



Additional chart coverage may be found in CATP2, Catalog of Nautical Charts.

SECTOR 10 — CHART INFORMATION

SECTOR 10

VANCOUVER ISLAND—ESTEVAN POINT TO TRIANGLE ISLAND

Plan.—This sector describes the W side of Vancouver Island from Estevan Point to Triangle Island, including the inlets and sounds indenting the coast.

General Remarks

10.1 The coast extending NW of Estevan Point is mountainous and presents a bold, rugged appearance from offshore. Brooks Peninsula, located 42 miles SE of the NW extremity of Vancouver Island, is an outcropping which interrupts the general trend of the coast. The high, jagged skyline of the mountains in the interior is remarkable. The mountains backing the coast are steep and densely wooded.

The entrances of the principal inlets and sounds have characteristic features, which usually make them readily identifiable. Numerous anchorages lie in the approaches to or within the inlets and sounds. It is advisable to employ a local pilot in order to reach any of the small harbors in this area as many above and below-water rocks lie in the approaches.

Winds—Weather.—The marine influence dominates the weather along the coast of Vancouver Island. The climate features mild and humid winters, warm but not hot summers, and a small range of temperatures.

The winds offshore rotate between S and W during the winter and between W and NW during the summer. Before moving E, stormy weather is not unusual during the winter along the seaward side of the coast lasting for several days. Offshore storms originating in the W part of the Pacific Ocean pass through the Gulf of Alaska and often swing SE along the coast. During the winter, SE gales of short duration occur and are often followed by SW gales and clear weather.

A coastal countercurrent sets NW along the coast of Vancouver Island with a velocity of 0.5 knot to 1.5 knots. Prevailing winter winds may increase the velocity to as much as 2.5 knots. The coastal current will be joined by the California Current when it reverses, and will continue NW past Vancouver Island. About 30 miles offshore, the current dissipates into confused eddies. Between Nootka Sound and Cape Cook, the velocity of the countercurrent increases to 2.5 knots with strong E winds and decreases to 0.5 knot with W winds. The flood tidal currents flow NW along the coast to Cape Scott where it divides, one branch continuing N and the other setting ESE into Queen Charlotte Strait.

Depths—Limitations.—The depths are ample for ocean-going vessels along the coastal track extending between Estevan Point and Triangle Island. The track, which passes about 10 miles off Estevan Point and Cape Cook, is clear of dangers and has a least depth of 91.4m. From Cape Cook, the track leads to Queen Charlotte Sound and closes the coast about 2.8 miles off Cape Scott, where the channel fairway has a least depth of 42.1m.

Regulations.—A Vessel Traffic Control System (VTS) exists in the approaches to the W side of Vancouver Island. For further information, see [paragraph 9.1](#).

Caution.—A local magnetic disturbance, differing as much as 7° from the normal variation, was reported (1964) to exist about 75 miles SW of Cape Scott, the NW extremity of Vancouver Island.

Estevan Point to Cape Cook

10.2 Estevan Point (49°23'N., 126°33'W.), a low and wooded projection, is located 2.8 miles W of Matlahaw Point. A light is shown from a structure standing on the SW extremity of the point and a radiobeacon is situated in its vicinity.

A gap in the trees, conspicuous from SW, indicates the point and several large boulders lie on a sandy beach in front of it. Several detached rocky shoal patches, with depths of 12.8m and less, lie up to 2.3 miles seaward of the point. Vessels should stay at least 2 miles from the point and the adjacent coast.

There are no off-lying dangers along this coast. However, the approaches to many inlets and sounds, except Nootka Sound, are encumbered with dangers.

Perez Rocks (49°25'N., 126°36'W.), below-water and drying, lie on an area of foul ground which extends up to 3.3 miles NW of Estevan Point. The outermost of these rocks has a depth of less than 1.8m. This group of rocks should be given a berth of at least 2 miles.

Escalante Point, located 9.3 miles N of Estevan Point, marks the E entrance of Nootka Sound. The coast between these points is low and fringed by foul ground. Escalante Rocks, above and below-water, extend up to 1 mile W of this point. An area of foul ground, with drying rocks, lies about 0.8 mile N of the point. Vessels should pass at least 1 mile seaward of these dangers.

Directions.—The coastal track leads about 10 miles SW of Estevan Point and Cape Cook. It then gradually closes the coast in the approaches to Cape Scott. The minimum offshore distance of the track is 2.8 miles and it occurs in the middle of Scott Channel, between Cape Scott and the easternmost of the Scott Islands. The track leads clear of all dangers and has depths, with the exception of those in Scott Channel, greater than 90m.

From a position with the light on Solander Island bearing 039° and distant 10 miles, a course of 338° for a distance of 41.5 miles leads to a position with the light on Cape Scott bearing 015° and distant 10 miles. A course of 000° for 9.5 miles then leads to a position with the light on Cape Scott bearing 090° and distant 2.8 miles.

This track leads seaward of the 200m curve off the entrance to Brooks Bay and the approaches to Quatsino Sound. It crosses the 200m and 100m curves in the S approach to Scott Channel, between Cape Parkins and Cape Scott. The track then passes close W of a patch, with a least depth of 55m, lying in the S part of Scott Channel.



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Estevan Point Light

10.3 Nootka Sound (49°34'N., 126°36'W.) is entered between Escalante Point and **Maquinna Point** (49°35'N., 126°40'W.). The terrain around the entrance of the sound is low. The foul shores are fringed by rocks and reefs, and marked by breakers. Within the entrance, the steep land backing the shores rises to mountainous heights. This sound is entered more easily than any of the others indenting the W coast of Vancouver Island. From its central part, in which lie a group of islands, narrow branches lead N, NE, and E. The northernmost branch separates Nootka Island from the mainland.

Burdwood Point (49°35'N., 126°34'W.), located 2.5 miles N of Escalante Point, is the steep-to E point at the inner entrance of Nootka Sound. Maquinna Point, the S extremity of Nootka Island, is low, wooded, and fronted by rocky foul ground extending seaward for 1 mile.

Yuquot Point (49°35'N., 126°37'W.), the W point at the inner entrance of Nootka Sound, is fringed by foul ground and fronted by the San Miguel Islands. The islands in this latter group are connected to each other and to the shore of the sound by drying reefs. A light is shown from a structure standing on San Rafael Island, which lies close NE of Yuquot Point.

Nootka Cone (49°37'N., 126°39'W.), 520m high, stands 2 miles N of Maquinna Point and is conspicuous from seaward.

Conuma Peak (49°50'N., 126°17'W.), 1,477m high, stands about 20 miles NE of Maquinna Point. It is a conspicuous steeple-shaped mountain.

Caution.—An abandoned submarine cable, which may best be seen on the chart, lies across the entrance to the sound between Burdwood Point and Discovery Point.

10.4 Cook Channel (49°38'N., 126°36'W.) leads N from the entrance of Nootka Sound, between the Saavedra Islands and the Spanish Pilot Group, to Kendrick Inlet and Eliza Passage.

Saavedra Islands (49°37'N., 126°37'W.), a chain of several small islands, lie parallel to the W side of Cook Channel.

Boca del Infierno Bay (49°37'N., 126°38'W.) is entered NW of the Saavedra Islands. It is very constricted and only used by small craft at slack water.

Nootka (49°37'N., 126°37'W.), a sport fishing resort, is situated at the entrance of Boca del Infierno Bay. It stands on the site of a former fish cannery that is now abandoned and in ruins.

Spanish Pilot Group (49°37'N., 126°35'W.) lies on the E side of Cook Channel and SW of Bligh Island. Anchorage can be obtained, in a depth of 42m, mud, between Narvaez Island and Vernaci Island, but the swinging room is limited because of shoal patches. A light is shown from a structure standing on a drying rock lying close off the W side of Vernaci Island. Rocks, with depths of 2.7m and 3.4m, lie, respectively, close off the SW and SE extremities of Vernaci Island. Another rock, with a depth of 2.7m, lies close off N extremity of Narvaez Island.

Vessels should not enter the channels leading between the various islands of this group without local knowledge.

Villaverde Islands (49°40'N., 126°34'W.) lie on the E side of the junction of Cook Channel and Eliza Passage. **Boston Point Light** (49°40'N., 126°37'W.) marks the end of a peninsula located at the W side of this junction.

Fidalgo Passage (49°39'N., 126°34'W.) leads NE from Cook Channel, between Bligh Island and the Villaverde Islands. Foul ground and numerous above and below-water rocks lie NW

and SE of the passage. Vessels should only use this passage during daylight and clear weather.

Caution.—Care is required in the area fronting Nootka due to submerged piles and general debris.

10.5 Eliza Passage (49°40'N., 126°35'W.) leads NE from Cook Channel and S of Strange Island to Tahsis Inlet and Tlupana Inlet. A rocky shoal patch, with a depth of 13.7m, lies in the middle of this channel.

Kendrick Inlet (49°41'N., 126°37'W.), entered from the N end of Cook Channel, leads NNW between Nootka Island and **Strange Island** (49°42'N., 126°37'W.). The fairway channel is deep, clear of dangers, and navigable by vessels as far as the anchorage at Plumper Harbor.

Plumper Harbor (49°42'N., 126°38'W.), lying on the W side of Kendrick Inlet, consists of a cove. It is 0.3 mile wide and fronted by the very small islands of the Matute and Funter groups. The harbor is used as a booming ground. A pier fronting the shore of the cove is used by small local vessels.

Sheltered anchorage can be taken, in a depth of 22m, in the middle of the harbor. Local knowledge is required.

Princesa Channel (49°43'N., 126°38'W.), constricted and encumbered by rocks, connects Kendrick Inlet and Tahsis Inlet, close N of Strange Island. The channel, available to only small craft, is marked by beacons and lighted beacons at the entrances.

Tahsis Inlet (Tasis Inlet) (49°50'N., 126°40'W.) extends about 15 miles N from its entrance, at the NE side of Eliza Passage. This inlet is formed by steep-to, rocky shores, and backed by mountains. The depths in the inlet are deep. Vessels should steer a mid-channel course in order to clear the inshore shoals. The tidal currents in the more constricted parts of the inlet attain a velocity of 2 to 3 knots. The flood current sets N and the ebb current sets S.

Salter Point (49°41'N., 126°35'W.), marked by a light, and **Coopte Point** (49°42'N., 126°35'W.) mark the entrance to Tahsis Inlet. Canal Island, marked on its W side by a light, lies in the entrance, midway between these points. A beacon stands on the N end of the island. Clear passages, about 0.2 mile wide, lead on either side of the island. Small vessels can obtain anchorage, in a depth of 29m, mud, in Jewitt Cove, about 1 mile NNW of Salter Point.

Tsowwin Narrows (49°47'N., 126°39'W.), located about 6 miles inside the entrance, is constricted by the Tsowwin River, which empties into its S side. A drying gravel spit, marked by a light, extends from the river mouth and reduces the width of the inlet to 225m.

Tsowwin Narrows West Light is shown from a structure standing on the W side of the narrows. Another light is shown from a structure standing on a small islet lying on the W side of the inlet, about 0.8 mile N of the narrows.

A stranded wreck is reported to lie on the E side of the inlet, about 0.8 mile N of the narrows.

10.6 Tahsis (Tasis) (49°55'N., 126°40'W.) ([World Port Index No. 18805](#)), a lumber port, is situated on the W side of the head of Tahsis Inlet.

Tides—Currents.—The large tidal range at the port is 4.2m and the mean tidal range is 2.8m. The height of HHW (large tides) is 4.4m.

Depths—Limitations.—Two deep-sea berths are situated close SW of the Tahsis Sawmill at the head of the inlet.

No. 1 Berth is no longer used. No. 2 Berth is 144m long and has a depth of 12.2m alongside. A rock, with a depth of 2m, lies close off the berths.

The No. 2 berth was designed to handle vessels of up to 213m in length, 30.5m beam, and 12.5m draft can be handled.

It is reported that vessels of up to 190m in length, 30.5m beam, and 12.2m draft have been accommodated.

Alberni Dock provides 127m of berthage with depths of 3.7 to 7.9m alongside. It is used by coastal vessels and large barges. There are also berthing facilities for fishing vessels, small craft, yachts, and seaplanes.

Pilotage.—Pilots may be embarked off Cape Beale, at the entrance to Treavor Channel. For further information, see pilotage for the Gold River in [paragraph 10.8](#).

Anchorage.—Anchorage can be taken anywhere in the harbor, clear of the booming grounds, and wherever depths are suitable.

Caution.—The port is sheltered from most directions, but S gales blow directly through the inlet and can make berthing operations difficult.

Tahsis Narrows (Tasis Narrows) (49°52'N., 126°40'W.), leading W from Tahsis Inlet to Hecate Channel and Esperanza Inlet, separates the NE end of Nootka Island from Vancouver Island. The tidal currents in the narrows are weak, with the flood setting E. Mozino Point, located at the N side of the narrows entrance, is marked by a light and a beacon. Two drying rocks lie close off the S shore of the narrows, SW and W of the light. The channel in the narrows has a least width of 0.1 mile and a least depth of 9.6m, lying at its W end.

Two beacons, the southernmost one lighted, stand on opposite shores of the narrows about 0.5 mile WNW and 0.8 mile W of Mozino Point. When these two beacons are aligned, they mark the position in the narrows to change course.

Ceepeecee (49°52'N., 126°43'W.), the site of a former cannery, is situated at the head of a bay, near the W end of the narrows. A short, broad peninsula divides the W end of the narrows.

10.7 Muchalat Inlet (49°39'N., 126°15'W.) and its approaches form the E part of Nootka Sound. The inlet can be approached from either S or N of Bligh Island. Mountains back both sides of this inlet, which is too deep for anchoring.

Bligh Island (49°40'N., 126°30'W.), the largest island in Nootka Sound, lies in the center of a system of inlets, passages, and channels which radiate in many directions. Clerke Peninsula, long and narrow, forms the SE part of the island and the W side of **Zuchiarte Channel** (49°38'N., 126°30'W.). The latter channel, which is deep and clear, leads 4 miles NE to **Anderson Point** (49°39'N., 126°28'W.), where it turns E towards the entrance of Muchalat Inlet.

Atrevida Point (40°39'N., 126°26'W.), located 1 mile ENE of Anderson Point, marks the N side of the inlet entrance. Lights mark both the entrance points.

Gore Island (49°39'N., 126°24'W.) lies in the middle of Muchalat Inlet with its W extremity located about 0.5 mile SE of Atrevida Point. A light is shown from a structure standing on the W extremity.

Williamson Passage (49°40'N., 126°23'W.) and **King Passage** (49°38'N., 126°23'W.), lying N and S of Gore Island, join close E of the latter island. Williamson Passage is deep and clear of dangers while King Passage is not recommended for transit.

The channel in that part of Muchalat Inlet lying E of Gore Island is deep and clear of dangers, except for **Victor Island** (49°40'N., 126°17'W.). Several islets front the S side of the inlet, about 2.5 miles E of Gore Island. Lights are shown from the N sides of these dangers.

10.8 Gold River (49°41'N., 126°07'W.), a lumber industry port, is situated 5 miles from the head of the inlet and adjacent to the Gold River.

Depths—Limitations.—Deepsea Dock, a finger pier, is 213m long, with alongside depths of 10.1 to 10.6m.

A wharf for loading wood pulp, formerly used by a now-closed pulp and paper mill, is situated 0.2 mile E of Deepsea Dock. It has a berthing face, 61m long, on the W side with a depth of 8.5m alongside. Dolphins joined by a catwalk extend up to 33m SSE from this wharf.

The public wharf is 55m long and has a least depth of 5.2m alongside. This wharf is used by coastal vessels. There are also facilities for barges, fishing vessels, small craft, and seaplanes. Vessels of up to 213m in length and 10.4m draft have been handled.

Pilotage.—Vessels requiring a pilot should contact Pilots Victoria by VHF and report any change in ETA, as soon as possible, because the pilots depart from Port Alberni and proceed to the embarkation area off Cape Beale. After boarding, the pilots will navigate vessels out of Barkley Sound and proceed towards Nootka Sound. Pilots will generally only navigate Nootka Sound during daylight hours. Between Cape Beale and Estevan Point, pilotage is not required. At Estevan Point, pilots resumes their duties.

Anchorage.—Due to the deep depths, no anchorage is possible outside the harbor.

Tlupana Inlet (49°43'N., 126°29'W.), the principal waterway in the N part of the sound, can be approached from either E or W of Bligh Island and entered from N of that island, preferably via Eliza Passage. The shores forming the inlet are high and rocky. The depths within the inlet and its tributaries are very deep.

Hanna Channel (49°40'N., 126°29'W.), the easternmost approach channel to Tlupana Inlet, is deep and clear of dangers. **Concepcion Point** (49°40'N., 126°29'W.) and **San Carlos Point** (49°41'N., 126°31'W.), the NE and N extremities, respectively, of Bligh Island mark the entrance of the channel. San Carlos Point and a point located 1 mile NW of Concepcion Point are marked by lights.

10.9 Descubierta Point (49°41'N., 126°30'W.) forms the NE entrance point of the channel. Several above and below-water rocks lie up to about 0.1 mile seaward of these points. A rock, marked by a buoy, fronts the SE entrance point. Numerous islets, rocks, and patches of foul ground lie about 1.5 miles SW of San Carlos Point and in the NE approach to Fidalgo Passage.

Galiano Bay (49°43'N., 126°28'W.) indents the SE side of Tlupana Inlet and its entrance is fronted by an islet. The

preferred entrance channel leads close S of this islet. Small vessels can enter and anchor in a depth of 27m about 0.4 mile SE of the islet, but the swinging room is limited. A drying rock lies in mid-channel, about 0.5 mile within the bay entrance.

Hisnit Inlet (49°44'N., 126°30'W.) indents the NW side of Tlupana Inlet. It is deep and clear of dangers, except for a drying rock and a below-water rock lying about 1 mile inside the entrance and close N of mid-channel. Anchorage can be taken in a depth of 20m at the head of the inlet.

Princess Royal Point (49°45'N., 126°27'W.), a high and bold bluff, and **Perpendicular Bluff** (49°46'N., 126°27'W.), formed by high and steep cliffs on three sides, are the entrance points off which Tlupana Inlet branches NW. An islet lies close inshore, about 1 mile NW of the Perpendicular Bluff.

Nesook Bay (49°46'N., 126°25'W.), the eastnorthernmost branch of Tlupana Inlet, is entered between **Santa Saturnina Point** (49°40'N., 126°26'W.) and Perpendicular Bluff. This bay is deep and clear of dangers in mid-channel. A rock, with a depth of 8.2m, lies about 0.3 mile off the E shore of the bay. Anchorage can be taken by small vessels in a depth of 36m, mud, about 0.1 mile N of this rock.

Moutcha Bay (49°47'N., 126°27'W.) indents the shore at the neck of the peninsula extending N from Perpendicular Bluff. This bay is open and clear of dangers as far as the drying bank, which extends 0.5 mile seaward from its head. Anchorage can be taken in depths of 29 to 34m about 0.3 mile off the N shore of the bay.

Head Bay (49°48'N., 126°29'W.) indents the northwest-ernmost branch of Tlupana Inlet. The E side of the bay entrance is fronted by several islets, above and below-water rocks, and foul ground. Anchorage can be taken in a depth of 27m about 0.5 mile from the head of the bay.

10.10 Nootka Island (49°40'N., 126°45'W.) extends 19 miles NW and separates Nootka Sound from Esparanza Inlet. The SW coast of this island is low and fringed by sandy beaches in places. Heavy seas usually break on the seaward side of the island. The terrain backing the coasts appears fertile and rises gradually N to several mountains, over 700m high.

Bajo Point, the low and rocky SW extremity of Nootka Island, is located 6 miles WNW of Maquinna Point. Ferrer Point is located 10 miles NW of Bajo Point. It is low, rocky, and moderately steep-to.

Bajo Reef (49°35'N., 126°49'W.) and Inner Bajo Reef extend up to 3 miles E, W, and S of Bajo Point. The outer edge of the reefs is marked close S by a lighted buoy. The inner reef has several drying heads and the outer reef has depths of less than 18m.

Ferrer Point (49°45'N., 126°59'W.) is low, rocky, and steep-to. It forms the S entrance point of Nuchatlitz Inlet. The 20m curve fringes the coast between this point and Bajo Point.

Nuchatlitz Inlet (49°46'N., 127°01'W.) indents the W side of Nootka Island and extends 10 miles E. It is entered between Ferrer Point and Pin Rock, 2.3 miles NNW. Within the inlet, the shores are high and rocky.

Danger Rock (49°46'N., 127°00'W.), with a depth of less than 1.8m, lies in the fairway channel, about 1 mile NNW of Ferrer Point. It is steep-to and breaks in stormy weather.



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Nootka Island Light

Nuchatlitz Reef (49°46'N., 126°59'W.) lies about 0.4 mile N of Danger Rock. It consists of above and below-water rocks and is usually marked by breakers.

Pin Rock (49°47'N., 126°59'W.) is one of several above and below-water rocks, which along with Nuchatlitz Reef and Danger Rock, lie in the entrance of Nuchatlitz Inlet. The passage lying between these dangers is not recommended. The preferred entrance passage leads between Ferrer Point and Danger Rock.

Northwest Cone (49°45'N., 126°58'W.), a hill, is conspicuous from the SW and useful in identifying the inlet from seaward. **Mount Rosa** (49°48'N., 126°54'W.) is also very prominent.

10.11 Florence Point (49°46'N., 126°55'W.) is located on the S side of the inlet, 2.5 miles within Ferrer Point. This point and **Tongue Point** (49°45'N., 126°56'W.) form the entrance of Louie Bay. Several above and below-water dangers lie in the vicinity of the entrance channel. These include **South Reef** (49°46'N., 126°58'W.), **Frank Rocks** (49°45'N., 126°56'W.), **Justice Rock** (Bare Rock) (49°47'N., 126°55'W.), and **Cameron Rocks** (Bare Island) (49°47'N., 126°55'W.).

Fitz Island (49°46'N., 126°54'W.), high and wooded, is located 1 mile NE of Florence Point and fronted by drying rocks.

Ensenada Islet (49°48'N., 126°58'W.), Colwood Island, and several rocks lie on the N side of the inlet. Numerous islets and below-water rocks lie W of this islet.

Port Langford (49°48'N., 126°56'W.), an inlet open to SW storms, has a depth of 12m in its outer part, but the holding ground is bad.

Mary Basin (49°48'N., 126°51'W.) is entered between a point, located 0.7 mile NE of **Benson Point** (49°47'N., 126°52'W.), and the NW part of **Lord Island** (49°47'N., 126°51'W.). An islet and a drying rock lie close within its entrance, which extends as far as **Narrows Island** (49°48'N., 126°50'W.). Anchorage can be taken, with local knowledge, in a depth of 7m in the middle of Mary Basin.

Mark Hill (49°47'N., 126°49'W.) rises 0.5 mile SE of Narrows Island and is conspicuous.

Inner Basin (49°48'N., 126°48'W.) lies at the head of Nuchatlitz Inlet and is entered via a narrow passage leading NE of Narrows Island. The passage is used only by small craft and strong tidal currents are reported to set through it.

Vessels approaching Nuchatlitz Inlet from the S should steer for Ferrer Point on a course of 014°. When nearing the point, they should then change course to pass about 0.5 mile W of it. When abeam, vessels should steer for Ensenada Islet (Cliff Islet) on a course of 030°. When Mark Hill and the NW extremity of Fitz Island are in line, bearing 076°, vessels will be in a position located midway between Danger Rock and a shoal patch, with a depth of 9.5m, which lies 0.8 mile NE of Ferrer Point. The latter range leads about 0.2 mile N of the shoal patch.

Caution.—Vessels not equipped with radar should not attempt to enter Nuchatlitz Inlet unless the range marks (Mark Hill and Fitz Island) can be easily identified.

A heavy swell prevails outside the entrance of Nuchatlitz Inlet.

10.12 Esperanza Inlet (49°47'N., 127°03'W.) indents the coast, 31 miles NW of Estevan Point, and is entered 5 miles N

of Ferrer Point. This extensive inlet separates Nootka Island from Vancouver Island and has high, rugged shores backed by mountains. Port Eliza is the only arm extending N from the inlet that affords sheltered anchorage.

Two channels lead from seaward in the entrances to Esperanza Inlet. Both are encumbered with dangers. A heavy swell usually prevails outside these entrances. A third entrance passage leads W of **Catala Island** (49°50'N., 127°03'W.) and between that island and the mainland. This passage is only used by local fishing craft.

Gillam Channel (49°48'N., 127°01'W.), the preferred channel leading into Esperanza Inlet, is entered 3.5 miles NW of Ferrer Point. Blind Reef, Flower Islet, and several intervening dangers lie on the SE side of the channel. Middle Reef, Mid Rock, Black Rock, and Double Island lie on the NW side. The channel is narrowest between Blind Reef and Middle Reef and has a least depth of 25.6m in the fairway. Only those dangers lying nearest to the fairway are described.

Nuchatlitz Light (49°49'N., 126°59'W.) is shown from a structure standing on an unnamed island.

Blind Reef (49°48'N., 127°01'W.), lying about 2 miles SW of Nuchatlitz Light, dries and is marked by breakers.

An approach fairway lighted buoy is moored about 1 mile SW of Blind Reef.

Extensive above and below-water rocks extend NNE from Blind Reef to **Flower Islet** (49°50'N., 126°59'W.).

Middle Reef (49°48'N., 127°03'W.), which dries, lies about 1.3 miles WNW of Blind Reef. Several detached rocky patches lie near a rock, 1.2m high, located at the SW extremity of the reef. A lighted buoy is moored close off the SE end of the reef.

Low Rock, Outer Black Rock, and Mid Rock lie on a drying reef which extends up to about 1 mile W, 0.8 mile WNW, and 0.8 mile N of Middle Reef.

Catala Island, 64m high and wooded, lies on the W side of the entrance to the inlet, 2 miles N of Middle Reef. The coasts of this island are rocky and fringed with dangers.

North Channel (49°48'N., 127°04'W.), a secondary channel, can be used with local knowledge. It joins Gillam Channel, SE of Mid Rock, after leading between Low Rock and Outer Black Rock. The area lying NW of the channel consists of extensive patches of above and below-water rocks and reefs. The channel is not recommended as it is encumbered by rocks with depths of less than 1.8m.

Rolling Rollstead (49°51'N., 127°02'W.), a channel, leads between the N side of Catala Island and the coast of Vancouver Island. It is generally entered from the E side. Halftide Reef, along with several above-water rocks, lies about 1 mile SW of the W end of Catala Island. Between the reef and Tatchu Point, 2.8 miles NW, the W approach to the anchorage is encumbered by numerous shoals and rocks. Anchorage can be taken in a depth of 8m about 0.5 mile NNW of the E end of Catala Island. A swell often prevails in the roadstead.

Double Island (49°51'N., 127°00'W.), marked by a light, lies off the NW side of the entrance to Esperanza Inlet.

Flower Islet (49°50'N., 126°59'W.) lies at the SE side of the entrance channel, 1 mile SE of Double Island.

Eliza Dome, a prominent and high mountain, stands 3 miles NNW of Catala Island. Leading Hill, with a conspicuous and cone-shaped peak, rises 1 mile NW of Double Island.

10.13 Centre Island (49°51'N., 126°56'W.) lies in the middle of the inlet, about 2.3 miles E of Double Island. The bay lying S of this island is foul and unfit for anchoring. The irregular and steep-to N side of Nootka Island extends ENE to **Steamer Point** (49°53'N., 126°48'W.), which is marked by a light.

Port Eliza (49°53'N., 127°01'W.), the westernmost of three inlets leading N from Esperanza Inlet, is entered through **Birthday Channel** (49°52'N., 126°59'W.), which lies E of Harbor Island. This inlet is deep and its shores are high. The fairway channel has a least width of 275m. Anchorage can be taken in depths of 21 to 31m about 0.5 mile from the head.

Vessels entering Port Eliza should do so via Birthday Channel. They may pass either W or NE of Fairway Island and then about 0.1 mile E of the E extremity of Harbor Island. Vessels proceeding to Queen Cove should pass E of the beacon marking Channel Reef and W of the islands lying in the entrance. The state of the tide should be considered before passing over the rocks in the entrance.

Vessels proceeding to the head of Port Eliza should enter as directed above. When about 0.3 mile N of Harbor Island, they should steer to pass W of Channel Reef and then maintain a mid-channel course to the anchorage.

10.14 Fairway Island (49°51'N., 126°58'W.) and **Harbor Island** (49°51'N., 126°59'W.) lie in the entrance of Birthday Channel. The passage leading between these islands is deep and about 0.1 mile. The passage leading NE of Fairway Island is about 0.1 mile wide. **False Channel** (49°51'N., 127°00'W.), the passage lying W of Harbor Island, is encumbered with foul ground and not recommended.

Channel Reef (49°52'N., 126°59'W.), which partly dries on its N side, lies in mid-channel, about 0.5 mile N of Harbor Island. It is marked by a beacon on the S side.

Queen Cove (49°53'N., 126°59'W.) is entered NNE of Channel Reef and has an entrance about 90m wide. Its shores are high and rocky. The fairway channel has a least depth of 4.6m over a rock lying in mid-channel. Saddle Point, located 0.3 mile within the W shore of the cove, is the former site of a cannery, now in ruins. Anchorage can be taken in a depth of 12m, mud, about 0.1 mile SE of this latter point.

Espinosa Inlet (49°53'N., 126°55'W.) is entered about 1 mile NNE of Centre Island and has depths too deep for anchoring. It extends N for 7.5 miles between high, rugged shores.

Zeballos Inlet (49°55'N., 126°48'W.), the easternmost of the three inlets leading N from Esperanza Inlet, is entered close N of Steamer Point. Its shores are rocky and steep-to. The fairway channel has a least width of 0.2 mile, but the depths are too deep for anchoring.

Zeballos (49°59'N., 126°51'W.), a settlement, stands at the head of the inlet. A T-shaped public wharf fronts the settlement and has a berth, 70m long, at its outer end. A float, for the use of small craft, is attached to the W end of the wharf and has a depth of 5.5m alongside.

Hecate Channel (49°52'N., 126°45'W.) leads SE from the vicinity of Steamer Point to the W entrance of Tahsis Narrows. The shores of this channel are high and rocky. It has deep depths and is clear of dangers.

Esperanza (49°52'N., 126°45'W.), a settlement, stands on the N side of the channel, at the W entrance of Tahsis Narrows. An L-shaped pier fronts the settlement and has depths of 4.9 to 5.8m alongside. A beacon marks the edge of a drying bank which lies close WNW of the pier.

10.15 Barrier Islands (49°55'N., 127°15'W.) are an extensive chain of islands, islets, and reefs extending NW from a position located 1.8 miles NW of Tatchu Point. Three navigable channels lead through the chain. Kyuquot Channel, the main channel, leads into Kyuquot Sound.

The islands front the coast and extend up to 2 miles offshore in the approach to Kyuquot Sound and up to 5 miles offshore near the NW end of the chain.

Vessels should keep well clear of this chain and remain in depths of over 50m, especially in thick weather.

Rugged Point (49°58'N., 127°15'W.), marked by a light, is located 7.5 miles NNW of Tatchu Point. The coast within the islands, between Tatchu Point and this point, is indented by several small bays. These bays afford shelter to small craft behind the rocks and reefs.

Clear Passage (49°54'N., 127°13'W.), a boat passage, leads into Kyuquot Channel between the Barrier Islands and the mainland.

10.16 Approaches to Kyuquot Sound.—Union Island lies in the entrance to Kyuquot Sound with White Cliff Head, its S extremity, located 1 mile W of Rugged Point Light. The island is 439m high in its N part and borders the W side of Kyuquot Channel. A conspicuous white cliff rises on the S side of White Cliff Head.

Thornton Islands (49°58'N., 127°20'W.), which are part of the Barrier Islands, lie 2.5 miles WSW of White Cliff Head. These islands are bare but the westernmost of the group has two prominent hummocks.

Vessels passing W of the Thornton Islands should approach with Amos Island Light ahead, bearing 005°. When a rock, 5.5m high, lying N of the Thornton Islands is abeam, they should alter course to bring Crowther Channel Beacon ahead, bearing 023°. When Amos Island Light bears 320°, vessels should then alter course to pass SW of it.

West Entrance Rock, with a depth of less than 1.8m, lies about 3 miles WSW of Rugged Point Light. East Entrance Reef, 4.3m high, lies about 2 miles ESE of West Entrance Rock.

Kyuquot Channel (49°58'N., 127°17'W.) may be approached from the seaward side of the Barrier Islands and entered between West Entrance Rock and East Entrance Reef. An approach fairway lighted buoy is moored about 0.8 mile W of East Entrance Reef.

The channel leads to Kyuquot Sound and passes between Union Island and Vancouver Island. A heavy swell generally prevails in the vicinity of the channel and the sound. The fairway channel is deep, about 1 mile wide, and clear of dangers.

Munsie Rocks, an extensive area of above and below-water rocks, extends up to 2 miles E of the Thornton Islands, on the NW side of the channel.

Eliza Dome, 873m high, stands 2.3 miles NE of Tatchu Point and is conspicuous from seaward.

Remarkable Cone, 945m high, stands 2.5 miles E of Rugged Point and Kyuquot Hill, 223m high, rises 0.5 mile N of White Cliff Head.

Vessels entering Kyuquot Sound via Kyuquot Channel should steer for the summit of Whiteley Island, bearing 040°. This course leads through the channel about midway between the reefs lying on either side and passes about 0.4 mile NW of the lighted buoy. Approaching Chatchannel Point, vessels should change course to the E in order to pass about 0.5 mile E of that point and to avoid a rock, which dries 2.1m, lying close off it. Vessels proceeding to Cachalot Inlet should pass S of Whiteley Island. Vessels proceeding to Fair Harbor or Easy Inlet may pass either E or W of Whiteley Island. If bound for the former, they should proceed up Pinnacle Channel.

Chatchannel Point (50°00'N., 127°14'W.), the E extremity of Union Island, is low, rocky, and has a defined knob within its extremity. A drying rock lies about 0.1 mile E of this point.

Whiteley Island (50°01'N., 127°12'W.) lies at the N end of Kyuquot Channel. It is steep-to, except at the S end.

Caution.—Vessels should not attempt to enter Kyuquot Channel without local knowledge, except in clear weather.

Vessels navigating within Kyuquot Channel should not proceed into depths of less than 55m on the SE side. In addition, they should not approach within 0.6 mile of Munsie Rocks, on the NW side.

10.17 Nicolaye Channel (49°58'N., 127°17'W.) leads between the SW shores of Vancouver Island and Union Island, on the N side, and the Barrier Islands, on the S. It is entered from the E between White Cliff Head and a rock, with a depth of 4.3m, lying close NE of Munsie Rocks. The W end of the channel joins the N end of Brown Channel. It can be entered from the S by passing W of the Thornton Islands.

Kyuquot Bay (49°59'N., 127°17'W.) indents the SW side of Union Island, between White Cliff Head and **Beacon Point** (Onward Point) (49°59'N., 127°18'W.). The E part of this bay is encumbered with dangers.

Kate Rocks (49°59'N., 127°19'W.) and Moos Islet, about 0.4 mile SW, lie at the SW edge of Nicolaye Channel. A below-water rock lies in the channel, about 1 mile NW of Kate Rocks.

Crowther Channel (50°01'N., 127°20'W.) forms the W entrance of Kyuquot Sound and leads NE from Nicolaye Channel between Union Island and Vancouver Island. Several islands, islets, and dangerous rocks, some unmarked, encumber the S entrance of this channel. The NE entrance is very constricted. Local knowledge is required.

Amos Island (50°01'N., 127°21'W.) lies on the W side of the S entrance to Crowther Channel. A light is shown from a structure standing on the SW end of the island. Several islets and rocks extend up to about 0.5 mile SE of the island into the channel. Rolston Island lies 0.2 mile WNW of the island and a light is shown from a structure standing 0.1 mile W of it.

Surprise Island (50°03'N., 127°17'W.) lies in the NE end of Crowther Channel and constricts the fairway to a width of only 90m. Local knowledge is necessary. Anchorage can be obtained in depths of 18 to 27m in Kyuquot Bay between Surprise Island and the mainland.

10.18 Kyuquot Sound—Inner Part.—Cachalot Inlet (50°00'N., 127°08'W.) is entered from Kyuquot Channel, ESE

of Whiteley Island. It is constricted at the head by an extensive mud flat. The fairway channel has a least depth of 18.3m. Anchorage can be obtained by small vessels, but strong SE and W gales cause heavy squalls throughout the inlet.

Amal Inlet (50°02'N., 127°08'W.) is entered about 1.3 miles N of Cachalot Inlet. It is about 0.3 mile wide and deep. Anchorage can be obtained in a depth of 33m about 0.5 mile from the head. Gales from the S cause heavy squalls at the roadstead. A high and conspicuous precipice rises at the N side of the roadstead.

Hohoe Island (50°03'N., 127°13'W.) and **Moketas Island** (50°05'N., 127°14'W.) lie in Kyuquot Sound, N of Whiteley Island. Several deep, navigable passages lead between and around these islands.

Anchorage can be taken in a depth of 14m within **Dixie Cove** (50°03'N., 127°12'W.). The roadstead is sheltered by Copp Island which fronts the cove.

Pinnacle Channel (50°02'N., 127°12'W.) leads between the steep-to, rocky shores of Hohoe Island and the mainland. The fairway, which is deep and clear of dangers, leads to Tahsis Inlet at its junction with **Markale Passage** (50°04'N., 127°12'W.). The passage leading between Hohoe Island and Moketas Island is deep and clear, except for **Warren Rocks** (50°04'N., 127°13'W.), above and below-water, which lie at the W end. These latter rocks are steep-to on their S sides.

Eelstow Passage (50°05'N., 127°12'W.) leads between Moketas Island and the mainland. Several above and below-water rocks lie in the middle of the E entrance to the passage. Several rocks also front the N side of Moketas Island.

Tahsis Inlet (50°05'N., 127°10'W.) leads NE and is entered from the passages lying N and S of Moketas Island. The fairway, which is deep and clear, leads between high, rugged shores.

False Ears (50°08'N., 127°08'W.), a conspicuous mountain, can be seen rising over Kyuquot Hill when entering Kyuquot Channel.

10.19 Fair Harbor (50°04'N., 127°09'W.) is entered between the NE side of **Markdale Peninsula** (50°04'N., 127°10'W.) and **Karouk Island** (50°05'N., 127°10'W.). It is the site of a logging settlement and affords anchorage to small vessels. Foul ground, with above and below-water rocks, extends N of the peninsula. A drying rock, marked by a light, lies on the N side of the fairway, SE of Karouk Island. A below-water rock lies on the S side of the fairway, about 0.1 mile S of this drying rock. The entrance channel has a least width of 0.1 mile and a least depth of 13.7m. It leads midway between the peninsula and Karouk Island, and then close S of the drying rock.

Range beacons, bearing 088.5°, stand on an islet lying 0.3 mile SE of Karouk Island and indicate the channel leading to the harbor. A wharf fronts the S shore near the E end of the harbor. It has depths of 5.5 to 12.8m alongside the SW side.

Anchorage can be taken in a depth of 18m, mud, at the E end of the harbor or in a depth of 34m, mud, near the W end. Both anchorages are sheltered, but are open to N gales.

Kashutl Inlet (50°08'N., 127°16'W.), a branch of Kyuquot Sound, is entered 1 mile NNW of Moketas Island. The rocky shores of this inlet are indented. The fairway channel has a least depth of 36.6m.

Expedition Islets (50°06'N., 127°14'W.) lie in the inlet entrance. A detached rock, with a depth of 6.1m, lies about 2 miles NNW of these islets.

Easy Inlet (50°08'N., 127°18'W.) is entered close N of Kayouk Bluff. It is constricted and has a least depth of 21.9m in the fairway channel. The inlet is bound by rocky, high, and steep-to shores. Several above-water and drying rocks front the W extremity of Kayouk Bluff.

Anchorage can be obtained, in depths of 27 to 36m, at the head of Kashutl Inlet, about 0.3 mile from the edge of the drying flat.

Brown Channel (49°59'N., 127°27'W.) is entered between the **Mission Group** (50°00'N., 127°25'W.), an extensive grouping of islands and islets lying on foul ground, and Lookout Island. It leads N and NE to join the W end of Nicolaye Channel. Kamils Island, Aktis Island, and Spring Island are the three largest islands of the Mission Group. A mast is situated at the S end of Spring Island and a white square building stands about 0.3 mile S of it.

Kamils Anchorage (50°00'N., 127°24'W.) lies in the middle of the three largest islands of the Mission Group. It has a depths of 10.9m and is located about 0.5 mile SE of Aktis Island. Favourite Entrance leads from the S to the anchorage. The anchorage is only used by small craft with local knowledge.

Lookout Island (50°00'N., 127°27'W.), 55m high, is the westernmost island of the Mission Group. A light is shown from the E side of this island and an approach fairway lighted buoy is moored about 0.5 mile S of it.

10.20 Brown Channel (49°59'N., 127°27'W.) has a least depth of 12.8m and is most constricted to the SE of McLean Island, where the width of the channel is about 0.2 mile. Rocky shoals front the sides of the channel and at least two detached shoals lie in the fairway. These dangers may best be seen on the chart.

McLean Island (50°02'N., 127°25'W.) lies on the N side of Brown Channel and 1.3 miles N of **Trapp Bluff** (50°00'N., 127°25'W.), a prominent and steep rocky headland. McLean Point, the S extremity of the island, is located 1.3 miles E of **Cole Rock** (50°02'N., 127°27'W.). The island forms the SW side of Clanninick Cove and is connected to Vancouver Island by a sandy beach which dries at LW.

Clanninick Cove (50°02'N., 127°24'W.) indents the N shore at the junction of Brown Channel and Nicolaye Channel. The shores of the cove are low and rocks front both sides of the entrance.

Chief Rock, which dries, lies at the W side at the outer edge of the foul ground extending SE from McLean Point. Yakats Rock, with a depth of less than 1.8m, lies about 0.3 mile N of Chief Rock.

Anchorage can be taken in a depth of 165m close S of a drying bank at the head of the cove.

Gayward Rock (50°01'N., 127°23'W.), above-water, lies on the S side at the NW end of Nicolaye Channel and is marked by a light. Clanninick Cove is entered NNW of this rock. A rock, with a depth of 6.4m, lies about 0.1 mile NE of Gayward Rock.

Anchorage can be taken, in a depth of 51m, about 0.2 mile NE of Gayward Rock. Anchorage can also be taken in a depth of 33m about 0.5 mile ESE of Gayward Rock.

Walters Cove (50°02'N., 127°22'W.) is approached to the SE of **Rolston Island** (50°01'N., 127°22'W.) and entered E of Walters Island. A dredged channel, 37m wide, leads into the cove and can be used by vessels up to 36m long. It has a depth of 4m and is marked by beacons. Local knowledge is required as several above and below-water dangers lie adjacent to the channel.

Kyuquot (50°02'N., 127°22'W.), a settlement, stands on the N side of Walters Island. It can be reached via the channel in the cove. A wharf fronts the settlement. It provides a berth, 30m long, and has a depth of 4.9m alongside. There are facilities for small craft and seaplanes.

Directions.—Vessels bound for Clanninick Cove, or the anchorages in Nicolay Channel, that do not have local knowledge should make the approach through Brown Channel. The outermost of the Barrier Islands should be given a berth of at least 2 miles until the light shown from Lookout Island bears about 350°. Vessels should steer for the lighted buoy on this bearing and then change course to pass about 0.2 mile E of the light.

After passing the light, vessels should steer for Cole Rock on a bearing of 357° in order to pass about 0.3 mile W of a shoal, with a least depth of 4.1m, lying WNW of Trapp Bluff. When McLean Point bears 068°, vessels should alter course to ENE in order to pass about 250m S of Chief Rock.

When the light on Gayward Rock bears 114° and distant about 0.3 mile, vessels should change course to NNW and enter the cove about midway between Yakats Rock and a rock, with a depth of 0.6m, lying close E. Vessels should then adjust course as required for the anchorage.

Caution.—Vessels should not attempt to pass to the W of Lookout Island.

A submarine cable, which may best be seen on the chart, lies across Brown Channel, near the entrance.

10.21 Checleset Bay (50°02'N., 127°40'W.) indents the coast of Vancouver Island, between Lookout Island and Brooks Peninsula. Three inlets lead NNE from the N shore of this bay. Numerous islets, above and below-water rocks, and reefs lie scattered throughout the bay. Breakers usually mark the below-water dangers. A swell often exists in the bay.

Malksope Inlet (50°07'N., 127°28'W.) is entered between **Malksope Point** (50°05'N., 127°29'W.) and Upsowis Point, 0.5 mile WNW. The sides of the inlet are high and steep-to. Mount Paxton rises 0.8 mile ENE of the E entrance point and is very conspicuous. Upsowis Point is fringed by foul ground.

Several islets lie on an area of foul ground located in the fairway, about 1 mile within the entrance. The inlet is approached from the S through the Barrier Islands and to the W of **Thomas Island** (50°04'N., 127°29'W.). Two buoys mark the dangers lying at the edge of the channel to the NW and SW of Thomas Island. Clear weather and local knowledge are necessary to enter the inlet. Anchorage can be taken in depths of 20 to 33m within the inlet.

An approach should be made from the S by passing about 0.5 mile W of a rock, 4.6m high, lying about 1.5 miles W of Lookout Island. Vessels should steer 007° and pass about 0.2

mile off the first buoy. They should then steer a course of about 347° to pass about 0.2 mile off the second buoy. Vessels should then set a course to pass 0.2 mile off Malksope Point.

Vessels should pass to the W of the group of islands and rocks lying 1.5 miles within the inlet. The fairway in this vicinity is only 0.1 mile wide, but has a least depth in mid-channel of 25m.

Ououkinsh Inlet (50°06'N., 127°34'W.), lying close W of Malksope Inlet, is entered NW of the Barrier Islands. The shores of this inlet are generally high. The depths in the inlet are deep, but temporary anchorage is available.

Byers Cone (50°07'N., 127°36'W.) rises at the W side of the entrance and is conspicuous.

Mahope Point (50°06'N., 127°34'W.), located 1.5 miles SE of Byers Cone, is conspicuous from the E.

10.22 McKiel Rock (50°04'N., 127°36'W.), which dries, and **Clara Islet** (50°05'N., 127°35'W.) lie SE and close to the entrance fairway of the inlet. Both of these dangers are fronted by foul ground on their S sides.

Vessels approaching from the S or SE should bring the westernmost of the O'Leary Islets and Scarf Island in line, bearing 350°. They should then proceed on this range until Mahope Point bears 046°, open E of Izard Point. Vessels should then steer for Mahope Point on this bearing and pass about 0.2 mile off the shoal, with a depth of 4.2m, lying N of McKiel Rock and 0.2 mile off the shoal, with a depth of 7.3m, lying 0.5 mile NNW of Clara Islet. When this latter shoal has been passed, they may enter, favoring the SE shore of the inlet.

Sulivan Reefs (50°05'N., 127°40'W.), partly awash and often breaking, lie close to the approach channels of Ououkinsh Inlet and Nasparti Inlet. Two detached shoal patches, with a least depth of 7.3m, lie near the fairway, NW of Clara Islet.

The **Cuttle Islets** (50°06'N., 127°36'W.) and the **Bunsby Islands** (50°06'N., 127°32'W.), both extensive groups, border the entrance of the inlet. The islands are steep-to on their NW sides. **Gay Passage** (50°07'N., 127°32'W.) leads SE between the two largest of the Bunsby Islands and is used by small vessels with local knowledge.

Green Head (50°05'N., 127°34'W.), located on the SE side of the entrance, is conspicuous. The area lying N of Mahope Point and fronting **Battle Bay** (50°07'N., 127°35'W.) is encumbered with numerous islets and shoals. The SE side of the entrance channel should be favored in order to avoid these dangers.

The **Longback Rocks** (50°07'N., 127°33'W.) lie on the NW side of the channel, opposite the entrance of Gay Passage. A drying rock lies on the SE side of the fairway, about 0.8 mile E of these rocks.

Izard Point (50°08'N., 127°31'W.), bold and conspicuous, is located 1.5 miles NE of Longback Rocks. The **Hisnit Islands** (50°10'N., 127°28'W.) lie 2.2 miles NE of the point and are steep-to on their S sides. The **Ououkinsh River** (50°11'N., 127°26'W.) flows into the head of the inlet through a drying bank. Small vessels can obtain anchorage in depths of 29m about 0.3 mile SW of this drying bank.

10.23 Nasparti Inlet (50°07'N., 127°40'W.) lies W of Ououkinsh Inlet and E of Brooks Peninsula. It has high, rocky shores that are indented. The depths in the inlet decrease from

58m at the entrance to 25m near the head. Numerous above and below-water rocks and shoals lie in the approaches to the inlet. Sullivan Reefs form the outermost danger.

Vessels entering Nasparti Inlet should steer to keep Scarf Island and a summit, 492m high, rising between Johnson Lagoon and the head of the inlet in line, bearing 019°. This range leads midway between a shoal, with a depth of 7.3m, lying 0.8 mile NNE of Cutler Rock and the dangers located to the SW of Ferey Rock. When Yule Rock is nearly abeam, vessels should change course to the E until Lorenz Point, bearing 030°, is just open W of the E entrance point of the inlet. This course leads between a rock, which dries 3.9m, lying at the NW end of the group of islands on the E side of the fairway and the dangers located to the SE of Scarf Island. Vessels should then maintain a mid-channel course up the inlet.

Vessels approaching from the SW can do so on the range that leads toward the entrance of Nasparti Inlet. They should then bring Scarf Island and the summit, 492m high, rising between Johnson Lagoon and the head of the inlet in line, bearing 019°. Vessels should proceed on this range until Clara Islet and Mount Paxton are in line, bearing 073°. They should then proceed on this range until Mahope Point bears 046°. Vessels should then steer for Mahope Point on this bearing.

10.24 Baker Rock (50°06'N., 127°42'W.), awash, has a detached shoal, with a depth of 9.5m, lying about 0.4 mile S of it. Both of these dangers break during heavy weather.

Quineex Reef (50°06'N., 127°44'W.), drying, lies 1.5 miles W of Baker Rock. A shoal patch, with a depth of 8.2m, is reported to lie about 0.3 mile NNE of this reef.

Cutler Rock (50°07'N., 127°41'W.), above-water, lies about 0.8 mile NNE of Baker Rock. A shoal patch, with a depth of 7.3m, lies about 0.7 mile NNE of this rock, on the W side of the approach fairway.

O'Leary Islets (50°06'N., 127°39'W.), barren and steep-sided; **Yule Rock** (50°07'N., 127°39'W.), fronted by several above and below-water rocks; and **Ferey Rock** (50°07'N., 127°39'W.), which dries, all lie on the E side of the approach fairway, at the outer edge of foul ground extending from the mainland.

Jacobson Point (50°08'N., 127°41'W.) is the low W entrance point of Nasparti Inlet. A drying ledge fringes the S side of this point. Small craft can obtain anchorage within a sheltered bay lying close N of the point.

Scarf Island (50°08'N., 127°40'W.), conspicuous from seaward, lies in the middle of the inlet, about 1 mile NE of Jacobson Point. The fairway is constricted by several drying rocks and shoals, which may best be seen on the chart, lying SE of the island.

Johnson Lagoon (50°11'N., 127°39'W.), constricted but navigable by small craft, is entered about 0.8 mile WNW of **Lorenz Point** (50°10'N., 127°38'W.). The drying head of Nasparti Inlet lies 2 miles NE of the latter point.

Anchorage can be taken in a depth of 40m in the middle of the inlet, WSW of Lorenz Point. Vessels can also anchor in a depth of 27m about 0.8 mile from the head of the inlet.

The **Brooks Peninsula** (50°10'N., 127°46'W.), broad and blunt, extends 9 miles SW from the coast of Vancouver Island. Its shores are rocky and mountains, over 600m high, rise abruptly inland from them.

From **Clerke Point** (50°05'N., 127°48'W.), the SE extremity of the peninsula and the W entrance point of Checleset Bay, the S coast of the peninsula is fringed by numerous above and below-water rocks and reefs. These dangers include Eldridge Rock, lying SE of Clerke Point, which is marked by breakers and **Banks Reef** (50°05'N., 127°51'W.), which dries and breaks heavily.

Cape Cook to Triangle Island

10.25 Cape Cook (50°08'N., 127°55'W.), the SW extremity of Brooks Peninsula, is a high bluff. It is conspicuous, wooded, and rises steeply from the sea.

Solander Island (50°07'N., 127°56'W.), lying 1.3 miles SW of Cape Cook, has a high summit marked by a light. The area lying between this island and the peninsula is foul and without a clear passage.

Brooks Bay (50°14'N., 127°56'W.) lies on the NW side of Brooks Peninsula. The shores of the bay are rocky and backed by mountain ranges. The entrance lies between Cape Cook and Lawn Point. Klaskish Inlet and Klaskino Inlet indent this bay and afford anchorage to small vessels. Numerous dangers lie in the approaches to these inlets. The Hacket Islands and the Guilliams Islands lie on an area of foul ground extending about 1 mile seaward from the SE shore of the bay.

Clerke Islet (50°12'N., 127°50'W.) lies on an area of foul ground extending NE from Hacket Island. **Clerke Reefs** (50°12'N., 127°53'W.), above and below-water, lie N of the latter island. Shoals extend NW of these reefs to within 1 mile of the approach channel leading into Klaskish Inlet. Vessels without local knowledge should avoid the SE part of Brooks Bay.

Scarf Reef (50°19'N., 127°59'W.), which breaks in heavy weather, lies 1.3 miles SW of Lawn Point, the low and grassy N entrance point of Brooks Bay. Several detached shoals lie SE of this reef and the area located between the reef and the point is foul.

Caution.—Brooks Bay should not be entered via the passage lying between Solander Island and Cape Cook.

Vessels approaching from the N should give Lawn Point a berth of at least 2 miles.

Local knowledge is required to enter any of the inlets within Brooks Bay.

10.26 Klaskish Inlet (50°14'N., 127°49'W.) is entered between **Orchard Point** (50°13'N., 127°48'W.) and **Gould Rock** (50°15'N., 127°50'W.). The depths in the entrance and throughout the inlet are deep. The Klaskish River flows into a landlocked basin which forms the head of the inlet.

Harris Peak and Shields Cone, two mountain peaks, are conspicuous. Shields Cone in line, bearing 084°, with Bonner Islet forms a range that indicates the channel leading through the reefs lying in the approach to the inlet.

Hughes Rock (50°15'N., 127°53'W.), which dries, lies about 1 mile N of the approach range and the sea breaks heavily over it. Gould Rock, above-water, lies on an area of foul ground extending about 1.5 miles W from **Sapir Point** (50°15'N., 127°48'W.), the N entrance point of the inlet. Bonner Islet lies 0.5 mile ESE of Sapir Point.

The **Donald Islets** (50°14'N., 127°48'W.), surrounded by above and below-water rocks, lie at the S side of the inlet entrance. A light is shown from the northernmost islet of the group.

McDougal Island (50°14'N., 127°46'W.) lies on the S side of the entrance fairway leading into the inlet. The channel lying between this island and Bonner Islet is constricted and confused seas often exist within it.

Klaskish Anchorage is the constricted area located between the E side of McDougal Island and the mainland. The approach to this area lies between an above-water rock and a group of rocks, marked by a beacon. Sheltered anchorage can be taken in depths of 18 to 23m.

Vessels should approach, bearing 084°, on the range alignment. When the northwesternmost of the Donald Islets bears 154°, they should change to a mid-channel course, pass between Bonner Islet and McDougal Island, and approach the anchorage entrance.

10.27 Klaskino Inlet (50°18'N., 127°52'W.), with Side Bay indenting its N side, has high rocky shores. This inlet is approached between Heater Point, rocky and conspicuous, and the N side of Brooks Bay. A rocky knob rises close within the Heater Point. The outer part of the inlet has depths of 18 to 36m.

Restless Mountain and Red Stripe Mountain are prominent landmarks in this vicinity. The latter mountain has a conspicuous landslide on its SW side which appears as a red stripe from seaward.

Morris Rocks (50°18'N., 127°52'W.), the largest group of rocks conspicuous from seaward, consist of several above and below-water rocks on which the sea breaks.

Steele Reefs (50°18'N., 127°53'W.), another group of above and below-water rocks, are marked by a buoy moored off their NW extremity.

Rugged Islands (50°19'N., 127°55'W.) lie on an area of foul ground fronting the N shore of the bay and are marked by a light at their N end. The approach range leads NW of this group of islands.

Martin Rock (50°19'N., 127°53'W.), which dries, lies 0.8 mile E of the largest of the Rugged Islands. It is marked by a buoy moored at the SW end.

Side Bay (50°20'N., 127°54'W.) indents the coast NE of the Rugged Islands. This bay, which is open to the weather, is encumbered by numerous islets, rocks, and reefs.

Seward Hill (50°21'N., 127°52'W.) rises within the head of the bay and is conspicuous from seaward.

Newton Entrance (50°18'N., 127°57'W.) is the approach passage leading from seaward towards Klaskino Inlet.

Anchorage Island (50°18'N., 127°49'W.) lies on an area of foul ground in the middle of the constricted part of the inlet. A chain of islets and rocks extends across the inlet, close NE of this island. Beacons and buoys mark the rocks lying adjacent to the sides of the passage.

Klaskino Anchorage (50°18'N., 127°49'W.) lies off the SE side of Anchorage Island. The entrance passage leading to this anchorage lies S of Anchorage Island and has a width of only 135m, between the shoals and rocks. The anchorage is sheltered but constricted and has depths of 14 to 18m.

Directions.—Seward Hill in line with the NW extremity of Rugged Island, bearing 045°, indicates the passage leading between the shoals lying in the approach to Newton Entrance. When Lawn Point bears 315°, vessels should change course to pass midway between the Rugged Islands and the mainland to the W and N. When about 0.3 mile NE of Rugged Islands Light, they should change course to pass between the two buoys moored to the SE. Vessels should then steer a course of 104° for the S extremity of Anchorage Island until Morris Rock bears 170°.

Caution.—The dangers lying in the entrance of Klaskino Inlet consist of numerous islets, rocks, and reefs which may best be seen on the chart. These dangers extend NW across the entrance between Heater Point and the shore in the vicinity of Lawn Point.

10.28 Quatsino Sound (50°25'N., 128°00'W.) is extensive and is the northwesternmost of the larger inlets located along the W coast of Vancouver Island. This sound extends about 13 miles ENE to its head and divides, branching SE into Neroutsos Inlet and N through Quatsino Narrows into Holberg Inlet and Rupert Inlet. It is approached between Kwakwilt Point and Cape Parkins. The entrance lies N of Cliffe Point. Forward Inlet, extending N from Cape Parkins, affords one of the better anchorages along this stretch of coast. A number of small local ports are situated in the branches at the head of the sound.

Several conspicuous mountains, islets, and a landslide serve as landmarks at the entrance. Nose Peak rises 3.5 miles NE of Cape Parkins and has a sharp, rocky summit.

Tides—Currents.—The currents in the sound attain a rate of 3 knots at springs. They set N and S at a position to the W of the Gillam Islands.

The current flowing E through the channel leading N of Drake Island divides. Off the NE coast of Drake Island, one part flows SE into Neroutsos Inlet and the other ENE towards Quatsino Narrows. Each of these currents attains a rate of 3 knots at springs. The junction of the W flowing parts of the tidal current occurs in the same position.

The tidal currents set past the entrance of Hecate Cove at a rate of 1 to 3 knots. Off Kokwina Cove, they set with strength and heavy tide rips are sometimes formed.

Directions.—Vessels approaching Quatsino Sound from the NW should give the coast to the NW of the sound a berth of about 2.8 miles by keeping Lawn Point bearing 134°. When Kains Island Light bears 095°, they should change course to 112° and head for the conspicuous landslide located 3 miles NNE of Kwakwilt Point. Vessels should maintain this course until Cliffe Point and the northernmost end of the Gilliam Islands are in line, bearing 056°. They should then steer on this range until the E side of the Hunt Islets and Pinnacle Island are in line, bearing 353°. Vessels should then steer 353° on the range and pass South Danger Rock and Robson Rock to the E and Kains Island to the W. As an alternate, they may pass S of Billard Rock and then E of the Gilliam Islands.

Vessels bound for Quatsino Sound should proceed as previously directed until the N extremity of Kains Island is abeam. They should then alter course to pass about 0.2 mile N of the buoy marking Brown Rock. Vessels should then change course to 075° and head towards the conspicuous rock lying off the S end of the Bedwell Islands. This latter course leads S of

Pilley Shoal and N of Cliffe Point. When Cliffe Point is abeam, they should change course to pass 0.3 mile S of the Bedwell Islands and 0.2 mile N of May Point.

Vessels bound for the easternmost anchorage in Koprino Harbor should give the E side of Schloss Island a berth of about 0.2 mile and then pass on either side of Ives Islet into the anchorage.

Vessels approaching Quatsino Sound from the S should make for a position located about 11 miles NW of Cape Cook with Kains Island Light bearing 021° and distant 14 miles. From this position, they should steer for the light until Cliffe Point is seen through the widest gap of the Gilliam Islands, bearing 041°. Vessels should then steer for Cliffe Point until the E side of the Hunt Islets and Pinnacle Island are in line, bearing 353°.

Caution.—The approaches to Quatsino Sound are exposed to the full sweep of the Pacific Ocean. Consequently, buoys moored in exposed positions may be missing.

Dangers in the form of rocks, reefs, and shoals lie along the sides and in the fairway of the approach to the sound. Only in heavy weather are these dangers marked by breakers.

10.29 Kwakiutl Point (50°21'N., 128°00'W.), located at the S approach of the sound, is low, rocky, and rises gradually SE to Restless Mountain. The coast extending 1.5 miles SSE of the point to Lawn Point and 7 miles NNE of the point to Cliffe Point is fronted by numerous above and below-water rocks, reefs, and shoals. Rowley Reefs and Piling Rock, which dries, extend up to 1.5 miles W of **Gooding Cove** (50°24'N., 127°57'W.). Anchorage can be taken in a depth of 10m, sand, within this latter cove.

Harvey Cove (50°26'N., 127°56'W.), backed by steep cliffs on its N side, is open to the W and not recommended as an anchorage.

Cape Parkins (50°27'N., 128°03'W.), at the N side of the sound, is steep, precipitous, and fringed by foul ground.

Mount Kains (50°28'N., 128°03'W.) rises prominently inland in the vicinity of the point.

Kains Island, 73m high, lies close SE of Cape Parkins and is separated from it by a small boat passage. A light is shown from a prominent structure standing at the S end of this island.

Heron Rock, below-water, and South Danger Rock, awash, lie about 0.2 mile S and 1 mile SE, respectively, of Kains Island. Robson Rock, which dries, and several below-water rocks lie close E of the island and are often marked by breakers.

The **Gillam Islands** (50°27'N., 127°58'W.), a chain of islands located on an area of rocky foul ground, lie about 1 mile offshore, SE of Cliffe Point. The largest and northernmost is-land of this chain is wooded. The channels lying adjacent to the islands are deep.

10.30 Billard Rock (50°26'N., 127°58'W.), steep-to, and **Brown Rock** (50°27'N., 127°59'W.), below-water, are marked by buoys and lie S and NW, respectively, of the Gillam Islands.

Forward Inlet (50°29'N., 128°02'W.), which trends N and NE, is entered between **Kains Point** (50°28'N., 128°02'W.) and **Montgomery Point** (50°28'N., 128°00'W.). The fairway channel is deep and free of dangers. Several islets and drying

banks encumber the head where a narrow passage leads into Ahwhichaolto Inlet, a large salt water lagoon.

Vessels bound into Forward Inlet should, when abeam of Kains Island, alter course to the E and give Pinnacle Island a berth of 0.2 mile. When the SW side of Matthews Island is open NE of Kains Point and bearing 323°, they should change course to follow the middle of the fairway through the inlet, passing E of the Hunt Islets and Matthews Island.

If bound into North Harbor, vessels should round the N extremity of Matthews Island at a distance of about 0.2 mile and then proceed WSW towards the anchorage.

If bound into Winter Harbor, vessels should proceed as previously directed until the N extremity of Matthews Island is abeam. Deep-draft vessels should favor the W shore of the inlet in order to avoid the shoal patch, with a depth of 9.7m, lying on Hall Bank. After passing Hall Bank, vessels should proceed in mid-channel toward the harbor and the anchorages.

Plumper Hill, with steep cliffs on its SW side, rises close above Montgomery Point. Nose Peak stands close NE of the hill and is conspicuous. Both entrance points are fronted by several islets.

A rocky patch, with a least depth of 9.6m, lies in the entrance fairway, about 0.8 mile W of Brown Rock.

Anchorage can be taken in a depth of 12m within **North Harbor** (50°29'N., 128°03'W.). The anchorage is sheltered by Matthews Island, which lies in the entrance. The anchorage can be approached by passing N of the island and S of Flint Rock, which lies close off the N shore. Hall Bank extends from the E side of the inlet and has depth of 5.5m lying at its W edge, about 0.5 mile E of Flint Rock.

Greenwood Point (50°31'N., 128°02'W.), marked by a light, is fringed by a steep-to sandbank.

Winter Harbor (Leeson Harbor) (50°31'N., 128°01'W.) is formed by that part of Forward Inlet lying above Greenwood Point. It has low shores fringed with sandy beaches. Sheltered anchorage can be taken, in a depth of 14m, mud, between 0.5 mile and 0.8 mile NE of Greenwood Point. A settlement, fronted by a public wharf, stands N of the latter point and several conspicuous oil tanks are situated in its vicinity.

Cliffe Point (50°28'N., 127°56'W.), marked by a light, is the S entrance point of the main body of Quatsino Sound. It consists of a steep-to and precipitous bluff that rises gradually inland to a mountain. Mount Bury stands about 1.8 miles SE of the point and is prominent.

Koskimo Bay (50°28'N., 127°52'W.), a broad and open bight, lies E of Cliffe Point and is fringed by rocks and shoals. Anchorage can be taken in a depth of 27m, sand and mud, at the E end of this bay with an islet, lying about 0.2 mile N, bearing 003°.

Caution.—Two small water intake pipelines, which may best be seen on the chart, lie across Winter Harbor between the vicinity of the mouth of Quashtin Creek and a point located on the W shore close S of the public wharf.

10.31 Koprino Harbor (50°30'N., 127°51'W.) lies on the N side of the sound, opposite Koskimo Bay. It is entered close E of **Prideaux Point** (50°29'N., 127°51'W.). The harbor is formed by an open bay, but is cluttered in its inner part by several islands, islets, and rocks. Small vessels can anchor in a



Photo copyright Mike Mitchell

Quatsino Light

depth of 27m about 0.2 mile W of **Schloss Island** (50°30'N., 127°52'W.). Anchorage may also be taken in a depth of 14m close N of the island, but the swinging room is limited.

The **Salmon Islands** (50°28'N., 127°48'W.) lie in an open bay close E of the Koskimo Islands. A T-shaped pier, with a depth of 9.1m alongside, fronts the head of the bay.

Brockton Island (50°29'N., 127°46'W.), marked by a light at its N end, lies off the S shore of the sound, about 2 miles NE of the Salmon Islands.

Drake Island (50°31'N., 127°38'W.), lying in the middle of the head of Quatsino Sound, has rocky shores and high, wooded slopes. The **Ildstad Islands** (50°31'N., 127°42'W.), lying close off the N side of the sound and 1 mile W of Drake Island, are joined together by a sand flat and marked by a light. **Newcomb Rocks** (50°31'N., 127°41'W.), below-water, lie on the E side of the approach channel which passes N of Drake Island. **Mount Byng** (50°33'N., 127°41'W.) has two conspicuous summits.

Bergh Cove (50°32'N., 127°37'W.) is entered between **Leeson Point** (50°32'N., 127°37'W.) and another point, 0.3 mile ESE. A light is shown from a structure standing on a drying reef located close S of Leeson Point. Leeson Rock, below-water, lies 0.2 mile SSE of the point and is marked close W by a buoy. A customs house is situated 1 mile W of Leeson Point. A wharf, with a depth of 6.1m alongside, fronts the E side of the cove.

Quatsino (50°32'N., 127°37'W.), a settlement, is situated on a low point about 0.5 mile ESE of Leeson Point. A wooded hill rises behind the settlement. The shore between the cove and Leeson Point is fronted by foul ground extending up to about

0.1 mile seaward. A boat landing and facilities for seaplanes are situated on the E side of the point.

10.32 Buchholz Channel (50°30'N., 127°38'W.) leads S of Drake Island and into Neroutsos Inlet. This channel is deep, but constricted to a width of about 0.2 mile by numerous islets and rocks at its W end. The E flood tidal current sets strongly toward the **Farmer Islets** (50°30'N., 127°39'W.), which are fronted by foul ground.

Bland Island (50°30'N., 127°40'W.), wooded and steep-to, lies in the channel entrance. It is located SSE of Holloway Point, the low and rocky SW extremity of Drake Island.

Banter Point (50°30'N., 127°37'W.), low and steep-to, is the NW extremity of a peninsula which extends into the channel and forms the E side of **Kultus Cove** (50°29'N., 127°37'W.). Several drying rocks lie near the head of the cove and are marked by a buoy.

The E and S shores of the cove are fronted by booming grounds. It was reported (1986) that the cove is used by ocean-going vessels to load logs by mooring to rafts extending from the shore.

Small vessels can obtain anchorage in the cove and also in Julian Cove, which is entered 1 mile ESE of Banter Point. Both of these coves have depths of 12 to 14m.

The E entrance of Buchholz Bay lies between **Pender Point** (50°29'N., 127°35'W.) and **Lakken Point** (50°30'N., 127°36'W.). Both of these points are low and backed by high land.

10.33 Neroutsos Inlet (50°30'N., 127°35'W.), the SE branch of Quatsino Sound, has high and rugged shores backed by

mountains in many places. The inlet is deep and has a least width of about 0.3 mile. Ice forms at times in the inlet, but does not interfere with shipping.

Evenson Point (50°31'N., 127°37'W.), rocky and fairly high, is located on the E side of the entrance to the inlet at its junction with Quatsino Narrows. McNiffe Rock, lying 0.2 mile SW of the point, dries and is marked by a light. **Cross Island** (50°31'N., 127°37'W.) lies near the entrance channel. It is steep-to on the E side, but foul ground fronts the S and SW sides.

Atkins Cove (50°30'N., 127°35'W.), open to the SE, affords shelter to small craft.

Buchholz Rock (50°29'N., 127°34'W.), below-water, is steep-to on its E side and is marked by a lighted buoy.

Yreka Mine (50°27'N., 127°34'W.), situated on a mountain slope, is a very conspicuous landmark. The wharf, barge landing, and dolphins fronting the shore in the vicinity of the mine are all abandoned.

Mist Rock (50°26'N., 127°30'W.), which dries, lies on a shoal located 0.7 mile S of Jeune Landing and is marked by a light.

Frigon Islets (50°25'N., 127°29'W.) lie about 0.8 mile SSE of Mist Rock and are wooded. A light is shown from the westernmost islet, which lies near the channel of the inlet. Vessels should pass at least 0.1 mile W of these islets.

Ker Point (50°23'N., 127°29'W.), located 2 miles SSE of the Frigon Islets, is the low extremity of a peninsula. This peninsula is located on the W side of the inlet and forms the E side of Thurburn Bay. Muir Rocks, consisting of a number of drying ledges, extends 0.1 mile NE of the point. An extensive drying mud flat lies off the mouth of Cayuse Creek, at the head of the inlet. Kretchen Island lies close to the W shore of the inlet, SW of Port Alice. Between the drying flat and Kretchen Island, both shores of the inlet are lined with booming grounds.

10.34 Port Alice (50°23'N., 127°27'W.) ([World Port Index No. 18820](#)), a small and privately owned port, is the site of a large pulp mill. The residential area of the town is situated in Rumble Beach, about 3 miles NNW.

Depths—Limitations.—A wharf, with several faces, fronts the port. The longest face provides 127m of berthage and extends SE. It has varying depths alongside due to the deposition of waste pulp. An obstruction, with a depth of 2.4m, lies close off the S end of the wharf.

Vessels are berthed about 5m out from the dock, using log fenders, to keep them in deeper water.

It is reported that vessels up to 183m in length and 11m draft have been accommodated in the port. There are facilities for small craft and seaplanes.

Pilotage.—Pilotage is compulsory. Pilots can be contacted by VHF and board at the entrance of Barkley Sound, off Cape Beale. Vessels should advise Pilots Victoria via radio station VAK of their ETA at Quatsino Sound or at Cape Beale.

Anchorage.—Vessels waiting for a berth can obtain anchorage in depths of 50 to 60m, mud, about 0.5 mile NW of the main wharf.

Caution.—A submarine pipeline, which may best be seen on the chart, extends about 0.1 mile S from the public wharf, which is situated N of the town.



Port Alice

Quatsino Narrows (50°32'N., 127°34'W.) is approached between Evenson Point and Quatsino. It leads N into Rupert Inlet and Holberg Inlet. There are depths of 18 to 36.6m in the fairway of the narrows. There is a depth of 19.8m lying in mid-channel, NE of Ohlsen Point. There are also depths of 11.2m and 9.6m lying, respectively, in mid-channel, W of Kultah Point and W of Makwazniht Island.

Tides—Currents.—The tidal currents attain a velocity of 5 knots, frequently even more at springs. Slack at HW occurs 5 minutes before the HW at Prince Rupert and has a duration of 12 minutes.

Hecate Cove (50°33'N., 127°36'W.), open to the S, has high shores and is fringed by sandy beaches.

Quattische Island (50°32'N., 127°35'W.) lies in the middle of the approach channel to the narrows. The fairway leading N of the island is deep and about 0.1 mile wide. The fairway leading S is obstructed by rocks.

Kokwina Cove (50°31'N., 127°35'W.) offers refuge to small craft, but the tidal currents are strong at the entrance.

10.35 Ohlsen Point (50°32'N., 127°34'W.), located at the W side of the S end of Quatsino Narrows, is bold, rocky, and marked by a light. A conspicuous gray cliff rises close N of this point. The fairway channel bends sharply to the N abreast of this point. A shoal patch, with a least depth of 19.2m, lies near the center of the channel, about 0.2 mile NE of the point.

It is reported that heavy tide rips occur at times off Ohlsen Point.

Sorenson Point (50°34'N., 127°34'W.), located at the W side of the N end of the narrows, is fringed by shoals. Kultah Point is located on the E side of the N end of the narrows.

Makwazniht Island (50°33'N., 127°33'W.), high and wooded, lies in the N entrance of the narrows, close NW of

Kultah Point. Tide rips and overfalls occur in the vicinity of this island. A light is shown from a structure standing on the NW extremity of the island.

Range beacons stand on the E side of the narrows, 0.4 mile SSW of Kultah Point. In line, bearing 193°, these beacons indicate the channel leading through the N entrance of the narrows.

Rupert Inlet (50°35'N., 127°30'W.) is entered between Makwazniht Island and Hankin Point, 0.8 mile N. It extends 5.5 miles ENE to a drying flat at the head. The inlet has high sides. It is deep and clear of dangers in mid-channel.

Utah Mines Bulk Wharf fronts the N shore of the inlet, about 2.5 miles NE of Hankin Point. This wharf provides 213m of berthage and consists of a pier extending offshore to dolphins, which are connected by a catwalk.

Anchorage can be taken in a depth of 25m at the head of the inlet, W of the drying flat.

Varney Bay is entered between Makwazniht Island and Kenny Point, 0.5 mile ENE. It affords anchorage to small vessels, but is encumbered by many drying and below-water rocks.

Anchorage.—Anchorage can be taken, in a depth of 18m, mud, in the center of Hecate Cove.

Vessels waiting to enter Prince Rupert should use the designated anchorage berths. Berths No. 2, Berth No. 3, and Berth No. 4 lie in Marcus Passage; Berth No. 5 through Berth No. 10 lie along the E shore of Prescott Island and Stephens Island; and Berth No. 11 and Berth No. 12 lie S of the Lucy Islands.

Berth No. 2, Berth No. 3, and Berth No. 4 are not to be used from June 15 to September 15. Berth No. 2 is restricted to vessels up to a maximum of 50,000 dwt.

Vessels are cautioned that these anchorage berths may not provide ideal holding ground during periods of inclement weather.

Vessels are urged to exercise extreme care at all times when anchored in these areas and maintain a continuous radio watch on VHF channel 71 (Prince Rupert Traffic Zone Control).

Caution.—Caution is necessary when entering the Hecate Cove due to strength of tidal currents setting across entrance.

10.36 Holberg Inlet (50°35'N., 127°35'W.), the W branch of Quatsino Sound, has high, rocky shores with several bays indenting its N shore and a drying flat fronting its head. It is entered between Sorenson Point and Hankin Point and extends 18.5 miles WNW.

Coal Harbor (50°36'N., 127°35'W.), entered 1.7 miles NW of Hankin Point, has shores fringed by sand and gravel. It has depths of 14 to 31m. A rock, below-water, lies close off Stewart Point, at the E entrance. A pier fronts the NW side of the harbor. It has a T-head, 31m long, with a depth of 6.4m alongside. Anchorage can be taken, in a depth of 22m, in the middle of the harbor.

Stragglings Islands (50°36'N., 127°41'W.), above and below-water rocks and islands, lie off the N side of Holberg Inlet, about 4 miles W of Coal Harbor. A light is shown from the W end of the largest island. No attempt should be made to pass through the islands.

Holberg (50°39'N., 128°00'W.), a settlement at the head of the inlet, has a pier with berthing floats on the outer end

extending across the drying flat. Booming grounds line both the N and S sides of the inlet in the vicinity of Holberg.

Caution.—Submarine cables, which may best be seen on the chart, lie across Holberg Inlet in the vicinity of Coal Harbor.

A submarine sewer outfall, which may best be seen on the chart, extends about 0.2 mile seaward from the N shore of Holberg Inlet, 0.5 mile WNW of Stewart Point.

Lippy Point (50°28'N., 128°06'W.), located on the coast about 2.5 miles NW of Cape Parkins, is low and rocky. Between this rocky point and Cape Scott, the coast is rocky, indented, and vessels should not approach within the 35m curve, which lies about 2 miles offshore. The coast between Cape Parkins and Lippy Point is fronted by rocks and shoals extending up to almost 0.5 mile offshore.

Quinn Rock (50°28'N., 128°05'W.), with a depth of less than 1.8m, lies off the entrance of **Grant Bay** (50°28'N., 128°05'W.). This bay is exposed, but anchorage can be taken in a depth of 11m, sand, in the middle of the bay during fair weather.

Topknot Point (50°32'N., 128°13'W.), located 6 miles NW of Lippy Point, is low with a distinctive knot-shaped hill rising within it.

10.37 Commerell Point (50°34'N., 128°15'W.), located 2.3 miles NNW of Topknot Point, forms the S entrance point of **Raft Cove** (50°35'N., 128°15'W.). This latter cove is encumbered by shoals and open to the weather. A conspicuous tower stands on a high hill, 6 miles NE of the point.

Bushby Rock, with a depth of 7m, lies about 1.5 miles SW of Commerell Point.

San Josef Bay (50°39'N., 128°19'W.) is open and unsheltered, except during N winds. It has high shores and ample depths, but a heavy swell often prevails. The bay is approached between Cape Palmerston, located 3.3 miles NW of Commerell Point, and Hanna Point, about 3.5 miles NNW.

Cape Palmerston (50°36'N., 128°18'W.), the S entrance point of the bay, is bold, rocky, and backed by heights. Foul ground extends up to about 0.5 mile offshore in the vicinity of Cape Palmerston.

Temporary anchorage can be taken, in a depth of 12m, about 1 mile ESE of Hanna Point.

Winifred Islands (50°40'N., 128°22'W.), bare and yellow-topped, lie about 0.8 mile WSW of Hanna Point and are conspicuous from the NW. The Helen Islands lie close NE and both island groups are located in the entrance of **Sea Otter Cove** (50°41'N., 128°21'W.). The latter cove is entered W of Hanna Point. Several mooring buoys are situated within this cove and are used by small craft.

Cape Russell (50°41'N., 128°23'W.) is a conspicuous headland on which the sea breaks heavily. It forms the W side of Sea Otter Cove and lies about 1.5 miles N of the Winifred Islands. Between Cape Russell and Cape Scott, 6 miles NNW, the coast is indented by Lowrie Bay, Hansen Bay, and Guise Bay.

Strange Rock (50°45'N., 128°25'W.), 4m high, lies at the outer end of a shoal located about 2.5 miles S of Cape Scott. It is the outermost danger in this vicinity.

Cape Scott (50°47'N., 128°26'W.), the NW extremity of Vancouver Island, is a promontory connected to the island by a low, sandy isthmus. It is fronted by foul ground extending up to about 0.7 mile seaward. A light is shown from a skeletal steel tower standing close within the extremity of the cape. A radio beacon is situated at the light and three prominent white buildings stand in the vicinity.

10.38 Scott Channel (50°47'N., 128°30'W.), leading between Cape Scott and the Scott Islands, is deep and free of dangers.

Tides—Currents.—The tidal currents off Cape Scott are strong and cause heavy tide rips and overfalls on both sides of the channel. The main flood tidal current sets NNE after leaving the cape. The secondary current sets E toward Goletas. The flood current sets 037° and the ebb current sets 217° in Scott Channel.

The **Scott Islands** (50°50'N., 128°54'W.), five in number, lie offshore up to 26 miles W of Cape Scott. The group also includes several islets and rocks. The tidal currents are strong in the various passages leading between the islands. Tide rips are often formed and are dangerous to small craft.

Depths of less than 90m lie W of Cape Scott and indicate proximity to the islands.

Cox Island (50°48'N., 128°36'W.), the easternmost and largest of the group, is 312m high, wooded, and fringed with rocks. Anchorage, during S winds, can be taken, in depths of

14 to 22m, about 0.3 mile off the beach on the NW side of the island.

Lanz Island (50°49'N., 128°41'W.) is separated from Cox Island by a channel encumbered with rocks. It is 212m high, wooded, and rocky. Anchorage can be taken, during S winds, in a depth of 18m, about 0.3 mile off the NE side of the island.

Bersford Island (50°47'N., 128°47'W.), 98m high and wooded, lies 2.5 miles SW of Lanz Island. Several islets and rocks extend up to about 0.7 mile N and 0.5 mile S of this island.

10.39 Sartine Island (50°49'N., 128°55'W.), lying 5 miles WNW of Bersford Island, is 107m high, grassy, and rocky. Numerous islets and above-water rocks extend up to about 1.3 miles W of the island. Many below-water rocks extend up to about 0.8 mile from the ESE side of the island.

Triangle Island (50°52'N., 129°05'W.), the westernmost island of the Scott Islands, lies 7 miles WNW of Sartine Island. It is 210m high, bare, and precipitous. Several islets lie close off this island and numerous below-water rocks extend up to about 0.8 mile from its E and W sides. Two rocky islets, 9m and 21m high, lie 1.8 miles E of the island and foul ground extends between them.

Temporary anchorage can be taken, during SW winds, in a depth of 24m, about 0.3 mile off a bight indenting the NE side of Triangle Island.

Caution.—ODAS buoys are moored about 30 miles and 260 miles W of Triangle Island.