side of the passage through Eggemoggin Reach. **Conary Ledge,** 0.4 mile north of Conary Island, is covered ½ foot and marked by a buoy north of the ledge.

(20) **Naskeag Harbor**, an anchorage for fishing boats, is north of Hog Island and **Harbor Island,** which is 0.3 mile east of Hog Island. The village of **Naskeag** is on the north side. The harbor can be entered from eastward or westward, but there are many unmarked dangers, and strangers should not attempt to enter except in small craft.

(21) At the eastern approach to the harbor, the bar from the northern shore extends two-thirds of the way across. Between the end of this bar and Harbor Island is a rock reported to uncover 6 feet about 75 yards north of the island. At half tide the bar is marked by ripples.

(22) **The Triangles**, a reef with rocks awash, is in the middle of the western entrance to the harbor. There are several private float landings between Naskeag Harbor and Center Harbor, 2 miles to the northwestward. **Northwest Cove** is a small cove with middle depths of 15 feet, about 2.5 miles northwest of Naskeag Point. **Babson Island** and **Little Babson Island** are wooded islands on the north side of the reach between Naskeag Harbor and Center Harbor. They are occupied only in the summer.

(23) **Torrey Islands** are about 0.9 mile northwest of Little Babson Island. A rocky ledge extends about 350 yards south of the east island. A 12-foot spot, marked by a buoy, is about 0.35 mile west of the south point of the west island. **Torrey Castle,** marked by a daybeacon, is a reef at the end of a ledge that extends 0.2 mile west from the west island. **Torrey Ledge,** covered 2 feet and marked by a buoy, is about 0.35 mile northwest of the west island. A rock awash is between the ledge and the island; mariners should not attempt to pass between the buoy and the island.

(24) **Center Harbor**, an anchorage for small craft only, is a small cove on the north side of the reach northeastward of **Torrey Islands,** 2.2 miles northwest of Hog Island. A buoy 200 yards west-northwest of Chatto Island marks the entrance. The town of **Brooklin** is at the head of the harbor. A white church spire in the town is conspicuous. A rock marked by a daybeacon is in the middle of the entrance northward of **Chatto Island,** which is 0.6 mile north of the eastern Torrey Island. The channel is close southward of the rock. Between the daybeacon and a boatyard near the head, on the north side of the cove, the channel has depths of 8 to 10 feet; above the boatyard it is mostly dry at low water. Good

anchorage is available off the entrance in depths of 22 to 24 feet, soft in places.

(25) The main approach to Center Harbor is from westward, but local vessels enter by the channel eastward of Torrey Islands, passing in midchannel on either side of the bare rock 350 yards eastward of the easterly of the islands. This passage should not be attempted by strangers.

(26) A boatyard, about 350 yards east of the daybeacon, has marine railways that can haul out craft up to 30 tons or 50 feet in length for hull or engine repairs or dry open or covered storage. Its pier and float landing has 6 feet alongside. Provisions and marine supplies may be obtained in Brooklin. The yard can build craft up to 50 feet.

(27) The Center Harbor Yacht Club pier and float landing, with 6 feet alongside, is on the north side of the entrance; water is available. The signal mast and clubhouse are conspicuous. There are several float landings in the harbor. Anchorage in soft mud bottom may also be had south of a line between the yacht yard and the daybeacon at the entrance.

(28) **Bridges Point Shoal** extends over 0.5 mile from **Bridges Point,** 4.8 miles northwestward of Naskeag Point, and is covered 5 to 17 feet; a buoy marks the outer end.

(29) **Benjamin River**, the approach to the town of **Sedgwick,** empties into the north side of the reach 5.5 miles northwestward of Naskeag Point. The channel at the entrance northward of **Cape Carter** has a least depth of 19 feet, but is restricted on both sides, leaving a passage 100 yards wide at its narrowest part. The channel is marked by seasonal buoys for about 0.5 mile above the mouth. A rock awash is at the outer end of the ledge and sand shoal extending into the river from the east side 0.6 mile northward of Cape Carter. Sedgwick can be reached only at high water as the river dries out some distance below.

(30) On the east side of the river about 1 mile above Cape Carter, there is a boatyard which builds craft up to 40 feet in length. The yard has a 2-ton crane and a marine railway that can haul out craft up to 12 tons or 40 feet in length for hull and engine repairs or dry open or covered storage. Gasoline is available in cans. The boatyard wharf dries at low water. Provisions and some marine supplies are available in Sedgwick. A number of mooring buoys are available off the boatyard.

(31) The village of **West Brooklin** is near the boatyard. A church spire in the village is conspicuous.

(32) A public wharf and float landing is on the west side of the river about 0.5 mile above the entrance. Depths of 8 feet were reported alongside.

(33) **Stump Cove Ledge**, covered 3 feet, is 0.6 mile west of Cape Carter. A buoy is off the southwest side of the ledge.

(34) **North Deer Isle**, on the southern side of Eggemoggin Reach, is a village at the north end of Deer Isle. In June 1979, some rock cribbing was the only remnant of the old ferry wharf 0.4 mile westward of Tinker Ledges. There is a rock crib breakwater just east of the old wharf, and the enclosed space between the two is sometimes used for beaching local small craft. The breakwater extends about 200 feet from shore and is covered most of its length at high water. It is not marked and is a danger to all craft approaching close to shore.

(35) **Tinker Ledges**, about 0.7 mile long and covered 13 feet, are on the south side of the reach about 6.7 miles west-northwest of Naskeag Point; a buoy is on the northeast side of the ledges.

(36) A highway causeway extending from the northwest corner of Deer Isle to the eastern side of **Little Deer Isle,** 0.4 mile northwestward, closes the passage between the two islands to all craft. **Stave Island,** just northward of the eastern end of Little Deer Isle, is wooded.

(37) **Billings Cove** is on the northern shore of Eggemoggin Reach 2.3 miles northwestward of Benjamin River and east of **Byard Point.** It dries out 300 yards from the head. Anchorage can be had in the middle of the cove just inside the entrance in depths of about 25 feet. **Sargentville** is a village near the eastern shore of the cove. A private wharf and float are just east of the cove. A good beach for hauling out or launching small craft is just eastward.

Chart 13309

(38) The **Deer Isle-Sedgwick Bridge** (State Route 175), a suspension-type fixed highway bridge, crosses Eggemoggin Reach between Byard Point and Little Deer Isle. The bridge has a clearance of 85 feet for a midwidth of 200 feet. The village of **Little Deer Isle** is near the south end of the bridge.

(39) **Howard Ledges**, on the south side of Eggemoggin Reach about 1.4 miles northwestward of the bridge, are covered 1 to 9 feet and marked by a buoy on the northwestern end.

(40) **Eggemoggin** is a summer resort with several private float landings at the northwest end of Little Deer Isle, southeastward of Pumpkin Island. Several boatsheds, where small craft are hauled out for winter storage, are at Eggemoggin.

(41) **Bucks Harbor**, on the north side of Eggemoggin Reach opposite Eggemoggin, affords excellent anchorage

and is often used by small vessels. **Harbor Island,** in the middle of the harbor, has a good channel around it which forms the anchorage. Shoals extend 250 yards off the northeast side of Harbor Island, and the channel is narrow between them and the shore northeastward. **Harbor Ledge,** covered 5 feet at the north end of the shoals, is marked by a buoy. The channel between the ledge and the northern shore has a depth of 23 feet. Small craft can anchor in the bight on the northeast side of Harbor Island. The best anchorage is west and northwestward of Harbor Island in depths of 28 to 37 feet.

(42) **South Brooksville**, a village at the head of Bucks Harbor, has a marina with 5 to 8 feet reported alongside its float landing. Bucks Harbor Yacht Club, close westward of the marina, has a float landing with 12 feet alongside. Gasoline, diesel fuel, water, ice, and some marine supplies are available at the marina.

(43) There are several private float landings in the harbor, and several moorings are available for hire. The village has a general store and guest houses. Engine repairs and electric welding can be made by a garage in the village.

(44) **Orcutt Harbor**, just westward of Bucks Harbor, is about 1.3 miles long and 500 yards wide. Good anchorage is available in depths of 14 to 52 feet in the middle of the harbor northward of a small wooded islet on the western side near the entrance. A reef, awash at low water, extends 300 yards southward from **Condon Point,** on the east side of the entrance. When northward of this reef, favor the eastern side of the entrance to avoid a rock covered 5 feet nearly 200 yards from the western shore and the same distance southward of the wooded islet. In the slight expansion 0.5 mile above the islet, care must be taken to avoid two rocks covered 5 feet, one of which is 200 yards from the western shore and the other 150 yards from the southeast side of the expansion. A boatyard is at the head of the cove making into the east side of the harbor, about 0.6 mile northward of Condon Point. The second rock described above, covered 5 feet, is on the south side of the entrance. The yard can haul out craft up to 45 feet on skids for hull and engine repairs; open storage is available. Another boatyard with a marine railway is at the head of Orcutt Harbor; craft up to 45 feet in length can be hauled out for engine and minor hull repairs; open storage is available. There are also several private float landings at the head of the harbor.

(45) **Horseshoe Cove** is a long, narrow cove, the entrance to which is 0.6 mile southwestward of Orcutt Harbor. The cove is navigable only for small craft with local knowledge for about 1.4 miles; above that point for another mile it dries out. There are no wharves. Private seasonal aids mark the channel to a boatyard on the west side about 1 mile above the entrance daybeacon. The yard has a marine railway and can build, or haul out for hull and engine repairs, craft up to 50 feet in length and 7-foot draft. Covered and open dry winter storage is available. The yard maintains a number of moorings off the yard. The best anchorage secure in all weather is reported to be in 15 feet, mud bottom, 0.8 mile northward of the entrance, northward of the inner daybeacon.

(46) **Weir Cove**, about 0.7 mile southwestward of Horseshoe Cove, has several private float landings on its east and west sides. **Buck Island** is a wooded islet off the entrance to the cove. A drying ledge, unmarked, extends about 0.2 mile southward from the eastern entrance point. Several rocks awash have been reported on the ledge, and some may exist between the southern extremity of the ledge and Buck Island; mariners are advised to exercise caution in this area. The upper half of Weir Cove is mostly dry at low water.

(47) **Thrumcap Island**, 1 mile northwestward of Pumpkin Island, is grassy and low. **Thrumcap Ledge,** southward of Thrumcap Island, is partly uncovered at high water and marked near its eastern end by a buoy. **Spectacle Island Ledge,** 0.8 mile southwestward of Thrumcap Island, is covered 6 feet. A buoy marks the southerly portion of the ledge; in 1979, it was reported that 6-foot depths extend 75 to 100 yards south of the buoy. **Two Bush Ledge,** 1.2 miles south of Thrumcap Island, is covered 2 feet; a buoy is off its west side. **Merriman Ledge,** awash at low water, is 0.4 mile westward of Pumpkin Island; a buoy is on its north side. In July 1984, a 6-foot shoal was reported about 175 yards east of Pumpkin Island in about 44°18'33"N., 68°44'25"W.

(48) About midway between Merriman Ledge and Spectacle Island Ledge is a 13-foot spot marked by a buoy. **Pumpkin Island Ledge,** 0.4 mile northwestward of Pumpkin Island, is covered 12 feet; a buoy is on its west side. **The Triangles**, 0.4 mile northeastward of Pumpkin Island, is a ledge covered 2 feet and marked by buoys on the north and west sides.

(49) A lighted fairway bell buoy, 0.7 mile north of Pumpkin Island, marks the western entrance to Eggemoggin Reach.

(50) Of the islands near the western entrance to Eggemoggin Reach, **Spectacle Islands,** 1.7 miles westward of Pumpkin Island, are grassy. A fairway bell buoy is 0.4 mile southeastward of the islands. **Two Bush Island,** 1.8 miles southwestward of Pumpkin Island, is bare; **Hog Island,** 2.5 miles southwest of Pumpkin Island, has scattered trees, a house, and a barn in the center. **Fiddle Head** is a small islet off the northeast end of Hog Island and is connected to it by a bar which uncovers.

(51) **Pond Island**, 0.4 mile northwest of Hog Island, is grassy and has a small clump of trees on the northeast side. **Western Island,** 0.5 mile west of Pond Island, is grassy on its eastern end and has a thick clump of trees on its western end. **Green Ledge,** west of Western Island, is marked by **Green Ledge Light 4** (44°17.4'N., 68°49.7'W.), 31 feet above the water and shown from a white skeleton tower with a red triangular daymark on the ledge; the light marks the western approach to Eggemoggin Reach from East Penobscot Bay. A bell buoy is 0.3 mile southwestward of the light.

(52) **Black Ledges**, awash at low water, are 0.4 mile southwestward of Pond Island.

Chart 13315

(53) **Deer Island Thorofare** is a narrow passage leading along the south side of Deer Isle, between it and the numerous islands southward. The passage joins Jericho Bay and East Penobscot Bay. It is a link in the chain of inland passages. Stonington is a town on the passage. The thorofare is used occasionally by coastal tankers and extensively by small craft bound through the inland passages. It has a least width of 100 yards in several places, and a least depth of 9½ feet in a channel across the bar between Moose and Crotch Islands. Vessels drawing up to 18 feet are reported to use the passage, but there are unmarked rocks covered 9 to 14 feet close to the channel. Local knowledge is advisable. The more important dangers are marked, and the channel is easily followed in the daytime in clear weather.

(54) The standpipe at Stonington and the stiff-leg crane and derricks at the inactive quarries on Crotch Island are prominent from all directions.

Anchorages

(55) The best anchorage for vessels bound through the thorofare and overtaken by night or bad weather is in Southeast Harbor. When overtaken by fog, they may anchor anywhere near the channel where the bottom is soft and the depth suitable. Small vessels anchor on the north side of the channel off Stonington, and between the wharves off Staple Point and the buoy 800 yards eastward. There are a considerable number of moorings off the wharves. A berth at one of these can usually be obtained on application to the harbormaster. There is also a good anchorage north of **Round Island,** 2 miles southeast of Crotch Island.

Tides and currents

(56) The mean range of the tide at Stonington is 9.7 feet. The tidal currents follow the general direction of the channel and are not strong. The direction of the currents is influenced by the wind; with strong easterly winds the flood and ebb set westward, and with westerly winds they set eastward. When not influenced by the wind, the flood sets eastward and the ebb westward, and continues to run about 0.8 hour after high and low waters.

(57) Ice seldom closes Deer Island Thorofare and Southeast Harbor and then is soon broken up by icebreakers. During severe winters, solid ice has existed from Stonington to Isle au Haut.

Routes

(58) There are two well-marked channels into Deer Island Thorofare from the eastward. The northern channel passes east and south of the buoys marking the ledges off **Green Ledge,** 0.8 mile eastward of Stinson Neck, and enters the thorofare between **Long Ledge,** 0.5 mile south of Green Ledge, and **Potato Ledge,** which extends 0.6 mile northeastward from **Shabby Island,** 20 feet high and wooded. A daybeacon is on Long Ledge, and a bell buoy is south of the ledge. A buoy is north of Potato Ledge. The channel then leads westward, passing south of **Lazygut Ledge,** 0.6 mile west of Long Ledge, and entering the thorofare at **Eastern Mark Island Ledge,** 1.4 miles west of Potato Ledge. The channel then continues between **Sheldrake Ledge** and **Haycock Rock,** marked by a daybeacon, 0.6 mile southwest of Eastern Mark Island Ledge; between **Haskell Ledge,** 0.8 mile west of Haycock Rock, Bold Island Ledges, and several other dangers, most of which are buoyed. The northern channel then joins the southern channel in the thorofare west of Bold Island Ledges, 3.5 miles west-southwestward of Potato Ledge.

(59) The southern entrance channel passes south of **Whaleback Ledge,** about 0.8 mile southward of Shabby Island, and runs nearly due west between **Shingle Island,** 1.1 miles southwest of Shabby Island, and **Saddleback Island,** 0.4 mile south of Shingle Island. The channel then swings northwestward and passes between **Bold Island,** 1.3 miles west of Shingle Island, and **Bold Island Ledges.** This channel is well marked by buoys to its junction with the other channels. Its eastern entrance is marked by a fairway bell buoy, about 700 yards east-northeastward of Saddleback Island.

(60) Entering from the westward, the principal leading mark is near **Deer Island Thorofare Light** (44°08'04"N., 68°42'12"W.), 52 feet above the water, shown from a white square tower on the west side of **Mark Island;** a fog signal is at the light. Westward of the light care must be taken to avoid **The Brown Cow,** a ledge with a rock 3 feet high on it, 1.3 miles southwestward from the light, and **West Mark Island Ledge,** covered 4 feet, about 0.7 mile northwestward of the light; a buoy is

south of the ledge. Passing north of the light and south of **Western Deer Island Ledge,** 5 feet high, and **Bay Ledge,** covered 11 feet, 0.4 mile north of Mark Island, there should be no difficulty in following the aids, which are colored and numbered for passage westward.

(61) **Southeast Harbor**, is northwestward of the eastern end of Deer Island Thorofare, between **Stinson Neck** on the east and **Whitmore Neck** on the west. The entire harbor is shown on chart 13313, but the entrance and eastern part are shown on chart 13315, of larger scale. The harbor is an excellent anchorage for vessels using the thorofare. The entrance is easily distinguished and the principal dangers are marked by buoys. **Oceanville** is a village on Whitmore Neck, on the south side of the harbor. In 1979, the eastern half of the stone wharf at the village was being repaired. A marina is at the village.

(62) **Webb Cove**, about 2 miles southwestward of Southeast Harbor and on the north side of Deer Island Thorofare, has rocks in the entrance, but good anchorage inside in depths of 8 to 12 feet. **Grog Island, Grog Ledge,** and **Humpkins Ledge** are off the entrance, and **Channel Rock** is about in the middle of the entrance. A detached, unmarked, and nearly L-shaped 400-foot-long fish weir is in the middle of the cove, about 500 yards above Channel Rock. In 1961, an obstruction, believed to be two pinnacle rocks covered 8 feet, was reported to be about in the middle of the channel between Grog Island and Grog Ledge. In September 1987, an obstruction was reported about 500 yards westward of Grog Ledge in about 44°09'45.5"N., 68°38'05.9"W. A 400-foot barge wharf of a stone quarry is on the northeast side at the entrance to the inner half of Webb Cove. In 1979, the wharf was being used by a packing company to offload fish; depths of 7 feet are reported alongside the wharf.

(63) **Stonington**, a town on the north shore of Deer Island Thorofare, has a sizable seafood industry. Many fishing vessels, lobster boats, draggers, and some charter and excursion boats operate from the port.

(64) Most of the wharves along the Stonington waterfront are used by commercial vessels. The cannery wharf (44°09'15"N., 68°39'38"W.), on **Staple Point,** has reported depths of 7 feet along its easterly side. A ledge off the wharf has little water on it; a buoy marks the outer end. A lobster wharf, 200 yards west of the cannery wharf, has depths of 7 feet reported alongside. A private pier and float, about 50 yards northwest of the lobster wharf, is used by the Stonington-Isle au Haut mail and passenger ferry; depths of 5 feet are reported alongside. Two lobster wharves, about 250 and 500 yards eastward of the cannery wharf, have reported depths of 10 and 7 feet, respectively, alongside their float landings. There are also several fish wharves at the western end of the harbor, eastward of **Green (Greens) Head.**

Small-craft facilities

(65) Most of the facilities are along the main waterfront. (See the small-craft facilities tabulation on chart 13306 for services and supplies available.) Provisions and marine supplies can be obtained in town. The nearest vessel repair facility is on Moose Island, just westward of Stonington.

(66) Berthage for transient craft is very limited at Stonington; most vessels anchor off the town or moor to mooring buoys off Staple Point. The town selectmen issue permits for mooring.

(67) Stonington has banks, restaurants, markets, stores, hotels, and motels. Good roads on the island connect with the bridge to the mainland.

(68) **Allen Cove**, just west of Stonington and east of **Moose Island,** is protected by a pier and breakwater built out from the southeast end of Moose Island. It is known locally as **Yacht Basin.** Sheds of a shipyard on the southeast end of Moose Island are prominent from westward. A causeway connects Moose Island with Deer Isle. Large lobster pounds occupy the northeast end of the cove and the areas on both sides of the causeway.

(69) The shipyard builds vessels up to 80 feet long and has several marine railways that can handle vessels up to 250 tons or 125 feet long for general hull or engine repairs; electrical and electronic repairs can also be made. A 30-ton mobile hoist and open or covered dry storage are available. Gasoline, diesel fuel, electricity, water, ice, and marine supplies can be obtained at the yard's service floats. The shipyard piers have depths of 10 feet reported alongside. Small craft anchor in the cove.

(70) **Crotch Island**, on the south side of Deer Island Thorofare opposite Moose Island, is the site of extensive granite quarries. The large quarry wharf on the north side of the island is reported to have a depth of 12 feet alongside. A 75–ton stiff-leg crane is on the wharf. In 1979, the quarry was inactive; many of the quarry derricks were visible from all around the island.

(71) On the northern side of the western entrance to the thorofare is **Andrews Island,** 60 feet high. Northward of Andrews Island and extending 0.5 mile south of **Fifield Point,** are **The Fort (Fort Island)** and **Second Island,** surrounded by off-lying reefs. The 9-foot spot 700 yards westward and the 15-foot spot 700 yards southwestward of Second Island are unmarked and should be avoided. A rock awash at low water is about 150 yards south of Fifield Point, close north of The Fort.

(72) **Burnt Cove**, northeastward of Fifield Point, is secure in all weather except westerlies. Good anchorage is found in mud bottom in midchannel just inside the entrance. The upper half of the cove is shoal and foul. A church spire in the village of **West Stonington (West Deer Isle),** at the head of the cove, is conspicuous. A lobster company pier and float landing are on the south side of the entrance; depths of 8 feet are reported alongside the float. Gasoline and some marine supplies are available. A boatyard, on the north side of the cove near the head, can haul out boats up to 55 feet in length for dry open and covered winter storage or hull and engine repairs. There are several other private wharves in the cove, but these are mostly dry at low water.

(73) The western shore of Deer Isle is described with East Penobscot Bay.

(74) South of Deer Island Thorofare and north of Merchant Row are many small islands, the more important of which are mentioned below. Navigation among these islands must be considered dangerous, for there are many ledges and the channels are unmarked.

(75) **Barter Island Ledges**, 0.5 mile west of McGlathery Island, are covered at high water; a daybeacon is on the ledges.

(76) **Harbor Island Ledge**, covered 3 feet, is 0.8 mile southward of **George Head Island,** a wooded island 80 feet high, 1.4 miles west of McGlathery Island. A buoy is north of the ledge. A 14-foot spot in midchannel, 0.5 mile south-southwest of George Head Island, is marked by a buoy on its south side.

(77) **Farrel Island**, 40 feet high and 2.6 miles west of McGlathery Island, and **Scraggy Island,** 0.8 mile west of Farrel Island, are wooded. There are several grassy rocks off the south side of Scraggy Island. **Sparrow Island,** 0.5 mile southwest of Farrel Island, is 40 feet high and grassy. **Sparrow Island Ledges** extend 0.5 mile west of the island.

(78) Of the remaining islands in the area, **Bare Island** and **Round Island** are wooded, and **Buckle Island, Little Camp Island,** and **Potato Island** are bare. **No Mans Island** is wooded on the western end and grassy elsewhere. **Enchanted Island** has scattered trees. **Camp Rock** and **Russ Islands** are partly wooded. **Phoebe Island, Millet Island, Spruce Island, Coombs Islands, Wreck Island, St. Helena Island, Green Island, Sand Island,** and **John Island** are wooded.

Charts 13313, 13305

(79) **Merchant Row** is a passage from Jericho Bay to East Penobscot Bay between the islands and ledges between Deer Isle and Isle au Haut. This passage is used by vessels in winter when Deer Island Thorofare is closed by ice, and by deep-draft vessels at all times. It is not quite as direct as Deer Island Thorofare, but the channel is wider and much deeper. There are numerous ledges and rocks on both sides of the passage, but the principal dangers are marked by buoys or daybeacons and the channel can be readily followed in clear weather and daylight.

(80) Deep-draft vessels can enter from the eastward through Toothacher Bay, the passage between Marshall and Swans Islands, through the channels between Marshall Island and Isle au Haut, or from Jericho Bay. Close attention should be given to the chart and the aids, with due regard for unmarked dangers. The description of the dangers, when entering Merchant Row from the southwestward in Isle au Haut Bay, is given later in this chapter.

(81) The islands and reefs on the north side of Merchant Row, including many of those in the channel, have been previously described under chart 13315. In fact, Merchant Row could be navigated on that chart for the greater part, but it is better to use charts 13313 and 13305, which, although on a smaller scale, show the islands and reefs on both sides of the channel as well as the approaches. There are two entrances to Merchant Row from the eastward which are separated by the islands and reefs in Jericho Bay.

(82) In the eastern approach to Merchant Row, south of Halibut Rocks and west of Marshall Island, a series of islands and reefs extend to the eastern entrance to the passage. **Southern Mark Island,** 2.1 miles southwest of Halibut Rocks, is about 30 feet high and grassy. About 1 mile south of Southern Mark Island is **Fog Island,** which is wooded. The numerous ledges east of Fog Island, and between it and Marshall Island, are mostly all bare. The more important of these, since they are closest to the channels, are **North Popplestone Ledge** and **Saddleback** on the north, and **Green Ledge, White Ledge,** and **Drunkard Ledge** to the south. **Saddleback,** 1.4 miles east-southeast of Southern Mark Island, in the summer shows some grass on its two conspicuous humps.

(83) **Torrey Ledge**, covered 17 feet, about 0.6 mile southward of Drunkard Ledge, is unmarked. **Blue Hill Rock,** covered 7 feet and about 1.2 miles eastward of Green Ledge, is marked on its southeast side by a buoy.

(84) Of the other islands and ledges on the south side of Merchant Row, **Burnt Island, Pell Island, Bills Island, Merchant Island,** and **Ewe Island** are wooded; Hardwood Island is round and heavily wooded; and **Ram Island,** 0.3 mile southwestward of **Hardwood Island**, is wooded.

(85) **Channel Rock**, 0.5 mile westward of Ram Island, uncovers 9 feet and is unmarked. **Ram Island Ledge,** awash at low water, about 400 yards southeastward of

Channel Rock, is also unmarked. **Scraggy Ledge** is a bare ledge 700 yards westward of Channel Rock. There is foul ground between Scraggy Ledge and **West Halibut Ledges,** bare ledges 0.3 mile northward. **Outer Scrag Ledge,** 1 mile northwestward of Scraggy Ledge, is 4 feet high. **The Brown Cow,** 1 mile northwestward of Outer Scrag Ledge, is a ledge with a rock 3 feet high on it, and is the westernmost danger at the western end of Merchant Row. A whistle buoy, about 0.6 mile south-southwestward of The Brown Cow, marks the western entrance to Merchant Row.

Chart 13313

(86) **Isle au Haut,** a large wooded island, 543 feet high, 4.2 miles southward of Deer Isle, is one of the principal landmarks of the locality. It has few year-round inhabitants, but a considerable number of summer residents. The coast is mostly foul and must be approached with caution. Part of the island is included in Acadia National Park.

(87) **York Island** is about 0.3 mile off the eastern side of Isle au Haut near its northern end. A ridge of shoals and reefs extends about 1 mile northward from York Island, ending in **Airy Ledge,** which has a buoy off its eastern side.

(88) The channel between York Island and Isle au Haut is almost blocked by a group of rocks. Between **Richs Point,** the northeastern end of Isle au Haut, and York Island are numerous reefs and rocks, most of which are marked by kelp. This area should be avoided by all except those having local knowledge.

(89) Foul ground also extends about 1 mile southward of York Island and includes **Turnip Yard,** awash, **Halfway Rock,** which uncovers 6 feet, and **Horseman Ledge,** awash in places at low water. These are unmarked. An unmarked shoal, cleared 15 feet, is about 500 yards eastward of Horseman Ledge; and a cleared depth of 12 feet, in midchannel between Halfway Rock and Little Spoon Island, is also unmarked.

(90) **Little Spoon Island**, **Great Spoon Island, White Horse,** and **Black Horse** are a group of grass-covered islands about 1.5 miles south-southeast of York Island. **Great Spoon Ledge,** awash at low water, is 0.3 mile north-northeast of Great Spoon Island. **Colt Ledge,** 0.6 mile south of White Horse and covered 8 feet, is marked by a buoy south of it. The chart should be carefully followed in this locality.

(91) **Eastern Ear Ledge**, which has a rock awash at low water on it, is 0.6 mile south-southeast of **Eastern Ear,** a small island close to the southeast corner of Isle au Haut. A buoy is southeastward of the ledge.

(92) **Head Harbor** is a small bight in the south shore of Isle au Haut, just west of 129-foot-high **Eastern Head,** the southeast point of the island. The harbor is used mostly by lobstermen and affords good protection for small boats except in southwest weather. In normal weather, the off-lying ledges break up the swell, causing the water in the northeastern part of the harbor to be fairly calm. The bottom is rocky in general, but some parts are clay. Depths are 9 to 21 feet in the northeastern semiprotected part, and 60 feet and more outside. There are a few houses on the shore in the northeastern part.

(93) The inner or northeastern cove of the harbor should not be entered without local knowledge, except in periods of good visibility. The bottom is mostly sand in the cove.

(94) **Roaring Bull Ledge**, 1 mile south-southwestward of Head Harbor, uncovers 4 feet. A lighted bell buoy is about 500 yards southward of the ledge.

(95) **Western Ear** is a wooded island at the southwest end of Isle au Haut. **Western Ear Ledge,** 0.2 mile southward of Western Ear, is awash at low water.

(96) The western side of Isle au Haut is fringed with many rocks and shoals, bare and covered. The westernmost ones visible at high water include one of the three bare rocks of **The Brandies,** which is 4 feet high about 1 mile westward of the southern part of Isle au Haut, and **Kimball Rock,** which uncovers 10 feet, 0.6 mile westward of **Kimball Island,** off the northwest shore of Isle au Haut.

(97) Several rocky spots with depths of 18 to 30 feet are outside the line joining these rocks. An obstruction, cleared to a depth of 10 feet, is about 0.2 mile northwestward of Kimball Head, and a rock awash is about 200 yards west of the northern extremity of the head.

(98) **Marsh Cove Ledges**, drying ledges which extend about 0.4 mile southwestward of **Marsh Cove,** Kimball Island, are marked by a buoy off the southwest end.

(99) **Duck Harbor**, 1.5 miles north of Western Ear, is a narrow but protected anchorage for craft up to 40 feet on the western side of Isle au Haut. The south shore should be favored on entering. The Stonington ferry lands at the National Park Service float on the south shore with depths of 5 feet reported alongside.

(100) **Moores Harbor** is a cove on the western side of Isle au Haut about 2.5 miles north of Western Ear. This harbor has many outlying ledges off the entrance and in the harbor, and is an unsafe anchorage.

(101) **Isle au Haut Thorofare** is on the northwestern side of Isle au Haut, between Isle au Haut and Kimball Island.

(102) A marked 75-foot-wide dredged channel leads across the ledges at the northeast end of Kimball Island. In

April 1986, the midchannel controlling depth was 3½ feet.

(103) The thorofare has a width of 100 to 500 yards, being widest at the western end. Secure anchorage for small craft or very small vessels can be had in depths of 33 feet near the village of Isle au Haut.

(104) In August 1990, strong unpredictable currents were reported in the thorofare at the change of tide and should be taken into consideration when anchoring.

(105) **Isle au Haut Light** (44°03.9'N., 68°39.1'W.), 48 feet above the water, is shown from a tower with its lower part conical, gray in color, and the upper part cylindrical, white in color, at Robinson Point on the south side of the western entrance. There is a white bridge to the shore. The light has a **034°-060°** white sector that marks the approach to Isle au Haut Thorofare. A buoy and daybeacon are off the two principal dangers on the north side near the western entrance, and buoys mark both ends of the dredged channel.

(106) Between **Moxie Island** and Isle au Haut Thorofare Daybeacon 4, the channel is narrowed by a ledge with a depth of only 2 to 4 feet. The ledge is so close to the charted 16-foot depth that boats either run on it unawares or come to anchor and are set aground by the falling tide. The daybeacon marks the southeast end of the ledge.

(107) Enter Isle au Haut Thorofare between Isle au Haut Light and Sawyer Ledge Buoy 1, and pass southward of Inner Ledge Daybeacon 3, giving it a berth of over 50 yards. Then keep in midchannel except in the choke at the entrance of the anchorage, where the northern side should be favored slightly. Avoid a rock, bare at low water, which is 90 yards from the northwest side of the anchorage.

(108) **Isle au Haut**, the village on the southeastern shore of Isle au Haut Thorofare, has a town wharf and float landing with 6 feet reported alongside. Gasoline, provisions, and some marine supplies can be obtained from the village store. Water can be procured from a nearby well. The harbor is reported to be free of ice in winter.

(109) Several other landings in the harbor dry at low water. A white church spire in the village is conspicuous, as is a large building on Point Lookout. A motorboat ferry carries mail and passengers daily between Isle au Haut and Stonington.

(110) **Lookout** is a village and summer resort at the eastern end of Isle au Haut Thorofare. A buoyed channel to the wharf from Merchant Row leads between Merchant and Hardwood Islands, northeastward of Bay Ledges, and westward of grassy **Flake Island** off the village. The wharf has a reported depth of 8 feet alongside. A buoy off the southwestern end of Flake Island marks the turn in the channel to the wharf. In 1965, dangerous rocks, covered at low water, were reported in the channel between Flake Island and Birch Point at the north end of Isle au Haut.

Chart 13302

(111) **Penobscot Bay**, the largest and most important of the many indentations on the coast of Maine, is about 20 miles wide from Isle au Haut on the east to Whitehead Island on the west and 28 miles long from its entrance to the mouth of Penobscot River. A chain of large and small islands divides the bay into two parts, **East Penobscot Bay** and **West Penobscot Bay.** The southern part of East Penobscot Bay is Isle au Haut Bay. **Vinalhaven Island** and **North Haven Island** are large islands dividing the southern part of the bay. Islesboro Island divides the bay near its head. Numerous harbors indent the shores of Penobscot Bay, the most important being Rockland, Rockport, Camden, Belfast, and Searsport on the western shore; Castine and Stonington on the eastern shore; and Vinalhaven and North Haven in the center of the bay. The bay is the approach to Penobscot River, on which are several towns and the city of Bangor at the head of navigation. The bay ports collectively are among the leaders for the lobstering industry in Maine.

(112) The sea approaches to the bay are well marked by the lights on Monhegan Island and Matinicus Rock; the entrance is marked by Saddleback Ledge Light on the east and by Whitehead and Two Bush Island Lights on the west side of the bay. The harbors are well lighted, and the more important dangers are marked by buoys or daybeacons. Deep-draft vessels ply the bay throughout the year and recreational vessels are prevalent during the summer. In severe winters many of the harbors are obstructed by ice. The Penobscot River seldom is entirely closed by it as icebreakers usually keep the channel free. The thorofares are only occasionally obstructed by ice and are much used by small vessels bound along the coast.

(113) Penobscot Bay, a region of rocks and ledges, requires extreme caution in navigating. After unusually high tides many logs are present in the bay, particularly from Belfast northward. These logs are dangerous to small craft. Penobscot Bay can be entered from eastward through Eggemoggin Reach, Deer Island Thorofare, or Merchant Row, and from westward through Muscle Ridge Channel or Two Bush Channel.

(114) Large vessels approaching Penobscot Bay from southward, either from Boston, Cape Cod Canal, or from eastward of Cape Cod, usually make Cape Ann Lighted Whistle Buoy 2 (42°37.9'N., 70°31.2'W.), chart 13260, then shape the course for Manana Island Lighted Whistle Buoy 14M (43°45.3'N., 69°22.5'W.),

and then enter through Two Bush or Muscle Ridge Channels. Two Bush Channel is used by most vessels and tows, and by all except small local vessels when the visibility is not good. Muscle Ridge Channel has good water, and most of the dangers are marked, but it is narrow in places and has a number of unmarked 16- to 22-foot spots near the track. It is not recommended for deep-draft vessels.

(115) The preceding paragraphs give the simplest directions by pointing out the difficulties and the dangers, and especially, when necessary, the need for local knowledge. The channels are well buoyed, most of the dangers well marked, and the approaches clear. No difficulty should be experienced in approaching and entering the bay in clear weather with the aid of the chart and by following the aids.

(116) Two vessel-to-vessel **oil transfer anchorage areas** near the head of Penobscot Bay north of Islesboro Island are discussed later in this chapter; indexed as Oil Transfer Anchorage Area.

(117) The mean range of the **tide** varies from about 9 feet near the entrance to about 10 feet in Eggemoggin Reach and near the head of Penobscot Bay. The rise and fall increases in passing up Penobscot River, the mean range at Bangor being 13.1 feet.

Charts 13302, 13303, 13305, 13309

(118) The U.S. Coast Guard Captain of the Port, Portland, in cooperation with the Maine and New Hampshire Port Safety Forum, has established a Recommended Vessel Route for deep draft vessels entering and departing Penobscot Bay and River. Deep draft vessels are requested to follow the designated routes. These routes were designed to provide safe, established routes for increased deep draft vessels, to prevent the loss of fishing gear placed in the waters in the approaches to Penobscot Bay and River, and to reduce the potential for conflicts between less maneuverable deep draft commercial vessels and all other vessels navigating upon these waters. 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 of the 0.4 mile wide route.

(119) **Recommended minimum under-keel clearances for Penobscot Bay and River** have also been established by the aforementioned group, in order to prevent groundings and to promote safety and environmental security of the waterway resources of Penobscot Bay and River. The group recommends that all entities responsible for safe movement of vessels in and through the waters of Penobscot Bay and River operate vessels in such a manner as to maintain a minimum under-keel clearance of 3 feet between the deepest draft of the vessel and the channel bottom when transiting Penobscot Bay and outer Penobscot River, south of Turtle Head on Islesboro island, and 2 feet when transiting Penobscot River north of Turtle Head, and a minimum under-keel clearance of 1 foot at all berthing areas.

(120) The Penobscot Bay & River Pilots distribute educational material to mariners in an effort to reduce right whale ship strikes.

Pilotage, Penobscot Bay and River

(121) Pilotage is compulsory for all foreign vessels, and for U.S. vessels under register in the foreign trade, with a draft of 9 feet or more, entering or departing from any port or harbor within the waters of Penobscot Bay and Penobscot River north of a line drawn from Marshall Point Light at Port Clyde, thence to Matinicus Rock Light, and thence to Western Head, Isle au Haut. Pilotage is optional for vessels under enrollment, fishing vessels, and vessels powered by sail. Upon departing its loading port enroute to a Penobscot Bay oil terminal, each commercial vessel is requested to furnish via its local shipping agency such information as required by local pilots and receiving facilities. The pre-arrival information includes: vessel name and particulars, cargo grades and amounts, estimated time of arrival, and any special needs.

(122) Pilot pickup stations: for the eastern entrance to the bay, vessels should make arrival at Penobscot Bay East Approach Lighted Whistle Buoy PBA (43°55'37"N., 68°39'37"W.), and follow the Recommended Route due west. The pilot will board 3 miles east of Penobscot Bay Lighted Buoy WP, at 43°55'50"N., 68°53'07"W. For the western entrance, pilots board at Manana Island Lighted Whistle Buoy 14M (43°45'18"N., 69°22'18"W.). The pilots require 36, 24, and 12 ETAs, as no pilot boats are maintained on station.

(123) Pilotage in the waters of Penobscot Bay is available from:

(124) **Penobscot Bay and River Pilots Association** offer pilotage for the entire area. The office address is: 48-2 Marshall Wharf, Belfast, ME 04915; The telephone number is 207-338-6600, and is manned 24 hours; FAX 207-338-2605; e-mail is pilots@acadia.net.

(125) The pilot boats at Monhegan Island (the west entrance to the bay) are local lobster fishing vessels which display a pilot flag by day and lights for a pilot boat by night. The pilot boat for the eastern entrance to the bay is a 48-foot black-hulled pilot boat with a white cabin top and "PILOT" written on the sides and top of the superstructure. The pilot boats can be contacted one hour prior to the last stated ETA on VHF-FM channel 16. The pilot boat will instruct the arriving vessel

which side to place the ladder on. The ladder should be ½ meter above the water, well lit, and in compliance with IMO Specifications. Integrated tug and barge units are required to have a proper pilot ladder rigged from the barge. Pilots will board vessels day and night when weather and sea conditions permit.

(126) Penobscot Bay and River Pilots Association meets arriving vessels at or about the previously mentioned pilot pickup stations. Tug and Barge units bound to and from Canadian ports are met about 0.5 mile south of Penobscot Bay Lighted Buoy WP (43º55'50"N., 68º53'07"W.); this pickup station can be used by other vessels with prior arrangements between Penobscot Bay and River Pilots and masters or agents. Vessels bound for Penobscot River ports can be boarded about 2 miles south-southeast of the town wharf at Searsport.

Security Broadcast System, Penobscot Bay

(127) Penobscot Bay and approaches have an established security communication system in which pilots, masters, and mates of deep-draft commercial vessels utilize VHF-FM channels 13 and 16 for security calls when proceeding between the pilot pickup stations and dock or anchorages at the north end of the bay and river.

Towage

(128) Three tugs up to 1,800 hp are available at Belfast. Arrangements for tugs are usually made through ships' agents; advance notice of 24 hours is required. Large oceangoing vessels require the use of tugs for docking at Searsport and at most of the ports on Penobscot River. A tug usually accompanies large vessels bound upriver to Brewer and other river ports; tugs meet vessels off Fort Point. Vessels bound for Searsport are met by tugs off Sears Island Bell Buoy 2. Tugs monitor VHF-FM channels 16, 13 and 10; work channels 13 and 10.

Wharves

(129) Approach and mooring criteria for Searsport deep-water facilities are as follows: Large commercial vessels should engage the services of escort tugs for inbound and outbound transits. For inbound transits, the escort tugs should be engaged in the vicinity of Sears Island Bell Buoy 2. Ship to shore communications are established at Searsport anchorage. Minimum visibility requirements for Searsport are ¼ mile. Maximum wind speed for entrance into Searsport is at pilot's and master's discretion. Maximum vessel capacity at Searsport is 65,000 DWT and 80,000 DWT at the Maine Port Authority Dry Cargo Pier.

(130) Approach and mooring criteria for Bucksport deep-water facilities are as follows: Large commercial vessels should engage the services of ship-assist tugs for inbound and outbound transits. For inbound transits, the assist tugs should be engaged in the vicinity of Fort Point. Ship-to-tug communication is established below Fort Point. Minimum visibility requirements for the Penobscot River are ½ mile. Maximum wind speed for docking and undocking in Bucksport are at the master and pilot's discretion. Maximum vessel capacity for Bucksport is 65,000 DWT; the maximum draft at MLW is 35 feet.

Chart 13303

(131) There is no secure harbor for vessels at any of the islands southward off Penobscot Bay. However, small craft and local fishermen moor at Monhegan Island (chart 13302), in Matinicus Harbor, which is the cove on the eastern side of Matinicus Island northward of Wheaton Island, and in Criehaven Harbor, an indentation in the northwest part of Ragged Island. The waters of this area are well surveyed; deep passages exist between the islands, as shown on the chart. Because of the broken nature of the bottom, vessels, particularly deep-draft ones, should avoid all broken ground having depths less than 60 feet. These waters are frequented mostly by local fishermen. The only settlements are on Monhegan, Matinicus, and Ragged Islands. In 1979, passengers bound for Matinicus Island used airplane service or chartered boats from Rockland. From Matinicus Island, a lobster boat can be hired to take passengers to Criehaven Harbor on Ragged Island.

Dangers

(132) **Seal Island**, the easternmost of the islands off Penobscot Bay, is bare, rocky, about 77 feet high, and 1 mile long. **Eastern Ledge,** awash at low water on which the sea usually breaks, extends 350 yards off the east end of the island. **Three Fathom Ledge,** 1.4 miles east-northeast of Seal Island, has been cleared to 16 feet. **Gully Ledge,** covered 24 feet, is about 650 yards south of Western Head, the westernmost point of the island.

(133) Seal Island is within the **danger zone** of a naval aircraft bombing target area, centered in 44°53'N., 68°44'W., just eastward of the island. (See **334.10**, chapter 2, for limits and regulations.) A wooden target float with a 10-foot tripod equipped with a radar reflector is about 0.4 mile southeast of the island.

(134) **Snippershan Ledge**, about 3.7 miles north-northwestward of Seal Island, has a least depth of 36 feet.

(135) **Malcolm Ledge**, midway between Seal Island and Wooden Ball Island, is 0.4 mile long. The north end of

the ledge uncovers 9 feet; the south end uncovers 3 feet.

(136) **Wooden Ball Island**, 3 miles southwest of Seal Island, is 62 feet high, 1 mile long, and rocky with grass on top. The eastern point of the island is a prominent knob. There are a few small abandoned houses at the low place in the western part of the island and a few summer camps. A lighted bell buoy is about 0.5 mile southwestward of Wooden Ball Island.

(137) **Matinicus Rock,** the southernmost islet in the approach to Penobscot Bay, is 56 feet high, and is marked near its south end by **Matinicus Rock Light** (43°47.0'N., 68°51.3'W.), 90 feet above the water, shown from a 48-foot cylindrical gray granite tower. A fog signal is at the light.

(138) About 2.3 miles northward of Matinicus Rock, a group of islands and rocks extends about 5 miles northward. Ragged, Tenpound, and Matinicus Islands and No Mans Land are the principal islands of the group.

(139) **Ragged Island**, the southernmost, is partly wooded. There are numerous high bare rocks, including **Green Ledge, Seal Ledge**, **High Ledge**, and **Brig Ledge,** on the east and south sides of the island. Broken ground extends 0.8 mile southward from the island to **Inner Breaker,** which is covered 3 feet and marked by a buoy.

(140) **South Breaker** is a small rock awash 1.7 miles southward of Ragged Island and 1.6 miles northwestward of Matinicus Rock Light. A buoy is south of the rock. A bell buoy is west of **Southwest Ledges,** 0.4 mile southwest of Ragged Island, which uncovers 6 feet in places.

(141) **Criehaven** is a village on **Criehaven Harbor,** on the western side of Ragged Island. There are several year-round residents on the island and some summer visitors. A breakwater extends northward from the southern entrance point; it is marked by **Criehaven Breakwater Light 8** (43°50.1'N., 68°53.6'W.), 32 feet above the water, shown from a skeleton tower with a red triangular daymark. A buoy is 700 yards westward of the harbor entrance off **Harbor Ledges,** which uncovers 4 feet and is on the south side just outside the entrance to the harbor. The best water favors the north side. There are several fish wharves in the harbor which bare alongside at low water. A limited supply of water can be obtained from wells on the island. The harbor affords anchorage for lobster boats moored to communal lines that are rigged across the harbor, but there is no protection from northerly blows. Strangers entering the harbor should exercise caution not to foul these mooring lines. The bottom slopes gently except for one dangerous rock which uncovers 2 feet on the northeast side of the harbor.

(142) **Seal Cove**, on the opposite side of the island from Criehaven Harbor, is reported to be shoal and boulder strewn, with seas that break at the entrance. Fairly good anchorage is available off Seal Cove in depths of 70 feet, flat sand and shell bottom, for vessels up to 100 feet in length; this anchorage is sometimes used by trawlers during northerly blows. However, mariners are cautioned to avoid anchoring in the cable area that extends southeastward from Seal Cove.

(143) **Pudding Island** and **Shag Ledge,** close to the northeast end of Ragged Island, are 35 feet high, bare, and rocky. **The Hogshead,** 0.2 mile northward of Shag Ledge, is a small bare rock 9 feet high in the middle of the eastern entrance to Matinicus Roads.

(144) **Tenpound Island**, 0.4 mile north of Ragged Island and 0.3 mile off the southeast side of Matinicus Island, is 41 feet high and grassy. **Matinicus Roads,** between Ragged Island and Tenpound Island, has a controlling depth of about 18 feet. A 7-foot rocky shoal is on the south side of the roads.

(145) **Matinicus Island**, 0.8 mile northward of Ragged Island, is mostly wooded and is the largest of the group. There are about 100 year-round residents, but in the summer many people spend vacations here. A telephone relay tower, about 100 feet high near the center of the island, is prominent from all around the island. **West Black Ledge,** 13 feet high, and **East Black Ledge,** 15 feet high, are bare rocks 0.6 and 0.9 mile eastward of Matinicus Island. **Tuckanuck Ledge,** 200 yards eastward of Eastern Black Ledge, has two rocks which uncover 1 and 8 feet.

(146) **Mackerel Ledge**, 700 yards northward of East Black Ledge, uncovers 7 feet. A buoy is north of the ledge. A rock covered 12 feet is 0.2 mile southward of East Black Ledge. **Greens Ledge,** covered 34 feet, is 0.7 mile northeast of Mackerel Ledge.

(147) **Wheaton Island** is just off the east side of Matinicus Island. The passage between the islands is bare at low water. There are small wharves which dry out in the cove between the two islands, and small craft anchor here. **Old Cove,** westward of the south end of Wheaton Island, is seldom used as an anchorage.

(148) The narrow passage between Wheaton Island and Matinicus Island is used considerably by lobstermen at half tide or better. A small boat attempting this passage should hug the Matinicus side no more than 5 feet from shore because of the rounded ledge which uncovers 3½ feet near midchannel.

(149) **Matinicus Harbor**, on the east side of Matinicus Island, is protected by Wheaton Island and a 450-foot breakwater extending from the north side. A light is close eastward of the breakwater. **Indian Ledge,** 2 feet high, is in about the center of the harbor. Small vessels can anchor in the outer harbor between Wheaton Island and Indian Ledge in depths of 6 to 26 feet. Except during easterly weather, the anchorage is quite calm.

Numerous fishing boats moor to communal mooring lines in the inner harbor behind Indian Ledge in depths of 4 to 8 feet.

(150) **Matinicus**, the village at the head of the harbor, has a general store and a restaurant. There is microwave telephone communication with the mainland. Gasoline and diesel fuel are available at the main wharf, which has a reported depth of only 1 foot alongside at low water. A limited supply of fresh water may be obtained at a well near the wharf. In August 1979, a mailboat worked between Tenants Harbor and Matinicus, but no passengers were carried. Passengers bound for the island generally use airplane service or charter boats from Rockland. A lobster boat can usually be hired to take passengers to Criehaven on Ragged Island.

(151) **Harbor Ledge** is a rock covered 4 feet, 300 yards northeastward of the entrance to Matinicus Harbor. A bell buoy south of the rock marks the entrance to the harbor. **The Barrel,** 300 yards northeastward of Harbor Ledge, is a rock which uncovers 10 feet at the south end of a ledge 300 yards long.

(152) **No Mans Land**, the largest of the rocks and islets northeastward of Matinicus Island, is 51 feet high and grassy. **Two Bush Island,** 22 feet high and grassy on top, is joined to the northeast end of Matinicus Island by a ledge which is covered 2 to 8 feet. **Two Bush Ledge,** 15 feet high and bare, is 0.2 mile southeastward of the island. Rocks covered 3 feet extend 350 yards eastward and northeastward from the ledge.

(153) **Beach Ledges** are two rocks which uncover 1 foot and 3 feet between Two Bush Ledge and Matinicus Island. A buoy marks the southeast end of the ledge. **Whaleback** is a ledge which uncovers 5 feet, 0.3 mile westward of No Mans Land.

(154) **Zephyr Ledges** are two rocks, the easternmost uncovering 3 feet, 0.3 mile north-northeast of No Mans Land. **Zephyr Rock,** the northeast end of the group, is covered 5 feet, 0.6 mile northeastward of No Mans Land. A lighted buoy is north of the rock.

(155) A lighted bell buoy, 0.7 mile north of Matinicus Island, is westward of the dangers northeastward of the island.

(156) Local boats bound to Matinicus Harbor from northward drawing 6 feet pass through the channel between Matinicus Island on the west and Two Bush Island and Beach Ledges on the east, at low water. Strangers should use this passage only in small boats and with a smooth sea, being careful to avoid the ledges.

(157) **Black Rocks**, two rocks 3 feet high, are on a ledge 0.3 mile westward of Matinicus Island.

(158) **Bantam Ledge**, which uncovers 5 feet and is surrounded by deep water, is 2.5 miles westward of Ragged Island. A buoy is southeastward of the ledge.

(159) **Foster Ledges**, 2 miles westward of Matinicus Island, are covered 6 and 13 feet; the southwestern and shoalest rock has a buoy off its west side. A ledge covered 30 feet is about 0.9 mile northward of the buoy.

(160) **Bay Ledge**, covered 3 feet, is about 5 miles northward of No Mans Land. A gong buoy is southwest of the ledge, and a fairway lighted bell buoy is about 1.3 miles southward of it. A ledge covered 24 feet is about 0.5 mile southwestward of Bay Ledge.

(161) **Pigeon Ground**, 3.5 miles west of Matinicus Island and 2 miles southward of Large Green Island, is broken ground about 2 miles long in an east-northeasterly direction. It is covered 15 feet on the western part of the broken ground and 21 feet on the eastern part.

(162) **Large Green Island**, 5 miles northwestward of Matinicus Island, is 43 feet high and grassy, and has some houses on its northern part. **Herring Ledge,** which partly uncovers 7 feet, extends 0.3 mile southward from the island.

(163) **Green Island Seal Ledges** are 0.6 and 0.9 mile south-southeastward of Large Green Island, with broken ground between. The southern part of the ledges uncovers 8 feet; the north end uncovers 5 feet.

(164) **Collins Rock**, about 1 mile north of Large Green Island, is covered 5 feet. **Junken Ledge,** covered 19 feet and marked by a buoy, is about 5 miles north-northeastward of Large Green Island. Two Bush Island Lighted Whistle Buoy TBI is 1.3 miles southwest of Junken Ledge.

(165) **Little Green Island**, about 1 mile northwestward of Large Green Island, is 43 feet high and grassy, and has several cottages on it.

(166) **Northern Triangles**, 1 mile northward of Little Green Island, is a reef about 1 mile long in an east-southeasterly direction. In the western half of the reef are some ledges awash at low water. A buoy is about 0.7 mile northward of the reef. A shoal covered 15 feet is 2 miles northward of Little Green Island and 2 miles southeastward of Two Bush Island Light; the shoal is marked by a buoy.

(167) **Alden Rock,** covered 4 feet and marked by a buoy, is 1.4 miles northwestward of Little Green Island. An unmarked rock covered 14 feet is 0.8 mile west-northwestward of Alden Rock. The 14-foot rock is at the eastern end of broken ground nearly 1 mile long and covered 22 to 30 feet.

(168) **Southern Triangles** are three groups of rocks, awash at low water, located midway between Little Green and Metinic Islands. The southwestern rock, 0.6 mile from the other two, uncovers 3 feet. A buoy is southeastward of the easternmost rock.

(169) **Metinic Island**, 5 miles west-southwestward of Large Green Island, is nearly 2 miles long, 78 feet high near its northern end, and partly wooded. The island is occupied during the summer by fishermen. There are no wharves, supplies, or mail service available. **Metinic Green Island,** low and grassy, is 0.4 mile southward of Metinic Island, with foul ground and ledges between.

(170) There is a passage for small craft with depths of about 7 feet between Metinic and Metinic Green Islands; local knowledge is advised. A rock covered 2 feet is 300 yards southwest of Metinic Green Island.

(171) A bell buoy, about 0.6 mile northward of Metinic Island, marks **Wheeler Rock,** covered 5 feet, about 0.3 mile northward of the island. **Wheeler Big Rock,** which uncovers 9 feet, is 300 yards northward of the island. **Green Point Shoal,** covered 17 feet, is 0.8 mile eastward of Metinic Island. **Hog Island, The Nubble,** both of which are bare, and **Cat Ledge,** which uncovers 3 feet, are close off the east side of Metinic Island.

Chart 13301

(172) Broken ground extends 2 to 3 miles westward and southwestward from Metinic Island. **Black Rock,** which uncovers 5 feet, is 0.7 mile westward of Metinic Island. A rock covered 14 feet is 0.3 mile southwestward of Black Rock.

(173) **Metinic Island Ledge**, covered 8 feet and marked by a buoy at its southwest end, is 1.8 miles westward of the northern end of Metinic Island. Kelp is reported on Metinic Island Ledge. A rock covered 26 feet is 0.6 mile northeastward of the ledge. **Hupper Shoal,** covered 17 feet, is 0.6 mile southwestward from the ledge.

(174) **Roaring Bull**, awash at low water and generally marked by breakers, is 2.8 miles westward of Metinic Green Island. A buoy is off the northwest side. A ledge covered 27 feet is 0.6 mile northwestward of Roaring Bull.

(175) **Southeast Breaker** is on a ledge about 0.5 mile long in a northeast direction; the higher part uncovers 4 feet. The ledge is 1.8 miles west-southwestward of Metinic Green Island, on the range of the south end of Metinic Green Island and the north end of Large Green Island. Unmarked shoals covered 10 to 16 feet are within 0.5 mile of the ledge.

(176) **Haddock Ledge**, covered 11 feet, is 1.3 miles southward of Southeast Breaker and 2.5 miles southwestward of Metinic Green Island; it is not marked.

(177) **Monhegan Island**, 9 miles off the mainland and 20 miles westward of Matinicus Rock (chart 13303), is one of the important landmarks for vessels bound along the coast. The island is 1.4 miles long and 165 feet high, and presents a rocky shore with high bluffs in places.

(178) **Monhegan Island Light** (43°45.9'N., 69°18.9'W.), 178 feet above the water, is shown from a 47-foot gray conical tower connected with a white building, on the middle of the island. Within 3 miles of the island the light is obscured between west and southwest. The fog signal and radiobeacon are on **Manana Island,** a small rocky island about 110 feet high, close westward of Monhegan Island. Manana Island Lighted Whistle Buoy 14M is 2 miles westward of the island. Penobscot Bay pilots usually board at this buoy.

(179) **Monhegan Harbor**, between Monhegan and Manana Islands, is an anchorage for small craft, but is exposed southward. The harbor, used principally by local fishermen and yachts, has depths of 15 to 25 feet with poor holding ground and scant room at the anchorage for a small vessel to swing.

(180) The deeper water in the harbor favors Manana Island. Entry into the harbor from the south is clear. A depth of 12 feet can be taken through the northern entrance between the wharf on Monhegan Island and the grass-covered rocky islet on the end of the ledge making out from Manana Island. The channel west of the small islet is shoal and has a depth of only 3 feet.

(181) In entering from the north the best water leads close to the end of the wharf. Even small craft should not attempt to ride out bad weather in this roadstead. During heavy weather the daily mail boat seldom is unable to land at the wharf.

(182) **Monhegan** is a village of fishermen and summer residents on the east side of Monhegan Harbor. The principal wharf has a depth of about 12 feet at the end. The village has telephone communication with the mainland. A diesel-powered motorboat ferry carries mail, freight, and passengers from Port Clyde, daily in summer and three times weekly in winter. Gasoline, diesel fuel, and provisions are obtainable. There are good hotel accommodations in the summer, and excursion boats from Boothbay Harbor call at Monhegan in the summer.

(183) **Eastern Duck Rock**, 400 yards off the north end of Monhegan Island, is a large, bare rock with some grass on top; the narrow channel between the rock and the island is nearer the rock because of Seal Ledges, which extend from Monhegan Island and show partly at high water. A gong buoy is about 250 yards northwest of the rock. **The Barrel,** a rock which uncovers about 5 feet off the northwest shore of Manana Island, is marked by a buoy.

(184) **Duck Rocks**, 0.6 mile off the northwest side of Monhegan Island, are two large, bare rocks. **Sunken Duck Rock,** covered 5 feet, is about 125 yards north-northwestward of the larger Duck Rocks. A bell buoy is northwest of Sunken Duck Rock.

(185) **Allen Shoal**, 1.9 miles northeastward of Monhegan Island Light and cleared to 22 feet, is unmarked.

(186) **Gull Rock Ledge**, covered 20 feet, is 1 mile south-southeastward of Monhegan Island Light. Kelp has been reported on this ledge. Breakers are reported to form on this ledge and on Allen Shoal with heavy swells.

Chart 13305

(187) **East Penobscot Bay** is that part of Penobscot Bay located eastward of Vinalhaven, North Haven, and Islesboro Islands. The southern part of it, between Isle au Haut and Vinalhaven Island, is called **Isle au Haut Bay.**

(188) There are many islands and numerous unmarked ledges in Isle au Haut Bay and East Penobscot Bay. The islands have numerous coves and small harbors, but few of these are available as anchorages, except for small craft, because of their shoal depths or obstructed entrances.

(189) The principal traffic through East Penobscot Bay moves in an east-west direction, with access through Eggemoggin Reach, Deer Island Thorofare, or Merchant Row from the eastward; or through Fox Islands Thorofare or the channels northward of North Haven Island, from the westward.

(190) A clear channel good for the deepest-draft vessels, though seldom used, leads through Isle au Haut Bay from Saddleback Ledge Light to the head of East Penobscot Bay. The channel passes eastward of Eagle Island, marked by a light, and a gong buoy northeastward of the light; thence in a northwesterly direction through the islands, northward of Eagle Island, and thence northward passing close westward of Cape Rosier.

(191) The principal dangers in this channel are marked, and the main part of it, with the exception of the areas near the shores, has been swept. The principal thorofares east and west have also been swept.

(192) **Saddleback Ledge Light** (44°00.8'N., 68°43.6'W.), 54 feet above the water, is shown from a 42-foot gray conical tower on a rocky islet in the middle of the southerly entrance to East Penobscot Bay. A fog signal is at the light. There is broken ground between the light and Vinalhaven Island, and deep-draft vessels should enter eastward of the light.

(193) The western side of Isle au Haut Bay is very foul. **Saddleback Ledge Shoal,** covered 2 feet and marked by a buoy, is 0.8 mile northwest of Saddleback Ledge Light. The mile-wide channel west of this shoal and east of 40-foot-high **Diamond Rock** and Diamond Rock Ledge has several shoal spots with depths ranging from 14 to 28 feet. The fairway gong buoy, about 0.9 mile southwestward of Saddleback Ledge Light, marks the southern entrance to this channel. **Diamond Rock Ledge,** covered 2 feet, is marked by a buoy.

(194) Between this channel and the southeast shore of Vinalhaven Island are many islands and reefs dangerous to navigation. A buoyed channel provides a partially protected route through the islands and reefs around the south end of Vinalhaven Island to Carvers Harbor or West Penobscot Bay. In daylight and with good visibility, moderate-sized vessels can run parallel to and about 0.5 to 1 mile offshore on this route.

(195) On the edges of this channel, along the southeast side of Vinalhaven Island, are unmarked **Little Triangle Ledge; Triangle Ledge, Halibut Ledge, Crosby Ledge, Sheep Island Ledge, Old Duke Ledges,** and **Bunker Ledge,** all marked by buoys; and **Point Ledge,** marked by a daybeacon, off the entrance to Indian Creek.

(196) Farther inshore, and unmarked, are **Green Island, Narrows Island, Sheep Island, Point Ledge, House Ledge, Sister Ledge, Griffin Ledge, Green Ledge, Clam Ledges, Wreck Ledge,** and **Folly Ledge.** Southward of the buoyed channel are **Brimstone Island, Hay Islands, Roberts Islands, Carvers Island,** and **Otter Island.**

(197) Surrounding and interspersed between these islands are numerous rocks and ledges, unmarked and dangerous to navigation. **Arey Ledges, Colt Ledge, Heron Neck Ledge, Old Horse Ledge, Channel Ledge,** and **Knubble Ledge,** and **The Breakers,** dangerous ledges only partially marked by buoys, lie to the westward, in the southern approach to Carvers Harbor.

(198) **Arey Cove** and **Roberts Harbor,** on the southeast side of Vinalhaven Island, are much obstructed by rocks and ledges, and are unsafe for strangers.

(199) The coast northward to Bluff Head and the eastern entrance to Fox Islands Thorofare has many off-lying islands and reefs, extending in some places nearly 1 mile offshore. The coves are small and foul, and of no value as harbors.

(200) **Winter Harbor**, locally known as Pleasant River, **Seal Bay,** and **Smith Cove** make into the northeastern part of Vinalhaven Island, south of the eastern entrance to Fox Islands Thorofare. They are frequently used by visiting yachtsmen during the summer, but local knowledge is advised.

(201) The islands and dangers on the east sides of Isle au Haut Bay and East Penobscot Bay from the entrance to Barred Island (44°10.0'N., 68°43.2'W.), off the southwestern side of Deer Isle were nearly all described previously in this chapter under the discussion of Deer Island Thorofare, Merchant Row, and Isle au Haut. Between Deer Island Thorofare and Eggemoggin Reach,

the eastern side of the bay is formed by the western shores of Deer Isle and Little Deer Isle.

(202) The only off-lying dangers from Barred Island off Crockett Cove to Southwest Harbor are **Sellers Rock,** part of which bares at low water and which is marked by a buoy, and the 18-foot spot 700 yards west of it.

(203) **Crockett Cove**, east of Barred Island and northwestward of Burnt Cove, is shoal and foul in its upper half. There is reported to be a good small-craft anchorage, secure in all weather, in 18 feet of water about 0.6 mile inside the entrance. It should be approached only after 3 hours following low water on a rising tide, and favoring the western side of the cove.

(204) **Goose Cove** is a small bight close westward of Crockett Cove. It is foul with rocks awash and submerged in the center. Great care should be taken in entering. A ledge is on the west shore.

(205) Two rocks awash at low water are off the entrance to the cove eastward of Barred Island, and another one farther eastward is off the entrance to Crockett Cove.

(206) **Southwest Harbor** is on the western side of Deer Isle, about 4 miles north of Deer Island Thorofare Light. The harbor is about 0.3 mile wide at the entrance and 1 mile long. The anchorage in depths of 18 to 28 feet is not used much, being open southward. A spire in the village of **Sunset** on the eastern shore of the harbor is prominent. There are no wharves. The western side of the harbor is formed by **Sheephead Island,** from which **Sheephead Island Ledges** extend 0.3 mile southward.

(207) **Mill Pond**, northward of Southwest Harbor, is of little importance. **Sylvester Cove** is northwestward of Mill Pond. The Deer Isle Yacht Club pier and float landing, with 9 feet alongside, and a fish wharf with a town float, dry at low water, are on the north side of the cove. Bare stone cribbing, on the south side of the cove opposite the yacht club float, is all that remains of a former pier. The mail and passenger boat, with year-round service to Eagle Island and summer service to Great Spruce Head Island and Barred Islands, leaves from the yacht club float. Eastward of the yacht club landings, the cove shoals rapidly to a fine shelving beach.

(208) The anchorage in the entrance of the cove is partly sheltered by a long reef on the south side of the entrance; the reef bares at about half tide. A buoy is northwestward of the reef. Caution should be used in rounding this reef, by passing northward of the buoy; it is reported that several small craft have grounded on the reef. There are no services available in Sylvester Cove.

(209) **Dunham Point**, 0.8 mile northwest of Sylvester Cove, is the westernmost point on Deer Isle. **Dunham Point Ledge,** awash at low water, extends 300 yards offshore from the point.

(210) **Pressey Cove**, about 1 mile northeastward of Dunham Point, is shoal and foul. There are islets on the west side and in the middle of the entrance to the cove. The middle one is grassy, and the western one has two trees and is connected with the shore by a sandbar. A number of private homes are around the cove.

(211) **Northwest Harbor**, on the northwestern side of Deer Isle, is about 0.3 mile wide and over 1 mile long. A large part of the upper half of the harbor is shoal and foul and dries out. Good anchorage will be found for small vessels in midharbor in depths of 13 to 17 feet, soft bottom. The harbor is sheltered from all but northwesterly winds. Good anchorage also is off the entrance of the harbor, between Gull Ledge and Heart Island, in depths of 19 to 30 feet. During January and February the harbor is closed by ice.

(212) **Gull Ledge**, partly uncovered at high water, is 0.4 mile northwest of the southern entrance point to Northwest Harbor. Between Gull Ledge and the buoy off the ledge extending from the southern entrance point is a narrow channel. Southwestward of Gull Ledge is a reef with rocks awash at low water, which must be avoided even by small boats if using this channel. Its southwest end is marked by a buoy, about 0.5 mile from Gull Ledge and 0.4 mile off the main shore.

(213) The village of **Deer Isle** is at the head of the harbor; some marine supplies and provisions are available. A private wharf and float landing are on the northern shore of the harbor about 0.7 mile east of Gull Ledge.

(214) The harbor is seldom used except by pleasure craft as an overnight anchorage in fair weather. With the aid of the chart, little trouble should be experienced in approaching and finding anchorage in midchannel up to 0.4 mile inside the entrance, as the entrance is wide and clear. **Heart Island,** 60 feet high and wooded, is 0.5 mile northward of the entrance.

(215) North of Northwest Harbor, the western shore of Deer Isle extends in a northeasterly direction to Eggemoggin Reach. It was formerly possible for small boats to follow this shore and pass between Little Deer Isle and Deer Isle directly into Eggemoggin Reach. This passage now is closed by a causeway.

(216) The islands off the western end of Eggemoggin Reach were previously described in this chapter.

(217) Between Little Deer Isle and North Haven Island, there is a chain of islands through which are many passes; these passes must be used with care because of the many reefs between the islands.

(218) **Pickering Island**, 1 mile southwest of Little Deer Isle and about 90 feet high, and **Bradbury Island,** 2.5 miles southwest of Little Deer Isle and about 170 feet high, are both wooded, and are the principal islands north of the main ship channel through East Penobscot Bay.

(219) **Hardhead Island**, a grassy islet 76 feet high, is 1 mile southward off Bradbury Island. About 0.4 mile northwest of Hardhead Island is **Middle Rock,** a shoal covered 10 feet on the north side of the main ship channel. A buoy is west of the rock.

(220) Southwest of the main ship channel, and between it and North Haven Island, the passes between the islands are nearly obstructed by reefs in many cases. Navigation between these islands, even by small craft, must be done with caution. A few of the reefs are buoyed. Most of the islands are wooded.

(221) **Eagle Island**, 1.5 miles west of Dunham Point, is wooded. **Eagle Island Light** (44°13'04"N., 68°46'04"W.), 106 feet above the water, is shown from a white granite tower on the northeast end of the island. A gong buoy is 320 yards east-northeastward of the light. **Eagle,** a small settlement on the island, has year-round mail and passenger boat service to Sylvester Cove, on the northwest side of Deer Isle. A bell buoy marks a shoal, covered 12 feet, extending 0.6 mile eastward of the island. **The Porcupines** are two high wooded islands off the south end of the island.

(222) **Great Spruce Head Island**, 231 feet high and 2.1 miles northwest of Eagle Island, is the highest island in the group. **Bear Island,** just south of Great Spruce Head Island, has a protected anchorage in a cove at its north end in depths of 12 to 30 feet, rocky bottom. A wharf and float in the cove have a depth of about 9 feet alongside.

(223) **Butter Island,** 186 feet high and 0.5 mile northwest of Eagle Island, is wooded. The passage between Butter Island and the northeast island of the **Barred Islands,** 300 yards westward, is reported to uncover at low water. **Oak Island,** 1.5 miles west-southwestward of Eagle Island, is grassy and uninhabited. **Burnt Island,** just south of Oak Island, is wooded except for its northeast end, which is grass covered.

(224) There is a passage northward of North Haven Island which is used in winter when Fox Islands Thorofare is closed by ice. To go through this passage, pass about 300 yards southward of Eagle Island and steer for **Spoon Ledge,** 15 feet high with grass on top, about 0.5 mile northwest of Oak Island. On this course pass 400 yards northward of **Grass Ledge,** 15 feet high and grass covered, 0.9 mile east of Oak Island, to a position about 400 yards northward of Oak Island. Then pass midway between Oak Island and Spoon Ledge and steer west-southwesterly, clearing Webster Head by about 600 yards. The least charted depth in this passage is 25 feet.

(225) The preceding paragraphs give the simplest directions for Isle au Haut Bay and East Penobscot Bay by pointing out the difficulties and the dangers, and especially, when necessary, the need for local knowledge. By close attention to the chart and following the aids, no difficulty should be experienced in navigating the area in daylight and in clear weather.

Chart 13308

(226) **Fox Islands Thorofare,** leading from East Penobscot Bay to West Penobscot Bay, between North Haven and Vinalhaven Islands, is one of the chain of inshore passages commencing at Bass Harbor and ending at Whitehead. Fox Islands Thorofare is about 7 miles long.

Prominent features

(227) **Widow Island**, inside the eastern entrance to Fox Islands Thorofare, is marked by a small cottage near its peak, on the southeast side.

(228) **Goose Rocks Light** (44°08'08"N., 68°49'50"W.), 51 feet above the water, is shown from a white conical tower on a black cylindrical foundation; a fog signal is at the light. A white sector in the light, from 301° to 304°, marks the fairway for the eastern approach to the thorofare.

(229) **Browns Head Light** (44°06'42"N., 68°54'34"W.), 39 feet above the water, is shown from a white cylindrical tower connected with a dwelling; a fog signal is at the light. A white sector in the light, from 050° to 061°, with a red sector on either side of it, marks the fairway for the western approach to the thorofare. A fairway lighted bell buoy, about 2.4 miles southwestward of the light, marks the western entrance.

(230) **Sugar Loaves,** a group of prominent high rocks surrounded by a ledge, are 600 yards northwestward of Browns Head Light. **Fiddler Ledge Daybeacon,** a gray, square stone shaft with a pyramidal top marks **Fiddler Ledge** which uncovers 5 feet 1.4 miles southwestward of Browns Head Light. It is the most conspicuous mark when approaching from westward.

(231) A large standpipe on the high ground just back of North Haven shows up prominently in approach from either direction.

Channels

(232) The controlling depth of 17 feet is in midchannel between Iron Point Ledge and Grindstone Ledge. The narrowest part of the channel is about 100 yards wide between **Iron Point Ledge,** marked by a daybeacon, and **Dobbin Rock,** marked by a buoy. Extreme caution should be exercised here as the currents are reported to be strong at times, especially during strong winds from the east or west. At low water, the thorofare is seldom used by vessels drawing over 14 feet.

Anchorages

(233) Good anchorage can be selected in the channel of the thorofare between the entrance of Seal Cove and the western end of the village of North Haven, in depths of 23 to 33 feet, soft bottom.

(234) Good anchorage for vessels of any draft, in depths of 32 to 42 feet, soft bottom, is in the western entrance of Fox Islands Thorofare, westward or northward of Sugar Loaves, and between Amesbury Point and **Crabtree Point Ledge,** 1.7 miles southwestward. A cable area extends across Fox Islands Thorofare in an east-west direction between Calderwood Rock on the north and Sugarloaves on the south. Care should be taken to avoid anchoring in this area.

(235) Anchorage can be found in **Seal Cove,** a large arm extending 1.5 miles southward from Fox Islands Thorofare southeastward of and on the opposite side of the channel from the village of North Haven. Large areas in the cove have depths of 8 to 12 feet, bottom soft in places, but shoaling has been reported in the middle of the cove. The cable areas in the cove should be avoided when anchoring. Good anchorage in depths of 19 to 23 feet, soft bottom, is in the middle of **Southern Harbor,** which makes northeastward between the **Dumpling Islands** and **Amesbury Point,** near the western end of the thorofare. The water shoals gradually toward the head. In May 1986, a 12-foot shoal was reported in the center of the harbor entrance in about 44°07'52"N., 68°54'11"W.

(236) **Carver Cove**, south of Widow Island at the eastern end of Fox Island Thorofare, is a secure anchorage except during northeast winds, easy of access, and convenient for vessels windbound in East Penobscot Bay or passing through the thorofare. The anchorage, in depths of 16 to 20 feet, good holding ground, is about 0.5 mile from the head of the cove, and 197° from the cottage on Widow Island. When entering, the shores should be given a berth of about 300 yards. An unmarked 18-foot rocky patch is about in the middle of the eastern entrance.

(237) **Kent Cove**, in the north shore of the thorofare north of Widow Island, is a secure anchorage with depths of 15 to 24 feet, good holding ground. Anchorage in the northeast and northwest arms, in depths of 8 to 11 feet, is preferred. Goose Rocks Light is the prominent guide for entering either day or night, the entrance being westward of the light. **Kent Ledge,** the only outlying danger, covered 3 feet, is 500 yards from the northwest shore of the cove off the entrance.

(238) **Waterman Cove**, in the north shore of the thorofare west of Kent Cove, is a good anchorage for small vessels. The water shoals gradually from a depth of 18 feet at the entrance to 4 feet near the head, where a narrow channel leads into the **Cubby Hole,** a shallow cove. The better entrance to Waterman Cove is between the buoys off Fish Point Ledge and Waterman Ledge.

Dangers

(239) The principal dangers are marked by buoys or daybeacons which can be easily followed in the daytime with clear weather.

(240) On the north side of the eastern entrance to Fox Islands Thorofare are **Babbidge Island, Calderwood Island,** and **Stimpsons Island.** North of these islands is unmarked Little Thorofare, which can be used by small craft with local knowledge. Ledges extend for over 0.4 mile south and southeast of these islands. A buoy, 0.6 mile southeast of Babbidge Island, is on the north side of the east entrance to Fox Islands Thorofare.

(241) Of the several reefs south of these islands, the most important are **Black Ledge, Sunken Black Ledge,** and **Channel Rock.** A buoy is just southwestward of Sunken Black Ledge. Channel Rock is marked by a bell buoy and a daybeacon.

(242) In the western approach to Fox Islands Thorofare, on the south side, are **Dogfish Ledges,** marked by a daybeacon; **Seal Ledge,** the north end of which is marked by a buoy; and **Inner Bay Ledges,** forming the westernmost danger in the western approach and marked by several buoys. The main entrance channel is north of these ledges and is well marked. The channel southeast, between these ledges, is also well buoyed for the guidance of those vessels going to Hurricane Sound and the southern part of Vinalhaven Island.

(243) **Drunkard Ledge**, 0.5 mile westward of Fiddler Ledge Daybeacon, uncovers 7 feet and is marked by a daybeacon on the eastern side. Broken ground, which should be avoided, extends 0.2 mile southward of the line joining the daybeacons. A gong buoy is on the southern extremity of the broken ground.

(244) **Fish Point Ledge**, which uncovers 4 feet and is marked at its southeast end by a buoy, is 400 to 600 yards southeastward of **Fish Point,** on the eastern side of Waterman Cove. Foul ground is between the point and the ledge. **Waterman Ledge,** covered 4 feet and marked by a buoy, is in the mouth of Waterman Cove 500 yards from the western shore.

(245) **Post Office Ledge**, covered 8 feet, and **Lobster Ledge,** covered 2 feet, are two marked ledges off the town of North Haven.

Tides and currents

(246) The mean range of tide is 9.5 feet. The tidal currents in Fox Islands Thorofare are usually not strong. They meet at Iron Point in the middle of the thorofare; the flood sets in from both ends and the ebb sets out. However, during periods of strong winds from the

eastward or westward, it is reported that strong currents with eddies are apt to be encountered in this vicinity.

(247) The thorofare is sometimes closed by ice in winter.

Pilotage, Fox Islands Thorofare

(248) Pilotage for these waters is discussed in this chapter; see Pilotage, Penobscot Bay and River, indexed as such.

(249) **North Haven** is an important summer resort and yacht center on the north shore of Fox Islands Thorofare. Small craft can anchor on the south side of the channel between Young Point and Hopkins Point where depths allow, and on the north side of the channel, taking care to leave a clear channel to the town wharf and ferry slip. The town wharf has a depth of about 12 feet, and the other wharves less.

(250) Water is available at the yacht club float, about 100 yards northwest of the ferry slip, with depths of 4 to 8 feet reported alongside. A boatyard, close eastward of the ferry slip, has marine railways up to 20 tons and a 15-ton mobile hoist that can handle craft up to 45 feet long for hull and engine repairs; gasoline, diesel fuel, ice, marine supplies, and winter storage are available. Depths of 6 to 7 feet are reported alongside the boatyard pier. The yard builds craft up to 45 feet long.

(251) State automobile, mail, and passenger ferry service to Rockland is maintained the year round. Microwave telephone and telegraph communications are available to the mainland. Taxi service, food, and lodging are available in the village.

(252) The north shore of Vinalhaven Island, across the thorofare from North Haven, has numerous summer residences with private landing floats.

(253) **Perry Creek** is a long narrow arm making westward on the west shore of Seal Cove. The creek is reported to be an excellent anchorage for small craft; avoid the cable area at the entrance. An overhead power cable crosses the northern branch of the creek as shown on the chart.

(254) The western entrance to Fox Islands Thorofare and the off-lying dangers are described under the discussion of the thorofare.

(255) **Crockett Cove** is just eastward of Crockett Point, the southeastern point at the western entrance to Fox Islands Thorofare. The cove is about 1 mile long and 200 yards wide near the entrance, is obstructed by ledges, and is suitable only for small craft with local knowledge.

(256) **Dogfish Island**, 0.4 mile south of Crockett Point and northwestward of Leadbetter Narrows, has a private stone wharf at its eastern end.

(257) **Leadbetter Narrows** is a narrow passage between Vinalhaven Island on the north and **Leadbetter Island,** 0.3 mile southeast of Dogfish Island, on the south. When passing through the narrows, favor the shore of Vinalhaven Island. A buoy marks a rock awash on the south side of the narrows. Continuing south along the eastern side of Leadbetter Island, a passage leads into the northern end of Hurricane Sound.

(258) A small stone wharf is on Leadbetter Island at the narrows. There is also an inactive quarry and wharf on the shore of Vinalhaven Island eastward from the narrows. The cove on Vinalhaven Island just northeast of the east entrance to Leadbetter Narrows is reported to be a good protected anchorage with mud bottom in 5 to 15 feet of water. Leadbetter Narrows should not be attempted by strangers except in launches or small craft.

(259) **Bartlett Harbor**, a small cove with deep water and good anchorage sheltered from all but westerly and northerly winds, is on the western shore of North Haven Island about 2 miles above **Stand-in Point,** the southwestern point of North Haven Island. A rock covered 9 feet is in the middle of the entrance; deep water is close-to around the rock.

(260) **Pulpit Harbor**, on the northwest side of North Haven Island, is 4 miles northeastward of Stand-in Point and 2.5 miles southwestward of **Webster Head,** (chart 13305), the high and partly wooded head at the north end of North Haven Island. The entrance has a clear width of over 100 yards, and the harbor is a secure anchorage for small vessels of about 13-foot draft or less.

(261) **Pulpit Rock**, 10 feet high and pointed, is near the end of the reef extending 250 yards northeastward from the western point at the entrance. The rock is a good mark. To enter, give the north side of Pulpit Rock and the eastern shore just northward of the entrance a berth of over 100 yards, and enter in midchannel eastward of Pulpit Rock. Keep in midchannel and anchor in its broad part in depths of 18 to 33 feet.

(262) Another good all-weather anchorage for small craft is reported to be in the southwesterly prong, just inside the entrance, in 18 to 27 feet. More sheltered anchorage in 8 to 10 feet is toward the northeast end of the harbor, where there is a public float landing with 3 feet alongside. There is a telephone at the landing. Gasoline, provisions, and most supplies can be obtained by calling North Haven from the landing.

Charts 13305, 13303

(263) **Lawrys (Laireys) Narrows**, between Leadbetter Island on the north and Lawrys and Cedar Islands on the south, is a part of the route between Carvers Harbor and Rockland. The principal dangers are buoyed,

except for a rock covered 11 feet, reported in August 1979 to be 100 yards southwest of the southern end of Leadbetter Island. In February 1992, a dangerous underwater rock ridge was at midchannel in about 44°04'03.7"N., 68°54'00"W. **Crotch Island, Crane Island,** and **Spectacle Island** lie southward of Lawrys and Cedar Islands. A safe anchorage is reported to be had in 6 to 8 feet between Crotch Island and the northwestern end of Crane Island.

(264) **The Basin** is a large irregular bight in the west side of Vinalhaven Island, about 2 miles southeast of Crockett Cove. **Barton Island** is in the middle of the entrance, leaving a narrow, crooked, foul, and shallow channel north of it. The depth in the basin varies from 10 to 111 feet.

(265) **Hurricane Sound** is bounded on the east by Vinalhaven and Greens Islands and on the west by **Hurricane Island,** 0.7 mile west of Greens Island, and **White Islands,** a group of islands about 1.5 miles northwest of Greens Island and farther north by **Crane Island** and **Cedar Island.** The sound has deep water. Several passages lead into the sound, but there are no good anchorages.

(266) It is reported that there is a good black pebble beach in the cove on the south side of Hurricane Island and that the old stone quarry pier on the northeast side of the island affords a good landing place in good weather. **Outward Bound School,** a summer sailing and survival school, is on the island.

(267) Along this part of West Penobscot Bay, numerous rocks and reefs extend over 2 miles offshore from Vinalhaven Island and the bottom of the bay is irregular with many spots of 10 to 18 feet for about 2 miles farther offshore. The better passes among the islands are buoyed. Great care must be used to avoid the numerous reefs.

(268) **The Reach** is a narrow, much obstructed channel leading northwestward from the entrance of Carvers Harbor, between Greens Island and Vinalhaven Island. The passage is marked and used by vessels bound between Carvers Harbor and Rockland. The channel at its narrowest is only 100 feet wide between the northeastern edge of the ledge marked by Wreck Point Light 5 and a rock covered 2 feet, about 200 feet northeastward of the Light. Great care is required in passing this point.

(269) **Old Harbor** is a small cove at the northern end of The Reach and on the opposite side of the channel from the northern end of Greens Island. Caution is necessary in using this harbor because of the many old fish stakes, and a ledge of drying rocks extending southward of the island in the entrance of the harbor.

(270) **Carvers Harbor** is a secure haven in all weather for small vessels on the southwest side of Vinalhaven Island.

Prominent features

(271) **Heron Neck Light** (44°01'30"N., 68°51'44"W.), 92 feet above the water, is shown from a white tower connected to a dwelling on the southern extremity of **Greens Island,** on the eastern side of the entrance to Hurricane Sound. The light has a white sector from 030° to 063° which marks the fairway of the approach to Carvers Harbor from the southwest; a fog signal is at the light.

(272) **Carvers Harbor Entrance Light 2** (44°02'03"N., 68°50'37"W.), 19 feet above the water and shown from an iron spindle with a red triangular daymark on the west end of Green Ledge, marks the entrance to the harbor. Ice seldom closes the harbor. A standpipe on the hill north of the harbor is very prominent.

Channels

(273) There are four channels in the approaches to Carvers Harbor. The entrance from southwestward is between Heron Neck Ledge and James and Willies Ledge; from the northwestward through The Reach; from the eastward through the channel between Vinalhaven Island and the islands and ledges south of it; and from the southward west of Colt Ledge and between Arey Ledges and The Breakers. The controlling depth in the entrance channel is 19 feet between Potato Island and **Dodge Point** on the north side of the entrance to the harbor.

(274) **Indian Creek**, just eastward of Carvers Harbor, has an entrance from the sea and also a connecting passage to Carvers Harbor. A fixed highway bridge crossing the passage has a clearance of 8 feet. The passage is not safe for strangers. **Lane Island** forms the west side of Indian Creek. The island is grassy with two prominent white houses visible from the southward. **Potato Island** and **Bar Island** are two small islets on the northwest side of Lane Island at the south side of the entrance to the harbor.

Anchorages

(275) The best anchorage for small craft is reported to be on the east and southeast side of Carvers Harbor; the western side is principally used by commercial craft and fishermen. In October 2003, the harbor had depths of about 11 feet in the center, about 8.0 to 10.0 feet along the north and south sides, and 5.8 feet in the access channel leading to a basin off the town landing at the head; depths of about 1.8 to 5.4 feet were available in the basin.

Dangers

(276) **James and Willies Ledge**, 5 feet high with rocks awash at the south end, is on the north side of the southwestern approach at its junction with Hurricane Sound. It is part of the extensive ledge area extending southward from Hurricane Island. A buoy is south of the area.

(277) **Heron Neck Ledge**, 7 feet high, is on the southern edge of the southwestern approach and is unmarked.

(278) **Folly Ledge** is a bare unmarked ledge on the west side of the channel at the junction of the eastern, southern, and southwestern approaches. **Green Ledge** is on the east side of the channel in the inner approach to Carvers Harbor. It is marked by Carvers Harbor Entrance Light 2.

(279) **Point Ledge**, covered 4 feet and marked by a daybeacon, is 0.7 mile east of Folly Ledge.

(280) The dangers in the eastern approach have been described with Isle au Haut Bay and East Penobscot Bay.

(281) Strangers should bear in mind that many unmarked dangers will, of necessity, have to be passed close-to, and should exercise extreme caution by giving strict attention to the chart and following the aids.

Tides

(282) The mean range of tide is 9.3 feet at Vinalhaven.

Routes

(283) The preceding paragraphs give the simplest directions by pointing out the difficulties and the dangers and especially, when necessary, the need for local knowledge. Vessels of 12–foot draft or less should experience no difficulty, in daytime and in clear weather, in approaching and entering.

(284) Pilotage for these waters is discussed in this chapter under Pilotage, Penobscot Bay.

Harbor regulations

(285) There is a **harbormaster** who assigns the moorings in the anchorage. A **speed limit** of 5 miles per hour is enforced within the harbor.

(286) **Sand Cove**, making northward from Carvers Harbor, is foul. There are several wharves and a boatyard at the head at which vessels lie aground at low water.

(287) **Vinalhaven** is a town at the head of Carvers Harbor. There are churches, a library, bank, movies, inns, lodging houses, medical and nursing services, restaurants, picnic areas, and an excellent school system. The depths at the ferry wharf and float landings vary from 6 to 10 feet. Diesel fuel, gasoline, ice, water, provisions, and some marine supplies are available at a landing east of the ferry wharf. There are four boatyards on Vinalhaven Island, one on Indian Creek, one in Sand Cove, and two in Carvers Harbor. Craft up to 50 feet in length can be hauled out for hull or engine repairs or dry open or covered winter storage. Emergency radio repairs can be made. There is microwave telephone communication with the mainland.

(288) The State maintains mail, automobile, and freight service with Rockland the year round. The island has good roads.

Chart 13305

(289) North of North Haven Island are numerous islands and reefs extending to Head of the Cape (chart 13309). Most of these have been described previously. The most westerly of the islands and reefs is **Egg Rock,** which is small and grass covered, and 2 miles north of Pulpit Harbor. **Egg Rock Ledge,** 0.3 mile south-southwest of Egg Rock, is covered 2 feet. A buoy is northeast of the ledge.

(290) **Compass Island Ledge**, 1.4 miles northeastward of Egg Rock, is covered 8 feet; a buoy is off the ledge. **Compass Island,** 42 feet high, is 0.8 mile northward of Compass Island Ledge. A ledge with a rock at its end, which uncovers 10 feet, extends about 300 yards northeastward from Compass Island; ledges also extend up to 0.3 mile eastward of the island. **Grass Ledge,** a group of rocks 15 feet high, and rocks awash and covered, is between Compass Island, **Scrag Island,** and **Little Spruce Head Island,** which is westward of **Great Spruce Head Island.**

(291) **Horsehead Island**, 74 feet high, is about 0.6 mile northward of Little Spruce Head Island. **Colt Head Island,** and still another group of **Barred Islands,** are 0.6 mile and 1.1 miles, respectively, north-northeast of Horsehead Island. **Beach Island,** 81 feet high, is 0.9 mile northward of Great Spruce Head Island. Submerged rocks are reported in the passage between Beach Island and Barred Islands. **Resolution Island,** the northwesterly island of this group of islands between North Haven Island and Cape Rosier, is 93 feet high and wooded.

(292) The passage through these islands, just north of North Haven Island, has been described previously with East Penobscot Bay.

Chart 13302

(293) **Islesboro Island** and the adjacent islands and shoals are about 15 miles long, and separate East and West Penobscot Bays near their heads. Islesboro Island is nearly divided in the middle. The island is an important summer resort and is frequented by many pleasure boats in summer. Dark Harbor, Islesboro, North Islesboro, and Pripet are villages on the island. A State

automobile and passenger ferry is operated between Lincolnville, on the mainland, and Grindle Point.

Chart 13305

(294) A chain of islands and rocks, through which are several channels, extends for 5 miles southward from Islesboro Island. **McIntosh Ledge,** the most southerly of the dangers and about 0.7 mile southeastward of Robinson Rock, is awash at low water. A buoy is southeast of the ledge.

(295) **Robinson Rock**, 22 feet high and grassy, is the most southerly visible danger; several smaller bare rocks are around it. Ledges extend for 0.6 mile north-northeast and south-southwest of the rock. There is a bell buoy off the southern end of these ledges.

(296) **Mark Island**, the most southerly wooded island, is high, rounded, and prominent. A reef extends southward from the island.

(297) **East Goose Rock**, 0.5 mile northward of Mark Island, is 15 feet high and grassy. **Saddle Island,** 0.7 mile east–northeastward of Mark Island, is high and thickly wooded.

(298) **Lasell Island**, 1.2 miles northeast of Mark Island, is high and wooded except at its north end. **Goose Island** and **Mouse Island,** eastward of Saddle and Lasell Islands, are rocky islets with grass on top. Several bare and covered rocks are between Goose and Mouse Islands. A buoy is 300 yards north of the ledge which uncovers 5 feet northward of Mouse Island, and a buoy is eastward of the bare rock east of Goose Island.

(299) **Lime Island**, 0.2 mile northeastward of Lasell Island, is low and generally wooded. A rocky spit connects Lime and Lasell Islands at low water. A bare rock is 0.2 mile northward of Lime Island. **Job Island,** 0.7 mile northeastward of Lime Island, is 104 feet high and thickly wooded. A dangerous rock, reported covered at high water, is about 0.2 mile east-southeast of the south point of Job Island. The southerly of the **Ensign Islands,** 0.7 mile west of Job Island, is wooded, and the northerly is wooded in the center with a house on the west side. A landing is on the south end. A lighted bell buoy is about 0.3 mile south of the southerly island.

(300) The channel between Mark, Lasell, and Lime Islands on the west and Saddle, Goose, and Mouse Islands on the east is used by some vessels bound from Rockland or westward to Eggemoggin Reach or points in the northern part of East Penobscot Bay. The channel is unmarked, and local knowledge is required.

Charts 13305, 13309

(301) **Dark Harbor** is a village, with many summer homes, on the southern part of Islesboro Island. There are grocery and hardware stores, a snack bar, and a gas station. **Dark Harbor Cove,** on the eastern side of the island, is crossed by a dam and footbridge just inside the entrance and is seldom used. Small craft visiting the resort tie up at the yacht club or other private floats in Gilkey Harbor.

(302) **Gilkey Harbor**, on the western side of the southern part of Islesboro Island, is between the island and **Seven Hundred Acre Island, Warren Island,** and **Spruce Island.** The harbor is a secure anchorage with good holding ground, and is frequented by many yachts in summer. There are a number of private float landings for small craft, but no commercial wharves. The harbor frequently is closed by ice in winter.

(303) Warren Island is a State park. A 200-foot pier with seasonal dockage and 4 feet reported alongside is on the east side of the island.

(304) The Tarratine Yacht Club is on the east side of **Ames Cove,** near Dark Harbor; the clubhouse has a float landing with a depth of 4 feet alongside. Some supplies can be obtained in the village, and water is available at the float. A boatyard, at the east end of Ames Cove, has a machine shop and a 40-foot marine railway. Gasoline, covered and uncovered storage, and hull and engine repairs are available. Ames Cove is inaccessible at low water.

(305) **Cradle Cove** is a shallow indentation on the northeast side of Seven Hundred Acre Island. A boatyard, near the eastern entrance point of the cove, has a machine shop and a marine railway capable of hauling out craft to 60 feet long or 25 tons for hull and engine repairs, and dry covered or open winter storage. Electric and electronic repairs can generally be made, and the yard has a small crane and pile driver. Gasoline and diesel fuel are available at the 300-foot pier and float landing, which has 6 feet reported alongside. Water, ice, marine supplies, and electricity are available, and the yard maintains guest moorings.

Channels

(306) The main entrance to Gilkey Harbor is from southwestward between Job Island and Ensign Islands; the controlling depth is about 27 feet in midchannel between Minot Island and Seven Hundred Acre Island. Unmarked rocks of less depth are near the sides. The channel is partially buoyed and easily entered. The entrance from the northward is marked by **Grindel Point Light** (44°16'53"N., 68°56'35"W.), 39 feet above the water, shown from a white square tower with a green square daymark, close to an abandoned lighthouse on

the north side of the entrance. The State ferry slip, and a municipal float landing with 12 feet reported alongside, are close southeastward of the light; a municipal small-craft launching ramp is adjacent eastward of the shore end of the ferry auto ramp. A lighted bell buoy is west of the entrance, and the channel into Gilkey Harbor is partially marked by buoys.

(307) Provisions and some marine supplies can also be obtained from Islesboro.

(308) Small craft can also enter Gilkey Harbor through narrow, crooked **Bracketts Channel,** westward of the south end of Islesboro Island and eastward of Job Island and **Minot Island.** The unmarked channel is said to have a controlling depth of about 6 feet. The best water favors the east side.

(309) No difficulty should be experienced in entering Gilkey Harbor from the southward or northwestward with close attention to the chart and bearing in mind a number of unmarked 14- to 18-foot spots in the northern half of the harbor. Wooded **Thrumcap (Thrumcap Island),** near the middle of the harbor, has a reef extending westward from it which is marked by a buoy. **Lobster Rock,** awash 0.6 mile east-southeast of Grindle Point, is unmarked.

Chart 13309

(310) **Gooseberry Point**, 0.6 mile northward of Grindel Point, is low and flat, with a clump of trees at its outer end. **Crow Cove,** 2.4 miles northeast of Grindel Point, is an anchorage for small craft only.

(311) **Seal Harbor**, on the western side of Islesboro Island about 3 miles northward of Grindel Point, offers good anchorage sheltered from all but southwest winds. This harbor, easy of access, is used by vessels bound up or down the bay as an anchorage for the night. Vessels of any size can anchor with ample swinging room about 0.5 mile eastward of Flat Island, in depths of 54 to 60 feet. Anchorage can also be had in depths of 48 to 57 feet in the middle of the harbor, keeping the southern and eastern shores distant about 500 yards. The northern side of the harbor is foul. The wreck of a schooner, covered 12 feet, is about 0.2 mile from the head of the harbor.

(312) The entrance to Seal Harbor from the southward is deep and clear. The entrance from westward is 400 yards wide, with depths of 22 to 29 feet between Seal Island and a shelving ledge which extends 500 yards northward from Flat Island.

(313) The approach from the northward east of Seal and Ram Islands has a controlling midchannel depth of about 15 feet, but is unmarked and should not be used except with local knowledge because of the many unmarked shoal spots close to the channel edges.

(314) **Flat Island** is a private bird sanctuary on the western side of the southern entrance to Seal Harbor. The island is grassy, with a few trees and scattered brush. **Seal Island,** 0.6 mile north of Flat Island, is wooded and has a brown house with a black roof on its western side. A private pier and float landing are on the east side of the island. **Ram Island,** 0.3 mile northward of Seal Island, is wooded. The ledge extending 0.3 mile northward from the island has three rocks awash.

(315) **Islesboro Harbor** is an open bight in the east side of Islesboro Island, 2.7 miles westward and on the opposite side of East Penobscot Bay from the head of Cape Rosier. The harbor affords good shelter in westerly winds and has depths of from 31 to 42 feet, rocky bottom. **Hewes Ledge,** off the southern point at the entrance and awash at low water, is marked by two buoys. Vessels can pass on either side of the ledge, being guided by the buoys. Foul ground extending over 0.2 mile from the western shore will be avoided by keeping the knoll northward of the harbor open from the north point of the harbor.

(316) The village of **Islesboro** is on the south side of the harbor. The village has a general store where marine supplies are available.

(317) **Sabbathday Harbor** is a small cove in the eastern side of Islesboro Island, about 2 miles northward of **Hewes Point,** the high point on the south side at the entrance to Islesboro Harbor. **Ryder Cove,** the northern part of the harbor, dries at low water. Sabbathday Harbor is open southward and provides anchorage for small vessels in depths of 6 to 20 feet. A dangerous sunken rock is about 150 yards southward of the western entrance point, and stonecribs are reported on the east side of the harbor, about 300 yards above the entrance. The village of **North Islesboro,** on the west side of the harbor, has a general store, filling station and restaurant.

(318) **Sprague Ledge**, 0.5 mile northward of Ram Island and about 0.5 mile off the west shore of Islesboro Island, is covered 2 feet. **Barley Ledge,** 0.3 mile northeastward of Sprague Ledge, is awash at low water.

(319) **Marshall Point**, near the north end of Islesboro Island, is marked by prominent yellowish bluffs. A fairway lighted bell buoy is 0.8 mile west of the point.

(320) **Turtle Head Cove**, a broad bight in the north end of Islesboro Island, is sheltered from southerly and easterly winds, and has good anchorage in depths of 18 to 37 feet, soft bottom. The anchorage has a clear width of about 700 yards and is in the eastern part of the cove. The eastern shore must be given a berth of 250 yards, and the south end of the cove 500 yards.

(321) In the western half of the cove, a shoal awash in one spot at low water and covered 9 feet near its north edge extends 600 yards from shore. The north end of Turtle Head bearing anything eastward of **070°** clears the shoal.

(322) **Turtle Head**, the north end of Islesboro Island, is a prominent wooded head joined to the island by a long, narrow, wooded neck. The village of **Pripet** is southward of Turtle Head. A crib wharf at Pripet is reported in ruins.

(323) **Parker Cove**, on the east side of Islesboro Island 2.2 miles south of Turtle Head, is a shallow cove used only as an anchorage by small local craft. **Islesboro Ledge,** covered 8 feet, is southeastward of the entrance; a buoy is off the east side of the ledge.

Chart 13303

(324) Two Bush Channel and Muscle Ridge Channel are entrances to West Penobscot Bay from westward, the former leading southward and the latter northward of an extensive group of islands and shoals.

(325) **Two Bush Channel** is broad and deep, and the principal dangers are buoyed. This channel is used in preference to Muscle Ridge Channel by large vessels and tows, and is generally used at night by all except small local vessels.

(326) **Two Bush Island**, the southeastern island of the group between the two channels, is marked by **Two Bush Island Light** (43°57.8'N., 69°04.5'W.), 65 feet above the water, shown from a 42-foot white square tower on the north side of Two Bush Channel; a fog signal is at the light. The light is the principal guide to the channel.

(327) **Halibut Rock**, awash at low water and marked by a buoy, is 1.6 miles northeastward of Two Bush Island Light. **False Halibut Ledge**, covered 6 feet and unmarked, is 0.3 mile northeastward. **Northeast Pond Ledge**, 0.6 mile northeastward of **Andrews Island,** is awash at low water, and **Sunken Pond Ledge**, covered 6 feet, is 500 yards southeastward; neither is marked.

(328) The larger islands between Two Bush Channel and Muscle Ridge Channel are mostly wooded, and of little importance. The small islands are bare and grassy, and there are many bare and covered rocks. Privately owned **Dix Island**, 2.7 miles north of Two Bush Island, is wooded. **High Island**, 0.2 mile northeastward of Dix Island, has an abandoned quarry on it. **Birch Island,** just east of Dix Island and south of High Island, is about 20 feet high. **Fisherman Island**, about 5 miles north-northeast of Two Bush Island, is 43 feet high and grassy. **Marblehead Island**, 0.3 mile south of Fisherman Island, is 46 feet high and bare. **Grindstone Ledge**, covered 2 feet, is 0.3 mile northwestward of Fisherman Island.

(329) **Muscle Ridge Channel** is used in daylight and clear weather because it is sheltered and affords anchorage in case of bad weather. The channel is deep but narrow in places, especially between Sheep Island and Hendrickson Point (chart 13305), where the channel is only 85 yards wide, but has a depth of 38 feet in midchannel. From the entrance at Whitehead Island, the channel extends in a northeasterly direction about 6 miles to Sheep Island, passing between numerous rocks and ledges. Shoal depths of 13 to 22 feet are close to the channel, but these dangers are well marked, and in daylight and clear weather no difficulty should be experienced. The controlling depth is 26 feet, but vessels drawing 30 feet have been taken through at high water.

(330) **Whitehead Island** is on the west side of the southern entrance to Muscle Ridge Channel. **Whitehead Light** (43°58'43"N., 69°07'27"W.), 75 feet above the water, is shown from a 41-foot gray tower attached to a red brick shed on the east end of Whitehead Island; a fog signal is at the light.

(331) There is a small wharf in the cove on the northeast side of the island 300 yards northward from the light. The narrow channel between Whitehead Island and **Norton Island,** 500 yards westward, is blocked by a reef which uncovers about 6 feet.

(332) The following information is given to identify the dangers close to the sailing line through Muscle Ridge Channel. **South Breaker,** 0.4 mile southward and on the opposite side of the channel from Whitehead Light, is awash at low water and marked on the southwest end by a bell buoy. **Yellow Ledge,** on the opposite side of the channel from Whitehead Light, is awash at high water and marked by a daybeacon. **Yellow Ridge Islet,** close eastward, is 15 feet high and bare.

(333) **Lower Gangway Ledge**, 0.4 mile north of Yellow Ledge, is covered 6 feet; a buoy is west of the ledge. **Hurricane Ledge,** 1 mile northeastward of Yellow Ledge, is awash at low water and marked on its northwest side by a buoy. **Garden Island,** about 2 miles northeastward of Whitehead Island, is 15 feet high and bare except for a little grass on top. **Garden Island Ledge,** 0.3 mile east-northeastward of Garden Island, uncovers about 5 feet; a daybeacon is on the ledge. **Sunken Ledge,** covered 4 feet, about 0.4 mile southward, is marked by a buoy off its south end.

(334) **Wiggins Rock,** covered 9 feet, is about 750 yards north-northeastward of Garden Island Ledge, and there are two rock patches covered 10 and 12 feet, respectively, about 500 yards northwestward of Wiggins Rock. **High Clam Ledge,** 0.8 mile northeast of Hurricane Ledge, is bare and grassy at its south end and awash at low water at its north end. **Channel Rock,** 0.4

mile north of High Clam Ledge, uncovers 10 feet and is unmarked.

(335) **Otter Island**, 0.5 mile north of Dix Island, is 31 feet high and wooded; a daybeacon is on the northwest end of the island. **Otter Island Ledge,** 0.3 mile northwestward on the opposite side of the channel from Otter Island, uncovers about 5 feet; a daybeacon is on the ledge. **Upper Gangway Ledge,** 0.6 mile north-northeast of Otter Island, is covered 5 feet and marked by a buoy. **Inner Grindstone Ledge,** awash at low water, is 0.3 mile east of Upper Gangway Ledge; a buoy is north of the ledge.

(336) **Seal Harbor** (see also chart 13305), an anchorage formerly much used by coasters, is on the western side of Muscle Ridge Channel between Whitehead Island and **Sprucehead Island,** 0.8 mile northward. The outer part of the harbor has depths of 15 to 39 feet with soft bottom, and thence depths decrease in the inner part of the harbor. The harbor is easily entered in the daytime; the principal dangers in the entrance are buoyed. The chart is the guide. A dangerous ledge extends about 100 yards east and 200 yards northeast of **Slins Island** (43°59'54"N., 69°08'00"W.) on the west side of the entrance to the north part of the harbor. A rock with a prominent black bullseye painted in the center, is on the east end of Sprucehead Island.

(337) A causeway and highway bridge connecting **Elwell Point** with Sprucehead Island has a fixed span with a clearance of 7 feet. A town ramp is at the north end on the west side of the bridge. A lobster wharf on the northeast side of Elwell Point is dry at low water.

(338) **Spruce Head** is a village on the north side of Seal Harbor. There are several private wharves in the harbor. A service wharf and float landing are on the east side of the cove in the south side of Sprucehead Island; depths of 7 feet are reported alongside the float. Gasoline, diesel fuel, water, ice, provisions, and some marine supplies are available.

(339) **Seal Island** is about 500 yards northward of the light on Whitehead Island. **Seal Island Ledge,** which uncovers for almost 500 yards north of Seal Island, is the principal danger on the south side of the entrance. A buoy marks the east side of the ledge. **Long Ledge,** 0.2 to 0.5 mile north of Whitehead Island, shows in two places at high water.

(340) **Burnt Island**, connected to Sprucehead Island by a private bridge, has a summer home. Small craft use the passage between these two islands. The highway bridge has a fixed span with a clearance of 12 feet. **Burnt Island Ledge,** 150 yards south of Burnt Island and marked by a buoy, is covered 2 feet.

(341) **Dix Island Harbor** is an anchorage off the southeast side of Muscle Ridge Channel between Andrews, Birch, and Dix Islands. The harbor is entered from southwestward through a narrow and crooked channel leading between the ledges north of **Hewett Island,** 1.5 miles north of Two Bush Island. The channel and harbor are unsafe for strangers.

(342) On the west side of **The Neck,** an island just westward of Andrews Island, is a wharf with 2 feet alongside. There is a stone wharf with good water reported alongside for small craft on the west side of **High Island.** Care must be exercised in approaching it to clear a rock covered 3 feet about 200 yards westward of the wharf. A good all-weather anchorage for small craft is reported between High Island, **Dix Island,** and **Little Green Island.**

(343) **Weskeag River** empties into the western side of Muscle Ridge Channel at the head of the bight westward of **Ash Island,** a 54-foot-high wooded island, about 3 miles northeast of Sprucehead Island. The channel between Ash Island and Ash Point is shoal and foul. **Lark Ledges,** dangerous unmarked ledges with several rocks, sunken and awash; **Grace Rock,** covered 2 feet and also unmarked; and a number of other unmarked patches and ledges obstruct the approach to Weskeag River.

(344) **Spaulding Island**, wooded, is about in the middle of the river entrance between **Otter Point** and **Thorndike Point.** There is a stone town wharf with 2 feet at the head on the west side just inside the entrance abreast of Spaulding Island. There are no facilities. The river has a narrow, crooked unmarked channel south of Spaulding Island which is not safe for strangers.

(345) The village of **South Thomaston** is at the head of navigation, 2 miles above its mouth; the greatest draft taken to the village is 9 feet at high water. Vessels seldom enter. Provisions and some marine supplies can be obtained at the village general store. There is a town wharf, which bares at low water, a small-craft launching ramp, and parking at the head of the harbor near the store. A private marine railway is 100 yards west of the town wharf. There are good roads to the interior. Local knowledge is advisable for entering and anchoring.

(346) **Fisherman Island Passage** leads from Muscle Ridge Channel to Penobscot Bay, between Fisherman Island and Sheep Island. Several dangers are in this passage, but the principal ones are marked by buoys and can be easily avoided in the daytime in clear weather. A strong southwesterly flow is reported on the ebb; make allowance for this current when approaching from the east.

(347) **Sheep Island Shoals**, which extend over 0.3 mile south of Sheep Island and uncover in places, are on the north side of the channel; the shoals are marked on the south end by a buoy. **Emery Ledge,** covered 5 feet, and

Northwest Ledge, covered 4 feet, are on the south side; both are marked by buoys.

Charts 13307, 13305

(348) **Owls Head Bay** is between Sheep and Monroe Islands, about 6.5 miles north-northeastward of Two Bush Island on the east and the mainland on the west. The bay is a continuation of Muscle Ridge Channel northward of Fisherman Island Passage. The channel through Owls Head Bay is very narrow on the western side of Sheep Island between Sheep Island Bar and **Hendrickson Point,** where the width is only 85 yards between the 5-fathom curves, and the depth 38 feet. It is marked by two buoys. Vessels caught by fog can anchor in the middle of the bay abreast Monroe Island in depths of 42 to 69 feet.

(349) Small vessels can anchor in the entrance to **Owls Head Harbor,** on the west side of the bay, between **Dodge Point** and the bare ledge 0.2 mile southwestward, in depths of 9 to 24 feet. Anchorage in depths of about 6 feet is available inside, in about the middle of the harbor. A lobster pound and wharf and a fish and lobster wharf with 7 feet reported alongside are on the western shore. Gasoline, diesel fuel, and fishing supplies are available at the southerly wharf; the town float landing is at the end of this wharf. Ice, provisions, and some supplies can be obtained at a general store in the village of **Owls Head.** There is a good firm beach where small boats may be launched from trailers at any stage of tide. There are good roads to the interior.

(350) **Owls Head** is a prominent headland at the northeast entrance to Owls Head Bay and on the south side of the entrance to Rockland Harbor. **Owls Head Light** (44°05'32"N., 69°02'38"W.), 100 feet above the water, is shown from a white tower on the headland; a fog signal is at the light. The light is obscured from 324° to 354° by Monroe Island.

(351) **Emery Island** is a small islet 0.8 mile west of the southerly end of, and on the opposite side of the channel from, Sheep Island. A rock 350 yards eastward of Emery Island is awash at low water; a daybeacon marks the rock. **Dodge Point Ledge,** eastward of Dodge Point, uncovers about 5 feet and is marked by a daybeacon. **Owls Head Ledge,** southeastward of Owls Head and awash at low water, is marked by a buoy.

(352) In West Penobscot Bay, eastward of Monroe Island, the tidal current has velocities up to 0.6 knot at strength. See the Tidal Current Tables for predictions.

(353) **Rockland Harbor**, one of the most important harbors in Penobscot Bay, is on the west shore of West Penobscot Bay between Owls Head on the south and **Jameson Point,** 2.1 miles northwestward, on the north. The harbor offers anchorage for large vessels, but is somewhat exposed to easterly winds. Northeasterly winds raise a heavy sea in the southwestern part of the harbor, but shelter may be found behind the breakwater.

(354) The breakwater extends 0.7 mile southward from Jameson Point. **Rockland Breakwater Light** (44°06'15"N., 69°04'39"W.), 39 feet above the water, is shown from a white square tower attached to a building on a granite pier at the outer end of the breakwater; a fog signal is at the light.

(355) **Rockland**, a city on the western shore of the harbor, has some trade in fish and petroleum products. State diesel-powered mail, freight, automobile, and passenger ferries leave the Rockland Port Terminal in **Lermond Cove** several times daily for North Haven and Vinalhaven.

(356) There are banks, hotels, motels, restaurants, a general hospital, library, shops, churches, and schools in Rockland. The city has many small metal, textile, and woodworking industries, and seafood processing and fruit packing plants. Several seasonal coastal cruising schooners operate out of Rockland, as well as from Rockport and Camden.

Prominent features

(357) The most prominent objects in approaching Rockland Harbor are the radio tower of station WRKD, which is lighted at night, the aerolight at the Knox County Regional Airport, and the radio tower and signal mast at **Rockland Coast Guard Station** on **Crockett Point** (44°06.3'N., 69°06.3'W.). The light on Owls Head and the light at the end of the breakwater are also conspicuous. A large white screen of a drive-in theatre 2.6 miles north of Jameson Point and a radio tower on Benner Hill, about 2 miles westward of Rockland Harbor, are also prominent.

Channels

(358) A federal project provides for an approach channel 18 feet deep and three branch channels 14 feet deep, each with a turning basin, leading to the northern, western, and southwestern parts of the waterfront; see latest editions of the charts for controlling depths. All channels are buoyed.

Anchorages

(359) Two general anchorages, one in the northern part of the harbor and the other in the southern part, and a small-craft anchorage in the western part are available in Rockland Harbor. (See **110.1, 110.4, and 110.32**, chapter 2, for limits and regulations.)

Dangers

(360) Standing westward in the harbor the water shoals gradually toward the wharves.

(361) Several rocks and ledges are in the harbor. The visible ones are **Shag Rock,** on a cluster of bare rocks, 0.3 mile northwestward of Owls Head and marked by a daybeacon; **Lowell Ledge,** a cluster of rocks awash at low water on the south shore of the harbor opposite Jameson Point; and **Seal Ledge,** which uncovers about 5 feet, in the southwest end of the bay and marked by a daybeacon. A buoy marks **Spears Rock,** covered 5 feet, about 300 yards northeastward of Lowell Ledge. Dangerous wrecks are on the south side of the harbor entrance about 0.5 mile northeast of Spears Rock and in the southwest part of the harbor about 200 yards south of Seal Ledge.

Tide

(362) The mean range of tide is 9.7 feet.

Weather, Rockland and vicinity

(363) July is the warmest month in Rockland with an average high of 77°F (25°C) and an average minimum of 56°F (13.3°C). January is the coolest month with an average high of 33°F (0.6°C) and an average minimum of 13°F (-10.6°C). The highest temperature on record for Rockland is 99°F (37.2°C) recorded in August 1944 and again in August 1948 and the lowest temperature on record is -18°F (-27.8°C) recorded in January 1971. Every month has seen temperatures at or below 40°F (4°C) and every month except July and August has recorded temperatures below freezing (0°C).

(364) The average annual precipitation for Rockland is 47.4 inches (1204 mm) with an annual maximum during early winter and a minimum during mid-summer. Precipitation falls on about 340 days each year. The wettest month is November with 5.6 inches (142 mm) and the driest, August, averages only 2.7 inches (69 mm). Snow falls on about 89 days each year and averages about 60 inches (1524 mm) each year. January through March each average greater than a foot (305 mm). One-foot (305 mm) snowfalls in a 24-hour period have occurred in each month December through March. Snow has fallen in every month except June through September. Fog is present on average 63 days each year with a minimum occurrence during mid-winter and a maximum during July and August.

(365) (See page T-1 for **Rockland climatological table**).

Routes

(366) Approaching Rockland Harbor, Rockland Breakwater Light may be steered for on any safe course, using the chart as a guide. Enter the harbor southward of the breakwater light, giving it a berth of 100 yards or more.

(367) **Pilotage** for Rockland Harbor is discussed in this chapter under Pilotage, Penobscot Bay.

Towage

(368) Two small motor launches, used as tugs, are available at Rockland. Tugs up to 1,800 hp are available at all times at Belfast; see Towage, Penobscot Bay, this chapter for details.

Quarantine, customs, immigration, and agricultural quarantine

(369) (See chapter 3, Vessel Arrival Inspections, and appendix for addresses.)

(370) Rockland is a **customs port of entry.**

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

Coast Guard

(372) **Rockland Coast Guard Station** is on the east side of Crockett Point.

(373) **Harbor regulations** can be obtained from the **harbormaster,** whose office is at the municipal landing, 0.5 mile northwest of **Atlantic Point.** The harbormaster monitors VHF-FM channel 16.

Wharves

(374) The Rockland Port District Terminal Wharf, on the west side of Lermond Cove, is the ferry terminal. The wharf is 280 feet long and has a ferry slip, a lift bridge, and ramp; depths of 11 feet are reported alongside. A private light on the wharf operates only upon the approach of a ferry. In addition, there are several private and public wharves and piers on the west side of the harbor that are used by vessels and barges engaged in coastwise shipping. Depths at these facilities are reported to range from about 6 to 14 feet.

Supplies

(375) Gasoline, diesel fuel, water, ice, and marine supplies are available at several of the wharves. Provisions and most supplies are available in town.

Repairs

(376) A commercial fishing corporation has a repair yard with marine railways and cranes up to 50 tons on Atlantic Point. The largest railway can handle vessels up to 225 feet in length, 40-foot beam, 1,200-ton displacement, and 16-foot draft. Hull, engine, and electronic repairs can be made. The nearest port where vessels can be drydocked is Boston. Several boatyards, catering to small craft, are also available in the harbor. Hull, engine,

and electronic repairs can be made. Marine railways up to 75 feet and lifts up to 35 tons are available.

Small-craft facilities

(377) There are three marinas in the harbor. A municipal dock with 6 feet reported alongside its float landing is on the west side of the harbor, about 0.3 mile northwestward of Atlantic Point. Water and electricity are available at the float, and guest moorings are maintained.

Communications

(378) The port has railway freight, bus, truck, and taxi service and microwave telephone communication with North Haven, Vinalhaven, and the inhabited islands off the entrance to Penobscot Bay.

(379) Charter planes are available at two nearby airports for trips to several towns in the bay. The town is a terminus of the Maine Central Railroad which connects with the main line at Brunswick.

(380) **Clam Cove**, on the west side of West Penobscot Bay, about 2 miles northward of Rockland Harbor, is shoal at the head, and is not a good anchorage. The ruins of a stone wharf are on the north side of **Brewster Point,** 1.2 miles north of Jameson Point. **Glen Cove** is a village near the head of the cove.

(381) **Brewster Point Ledge**, extending over 700 yards southeastward from Brewster Point on the south side of the entrance, is awash at high water; a buoy is southeastward of the ledge.

(382) **Ram Island** is a grass-covered rock 400 yards northeastward of Brewster Point. The shoal that extends northeastward from the island is marked by a buoy.

(383) **Rockport Harbor**, on the west side of West Penobscot Bay about 4 miles northward of Rockland Harbor, is a good anchorage for vessels of any size, sheltered from all but southerly winds, and is easy of access. The harbor is about 0.7 mile wide at the entrance between Indian Island and the western shore, and gradually narrows to the head.

(384) **Rockport** is a town at the head of the harbor at the entrance to Goose River. It has schools, churches, medical services, library, motels, restaurants, markets, and shops of all kinds.

Prominent features

(385) **Lowell Rock Light 2** (44°09.8'N., 69°03.6'W.), 25 feet above the water, is shown from a spindle with a triangular red daymark on the south end of **Lowell Rock.** A fairway bell buoy 0.4 mile southeast of the light marks the entrance to the harbor. A large screen of a drive-in theater back of the western shore at the entrance and a clock tower at the head of the harbor are conspicuous. **Beauchamp Point,** the eastern point of Rockport Harbor north of Indian Island, is prominent.

Channel

(386) The entrance is deep and clear with the exception of Porterfield Ledge in the middle of the entrance. The depths in the channel range from over 50 feet in the entrance to 13 feet near the head. Passage is sometimes made by local small craft at high water across the ledge between Indian Island and Beauchamp Point.

Anchorages

(387) Vessels can anchor anywhere between the entrance and a point 1 mile southward of the head, in depths of 42 to 63 feet, soft bottom. Small vessels and motorboats can find anchorage nearer the head.

Dangers

(388) **Porterfield Ledge**, in the middle of the entrance to Rockport Harbor, uncovers several feet at low water; a daybeacon is on the ledge. **Indian Island,** on the eastern side of the entrance, is grassy and marked at its south end by an abandoned lighthouse. An unmarked fish weir is on the west side of the harbor, about 0.3 mile southward of the entrance to Goose River.

(389) **Seal Ledge**, uncovered at low water, on the east side of the harbor about 0.7 mile northward of the light, is marked by a daybeacon.

Routes

(390) Vessels can enter Rockport Harbor on either side of Porterfield Ledge Daybeacon, giving the daybeacon a berth of at least 150 yards. When in the harbor stand northward in midharbor until 0.3 mile from the head, then slightly favor the eastern side.

Supplies

(391) Gasoline, diesel fuel, ice, provisions, and some marine supplies can be obtained in Rockport.

Small-craft facilities

(392) A public float landing, maintained by the town of Rockport, is at the east side of the entrance to Goose River, at the head of the harbor. Depths of 3 feet are reported alongside the float; water is available. The Rockport Yacht Club, close westward, has a float landing with 3 feet reported alongside. There are a number of private wharves in the harbor.

(393) A boatyard, close eastward of the public landing, has a 12-ton mobile hoist and facilities for open or covered winter storage. Depths of 8 to 10 feet are reported alongside the floats. Hull and engine repairs can be made, and gasoline, diesel fuel, water, ice, electricity,

marine supplies, and transient moorings are available. The yard builds boats up to 45 feet long.

(394) A municipal marina park is on the west side of the harbor, about 120 yards west of the boatyard. Transient berths, with depths of 3 to 8 feet reported alongside the floats, are available.

(395) The town **harbormaster** can usually be found at the park. A **speed limit** of 5 mph is enforced in the harbor.

Communications

(396) Local taxi service is available as is through bus service.

(397) **Deadman Point** is about 0.4 mile northeast of Indian Island. **Hog Cove,** on the north side of Deadman Point, has two private piers with float landings. **Hog Cove Ledge** extends about 0.4 mile above Deadman Point and forms the eastern side of the cove. **Goose Rock** is a bare ledge about 0.2 mile north of Hog Cove Ledge. A 12-foot spot 0.4 mile northeast of Deadman Point is marked on the east side by a buoy.

(398) **The Graves**, about 1 mile offshore, midway between the entrance to Rockport and Camden Harbors, is a ledge showing bare rocky heads at high water and a large area that uncovers at low water. A lighted gong buoy is just eastward of The Graves.

(399) **Camden Harbor**, on the west side of West Penobscot Bay about 6 miles north of Rockland Harbor, is the approach to the town of Camden. The harbor is frequented by many yachts and small craft.

(400) **Camden**, the town on the inner harbor, is important as a yachting center and as the homeport of several seasonal cruising schooners. The nearest railway freight point is Rockland. There is a public park and picnic area. Swimming, boat rental, parking, country clubs, banks, churches, hospital, restaurant, and markets and shops of all kinds are available in the town.

Prominent features

(401) The most conspicuous feature seen in entering Camden Harbor is **Mount Battie** (44°13'22"N., 69°04'10"W.), 800 feet high. A small stone memorial tower on the summit shows as a long ridge from off the harbor.

(402) **Curtis Island**, on the southern side of the entrance, is prominent. **Curtis Island Light** (44°12.1'N., 69°02.9'W.), 52 feet above the water, is shown from a white tower on the southeast end of the island.

(403) **Northeast Point**, on the northeast side of the entrance, is marked off its south side by **Northeast Point Light 2** (44°12'31"N., 69°02'47"W.), 20 feet above the water, shown from a white skeleton tower with a red triangular daymark.

Channels

(404) The main channel into the harbor is from southward and is deep and clear; it is marked by a bell buoy at the entrance, and by buoys and Curtis Island Light. The inner harbor, westward of Eaton Point, has depths of about 7.7 to 10 feet in the middle and 4.4 to 6.1 feet along the east and west shores with lesser depths along the north shore. **Northeast Passage**, with a depth of about 19 feet, is a narrow channel leading into Camden Harbor between Northeast Point and Inner Ledges. The deeper water favors the light off Northeast Point. A fairway bell buoy is 0.3 mile northeastward of the entrance to Northeast Passage. This channel is used by local vessels, but should be used with great caution by strangers. The passage between Curtis Island and **Dillingham Point** is shoal and foul. Rocks awash are about 110 yards southwest of the light and about 150 yards northwestward of the island.

Anchorages

(405) The outer harbor is easy of access and affords good anchorage in depths of 13 to 33 feet, soft bottom. The anchorage is eastward of a line from Eaton Point to the buoy northward of Curtis Island. The depths in the outer harbor shoal gradually northward to a depth of 12 feet about 500 yards from the head of **Sherman Cove,** in the northern part of Camden Harbor. Above the 12-foot curve the cove is shoal.

(406) The greater part of the inner harbor west of **Eaton Point** is occupied by small pleasure and fishing craft. There are numerous private and some public moorings.

Dangers

(407) **Northeast Ledge,** consisting of **Inner Ledges** and **Outer Ledges,** is southward of Northeast Point, and constricts the main entrance to Camden Harbor to a width of about 400 yards. The higher parts of Inner and Outer Ledges uncover about 5 feet. The ledges are marked by buoys and a daybeacon.

(408) **Dillingham Ledge**, having a buoy off its east side, is 0.5 mile offshore and 1.3 miles northeast of Camden Harbor.

(409) A shoal extends 80 yards from the north shore off Eaton Point and the shipyard at the entrance of the inner harbor. Ruins of a pier extend about 150 yards southeast from Eaton Point.

(410) The mean range of **tide** is 9.6 feet.

(411) **Ice** sometimes forms in the harbor from January to March, but is not dangerous for vessels in the outer harbor. Westerly winds clear the harbor of ice if it is broken up.

Routes

(412) Entering Camden Harbor by the main channel, vessels can steer for Curtis Island Light on any safe course, taking care to avoid The Graves, until close to the entrance bell buoy, thence select anchorage in the outer harbor, as shown on the chart. If going to the inner harbor, pass 100 yards northeastward of Camden Harbor Buoy 7 and steer for the entrance of the inner harbor, clearing the shoal on the north side off Eaton Point at the entrance to the inner harbor, and haul northward in midharbor.

(413) To enter by Northeast Passage, from the fairway bell buoy, steer for the north end of Curtis Island until close to the buoy at the northerly end of Outer Ledges. Pass northward of this buoy and steer westward between Northeast Point Light 2 and Inner Ledges Daybeacon 3, favoring the light.

Pilotage, Camden Harbor

(414) Pilotage for Camden Harbor is discussed in this chapter. See Pilotage, Penobscot Bay and River, indexed as such.

(415) The town **harbormaster** supervises the moorings and enforces the local regulations; he can be contacted at the town wharf.

Wharves

(416) The town wharf, on the west side of the inner harbor near the head, has two float landings with depths of 8 feet reported alongside. The wharf is used by several excursion schooners which operate along the Maine coast from Camden during the summer. The Camden Yacht Club, about 150 yards southward of the town wharf, has several float landings with depths of 7 feet reported alongside. Water is available at the floats, and guest moorings are maintained by the club in the outer harbor.

(417) A boatyard, close eastward of Eaton Point, has a 125-ton marine railway that can handle craft up to 100 feet and an 18-ton mobile hoist for hull and engine repairs or dry open and covered winter storage. Gasoline, diesel fuel, transient berths with water and electricity, and marine supplies are available.

Small-craft facilities

(418) Most of the facilities are in the inner harbor at Camden. (See the small-craft facilities tabulation on chart 13306 for services and supplies available.)

Communications

(419) Bus, both local and coastal, and taxi service are available, and a number of coastal cruising schooners operate from the harbor on weekly schedules in the summer. The nearest air transportation is at Rockland.

Chart 13305

(420) **Mount Megunticook** (44°14.5'N., 69°04.1'W.), 1,385 feet high, is 2 miles northward from Camden. The mountain shows as a flat-topped peak with a steep shoulder on its southern side.

Chart 13309

(421) **Ducktrap Harbor** is a broad open bight in the west shore of West Penobscot Bay, 5 miles northeastward of Camden Harbor. Good anchorage, sheltered from northerly and westerly winds, is 600 yards from the north shore of the harbor, in depths of 31 to 43 feet, bottom soft in places. **Haddock Ledge,** the only outlying danger, is a rock covered 3 feet about 0.6 mile from the western shore and the same distance southwestward of Spruce Head, the northeast point of the harbor. A buoy is on the southwest side of the ledge. With this exception, danger will be avoided by giving the shore of the harbor a berth of about 500 yards. A bell buoy marks the southern approach to the harbor.

(422) **Lincolnville** is a village at the southwest end of Ducktrap Harbor. A State automobile and passenger ferry operates between Lincolnville and Grindel Point, Islesboro Island. The ferry terminals are marked by private lights. A public float landing, with 3 feet reported alongside, is on the north side of the ferry pier, and a small-craft launching ramp is close northward. The village **harbormaster** can be contacted through the town office. The ferry pier and shed are prominent from offshore. A church with a white spire, 0.5 mile northward of Lincolnville, is conspicuous from the bay. The viaduct of the main coastal highway where it crosses the valley at the head of the harbor is conspicuous.

(423) **Great Spruce Head**, 2 miles northward of Spruce Head, is bold.

(424) **Saturday Cove** is a small cove on the west side of West Penobscot Bay, 9 miles northeastward of Camden harbor. The village of **Northport** is on the south side of the cove. Private float landings are usually maintained near the entrance.

(425) **Temple Heights** is a small summer settlement on the western shore of the northern end of West Penobscot Bay, about 0.5 mile north of Saturday Cove.

(426) **Bayside** is a summer settlement on the southwest side of Penobscot Bay, 2.1 miles north-northwestward of Temple Heights. A red elevated water tank on the hill back of the village is prominent. The wharf has a float landing maintained by the village of Northport. There is reported to be a depth of 5 feet alongside the floats. Water is available at the wharf, and gasoline, oil, provisions, and some marine supplies are obtainable in the

village. A small-craft launching ramp is just northward of the wharf.

(427) **Belfast Bay** and **Passagassawakeag River** empty into the head of Penobscot Bay from northwestward and form the approach to the town of Belfast and village of City Point, about 2 miles above Belfast.

(428) Two **vessel-to-vessel oil transfer anchorage areas** in Penobscot Bay have been designated by the State of Maine, Department of Environmental Protection. One area is 1.8 miles northwest of Islesboro Island within a circle having a diameter of 2 miles, centered in 44°24'15"N., 68°55'25"W. The other area is 2.1 miles northeast of **Turtle Head,** the northernmost point on Islesboro Island, within a circle having a diameter of 1 mile centered in 44°25'00"N., 68°50'43"W.

(429) **Belfast**, a city on the southwest side of Passagassawakeag River at the mouth, has several shoe and clothing factories, food canneries, a frozen foods processing plant, and fish and poultry packing plants. The city has banks, a hospital, library, markets, numerous shops of all kinds, a public park with a pool, motels, and restaurants.

Prominent features

(430) A grain elevator in Belfast and the buildings of the plants along the waterfront are prominent.

Channels

(431) The main channel in Belfast Bay is wide and clear between Steets Ledge and the western shore with depths of 50 feet at the entrance gradually decreasing to 14 feet off the mouth of Goose River. The channel is partially marked by buoys to a point about 0.3 mile below the first bridge, a fixed footbridge. The channel above this point requires local knowledge and is little used except by small craft. It is narrow, crooked, and unmarked, and bares in places at low water.

Anchorages

(432) The bay affords good anchorage, exposed to southeasterly winds, and is easy of access. Good anchorage can be had off the entrance to the river westward of Steets Ledge, in depths of 19 to 28 feet; also in the river south of Goose River in midchannel, or by favoring the western shore, in depths of 11 to 16 feet, soft bottom. Above this point, shoals extend halfway across the harbor from the northeast side and for a short distance below the bridge extend two-thirds of the distance across. Small vessels can anchor about 75 yards off the upper wharves of the city in depths of 10 to 22 feet.

Dangers

(433) **Steets Ledge**, on the north side of Belfast Bay, is an extensive ledge with a least depth of 1 foot, marked by a lighted bell buoy. An abandoned lighthouse also marks the ledge. The passage between the ledge and the north shore should not be used because of shoals to the eastward.

Bridges

(434) The former highway swing bridge crossing the Passagassawakeag River has been converted to a footbridge which has a fixed span with a clearance of 9 feet. U.S. Route 1 highway bridge about 250 yards northwestward has a fixed span with a clearance of 68 feet. About 0.7 mile upstream, a fixed bridge with the center span removed restricts the channel to a width of about 100 feet. An overhead power cable at the bridge has a clearance of 30 feet. About 3 miles above the mouth, the river is crossed by two fixed bridges having clearances of 7 feet. The lower one is a railroad spur bridge, and the upper one a highway bridge.

Tides and currents

(435) The mean range of tide at Belfast is 10 feet. Ice obstructs navigation throughout the river and bay in severe winters. The bay has been frozen over to Islesboro Island.

Routes

(436) Vessels entering Belfast Bay can shape the course to pass anywhere between the bell buoy southward of Steets Ledge and the western shore, then head north-northwestward in midchannel.

Pilotage, Belfast

(437) Pilotage for Belfast is discussed in this chapter under Pilotage, Penobscot Bay (indexed as such).

Towage

(438) Three modern tugs up to 1,800 hp are available at Belfast. They berth at the Marshall Wharf. See Towage, Penobscot Bay, this chapter for details.

Quarantine, customs, immigration, and agricultural quarantine

(439) (See chapter 3, Vessel Arrival Inspections, and appendix for addresses.)

(440) Belfast is a **customs port of entry.**

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

Wharves

(442) Wharves at Belfast include the Stinson Canning Wharf, Maineport Towboats (Marshall Wharf), and the wharf at Belfast Boatyard, adjacent to the towing company wharf. The canning company wharf, used by

fishing vessels, is on the south side of the river just below the footbridge; depths of 8 to 10 feet are reported along its 50-foot northeasterly face. The towage company wharf, about 0.2 mile southeastward, is used primarily for mooring tugs; depths of 15 feet are reported alongside.

(443) The town wharf and float landing, on the southeast side of the towage company wharf, has a depth of 8 feet reported alongside. In July 1984, a breakwater was under construction east of the town wharf. The remainder of the piers and wharves at Belfast are in ruins.

Supplies

(444) Gasoline can be obtained at the town wharf. Provisions and some marine supplies are available in town.

Repairs

(445) The boatyard has a 40-foot marine railway and can make complete hull repairs. There are machine shops in town.

Communications

(446) The Belfast and Moosehead Lake Railroad has a freight terminal at Belfast. The main coastal highway, U.S. Route 1, passes through the town. Taxi and coastal bus services are available.

(447) **Searsport Harbor**, at the head of Penobscot Bay about 4 miles east of Belfast, is a broad bight open to the southward. The town of **Searsport** is at the head of the harbor. The commercial development of the harbor is at **Mack Point,** 1 mile east of Searsport. There is considerable traffic in oil, potatoes, general cargo, and dry bulk commodities.

Prominent features

(448) Three steam cranes, oil tanks on Mack Point, and a spire in the village are conspicuous.

Channels

(449) Natural depths in the main channel of Penobscot Bay provide depths of over 40 feet to within 1 mile of the facilities at Mack Point, thence depths of about 35 feet to a dredged access channel which leads to a turning basin off the facilities. In 1997, the controlling depth was 35 feet in the access channel and in the turning basin except for shoaling to 31 feet along the northwest and west edges.

Anchorages

(450) Good anchorage, used by all classes of vessels, may be had in depths of 18 to 32 feet, soft bottom, sheltered from northerly winds, within a mile southward of Mack Point.

Dangers

(451) **Long Cove Ledge**, covered 1 foot near its southern end, is 400 to 800 yards south of the west end of Mack Point. A lighted bell buoy is off the southeast side of the ledge, and buoys are on the east and west sides of it. A rocky ledge, covered 33 feet and marked with a lighted buoy, is about 2.5 miles south-southwestward of the railroad pier at Mack Point, in the northern section of the Oil Transfer Area.

(452) Ledges make off 0.3 mile from the western shore of the southern half of Sears Island; one of these ledges, **Sears Island Ledge,** is bare at low water. A bell buoy is about 0.5 mile southwest of Sears Island and at the south end of the ledge. Two other buoys mark the limit of the ledge westward of the island.

Routes

(453) The approach to Mack Point piers is between Sears Island and the lighted bell buoy off the southeast side of Long Cove Ledge.

Pilotage, Searsport

(454) Pilotage for Searsport is discussed in this chapter under Pilotage, Penobscot Bay (indexed as such).

Towage

(455) Large vessels require tug assistance in docking at Searsport. Three modern tugs up to 1,800 hp are available at Belfast. See Towage, Penobscot Bay, this chapter for details.

Quarantine, customs, immigration, and agricultural quarantine

(456) (See chapter 3, Vessel Arrival Inspections, and appendix for addresses.)

(457) Belfast is the **customs port of entry** for Searsport.

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

Wharves

(459) There are two deep-water piers on Mack Point; a bulk liquid dock and a dry cargo facility capable of handling bulk, break-bulk and containerized cargoes. Both docks are operated by Sprague Energy, which can be contacted at 207-548-2531 for further details. These facilities have highway connections and are served by the Montreal, Maine and Atlantic Railroad.

(460) The Maine Port Authority Dry Cargo Pier, the larger of the two, is on the southeast end of Mack Point. The pier is a pile-supported concrete structure measuring 801 in length by 100 in width. There are portable hoppers on the dock for the discharge of bulk cargo. The pier has 544 feet of berthing space on the east and

west sides. The east side is dredged to 42 feet at MLW, and can accommodate vessels of up to 750 feet in length and 106 feet beam, up to 80,000 DWT. The west side of the pier is dredged to 32 feet. Warehouses in excess of 30,000 square feet are located on land adjacent to the dock.

(461) The Sprague Energy Liquid Bulk Pier, about 250 feet westward of the dry cargo pier, is 660 feet long and provides 625 feet of berthing space along its easterly side; depths of 36 feet are alongside. Liquid bulk cargoes of chemicals and petroleum products are handled. Vessels can receive bunker C fuel oil at the pier.

(462) At Searsport, west of the entrance to **Mill Brook,** there is a town landing with 4 feet reported alongside the float and pier. A small-craft launching ramp is adjacent to the landing.

Supplies

(463) Gasoline, diesel fuel, and diesel oil are available by tank truck; bunker C fuel oil is available at the C. H. Sprague & Son Co., Searsport pier. Provisions, water, ice, and some marine supplies can be obtained in Searsport.

Repairs

(464) Aboard ship repairs can be handled by a firm in Searsport. There are no marine railways, and the nearest drydocks for large vessels are at Boston.

Communications

(465) Searsport is the ocean terminus for the Montreal, Maine, and Atlantic Railroad. It has connections with the Maine Central Railroad, and the Canadian Pacific and Canadian National Railways. Local taxi service is available and bus service at the main coastal highway, U.S. Route 1, about 0.7 mile from the terminals.

(466) **Long Cove** is eastward of Searsport Harbor between the northwestern shore of Sears Island and Mack Point. The upper half of the cove is shoal, but good anchorage can be selected in the middle just inside the entrance in depths of 10 to 24 feet, sheltered from all but southwesterly winds.

(467) **Sears Island**, eastward of Searsport Harbor and on the west side of the entrance to Stockton Harbor, is high and thickly wooded. A small clearing is on the south end of the island. Sears Island is joined to the mainland by a solid-fill causeway that provides for vehicular and rail access to the island.

(468) **Cape Jellison** is 0.5 mile east of Sears Island and forms the eastern shore of Stockton Harbor. A ledge, the outer part of which uncovers about 5 feet, extends 0.4 mile southward from **Squaw Point,** the southern extremity of Cape Jellison. **Squaw Head** is a wooded islet in the middle of the ledge which is marked by a buoy off its southern end. A buoy is off the shoal making westward from Cape Jellison.

(469) **Stockton Harbor** is between Cape Jellison and Sears Island, westward of the entrance to Penobscot River. It is a secure harbor for vessels of about 22-foot draft or less, and easy of access. The depths shoal gradually from about 22 feet at its southern end to 9 feet about 0.3 mile above the ruins of the old wharves on the east side. Above this the harbor is shoal.

(470) **Stockton Springs** is a village at the head of the harbor. The old wharf is in ruins. The former extensive wharves on the western side of Cape Jellison are in ruins, and only piles remain.

(471) On **Kidder Point,** on the western side of the harbor, is a chemical plant and wharf. In 1970, shipments to and from the plant were by rail, as the wharf, with 10 feet at the head, was in disrepair. The wreck of a barge lies off the east side of the pier some distance inshore from the head. Several tanks and buildings of the plant are conspicuous.

(472) An offshore mooring facility, owned and operated by Delta Chemicals, Inc., consisting of a platform with a mooring dolphin off the south and north ends and several mooring buoys, is in the entrance to Stockton Harbor, about 0.7 mile south-southeastward of Kidder Point. About 200 feet of berthing space with dolphins is available at the facility; depths of 33 feet are reported alongside. Vessels usually moor starboardside-to. Each of the dolphins is marked by a private light.

(473) To enter Stockton Harbor, make the lighted gong buoy about 0.7 mile southward of Sears Island, then head up, setting a midchannel course through the entrance and westward of the buoys off Cape Jellison.

(474) Anchorage can be selected as desired and as charted depths indicate.

(475) **Bagaduce River** empties into the eastern side of East Penobscot Bay near its head. The river is the approach to the town of Castine, on the north side just inside the entrance, and to several smaller settlements farther up.

(476) **Castine Harbor**, at the entrance to the river, has ample depth and is easily entered.

(477) **Castine** is an important summer resort 1 mile eastward of Dice Head Light. The locality is of historical interest, and there are many tablets about the town marking spots of special interest.

(478) The **Maine Maritime Academy** is at Castine. There is no commerce by water except some fishing and much yachting. The town has a hospital, grocery store, restaurants, guest houses, a bank, and other conveniences.

Prominent features

(479) **Dice Head Light** (44°22.9'N., 68°49.2'W.), 27 feet above the water, is shown from a skeleton tower with a red and white diamond-shaped daymark on the point on the north side of the entrance to Bagaduce River. The white stone circular tower of the abandoned lighthouse, above Dice Head Light, is very conspicuous.

(480) The start and finish of the **Annual Maine Retired Skippers Sailing Race,** held in Penobscot Bay on the last Monday in August, is off Dice Head.

Channels

(481) The channel in the river for 5 miles above Castine Harbor is buoyed and is used by small craft. However, at the Narrows the channel is so constricted by rocks in places that navigation is possible at slack water only, on account of the current. It is unsafe for strangers above the Narrows. A fairway bell buoy marks the entrance to the river.

Anchorages

(482) Small craft anchor off the town eastward of the float landings, where there are a number of moorings, but the best anchorage is reported to be in **Bartlett (Smith) Cove,** southeastward of Castine Harbor. The cove has depths of 19 to 58 feet, soft bottom, and shelter can be found there in all winds.

(483) Another small-craft anchorage is in what is locally known as **Hospital Cove** between **Nautilus Island, Holbrook Island,** and **Ram Island** and the northern extremity of Cape Rosier. This cove can be entered from the westward through the channel between Nautilus Island and Holbrook Island. **Nautilus Rock,** in the middle of the entrance, is marked by a buoy. The southwesterly channel, between Ram and Holbrook Islands and Cape Rosier, is unmarked and more difficult. Anchorage, secure in all weather, can be had in good holding ground in 13 to 37 feet in the westerly half of the cove. The holding ground in the channel southeastward of Castine is not good, and the general depth is about 72 feet.

Dangers

(484) **Henry Point** is on the east side of the approach to Bartlett Cove. Dangers to be avoided in the cove are the middle-ground ledge, awash and marked on the east side by a buoy, about 0.5 mile south of Henry Point, and a rock covered 3 feet 300 yards west of **Sheep Island,** near the southern part of the cove. In addition, there are numerous unmarked bare and submerged rocks along the edges of the cove and caution should be exercised.

(485) **Otter Rock Shoal**, awash at low water and marked by a buoy at its south end, extends 0.2 mile off the north shore at the entrance near Dice Head.

(486) **Hosmer Ledge**, a drying ledge on the south side of the channel, extends 0.2 mile off the north end of Cape Rosier about 0.9 mile east of Dice Head Light. A daybeacon is on the ledge.

(487) **Middle Ground**, which uncovers 2 feet and is marked on its west end by a buoy, is off the east side of the channel 1.4 miles above the entrance.

(488) **Trott Ledge**, which uncovers 5 feet and is marked by a buoy, is on the west side of the channel about 1.8 miles above the entrance.

(489) A rocky ledge, covered 4 feet and marked by a buoy, is on the west side of the channel 2.6 miles above the entrance and south of Negro Islands.

(490) Numerous other rocks and ledges, mostly unmarked, are on both sides of the channel above the **Narrows,** a constricted part of the channel about 4.5 miles above the entrance.

Tides and currents

(491) The mean range of tide is 9.7 feet at Castine. The river is usually free from ice at Castine and for some distance above, but in very severe winters the river is entirely closed. Currents of almost 5 knots have been observed at Jones Point, about 4 miles above the entrance.

Routes

(492) Craft entering Castine Harbor will find the eastern shore northward and southward of the entrance is bold and can be followed at a distance of 0.3 mile. Pass close to the fairway bell buoy on either side and, keeping a reasonable distance offshore and south of the buoy marking Otter Rock Shoal, steer into the harbor on a midchannel course. By close attention to the chart, anchorage can be found in Bartlett Cove about 200 to 500 yards south of Henry Point, or for small craft south of Sheep Island near the head of the cove, taking care to avoid the charted dangerous rock previously mentioned.

(493) There are no commercial facilities in Castine Harbor. The Maine Maritime Academy, at the western end of the Castine waterfront, maintains an excellent wharf with 26 feet alongside at which the large training vessel moors.

Small-craft facilities

(494) The town wharf and float landing, just eastward of the Academy wharf, has 12 feet reported alongside. A boatyard is 150 yards northeast of the town wharf. A 20-ton marine railway at the yard can handle craft up to 45 feet long for hull or engine repairs or dry open and

covered winter storage; gasoline, diesel fuel, water, ice, and some marine supplies are available.

(495) Castine Yacht Club, about 100 yards eastward of the boatyard, has a depth of 8 feet reported alongside its float landing. The stone foundation of an old stone pier is between the shore and the northeast end of the yacht club float; care should be taken to avoid it in coming alongside.

(496) **West Brooksville** is a village on the south side of the river 1.5 miles above Castine Harbor, and **North Castine** is a village on the west side 2 miles above Castine.

(497) **North Brooksville** is a village on the southern branch of Bagaduce River, about 6 miles above Castine, At high water, small boats sometimes go to the bridge crossing the river at the village, but the channel is unmarked and unsafe for strangers.

(498) **Penobscot** is a village on **Northern Bay** at the head of navigation on the north branch of the Bagaduce River, 6.5 miles above Castine. The approach to the village is bare at low water.

(499) **Penobscot River**, emptying into the head of Penobscot Bay, forms the approach to the towns of Bucksport, Winterport, and the cities of Bangor and Brewer; the last two are at the head of navigation about 24 miles above Fort Point Light at the entrance. The deepest draft ordinarily trading to Bangor is about 16 feet.

Channels

(500) In June 1997, the controlling depth was 19 feet in the dredged section through Frankfort Flats; thence in 1993, the natural channel depths were 15 feet to South Brewer, thence 5 feet in the channel to the Bangor waterfront. The channel is marked by buoys, daybeacons, and a lighted buoy to a point about 1.5 miles below South Brewer.

Caution

(501) Deep-draft vessels bound for Bucksport should exercise caution above Fort Point as depths of 31 and 32 feet are in midchannel, about 0.5 mile eastward of Sandy Point. A rocky ledge, covered 34 feet, also in midchannel, is about 0.25 mile southwestward of Odom Ledge Daybeacon. A shoal, covered 31 feet, is about 0.2 mile southwest of Odom Ledge Daybeacon in about 44°30'48"N., 68°48'16"W.

(502) The most difficult sections for vessels are off Lawrence and Luce Coves where it is difficult to mark the best water and off Frankfort Flats where large vessels experience difficulty with the sharp turns.

(503) The channel in Penobscot River is crooked and narrow in places, and frequent changes occur. Strangers should not attempt to carry drafts greater than 10 feet to Bangor at low water. With a deeper draft a pilot or towboat should be used; 14 to 18 feet is carried to Bangor and Brewer at high water, and deeper drafts occasionally to the oil berth at South Brewer. The safest time is on a rising tide. Navigation of the river at night is extremely dangerous due to lack of lighted navigational aids. After unusually high tides many logs, dangerous to small craft, are in the river. At times of maximum ebb currents, buoys are occasionally pulled under. The paragraphs describing the river give the simplest directions by pointing out the difficulties and the dangers and especially the need for local knowledge. The chart and the aids must be carefully followed.

Dangers

(504) An unmarked 16-foot spot is about 0.3 mile southeast of Squaw Head. **Fort Point Ledge**, 0.3 to 0.6 mile southward of Fort Point Light, uncovers about 5 feet. A light marks the ledge.

(505) **Odom Ledge**, a drying ledge in the middle of the main channel 2.7 miles above Fort Point, is marked by a daybeacon on a square stone base on the highest point of the ledge and by a buoy off the southwest side.

(506) Vessels drawing 30 feet or more should exercise caution when proceeding between Fort Point and Odom Ledge; see Caution, Penobscot River.

Anchorages

(507) The usual anchorage for coastal vessels waiting at the river entrance for passage upstream is northward of Fort Point on either side of the channel. Anchorage in the river is not advised because vessels tend to drag anchor on strong ebb tides. Larger vessels usually anchor south of the point, or off Searsport Harbor and start up the river about 1 to 3 hours after low water.

(508) **Morse Cove**, on the east side at the entrance to the river, is sometimes used by pleasure boats for temporary anchorage in depths of 8 to 18 feet, soft bottom.

(509) **Fort Point Cove**, on the west side of the river northward of Fort Point, is used frequently as an anchorage. The depths are from 23 to 5 feet, shoaling gradually westward. A State park is on the south side of the cove. Seasonal dockage with 12 feet reported alongside is available at a 200-foot pier at the park. It is reported that this mooring becomes very rough in a north wind.

Tides and currents

(510) The mean range of tide varies from 10.3 feet at Fort Point to 13.1 feet at Bangor. For predictions for a number of places on the river, see the Tide Tables. Currents

of 3 knots are not unusual from Odom Ledge to Orrington, and during spring runoff, currents reported to exceed 5 knots may be encountered. Because of these currents, larger vessels should use caution navigating the river. Passage up the river is more advisable during flood current.

(511) **Ice** impedes but usually does not prevent navigation above Winterport for nearly 5 months each year, beginning about the end of November. During extreme winters the river is closed to the mouth. The most difficult place below Winterport is abreast Fort Knox, where ice jams occur. If vessels can pass this point they usually can go to Winterport. The river is kept open by an ice breaker, which prevents much of the damage that might otherwise be caused by ice and freshets.

(512) Freshets occur in the river during March and April; at times they are dangerous to vessels.

Pilotage, Penobscot River

(513) Pilotage for Penobscot River is discussed in this chapter under Pilotage, Penobscot Bay and River, indexed as such.

Towage

(514) Large vessels bound upriver usually take a tug to assist in making the turns and in docking. Three tugs up to 1,800 hp are available at Belfast. (See Towage, Penobscot Bay, this chapter for details.)

(515) **Fort Point**, on the west side at the entrance to Penobscot River, is partly wooded. **Fort Point Light** (44°28.0'N., 68°48.7'W.), 88 feet above the water, is shown from a white square tower connected to a dwelling on the point; a fog signal is at the light. There are several houses farther back on the north side of the point. A buoy marks the extremity of the shoal extending eastward from the point. Fort Point Light structure is reported to be a good radar target.

(516) About 2.5 miles above Fort Point Light, Penobscot River is divided by **Verona Island** into two channels. The principal channel is on the west side of the island, and the **Eastern Channel (Eastern River)** is on the east side. The channels unite north of Verona Island at the town of Bucksport.

(517) **Orland River**, flowing into Eastern Channel from a northeasterly direction, is a shallow stream navigable for small boats and fishermen at high water to the dam at the village of **Orland,** about 2.2 miles above the mouth. The channel is crooked, unmarked, and bare at low water a little below Orland.

(518) **Sandy Point** is a village on the west bank of Penobscot River about 1 mile above **Sandy Point,** the northern entrance to Fort Point Cove. A large two-story mansion, with three small houses behind, and locally known as **Herseys Retreat,** is on the bluff at Sandy Point and reported to be conspicuous when coming up the river from seaward.

(519) The ruins of a large pier extend east from the sand beach just north of Sandy Point. In July 1984, submerged pilings extended northward about 40 yards from the easternmost visible pilings.

(520) **Verona Park** is a small summer settlement on the west side of Verona Island about 1 mile below Bucksport.

(521) Penobscot River is crossed by U.S. Route 1 highway bridge, about 0.8 mile below the town of Bucksport. The bridge has a fixed span with a clearance of 135 feet. The overhead power cable that crosses the river just above Bucksport has a clearance of 145 feet. U.S. Route 1 highway bridge crosses Eastern Channel eastward of the wharves at Bucksport. The fixed span has a clearance of 19 feet. Only small-boat traffic operates in Eastern Channel. An overhead power cable crossing the channel close eastward of the bridge has a clearance of 42 feet.

(522) **Bucksport**, a town on the east bank of the river 6.5 miles above Fort Point, is the terminus of a branch line of the Maine Central Railroad. Paper manufacture and oil distribution are the principal industries. There are markets, banks, restaurants, lodging, and other conveniences in town.

Quarantine, customs, immigration, and agricultural quarantine

(523) (See chapter 3, Vessel Arrival Inspections, and appendix for addresses.)

(524) Bucksport is a **customs station.**

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

Wharves

(526) There is one deep-draft facility at Bucksport in general use. Most of the other wharves are in ruins with only broken pilings and stone foundations remaining.

(527) The paper mill wharf (44°34.4'N., 68°48.1'W.), on the southeast side of the point just northwest of the town, has about 400 feet of berthing space with depths of 5 to 24 feet reported alongside. It is used principally to load small vessels and barges with paper. An occasional pulp shipment is discharged from oceangoing vessels.

(528) A petroleum handling berth, consisting of nine concrete pile clusters supporting a handling platform, extends from a former railway wharf and provides a 700-foot berth with depths of 35 feet alongside and can accommodate vessels up to 65,000 DWT. A one-foot under-keel clearance is required when alongside Penobscot Bay and River oil facilities.

Small-craft facilities

(529) A public float landing, with depths of 10 feet reported alongside, is about 200 feet east of the petroleum berth. Gasoline, diesel fuel, provisions, marine supplies, and services are available nearby.

(530) **Fort Knox**, a restored fort of imposing appearances across the river from Bucksport, is a State park. **Prospect Ferry** is just above Fort Knox. Nothing remains of the old ferry landing except the stone foundation which uncovers at low water.

(531) **Harriman Cove** is on the east side of Penobscot River, 1.3 miles above Bucksport. It has a prominent tall concrete silo.

(532) **Frankfort Flats**, marked by buoys, are 3 miles above Bucksport. The channel crosses from the east side of the river to the west side at this point, and it is difficult to carry the best water. Frequent changes occur here, and large steamers experience difficulty making the sharp turns without the aid of a tug.

(533) **Marsh River** is a shallow stream flowing into the west side of Penobscot River from a southerly direction just westward of Frankfort Flats. **Frankfort** is a small village on North Branch of the river. The channel in North Branch is bare at low water and full of boulders a little below the village.

(534) **Winterport** is a town on the west bank of Penobscot River about 12 miles above Fort Point. A 270-foot barge, moored 300 feet offshore about 0.3 mile south of the town, with 25 feet alongside and a floating deck height of 8 feet, is used to ship potatoes and frozen foods in foreign trade. A series of conveyors are used to load the vessels; water and electricity are available. A marina and boatyard at the former upper potato wharf has a depth of 15 feet reported alongside. Transient moorings; limited transient berths with electricity and water; and gasoline, diesel fuel, marine supplies, and open or covered storage facilities are available. A 15-ton mobile hoist is available; hull and minor engine repairs can be made.

(535) An overhead power cable with a clearance of 159 feet crosses the river about 3 miles above Winterport.

(536) **Bucks Ledge**, about 3.2 miles above Winterport, is marked by a daybeacon at the center and bares at low water. The ledge extends north and south of the daybeacon.

(537) **South Orrington**, 0.6 mile north of Bucks Ledge daybeacon, has a public launching ramp. The ramp may be inaccessible at low water.

(538) **Hampden**, a small town on the west bank of the river, is 20 miles above Fort Point. The village of **Orrington** is on the east bank opposite Hampden. **East Hampden,** on the west bank 1.5 miles below Bangor, has facilities for small tankers discharging oil. A public launching ramp and float dock are available.

(539) A large paper mill at **South Brewer,** on the east bank about 1 mile below Bangor, has a wharf with depths alongside of 13 feet at the upper end and 15 feet at the lower end; in 1979, the wharf was not being used. Two high brick stacks are prominent from downriver.

(540) **Brewer** is a city on the east bank of the river opposite Bangor. The city has banks, markets, stores of all kinds, motels, restaurants, and other conveniences.

(541) **Bangor** is an important city on the west bank of Penobscot River at the head of navigation. Three fixed highway bridges and a railroad swing bridge connect Bangor with Brewer. The first bridge has a clearance of 74 feet and the second has a clearance of 22 feet. There is no navigation above the third bridge. The river between the second and third bridge is used only to moor small craft. A dam crosses the Penobscot River 1 mile above the fourth bridge.

(542) The principal water traffic to Bangor is in petroleum and asphalt. Most of the river in front of the city has been dredged where necessary to obtain a depth of 14 feet. Considerable shoaling has been reported in some places on the Brewer side. The bottom is rocky with poor holding ground, and there are submerged obstructions and a few rocks with less than 14 feet over them. The city has banks, a library, a general hospital, markets, shops of all kinds, hotels, motels, restaurants, churches, schools, and public parks.

Quarantine, customs, immigration, and agricultural quarantine

(543) (See chapter 3, Vessel Arrival Inspections, and appendix for addresses.)

(544) Bangor is a **customs port of entry.**

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

Wharves

(546) Bangor has three oil wharves and an asphalt wharf with depths of 7 to 14 feet reported alongside.

(547) A public float landing, just below the mouth of Kenduskeag Stream, has a depth of 3 feet reported alongside, but no facilities are available. Gasoline, diesel fuel, provisions, and some marine supplies can be obtained in Bangor.

Communications

(548) The port is served by the freight lines of the Maine Central Railroad and the Montreal, Maine, and Atlantic Railroad, and numerous trunklines. Bus service, both local and coastal, and taxi service are available. The Bangor International Airport is 2 miles west of the city.

(549) **Kenduskeag Stream** empties into the Penobscot River from the westward at the north end of Bangor. A railroad swing bridge with a clearance of 6 feet crosses the stream at the entrance; the swing span is inoperative. Just above the railroad bridge is a fixed highway bridge. There is no navigation on the stream.

Chart 13301

(550) The following is a description of the coast from Muscle Ridge Channel to Georges Islands. Muscle Ridge Channel and Seal Harbor have been described previously in this chapter.

(551) **Norton Island Ledges** are 0.6 to 1.2 miles westward of Whitehead Island (43°58.8'N., 69°07.8'W.). A bare rock is near the southwest end of the ledge, and rocks awash at low water are 600 yards southeastward and southwestward of the bare rock.

(552) **Seavey Ledges**, westward of Norton Island Ledges, have four rocks awash at high water. There is a depth of 5 feet north of the ledges marked by a buoy and another 5-foot depth, unmarked, at the southern end of the ledges, about 300 yards southwestward of the southerly group of three bare rocks.

(553) **Wheeler Bay** and **Clark Cove,** northward of Seavey Ledges, are foul. There are several granite quarries in these coves, but none were operating in 1979. Their wharves have depths that vary from 5 to 8 feet, but are little used. One at the head of Wheeler Bay has a float landing with 4 feet alongside. **Clark Island** is a village on the northwest side of Clark Cove, northward of **Clark Island.** There is an inactive granite quarry with stone wharf on Clark Island. The derricks are conspicuous. The island is joined to the mainland by a causeway.

(554) **Makertown Cove** is on the east side of Wheeler Bay northeastward of **Calf Island.** It has seven fish wharves and a float landing at the entrance with 5 feet alongside. Gasoline and some provisions are available. The cove is difficult to enter without local knowledge.

(555) **Tenants Harbor**, 3 miles westward of Whitehead Light, is an excellent anchorage frequently used as a harbor of refuge by small vessels, and is easy of access. **Southern Island,** on the southern side of the entrance, is marked on its east side by an abandoned lighthouse, a white tower connected to a dwelling. A lighted bell buoy is east of the island. **Northern Island** is on the north side of the entrance. There are depths of 8 to 25 feet in the harbor.

(556) The **anchorage** with most swinging room in Tenants Harbor is halfway from the western ends of Northern and Southern Islands to the stone pier on the north side. Small craft anchor toward the head of the harbor. The bottom is mostly soft mud and good holding ground and shoals gradually westward. The north side of the harbor eastward of the stone pier is clear, while westward of it are spots with depths of 4 to 9 feet. The south side of the harbor abreast the western entrance point of Long Cove should be given a berth of 200 yards because of a ledge covered 2 feet making out into the harbor from the south shore. The harbor is open eastward, and an easterly gale raises a choppy sea in the harbor, but vessels with good ground tackle can ride in safety. It is reported that a strong chop can also develop with a southwest wind, and that craft of 6-foot draft or less can find calm anchorage in Long Cove on the north side of the harbor. Ice often obstructs the harbor during February; during extremely cold weather it is sometimes frozen to Southern Island.

(557) Vessels entering Tenants Harbor can pass midway between Southern and Northern Islands and steer **268°** into the harbor, slightly favoring the northern side.

(558) The channel between Southern Island and Hart Neck is shoal and foul with rocks awash at its northwestern end.

(559) The village of **Tenants Harbor** is on the northern shore near the head of the harbor. There are two service facilities and a boatyard along the northern side of the harbor with depths of 4 to 8 feet reported alongside their float landings. The facility adjacent to the town wharf has water, ice, marine supplies, and maintains guest moorings. The boatyard has a marine railway that can handle craft up to 50 feet in length for hull and engine repairs or dry covered or open winter storage. Mariners are advised to avoid taking a direct route from one facility to another, inasmuch as partially bare ledges extend from the shore between the facilities. Lodging is available in the village, and a good road leads to Thomaston.

(560) **Long Cove**, making northward from the entrance to Tenants Harbor, has several stone quarries which are not in operation. A lobster pound and fish pier are on the west side of the cove. Several private float landings are in the cove. The cove is reported to afford excellent anchorage for craft up to 6-foot draft.

(561) The entrance to the cove is about 150 yards west of the southwestern end of Northern Island between reefs partly bare at low water. A buoy marks the east side of the entrance to the cove. A bare rock is on the eastern end of the reef on the western side of the entrance. In September 1982, shoaling was reported in about the center of the cove.

(562) **Hart Ledge** extends nearly 500 yards from shore 0.7 mile southward of Southern Island. A rock awash is near the northeast end of the ledge, and another rock awash at low water is near its southwest end. A buoy is off the northeast side of the ledge.

(563) **Mosquito Harbor**, 2 miles southwest of Tenants Harbor, is shoal and used by a few fishing boats. The landings bare at low water. **Martinsville** is a settlement at the head of the harbor. **Mosquito Head,** on the eastern side of the entrance, is 92 feet high and wooded and looks like an island from a distance.

(564) **Mosquito Island**, off the entrance to Mosquito Harbor, is 60 feet high and wooded. The islets southwestward of Mosquito Island, including **Hay Ledge,** 15 feet high, **The Brothers,** 18 to 20 feet high, and **Gunning Rocks** are rocky with grass on top. Three-foot-high **Black Rock,** 0.6 mile southwest of Gunning Rocks, is bare. **Hart Bar,** extending 0.5 mile northwestward of **Hart Island,** 1.8 miles west of Mosquito Island, is partly awash at low water. There are many unmarked submerged ledges in this vicinity.

(565) The passage south of Mosquito Island and north of these rocks and islands is part of the inside route used by many vessels drawing 12 feet or less. The principal dangers are buoyed, but there are two unmarked rocks including **Barter Shoal** that are covered 14 and 19 feet.

(566) **Old Cilley Ledge**, 1 mile southward of Hart Island, is about 0.5 mile long. The eastern end of the ledge is covered 2 feet, and its western end uncovers 9 feet. A bell buoy is 0.3 mile eastward of the eastern end.

(567) **Marshall Point** is 7 miles southwestward of Whitehead Light and on the east side of the southern entrance to Port Clyde. **Marshall Point Light** (43°55.0'N., 69°15.7'W.), 30 feet above the water, is shown from a white tower; a fog signal is at the light.

(568) **Port Clyde** is a small but excellent harbor and anchorage between Marshall Point and Hupper Island, about 9 miles north-northeastward of Monhegan Island. Fishermen and coasters use it as a harbor of refuge. A bar, with boulders and covered 2 to 6 feet, obstructs the northern entrance. Vessels of 15-foot draft have been taken over this bar at high water by local pilots, but strangers should not attempt it.

(569) The anchorage is anywhere in the channel inside of Marshall Point in depths of 23 to 35 feet, good holding ground; there is a clear width of 200 to 250 yards. Good anchorage is also found, in southerly weather, northward of Hupper Island eastward of a line between Blubber Island and Hupper Point in depths of 21 to 24 feet.

(570) The mean range of **tide** is 8.9 feet.

(571) **Ice** usually does not interfere with navigation. In very severe winters the harbor may be frozen over for a short time.

(572) There are entrances from northward on either side of **Raspberry Island,** a small islet about 20 feet high about in the middle of the northern entrance. The passages on both sides of the island have depths of about 5 feet, but they are narrow and difficult and should not be attempted without local knowledge, except in small craft. The easterly channel is best for strangers in small craft. The best water follows the eastern shore at a distance of about 70 yards and passes eastward of a reef which makes eastward from a small islet.

(573) The village of **Port Clyde,** the base of many fishing boats, is on the eastern side of the harbor. The village has no rail connections, but a highway runs to Thomaston. Fields Wharf, 0.5 mile northward of Marshall Point Light, is used by the ferry which maintains mail, passenger, and freight service with Monhegan Island; gasoline and diesel fuel are available at the wharf. The town float, with depths of 5 to 10 feet reported alongside, and a small-craft launching ramp are just northward of the wharf. There are a number of other wharves in the harbor, some with float landings, with depths of 6 to 18 feet alongside. Numerous other wharves are bare. Gasoline, diesel fuel, water, ice, and some marine supplies can be obtained at some of these facilities.

(574) The town **harbormaster,** usually found at the town float, controls moorings in the harbor and enforces local **harbor regulations.** A **speed limit** of 5 mph is enforced.

(575) A general store, hotel, and restaurant are in the village. A small private boatyard, about 0.4 mile northwestward of Fields Wharf, has a machine shop and a marine railway that can handle craft up to 30 feet in length in an emergency only.

(576) **St. George River** entrance is about 9 miles southwestward of Whitehead Island and north-northeastward of Monhegan Island. Marshall Point Light marks the eastern approach, and Franklin Island Light the western. The Georges Islands extend 6 miles south-southwestward from the middle of the entrance, which also is obstructed by numerous ledges and rocks, the most prominent of which are marked. St. George River extends 10 miles in a northeasterly direction to the town of Thomaston, above which it is shallow and of no commercial importance.

(577) The channel depths in the river up to Broad Cove range from about 22 feet to over 80 feet; above this, the depths gradually decrease and the channel narrows to a small stream through extensive flats that bare at low water. From a point about 1 mile below Thomaston, a narrow channel, subject to shoaling, was dredged to a depth of 16 feet. The channel in the upper river is marked by buoys, some of which are uncharted because they are frequently shifted to mark the best water. The sharp bend in the dredged channel near Thomaston is marked by a seasonal light. In June 1984, the controlling depth was 11 feet to the bend at Thomaston, thence 5 feet (11 feet in the right half of the channel) through the bend to the upper wharf just below the

bridge. Local knowledge is required to carry the best water.

(578) Good anchorage for large vessels is found eastward of Caldwell Island in depths of 33 to 53 feet, soft bottom; above this, vessels anchor anywhere in the channel where the depth is not too great, or in Turkey, Maple Juice, Otis, or Broad Coves.

(579) The mean range of the tide at Thomaston is 9.4 feet. Ice closes the river to navigation from December to March in severe winters. In ordinary winters, it is not usually closed entirely for more than 1 month, although ice sufficient to interfere with navigation may be encountered at any time for a period of 3 months.

(580) The approach to the entrance of St. George River has very broken and irregular bottom, with numerous ledges bare and submerged. Strangers should proceed with caution and avoid crossing broken areas where the charted depth does not greatly exceed the draft.

(581) In approaching and entering St. George River no difficulty should be experienced by the navigator closely following the chart and the aids, having due regard for the unmarked dangers, some of which have been described in the preceding paragraphs. The anchorages in the lower river have been described previously. Above the Narrows at Bird Point, there is excellent anchorage near the middle of the river off Otis Cove. Passage in the river above the Narrows should be guided by the chart and the buoys. The safest time is at low water and on a rising tide when the flats are bare.

(582) **Georges Islands** are a group of islands and rocks extending about 6.5 miles south-southwestward from the middle of the entrance to St. George River. The larger islands are in general wooded, and the smaller ones grassy or rocky; there are few prominent landmarks. Several channels lead between the islands; the most important are Davis Strait, the channel between McGee and Seavey Islands, and the channel northwestward of Caldwell Island.

(583) **Old Man Ledge** is the most southerly of the dangers. A lighted whistle buoy is about 0.3 mile south of the ledge. **Old Woman Ledge,** 0.6 mile northward of Old Man Ledge, uncovers 3 feet.

(584) **Burnt Island**, the eastern large island at the south end of Georges Islands, is privately owned, about 160 feet high, wooded, and marked on its summit by a conspicuous lookout tower. At low water there is no passage between Burnt Island and **Little Burnt Island,** just north of the peninsula.

(585) **Georges Harbor** is between **Allen Island,** 0.5 mile west of Burnt Island, and **Benner Island,** off the northwest side of Allen Island. There is a small settlement of fishermen, and small craft sometimes anchor there. The best water is midchannel in entering the thorofare from northeastward. Entering from southwestward favor the south side. In 1966, a submerged mooring cable, suspended above the bottom, was reported extending across Georges Harbor between Allen Island and Benner Island.

(586) **Davis Island**, 0.9 mile northwestward of Burnt Island, is grassy and has two knolls with a saddle between. **Davis Strait** is the passage between Davis Island on the south and **Thompson Island** and other small islands on the north. The two southernmost islets on the north side of Davis Strait are grassy, and the others are wooded. The passage is part of the through route used by many vessels drawing 12 feet or less. It is reported that barges drawing 16 feet use this strait. It has ample depth, but **Griffin Ledge,** in midchannel, has a depth of 10 feet over it. On the south side of the ledge is a buoy, and the channel, which is southeastward of this buoy, is only 75 yards wide.

(587) Between Thompson and Hupper Islands the bottom is very broken, and there are numerous dangers, most of which are marked or visible at some stage of the tide. **The Sisters,** 1.3 miles east of Thompson Island, are two small ledges awash at low water; a buoy is on the northwest side of the ledges. **Old Horse Ledge,** 0.4 mile northwestward of The Sisters, uncovers at low water and is marked by a daybeacon.

(588) **Outer Shag Ledge**, 0.3 mile westward of Old Horse Ledge, uncovers about 5 feet, and **Inner Shag Ledge,** 0.3 mile west of Outer Shag Ledge, is awash at high water. **Kelp Ledges,** 300 yards west of Hupper Island, are awash at low water. **Gig Rock,** 0.6 mile southwest of The Sisters, is covered 7 feet; a bell buoy is off the northwest side of the rock.

(589) **Bar Island**, 0.7 mile west of Hupper Island, is low and grassy. There is ample depth in the channel between Bar Island and **Seavey Island** on the northeast and larger McGee Island on the southwest. Some of the dangers are buoyed, but there are unmarked dangers close to the channel. The passage is used by small boats. **Jenks Ledge,** the most westerly danger off the passage, is awash at low water and is marked by a buoy. A submerged obstruction of unknown depth is about 0.3 mile southwestward of the ledge.

(590) **Deep Cove**, on the eastern shore just north of the northern entrance to Port Clyde, has good anchorage in depths of 21 to 43 feet, soft bottom. A dangerous rock awash is in the north part of the cove, and a 12-foot spot is about 200 yards south. **Caldwell Island** is at the northern end of Georges Islands and the middle of the entrance to St. Georges River.

(591) **Gay Cove** is a shallow and unimportant cove in the eastern shore of Gay Island, the western point at the entrance of the river. It is reportedly sometimes used by yachts.

(592) **Pleasant Point Gut** separates Gay Island from the mainland. Its western part is bare at low water. **Pleasant Point,** a village of fishermen, is along the shore of the mainland. There are several lobster wharves, one of which has a depth of 4 feet alongside; the others are bare or have depths of less than 3 feet alongside. Gasoline, oil, and some supplies can be obtained at the float landing with 6 feet alongside. A private wharf is on **Gay Island** on the south side of the harbor. Local small craft are reported to make passage through the western entrance to the gut about half tide. Strangers should not attempt it.

(593) **Turkey Cove**, on the eastern shore of the river about 1.5 miles above Caldwell Island, has good anchorage in depths of 15 to 27 feet, soft bottom, about midway between the points at the entrance.

(594) **Maple Juice Cove** is a long, shallow cove on the west shore about 2 miles above Caldwell Island. Good anchorage is found at the entrance in depths of 13 to 24 feet.

(595) **Otis Cove**, broad but shallow at its head, is on the eastern shore about 1.7 miles above Turkey Cove. There is good anchorage off the entrance in depths of 20 to 27 feet. There are no wharves.

(596) **Broad Cove**, on the western shore about 4.5 miles above Caldwell Island, is shallow. The village of **Cushing** is near the northern shore. There is a wharf which bares at low water. An aquiculture farm marked by private buoys is in the center of the cove. **Bailey Ledge,** off the southern entrance, is bare at low water and marked on the southeast side by a buoy.

(597) **Watts Cove** is a shallow cove on the eastern shore opposite Broad Cove. The village of **St. George** is at the head of the north arm of the cove.

(598) Abandoned **Fort St. George** is on the east side of the river about 1.5 miles above Broad Cove.

(599) **Thomaston** is a town near the head of navigation on the St. George River. There is no waterborne commerce. Two towers of a cement plant, a large red boatyard building, a church spire at the east end of town, and a railroad bridge across the mouth of Mill River on the east end of the town are conspicuous.

(600) There are two boatyards at Thomaston. Craft up to 150 feet can be built, and hull and engine repairs can be made. Open and covered dry winter storage facilities are also available. The public landing has a float landing with 15 feet reported alongside and a small-craft launching ramp. Gasoline, diesel fuel, water, dry open and covered winter storage, limited marine supplies, and hull and engine repairs are available at marinas on either side of the river just below the bridge. The **harbormaster** can be contacted through the Thomaston Police Department.

(601) St. George River is crossed at Thomaston, above the wharves, by a fixed highway bridge with a clearance of 5 feet; the nearby overhead power and telephone cables have a clearance of 40 feet.

(602) Two fixed bridges, a railroad and a highway bridge, cross the river about 2 miles above the bridge at Thomaston; least clearance is 5 feet. The piles of a former wooden bridge just below the railroad bridge project about 5 feet above the river bottom and form obstructions in the channel. There is little traffic, except for small boats, in this part of the river. The fixed railroad bridge across the mouth of **Mill River,** east of Thomaston, has a clearance of 25 feet for a width of 28 feet.