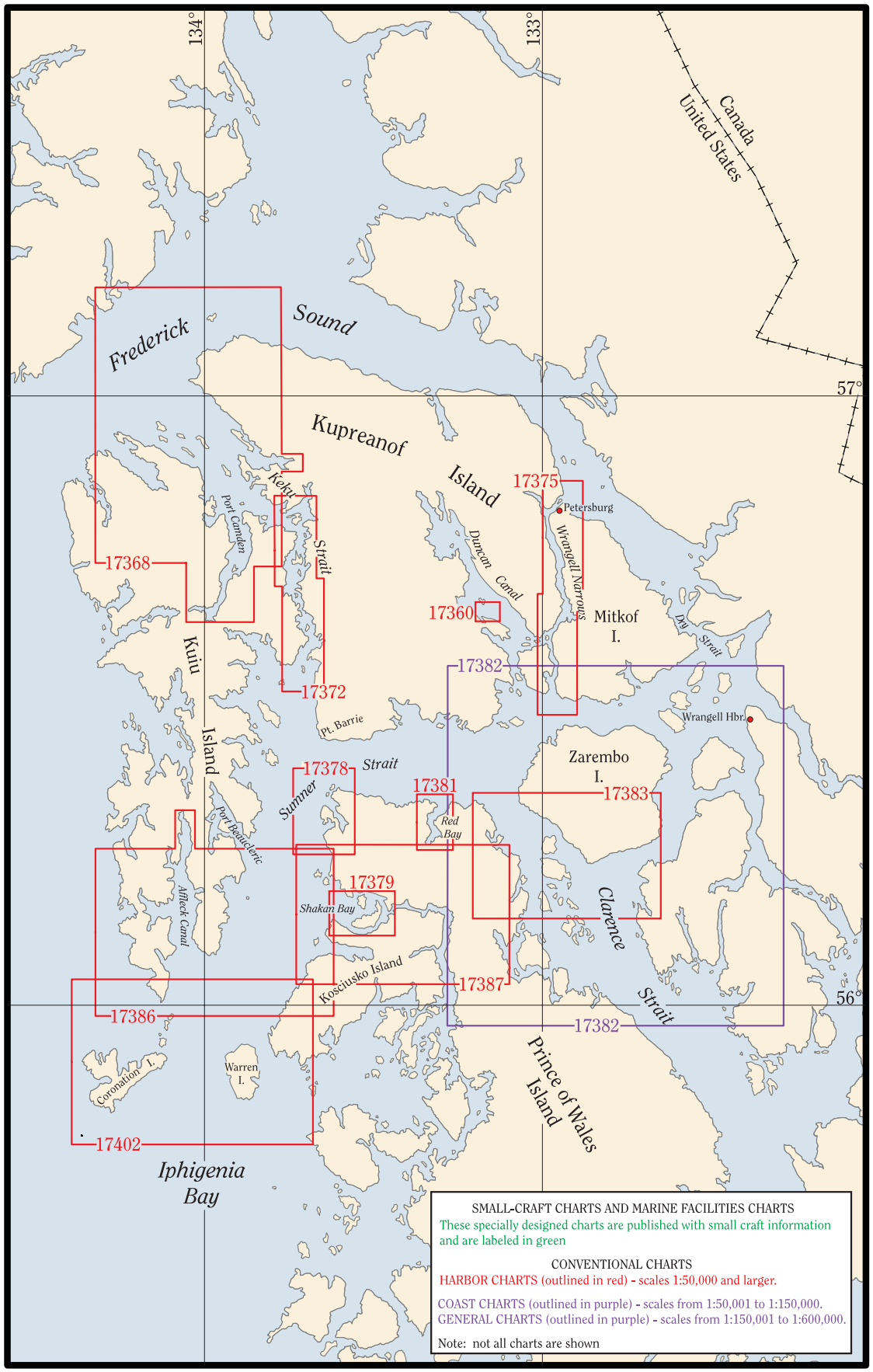
134°
133°
Canada
United States
Frederick
Sound
57°
Kupreanof
Island
Keku
Strait
Port Camden
17375
Petersburg
Duncan Canal
Wrangell Narrows
17368
17360
Mitkof
I.
Dry Strait
Kuiu
Island
17382
17372
Pt. Barrie
Wrangell Hbr.
Zarembo
I.
17378
Strait
17381
17383
Sumner
Red
Bay
Port Beauclerc
17379
Shakan Bay
Clarence
Strait
Affleck Canal
Kosciusko Island
17387
56°
17386
17382
Coronation I.
Warren
I.
Prince of Wales
Island
17402
Iphigenia
Bay
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

Sumner Strait

(1) This chapter describes Iphigenia Bay, Sumner Strait, and the many bays bordering it, the S part of Keku Strait including Rocky Pass, Duncan Canal, Wrangell Narrows, Dry Strait, Stikine River, and the city and harbor of Petersburg.

Charts 17360, 17400

(2) **Sumner Strait** is one of the great inlets into southeastern Alaska from the sea. The strait has three entrances. The main entrance from the sea, between Coronation Island and Warren Island, is about 5.8 miles wide. Warren Channel, the entrance E of Warren Island, between it and Cape Pole, is about 1.2 miles wide and is used by vessels bound to and from Davidson Inlet and Bucareli Bay. Decision Passage, the entrance between Cape Decision and the Spanish Islands, is about 1 mile wide and is used by vessels bound to and from Chatham Strait. These entrances are described under separate headings.

(3) The usual route of vessels bound N from Clarence Strait is by way of Snow Passage or Stikine Strait to Sumner Strait, and thence to Wrangell Narrows. Vessels too large to make the passage through Wrangell Narrows with safety continue W through Sumner Strait, round Cape Decision, and go N through Chatham Strait or W to sea by way of Cape Ommaney. In fog or thick weather, vessels bound around Cape Decision, instead of using the channel N of Spanish Islands, can continue S and round Helm Point, entering Chatham Strait between Hazy Islands and Coronation Island, or pass to sea S of Hazy Islands. Almost all of Sumner Strait has been examined, and the dangers are shown on the chart.

(4) **Voluntary vessel traffic procedures** have been adopted for gillnet vessels and deep-draft vessels transiting the N section of Clarence Strait, Snow Passage, and Sumner Strait in the vicinity of Point Baker. Traffic lanes, about 0.2 mile wide, have been established for these areas as follows:

(5) **328°** from a point in Clarence Strait abeam of Point Stanhope in about 55°59.4'N., 132°39.8'W. to about 56°09.3'N., 132°50.8'W., thence;

(6) **333°** to a point about 56°15.9'N., 132°57.0'W., thence around the E side of Bushy Island to about 56°17.2'N., 132°58.0'W., thence;

(7) **299°** to a point about 56°18.6'N., 133°04.9'W., thence;

(8) **315°** to a point about 56°21.0'N., 133°09.5'W., thence;

(9) **277°** to a point about 56°23.0'N., 133°38.7'W., thence around Point Baker, about midway between Helm Rock and Mariposa Reef to a point about 56°22.5'N., 133°39.9'W., thence;

(10) **204°** to a point abeam of Calder Rocks in about 56°15.1'N., 133°45.7'W.

(11) Cruise ships, ferry vessels, and other deep-draft vessels are requested to observe the following practices:

(12) 1. Announce your presence 30-45 minutes prior to entering the areas and at regular intervals while transiting through the area.

(13) 2. Avoid meeting and do not overtake vessels in Snow Passage.

(14) 3. Travel along indicated tracklines as much as possible and maintain a safe speed.

(15) Gillnet vessels should:

(16) 1. Adequately mark the net end with lights and radar reflectors.

(17) 2. Monitor VHF-FM channels 13 and 16 and listen for broadcasts by deep draft vessels in the area.

(18) 3. Provide for two-way traffic of large vessels along the designated tracklines.

(19) 4. Warn other gillnetters if they appear to be in the lane when there is commercial vessel traffic approaching.

(20) 5. Do not place sleep sets within or adjacent to the shipping lane.

Currents

(21) From the S entrance to Sumner Strait in Iphigenia Bay, the current floods N to the vicinity of Point Baker, where it turns E with an estimated velocity of 2 knots. W of Zarembo Island the current divides. One branch passes through Snow and Kashevarof Passages and meets the flood current from Clarence Strait near Key Reef. The second branch sets N and E of the island until it meets and is overcome by the current from the Stikine River. The ebb sets in generally the opposite

direction with considerably greater velocity. The edge of the current from the Stikine River is well defined by its muddy white appearance. Near the end of the ebb, it is sometimes noticed to be W of Vank Island and S in Chichagof Pass and Stikine Strait. Between Point Baker and Strait Island, the irregularities of the bottom produce heavy swirls and surface disturbances.

(22) The ebb current flows from the vicinity of Wrangell through Sumner Strait and through Stikine Strait and Chichagof Pass to Clarence Strait.

(23) It is reported that strong currents and heavy tide rips occur off Cape Decision, Fairway Island, Point St. Albans, and the small islands to the N.

(24) (See the Tidal Current Tables for daily predictions.)

Weather

(25) The S part of Sumner Strait is most susceptible to strong winds with a S component, whereas the N part is vulnerable to easterlies. These winds blow year round, but are strongest from October through February when gales in the nearby open sea occur about 10 percent of the time and wave heights of 10 feet or more are encountered about 15 to 20 percent of the time; many of these open-ocean waves arrive from SE through SW. Reduced visibility is a problem from June through September. Visibilities of less than 2 miles are encountered 10 to 15 percent of the time, most often in the N part of the Strait.

Chart 17400

(26) **Iphigenia Bay** extends between the Maurelle Islands on the E and Coronation Island on the W, and is the approach from the sea to Sumner Strait, Warren Channel, Davidson Inlet, Bocas de Finas, Sonora, and Arriaga Passages. The depths are generally good, but the bottom is very irregular, and there are several dangers. On the E side of the bay, deep water prevails until within 1.5 miles of a line passing from the NW end of St. Joseph Island to Timbered Islet to Losa Islet, where the depths become irregular.

(27) Vessels bound from the S for Davidson Inlet and Warren Channel should give Timbered Islet a berth of 1 to 1.5 miles; those bound for Sumner Strait should favor the Coronation Island side of the entrance. Those bound for Cape Ommaney can pass between Hazy Islands and Coronation Island on a midchannel course or pass outside of the Hazy Islands, giving them a berth of at least 1 mile.

Charts 17386, 17402

(28) **Warren Island** is almost rectangular in shape, with numerous peaks. **Warren Peak**, near the N end of the island, is snow covered from November to May. From N it shows prominently as a sharp, almost conical peak. From W, the skyline appears as a series of jagged summits; near the S end of the island it appears lower and rounding. From the S, the skyline appears ragged and irregular. The land rises abruptly from the shore and is heavily timbered; the peaks are generally bare.

(29) With the exception of small stretches of sand beach in Warren Cove, False Cove, and in the two small coves in the N coast, the shoreline is a rocky shelf. Off-lying rocks that bare at different stages of the tide are from 50 to 600 yards off the W coast and about 175 yards off the S coast.

(30) Off the S end of Warren Island are three groups of dangerous, rocky, unmarked shoals. The outermost group, about 2.8 miles S of **Boot Point**, does not show but breaks occasionally with a long heavy break at low water. Another group, about 2.7 miles SW of Boot Point, has two rocks awash, one of which uncovers 8 feet. The third group, about 1.5 miles SW of the point, has a rocky islet 15 feet high. **Alice Rocks**, with a least depth of 1¾ fathoms, are about 0.3 mile NW of the islet. Between the islet and Boot Point heavy tide rips were observed when the wind was against the current. Broken ground and shoals with a least depth of 2 fathoms were found in this area, and it should be avoided.

(31) **Point Borlase** is an indefinite point at the NW end of Warren Island. **Borlase Rock**, with two rocky heads that uncover 3 feet and generally show as a breaker, is 0.7 mile W of Point Borlase. A group of rocks with a least depth of 2 fathoms is from 1.3 to 1.6 miles S of Borlase Rock and about 0.5 mile offshore. A 6½-fathom spot is about 0.4 mile NE of the N end of Warren Island. A large kelp patch with a depth of 3¾ fathoms is 500 yards off the NW shore of the island about 1.4 miles NE of Point Borlase.

(32) The two small coves in the NW coast of the island close E of Point Borlase offer protection for small craft in SE weather. Anchorage may be had in 4 fathoms, mud bottom.

(33) **Warren Cove** is on the E shore of Warren Island, about 2 miles from the S end. In entering, favor the S shore and give it a berth of at least 300 yards until inside the entrance, thereby avoiding a shoal covered 1½ fathoms that extends about 250 yards N from the S point at the entrance. A rock awash is 250 yards S of the N point at the entrance. Between this rock and the shore is a bare rock. This area is usually kelp-marked. At low water a sand beach extends a considerable distance from the head of the cove. There is a small gravel beach

just inside the entrance on the S side of the cove; the light color of it may often be distinguished at night.

(34) Anchorage may be had in 7 fathoms, sand bottom, in the center of Warren Cove. A heavy swell enters the cove during SE weather. At night, in the approach to the cove from the S, the entrance is not readily picked up, because the headland to the N shows prominently, while that to the S does not, and the entrance to False Cove is easily mistaken for that to Warren Cove.

(35) **False Cove**, the small bight 1.5 miles N of Warren Cove, affords anchorage in depths of 4 to 5 fathoms, sand bottom, behind the kelp-marked rocks awash that extend across the N half of the entrance.

Local magnetic disturbance

(36) Differences of as much as 4° from normal variation have been observed in False Cove.

(37) **Warren Channel** leads between Warren Island and **Kosciusko Island** to the E. No outlying dangers were found in the channel proper, which has depths of 17 to more than 100 fathoms. Numerous islets and rocks above water extend about 2.8 miles S from the SW point of Kosciusko Island; **Black Rock**, the southernmost, is 50 feet high and pointed on top. **Cape Pole** is the W point of Kosciusko Island. In July 1975, a rock awash was reported S of Black Rock in about 55°52'00"N., 133°45'41"W.

(38) The tidal currents set N on the flood and S on the ebb. The currents have a velocity of 1.4 knots on the flood and 2.4 knots on the ebb. Heavy tide rips form NW of the entrance to Pole Anchorage.

(39) **Halibut Harbor**, on the S side of Kosciusko Island, E of its SW point, is protected by numerous islands and affords anchorage for small vessels in 16 fathoms. The entrance is foul, and only those with local knowledge should attempt to enter.

(40) **Coronation Island**, W of Warren Island, is triangular in shape, divided into three peninsulas by Windy Bay on the W side and Aats Bay on the N side, the heads of which are separated by a range 1 mile in the center of the island. From offshore, the NE peninsula shows heavily wooded ridges of moderate slopes, but without characteristics of interest to the navigator. The W and N sides of the island are described with Chatham Strait.

(41) The S end of Coronation Island appears from offshore to the W as timbered ridges with gentle slopes from **Needle Peak**, in the center of the island, to Helm Point, where they terminate in yellow and reddish cliffs. The summit of Needle Peak is not very definite and appears flat with a series of sharp knobs of a grayish color.

(42) **Windy Peak**, on the NW side of Windy Bay, is prominent. From the W and SW it shows as a cone marked by a large landslide. From the NW and S it shows as a flat-topped mountain with a small knob on the W end.

(43) **Pin Peak**, on the NW end of the island, is easily recognized as a long ridge covered with trees and shrubs. Near the S part of the ridge is a conspicuous knob or point. The ridge for several hundred feet below the summit is loose rock, without vegetation, and shows as light yellow from a W direction. The peak is not conspicuous from a N direction, because it shows against higher peaks to the S. From the summit the ridge has a rounding slope to the depression between it and Windy Peak. To the N the slope is gradual and drops in a long hollow or concave shoulder to a height of 900 feet, where there is an abrupt and noticeable change to a steep slope that ends at the shoreline.

(44) **Helm Point**, perhaps the most conspicuous and prominent headland in southeastern Alaska, is the S extremity of Coronation Island. Differing from most of the capes and points in this section, which have moderate slopes, it rises vertically in sheer weather-beaten cliffs to a height of 1,085 feet and ends abruptly in what appears to be flat tableland. The point is cut by numerous crevices and caves, one of which shows prominently from the S. Devoid of vegetation, of a light yellow to reddish color, barren and bleak, it is the nesting place of thousands of sea birds. Local conditions are such that it is generally visible in moderately thick weather when other sections are not visible. In approaching Helm Point in thick weather, the soundings give very little indication of shoaling or the existence of rocks. Two rocks, awash at half tide, and a reported 5-fathom shoal, are 1.4 miles 240°, and 0.4 mile SE, respectively, from Helm Point Light.

(45) **Helm Point Light** (55°49'36"N., 134°16'12"W.), 140 feet (42.7 m) above the water, is shown from a skeleton tower with a red and white diamond-shaped daymark on the S extremity of a point about 0.4 mile ENE of Helm Point. This point has the appearance of a dome-shaped grassy islet that is prominent from NE and SW. The light marks the W side of the entrance to Sumner Strait.

(46) **China Cove**, just N of Helm Point Light, is an open bight into which a heavy swell enters in SE weather. The sandy bottom slopes gently, and anchorage may be had in 5 to 10 fathoms.

(47) From Helm Point to Cora Point, the coastline is marked by ledges and cliffs. Rocks extend about 600 yards offshore.

(48) **Cora Point** is the extremity of a projecting ledge at the NE end of Coronation Island. **Cora Island**, a small wooded islet about 0.7 mile S of Cora Point, is about 170 feet high and has a cluster of rocks close-to. A clump of trees on the island shows prominently from

the direction of Helm Point. Small craft may find protected anchorage in SE weather behind the island, in 6 fathoms, mud and gravel bottom.

(49) The **Spanish Islands** are a chain of wooded islands and rocks that extend N from the NE extremity of Coronation Island in the direction of Cape Decision. At its NE end, the S large island has a wooded summit that shows prominently from the W. A small rocky islet with a scrub growth is 0.3 mile off the W shore.

(50) A submerged rock is about 1.6 miles WNW of the NW end of the southernmost of the Spanish Islands. During severe weather the seas pile up heavily. Rocks awash and submerged rocks extend up to 0.2 mile off the E side of the N island.

(51) A narrow 20-fathom channel separates Coronation Island and the S Spanish Island. The chart shows the dangers, and courses can be laid out as desired. Tide rips are usually very heavy in this channel.

(52) A channel 120 yards wide with depths of 8 to 12 fathoms is between the S large Spanish Island and the small islet off its N end. Between this small islet and the small islet to the NE of it is a narrow channel with depths of 8 to 9 fathoms. Small craft sometimes anchor in 8 to 14 fathoms in the bight formed by these islets and the middle island.

(53) The middle island has an elevation of 370 feet near its N end, with a moderate slope to the S. From offshore it appears as a flat ridge. A rocky islet, 35 feet high, is 0.3 mile off the E side of the island near its S end. Broken ground and submerged rocks are between this islet and the middle island.

(54) **Spanish Islands Light** (55°59'13"N., 134°06'17"W.), 38 feet (11.6 m) above the water, is shown from a skeleton tower with a red and white diamond-shaped daymark on the N extremity of the northernmost of the Spanish Islands. The light marks the SE side of Decision Passage.

(55) **Cape Decision**, the S extremity of Kuiu Island, is a low, bare, rocky point, from which the land rises gradually to an irregular, timbered ridge. It stands out well when approached from a direction to pass through the passage between it and the Spanish Islands. Avoid the large kelp patches 1.5 and 2 miles NW from the cape and about 0.8 mile off the Kuiu Island shore.

(56) **Cape Decision Light** (56°00.1'N., 134°08.2'W.), 96 feet above the water, is shown from a white square tower on a white square building at the S end of the cape.

(57) **Decision Passage**, 1 mile wide between Cape Decision and the Spanish Islands, is used by large vessels bound from Sumner Strait to Chatham Strait or Cape Ommaney. The passage is clear; however, the cape and the islands should be given a berth of not less than 0.2 mile. Vessels rounding the cape are cautioned to give this area sufficient berth.

(58) The large body of water to the W of the Spanish Islands and to the N of Coronation Island has been closely surveyed, and all dangers found are shown on the chart. After prolonged severe gales, very heavy breakers have been seen on spots where the shoalest water was found.

Charts 17360, 17386, 17402

(59) This section covers the W side of Sumner Strait from Cape Decision to the S entrance to Keku Strait. From Iphigenia Bay to Strait Island, Sumner Strait follows a N direction, and at Strait Island it turns E to its junction with Stikine Strait near the town of Wrangell.

(60) The W side of Sumner Strait between Cape Decision and Keku Strait is indented with many inlets and bays, and has many islets, rocks, and reefs that extend from 1 to 2 miles off the main shore into the strait. Lighted buoys mark the outermost dangers.

(61) **Fairway Island** (56°02.4'N., 134°03.1'W.), small and wooded, is on the W side of the S end of Sumner Strait about 3.6 miles NE of Cape Decision Light. It is surrounded by kelp, rocks, and reefs, bare at various stages of tide. Two rocks with 6- and 7-foot heights are 0.5 mile S of the island and nearby is another rock that uncovers 10 feet.

(62) **Port McArthur** is about 4.5 miles N of Cape Decision. It is protected at the entrance by a group of islands and reefs, and it affords anchorage that is not secure because large swells run to the head of the bay. For small craft the most secure anchorage is in 4 fathoms behind South Island. In bad weather the landing can be made behind the island, from where an emergency trail leads to Cape Decision Light. In 1968, this trail was reported poorly maintained and difficult to follow. The entrance to Port McArthur leads N and W of North Island and has a clear width of 300 yards between the kelp patches. Freshwater can be had from small streams at the head of the harbor.

(63) **North Island** and **South Island**, at the entrance to Port McArthur, are low and wooded, with surrounding ledges; they are about 0.5 mile apart N and S. Between them is a rocky islet and numerous rocks awash and ledges surrounded by kelp. The passages S of South Island, and between South and North Islands, are shoal and rocky and should not be attempted without local knowledge.

(64) Two large kelp patches are about 0.4 mile and 0.5 mile E and ESE, respectively, from North Island. The S patch has a least depth of 1½ fathoms, and the N patch has a least depth of 3 fathoms.

(65) Kelp patches and an area of foul ground extend to the W and N of North Island for a distance of 0.3 mile. When entering Port McArthur, give this area a good berth.

(66) **Lemon Point,** on the opposite side of the entrance channel, is low and has several bare rocks off it. On the SE and S sides kelp extends a short distance out, and the point should be given a berth of 400 yards in rounding into the port. A rock, covered at half tide, 0.4 mile ENE of the outer bare rock off Lemon Point, is marked by **Lemon Point Rock Light** (56°04'22"N., 134°06'42"W.), 26 feet (7.9 m) above the water and shown from a small house on a pier, with a red triangular daymark on a skeleton tower. The rock is surrounded by kelp and is the only serious danger on the W side of the channel.

(67) To enter Port McArthur, pass N and W of North Island and SE of Lemon Point Rock Light. When the outer rock off Lemon Point is abeam, round the point and keep in midchannel to the anchorage.

(68) The shores of Port McArthur are steep-to; the 5-fathom curve is less than 200 yards off the high water line except at the head of the bay. Anchorage depths are about 16 fathoms with the exception of S of Lemon Point where there is a depth of 12 fathoms.

(69) **Affleck Canal**, the entrance to which is W of Point St. Albans and NW of Fairway Island, is 14 miles long in a N direction. The depths in general are great but very irregular, especially near the shores and at the head of the canal.

(70) **Marble Islet**, named from its formation, marks the W point of the entrance to Affleck Canal. Near it are several small islets.

(71) **Bush Islets**, on the S side of the entrance to Kell Bay, are three in number, and from 10 to 12 feet high. The two N islets are sparsely wooded. The area to the W is foul and covered with thick kelp during the summer.

(72) A dangerous rock, covered 1 fathom, is in Affleck Canal, 1,300 yards 151° from the center of Bush Islets. From this rock a kelp patch extends in a NW direction for about 250 yards.

(73) **Kell Bay** is about 7 miles N of Fairway Island on the W side of Affleck Canal. One mile inside the entrance and about 500 yards off the S shore is a wooded islet 10 feet high; deep water exists between this islet and the S shore of the bay. An area of foul water, marked by thick kelp in the summer, extends for a distance of about 0.4 mile NW from the N end of the islet. Within this area are several rocks and islets, bare from 3 to 15 feet at high water, and, in addition, there are rocks with 2 to 9 feet over them at low water. The N shore of the bay is very broken, with numerous indentations, wooded islets, and rocks.

(74) At the head of the bay are two arms that extend in a NW and SW direction. The NW arm is about 1.5 miles long. Two wooded islands and numerous rocks mark the S side of the entrance. Vessels entering this arm should proceed with caution, favoring the N shore until abreast the largest wooded islet, and then favor the S shore in order to avoid the rocks awash and bare 8 feet at low water, near the N shore. The entrance to the extreme head of the arm is blocked by obstructions that do not permit entry of even small vessels at low tides.

(75) The SW arm is separated from the main body of Kell Bay by three wooded islands. To enter, pass midchannel between the islands and the SW shore, follow the SW shore at a distance of 150 yards until the S point of the W island has passed abeam. Then stand in midchannel, taking care to round the S side of the island at a distance of 200 yards so as to avoid the ledge that extends about 150 yards offshore. Anchorage may be had in 9 to 12 fathoms, soft bottom.

(76) The basin at the head of the SW arm affords excellent anchorage for small craft in depths of 4 to 5 fathoms, soft bottom. The entrance is constricted, being only 30 to 35 yards wide, and vessels entering are advised to proceed with caution keeping close to the W shore, which is abrupt and steep-to.

(77) Affleck Canal is clear E of the small wooded islet, about 10 feet in elevation, about 1 mile N of Kell Bay. There are several rocks in the immediate vicinity of this islet. A lagoon, connected with Affleck Canal at high water, is on the W shore about 2 miles N of Kell Bay.

(78) **Bear Harbor** is on the W side of Affleck Canal, about 4 miles N of Kell Bay. From the entrance to its head, it is about 2 miles long in a NW direction. The harbor has three arms; the E is deep and open to the S; the middle and W arms are sheltered and afford suitable anchorage for small vessels. The approach to these two arms is S of the island at the entrance. The deepest part of the channel, about 5¼ fathoms, is 100 yards off the shore of the island. Favor the shore of this island in entering and navigate with caution. After the E tip of the island is passed abeam by 100 yards, a midchannel course will lead over a ½-fathom spot marked by kelp. This spot is the end of a reef making out from the S shore.

(79) After the entrance is passed, midchannel courses lead into the W arm that is deep except along the S shore near the head.

(80) A midchannel course is followed in the middle arm until about 1 mile from the entrance when the E shore is followed at a distance of about 200 yards. This arm is deep to within 0.5 mile of its head where it shoals gradually to the tidal flats off the mouth of the principal streams that empty into Bear Harbor.

(81) On the W shore of Affleck Canal, about 3 miles N of Bear Harbor, is a grass-topped islet, about 5 feet high. A depth of about 10 fathoms can be carried to about 1 mile S of the head of the canal by favoring the W shore

at all times in order to avoid the extensive kelp patches and shoals in the E side. About 1 mile S of the head of the canal, the E shore is foul and studded with rocks; the foul area extends from 300 to 400 yards offshore.

(82) The two main inlets on the E side of Affleck Canal are not recommended as shelter; the heavy ground swell runs into both, well toward their heads. The entrances of both are free of obstructions. The S inlet, which is about 500 yards long, is about 5.5 miles N of the E entrance point of Affleck Canal. Inside are depths of 5 to 7 fathoms, soft bottom. A group of rocks that bare 7 feet and are surrounded by kelp are about 0.7 mile 232° from the S entrance point of this inlet.

(83) The N inlet about 1 mile further N has an entrance about 350 yards in width, and extends E for about 0.8 mile. Its center has depths of 9 to 12 fathoms. Vessels desiring to enter this inlet should favor the N shore, as a rock that bares 6 feet is about 340 yards inside the entrance and about 70 yards off the S shore.

(84) **Point St. Albans** is about 7.5 miles NE of Cape Decision. Rocks and heavy kelp extend 1.1 miles S, and a 3-fathom spot is 1.8 miles S of the point; heavy tide rips and swirls may be experienced off this extensive kelp patch. Off-lying rocks and reefs extend to a distance of 0.3 mile offshore along the E shore of Affleck Canal to the point opposite Marble Islet.

(85) **Point St. Albans Reef** is an extensive foul area, about 1.6 miles ENE of Point St. Albans. The highest part of this area is a rock awash at high water, in the NW part of the kelp patch. Numerous other rocks bare at various stages of the tide. A lighted whistle buoy, off the E end of the reef, also marks a 6¾-fathom shoal. Vessels should pass to the E of the buoy.

(86) From Point St. Albans to **Point Amelius**, about 7.5 miles to the N, islands and reefs extend offshore to a distance of 1.5 miles. This section of the coast is foul and marked by kelp. A rock awash at low water is in the kelp patch about 2.8 miles NE of Point St. Albans. There are passages between and inside the group of islets located 4 miles N of Point St. Albans. This area is foul, with numerous rocks and kelp patches, and only those with local knowledge should enter. Small vessels may find shelter in the two small bays 3 miles and 4.5 miles N of Point St. Albans. The bays are exposed to the E, and there are shoals off the approaches.

(87) **Amelius Island Shoal**, a rocky shoal with a least depth of 4¼ fathoms, is about 1.8 miles ESE of **Amelius Island**, the outermost islet off Point Amelius. A lighted buoy is on the E side of the shoal. Deep-draft vessels should avoid passing close to the buoy.

(88) The bight W of Point Amelius is exposed to the SE and is used only as a temporary anchorage. **Louise Cove**, on its W side near the head, affords anchorage for small vessels in 3½ fathoms.

(89) An isolated 3¼-fathom shoal is about 2.5 miles N of Amelius Island and about 0.3 mile offshore.

(90) **Port Beauclerc** is a large arm on the W side of Sumner Strait, the entrance to which is about 11 miles N of Point St. Albans and 10 miles WSW of Point Baker. **Beauclerc Island**, small and wooded, is off the middle of the entrance, with a wooded islet close N of it.

(91) **Beauclerc Island Light** (56°15'27"N., 133°51'16"W.), 30 feet (9.1 m) above the water, is shown from a skeleton tower with a red and white diamond-shaped daymark on a rock on the E side of the island. A reef extends 300 yards E from the small wooded islet.

(92) The narrow passage S of **Edwards Island** is clear and deep in midchannel. The E shore of the cove, NW of Edwards Island, is formed by a small island with a very small islet off its N end. The entrance to the cove is N of the islet.

(93) There is anchorage, exposed to the S, in the bight on the E shore, 3 miles from the entrance to Port Beauclerc.

(94) Anchorage in Port Beauclerc may be had N of the small island that is about 1.4 miles N of Edwards Island, but the anchorage is obstructed by a large kelp patch, with a depth of 3 fathoms and possibly less, which is 0.7 mile N from the small island. Good anchorage may be found S of Edwards Island in 20 fathoms, sand bottom; enter from the E in midchannel on a course of **278°**. Small-boat anchorage is available in the small cove W of the charted rock awash on the S side of this island, or in the cove on the Kuiu Island side S of the E end of Edwards Island.

(95) Anchorage may also be had in the S arm in 4 or 6 fathoms, mud bottom. Enter by the narrow passage S of Edwards Island and slightly favor the E shore of the arm to avoid a sunken rock, marked by kelp, 1 mile W of the W end of the narrow passage S of Edwards Island. On the E shore of the arm, 1 mile SE from the narrow passage, is a point close to a 3½-fathom spot.

Caution

(96) Where local knowledge is lacking, caution is advised in entering Port Beauclerc.

(97) **Boulder Point**, about 4 miles N from Beauclerc Island, is a bold rounding point with numerous rocks close-to.

(98) **Reid Bay** is on the W side of Sumner Strait, 3 miles N of Boulder Point. It has two islets and several outlying rocks along its NW shore and rocks awash S of the islets in midchannel. Small craft may anchor in the cove on the W side of the peninsula point at the S side of the entrance to the bay in 5 to 6 fathoms, mud bottom. There are dangers off the points at the entrance to this cove, and it should be entered with caution. A

kelp-marked reef with rocks awash is 1.8 miles WSW from the S end of Sumner Island.

(99) **Sumner Island** is 4.3 miles NNE of Boulder Point. It has steep, rocky shores and is surrounded by small rocky islets that extend NW to Kuiu Island and SE from the SE point of the island for about 0.5 mile. Several reefs extend a short distance off the NE shore of the island and should be approached with caution.

(100) **Alvin Bay**, NW of Sumner Island, is clear of dangers except for a depth of 1¾ fathoms in the center near where it starts to narrow. At this point a small islet is on the S side of the bay with a rock between it and the S shore; there are also rocks N of the islet.

(101) To enter, pass N of the islet leaving the detached rocks on the starboard side. Good anchorage may be had inside in 4¼ fathoms, mud bottom. With caution, this entrance can be made easily. The bay is used extensively for anchorage during the fishing season.

(102) **Strait Island** is in the middle of Sumner Strait 3 miles NW of Point Baker. It is divided into two parts at high water, and is low and wooded. **Mariposa Reef**, which partly bares, extends about 0.8 mile S from the island. A lighted bell buoy is about 250 yards off the S end of the reef.

(103) A rock that uncovers at low water is 0.3 mile WNW of the NW tip of Strait Island; it is not marked by kelp, and there are strong currents around it. A shoal covered 2¼ fathoms is 0.35 mile S of this rock, and another shoal area, covered 2¾ fathoms, is about 0.2 mile WSW of the rock.

Charts 17360, 17402

(104) **Warren Channel** to **Point Baker** covers the E shore of Sumner Strait below Strait Island. Shipley Bay, Shakan Bay, Shakan Strait, and Port Protection are the important harbors in this section. The coast is bold and rugged with many off-lying rocks and islets. Calder Rocks and Helm Rock are the principal offshore dangers.

(105) **Voluntary vessel traffic procedures** have been established for gillnet vessels and deep-draft vessels transiting **Sumner Strait** in the vicinity of Point Baker. See the description of Sumner Strait at the beginning of this chapter for designated tracklines and procedures.

(106) **Pole Anchorage**, on the E side of the S end of Sumner Strait, affords an anchorage for small vessels, protected from NE and SE winds; it is exposed to W winds and swells. The SW point of the entrance is a large mass of grassy-topped rocks, about 10 feet high, that extend about 0.6 mile N of **Cape Pole**; the passage between them and the cape has many bare rocks and almost dries. There is considerable kelp for some distance N of the grassy-topped rocks. The N point at the entrance is a wooded islet close to shore; kelp extends some distance NW of it, also about 100 yards W.

(107) Anchorage can be had in 10 to 11 fathoms, mud bottom, with the N end of Warren Island showing about midway between Cape Pole and the grassy-topped rocks. Small fishing vessels may find suitable anchorage SE of Cape Pole, E of a large kelp patch, in any desired depth.

(108) **Fishermans Harbor**, a bight NE of Pole Anchorage, is used extensively by small fishing craft. **Cape Pole** is a settlement at the E side of the harbor. A 60-foot small-craft and seaplane float is operated by a logging camp on the E side of the harbor. In 1976, the reported depth alongside was 18 feet. A T-shaped wharf is on the SW side of the harbor opposite the small-craft and seaplane float. In June 1983, the T-shaped wharf was reported not in use. S of the small-craft and seaplane float are groups of piling used for log storage. Gasoline, water, limited provisions, and a small machine shop are available in an emergency only. A freight boat from Ketchikan visits weekly, and radiotelephone communications are maintained.

(109) **Fishermans Harbor Light** (55°58'01"N., 133°47'43"W.), 17 feet (5.2 m) above the water, is shown from a skeleton tower with a red and white diamond-shaped daymark on the edge of a reef on the SE side of the harbor. A daybeacon is on a reef on the E side of the entrance to the harbor.

(110) To enter Fishermans Harbor at the S end, **steer 149°** heading for Fishermans Harbor Light, being careful to avoid the reefs and a submerged pile on the NE side of the channel in about 55°58'21"N., 133°47'54"W., then haul gradually S, heading for the W side of the float on the E side of the harbor. When abreast of the float, anchor in any desired depth. The channel has a controlling depth of 2½ fathoms about 0.3 mile NW of the light, but deepens gradually when approaching the float.

(111) **Point Hardscrabble**, about 2.2 miles NE of Cape Pole, is not very prominent. Two small islets are about 600 yards W of the point. There are depths of from 4½ to 11 fathoms between the extensive kelp patches that are between the islets and the point. A small cove, 5.5 miles NNE of Cape Pole, affords protection from S weather for small vessels, but is open to N.

Charts 17379, 17386, 17387

(112) **Ruins Point** (56°04.0'N., 133°42.0'W.), 8 miles NNE of Cape Pole (chart 17402), is on the S side of the entrance to Shipley Bay. The point is poorly defined and

has no prominent features. **Finger Shoal** and other foul ground extend about 0.5 mile from the shore in the vicinity.

(113) **Shipley Bay**, entered about 2 miles NE of Ruins Point, has good anchorage available at the head. **Bluff Island**, 200 feet high and wooded, is in the middle of the entrance. The vertical E face is a rookery for sea birds; the W side has gradual slopes. Islets and rocks extend about 0.4 mile from the W extremity of the island.

(114) The S approach to Shipley Bay extends between the S tip of Bluff Island and a tiny islet 0.5 mile N of the S shore. The area between the islet and the S shore is mostly foul, and passage should not be attempted except by small craft with local knowledge. A rock awash at minus tides is 1 mile SE of the S tip of Bluff Island; navigable water extends on all sides of this rock that is surrounded by thick kelp and is easily distinguishable at all stages of tide during summer. From a small wooded islet on the N side of the entrance, foul ground extends for about 0.7 mile SE. This constricts the passage to a width of only about 0.5 mile along the S shore. E of this point, however, the bay is generally clear, although the depths are irregular and there are several rocks 100 to 200 yards off the S shore.

(115) About 4 miles from the entrance, the bay is constricted by a promontory jutting out from the S shore. A small wooded islet surrounded by foul ground is off the point. W of the point is a large bight in which are two islands. Anchorage in 3 to 10 fathoms is available in the bight W of the islands; poor holding ground. Winds are reported to draw with great force through the gap to the S during SE storms.

(116) The best anchorage is near the S shore at the head of the bay, just E of the point 1 mile from the head of the bay, in depths of 15 fathoms, mud bottom, and good holding ground. A small cove just W of the point is suitable for small craft; depths are 3 to 5 fathoms, mud and sand bottom.

(117) Shipley Bay may be entered safely from either side of Bluff Island.

(118) **Shakan Bay** is on the E side of Sumner Strait about 6 miles NNE of Ruins Point. The bay, including Shakan Strait, is circular in shape. Its entrance is between Shakan Island on the S and the Barrier Islands on the N. The center of the bay is almost filled with islands. At the E extremity of Shakan Strait, the bay connects with El Capitan Passage.

(119) The N shore of the bay is foul for about 1.5 miles offshore and should be avoided. The E part of the outer bay is extremely foul.

(120) **The Nipples**, 1 mile SE of Shakan Strait, and Mount Calder, N of the bay and 2 miles NE of Barrier Islands, are good landmarks for the bay.

(121) **Station Island**, off the S point at the entrance, is marked by **Shakan Bay Light** (56°08'57"N., 133°37'33"W.), 25 feet above the water and shown from a small house with a red and white diamond-shaped daymark on a brown skeleton tower on the N side of the island. There are submerged rocks and rocks awash between Station Island and Shakan Island, which is close W.

(122) **Shakan Island**, 0.3 mile W of Station Island, is about 18 feet high and is covered by scrubby trees. A rock awash and a 3-fathom shoal are about 0.2 mile and 1.2 miles, NNW and SW, respectively, of Shakan Island. The area S of the islet and E of the 3-fathom shoal has several detached rocks, all marked by kelp, and other dangers. The chart is the best guide.

(123) **Shakan Strait**, comprising the S part of Shakan Bay, is about 4.6 miles long, averages 0.4 mile in width, and is semicircular in shape. It affords a clear and safe route to El Capitan Passage. The W entrance, marked by a daybeacon on an islet off the SW end of Hamilton Island, is 0.3 mile wide, but between the 5-fathom curves is constricted to about half that, by reefs on both sides. About midway of its length is a 5¼-fathom rocky shoal in midchannel, marked by a buoy, about 0.2 mile E of the daybeacon marking the SE end of Hamilton Island. Off-lying dangers are few, and none is more than 200 yards offshore. A log storage area is along the E shore, 0.5 mile S of the entrance to El Capitan Passage.

(124) **Hamilton Island**, **Middle Island**, **Divide Island**, and **Fontaine Island** are heavily wooded islands in the center of Shakan Bay. Of the several passages between and around them, Shakan Strait is the principal one; the others are used only by small craft with local knowledge. Good anchorage, with mud bottom, in 8 to 9 fathoms, was reported 0.3 mile S of Fontaine Island in about 56°08'36"N., 133°28'33"W.

(125) **Mount Calder**, a sharp conical peak projecting above the dark timbered slopes, is an outstanding landmark. Easily identified by its light-gray color, it can be seen from the entrance to Sumner Strait in clear weather.

(126) **Calder Bay** is on the N side of Shakan Bay N of Middle Island. Depths shoal gradually from about 9 fathoms at its entrance to the tidal flat about 0.6 mile from the entrance.

Local magnetic disturbance

(127) Differences of as much as 6° from the normal variation may be expected in Shakan Strait.

(128) Enter Shakan Bay with Beauclerc Island Light (chart 17360) astern and Shakan Bay Light a little on the starboard bow.

(129) In entering Shakan Strait, favor the N point slightly. When 1.2 miles inside the entrance to the strait, favor the N shore slightly, otherwise follow a midchannel course to the anchorage, about 0.8 mile SSW of the entrance to El Capitan Passage, a distance of 4 miles. Anchor about 0.3 mile offshore in 7 to 9 fathoms, mud bottom.

(130) At night, deep shadows make it difficult to distinguish the entrance to the channel between Hamilton Island and Kosciusko Island. The channel between Divide Island and Middle Island is used by small craft.

(131) **Barrier Islands**, on the N side at the entrance to Shakan Bay, are two islands with numerous rocks and islets around and between them. Both islands are almost level and wooded. A reef extends about 0.7 mile S from the S point of the W island. A rock with 2½ fathoms over it, about 0.7 mile W from that point, is marked on the W side by a lighted bell buoy.

(132) **Calder Rocks** are dangerous kelp-marked reefs off the E shore of Sumner Strait, the southernmost point that is about 2 miles NW of the Barrier Islands. From this southernmost point, which bares 3 feet, the reefs extend 1.2 miles in a N direction with little depths over them and with deep water close-to. A lighted buoy is close W of the N end. There is good passage on each side of Calder Rocks; the E one is generally used by small craft, and the W one is used by larger vessels.

Chart 17378

(133) **Hole in the Wall** (56°15.7'N., 133°38.5'W.) is a small cove on the E side of Sumner Strait, E of Calder Rocks and 2.5 miles N of Barrier Islands (chart 17387). The entrance is through a very narrow passage 0.5 mile long, between high bluffs, and opens into a basin 400 yards in diameter. Two rocks that bare are in the narrow entrance. Depths in the basin are from ½ to 7 fathoms; it may be used for anchorage, but is subject to strong winds drawing through the entrance. The bottom is sand and mud. Small craft pass through the narrow entrance only at half tide or higher water.

(134) **Labouchere Bay** is about 1.8 miles N of the entrance to Hole in the Wall and about 4 miles S of Point Baker. It is studded with islets and rocks, the entrance being partially closed by Labouchere Island and the islands and reefs that extend SE of it to the shore.

(135) There is sheltered anchorage for small vessels just inside the bay on the S side in about 56°17.2'N., 133°39.0'W., in depths of 3 to 21 fathoms, mud and sand bottom. Three detached rocks that cover at half tide are near the head of the anchorage. Small fishing craft anchor SE of the rocks and near the sand beach in 2 to 5 fathoms. The recommended entrance to Labouchere Bay is from the NW. Small fishing vessels may enter Labouchere Bay from the S on a N course, through a channel passing E of the kelp-marked submerged reef at the entrance, 0.5 mile SE of Labouchere Island, and avoiding the large kelp beds on their right.

(136) In 1976, a logging camp was at the cove about 1.7 miles ENE of Labouchere Island. There are a small-craft float, a seaplane float, and log storage in the cove. Water and gasoline are available in an emergency only. A road connects Labouchere Bay with Port Protection. The logging camp maintains radiotelephone communications with the Alaska Loggers Association in Ketchikan.

(137) **Protection Head**, a bold white bluff, 1 mile N of Labouchere Island, is an outstanding landmark visible from the S for many miles.

(138) **Port Protection** has its entrance 1.5 miles S of **Point Baker**, the NW extremity of Prince of Wales Island, and 1.5 miles N of Protection Head. The entrance is marked by **Port Protection Light** (56°19'35"N., 133°36'45"W.), 19 feet (5.8 m) above the water, shown from a pile with a red and white diamond-shaped daymark on the NE end of the wooded island at the SW side of Wooden Wheel Cove, 1 mile inside the entrance, and by a daybeacon on a detached reef, 0.3 mile off the N shore. A ship may enter Port Protection on either side of the daybeacon while being careful to pass the reef at a safe distance. There is good anchorage for large craft 1.8 miles in from the daybeacon and SW of the chain of small wooded islands in the upper half of the bay, in 6 to 18 fathoms, mud and sand bottom. A more sheltered anchorage may be had E of the chain of islands.

(139) To reach the second anchorage, proceed from the first on an ENE course, keeping the two N of the small wooded islands to the NW. Pass close to the tangent of the larger island on the right. Depths in the passage between the islands are 6 to 11 fathoms. Good anchorage in 10 fathoms, mud bottom, is directly ahead and about halfway between the island passed on the right and the E shore of the bay. This is the best shelter in the bay, affording protection in all weather. Small vessels may find anchorage in 5 to 8 fathoms a little farther in.

(140) The shores of Port Protection are usually fringed with kelp, and the soundings, though deep, are irregular and the bottom rocky. Log raft mooring facilities are along the SW shore about 1.2 miles S of Port Protection Light.

(141) **Port Protection** is a small settlement on the NE side of the port in **Wooden Wheel Cove** and S of Port Protection Light. Along the beach are some homes and an abandoned shrimp cannery. A 250-foot State-maintained small-craft float is anchored on the W side of the cove with 4 to 8 fathoms reported

alongside in June 1976. Water is available. Radiotelephone communications are maintained.

(142) **Joe Mace Island** is on the N side of the entrance to Port Protection. **West Rock**, in a cluster of dry rocks and rocks on a reef, is about 300 yards N of Joe Mace Island. The rock is marked by **West Rock Light** (56°21'12"N., 133°38'14"W.), 20 feet (6.1 m) above the water, and shown from a skeleton tower with a red and white diamond-shaped daymark.

(143) **Point Baker** is a settlement with two general stores on the inner bay E of Point Baker and about 0.4 mile S of Point Baker Light. Gasoline, provisions, water, diesel fuel, and fishing supplies can be had at the stores. A State-maintained 391-foot small-craft float with a seaplane float at its end is at Point Baker. In June 1976, depths of 10 to 12 feet were reported alongside. A 45-foot grid is in the mudflats about 60 yards NNW of the float. During the fishing season, a fish-buying scow usually moors at Point Baker. Provisions, fishing supplies, gasoline, diesel fuel, and water are available from the scow. The settlement maintains radiotelephone communications. A freight boat visits weekly from Ketchikan, and charter seaplanes are available from Ketchikan.

(144) The shores of the bay are steep-to and lined with thick kelp. The midchannel passage, with a controlling depth of 2½ fathoms, leads to the float. The inner bay is restricted by several submerged off-lying dangers and is not recommended as an anchorage. This port is used extensively during the fishing season.

(145) **Point Baker Light** (56°21.5'N., 133°37.1'W.), 20 feet above the water, is shown from a skeleton tower with a red and white diamond-shaped daymark on the NW end of the outer island on the E side of the entrance to Point Baker anchorage. **Point Baker Anchorage Daybeacon** is on the E side of the passage about 0.2 mile S of the light. A narrow constricted passage, which extends from the head of Point Baker Harbor into Port Protection, is used considerably by very small craft drawing up to 3 feet at half tide or higher.

(146) **Helm Rock**, covered 2½ fathoms, is about 0.75 mile NNW of West Rock Light and on a line between the S point of Strait Island and Point Baker and 0.8 mile from the latter. A lighted buoy is about 0.2 mile N of the rock. There are usually heavy tide rips and swirls around it. A rocky shoal with 3 fathoms over it is 700 yards NNE of Point Baker. The usual course is midchannel between Point Baker and Strait Island. Small craft frequently pass between Point Baker and Helm Rock to avoid the current and swirls around the rock.

(147) **Merrifield Bay**, 1 mile E of Point Baker, is good anchorage for small vessels in 8 to 10 fathoms, mud bottom, but is open to the N. On the W side at the entrance are several bare rocks, and a little W of the entrance about 0.55 mile E of Point Baker Light is **East Rock**, a large rock, awash at highest tides.

Charts 17360, 17368

(148) **Keku Strait**, marked by lights and daybeacons, connects Summer Strait with Frederick Sound and separates Kuiu Island from Kupreanof Island. The strait consists of three parts: a large bay at the S and N ends, and a narrow, intricate passage, about 18 miles long, known as Rocky Pass, that connects the two bays. The following description covers the S bay and Rocky Pass. The N part is described with Frederick Sound, chapter 8.

(149) The bay forming the S entrance to the strait is very foul, particularly the E and NE shore. Navigation through any part of the bay should be with caution. The entrance to the bay is between Sumner Island and Point Barrie.

(150) In the S bay, anchorage can be had about 300 yards off the E shore, E of Meadow Island. Anchorage can also be had in Threemile Arm, or in the NE part of the bay, E of the entrance to Rocky Pass.

(151) **Point Barrie** forms the E point at the S entrance to Keku Strait. Reefs and shoals extend from 0.5 to 1 mile off the point. **Barrie Island**, 0.9 mile SE of the point, is a wooded island making a good mark for entering Keku Strait from the E. Foul ground extends from the island to the shore.

(152) W and NW of Point Barrie are numerous off-lying rocks, reefs, and islets. **Trouble Island**, 2 miles NNW of Point Barrie, is a prominent wooded islet at the outside edge of the foul area. Small craft with local knowledge can follow an irregular passage through this area, but this should not be attempted when the extensive kelp beds are not showing.

(153) **Conclusion Island** is the large densely wooded island about 4.5 miles WNW of Point Barrie and 3 miles N of Sumner Island; it has several peaks and is generally steep-to.

(154) **No Name Bay**, about 3 miles W of Conclusion Island, is constricted at its head by several wooded islets. Near the head is anchorage suitable for small craft.

(155) **Seclusion Harbor** is a small inlet about 3.5 miles NNW of the W end of Conclusion Island. A chain of islands is E of its entrance.

(156) **Threemile Arm**, N of Seclusion Harbor, makes off to the W at the NW end of the bay. Its entrance is obstructed by rocks. By proceeding with care, vessels can enter passing NE of the islet in the middle of the entrance, and find good protected anchorage in the middle of the arm in 5 to 8 fathoms, soft bottom.

(157) In 1974, a survey revealed a rock awash in the middle of the arm in 56°35'45"N., 133°50'10"W.

(158) **Meadow Island** is a low, wooded island in the E part of the bay, 4 miles N of Point Barrie. The island is used as a fox farm. Foul ground extends 300 yards S and 0.6 mile N of the island.

Chart 17372

(159) **Skiff Island** (56°31.1'N., 133°41.0'W.), on the E side of the bay at the S end of Keku Strait, is low and wooded and is surrounded by rocks and reefs. A small-boat passage is E of the island.

(160) About 1.1 miles WNW of Skiff Island is a small, wooded island, divided at high water. The cut is quite prominent from E and W. The S point of the island is a bold, light-colored cliff, easily identified.

(161) **Monte Carlo Island**, near the center of the bay, is a relatively large, low, wooded islet, 2.5 miles SSW of the entrance to Rocky Pass. It is surrounded by foul ground, particularly to the S, E, and N. Clear of the foul ground to the N, is a passage leading to the W that affords indifferent anchorage in 6 to 7 fathoms, sticky bottom. The small cove on the N side of the island affords anchorage for small craft, but the entrance is difficult because of the numerous rocks and reefs.

(162) **Rocky Pass** has its S entrance about 8 miles N of Point Barrie.

(163) A Federal project provides for a channel dredged to a depth of 5 feet through Devils Elbow and The Summit, the shallowest parts of the pass.

(164) The pass is used by fishing vessels, cannery tenders, and tugs with log rafts. The draft which can be carried through depends on the tide. It is reported that 12 feet can be carried through 40 percent of the time, with a resultant saving of from 30 to 80 miles. Because of strong currents, narrow channel, and sharp turns, it is advisable to make passage at or near high-water slack.

(165) The depths through Rocky Pass are generally shallow, and small craft can anchor practically anywhere with the aid of the chart. Larger craft can enter the S end of the pass for a distance of 2 miles until opposite **Tunehean Creek** and select anchorage according to draft, either to N or S of the midchannel reef off the mouth of the creek. At the N end of Rocky Pass, larger craft can anchor in Big John Bay, Stedman Cove, or in the channel as far S as 1 mile below High Island.

(166) **Devils Elbow**, about 14 miles N of Point Barrie, is the most dangerous part of the pass. The channel here makes a full right-angle turn. It had a controlling depth of 5 feet in April 2001.

Local magnetic disturbance

(167) Differences of as much as 3° from the normal variation have been observed in the Devils Elbow in the vicinity of 50°38'N., 133°41'W.

(168) **Beck Island** is a small island in the center of the pass about 6.5 miles N of the S entrance and about 0.7 mile S of Summit Island. S of Beck Island is **Brown Bear Head Island** with off-lying rocks awash to the S.

(169) **Summit Island**, a relatively large island about halfway through the pass, is at the S end of the most constricted part of the pass, known as The Summit. The island is low and wooded to the high-water mark, with large tide flats about the N and E sides.

(170) **The Summit** is the narrow passage, W and NW of Summit Island, through which a channel has been dredged. The channel had a controlling depth of 3.5 feet (4.1 feet at midchannel) in April 2001. Passage through The Summit should be attempted only with local knowledge.

Local magnetic disturbance

(171) Differences of as much as 4° from normal variation have been observed in Keku Strait, N of The Summit, in the vicinity of 56°42'N., 133°44'W.

(172) **High Island**, about 10.5 miles N of Keku Strait S entrance and 1.8 miles S of Beacon Island, is the largest island in Keku Strait. The W arm of the island has a conspicuous conical peak. Boats awaiting the tide often are off the NW point of this part of the island. Just S of the point are several clusters of mooring piles close-in along the shore, and anchorage in 12 to 18 feet can be secured just NW of the point.

(173) **Beacon Island** marks the turn in the general direction of the pass from N to W. A low-water rocky ledge extends all around the island to the extent of 125 yards E of the island and 200 yards SW of the island.

(174) Passage E of Beacon Island leads into **Big John Bay**, a large bay that extends N and E of Horseshoe Island. Fishing vessels often anchor in the SE arm of Big John Bay in 18 to 24 feet, soft bottom. This anchorage is protected from all directions except NW. The N part of Big John Bay is considered good game country. Entering from the W the channel leads N of Horseshoe Island and between the larger two of the islands W of Horseshoe Island.

(175) **Berry Island**, SW of Horseshoe Island and about 1.2 miles WNW of Beacon Island, is small but quite prominent in the vicinity; the vegetation has a rather distinct shade. The island is on the SW part of a reef that extends about 0.3 mile NE. This reef, which covers at half tide, should be given a wide berth.

(176) **Stedman Cove**, the deep bight in the SW shore of **Horseshoe Island**, affords the best anchorage in the vicinity for small craft; it is well protected from almost every direction, particularly from SE and from N to NW. It is a convenient place to await favorable tidal conditions before proceeding S through the pass.

(177) When entering the cove, care should be taken to avoid the long sandspit that extends about two-thirds the distance across the entrance from the E shore. The point of this spit is usually marked by a pole. Continue beyond the second point along the E shore and anchor in 12 to 18 feet in the inner cove.

(178) **Entrance Island**, a long narrow island marking the N entrance to Rocky Pass, is low and wooded to the high-water line. A low-water ledge extends 225 yards off the S shore of the island. Strong tidal currents run around the N end of Entrance Island, and this area is not very favorable for use as an anchorage. Even the head of the bight NE of Entrance Island is a poor anchorage area, being too exposed.

Tides

(179) The range of tide at The Summit is about the same as at Ketchikan, but the time of tide occurs about ½ hour later than at Ketchikan. In the S and N bays of Keku Strait, the range of tide is about 0.8 of that at Ketchikan, and the time of tide is about the same as at Ketchikan. When proceeding in either direction, it is best to enter Rocky Pass about 1½ to 2 hours before high water. There are many places at each end of Rocky Pass where vessels waiting for the tide can anchor. Strangers should make passage on a rising tide and be careful to remain in the channel because of the many unmarked dangers close to the channel edge. (See the Tide Tables for daily predictions.)

Currents

(180) The flood current enters Keku Strait at both ends and meets in varying places between High Island and The Summit. At the entrance to Rocky Pass the tidal current has a velocity at strength of 0.9 to 1.2 knots.

(181) At Devils Elbow the velocity of current is 1.8 to 2.4 knots, this being the strongest current encountered in the pass. Slack water occurs at practically high and low water. The period of slack at low water lasts only 5 or 10 minutes, and the current attains considerable velocity within a half hour of this time. The high-water slack lasts considerably longer, and passage through Devils Elbow can easily be made within an hour before and after the high-water slack.

(182) At The Summit strong currents set in within 1 hour of high-water slack attaining a velocity of about 2.6 knots. Through The Summit and the passages N of The Summit, the currents are quite variable because of frequent shallow depths and the intricate topography. High-water slack occurs near high water, but the ebb current runs for a considerable time after low water. (See the Tidal Current Tables for daily predictions.)

Chart 17360

Point Baker to Duncan Canal

(183) Point Baker and Helm Rock have been described earlier in this chapter.

(184) In **Buster Bay**, the open bight 6.5 miles E of Point Baker (56°21'N., 133°37'W.), vessels may find anchorage with shelter from S winds in 10 fathoms, sand bottom, about 0.7 mile from shore.

(185) **Totem Bay**, about 10.5 miles NE of Point Baker, is a large indentation on the N shore of Sumner Strait, midway between Point Barrie and Mitchell Point. A reef extends 1.2 miles E from the W point at the entrance. A shoal extends 0.2 mile off the E point at the entrance.

(186) To enter the bay, approach from E, keeping about 1 mile off **Moss Island** and about 0.5 mile off the E point at the entrance. The bay has depths of 7 to 8 fathoms, mud bottom, and is good protection except in S weather. Shoals extend over 0.2 mile from the shores of the bay.

(187) **Shingle Island**, low and wooded, is about 1.5 miles S of the entrance. The bay and its approaches have reefs that extend S of the island and detached submerged rocks.

(188) **The Eye Opener** is a rocky ledge near the middle of Sumner Strait, about 11.7 miles E of Point Baker. It is marked by **The Eye Opener Light** (56°23'09"N., 133°16'36"W.), 28 feet (8.5 m) above the water and shown from a skeleton tower on a brown cylindrical base with a red and white diamond-shaped daymark. A rock with 1 fathom over it, not marked by kelp, and a rock with 5¼ fathoms over it and marked by a buoy, are 0.4 mile SW and 1.8 miles SE, respectively, of the light.

(189) **Douglas Bay** is a bight, open S, about 4 miles N of The Eye Opener and E of Moss Island. It has depths of 5 to 6 fathoms, but is not important as an anchorage.

Chart 17381

(190) **Red Bay** indents the S shore of Sumner Strait, 11 miles E of Point Baker and 3 miles W of Point Colpoys (chart 17360). The chart shows all known dangers. It is used extensively for anchorage during the fishing season.

(191) The entrance is through a narrow and rocky channel about 0.7 mile long, with depths of 1 to 4½ fathoms. The narrowest part of the channel is between the SW

side of Bell Island and a rock awash off the SE end of Danger Island. At about 0.8 mile S of this area, the channel leads between two grassy rocks 13 and 16 feet high, and then W of **Range Islet** (56°18'15"N., 133°19'48"W.), which is wooded. A reef, bare at low water, is about 90 yards NNW from the N end of Range Islet. S of Range Islet the bay is about 2 miles long and 0.4 mile wide, with depths of 3 to 15 fathoms. A rock awash is near the S end of Red Bay in 56°16'52"N., 133°19'08"W., about 1.4 miles S of Range Islet.

(192) **Dead Island**, small and wooded, is close N of Bell Island and forms the E point at the entrance; a reef with bare heads extends 0.2 mile NE of the islet. **Pine Point** forms the NE entrance of the outer bay. **Bell Island** and **Danger Island**, low and wooded, form the E and W sides of the narrow entrance and are separated from the main shore by shallow passes useless for navigation except for a high-water canoe channel behind Bell Island.

(193) Vessels not wishing to enter or waiting for the proper stage of tide may anchor at the entrance to Red Bay in the bight W of Dead Island. Another anchorage is in the middle, NE of Dead Island, in 7 to 10 fathoms, mud bottom. Larger vessels should anchor farther out with more swinging room in 18 to 20 fathoms. Inside the entrance the anchorage most used is the small bay E of **Flat Island** in 4 to 10 fathoms, mud bottom. This is good shelter in all weather. Vessels wishing to go farther into the bay may find anchorage in 5 to 9 fathoms, mud bottom.

(194) Tidal currents in the narrow entrance to the bay have velocities of 3 to 5 knots, with very short intervals of slack at times of high and low water.

(195) About 12 feet is the greatest draft that can be safely carried in at low water. The safest time to enter is at, or shortly before, high-water slack. All dangers are marked by kelp, but it is run under during the strength of the current.

(196) Enter between the bare rock at the NE end of Danger Island and the SW end of Dead Island, favoring the latter, and then favor the W or Danger Island shore until halfway through the passage, when the E or Bell Island shore should be favored to avoid the rock close to the SE point of Danger Island. Bring the E grassy rock in line with the W side of Range Islet, about 0.3 mile S of Flat Island, and steer that range until near the rock, and then pass midway between the two grassy rocks and W of Range Islet. Then follow a midchannel course up the bay and select anchorage as required.

Chart 17360

(197) Two miles E of Red Bay (56°20'N., 133°18'W.) is an open bight, sheltered from S winds, that affords anchorage for vessels of any size in 10 to 15 fathoms, mud bottom, about 0.5 mile offshore. The shore from Pine Point to Point Colpoys is rocky and should not be approached closely.

Chart 17382

(198) **Point Colpoys**, low and wooded, is on the NW side of Clarence Strait where it joins with Sumner Strait. **Point Colpoys Light** (56°20'11"N., 133°11'54"W.), 19 feet (5.8 m) above the water, is shown from a skeleton tower with a red and white diamond-shaped daymark on the point. Irregular bottom extends about 0.3 mile N from the point. A rock, which uncovers 5 feet and is marked by a daybeacon, is 1.2 miles E of the light. Shoals and foul ground extend about 2 miles SE from the rock to Rookery Islands.

(199) **McArthur Reef**, covered 3 fathoms, is about 3.2 miles E of The Eye Opener and 3.6 miles N of Point Colpoys. The reef is marked by a lighted bell buoy.

(200) **Mitchell Point**, on the SE end of Kupreanof Island and about 6.7 miles N of Point Colpoys, is low, level, and rocky. A broad tapering reef, showing considerable kelp, extends about 2.2 miles SE from the point. The extreme outer end of the reef bares; at high water it is usually marked by tide rips. A lighted buoy marks the SSW entrance of the narrow channel leading to the W of Level Islands.

(201) **Level Islands**, heavily wooded, are about 2.5 miles E of Mitchell Point. S of the W island is a small islet surrounded by rocks, and the entire group is surrounded by a shelving ledge and by kelp that extends out nearly 0.5 mile. A pinnacle rock, with 3 fathoms over it, marked by a lighted buoy, is 0.6 mile SE of Level Islands in the direction of Vichnefski Rock. The passage SW and W of Level Islands is foul. A white tower on the N side of the E Level Island is reported obscured by trees from Sumner Strait.

(202) **White Rock** is 1 mile NE of the E end of Level Islands and can be readily recognized by its white appearance and detached position. Several rocks awash are S of White Rock. The outermost, 0.2 mile S, is marked by kelp.

(203) **Kah Sheets Bay**, N of Level Islands, is shoal and has many dangers. Three wooded islands are S of the N entrance point. Small fishing craft frequently anchor W of the S island in 1½ fathoms, mud bottom.

(204) **Vichnefski Rock**, on the SE side of Sumner Strait, about 0.8 mile N of Point St. John, Zarembo Island, is long and bare, and awash at extreme high water. It is marked by **Vichnefski Rock Light** (56°26'18"N., 133°00'56"W.), 33 feet (10.1 m) above the water, is shown from a skeleton tower with red and white

diamond-shaped daymark. SE of Vichnefski Rock are several ledges that partly bare, and the passage between the rock and **Point St. John** should not be attempted except by small craft with local knowledge.

(205) **St. John Harbor**, on the NW side of Zarembo Island and E of Vichnefski Rock Light, is sheltered except from N. **Low Point** and Point St. John, respectively, are to the N and S of the entrance. **Northerly Island** and **Southerly Island** are in the outer part of the harbor. Two large rocks are close to the N side of Northerly Island, and rocks that bare and are marked by kelp are just outside of them. Vessels should enter midway between Northerly Island and Low Point.

(206) Anchorage in about 14 fathoms, mud bottom, can be had midway between the middle of Southerly Island and the first bight in the opposite shore of Zarembo Island. Anchorage in 7 fathoms can be had farther in, but the currents are strong.

(207) Small craft can enter St. John Harbor SW of Northerly Island and Southerly Island, taking care to avoid a rock, awash at half tide, 200 yards SW of the S point of Northerly Island, and a similar rock that is 80 yards S of Southerly Island. A daybeacon is on the point about 1 mile E of Low Point.

Chart 17360

(208) **Duncan Canal** has its entrance 3 miles W of the entrance to Wrangell Narrows. From its head a low marshy valley, sometimes used as a portage, extends to Portage Bay. The soundings in the canal generally are less than 20 fathoms and somewhat irregular. Commercial crabbers and shrimpers operate in the canal.

(209) A daybeacon marks the W side of the entrance to Duncan Canal; a light on Butterworth Island marks the E side.

Anchorages

(210) Several good anchorages were found in Duncan Canal, usually in depths of 8 to 15 fathoms, sticky mud bottom, good holding ground.

Currents

(211) The flood enters Duncan Canal with a velocity of 1 to 2 knots and runs in the direction of its axis, except at the W entrance of Beecher Pass, through which it passes into Wrangell Narrows, causing a crosscurrent in this immediate vicinity. The ebb flows in an opposite direction, and the same crosscurrent, with a W set, is found at Beecher Pass. The flood current has a W set in the vicinity of the rocks that are off the S end of Woewodski Island. Strong tide rips are found at the entrance to the canal.

(212) In 1959 a survey vessel experienced moderate to strong currents in the entrance between Kupreanof and Woewodski Islands, especially near Butterworth Island. Strangers should use caution when navigating this passage. The effect of the current diminishes inside the canal proper, but light to moderate tide rips have been noted in midchannel as far as Indian Point.

Routes

(213) Enter Duncan Canal E of Lung Island, proceed in midchannel W of Butterworth Island, and follow midchannel courses. The known dangers are shown on the chart. Caution is needed in navigating it.

Pilotage

(214) Pilotage, except for certain exempted vessels, is compulsory for all vessels navigating the inside waters of the State of Alaska. The pilot boarding station for Duncan Canal is about 1 mile NW of Guard Islands Light (55°26.8'N., 131°52.9'W.). (See Pilotage, chapter 3, for details.)

Towage

(215) Three 500 hp tugs from Wrangell are available for assistance in docking and undocking vessels at the Alaska Barite Facility in Duncan Canal. Arrangements should be made in advance through ship's agents.

Chart 17382

(216) **Foremost Rock** (56°30.2'N., 133°00.3'W.) uncovers 12 feet and is marked by a daybeacon. It is near the E end of a reef 0.8 mile long off the entrance to Duncan Canal, almost on a line joining White Rock and the W point at the entrance to Wrangell Narrows and about 1 mile from the point.

(217) **Lung Island**, wooded, is on the W side of the entrance to Duncan Canal. A small islet, 25 feet high and wooded, is in midchannel W of Lung Island; each side of this islet has a narrow passage, the W passage being foul.

(218) **Baby Island** is on the E side of the entrance to Duncan Canal, about 1.1 miles ENE of the SE end of Lung Island.

(219) **Butterworth Island**, wooded, is close off the W shore of Woewodski Island and on the E side of Duncan Canal, about 1.5 miles from the entrance. The narrow passage between Butterworth Island and Woewodski Island is navigable for small craft at high water, but is not recommended for strangers.

(220) **Butterworth Island Light 2** (56°32'13"N., 133°04'31"W.), 21 feet (6.4 m) above the water, is shown from a frame structure with a red triangular daymark

on the W side of the island. The light marks the E side of the entrance to Duncan Canal.

Chart 17360

(221) **Woewodski Island** separates the lower part of Duncan Canal from the lower part of Wrangell Narrows, and is separated from Lindenberg Peninsula by Beecher Pass. The island is wooded and mountainous.

(222) **Beecher Pass Light 4** (56°34'47"N., 133°04'28"W.), 15 feet (4.6 m) above the water, is shown from a skeleton tower with a red triangular daymark on the NW point of the island. In the first bight to the S of the light are the buildings of the abandoned **Olympic Mine**. A trail leads inland to **Harvey Lake**. A 4¾-fathom shoal, marked by a buoy on its SW side, and a 3¼-fathom shoal are on the E side of Duncan Canal, about 1 mile and 1.7 miles, respectively, S of Beecher Pass Light.

(223) **Beecher Pass**, 4 miles within the entrance to Duncan Canal, connects the canal with Wrangell Narrows; it is filled with islets and reefs showing much kelp. **Fair Island** is at the W end of the pass. A reef extends about 700 yards in a N direction from the NW end of Woewodski Island, and rocks are off the E end of Fair Island in the middle of the channel to the S of Fair Island. Reefs extend about 250 yards off the N shore of Fair Island, and a rock is about 250 yards E of its E point. All known dangers are charted. The pass is used by tugs with tows and extensively by fishermen and hunters, and is easily navigated with proper caution. Boats may pass either N or S of Fair Island with safety. Depths of about 10 feet can be carried through Beecher Pass to Wrangell Narrows.

(224) To go through Beecher Pass, steer midchannel courses from W until beyond the E end of **Big Saltery Island**, and then with the chart as a guide, favor the S shore until almost abeam of No Thorofare Point.

(225) The bay between Keene Island and Big Saltery Island (see chart 17375) is good shelter and used extensively. A rock, which uncovers at extreme low tide, is about 0.2 mile E of Big Saltery Island in 56°36.0'N., 133°00.0'W. Anchor in 8 to 13 fathoms, mud bottom. Small craft also anchor near the W end of the pass in the small cove on the N side, N of Fair Island in 2 to 3 fathoms.

(226) **Little Duncan Bay**, entering the W shore of Duncan Canal opposite Beecher Pass, about 5 miles from the entrance, is shallow, but affords protected anchorage for small craft. **Emily Island** is a small, wooded islet on the S side of the bay. Foul ground extends in a SE direction from the N point at the entrance.

(227) **Grief Island**, on the E side of Duncan Canal NW of Beecher Pass, must not be approached closely, as foul ground is found close inshore and SW of it. A rock that bares is 1.2 miles 340° from the island.

(228) A rock with a depth of ½ fathom over it, 1.7 miles 323° from the NW point of Grief Island, is marked by a buoy close W. In 1972, a survey revealed a shoal covered 6½ fathoms in 56°38'33"N., 133°09'22.8'W., about 0.6 mile SE of a mooring facility.

(229) **Castle Islands** are a group of small islands, most of them wooded, on the SW side of Duncan Canal, about 9 miles from the entrance. **Castle River** empties into the bight W of the islands. The head of the bight is filled with a mudflat. The entire area is shoal to the W of the Castle Islands from the S end of Big Castle Island, the largest in the group. A shoal covered ¼ fathom is about 2.1 miles NNW of Big Castle Island in 56°41'57"N., 133°12'00"W.

(230) **Mitkof Island**, triangular in shape, is mountainous and wooded at the N and S ends, with a low divide in an E and W direction through the central portion. Wrangell Narrows is to the W and Federick Sound and Dry Strait to the N and E, respectively.

Chart 17382

Wrangell Narrows to Wrangell

(231) **Point Alexander**, the E point of the S entrance to Wrangell Narrows, is marked by **Point Alexander Light** (56°30'33"N., 132°57'01"W.), 17 feet (5.2 m) above the water and shown from a skeleton tower with a red and white diamond-shaped daymark on a reef off the point. **Point Howe**, 4.5 miles to the E of Point Alexander, presents no special features.

(232) **Woodpecker Cove** is a small indentation on the N side of Sumner Strait, close W of Point Howe. It affords anchorage for small craft with protection from Stikine winds.

(233) **Station Island**, about 1.7 miles E from Point Howe, is small and timbered. The shoreline is rocky with cliffs 15 to 30 feet high. **Station Island Light** (56°29'40"N., 132°45'48"W.), 19 feet (5.8 m) above the water, is shown from a square frame structure with a red and white diamond-shaped daymark on a rock off the E side of the island.

(234) **Blind Slough** enters the S end of Mitkof Island about 2 miles NE of Station Island. It has a wooded island at the entrance and another island 1.7 miles inside. The head of the slough divides into several arms. A large stream empties into the E arm. From the head of the slough, low ground extends to Wrangell Narrows. The slough is too shallow to be of use as an anchorage except for small craft, and then local knowledge is desirable. In 1976, there was log storage along the E and N shoreline of the slough.

(235) **Baht Harbor**, on the N shore of Zarembo Island, about 3.5 miles E of Low Point (56°27.1'N., 132°56.9'W.), is a broad, open bight, affording anchorage in SE winds. The anchorage is in the middle of the bight, in 12 to 15 fathoms, about 0.2 mile offshore. At high water, the navigator should not seek less than 15 fathoms.

(236) **Little Baht Harbor**, 1 mile W of Craig Point, affords anchorage for small craft in 11 fathoms, soft bottom, behind a wooded islet and off the mouth of a small creek. There is considerable current at the anchorage, and its use is recommended only in case of emergency.

(237) **Craig Point**, marked by a light, is on the N shore of Zarembo Island, about 2.5 miles E of Baht Harbor.

(238) **Vank Island**, about 2 miles off the NE end of Zarembo Island, is timbered and has two prominent hills. The S shore is marked by cliffs 40 feet high in places; the N shore is low and strewn with rocks. A small church on the N end of the island is visible from N. A light is on Neal Point at the S end of the island. Mud Bay is to the NW of Neal Point. It is deep at the entrance, shoals rapidly, and is not regarded as a favorable anchorage. The bight in the N end of Vank Island at times is used as a small-craft anchorage.

(239) **Two Tree Island**, a small rocky islet off the N end of Vank Island, is marked by a light. A 2-fathom spot is about 1 mile NNW from Two Tree Island. Passage may be made on either side of Vank Island, but the S is preferred.

(240) **Sokolof Island**, NE of Vank Island, is timbered. The center is low and is drained by a stream running W, which empties into a bay used as an anchorage by small boats except during W winds. In 1976, log storage took up most of the bay.

(241) **Wilson Islands** are at the S end of Dry Strait about 2.2 miles N of Sokolof Island. The two low, rocky islands are thickly wooded with spruce.

Chart 17360

(242) **Dry Strait**, mostly bare at low water, affords passage for small craft at high water between the head of Sumner Strait and the head of Frederick Sound. It is extensively used by fishing boats and towboats operating between the towns of Wrangell and Petersburg. The channel requires local knowledge for safe navigation. Boats should attempt the passage only on the upper half of a rising tide. There are no abrupt changes in depth. The water is muddy at all times, and strong currents are experienced in places, 5 knots having been observed at times at Blaquiere Point.

(243) **Dry Strait Light 1** (56°35'02"N., 132°32'33"W.), 29 feet (8.8 m) above the water, is shown from a skeleton tower with a green square daymark on **Blaquiere Point** on the W side of the S entrance to Dry Strait. The channel passes close E of Blaquiere Point and to the W of the small islet 0.9 mile N of the point. A light on the W shore, about 3.5 miles NW of the islet, marks the N end of the shoal water area through the strait.

(244) **Dry Island** and **Farm Island** are on the E side of Dry Strait NNE of Blaquiere Point. Boats should not attempt passage between these islands. A poor channel can be followed at high tide between Farm Island and **Sergief Island** to the S.

(245) **Kadin Island**, about 2.5 miles S of Sergief Island, is 1,810 feet high, and wooded. **Rynda Island** and **Greys Island**, W of Kadin Island, and **Pocket Island** and **Hidden Island**, NW of Dry Island, are within Dry Strait. Fivemile Island, marked by a light, is about 1.8 miles N from the N end of Woronkofski Island and is described with Stikine Strait.

(246) A rock with ¾ fathom over it and a rock awash are about 0.6 mile ENE of **Liesnoi Island**, a small wooded island to the S of Kadin Island.

(247) The **Stikine River** has its source in a small lake in British Columbia near 57°10'N., 128°00'W., and is about 200 miles long. It flows in a SW direction through glaciers and gorges; one of the latter, very narrow and about 30 miles long, is known as the Grand Canyon. The river freezes in the winter, and with the spring freshets the current builds up great force. The river is usually navigable from about May 1 to October 15. The highest water is generally in July. Vessels drawing 3 feet and less navigate the river to Telegraph Creek, B.C., about 143 miles above the mouth.

(248) Stikine River empties by two mouths: one, the N channel, following the mainland W, enters the head of Frederick Sound; the other follows the mainland S and forms the only navigable entrance to the river. The N channel can be navigated only by small craft at high water. The S entrance has a least depth of about 2 feet at mean lower low water. The mean range of tide is about 11½ feet, and the diurnal range is about 14 feet. The channel is from 0.2 to 0.5 mile wide. Tidal effects have been noted for a distance of about 17.4 miles above the mouth.

(249) The Federal project provides for snagging of the Stikine River from its mouth to the Canadian border, a distance of about 26 miles above Gerard Point (56°31'N., 132°20'W.). Snagging operations are made annually by the U.S. Forest Service.

(250) No permanent directions can be given since the channel across the mud flats at the mouth of the river changes with every freshet. Strangers can obtain directions from the masters of the river boats at Wrangell. The channels of the S arm of the Stikine River are followed by experienced boatmen by the appearance of the water. There is a strong S current in the channel. The

water appears to boil in the deeper parts, while over the shoals it runs smoothly and evenly.

Chart 17375

(251) **Wrangell Narrows** extends in a general N direction for 21 miles from near the E end of Sumner Strait to the E part of Frederick Sound. The channel is narrow and intricate in places, between dangerous ledges and flats, and the tidal currents are strong. It is marked by an extensive system of lights, lighted ranges, daybeacons, and buoys that, with the aid of the chart, renders the navigation of the narrows fairly easy for small craft, even without local knowledge. It is safest to enter either end late on a flood tide. Waterborne traffic through the narrows consists of cruise ships, State ferries, barges, and freight boats carrying lumber products, petroleum products, fish and fish products, provisions, and general cargo.

Channels

(252) The Federal project for Wrangell Narrows provides for several dredged sections 24 feet deep through the narrows, except for a dredged section W of Turn Point, that has a project depth of the 27 feet. In March 2003, the controlling depth in the dredged section from Frederick Sound to Lighted Buoy 53 was 19.7 feet (20.8 feet at midchannel); thence in 1993, 23 feet (24 feet on the centerline) to Scow Bay, except for lesser depths along the edges; thence in December 2000-April 2001, 22 feet (24 feet on the centerline) in the dredged section from Lighted Buoy 42 to Light 8; thence in March 2003, 21.7 feet in the dredged section S of Battery Islets. Some of the cuts have a tendency to fill, and considerable maintenance dredging has been required. Once or twice each year exceptionally low tides occur, at which time the water level may fall as much as 4 feet below chart datum.

Currents

(253) The currents enter Wrangell Narrows from both ends on the flood and meet a little S of Green Point (56°42.0'N., 132°57.2'W.). At the N end of the narrows during the turn of the tide on the last of the flood and the first of the ebb, an unexpected current of about 2 knots sets NW directly across the channel. The velocity of the current in the narrows varies from place to place. Off Petersburg the velocity of the current is 3.5 knots. The strongest currents occur off Turn Point and off Spike Rock and South Ledge Light. The velocity of the current at times of strength at these points is between 4 and 5 knots. During spring and tropic tides, velocities of 6 to 7 knots may occur. (See the Tidal Current Tables for daily predictions.)

Ice

(254) Occasionally a few stray pieces of ice from Le Conte Bay (chart 17360) work into Wrangell Narrows as far as Green Point (56°42.0'N., 133°57.2'W.). The pieces are sufficiently large to make them dangerous to navigation.

Routes

(255) Specific courses for Wrangell Narrows would be of little help and could be confusing. The navigator should pay close attention to the chart as the narrows are well marked with aids to navigation that should be closely followed.

(256) In some cases with twin screw vessels, the engines are reversed in order to help make the sharp turns. Inquiry of local pilots showed that they did not use courses in the narrows because of strong currents and sharp turns. In foggy weather vessels come to anchor at either end of the narrows and wait until the fog clears away. The anchorage off Anchor Point, about 8.5 miles above the S entrance, is also available to vessels under the stress of weather.

(257) On the course between **Deception Point** and Point Lockwood, there is a strong tendency to be set to the W with a flood current. At Point Lockwood Rock Light, a sharp turn is necessary and usually the time required to get on course makes it necessary to immediately change to the next course. Commercial vessels make this turn by going hard left and hard right without steadying.

(258) On the course between Burnt Island Reef and South Ledge, there is a tendency to be set to W on the flood.

(259) On the course out of the N end of the narrows during the flood, there was found to be a strong W set especially in the vicinity of Prolewy Rocks.

(260) Low-powered vessels usually enter the narrows on the last of the flood and carry a favorable current all the way through. The currents meet about 8 miles from the N entrance and 12 miles from the S entrance.

(261) Vessels too large to make the passage through Wrangell Narrows safely, continue W through Sumner Strait, round Cape Decision, and go N through Chatham Strait, or W to sea by way of Cape Ommaney. Smaller vessels regularly using Wrangell Narrows sometimes use the longer passage to their advantage when not favored by suitable conditions of tide or daylight in the narrows.

(262) (See **162.255**, chapter 2, for navigation regulations for the Wrangell Narrows.)

(263) **Midway Rock** is about 1.3 miles N of Point Alexander, the E point at the S entrance to Wrangell Narrows, and 400 yards from the E shore. It is low and marked by a light.

(264) Anchorage with protection from N and NE winds can be had near the W shore of the S end of the Narrows W of Midway Rock, in 6 to 12 fathoms, sticky bottom.

(265) **Point Lockwood**, 1.6 miles N of Midway Rock, is marked by a light. A ledge is close to the W shore nearly 0.5 mile above the point. A dangerous flat that bares extends 300 yards off the mouth of a stream on the E shore opposite the ledge.

(266) **Point Lockwood Rock**, covered ¾ fathom, is 200 yards off the W shore, about 0.6 mile N of Point Lockwood. The rock is marked on the NE side, its highest point, by a light. A rock, covered 2¾ fathoms, but with no kelp, and marked by a light, is about 300 yards N of Point Lockwood Rock and the same distance S of the southernmost **Battery Islets**. The main channel leads W of Battery Islets and has a clear width of 100 yards with rocks on both sides. Two lighted buoys mark the edge of the shoal water on the W side of the channel, and on the E side of the channel a light marks the NW edge of the reef off the northernmost islet. The tow channel used by small craft and tows runs E of Battery Islets and is marked by buoys. Dense kelp extends into this channel from both sides.

(267) **Boulder Point**, on the W side of the narrows about 0.4 mile NW of Battery Islets, is marked by a light.

(268) **No Thorofare Point**, on the W side of the channel 5 miles above Point Alexander, is the S point of the E entrance of Beecher Pass. Beecher Pass has been described with Duncan Canal earlier in the chapter.

(269) **Spike Rock**, about 0.6 mile N of No Thorofare Point and 475 yards SE of Keene Island, is close to the W edge of the channel and is marked by kelp in the summer and fall. Uncharted pinnacles were reported in the area of Spike Rock. Mariners are advised to use extreme caution when transiting the area. A lighted channel buoy is close S of the rock. The dredged channel E of the rock is marked by lights, on the E edge, and by a lighted centerline range. Pick up the lighted range promptly when approaching Spike Rock from the N.

(270) **Burnt Island**, small and wooded, is on the W side of the channel about 6.1 miles above Point Alexander. A light marks the end of the rock ledge that extends S from Burnt Island. The E edge of the reef off the N side of the island is marked by a buoy. **Caution** is advised when transiting this area due to the proximity of the ledge to the W channel limit. **Burnt Island Reef** is on the E side of the channel, NE of Burnt Island, and is marked by a light. The dredged channel that leads W of the reef is marked by a lighted range.

(271) **South Ledge**, a reef marked by kelp in the summer and fall, is on the E side of the channel about 7 miles above Point Alexander. The E edge of the channel NW of the ledge is marked by a light. The W edge of the channel is also marked by a light.

(272) **North Ledge** is a bare reef marked by a light on the E side of the channel 0.5 mile N of South Ledge. **North Point** is on the W side of the narrows between North and South Ledges. A reef that extends off the point is marked by a light.

(273) **Bush Top Island**, N of North Ledge, is to the W of the channel. The SE edge of the reef surrounding the island is marked by a light.

(274) **Spruce Point**, low and wooded, is on the E side of the channel opposite Bush Top Island.

(275) **Colorado Reef** is a reef that bares, on the W side of the narrows opposite **Anchor Point**, about 8.5 miles above Point Alexander. A mud flat fills the large bight between Anchor Point and **Blind Point**. A narrow channel, called **Blind Slough**, is navigable for small craft at high tide and leads across the mudflat to the mouth of **Blind River**. A fixed highway bridge with a 38-foot span and a clearance of 6 feet is about 3.5 miles above the entrance to the river.

(276) The winding channel between Anchor Point and Rock Point, about 2.2 miles to the N, is well marked by lights, buoys, and a daybeacon.

(277) The dredged anchorage area, 200 yards wide, is on the W side of the channel NW of Anchor Point. The controlling depth in the anchorage was 26 feet in 1963.

(278) **Vexation Point** is the E point of **Woody Island**, about 9.5 miles N of Point Alexander. The edge of the reef that makes off to the NE of the point is marked by a light. The tow channel, with a reported controlling depth of 10 feet in 1976, passes to the W of the main channel between Anchor Point and Woody Island.

(279) **Danger Point Ledge** is a reef that bares, off **Danger Point** on the E side of the channel opposite Vexation Point. It is marked by a light.

(280) **Green Rocks** are wooded and about 0.8 mile N of Vexation Point. The N end is marked by a daybeacon and S end by a light. The main channel passes E of Green Rocks.

(281) **Papkes Landing**, on the E side of the narrows, about 11 miles N of Point Alexander, is the site of a State-maintained small-craft float. In 1976, the 100-foot-long float had a reported depth of 12 feet alongside. A lumber company bulkhead pier that runs dry at low water is close N of the float. The U.S. Forest Service maintains a log pond and rafting area just N of the pier. A road extends N about 10 miles along the E shore of the narrows from Papkes Landing to Petersburg and SE about 17 miles through Blind Slough to Dry Strait.

(282) **North Flat** is a wide flat that bares, on the E side of the channel, N of Papkes Landing and SE of **Green Point** (56°42.0'N., 133°57.2'W.). **South Flat** is a smaller flat that bares on the opposite side of the channel. The main ship channel between the flats is marked by lights and a lighted buoy.

(283) From the light off Green Point the channel widens to almost the whole width of the narrows, and the water deepens to 15 to 20 fathoms.

(284) A logging company has an 80-foot floating pier on the W side of the narrows about 0.75 mile N of Green Point.

(285) **Mountain Point**, about 2.3 miles N of Green Point, is marked by a light 43 feet above the water.

(286) **Scow Bay**, on the E side of Wrangell Narrows, is about 2 miles below Petersburg and immediately S of Blunt Point. At night, the lights from the community of Scow Bay show prominently on the narrows. A restaurant and lodge are 0.6 mile S of the bay. The small-craft float at the lodge had a reported depth of 12 feet alongside in 1976.

(287) A 300-foot-long lumber wharf, formed by a landfill, is about 0.3 mile SW of Blunt Point. A barge ramp with an adjustable transfer bridge is at the NW end of the wharf; the rest of the wharf is not used to berth vessels. In 1976, depths of 9 feet were reported alongside the barge ramp. There are three acres of open storage for lumber and containers on the wharf, and a 25-ton forklift is available to handle these products.

(288) At **Blunt Point** the channel narrows and boulder patches, marked by kelp, are on either side. A light marks the edge of the reef on the E side of the channel off Blunt Point. The light is most brilliant down channel, diminishing around the rest of the horizon.

(289) At **Turn Point**, about 1.5 miles N of Blunt Point, a shoal extends to NW halfway across the narrows. Frequent dredging is necessary to keep the channel open at this point. The dredged channel is marked by two lighted ranges, lighted buoys, and three lights. The tow channel passes E of the three lights marking the E edge of the bend in the main channel off Turn Point.

(290) **Petersburg Creek**, which empties into the narrows from the W side opposite Turn Point, is navigable for small craft at high tide.

(291) **Bayou Point** is the N point at the entrance to Petersburg Creek. A road extends along the shore behind the point.

(292) **West Petersburg** is a small settlement on the W side of Wrangell Narrows, 1.6 miles inside the entrance opposite Petersburg.

(293) **Prolewy Rocks**, off the W point just inside the N entrance to Wrangell Narrows, are marked by a daybeacon. The tow channel passes NW of the main channel and SE of the daybeacon. A lighted bell buoy marks the N entrance to Wrangell Narrows.

(294) **Petersburg** is a fishing center on Mitkof Island, on the E side of Wrangell Narrows, 1 mile inside the N entrance. The city has two cold storage plants, four canneries, two oil terminals, and a sawmill. Petersburg is the home port of over 300 fishing boats. The deepest draft of a commercial vessel calling at the port in 1976 was 19 feet. Commodities handled at the port include fish and fish products, logs and lumber products, machinery, petroleum and petroleum products, provisions, and general cargo.

Prominent features

(295) A church spire, about 1.2 miles ENE of Turn Point, is conspicuous from seaward.

Channels

(296) A Federal project provides for a depth of 24 feet in the approaches to the existing wharves; a small-craft basin 11 to 15 feet in depth; and a short channel 8 feet deep to the S side of the Whitney-Fidalgo Pier. In May 1993, the project depths were generally available throughout the harbor except for lesser depths along the basin edges.

Anchorages

(297) The harbor affords excellent protection for small craft. Larger vessels may find protected anchorage 0.3 mile S of Scow Bay in 4 to 5 fathoms, mud bottom.

Dangers

(298) All known dangers are charted, and most are marked. There are two shoals, each marked by heavy kelp, 100 to 240 feet N of the N end of Petersburg Processors Inc. Pier.

Tides

(299) The mean range of tide is 13.4 feet and the diurnal range is 15.7 feet at Petersburg.

Weather

(300) Petersburg has a typical maritime climate with mild winters, cool summers, and an annual precipitation of more than 100 inches. Petersburg's location shields it from most of the high winds observed in the channels of southeastern Alaska with a resulting average annual wind speed of about 4.3 knots. The high winds can occur from almost any direction, but most commonly blow from either N, NNE, SSE, or SE. About 45 percent of the winds, 21 knots or more, blow from the SSE and SE, and about 30 percent from the N and NNE; higher winds have been observed from other directions.

(301) Fog is observed on an average of 10 to 12 days in each month except September and October, when fog occurs on an average of 16 to 19 days each month. Snowfall, however, is the greatest restriction to visibility in the winter. (See Page T–3 for **Petersburg climatological table**.)

Pilotage, Petersburg

(302) Pilotage except for certain exempted vessels, is compulsory for all vessels navigating the inside waters of the State of Alaska. (See Pilotage, Alaska, indexed as such, chapter 3, for details.)

(303) Vessels en route Petersburg meet the pilot boat about 1 mile NW of Guard Islands Light (55°26.8'N., 131°52.9'W.).

(304) The pilot boat, a tugboat, can be contacted by calling "PETERSBURG PILOT BOAT" on VHF-FM channels 16, 13, or 12.

Towage

(305) Tug assistance is not normally required for docking or undocking vessels at Petersburg. If such services are required or desired, commercial towboats up to 320 hp operating from Petersburg and engaged in towing of barges and log rafts are available. Towboats up to 1,270 hp are available from Wrangell.

Quarantine, customs, immigration, and agricultural quarantine

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

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

(308) Petersburg is a **customs station**.

(309) A **Coast Guard** vessel is stationed at Petersburg.

Harbor regulations

(310) A **speed limit** of 7 knots is prescribed for Wrangell Narrows off Petersburg Harbor. (See **162.255**, chapter 2, for regulations.)

(311) Petersburg city ordinance prescribes a 4 mph and "no wake" **speed limit** inside the floats at the city boat harbors.

Wharves

(312) All the wharves in Petersburg are privately owned and operated except City Pier, which is owned by the city, and the Ferry Terminal, which is owned and operated by the State of Alaska.

(313) Nelbro Packing Co. Wharf (56°48'24"N., 132°58'38"W.): 160-foot face; depth alongside, 13 feet; deck height, 24 feet; two 2¼- and one 1¾-ton forklifts; receipt of fish; owned and operated by Nelbro Packing Co., Inc.

(314) State of Alaska, Petersburg Ferry Terminal Dock (56°48'31"N., 132°58'28"W.): 150-foot face; depth alongside, 28 feet; total berthing space with dolphins, 500 feet; load and discharging passengers and vehicles via a 35-ton transfer bridge; operated by the State of Alaska.

(315) City Pier (56°48'37"N., 132°58'12"W.): 160-foot face; depths alongside, 20 feet; deck height, 27 feet; receipt and sale of marine fuels, oils, and lubricants; owned by the City of Petersburg and operated by White Pass Alaska, Inc. and U.S. Coast Guard.

(316) Alaska Fuel Service, Petersburg Wharf (56°48'40"N., 132°57'53"W.): 65-foot face; depth alongside, 15 feet; deck height, 30 feet; receipt of petroleum products; owned by UNOCAL Corp. and operated by Alaska Fuel Service, Inc.

(317) Chatham Strait Seafoods Pier (56°48'47"N., 132°57'44"W.): 300-foot face; depth alongside, 20 feet; deck height, 27 feet; owned and operated by Chatham Strait Seafoods Co. A strong current was reported to set off the wharf on the ebb tide.

(318) Alaskan Glacier Sea Food Co. Wharf (56°48'49"N., 132°57'26"W.): 60-foot face; depth alongside, 12 feet; deck height, 26 feet; one 2- and two 1½-ton forklifts; receipt of seafood; owned and operated by Alaskan Glacier Seafood Co.

(319) Petersburg Fisheries Wharf (56°48'52"N., 132°57'30"W.): W face 175 feet; depth alongside, 26 feet; deck height, 26 feet; nine 1- to 2-ton forklifts; receipt of fish, loading of supplies, and icing fishing vessels; owned and operated by Icicle Seafoods. A strong current is reported to set on the wharf on the flood and ebb.

Supplies

(320) Provisions, fishing supplies, and some marine supplies can be obtained in Petersburg. Water is available at all wharves. Gasoline, diesel fuel, distillates, lubricating oils, and greases can be had at the oil companies' wharves. Only diesel oil is available in Petersburg for large vessels. Fishing vessels can obtain ice at the wharves of the canneries and cold storage plants.

Repairs

(321) There are no drydocking or major facilities for larger vessels in Petersburg or in southeastern Alaska. The nearest facilities are in British Columbia and the State of Washington. A marine railway that can handle vessels up to 60 feet long is available in the mudflats 0.1 mile S of the Chatham Strait Seafoods Pier. A 191-foot small-craft grid is on the E side of the N boat harbor, and a three tiered grid with individual lengths of about

100 feet is on the E side of the S boat harbor. Emergency shaft repair and minor repairs can be made in several machine shops adjacent to the waterfront. Repairs to electronic equipment can be made by several local firms.

Small-craft facilities

(322) The city of Petersburg operates two boat harbors immediately N and S of the Chatham Strait Seafoods Pier. The harbors berth up to 260 vessels from 16 to 85 feet long. In March 2003, depths of 9 to 15 feet were available in the N boat harbor. In January-May 1979, depths of 12 to 15 feet were reported in the S boat harbor. Water and electrical power are available on all floats. Surfaced boat-launching ramps are in the SE corner of the N boat harbor and in the SW corner of the S boat harbor. The **harbormaster** assigns berths, controls the use of the small-craft grids, and maintains an office on the approach pier in the NE corner of the N boat harbor. The harbormaster's office monitors VHF-FM channel 16.

(323) Several floats maintained by the U.S. Coast Guard for their own vessels are on the N side of the Chatham Strait Seafoods Pier in the SW part of the N boat harbor. A float for the use of the U.S. Forest Service is on the S side of the Chatham Strait Seafoods Pier in the NW part of the S boat harbor.

(324) A State-maintained 95-foot small-craft float is 0.5 mile W of the Chatham Strait Seafoods Pier at West Petersburg close NE of Bayou Point. In 1976, a depth of 6 feet was reported alongside.

Communications

(325) Petersburg has regular passenger, express, and freight service to Puget Sound ports, British Columbia, and other Alaska ports by water and air. The Alaska State Ferry System has daily service during the summer to Prince Rupert, B.C., Ketchikan, Wrangell, Juneau, Haines, Skagway, and Sitka, and weekly service to Hoonah, Kake, and Seattle. This schedule is less frequent during winter. Scheduled airlines operate daily from Petersburg; charter air service is available. A highway parallels the N shore of Mitkof Island along Frederick Sound for about 5 miles from Petersburg, and parallels the W shore of Mitkof Island to Blind Slough, across to Blind Slough on Sumner Strait, and along the S and E shores of Mitkof Island to about 1 mile above Blaquiere Point, about 27 miles from Petersburg. Petersburg maintains telephone and radiotelephone communications.