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SECTOR 4 — CHART INFORMATION

SECTOR 4

THE GULF ISLANDS

Plan.—This sector describes the passages to the W of Moresby Passage and Active Pass, which lead through the Gulf Islands to Dodd Narrows and the Strait of Georgia. The descriptive sequence is from SE to NW.

General Remarks

4.1 The route to Nanaimo leads via Satellite Channel, Sansum Narrows, Stuart Channel, Dodd Narrows, and Northumberland Channel. It passes the Vancouver Island facilities of Cowichan Bay, Chemainus Bay, and Ladysmith Harbor.

Satellite Channel is a good passage, but Sansum Narrows is somewhat confined and is not recommended without local knowledge. Stuart Channel is a good passage; Dodd Narrows has a least width of 55m; and Northumberland Channel is broad and clear.

An alternate route to Nanaimo is via Trincomali Channel, Dodd Narrows, and Northumberland Channel. Trincomali Channel can be navigated without difficulty. However, fewer opportunities to anchor are afforded along this route.

Dodd Narrows, Porlier Pass, and Gabriola Passage lead into the Strait of Georgia from the channels lying between the Gulf Islands. Porlier Pass, lying between Galiano Island and Valdes Island, is used by large vessels, but is more difficult to transit than Active Pass. Gabriola Pass, lying between Valdes Island and Gabriola Island, is not recommended.

Winds—Weather.—See [paragraph 2.1](#) for further information.

Tides—Currents.—In Northumberland Channel, the tidal currents set continually to the E. The maximum velocity is 1 knot to 2 knots at springs. Percy Anchorage, lying at the E end of this channel, has weak tidal currents.

When the tidal currents are strong in the passes leading through the outer Gulf Islands, they are little affected by the wind unless it holds the same direction for at least 12 hours.

Gales from the N make slack water earlier at HW and later at LW. They also increase the rate of the ebb current. Gales from the S have relatively less effect, but they tend to make slack water earlier at LW and later at HW. They also increase the rate of the flood current.

The flood current in Sansum Narrows sets N and has an average maximum velocity of 2 knots. The velocity of the tidal currents seldom exceeds 3 knots and in the wider parts of the narrows is usually 1 knot to 2 knots. The HW slack occurs 37 minutes before HW slack in Active Pass; the LW slack occurs 24 minutes after LW slack in Active Pass.

The tidal currents in Stuart Channel have little strength and those in Houston Passage are weak. In the NW part of the latter passage, both tidal currents set N as far as the N extremity of Saltspring Island. In the E part of this passage, the currents set NW and SE. In the S part of Stuart Channel, the flood current sets NW and the ebb in the opposite direction.

The tidal currents in Dodd Narrows set N on a rising tide and S on a falling tide. The maximum velocity is 8 to 10 knots, but at ordinary springs the velocity is 6 to 8 knots.

The duration of slack is about 6 minutes, but at no time is the water completely slack throughout Dodd Narrows. The tidal currents, having become very weak, change direction with no cessation of movement in the narrows as a whole.

During the strength of the tidal current, a tide rip always forms in a well-defined curve on that side of the narrowest part of Dodd Narrows towards which the current is setting. The gradual disappearance of this tide rip indicates the slackening of the current. The narrows should not be attempted until the tide rip has entirely disappeared.

The tidal currents in Gabriola Passage have a maximum velocity of 6 to 8 knots. Both tidal currents in this passage vary greatly in direction at different stages of the tide, but in general they flow E with a rising tide and W with a falling tide. The duration of slack is only about 4 minutes.

The tidal currents in the middle of Porlier Pass set at a velocity of 4 to 8 knots; the greater rate occurs when the range of the tide is largest. The flood current sets NE. The ebb current sets directly over Romulus Rock, at the S end of the pass, from the direction of Virago Point.

The tidal currents in Pylades Channel are inappreciable.

The tidal currents are weak in the SE and wider part of Trincomali Channel. To the N of Wallace Island, then as far as Polier Pass, the currents set at a velocity of 1 knot to 3 knots.

The tidal currents in Captain Passage set at a velocity of 2 to 3 knots. The S current sets directly onto the S shore of this passage and the N current sets strongly NW.

The tidal currents in Satellite Channel set at a velocity of 1 knot to 2 knots. The flood current sets SW and NW around Cape Keppel and the ebb in the opposite direction.

Depths—Limitations.—Deep water is found in the fairways of all the major passages of the Gulf Islands. Many of the dangers lying in and adjacent to the fairways are marked by aids. However, rocky shoals extend offshore in some of the more constricted passages and, along with varying tidal current conditions, make it necessary to have local knowledge.

Dodd Narrows has a least depth of 12.8m in the channel; Porlier Pass has a least depth of 6.7m in the channel; and Gabriola Passage has a least depth of 13.7m in the channel.

Regulations.—The waters described in this sector lie within the Vancouver Vessel Traffic Service (VTS) System. For further information on reporting requirements, see [paragraph 1.1](#).

4.2 Satellite Channel (48°42'N., 123°29'W.), a navigable passage, is bounded to the N by Saltspring Island and to the S by Portland Piers and Vancouver Island. This channel is entered from Swanson Channel, Shute Passage, and Colburne Passage and leads to Saanich Inlet, Cowichan Bay, and the S end of Sansum Narrows.

The depths in the channels are great and there are very few dangers. Mid-channel courses should be steered in the fairways of Satellite Channel and its various reaches.

Saltspring Island (48°47'N., 123°29'W.), the largest of the Gulf Islands, forms the SE and SW sides of Satellite Channel. The S part of the island is wooded and mountainous while the N part is hilly and not so high. The valleys are generally cultivated.

Natural landmarks of prominence include **Bruce Peak** (48°46'N., 123°31'W.), which is flat-topped, and **Baynes Peak** (48°48'N., 123°31'W.), which is very conspicuous and has a perpendicular precipice on the S side of its summit.

Between **Beaver Point** (48°46'N., 123°22'W.), the E extremity of the island, and Cape Keppel, 6 miles SW, the coast is indented by Fulford Harbor. Shoals fringe the shore between Beaver Point and **Eleanor Point** (48°45'N., 123°23'W.), 1.3 miles SSW. Isabella Island, marked by a light, lies 2.3 miles SW of Eleanor Point and about 0.4 mile offshore.

4.3 Fulford Harbor (48°46'N., 123°26'W.) ([World Port Index No. 18590](#)) is entered between Eleanor Point and Isabella Point. Reginald Hill, bare and rocky, rises near the village backing the harbor. The village is a terminus for the regular ferry service from Swartz Bay (48°41'N., 123°24'W.).

The fairway leading to the inner part of the harbor has a least depth of 9.1m. A drying mud flat extends 0.3 mile from the head of the harbor and is fronted by depths of less than 11m. The harbor is mainly used by pleasure craft and has a wharf, 24m long, with a depth of 3m alongside.

Russell Island (48°45'N., 123°24'W.) lies in the entrance to Fulford Harbor. Cecil Rock, with a depth of less than 1.8m, lies about 0.3 mile S of this island. The principal entrance channel leads SW of the island and W of **Jackson Rock** (48°45'N., 123°26'W.), an above-water danger.

Anchorage can be taken, in depths of 18 to 26m, mud, in the center of the harbor. A preferred roadstead, with a depth of 18m, lies about 0.3 mile SSE of the ferry slip.

Cape Keppel (48°43'N., 123°29'W.), a steep-to point, forms the S end of Saltspring Island. Mount Tuam rises 1 mile NE of the cape and is a conspicuous landmark. Several radio towers stand on the summit of this peak.

Patey Rock (48°42'N., 123°31'W.) dries 2.4m and a shoal, with a depth of 11m, lies about 0.5 mile E of it. These two obstacles are the only known dangers lying in Satellite Channel SW of Cape Keppel.

Musgrave Point (48°45'N., 123°33'W.) is located on the SW side of Saltspring Island, about 3.3 miles NW of Cape Keppel. The channel leading between the cape and this point is free of dangers except for Musgrave Rock, with a depth of 2.1m, which lies about 0.5 mile S of the point.

Saanich Inlet

4.4 Saanich Inlet (48°40'N., 123°30'W.) extends 13 miles S from Satellite Channel to within 4 miles of Esquimalt Harbor.

Saanich Peninsula (48°40'N., 123°27'W.), forming the E side of the inlet, extends N from the SE end of Vancouver Island. The W shore of the inlet is steep and heavily wooded, as is the E shore to the S of **Tod Inlet** (48°34'N., 123°28'W.).

The E shore to the N of Tod Inlet is low and featureless. The entire inlet is deep and clear of dangers in mid-channel.

Caution.—Submarine cables cross the inlet in several places. Two at Coal Point; one from Brentwood Bay to Bamberton; and one at the mouth of Squally Reach.

A naval torpedo firing area, marked by buoys, lies about 2 miles within the entrance of Saanich Inlet. This area should be avoided if possible, otherwise, transit is allowed.

Moses Point (48°41'N., 123°29'W.) and **Hatch Point** (48°42'N., 123°32'W.), located about 2 miles W, form the entrance to Saanich Inlet. Wain Rock, which dries, lies about 0.3 mile SW of Moses Point and is surmounted by a circular lighted tower.

Deep Cove (48°41'N., 123°29'W.) indents the coast between Moses Point and Coal Point, 0.7 mile S.

Patricia Bay (48°39'N., 123°28'W.) is entered close S of Warrior Point and affords anchorage, in depths of 11 to 25m, in its center. Several mooring buoys are often situated in the N part of this bay.

The Institute of Ocean Sciences stands on the SE side of the bay and is fronted by a breakwater, marked by a light. Several berths, with depths of 4.4 to 7m alongside, are available for vessels employed by or visiting the institute. There are also facilities for small craft and seaplanes within the bay.

Mill Bay (48°39'N., 123°33'W.), entered close S of Whiskey Point, is partly encumbered with drying rocks and shoals. Small vessels, with local knowledge, can anchor in suitable depths within this bay.

Verdier Point (48°38'N., 123°32'W.) forms the S entrance of Mill Bay.

4.5 McPhail Point (48°37'N., 123°31'W.) is the terminus for a ferry that runs from Brentwood Bay. Tozier Rock, below-water, lies about 0.3 mile NE of this point and is marked by a beacon.

The coast between McPhail Point and Verdier Point is fringed by foul ground. Tanner Rock lies 0.1 mile offshore, about 0.3 mile SSE of Verdier Point. It dries and is marked by a beacon.

Dyer Rocks (48°38'N., 123°29'W.), a group of above and below-water rocks, lie close off Yarrow Point, at the N entrance to Coles Bay. Rocky shoals extend across the mouth of this bay to the N of the entrance fairway.

Coles Bay (48°37'N., 123°28'W.) affords anchorage, in depths of 18 to 27m, in its center with Dyer Rocks bearing 290°. Vessels approaching this anchorage from the N should stay at least 0.5 mile from Dyer Rocks to avoid the fringing shoals extending S from them.

Senanus Island (48°36'N., 123°29'W.) lies 0.5 mile SSW of **Henderson Point** (48°36'N., 123°29'W.) and is separated from it by a deep and clear channel. A light is shown from the N side of the island.

Brentwood Bay (48°35'N., 123°28'W.) may be entered from E or W of Senanus Island and N of **Willis Point** (48°35'N., 123°29'W.). Tod Inlet, narrow and sheltered, leads S from the head of this bay, which is fringed by rocky shoals and drying rocks along its E shore. Two of the drying rocks are marked by a buoy and a beacon. Anchorage can be taken, in a depth of 27m, about 0.2 mile NW of the beacon.

A ferry slip is situated 0.3 mile SE of **Sluggett Point** (48°35'N., 123°28'W.). Two floats, with depths of 2.4 to 4.8m alongside, are moored close to this ferry slip.

4.6 Bamberton (48°33'N., 123°31'W.) ([World Port Index No. 18665](#)) is the site of a disused cement works. There are two wharves, the northernmost of which provides 76m of berthage, with a depth of 9m alongside. The southernmost wharf is used only by small vessels. It is reported that vessels of up to 160m in length and 9.7m draft have been handled here at HW.

Squally Reach is that part of Saanich Inlet leading SW from Willis Point to **Elbow Point** (48°33'N., 123°32'W.). Repulse Rock, which dries, lies close off Elbow Point and is marked by a beacon.

Finlayson Arm extends 3.5 miles S from Elbow Point to its head. Sawluctus Island, wooded and steep-to, lies in the inner part of this arm. Anchorage can be taken, in a depth of 16.5m, about 0.2 mile SW of the island.

Cowichan Bay (48°45'N., 123°36'W.) ([World Port Index No. 18580](#)) is approached via Satellite Channel, between Cape Keppel and Hatch Point.

A wharf, with a depth of 8.8m alongside, is situated close NW of the latter point. Significant quantities of lumber and forest products are exported from the bay. Vessels of up to 196m in length and 10.4m draft have been handled.

Between Hatch Point and **Cherry Point** (48°43'N., 123°33'W.) the shore is indented by a drying bight.

4.7 Boatswain Bank (48°43'N., 123°32'W.) fronts the bight for about 0.8 mile. This bank is steep-to offshore, but shoals abruptly near the bight.

Cowichan Bay is entered between Cherry Point and Separation Point, which is marked by a light. Partly-drying flats fill the head of this deep bay. Mount Tzuhalem rises precipitously over the N side of the bay and is prominent. A railroad trestle extends SE across the flats to a wharf and ferry slip. Several piers and floats are situated close S of the ferry slip. The main wharf provides two berths, 150m and 198m long, with least depths of 8.3m alongside.

Anchorage can be taken, in a depth of 44m, about 0.2 mile NE of the wharf. Anchorage can also be taken, in depths of 7 to 16m, sand, on Boatswain Bank.

Eight designated anchorage berths, which may best be seen on the chart, lie within Cowichan Bay and its S approach. Berth No. 1 through Berth No. 4 lie within the bay; Berth No. 5 through Berth No. 8 lie in the W part of Satellite Channel. The bottom throughout these anchorages is formed of mud.

Genoa Bay (48°46'N., 123°36'W.), a small inlet, indents the N side of Cowichan Bay. It is encumbered by shoals, reefs, and above and below-water rocks, some of which are marked by beacons and buoys. Local knowledge is advisable. Anchorage can be taken, with local knowledge, in depths of 4 to 11m, mud, in the middle of this bay.

Sansum Narrows

4.8 Sansum Narrows (48°48'N., 123°33'W.) is entered from the S via Satellite Channel. Musgrave Point forms the SE entrance point while Separation Point forms the SW.

A cove lies close N of Musgrave Point. A pier and an attached float, with depths of 1.8 to 6.7m alongside, are situated within this cove.

Sansum Narrows, leading N to Stuart Channel, is confined between high land on each side, which makes for fluctuating winds. Depths in the narrows are too great for anchoring and local knowledge is recommended. The tidal currents in the narrows seldom exceed a velocity of 3 knots and usually set a lesser rate. In the wider parts, rates of 1 knot to 2 knots may be expected.

The depths are great throughout the channel, except for a rocky patch, with a depth of 11m, lying about 1.3 miles N of Separation Point.

Burial Islet (48°46'N., 123°34'W.), marked by a light, lies about 0.2 mile offshore, 1.5 miles N of Separation Point. It is the only danger in the S part of the narrows. The central and N parts of the narrows are unencumbered. Mid-channel courses are recommended.

Bold Bluff Point (48°47'N., 123°33'W.), broken-up and moss-covered, is fringed by drying rocks. Sansum Point, located 0.5 mile SW of this point, is fronted by a rocky ledge marked by kelp.

Burgoyne Bay (48°48'N., 123°32'W.), lying adjacent to Bold Bluff Point and opposite **Octopus Point** (48°48'N., 123°34'W.), is deep but shoals abruptly as it reaches the sandy head. A light is shown from Octopus Point. A pier, used by vessels from Sydney, fronts the head of this bay.

Maple Bay (48°49'N., 123°36'W.), opening W from the narrows, is entered between **Paddy Mile Stone** (48°48'N., 123°35'W.) and Arbutus Point, 0.8 mile N. Paddy Mile Stone consists of an enormous conspicuous boulder resting on a point.

Birds Eye Cove (48°48'N., 123°36'W.) leads S from Maple Bay and is constricted. Two landing floats, with depths of 4.5 to 8.2m alongside, lie close off the W side of this bay. Several sunken rocks lie close SE of the floats. Anchorage can be taken, in a depth of 36m, mud, in the entrance to the cove.

Caution.—Overhead power cables, with a vertical clearance of 52m, span Sansum Narrows close N of Arbutus Point.

Stuart Channel

4.9 Stuart Channel (49°00'N., 123°44'W.) lies between Vancouver Island, on the W side, and Saltspring Island, Kuper Island, and Thetis Island, on the E. From the N entrance of Sansum Narrows, this channel leads NNW to Dodd Narrows and the Strait of Georgia.

The depths in the fairway of Stuart Channel are ample for ocean-going vessels. Several dangers, in the form of islets and reefs, lie at the sides of the channel in many places; a mid-channel course is recommended.

Grave Point (48°51'N., 123°36'W.) and **Erskine Point** (48°51'N., 123°34'W.) form the S entrance points of Stuart Channel. A light is shown from a white mast standing on the former point.

Vesuvius Bay (48°53'N., 123°34'W.) is a very small bight. A government pier fronts the N side of this bay. Temporary anchorage can be taken, in a depth of 22m, mud, close off the pier.

Parminter Point (48°54'N., 123°35'W.), steep-to, is located 1.5 miles NNW of Vesuvius Bay. This point is the most conspicuous on the W side of Saltspring Island.

Osborn Bay (48°52'N., 123°38'W.) is entered between **Sherard Point** (48°52'N., 123°37'W.) and the Shoal Islands, which lie on an extensive, drying flat. Extensive log booming grounds lie in the W part of this bay.

The **Shoal Islands** (48°54'N., 123°40'W.) are a chain of islands, islets, and rocks that extend about 3.5 miles NW from Osborn Bay. The drying flats containing the islands extend as far as 1 mile offshore. These islands are wooded and difficult to define. Numerous rocky heads, submerged bare rocks, and underwater ledges lie near the outer edges of the flats. A drying rock is marked by a beacon. A light is shown from the southeasternmost island. Anchorage, sheltered from prevailing W and SW winds, can be taken, in a depth of 22m, mud, about 0.8 mile SSW of the light.

Crofton (48°52'N., 123°38'W.) ([World Port Index No. 18570](#)), a lumber port and settlement, stands on the SW shore of Osborn Bay. A ferry plies between this port and Vesuvius Bay.

Three main wharves, used by ocean-going vessels, front the settlement. No. 1 Dock (Deepsea Dock) has 170m of berthage, with a depth alongside of 12m. With the aid of a mooring dolphin, vessels of up to 183m in length can be handled alongside.

No. 2 Dock (Osborn Bay Wharves) has 152m of berthage, with a depth of 12.2m alongside.

No. 3 Dock (Stuart Channel Wharves) has 138m of berthage, with a depth of 10.4m alongside.

4.10 North Reef (48°55'N., 123°38'W.), a narrow and above-water ridge, lies on foul ground, about 1.5 miles NW of Parminter Point. It is marked by a light. Tent Island, lying 0.5 mile N of the reef, is encircled by foul ground and above and below-water rocks. A reef, which dries, connects this island with Kuper Island at **Josling Point** (48°56'N., 123°38'W.), its S extremity.

Escape Reef (48°57'N., 123°40'W.) is a drying, narrow ridge lying at the E side of Stuart Channel and about 0.5 mile off Kuper Island. The highest part of the reef is marked by a beacon.

Telegraph Harbor (48°58'N., 123°40'W.) ([World Port Index No. 18540](#)) is entered between Active Point and the SE end of **Hudson Island** (48°58'N., 123°41'W.). The inner part of this harbor is constricted and fringed by rocky ledges. The outer harbor has a least depth of 12.8m.

Alarm Rock (48°58'N., 123°40'W.), a narrow ledge, rises barely above water and is marked by a light. It lies about 0.5 mile W of Active Point, at the outer edge of the foul ground extending S from Hudson Island.

The entrance to the inner harbor lies between **Donckele Point** (48°58'N., 123°40'W.) and Foster Point, the S extremity of Thetis Island. A settlement fronted by a pier stands 0.3 mile NE of Donckele Point. Anchorage can be taken by vessels of moderate size, in a depth of 13m, mud, close NW of the pier. The harbor above Foster Point affords sheltered anchorage to small craft. Local knowledge is advisable.

Caution.—A submarine cable, which may best be seen on the chart, lies in the harbor in the vicinity of the anchorage area. Another submarine cable runs from close W of Foster Point to Hudson Island.

4.11 Preedy Harbor (48°58'N., 123°41'W.), entered from NW between Thetis Island and Dayman Island, affords good anchorage.

Crescent Point (48°59'N., 123°41'W.), the N entrance point, is located 0.4 mile N of Dayman Island. Shoals fringe this point and extend as far as the channel leading into the harbor. Several drying, rocky ledges, which are marked by beacons, lie on a bar extending between Hudson Island and Foster Point. They separate Preedy Harbor from Telegraph Harbor. A pier, with a depth of 5.5m alongside, is situated at the head of the harbor and ferry landing lies close N of it. The northwesternmost entrance, between Crescent Point and Dayman Island, is the preferred one. The fairway is 0.2 mile wide and has a least depth of 8.2m. False Reef may be passed on either side. Vessels entering the harbor between Hudson Island and Dayman Island should favor the NW side of the channel, which has a least depth of 4.3m.

Good anchorage over a bottom of mud can be taken in the N end of the harbor.

Caution.—A submarine cable, which may best be seen on the chart, lies across the northwesternmost entrance channel between Scott Island and Crescent Point. Another submarine cable lies across the harbor from Dayton Island to the vicinity of Thetis Island.

4.12 Thetis Island (49°00'N., 123°41'W.), lying astride the N end of Kuper Island, forms the E side of the N end of Stuart Channel.

Burchell Hill (49°00'N., 123°41'W.), heavily wooded, and **Moore Hill** (49°00'N., 123°40'W.) are conspicuous landmarks.

Dayman Island (48°58'N., 123°41'W.) and **Scott Island** (48°58'N., 123°42'W.), both wooded, lie on the edge of Stuart Channel and SW of Preedy Harbor. An extensive area of rocky ledges and foul ground extends from Alarm Rock to Scott Island.

False Reef (48°59'N., 123°42'W.) lies about 0.5 mile NW of Scott Island. A beacon stands on a drying rock located at the S end of this reef.

Fraser Point (49°01'N., 123°43'W.) is the NW extremity of Thetis Island. Several detached shoals extend up to about 1.3 miles NNW of the point and constrict Stuart Channel.

North Cove (49°01'N., 123°42'W.) indents the N coast of Thetis Island between Fraser Point and Pilkey Point, 0.8 mile E. Shoals fringe the sides and head of this cove. Several below-water rocks, unmarked by kelp, lie in the entrance and about 0.3 mile NE of Fraser Point.

Anchorage, sheltered from S winds, can be taken in the center of the cove. The preferred anchorage lies in a depth of 12m, mud, SW of Pilkey Point.

The **Ragged Islets** (49°02'N., 123°42'W.), three in number, lie on a narrow ridge extending from the foul ground located NW of Pilkey Point. The middle islet, which is the largest, can be identified by stunted bushes growing on it. A beacon stands on the northwesternmost islet.



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Bare Point Light

4.13 Miami Islet (49°02'N., 123°43'W.) lies on a drying ridge, about 1.3 miles NW of Pilkey Point. Several above and below-water rocks lie on this ridge. A buoy is moored at the NW extremity of the ridge and a wreck, which dries 1.3m, lies close SE of it.

Chemainus Bay (48°56'N., 123°43'W.) is entered between **Bare Point** (48°56'N., 123°42'W.), marked by a light, and Hospital Point. The sides of this bay are steep-to, but drying flats extend from the head into depths of 11 to 46m. These flats are used as booming grounds for logs discharged from a railroad pier. A conspicuous water tower stands at the SW side of the bay and a prominent generating plant, with several oil tanks, is situated on the E side.

Bare Point is the N extremity of a narrow, wooded peninsula which forms the E side of Chemainus Bay.

Hospital Point (48°56'N., 123°43'W.) forms the W entrance of the bay. Hospital Rock, marked by a lighted buoy, lies about 0.2 mile NE of this point. Range lights, situated on the W side of the bay, indicate the entrance fairway and lead E of the rock to the facilities.

Vessels usually anchor in Houstoun Passage, W of Southey Point.

Caution.—Two submarine cables, which may best be seen on the chart, extend NE across Stuart Channel from Hospital Point.

4.14 Chemainus (48°55'N., 123°43'W.) ([World Port Index No. 18560](#)) is a fishing and lumber terminal. Several piers and wharves line the W side of the bay. The port is connected by railroad to Victoria and Nanaimo. A ferry plies between the harbor and Preedy Harbor.

The main wharf provides two berths. The southernmost berth is 157m long and has depths of 7.6 to 12.8m alongside.

The northernmost berth is 149m long and has depths of 12.2 to 15.8m alongside.

Ladysmith (48°59'N., 123°49'W.) ([World Port Index No. 18530](#)), a town, is mainly a lumber center. It is connected by railroad and highways to all of Vancouver Island. The town has no berthing facilities for ships other than a public pier. However, vessels usually anchor when loading or discharging cargo.

Ladysmith Harbor (48°59'N., 123°47'W.), a bay, is entered between Boulder Point (48°57'N., 123°45'W.), on the S side, and Sharpe Point (48°59'N., 123°46'W.), on the NNW side. It is backed by a high, wooded summit. A large, conspicuous boulder marks Boulder Point. Depths of 36m in the entrance gradually decrease to a drying mud flat lying at the head.

Holland Bank (48°59'N., 123°48'W.), consisting of drying mud and shingle, is marked by a beacon. A conspicuous railroad embankment is situated on the shore in the vicinity of this bank.

Williams Point (49°00'N., 123°49'W.) is a low, grassy neck with a sandy beach. Cliffs line the shore to SE of this point.

Sibell Bay (48°59'N., 123°47'W.) is entered about 0.5 mile NW of Sharpe Point and E of the Dunsmuir Islands. Hunter Point, located 1 mile NW of Sharpe Point, forms the NW side of the bay, which is deep and clear of dangers.

The **Dunsmuir Islands** (48°59'N., 123°47'W.) lie close off Hunter Point. Shoals, with depths of less than 5m, extend from the largest island of this group into the harbor. Cluster Rocks, both drying and awash, lie close S of the islands.

The **Woods Islands** (49°00'N., 123°49'W.) lie parallel to the harbor, NE of Williams Point, and constrict the channel, especially off the S side of the islands. The fairway is reduced to width of only 90m between the shoals.

Wedge Point (49°01'N., 123°50'W.), located on the mainland side of the inner harbor, is conspicuous. Within this point, drying mud flats fill the harbor

Anchorage.—Designated anchorage berths, which may best be seen on the chart, lie between the outer part of Ladysmith Harbor and a position located 1.3 miles SE of Boulder Point. They are numbered 1 through 7. Anchorage berths, numbered 8 and 9, lie in the outer part of Kulleet Bay.

4.15 Evening Cove (48°59'N., 123°46'W.) indents the coast between Sharpe Point and Coffin Point, 0.5 mile NE. The latter point is low and wooded. The cove is encumbered with rocky shoals. Anchorage can be obtained within the cove by small craft, but it is exposed to SE winds.

Coffin Island (48°59'N., 123°45'W.), marked by a light, and Nares Rock, above-water, lie on a reef extending 0.5 mile ESE of Coffin Point.

Kulleet Bay (49°01'N., 123°47'W.) indents the coast close W of **Deer Point** (49°02'N., 123°46'W.). It may be approached and safely entered from the S and N by keeping about 0.3 mile offshore. The bay is free of dangers, except for a shoal, with a least depth of 5.5m, extending from the S shore.

Anchorage within Kulleet Bay is good only in fair weather as it is exposed to E winds. The bottom consists of mud. Designated berth No. 8 has a depth off 33m; designated berth No. 9 has a depth of 53m.

Houstoun Passage (48°57'N., 123°35'W.) is entered between Parminter Point and North Reef. This passage connects Stuart Channel with Trincomali Channel. It leads N from Stuart Channel, turns abruptly around the N extremity of Saltspring Island, and leads SE to the junction with Trincomali Channel. The N continuation of this passage leads E of Kuper Island and is bound by a chain of islands extending SE.

The depths in the fairway of Houstoun Passage are ample for ocean-going vessels. Several shoals lie in or near the channel, but these dangers are marked by navigational aids.

Caution.—A submarine cable, which may best be seen on the chart, extends E across Stuart Channel close N of Coffin Point.

A submarine cable, which may best be seen on the chart, lies in mid-channel through the entire length of Houstoun Passage. Another submarine cable extends SE across the passage from Josling Point.

Idol Island (48°55'N., 123°36'W.) and **Grappler Rock** (48°56'N., 123°36'W.), marked by a light, lie about 0.3 mile offshore, on the E side of Houstoun Passage. The island is encircled by shoals and the rock, which dries, lies on a reef marked by kelp. Two other drying rocks lie close S of Grappler Rock.

An area of foul ground, marked by a beacon, extends up to about 0.3 mile E of **Sandstone Rocks** (48°55'N., 123°37'W.). The foul ground and the rocks constrict the fairway channel in Houstoun Passage, to the W of Idol Island.

4.16 Southey Point (48°57'N., 123°36'W.), located at the N end of Saltspring Island, is low and fronted by a drying ledge.

JackscREW Island (48°57'N., 123°35'W.) lies 0.5 mile NNE of Southey Point. The S end of this small, wooded island is marked by a light. Houstoun Passage between the point and island is deep and clear of dangers.

Anchorage.—Four designated anchorage berths, which may best be seen on the chart, lie in Houstoun Passage. No. 1 has a depth of 24m, mud; No. 2 has a depth of 30m, mud; No. 3 has a depth of 20 to 24m, mud; and No. 4 has a depth of 40m, mud.

Caution.—Vessels should be aware of the submarine cables lying in the vicinity of these anchorage berths.

Penelakut Spit (48°59'N., 123°38'W.), located 2.8 miles NNW of Southey Point, is the NE extremity of a small peninsula. This spit, formed of innumerable white and broken clam shells, is low, but very conspicuous from the SE and NW. The E side of Kuper Island (48°56'N., 123°38'W.) is fringed by drying sand flats, boulders, and drying reefs, which are fronted by foul ground. A prominent church tower is situated at the NE end of the island.

Norway Island (48°59'N., 123°37'W.), lying 0.5 mile E of Penelakut Spit, is wooded and has steep cliffs on its W side. A beacon stands on an islet lying close S of this island. Only small craft should use the passage leading between the island and Penelakut Spit.

Mowgli Island (48°58'N., 123°36'W.), lying 0.5 mile SE of Norway Island, is encircled by foul ground. A navigable and deep passage, about 0.1 mile wide, leads between these two islands. Several wooded islets, lying 0.3 mile S of Mowgli

Island, are fringed by foul ground. A beacon stands on the northernmost islet of the group.

The **Secretary Islands** (48°58'N., 123°36'W.), two in number, lie close SE of Mowgli Island. Foul ground encircles the islands and lies in the passage leading between the islands.

Wallace Island (48°57'N., 123°33'W.) extends 2 miles SE from Chivers Point, its NW extremity, to Panther Point, its SE extremity. A chain of shoals, islets, and drying rocks lies 0.2 mile off the island and extends parallel to its W side. A lighted buoy marks the SE end of this chain. Several drying rocks and shoals extend up to 1.5 miles NW of the lighted buoy. The passage lying at the NW end of the island is foul.

Fernwood Point (48°55'N., 123°32'W.), located 3 miles SE of Southey Point, is the W entrance point of Houstoun Passage; Panther Point is the E entrance point. Off-lying dangers, consisting of Victoria Rock and a detached rock, lie between 0.5 mile and 0.8 mile ENE of Fernwood Point.

Captain Passage—Trincomali Channel—Porlier Pass

4.17 Captain Passage (48°49'N., 123°25'W.) is entered from Swanson Channel, between Beaver Point and Point Liddell. This passage, which leads NW to Ganges Harbor and N to Trincomali Channel, has a deep fairway and a least width of 0.5 mile.

Yeo Point (48°48'N., 123°23'W.), located 1.8 miles NW of Beaver Point, is conspicuous due to the white, sandy beaches lying nearby.

The **Channel Islands** (48°48'N., 123°23'W.), the northernmost of which is marked by a light, lie in the middle of Captain Passage, about 0.5 mile NE of Yeo Point. Foul ground encircles these very small islands. Deep Ridge extends SE from the islands and has a least depth of 9.4m at its outer end. This shoal is marked by a lighted buoy.

The **Acland Islands** (48°49'N., 123°23'W.) are wooded and extend between 0.3 mile and 0.8 mile NW of Point Liddell. Foul ground surrounds these islands and extends about 1 mile NW to **Batt Rock** (48°49'N., 123°25'W.). This latter rock, isolated with a least depth of 1.5m, lies about 1.8 miles NW of Yeo Point. A chain of islets lies on the foul ground. A lighted buoy is moored close SW of the northnorthwesternmost island of the group.

Welbury Point (48°51'N., 123°27'W.) and **Scott Point** (48°50'N., 123°25'W.) form the entrance to Welbury Bay. This bay is narrow, shoal, and fronted by foul ground extending from Welbury Point.

Horda Shoals (48°50'N., 123°25'W.), lying in the middle of Captain Passage, consists of two rocky patches. It has depth of less than 2m and is marked by a lighted buoy.

4.18 Long Harbor (48°51'N., 123°27'W.), a narrow inlet, is entered between Scott Point and Nose Point, 0.3 mile ENE. The latter point is marked by a light. Several barren islets lie in the harbor within Nose Point and another islet lies in the center. These dangers are marked by lights and buoys. A ferry landing is situated on the SW shore of the inlet.

Anchorage can be taken within the inlet, in depths of 17 to 18m, mud, between the outer islets and the islet lying in the center.

Nose Point (48°51'N., 123°25'W.), the W entrance point of Trincomali Channel, is narrow, rocky, and fronted by a shoal spit.

Peile Point (48°51'N., 123°24'W.), the E entrance point, is sloping and free of off-lying dangers.

Selby Cove (48°50'N., 123°24'W.) and several other shallow inlets indent the NW coast of Prevost Island, opposite Nose Point. They afford sheltered anchorage.

James Bay (48°51'N., 123°24'W.), the northernmost inlet, has a depth of 7m and affords sheltered anchorage from S winds.

Transit of Captain Passage is best accomplished from the S by passing midway between the Channel Islands and Acland Islands. Vessels should keep at least 0.1 mile E of Horda Shoal and pass midway between Selby Point and Nose Point.

4.19 Ganges Harbor (48°51'N., 123°29'W.) ([World Port Index No. 18600](#)) is an agricultural center. A public wharf is situated on the NE side of the small peninsula near the head of the harbor. It is 41m long and has depths of 2.8 to 4.7m.

The harbor is approached from Swanson Channel by passing on either side of the Channel Islands and Batt Rock. It is entered between a point located 3.3 miles NW of Yeo Point and the southeasternmost island of the Chain Islands. There are depths of 12m in the harbor entrance, decreasing to 6.5m near the head.

Ganges Shoal (48°50'N., 123°27'W.), unmarked, has a depth of 4m and lies about 0.3 mile SSW of the southeasternmost island of the Chain Islands. The latter island is marked by a light.

The **Chain Islands** (48°50'N., 123°27'W.), a group consisting of several islands and islets, extend to the head of the harbor. The fairway leads between these wooded islands and the S shore. Vessels with drafts of up to 8.5m can enter the harbor. They should avoid Ganges Shoal and proceed inward, keeping about 0.2 mile off the SW side of the Chain Islands.

Anchorage can be taken, in a depth of 12m, mud, about 0.3 mile W of the southeasternmost island of the Chain Island group. Anchorage can also be taken, in a depth of 7.3m, mud, about 0.2 mile ESE of **Grace Islet** (48°51'N., 123°30'W.).

Trincomali Channel (48°54'N., 123°29'W.) leads from Swanson Channel and Active Pass to Stuart Channel. There is deep water lying throughout the fairway, which has a least width of 0.8 mile, leading through Trincomali Channel.

Hawkins Island (48°50'N., 123°22'W.) lies close off a conspicuous beach of white shells forming the E side of Prevost Island. A rock, 10m high, lies close SE of Hawkins Island and drying rocks extend farther SE. Charles Rocks, above and below-water, extend NW from Hawkins Island. The S entrance of Trincomali Channel, for 1 mile E of Charles Rocks, is clear of dangers.

Phillimore Point (48°52'N., 123°24'W.), an outcropping of Galiano Island, is located on the E side of the channel, 1.5 miles NNE of Peile Point.

Ben Mohr Rock (48°52'N., 123°23'W.) lies near the middle of the fairway, between Phillimore Point and Peile Point. Depths of about 9m lie up to 1 mile SE of this rock. A lighted buoy is moored on the SE side of the rock and a light is shown from Phillimore Point.

Parker Island (48°53'N., 123°25'W.), lying close NW of Phillimore Point, is steep-to and wooded, with sheer cliffs on the W side.

Julia Island (48°52'N., 123°24'W.) lies in the channel leading between Phillimore Point and Parker Island.

Caution.—A sewer pipeline, which may best be seen on the chart, runs the length of Ganges Harbor and discharges 0.5 mile SE of the main harbor light.

A submarine cable area, which may best be seen on the chart, lies across Trincomali Channel from Parker Island to Saltspring Island.

4.20 Montague Harbor (48°53'N., 123°24'W.), sheltered by Parker Island, is entered between Phillimore Point and Julia Island. A mid-channel course leads through a danger-free fairway into this harbor. Small craft can enter the harbor to the NE of Parker Island. The harbor has depths of 11 to 23m. A regular ferry service is maintained with Ganges Harbor.

Anchorage can be taken, in 11m, mud, in the middle of the inner part of the harbor. Anchorage can also be taken, in a depth of 18m, mud, about 0.3 mile N of Phillimore Point.

Caution.—Overhead power cables, with a vertical clearance of 38m, span both the N and S entrances to Montague Harbor.

Sphinx Island (48°54'N., 123°26'W.) is the southeasternmost island of a chain consisting of islands, islets, and rocks that extends about 1.5 miles NW to **Ballingall Islets** (48°54'N., 123°28'W.).

Walker Rock (48°56'N., 123°30'W.), lying 1.5 miles NW of the Ballingall Islets, is an extensive above and below-water ledge. It is marked by a light at the SE end.

Govethenor Rock (48°55'N., 123°30'W.), with two heads, has depths of less than 2m and lies in the middle of Trincomali Channel, about 1.3 miles E of Fernwood Point. This rock, usually indicated by kelp, is marked by a lighted buoy.

Atkins Reef (48°53'N., 123°28'W.), above and below-water, parallels the shore for about 0.5 mile. It extends from a position located 3 miles NW of Nose Point and its highest part is marked by a beacon. A detached, partly drying ledge extends SE of the beacon. The shore in the vicinity of the reef is formed of high, wooded cliffs.

Mount Parke (48°50'N., 123°18'W.), bearing 115°, in line with the SE end of Galiano Island, leads about 0.5 mile NE of Atkins Reef.

Walker Hook (48°54'N., 123°30'W.), a narrow and wooded elbow, is connected to the shore by a sandy isthmus. Several below-water rocky heads, lie close ESE of this elbow.

Entering Trincomali Channel from Swanson Channel, the fairway leads between Enterprise Reef, Ben Mohr Rock, and Walker Rock, on the N side, and Portlock Point, Hawkins Island, Charles Rocks, Atkins Reef, and Governor Rock, on the S side.

A steep-to, detached rock, with a least depth of 4.9m, lies about 0.3 mile NE of Victoria Rock.

Between Wallace Island, the Secretary Islands, and Galiano Island, the channel is deep, about 1 mile wide, and clear of dangers.

Retreat Cove (48°57'N., 123°30'W.), indenting an otherwise unbroken coastline, is fronted by a wooded islet which affords shelter to small craft with local knowledge.

Bodega Hill (48°58'N., 123°32'W.), rising above high cliffs, stands 1.5 miles NW of Retreat Cove and is a conspicuous landmark.

A white patch, another landmark on the cliffy coast, is located directly beneath **Quadra Hill** (48°56'N., 123°28'W.). It is conspicuous and shaped like a lug sail.

North Galiano (48°59'N., 123°35'W.), a settlement, stands within a cove. There is a float with a depth of 2.4m alongside in the cove. A weekly freight ferry service runs to Chemainus.

4.21 Reid Island (49°00'N., 123°37'W.), and **Hall Island** (48°59'N., 123°36'W.) lie in the middle of Trincomali Channel, close SW of Porlier Pass. Foul ground fringes the S side of both these islands. A channel, about 0.3 mile wide, leads between the islands and has a depth of 20m.

Rose Islets (49°01'N., 123°39'W.), along with several above and below-water rocks, extend up to 0.8 mile NW of Reid Island.

Clam Bay (48°59'N., 123°39'W.), lying 1 mile SW of Reid Island, is entered between Penelakut Spit and Leech Island, about 0.8 mile SE. This bay is fronted by Centre Reef, which dries and is marked by kelp. Foul ground, extending SE from the reef, is marked by a buoy moored at its extremity. Several above and below-water rocks and shoals lie between Centre Reef and Leech Island. A boat passage connects the head of the bay with Telegraph Harbor at HW. Anchorage can be obtained by small craft in a depth of 11m, mud, to the S of Rocket Shoal.

Cayetano Point (49°01'N., 123°36'W.), fringed by shoals and foul ground, is the S extremity of Valdes Island. The latter island is wooded and lined with cliffs along its W side. Cardale Point, located 0.5 mile NW of Cayetano Point, is low and fronted by drying sandbanks. The shore between this point and Shingle Point, 2 miles NNW, is sandy.

Caution.—A submarine cable, which may best be seen on the chart, extends NW across Clam Bay from Penelakut Spit.

4.22 Porlier Pass (Cowichan Gap) (49°01'N., 123°35'W.), which separates Galiano Island from Valdes Island, connects Trincomali Channel with the Strait of Georgia. This passage has a least width of about 0.4 mile, but the navigable channel is constricted. The fairway has a least depth of 8.8m and the tidal currents are strong. The best time to transit this passage is during slack water. Local knowledge is advisable.

Alcala Point (49°00'N., 123°35'W.), at the Trincomali Channel end, is the S entrance point of the pass. Rocky shoals extend to the N of this point.

Romulus Reef (49°01'N., 123°36'W.), formerly with a least depth of 4.3m, has been removed by blasting. Several other shoal patches in this area have also been removed and the entire area now has a least depth of 6.7m.

Black Rock, which dries, lies about 0.2 mile SE of Cayetano Point. This rock is marked by a beacon and foul ground extends to the SE of it.

Anchorage—Six designated anchorage berths, which may best be seen on the chart, lie at the N end of Trincomali Channel, as follows:

Berth	Position	Depth
No. 1	49°01.1'N, 123°37.7'W	40m
No. 2	49°01.4'N, 123°39.9'W	35m
No. 3	49°02.0'N, 123°38.7'W	42m
No. 4	49°02.1'N, 123°41.0'W	40m
No. 5	49°02.7'N, 123°39.7'W	42m
No. 6	49°03.2'N, 123°41.0'W	50m

Caution.—Vessels should not use the channel leading N of Black Rock nor the channel leading between Romulus Reef and Black Rock.

4.23 Virago Point (49°01'N., 123°35'W.), marked by a light, is the outermost spur of a narrow projection. The W side of this projection is formed by cliffs. Above and below-water rocks fringe the N and W sides of the projection. Virago Rock, which dries, lies on rocky, foul ground at the NW side of the fairway leading through Porlier Pass. This rock is marked by a light.



Photo copyright Mike Mitchell

Virago Point Light

Race Point (49°01'N., 123°35'W.), a finger-like projection, is located 0.3 mile N of Virago Point and marked by a light. The lights on these points, when aligned, lead from the Strait of Georgia into Porlier Pass. Foul ground, on which lies Boscowitz Rock, extends off the sides of Race Point.

Lighthouse Bay, entered between these two points, affords shelter to small craft.



Photo copyright Mike Mitchell

Race Point Light

Vernaci Point (49°01'N., 123°35'W.), located 0.5 mile NW of Race Point, is fronted by foul ground and rocky shoals which extend up to about 0.3 mile SE. Between the outer coast of Valdes Island and **Shah Point** (49°02'N., 123°36'W.), the shore is fringed by foul ground.

Canoe Islet (49°02'N., 123°35'W.), located 0.3 mile E of Shah Point, lies on foul ground. An above and below-water ledge extends SSE of this islet and several detached shoals lie E and W of it.

Dionisio Point (49°01'N., 123°34'W.), located at the SE entrance of Porlier Pass, is a rocky peninsula lying 0.5 mile E of Race Point. Foul ground, reefs, and rocky ledges extend from this point and another point close SW into the entrance channel.

Caution.—A submarine cable, which may best be seen on the chart, extends NE across Lighthouse Bay from Virago Point.

Dodd Narrows and Southeast Approaches

4.24 Yellow Point (49°02'N., 123°45'W.), located 6 miles SSE of Dodd Narrows, is low and grassy, but the terrain inland rises to a wooded, high summit. Rocky, foul ground extends E from this point. The approach to the narrows leads through Stuart Channel from its junction with Trincomali Channel in the area between Yellow Point and Pylades Island. The coast of Vancouver Island between Yellow Point and the narrows is fringed with rocky shoals, but has no distinguishing features.

The **De Courcy Group** (49°06'N., 123°45'W.), consisting of three islands, forms the E side of Stuart Channel between Pylades Island and Dodd Narrows. This group separates Pylades Channel from Stuart Channel. Foul ground encircles the islands in the group and vessels should not approach them within 0.3 mile.

The depths are ample for ocean-going vessels in the channels leading to Dodd Narrows. Pylades Channel, Stuart Channel,

and Ruxton Passage, which connects the two, have fairways that are clear of dangers.

Danger Reefs (49°03'N., 123°43'W.), marked by a light, lie in the middle of the channel leading between Yellow Point and Pylades Island. These reefs consist of several above and below-water ledges and are lie within the 20m curve. A shoal patch, with a depth of 7m, lies off the S end of the reefs; a detached shoal, with a depth of 9.6m, is located off the N extremity of the reefs.

Caution.—Vessels using the passage leading between Miami Islet and Danger Reefs should pass at least 0.5 mile S of the light marking the reefs. A stranded wreck is reported to lie close NW of Miami Islet.

Boat Harbor (49°06'N., 123°48'W.) indents the coast 4 miles NW of Yellow Point. Drying ledges, marked at their outermost edge by a beacon, extend from the N entrance point of the harbor. A detached shoal, with a depth of 13m, lies about 0.5 mile NE of the beacon. Sheltered anchorage is afforded to small vessels, in a depth of 5m, at the S end of the harbor. Temporary anchorage can be taken, in a depth of 14m, mud, in the entrance of the harbor. Vessels awaiting slack water in Dodd Narrows often anchor in this area.

Round Island (49°07'N., 123°48'W.) lies about 0.5 mile offshore, 1.5 miles N of Flewett Point. Above and below-water rocks encircle this island and a detached shoal patch lies 0.3 mile SE of it.

4.25 Pylades Channel (49°06'N., 123°43'W.), lying between the DeCourcy Group and Valdes Island, connects Trincomali Channel with Gabriola Passage. The shores of the former island group are fronted by rocky shoals lying within the 35m curve. The W shore of Valdes Island consists of wooded, bare cliffs fringed by shoals.

Pylades Island (49°04'N., 123°41'W.), the southernmost island of the group, is wooded. Its W end is formed by broken cliffs. Tree Island lies 0.3 mile WSW of this island.

Whaleboat Passage leads between Pylades Island and **Ruxton Island** (49°04'N., 123°42'W.). It is available to small craft. A beacon stands on a drying ledge lying close NW of Ruxton Island. **Ruxton Passage** (49°05'N., 123°43'W.) leads between Ruxton Island and DeCourcy Island, 0.5 mile NW. A mid-channel course should be steered in this passage and vessels should take care to avoid the shoal, with a least depth of 7.6m, lying in the entrance.

DeCourcy Island (49°06'N., 123°45'W.), the largest of the island group, has a cliffy W side. It is fronted by rocky, partly-drying shoals extending up to about 0.2 mile NE. Link Island, lying close NW of the island, has a drying shoal fronting its NW end.

Mudge Island (49°08'N., 123°48'W.), forming the E side of Dodd Narrows, is densely wooded and cliffy along the S side. It is connected to Link Island by a drying shoal. Foul ground extends up to 0.3 mile seaward of the island; several above-water rocks lie at the E end of this area.

False Narrows (49°08'N., 123°47'W.), leading N of Mudge Island, is only a small boat passage.

Gabriola Passage (49°08'N., 123°42'W.) leads E from Pylades Channel to the Strait of Georgia. This passage is

constricted and has numerous dangers lying in its E approaches. It is not recommended for navigation. If a transit is necessary, vessels should only use the passage at slack water. Local knowledge is required.

Dibuxante Point (49°08'N., 123°43'W.), a drying rock ledge, lies close off the S entrance point of Gabriola Passage and is marked by a light.

Degnen Bay (49°08'N., 123°43'W.), indenting the N side of the passage, is encumbered with rocks and foul ground, but affords shelter to small craft. A public wharf is situated in the N part of this bay. A float, with a berth 120m long, fronts the wharf and has a depth of 3m alongside.

Cordero Point (49°08'N., 123°42'W.) and Josef Point, close N, are located 0.5 mile inside the W entrance of the passage. The fairway leading between these points has a width of 135m. The passage to the E of the points widens, but rocks and drying reefs fringe the channel on the E and SE sides. Detached, rocky patches lie up to about 1 mile seaward of the NE side of Valdes Island.

4.26 Breakwater Island (49°08'N., 123°41'W.) lies at the N side of the E entrance to Gabriola Passage. Rocky shoals and above and below-water rocks encircle this island. They extend up to about 0.3 mile SE and W as far as Gabriola Island. A light is shown from a structure standing 0.2 mile N of the S extremity of the island.

Rogers Reef, lying about 0.2 mile W of Breakwater Island, dries and is marked near its S end by a light. Small craft can take shelter close E of the light.

Dodd Narrows (49°08'N., 123°49'W.) leads into the SE part of Northumberland Channel and then through the approaches to Nanaimo Harbor and the Strait of Georgia. The least depth in the fairway of the narrows is 12.2m. A rock, which dries 1.8m, lies on the E side of the fairway, close S of Purvis Point.

Purvis Point (49°08'N., 123°49'W.), the W extremity of Mudge Island, and Joan Point, located close SW, form the N entrance of Dodd Narrows. A light is shown from Joan Point. The fairway in the vicinity of the drying rock lying close S of Purvis Point is only 55m wide.

Caution.—Vessels approaching Gabriola Passage from the E must avoid the rock, awash, lying close SE of the S extremity of Breakwater Island.

On entering Dodd Narrows from the N, an immediate change of course is necessary to remain in the fairway.

Under ordinary circumstances, transit of Dodd Narrows should not be attempted by vessels much larger than tugs or barges. However, vessels of up to 70m in length have passed through without undue difficulty at slack water.

For easily maneuverable power vessels, the narrows presents no transit problems at or near slack water. The passage should not be attempted against the tidal current.

Overhead cables, which may best be seen on the chart, span Dodd Narrows and have a vertical clearance of 37m.

Northumberland Channel

4.27 Northumberland Channel (49°09'N., 123°51'W.) leads NW from Dodd Narrows to Nanaimo Harbor. This channel is deep and free of dangers. Precipitous bare cliffs extend S from the NE entrance point of the channel.

Percy Anchorage is the name given to the E end of Northumberland Channel to the N of Mudge Island. This anchorage area is a convenient place to await slack water in Dodd Narrows. Anchorage can be taken, in depths of 11 to 16.5m, mud, about 0.8 mile E of Joan Point.

Caution.—Overhead cables, which may best be seen on the chart, span the mouth of Percy Anchorage and have a vertical clearance of 28m.

Harmac (49°08'N., 123°51'W.) ([World Port Index No. 18525](#)), situated 1.5 miles W of Joan Point, is the site of a large pulp mill.

Depths—Limitations.—Harmac Pulp Operations West Dock is 115m long, with a depth alongside of 10m. Dolphins on each end of the wharf extend the berthing length to 152m.

Harmac East Dock, used for loading packaged lumber, is 137m long, with a depth alongside of 10.4m.

Canadian Occidental Petroleum Wharf is used for the discharging of sodium chloride and the loading of caustic soda. The berth is 70m long and has a depth of 11m alongside.

Duke Point Terminal, situated 1.3 miles SSE of Jack Point, is 170m long and has berthing dolphins standing 50m from each end. It is used for the loading of forest products and has a depth of 13.5m alongside.

At the Duke Point Terminal, berthing is allowed 24 hours. Berthing is only allowed during daylight hours at the Harmac Pulp Operations West Dock and the Harmac East Dock.

Aspect.—A tall chimney and a conspicuous chemical plant stand 0.5 mile W of the pulp mill.

Caution.—A salt water concrete intake, submerged to a depth of 14m, and a submarine pipeline lie close N of the easternmost dolphin of the Canadian Occidental Petroleum Wharf.

Approaches to Nanaimo Harbor

4.28 Nanaimo Harbor is approached from the Strait of Georgia between Tinson Point and Lagoon Head. Off-lying islands, rocks, and reefs divide the approach into three navigable channels; Fairway Channel, Rainbow Channel, and Horswell Channel. In the outer approaches the channel leads between Gabriola Island, on the E side, and Newcastle Island and Protection Island, on the W. Northumberland Channel forms the S approach leading to the harbor.

Fairway Channel (49°12'N., 123°53'W.) is entered between Tinson Point and Snake Island. This channel is deep and clear of dangers over a navigable width of 0.8 mile.

Rainbow Channel (49°13'N., 123°54'W.) lies between Snake Island and Five Finger Island. This channel is deep and clear of dangers over a width of 1 mile.

Horswell Channel (49°14'N., 123°56'W.) is entered between Hudson Rocks and Vancouver Island, in the vicinity of Lagoon Head. It is deep, with a navigable width of about 0.5 mile. Detached shoals, with depths of 7.6m and 8.6m, lie, respectively, about 0.5 mile E of **Neck Point** (49°14'N., 123°58'W.) and **Angle Point** (49°12'N., 123°55'W.).

Snake Island (49°13'N., 123°53'W.), smooth and grassy, lies 1.8 miles NW of Tinson Point. Foul ground encircles this island and a rocky ledge, with a least depth of 1.5m, lies 0.3 mile SE of it. The passage leading between the island and the

ledge is not recommended. A light is shown from a structure standing at the N end of the island.

Five Finger Island (49°14'N., 123°55'W.), lying 1.3 miles NW of Snake Island, is barren and rugged. On certain bearings, the five hummocks forming the island resemble the knuckles of a closed hand. Above and below-water rocks lie on foul ground extending N and S of the island and a detached shoal, with a depth of 6.4m, lies about 0.3 mile W of it.

Hudson Rocks (49°14'N., 123°56'W.), a group of five small islets, lie about 0.5 mile SW of Five Finger Island. Partly-drying reefs encircle the islets and lie within the 15m curve. A light is shown from the southwesternmost islet.

4.29 Nanaimo Harbor—East side.—Tinson Point (49°12'N., 123°51'W.) is the E end of a small, anvil-shaped peninsula located at the NW side of Gabriola Island. This point lies at the E side of Fairway Channel. Reefs, covered by kelp, extend up to 0.3 mile seaward of the point.

Malaspina Point (49°11'N., 123°52'W.), located 0.8 mile SW of Tinson Point, marks the NE limit of the harbor. Reefs, marked by kelp, extend about 0.2 mile into the channel from the vicinity of this point.

Descanso Bay (49°11'N., 123°52'W.) is entered between the southernmost spur of Malaspina Point and another point located 1 mile S. A partly-drying reef fronts the N shore of this bay. The N and SW parts of the bay are foul, but the center is clear. A small settlement, with a ferry landing, is situated at the head of the bay. A light is shown from the S entrance point.

Jack Point (49°10'N., 123°54'W.) is located at the S entrance of the harbor and the N entrance of Northumberland Channel. It forms the N end of a long, narrow peninsula. Above and below-water rocks fringe this point. The tidal currents attain considerable velocity at times in the vicinity of the point. A light is shown from a structure standing close NE of the point.

Anchorage.—Seven designated anchorage areas, which may best be seen on the chart, lie E of the entrance to Nanaimo Harbor.

4.30 Nanaimo Harbor—West side.—Lagoon Head (49°14'N., 123°57'W.) is the NW entrance point of Horswell Channel. Above and below-water rocks lie on foul ground fringing the headland. Drying mud flats, on which lie several islets and reefs, extend shoreward and to the NW of this headland.

Hammond Bay (49°14'N., 123°57'W.) indents the coast to the W of and adjacent to Lagoon Head. Several shoal patches, with depths of 7.3 to 9.1m, lie in the approach to the bay, about 0.5 mile N of Lagoon Head.

Anchorage can be taken, in depths of 12 to 16.5m, in the center of the bay, but it is open to the NE and not recommended.

Clarke Rock (49°14'N., 123°56'W.), lying at the W side of Horswell Channel and close ESE of Lagoon Head, is marked by a light. Detached shoals lie in the vicinity of this rock and a dangerous below-water rock lies in the channel close N of it.

Between the bluff, located at the SW end of the channel, and Lagoon Head, shoals fringe the shore and extend up to 0.2 mile seaward. Horswell Rock, detached, lies about 0.3 mile E of this bluff and has a depth of less than 2m.

Departure Bay (49°12'N., 123°57'W.) is entered between Nares Point, the N extremity of Newcastle Island, and Horswell Bluff. The S part of this bay joins Newcastle Island Passage, which leads into the NW part of the harbor. This bay has ample depths, but is seldom used except as an anchorage.

Jesse Island (49°12'N., 123°57'W.), with the Brandon Islands lying 0.3 mile W of it, fills the N part of Departure Bay. Drying rocks, below-water ledges, and foul ground encircle all these islands. A beacon marks a drying rock lying at the W end of the Brandon Islands. A light is shown from the E end of Jesse Island.

4.31 Pimbury Point (49°12'N., 123°57'W.) is prominent and located at the W side of the S entrance to Departure Bay. Several conspicuous oil tanks stand near the point and a pier extends from the shore close to them. A ferry landing is situated 0.3 mile W of the point. A ferry service is maintained with Horseshoe Bay (Howe Sound).

Shaft Point, located at the E side of the S entrance to the bay, lies close NE of Pimbury Point. A lighted buoy marks the outer edge of the foul ground that extends up to about 0.2 mile NW of the point.

Newcastle Island (49°11'N., 123°56'W.), partly fronting Vancouver Island and Departure Bay, is separated from the former by Newcastle Island Passage. Most of the island is fringed by foul ground and drying flats front its E side. These flats extend as far as Protection Island, lying 0.1 mile SE. The latter island is also fringed by foul ground, reefs, and drying mud flats. These dangers lie within the 5m curve and extend up to about 0.2 mile offshore.

Gallows Point (49°10'N., 123°55'W.), marked by a light close S, is the S extremity of Protection Island. It is also the N entrance point of Nanaimo Harbor. Shoals lie up to about 0.1 mile S of the point and extend into the entrance channel. A buoy is moored within these shoals, at the outer edge of the drying flats.

Newcastle Island Passage (49°11'N., 123°57'W.), the NW part of Nanaimo Harbor, leads into Departure Bay. It is narrow, shallow, and suitable only for small vessels with local knowledge. Drying reefs and mud flats extend into the S entrance of this passage.

Oregon Rock (49°11'N., 123°56'W.), which dries, lies on the W side of the fairway and Passage Rock lies close N of it. A pile dolphin stands close E of the latter rock.

Caution.—A submarine sewer pipeline, which may best be seen on the chart, extends NE from Hammond Bay.

Several submarine cables and submarine pipelines, which may best be seen on the chart, lie across Newcastle Island Passage.

Nanaimo Harbor (49°10'N., 123°56'W.)

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4.32 Nanaimo Harbor lies on the W side of the Strait of Georgia, about 35 miles W of Vancouver. The harbor is sheltered and easily accessible. The principal wharves and piers line the shore of Vancouver Island to the SSW of Protection Island. Several other berths front the W side of Newcastle Island Passage.



Photo copyright Mike Mitchell

Gallows Point Light

Tides—Currents.—The tides rise about 3.4 to 4.9m at springs. The tidal currents average 1 to 3 knots and follow the directions of the channels. In Newcastle Island Passage, the currents are weak.

Depths—Limitations.—The approaches are deep and the inner harbor has general depths of 7.3 to 12.8m. The controlling depth at the harbor entrance is 17.3m at HW and 13.4m at LW. The entrance channel has a mean depth of 9.4m at LW, but the port can accommodate vessels drawing up to 13.5m.

The drying mud flat lying in the entrance and extending to the inner harbor is marked by lights at its N edge. An unmarked shoal patch, with a least depth of 1.8m, lies about 0.2 mile WNW of Assembly Wharf. Beacon Rock and Carpenter Rock lie close together to the N of the CPR Wharf. The former rock is marked by a beacon; the latter rock is marked by a buoy. Satellite Reef and Three-Fathom Patches lie about 0.5 mile WNW of Gallows Point. The former danger dries and is marked by a buoy. The latter danger is swept to a least depth of 5.2m. Middle Bank, lying close S of Three-Fathom Patches, has a least depth of 7m.

Bate Point, located at the S extremity of Newcastle Island, is flat and grassy. It is fronted by a drying reef marked close S by a buoy. Mark Bay is entered between this point and Good Point, 0.5 mile E. Reefs and mud flats front the shores of the bay. A pier, 76m long, extends from the E side of the bay and has depths of 5.5 to 6.7m alongside.



Nanaimo Harbor

Winds—Currents.—Calm weather prevails in port. The winds mostly blow from the SE and W.

The Nanaimo Assembly Wharf has three berths. They are designated A, B, and C; are each 183m long; and have depths of 10.1m, 12.4m, and 10.9m alongside, respectively. These berths are used for loading general cargo, lumber, pulp, and other forest products. Berthing is permitted 24 hours.

Duke Point Deep Sea Terminal has one berth, designated D, with a length of 170m, and an alongside depth of 13.5m.

CPR. Wharf provides two berths. The NE berth is 122m long and the SE berth is 79m long. These berths are used for handling freight cars, vehicles, and trailers and have depths of 2.4 to 5.6m alongside.

Aspect.—Conspicuous buildings in the vicinity of the harbor include the old blockhouse, an octagonal tower with a black roof; the post office, a large gray stone building with a flagstaff; and a hotel.

Buoys and beacons mark the various dangers lying in the approaches and the harbor.

Two lights, in line bearing 254°, are shown from structures standing at the SW side of the harbor. This range indicates the

fairway leading through Meakin Channel to the CPR. Wharf. A lighted range is also shown from two piers on the SW side of the S entrance to Newcastle Island Passage. In line bearing 310°, these range lights indicate the fairway leading through the S entrance in a least depth of 6.1m.

Pilotage.—Pilotage is compulsory. Pilots may be contacted by VHF and board in the vicinity of the outer approach lighted buoy, Victoria, B.C. Vessels must send an ETA at least 12 hours prior to arrival and a confirmation message 4 hours before arrival at Victoria. Pilots are stationed at Nanaimo.

Anchorage.—Several designated anchorage areas, lettered A through G, lie NE and E of Protection Island and may best be seen on the chart. These areas have depths of 23 to 65m, mud.

Small vessels can anchor in a depth of 7m, mud, about 0.4 mile SE of Bate Point.

Caution.—When approaching Nanaimo Harbor from the SE, vessels should keep at least 1 mile off Gabriola Reefs.