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ATL 108

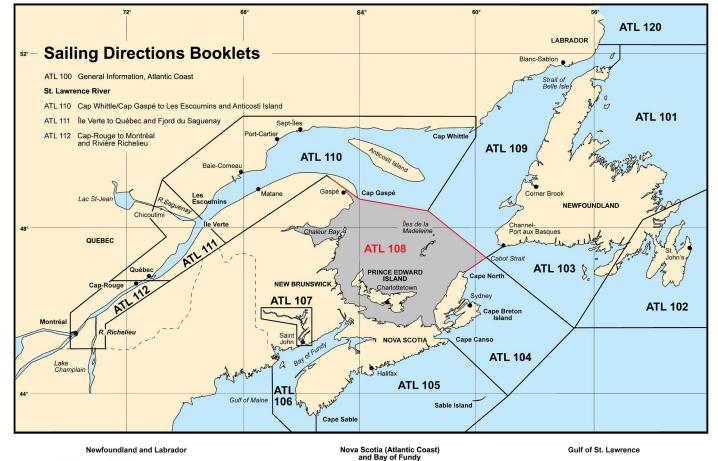
Canadian Sailing Directions

Gulf of St. Lawrence (Southwest Portion)

2024/08







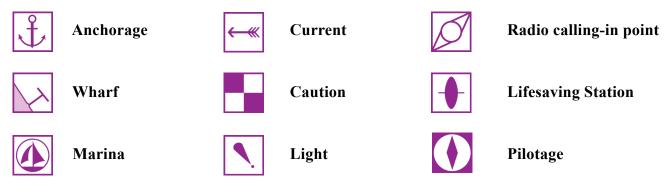
Newfoundland and Labrador

- ATL 101 Northeast and East Coasts
- ATL 102 East and South Coasts
- ATL 103 Southwest Coast
- ATL 120 Camp Islands to Hamilton Inlet (including Lake Melville)
- ATL 104 Cape North to Cape Canso (including Bras d'Or Lake)
- ATL 105 Cape Canso to Cape Sable (including Sable Island)

Gulf of St. Lawrence

- ATL 108 Gulf of St. Lawrence (Southwest Portion) ATL 109 Gulf of St. Lawrence (Northeast Portion)
- ATL 106 Gulf of Maine and Bay of Fundy
- ATL 107 Saint John River

Pictogram Legend



Report discrepancies between real-world observations and descriptions in the publication

Users of this publication are requested to forward information regarding newly discovered dangers, changes in aids to navigation, the existence of new shoals or channels, or other information that would be useful for the correction of nautical charts and publications affecting Canadian waters to: <a href="mailto:charts-addition-charts-charts-charts-addition-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts-charts

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Record of Changes

As the CHS acquires new information, relevant changes are applied to Sailing Directions volumes in order to maintain safety of navigation. It is the responsibility of the mariner to maintain their digital Sailing Directions file by ensuring that the latest version is always downloaded. Visit <u>charts.gc.ca</u> to download the most recent version of this volume, with all current changes already incorporated.

The table below lists the changes that have been applied to this volume of Sailing Directions. This record of changes will be maintained for the current calendar year only.

Date	Chapter / Paragraph	Description of Change
2024/01	C4/P239	Update - Fishing Harbour
2024/02	C4/P289, 330	Update - Depths
2024/02	C4/P314	Deletion - Depth
2024/02	C4/P333	Update - From now on, refer to current chart for depths.
2024/02	C4/P334	Update - Population
2024/02	C4/P334	Update - Port facility
2024/02	C4/P334	Update - Length
2024/06	Entire Booklet	ATL 108 has been reformatted and now meets Web Content Accessibility Guidelines (WCAG) 2.0. Other changes include updated imagery, hyper- links, and indexing.
2024/07	page 1-13	Update photograph Havre Boucher
2024/07	C1/P73	Update Havre Boucher description
2024/08	C3/P56, P114	Update charts of reference

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Preface

This edition of *Sailing Directions, ATL 108* — *Gulf of St. Lawrence (Southwest Portion)*, has been compiled from Canadian Government and other information sources. All hydrographic terms used in this booklet are in accordance with the meanings given in the *Hydrographic Dictionary* (Special Publication No. 32), published by the *International Hydrographic Organization*.

General information for the Atlantic Coast is grouped within one booklet, *Sailing Directions, ATL 100 — General Information, Atlantic Coast.* It contains navigational information and a brief description of the main port facilities as well as geographic, oceanographic and atmospheric characteristics.

The detailed description of the geographical areas is given in a series of booklets. Their limits are printed on page 2 of the booklets. The appropriate descriptive booklet(s) should be consulted in conjunction with the *ATL 100 — General Information* booklet.

Tide, water level and current information has been revised by the Tides, Currents and Water Levels Division of the *Canadian Hydrographic Service*.

The photographs are by *Fisheries and Oceans Canada*. The photograph for the Port of Belledune is courtesy of the *Port of Belledune Authority*.

References to Other Publications

Canadian Hydrographic Service

- <u>Catalogue of Nautical Charts and Publications</u>
- Canadian Tide and Current Tables

Canadian Coast Guard

- List of Lights, Buoys and Fog Signals
- <u>Radio Aids to Marine Navigation (Atlantic, St. Lawrence, Great Lakes, Lake Winnipeg,</u> <u>Arctic and Pacific)</u>
- Annual Edition of Notices to Mariners

Explanatory Notes

Canadian Sailing Directions expand charted details and provide important information of interest to navigation which may not necessarily be found on charts or in other marine publications. They are intended to be read in conjunction with the charts quoted in the text.

Remarks

Buoys are described in detail only where they have special navigational significance, or where the scale of the chart is too small to clearly show all the details.

Chart references, in *italics*, refer to the largest scale Canadian chart. Occasionally a smaller scale chart may be quoted where its use is more appropriate.

Tidal information relating to the vertical movements of the water is not given and the *Canadian Tide and Current Tables* should be consulted. However, abnormal changes in water level are noted.

Names have been taken from the most authoritative source. Where an obsolete name still appears on the chart or is of local usage, it is given in brackets following the official name.

Wreck information is included where drying or submerged wrecks are relatively permanent features and are of navigation or anchoring significance.

Units and terminology used in this booklet

Latitude and longitudes given in brackets are approximate, and are intended to facilitate reference to the chart quoted.

Bearings and **directions** refer to True North (geographic) and are given in degrees from 000° clockwise to 359°. The bearings of conspicuous objects, ranges and light sectors are given from seaward. **Courses** always refer to the course to be made good.

Tidal streams and **currents** are described by the direction towards which they flow. The **ebb** stream is caused by a falling tide and the **flood** stream is caused by a rising tide. **Winds** are described by the direction from which they blow.

Distances, unless otherwise stated, are expressed in nautical miles. For practical purposes, a nautical mile is considered

to be the length of one minute of arc, measured along the meridian, in the latitude of the position. The international nautical mile, which has now been adopted by most maritime nations, is equal to 1,852 m (6,076 ft).

Speeds are expressed in knots, which mean 1 nautical mile per hour.

Depths, unless otherwise stated, are referred to chart datum. As depths are liable to change, particularly those in dredged channels and alongside wharves, it is strongly recommended these be confirmed by the appropriate local authority.

Elevations and **vertical clearances** are given above Higher High Water, Large Tides. In non-tidal waters they are referred to chart datum.

Heights of objects, distinct from the elevations, refer to the heights of the structures above the ground. A statement, "a hill ... m (... ft) high", is occasionally used when there could be no confusion and in this case the reference will signify an elevation.

The List of Lights, Buoys and Fog Signals number is shown **in brackets** after the navigational aid (light, leading lights, buoy). The expression "seasonal" indicates that it is operational for a certain period during the year; mariners should consult the *List of Lights, Buoys and Fog Signals* to determine the period of operation. The expression "private" means that the navigational aid is privately maintained; it will not necessarily be mentioned in the *List of Lights, Buoys and Fog Signals* and its characteristics may change without issuance of a *Notice to Shipping*.

Time, unless otherwise stated, is expressed in local standard or daylight time. For the waters described in this booklet, local time is Atlantic Standard Time (AST Z+4).

Deadweight tonnage and **masses** are expressed in metric tonnes. The kilogram is used to describe relatively small masses.

Public wharf is a wharf that is available for public use, though certain fees may be charged by local authorities. It may be shown as "Government wharf" or "Gov't whf" on older charts. **Conspicuous** objects, natural or artificial, are those which stand out clearly from the background and are easily identifiable from a few miles offshore in normal visibility.

The expression "**small craft**" refers to pleasure craft and small vessels with shallow draught.

Diagrams are large scale cartographic representations of harbours, wharves, anchorages, or marinas.

Pictograms are symbols shown at the beginning of the paragraphs to allow quick reference to information or to emphasize details. The Pictogram Legend is shown on the third page of this booklet.

Abbreviations

Units

°C	degree Celsius
cm	centimetre
fm	fathom
ft	foot
h	hour
ha	hectare
HP	horsepower
kHz	kilohertz
km	kilometre
kn	knot
kPa	kilopascal
m	metre
mb	millibar
MHz	megahertz
min	minute
mm	millimetre
NM	nautical mile
t	metric tonne
0	degree (plane angle)
6	minute (plane angle)

Directions

Ν	north
NNE	north northeast
NE	northeast
ENE	east northeast
Е	east
ESE	east southeast
SE	southeast
SSE	south southeast

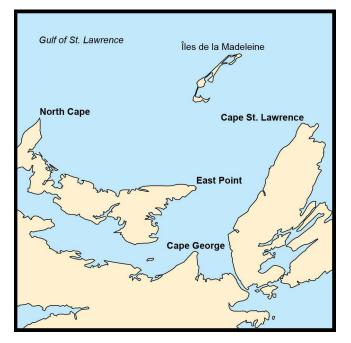
S	south
SSW	south southwest
SW	southwest
WSW	west southwest
W	west
WNW	west northwest
NW	northwest
NNW	north northwest

Various

	Adland's D'Istant And Ist
A.P.A.	Atlantic Pilotage Authority
CCG	Canadian Coast Guard
CHS	Canadian Hydrographic Service
DFO	Department of Fisheries and Oceans,
	Canada
DWT	deadweight tonnage
ETA	estimated time of arrival
ETD	estimated time of departure
HF	high frequency
HW	high water
LW	low water
Μ	million, mega
MCTS	Marine Communications and Traffic
	Services
NAD	North American Datum
No.	number
SAR	Search and Rescue
U.S.A.	United States of America
VHF	very high frequency
VTS	Vessel Traffic Services
VHF	very high frequency

Chapter 1

NW Coast of Cape Breton Island, St. Georges Bay and East and North Coasts of Prince Edward Island



Cape Breton Island — NW Coast

Chart 4022

1 From Cape St. Lawrence $(47^{\circ}03 'N, 60^{\circ}36 'W)$ to Black Point (north of Port Hood), a distance of 73 miles, the coast is high with long stretches of precipitous cliffs rising a short distance inland to a ridge with summits of 1500 feet (457 m). The cliffs are notched at intervals by ravines and gullies where a few small rivers and streams enter the sea. The *Cabot Trail*, a road through the highlands of Cape Breton, follows the coast closely for much of this distance. Small fishing villages and settlements are scattered thinly along the shore, and there are a few small shallow harbours, the largest being Chéticamp Harbour, midway along this coast.

2 The steepness of the cliffs is repeated in the generally deep water offshore, with shallow water and rocks confined to within 0.5 mile of the shore, except near the few islands, river mouths, and areas where the sea and weather have eroded cliffs. There are few suitable areas for boat landings, and then only in good weather.

Ample offing should be allowed on this coast, particularly in autumn and early winter, when the prevailing NW winds cause a heavy onshore sea and swell.

4 There is a general set towards this coast at most times. The **tidal streams** are inconstant and irregular in rate and direction, and do not normally exceed 1 knot in summer.

5 The hourly surface currents forecasts for the Gulf of St. Lawrence are available on the St. Lawrence Global Observatory website at <u>www.ogsl.ca</u> (click on the Ocean Forecasts tab). A mariner can obtain hourly details of the direction and speed of surface currents forecasted for the subsequent 48 hours.

Chart 4363

6 **Bay St. Lawrence (St. Lawrence Bay)** is located east of Cape St. Lawrence, and west of the bold, rocky headland of **Cape North** (47°02'N, 60°25'W). The bay is

BAY ST. LAWRENCE (2007)



open to the north, and at the head of the bay is the entrance to a small harbour.

7 Fairway light and whistle buoy VV (859), is moored 0.8 mile NNW of the entrance to the harbour. A west breakwater 90 m (295 feet) long, and an east breakwater 50 m (164 feet) long, extend from the shore to form a narrow, sheltered entrance channel 20 m (65 feet) wide. Lights (858, 858.3) are shown; one from each breakwater. The channel, with depths as shoal as 1.3 m (4 feet), runs in a SSE direction for 200 m (655 feet), before opening up to the sheltered waters of Deadmans Pond. It is reported that the best water is found on the east side of the channel, closer to the wharf face, and once clear of the channel, on a heading directly to the wharf.

8 A T-shaped public **wharf** extends from a marginal wharf on the NE shore of Deadmans Pond. The T-end is 160 m (525 feet) long, and the stem is 35 m (115 feet) long. On the outer face, depths run from 1.9 m (6 feet) at the NW end to 2.1 m (7 feet) at the SE end. On the inside face, depths are about 1.9 m (6 feet) from the SE end toward the stem. The inside NW face has depths of 1.7 to 2.2 m (5 to 7 feet), from the NW end toward the stem. A floating wharf 60 m (197 feet) long is located close east of the wharf. Two concrete surfaced **launching ramps** are located SE of the floating wharf. The community of **Bay St. Lawrence** is located around the shore of Deadmans Pond, and there is a whale-watching operation stationed there. Supplies may be obtained nearby in limited quantities.

Chart 4464

9 Cape St. Lawrence to Chéticamp Harbour. — Pleasant Bay $(46^{\circ}50'N, 60^{\circ}48'W)$ is situated about 15 miles SW of Cape St. Lawrence. The harbour is entered between two stone **breakwaters** 40 m (131 feet) apart. A **light** is shown from a mast at the outer end of each breakwater (860.6, 860.9). Fairway **light** and bell **buoy** VC (860.5) is moored 0.6 mile NW of the harbour entrance. Leading **lights** (861, 861.1) bearing 143¹/₂° are in the approach and are shown from skeleton towers, having white daymarks with red stripes.

10 There are reported depths of 1.8 to 2.4 m (6 to 7 feet) in mid-channel in the entrance. The entrance sometimes is impassable during strong NW winds. The harbour is often quite busy during the crab fishery, which is usually held in July and August.

11 From the west side of the inner harbour, an L-shaped Public **wharf** extends 41 m (135 feet) to an outer end 30 m (100 feet) long. There is a least depth of 1.8 m (6 feet) along the outer face. A marginal wharf, 60 m (200 feet) long, extends along the shore to the east. There is a least depth of 1.5 m (5 feet) alongside. Fresh water, gravity fed, is available at the east end of this wharf. Another marginal wharf, 46 m (150 feet) long, extends to the west. There is a least depth of 0.6 m (2 feet) alongside. These wharves have a concrete deck. Adjacent to this, on the south side of the harbour, are floating wharves with a

PLEASANT BAY (2013)



CHÉTICAMP ISLAND LIGHT (2005)



total length of 100 m (330 feet). There is a least depth of 0.6 m (2 feet) alongside.

12 On the east side of the inner harbour is a wharf 46 m (150 feet) long with a least depth of 0.6 m (2 feet) alongside. A floating wharf extends 25 m (82 feet) from its SW corner. Tour boats operate from this wharf, and a concrete surfaced **launching ramp** is located close NE. **Pleasant Bay** has a population of about 300.

Chart 4449

Jerome Ledge, with 0.6 m of water over it, and **Caveau Shoals**, with a least depth of 3.4 m, lie on the NE side of the entrance to Chéticamp Harbour.

Chéticamp Island is joined to the mainland by a narrow beach of sand and shingle at the south end. The coast of the island is a high cliff which is constantly undermined by the sea. The east side of the island, bordering Chéticamp Harbour, is low and grassy. A **light** (867) is shown at an elevation of 22 m, from a white tower 13.3 m high, with a red upper part, on **Pointe** **Enragée (Enragée Point)** (46°39'N, 61°02'W), the NW point of the island.

15 **Chéticamp Harbour**, between Chéticamp Island and the mainland, is suitable as an **anchorage** for small vessels. The harbour is subject to **silting** and depths may be shallower than those charted. The limiting depth in the channel is 4.6 m. The harbour is normally open from mid-April to early January. Ice usually forms about the middle of January and has been known to restrict navigation until mid-May. The population of the Chéticamp area is about 5000.

16 Leading **lights** (862, 863) bear 108° in the approach to the harbour north of Chéticamp Island. The front light is shown from a skeleton tower, while the rear light is shown from a tower. The lights are located on **Caveau Point**, and both lights have white daymarks with red stripes. Mariners are **cautioned** not to use the towers remaining from an old set of leading lights as beacons or ranges. The channel to the inner harbour is **buoyed**.



17 On the east side of the inner channel, there is a basin known as *La Digue*, which is managed by the *Harbour Authority of Chéticamp*. A marine railway lies at the head of the inner basin. A marginal **wharf**, 100 m long, with depths of 2.7 to 5.2 m alongside, extends west from the entrance into the inner basin. A dog-leg **wharf** extends 175 m from the western end of the marginal wharf, forming an outer basin. Visiting vessels are permitted to berth at *La Digue*, see Appendix for additional information.

A wharf, 50 m long, is located south of the basin, and a rubble breakwater-wharf 55 m long, is close SW. A fish plant wharf lies close south. It has an outer face 50 m long with a depth of 3.7 m alongside. It was in some disrepair in 2013.

Wharf extends 30 m from the shore to an outer end 30 m long. There is a least depth of 2.1 m along the outer face, and 2.4 m along the inside face. There are public washrooms. A light tower, no longer in use, is situated on shore, adjacent to the wharf.

20 Le Quai Mathieu is located a further 0.4 mile SSW of the basin. The **wharf** face is 21 m long with depths of 0.5 to 1.4 m alongside. There is a visitors' centre and washrooms. A crib, in disrepair, formerly used for oil shipments, is located off the face of this wharf. **Caution** is necessary in this area.

21 A T-shaped Public **wharf** (Town Wharf) extends about 85 m from the east shore, about 0.15 mile north of the **conspicuous** church, and 0.6 mile SSW of the basin. The outer end is 60 m long and 10 m wide with a least depth of 4.6 m alongside. The deck of the wharf, concrete, has an elevation of 1.8 m. The wharf is flood-lit, and it is managed by the *Harbour Authority of Chéticamp*. Visiting vessels are permitted to berth here, see Appendix for additional information.

22 The most sheltered **anchorage** is off the Public wharf in 7.3 m, but there is little swinging room. Small craft can anchor anywhere in the inner harbour in good holding ground. Anchorage is not safe in strong north or NE winds. A **wreck** lies close off the west shore at a depth of 0.3 m, opposite the Public wharf.

23 **La Pointe** is the SSW extremity of Chéticamp Island. An L-shaped Public wharf forms a sheltered basin to the NE of La Pointe. The basin is 49 m wide with depths of 1 to 2.3 m. A small breakwater, south of the wharf, gives additional protection. This facility is managed by the *Harbour Authority of Chéticamp*. The breakwater and wharf were in some disrepair in 2013, and as of 2015, the *Harbour Authority* indicates that the facility is closed.

24 The **anchorage** in the bay east of La Pointe is open to the south and west and is not considered safe after August. The holding ground is loose sand and gravel.

Chart 4463

A tower, with an elevation of 473 m (1553 feet) and marked by red lights, is situated 3.2 miles SE of La Pointe.

CHÉTICAMP — TOWN WHARF (2013)



Chart 4449

Grand Étang Harbour (46°33'N, 26 $61^{\circ}03'W$, protected by two rock breakwaters, is a secure harbour for small craft, 3.1 miles south of La Pointe. Due to continuous silting, depths in the harbour and approaches are subject to change. Leading lights (869, 870) bear 130¹/₂° in the approach. The front light is shown from a skeleton tower while the rear is shown from a triangular skeleton tower; both lights, having white daymarks with red stripes are on the NE side of the harbour. Lights (868.5, 868.6) are shown from the outer end of each breakwater at the entrance to the harbour. A conspicuous wind turbine with fixed red lights, is located 0.3 mile east of Grand Étang Harbour.

There are three Public wharves on the SW side of the harbour. The north wharf is 55 m long with depths of 1.4 to 1.6 m alongside. The middle wharf is L-shaped, 65 m long, with an outer end 15 m long and a depth of 1.3 m alongside. A third wharf, 55 m long, has an outer end 22 m long with a depth of 1 m at the outer end. A small wharf and launching ramp are situated on the north side of the harbour. A causeway and bridge span the head of the harbour; the bridge has a vertical clearance of 2 m. The population of Grand Étang is about 350.

Margaree Harbour (46°27'N, 28 $61^{\circ}07'W$) is a shallow basin formed by the expanded and partially drying mouth of the Margaree River. The entrance is protected by breakwaters on each side. Due to silting, depths in the harbour and approaches are subject to

change, and navigation should not be attempted without the latest local information. Lights (873.2, 873.21) are shown from masts on the outer ends of each breakwater. A bridge with a vertical clearance of 2.7 m crosses the Margaree River 0.5 mile above the entrance.

Leading lights (872, 873) bear 1661/2° 29 in the approach, and are shown from white structures with red stripes on the SW side of the river mouth. Each structure has a red upper part and red roof. Inside the entrance, a shallow **buoyed** channel leads to a basin in the NE part of the harbour inside of a long rocky spit. The Public wharf has a face 48 m long with depths of 1.2 to 2.4 m alongside. Marginal wharves are situated to the NE and SW. A floating wharf, with depths of 0.9 to 1.5 m at the outer end, extends from the NE marginal wharf. The settlement of Margaree Harbour has a population of about 70.

Chart 4463

Whale Cove is a small bight located 1 mile SSW 30 of the entrance to Margaree Harbour, giving good shelter in moderate weather. The head of the bight is a fine sandy beach.

Margaree Island (Sea Wolf 31 Island), 8 miles SW of Margaree Harbour, of stratified sandstone, precipitous and with

stunted trees, averages 50 m (164 feet) in elevation. The shore is bordered by submerged rocks. Swell rolls completely around the island, and there is also a strong tidal flow in the vicinity of the island, and between it and

INVERNESS HARBOUR — ENTRANCE (2013)



INVERNESS HARBOUR (2013)



the mainland. Anchorage in the area is insecure with poor holding ground. Between the island and the mainland, depths run from 9 to 22 m (5 to 12 fathoms), with rock bottom and occasional sand and gravel. *Margaree Island (Sea Wolf Island)* **light** *(874)* is shown at an elevation of 91 m (298 feet) from a white tower 8.2 m (27 feet) high on the summit of the island *(46°21'N, 61°16'W)*. 32 Close SE of **Marsh Point**, which lies 3.4 miles south of Margaree Island light, there is a **breakwater-wharf** 131 m (430 feet) long, with depths of 0.6 to 1.5 m (2 to 5 feet) at the SE face. This wharf and the skidway at its inner end were in a state of disrepair in 2002, and only used by local fishermen during lobster season.

FINLAY POINT SMALL BOAT BASIN (2013)



The settlement of Inverness, population 33 1248 in 2016, is situated 7.5 miles SSW of Margaree Island (Sea Wolf Island). The twin domes of a church are conspicuous. Inverness Harbour is a small craft basin connected to the sea by a channel 18.3 m (60 feet) wide between two breakwaters. Lights (874.1, 874.12) are shown at the outer ends of each breakwater. Leading lights (874.2, 874.3), bearing 124° through the channel, are shown from skeleton towers having white daymarks with red stripes. There is a least depth of 2.1 m (7 feet) on the range leading into the basin.

A T-shaped Public wharf extends 51 m 34 (168 feet) from the north side of Inverness Harbour. The outer face, 65 m (213 feet) long, has a least depth of 1.8 m (6 feet). The T-end has a deck elevation of 1.8 m (6 feet). Adjoining the shore is a marginal wharf with a face 44 m (145 feet) long, having a least depth of 1 m (3 feet); this wharf is used for landing and fueling by local fishermen. An L-shaped floating wharf leads 50 m (164 feet) into the harbour close west; the L-end is 20 m (66 feet) long. There are depths of 0.9 to 1.8 m (3 to 6 feet) along the sections of the floating wharf.

Chart 4462

35 Cape Mabou (Mabou Highlands) rises to an elevation of 1000 feet (304 m) south of Inverness and continues to the Mabou River at Green Point. Scars of clay and gypsum are visible from the cape in this area, while the remainder of the coast is precipitous.

At Finlay Point (46°08'N, 36 61°28'W), there is a shallow dredged channel 70 feet (21 m) wide between two breakwaters that leads into a small boat basin. There is a reported depth of 5 feet (1.5 m) in mid-channel. A Public breakwater-wharf, which dries alongside, extends 261 feet (80 m) along the east side of the west breakwater. There is a light (874.4) situated on the southern extremity of the west breakwater. A second wharf extends 290 feet (88 m) east along the head of the basin. There are depths of 1 to 4 feet (0.3 to 1.2 m) alongside. A floating wharf extends along the south side of the basin.

Chart 4448



Mabou Harbour, at the mouth of Mabou River, is entered through a channel with a depth of about 2 feet (0.6 m). Fairway light buoy VJ (874.51) is moored off the entrance, 0.4 mile SW of Green Point. The entrance is between two low capes of sand and grass. From the entrance to a highway bridge 3.5 miles upstream, the harbour resembles a shallow lake. Currents in the entrance are noticeable at half-tide. The bridge has a vertical clearance of 7 feet (2.1 m). There is protected small craft anchorage anywhere

in the harbour. Silting occurs in the harbour and depths should be checked with the latest local information. The communities of Mabou Harbour Mouth, Mabou Harbour and Mabou have a population of about 460.

CAPE GEORGE LIGHT (2005)



A Public wharf, close inside the entrance on the north side, consists of a basin protected by two wharves. The outer face, 105 feet (32 m) long, has depths of 4 to 10 feet (1.2 to 3 m) alongside. Along the basin faces is a least depth of 4 feet (1.2 m). A privately maintained **light** (876) is shown at an elevation of 45 feet (14 m), from a white tower on the inner end of this wharf. A **launching ramp** is situated close east of the basin.

39 A Public floating **wharf** extends from the north side of the bridge, with sections adjacent to, and parallel to the Mabou River. There is a least depth of 6 feet (1.8 m) alongside.

St. Georges Bay — Canso Canal

Charts 4462, 4302

40 The entrance to **St. Georges Bay** lies between **Black Point** (46°02'N, 61°33'W), the SW point of Cape Breton Island, and **Cape George**, nearly 18 miles to the SW. Cape George is a precipitous headland rising to an elevation of 600 feet (183 m). A **light** (892) is shown at an elevation of 398 feet (121 m) from a white tower, 45 feet (14 m) high, on Cape George. Starboard hand **light** and bell **buoy** VU2 (891.5) is moored close NE of the cape. 41 The main shipping channel through the bay leads into the **Strait of Canso** at the south end of the bay. The strait is deep and without dangers. The **Canso Canal** allows for shipping between the Gulf of St. Lawrence and the Atlantic coast of Nova Scotia through the **Canso Causeway**.

42 For vessels entering or leaving St. Georges Bay, a compulsory **traffic separation scheme** is in effect.

43 **Pilotage** is compulsory in the Strait of Canso area within a line drawn from Cape Jack to Low Point in St. Georges Bay, and from Green Island to Fox Island in Chedabucto Bay (45°25'N, 61°08'W), south of the causeway.

44 Masters of vessels requesting a pilot must make arrangements through the *Atlantic Pilotage Authority* (*APA*), 12 hours tentative, 6 hours firm, before arrival at the pilot boarding station which is in position 45°41'42"N, 61°28'18"W. Pilotage arrangements can normally be made through the vessel's local marine agent or else directly with the *APA*. The *APA* can be contacted by telephone: 1-877-272-3477; or email, <u>dispatch@atlanticpilotage.com</u>.

45 The master of a vessel that is to depart or move within the compulsory pilotage area must report to the *APA* 12 hours tentative, 4 hours firm, before the ETD.

Chart 4302

46 **Overhead** power **cables**, with a minimum vertical clearance of 41 m, span the strait 0.9 mile NW of the causeway. Quick flashing **lights**, visible for several miles in St. Georges Bay, are shown from the towers on both shores.

47 A **submarine cable** also crosses the strait close south of the overhead cable. A second **submarine cable** extends 0.25 mile from the Cape Breton Island shore, close NW of the canal entrance.

48 A third **submarine cable** traverses the Strait of Canso, close north of the causeway. A fourth **submarine cable**, just south of the causeway, joins the Cape Breton Island shore to the Cape Porcupine front leading light.

49 From St. Georges Bay, two sets of leading **lights** mark the approach to the canal. The outer **lights** (or *Cape Porcupine* leading lights) *(697, 698)*, in line bearing 144°, are shown from towers with white daymarks having red stripes; the lights are situated on the causeway and to the SE of Cape Porcupine, south of the causeway.

Solution The inner **lights** (or *Balache Point* leading lights) (701, 702), in line bearing $131\frac{1}{2}^{\circ}$, are shown from towers with white daymarks having red stripes, situated at the north end of the lock.

CANSO CANAL — FROM THE NORTH (2005)



51 **Canso Causeway and navigation lock.**— The stone-fill causeway carries a highway, railway tracks and **overhead** power **cables**. The **overhead cables** cross the lock with a vertical clearance of 43 m.

52 The Canso lock, at the east end of the illuminated causeway, is 250 m long and 24.4 m wide. A swing **bridge** crosses the south approach to the lock. A traffic **light** (700.5) on the bridge operates as follows: flashing red indicates preparation of bridge opening and bridge in motion; fixed red indicates bridge is fully closed; fixed white indicates bridge is fully open. A mooring berth, 213 m long, extends from the outer end of the north approach wall, and a similar berth, 198 m long, joins the outer end of the south approach wall. Two **lights** (700, 703) are shown on masts on the outer end of each mooring berth.

53 Ships with a draft not greater than 8.5 m and not more than 224 m in length may proceed, in accordance

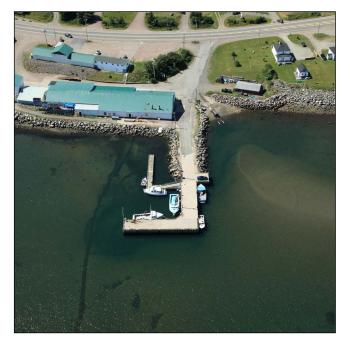
with the *Canal Regulations*, through the lock 7 days a week, 24 hours a day, during the navigation season. Vessels with a draft greater than 8.5 m and not more than 9.1 m may proceed through the lock when tidal conditions are favourable, in the opinion of the Canal Superintendent.

54 The Canso lock is closed to navigation during the winter months. The lock usually closes in January and opens in early April. The times of closing and opening are announced in *Notices to Mariners* or *Navigational Warnings*.

55 Vessels shall enter the lock on the green signal light or on the instructions from the lockmaster, and shall leave the lock on the lockmaster's instructions. The lockmaster shall be contacted on

VHF channel 11 (156.55 MHz) when 0.5 mile from the lock. The signal **lights** are shown at each end of the lock. *The Canso Canal radiotelephone VAZ3 shall be used only when normal methods of signaling are inoperative or ineffective.*

AULDS COVE (2013)



Vessels over 30.5 m in length shall place an 56 adequate number of linesmen ashore before the bow of the vessel enters the lock to ensure that the ship will be under control while entering and manoeuvring in the lock. At the discretion of the lockmaster, ships over 153 m in length may require three linesmen.

57 Canal linesmen are not provided. If a vessel is unable to place linesmen ashore, experienced linesmen will be provided on request to the lockmaster at least 6 hours prior to arrival at the canal approach. This service will be provided at the vessel's expense, payable in Canadian or U.S. currency before the vessel leaves the dock. These linesmen are not canal employees, and the responsibility for their safety and the service provided lies with the vessel.

Aulds Cove is an inlet situated on the west 58 side of the Strait of Canso, 0.6 mile NW of the causeway. There is a Public wharf extending 30 m to an outer end 30 m wide. The north side of the stem has depths of 0.9 to 2.7 m, and the south side 1.8 to 2.4 m. The outer end has depths of 2.1 to 2.7 m, and the inside face 1.8 m. A floating dock is attached to the south side of the stem; it has a south face 25 m long and a least depth of 1.2 m alongside. Poor shelter is reported during north seas and swells.

East Side of St. Georges Bay

Chart 4462

Between Heffernan Point (45°42'N, 61°28'W) 59 and Long Point, 6.5 miles north, shallow water does not extend more than 0.5 mile from the shore, and there are no detached dangers. The land is high, and 0.5 mile inland, it rises to the summit of a ridge 850 feet (259 m) in elevation which parallels the coast as far as Long Point. The only conspicuous feature along this stretch of coast is the spire of the church at Creignish.

From Long Point to Big Rorys Point 60 (Emersion Point), 7.5 miles north, shoal water with detached rocks and boulders fringe the coast to a distance of 2 miles offshore. Judique Shoals, off Campbell Point, with a least depth of 6 feet (1.8 m), form part of this foul area. Judique Bank, a rocky area with a least depth of 28 feet (8.5 m), lies 2.5 miles NW of Judique Shoals.

61

Near Judique South, there is a small boat basin at Baxters

Cove. It is protected on the seaward side by a boulder breakwater and on the south side by an L-shaped Public wharf, 150 feet (46 m) long. The channel leading into the basin is not buoyed, and channel widths and depths change frequently. Caution is advised. A light (882), at an elevation of 24 feet (7.3 m), is shown from a mast having a red and white triangular daymark, at the outer end of the wharf. Three wharf faces, each about 100 feet (30 m) long, form the east side of the basin. A fourth wharf, 62 feet (19 m) long, joins the north face. Close south, a floating wharf extends 98 feet (30 m) from the east side of the basin. There are depths of 3 to 6 feet (0.9 to 1.8 m) alongside the wharves.

There is a Public harbour protected by two 62 breakwaters close south of Katies Point (Kate Point). There is a reported depth of 5 feet (1.5 m) in the entrance. A concrete-decked wharf on the north side of the harbour is 200 feet (61 m) long with depths of 1 to 4 feet (0.3 to 1.2 m) alongside. The wharf is flood-lit, and power and diesel fuel are available. A floating wharf 275 feet (84 m) long lies on the west side of the harbour inside the rock breakwater; there is a least depth of 6 feet (1.8 m) alongside. The wharf on the east side is 300 feet (91 m) long with a least depth of 3 feet (0.9 m) alongside.

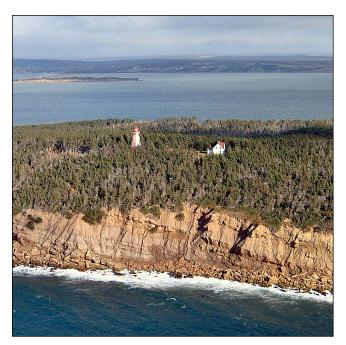
HARBOUR NEAR KATIES POINT (2013)



Chart 4448

63 Henry Island (45°59'N, 61°36'W), 2.5 miles off the Cape Breton Island coast, presents eroding cliffs along most of its shore. These cliffs are 100 feet (30 m) in elevation on the west side. There are some small coves and sandy beaches on the east side. Shallow water

HENRY ISLAND LIGHT (2005)



extends some distance from **Fishery Point**, its SE extremity, and a **wreck** lies close south of the point. A **light** (881) is shown at an elevation of 200 feet (61 m) from a red and white vertically striped tower, 39 feet (12 m) high, on the summit of the island.

64 **Port Hood Island**, 0.9 mile NE of Henry Island, is surrounded by cliffs except for a sandy beach at the head of a bay on its east side, off which a church on the island is prominent. Gypsum cliffs and detached ragged rock formations are noteworthy at the NW end of the island. Between Henry Island and Port Hood Island are **shoals**, with a passage marked by **buoys**.

65 **Port Hood** is the only harbour along this part of Cape Breton Island to offer some shelter for small vessels. It is sheltered from the west by Port Hood Island, Henry Island and the **reefs** between them, and a **breakwater** joining Port Hood Island to the mainland gives some protection from NW swell. The breakwater is partly submerged at high water, and yellow cautionary **buoys** are moored along each side.

66 Parks Point (Spithead), on the SE side of Port Hood Island, and Shipping Point (Dean Shoal), on the east side of the harbour, narrow the entrance but provide some protection from SW swell. Sustained south or SW gales send in a heavy swell. South and east of Parks Point (Spithead), **buoys** mark the channel into the harbour. A south cardinal **light buoy** VM (882.3) is moored 0.8 mile NNE of Parks Point (Spithead). There are depths of 18 to 35 feet (5.5 to 10.7 m) in the **anchorage**, sand and mud, but the area is small and swinging room restricted.

PORT HOOD — MURPHYS POND (2013)



67 The settlement of **Port Hood**, population of about 700, is situated on the east side of the harbour. The red church is **conspicuous**. A smaller white church, with a spire, is situated 0.15 mile further south. The brick courthouse is **conspicuous**.

68 A T-shaped **wharf**, in some disrepair in 2013, extends 590 feet (180 m) from the shore at Port Hood. The outer face, 246 feet (75 m) long, has no berth. The inside face is used by residents who live on Port Hood Island.

69 A breakwater extends south from Smith Point on Port Hood Island. A boat basin, enclosed by three faces of total length 492 feet (150 m), and depths of 3 to 6 feet (0.9 to 1.8 m) alongside, is situated inside the breakwater. A wharf close west of the breakwater is in a state of disrepair. A privately maintained light (877) is shown from a mast having a red and white daymark, at the outer end of the breakwater.

70 At Murphys Pond (Murphy Pond), north of the Port Hood breakwater, there is a boat basin for fishing craft which is protected by two breakwaters. The basin is lined with wharves. Lights (876.8, 876.9) are shown at the outer ends of each breakwater. The wharf on the east side is 110 feet (34 m) long, a launching ramp 40 feet (12 m) wide lies to the south of the wharf. The north wharf totals 590 feet (180 m) in length, including two sides of an adjoining **pier**. On the west side, the marginal **wharf** is 210 feet (64 m) long. A floating wharf, with a total length of 220 feet (67 m), adjoins the west breakwater. There is a reported depth of 6 feet (1.8 m) throughout the basin. Fresh water and electricity are available. Fairway **light buoy** *VX* (876.5) is moored one mile WNW of the entrance to the basin; port hand **light buoy** *VX1* (876.3) is moored 0.1 mile south of the entrance.

Little Judique Harbour lies just 71 north of Domhnull Ruadhs Head (Cape Susan) to the SE of Henry Island. There is a sheltered small craft harbour that is entered between two breakwaters. The channel has a width of 36 feet (11 m) and there is a depth of only 3 feet (0.9 m) in the approach. A light (881.1) is shown from a mast at the outer end of the north breakwater. A Public wharf with a face 910 feet (274 m) long extends along the south side to a highway bridge; there are depths of 2 to 6 feet (0.6 to 1.8 m) alongside. A floating wharf on the north side is 110 feet (34 m) long with depths of 1 to 6 feet (0.9 to 1.8 m) alongside. Adjacent to this is a **ramp** and small boat haulout and storage area. A sector light (881.3) is shown from a skeleton tower having a red and white daymark, at the inner end of the south breakwater. The white sector indicates the preferred approach.

HAVRE BOUCHER — ENTRANCE (2005)



HAVRE BOUCHER (2018)



POMQUET ISLAND (2005)



South Side of St. Georges Bay

Chart 4302

12 Havre Boucher $(45^{\circ}41'15"N, 61^{\circ}31'30"W)$, about 1.5 miles west of the entrance to the Strait of Canso, is a small and shallow harbour for smaller vessels. Fairway **light buoy** VQ (883.4) is moored 0.8 mile NNE of the entrance. The harbour has easy access and offers good shelter. The entrance is narrow, but there is a least depth of 1.8 m along the range. Leading **lights** (884, 885) bear 194¹/₂° in the entrance channel, which is also marked by **buoys**. The lights are shown from white towers with red stripes, situated on the SW shore of the harbour. The west entrance point is a low bank of stones and small rocks.

73 The deepest water in the **anchorage** is 3.7 m in fair holding ground. Two L-shaped public **wharves** which extend 70 metres from shore, enclose a boat basin on the western side; there are berths located around the inside and a floating dock parallel to the shore. There are depths of 2 m in the entrance, and 2 to 3 m within the basin. Electricity is available at the facility, and a **launching ramp** is located close south. The community of **Havre Boucher** had a population of 281 in 2021.

Chart 4447

74 **Cape Jack** (45°42'N, 61°34'W) is a prominent headland with a 60-foot (18.3-m) red

sandstone cliff facing seaward. The remnants of a breakwater at **Breens Pond**, SW of the cape, are surrounded by very little water. The breakwater was formerly about 400 feet (122 m) long.

75 **Jack Shoal** extends 1 mile north of Cape Jack and should be given a wide berth in any weather. *North Canso* **light** (883) is obscured over Jack Shoal, and by keeping the light open, the shoal is cleared by more than 1 mile. Starboard hand **light** and bell **buoy** *VU4* (886) is moored 1.3 miles NE of the drying portion of the shoal.

76 **Linwood Harbour (Little Tracadie Harbour)**, small and shallow, with a drying bar across its narrow entrance, lies between **Cape Blue**, of limestone, and **Barrios (Barrio) Head**, a cliff of red sandstone.

Tracadie Harbour, enclosed by **Tracadie Big Island (Delory Island)**, has a narrow entrance that has a least depth of 3 feet (0.9 m) in mid-channel; the channel is **buoyed**. Starboard **light buoy** *VP2 (887.2)* is moored 0.4 mile NNW of the entrance. The harbour has many small coves and islets. A **breakwater** extends from the east side of the entrance at **Barrios Beach**. A **light** (887) is shown at an elevation of 53 feet (16 m) from a mast 22 feet (6.8 m) high, with a red and white daymark, situated near the inner end of the breakwater. A **conspicuous** church lies on the south shore of the harbour at the village of **Tracadie**. **Middle Head**, the north tip of Tracadie Big Island (Delory Island), presents a bold

BAYFIELD SMALL BOAT BASIN (2013)



seaward face. An **overhead cable**, height unknown, crosses the harbour entrance.

78 The Public **wharf** at Barrios Beach, 95 feet (29 m) long and 20 feet (6 m) wide, has a depth of 3 feet (0.9 m) along its three faces. The deck has an elevation of 6 feet (1.8 m). A marginal **wharf**, close to the north, has a face 95 feet long with a depth of 3 feet (0.9 m) alongside.

A private wharf, 123 feet (37 m) long and 20 feet (6 m) wide, is located on the west shore of the harbour, about 1.3 miles WSW of the breakwater. There are depths of 4 feet (1.2 m) along the south face and 5 feet (1.5 m) along the north face.

80 **Bowman Head** lies 2.5 miles west of Barrios (Barrio) Head, and from it, **Bowman Bank** covers a large area extending 2.3 miles NW from the shore. North cardinal **light buoy** *VP* (887.1) is moored toward the northern extent of Bowman Bank, 1.7 miles NNW of Bowman Head.

Pomquet Island $(45^{\circ}39'N, 61^{\circ}45'W)$ is wooded, 49 feet (15 m) in elevation, and composed of red sandstone. A drying **reef** extends off the east side and curves to the south towards **Pomquet Point**, leaving a narrow boat channel between the island and the point. A **light** (888) is shown at an elevation of 45 feet (14 m) from a white tower on the NE end of the island. Starboard **light buoys** VR2 and VR4

(887.75, 887.8) are moored east and southeast of Pomquet Island, respectively. **Pomquet Road** (local name), the bight formed to the SE, is partially sheltered by the island and **reefs**, and by a **breakwater** 615 feet (187 m) long, extending from Pomquet Point, but any anchorage is exposed to NE gales. The best **anchorage** is in 24 feet (7.3 m), sand, with the south end of the island bearing 353°, 0.5 mile distant.

N N S² A boat harbour at **Bayfield**, south of Pomquet Island, is formed by two rock **breakwaters**. Starboard **light buoy** *VR8* (887.82) is moored close SE of the entrance. A **light** (888.5) is shown from a mast at the outside end of the north breakwater. A **wharf** 320 feet (98 m) long lies along the inside face of the south breakwater. An outer end of this wharf is 60 feet (18.3 m) long. There are depths of 5 to 7 feet (1.5 to 2.1 m) alongside. Across the head of the harbour is a floating wharf, 220 feet (67 m) long, with a least depth of 7 feet (2.1 m) alongside. A **launching ramp**, 20 feet (6.1 m) wide, lies adjacent to this.

83 **Pomquet Harbour**, entered 1 mile west of Pomquet Island, is very shallow and navigable only by small craft. The shifting sand bar across its narrow entrance has a depth of only 2 feet (0.6 m).

84 **Monks (Monk) Head**, 3.7 miles WNW of Pomquet Island, is a **conspicuous** cliff of white gypsum 45 feet (14 m) in elevation.

Chart 4446

Antigonish Harbour $(45^{\circ}41'N, 61^{\circ}53'W)$ is an extensive shallow estuary that is entered through a narrow channel separating **Dunns (Dunn) Beach** and **Mahoneys (Mahoney) Beach**. Because of **silting**, depths in the approach to and inside the harbour are subject to change. The entrance has a limiting depth of only 3 feet (0.9 m). The flow in the entrance seldom exceeds 2 knots, except during the spring run-off. Fairway **light buoy** *VS* (889.5) is moored 0.6 mile NE off the entrance to the harbour.

86 Inside the harbour, the extensive mud flat surrounding **Captain Island** separates the channel. One channel leads west and the main channel trends SE and continues SW for 4 miles. The shores are broken into many coves and there are several islets. There is continuous silting in the harbour, and local knowledge is essential.

Chart 4462

The town of **Antigonish**, population 4364 in 2016, lies at the head of the SW arm of Antigonish Harbour, 6.5 miles from the harbour mouth.

CRIBBONS POINT (2013)



West Side of St. Georges Bay

88 **Ogdens (Ogden) Pond** $(45^{\circ}43'N, 61^{\circ}54'W)$, 1.5 miles north of the entrance to Antigonish Harbour, is separated from the bay by a bar through which there is a narrow boat channel with a depth of about 1.5 feet (0.4 m). There are depths of 10 feet (3 m) in the pond. There are **conspicuous** white cliffs close north of the entrance to the pond.

89 **MacIsaacs (MacIsaac) Rock** lies nearly 0.3 mile offshore, 1.2 miles NNE of Ogdens Pond. There is a depth of 12 feet (3.7 m) over it and it is sometimes marked by **breakers**.

90

Chart 4404

Cribbons Point (Cribbean

Head), a **conspicuous** cliff formed of sedimentary rock, is situated 7 miles south of Cape George. A **light** (890.2) is shown at an elevation of 20 m from a skeleton tower on the cliff. The harbour is protected by two rock **breakwaters**. In 2008, there were depths of 1.3 m in the harbour. The Public **wharf** lies inside the east breakwater. It is 82 m long with an outer end 56 m long. A **light** (890), having a triangular red daymark, is shown from a mast on the outer end of the east breakwater. The *Cribbons Point Marina* with several floating finger piers and a **launching ramp**, has been established on the west side of the harbour. Fresh water, garbage disposal and septic pump-out facilities are available.

91 **Ballantynes Cove** lies on the south side of Cape George. The harbour is enclosed by two rock **breakwaters** leaving a channel 37 m wide between them. The L-shaped Public **wharf** is 162 m long with a spur extending 38 m from the east breakwater; the spur was in disrepair in 2013. There are depths of 1.2 to 3 m along the west face and 2.1 to 3 m along the spur faces. A **light** (891) is shown at an elevation of 8 m from a mast 5.2 m high on the outer end of the east breakwater. Floating wharves are located inside the west breakwater, totalling 67 m in length. There is a depth of 1.8 m in this area.

92 Ballantynes Cove has an active fishery, and the wharf is frequently used by yachtsmen. The *Ballantynes Cove Marina* operates from the abovementioned floating wharves. The *Bluefin Tuna Interpretive Centre* is located in a building on shore adjacent to the Public wharf. Washrooms, showers and laundry facilities, and the Harbour Master's Office are housed in the same building. Fresh water and electricity are available throughout the harbour, and there is septic pump-out capability. Both diesel fuel and gasoline are available.

Prince Edward Island — East Coast

Charts 4023, 4403

East Point (46°27'N, 61°58'W) is a red sandstone cliff 30 to 60 feet (9 to 18.3 m) in elevation. **Tide-rips** are frequently present off the point.

BALLANTYNES COVE (2013)



94 There is good **anchorage**, in northerly winds, to the SW of East Point as far as South Lake, a distance of 5 miles, with moderate depths and red sand bottom. North and NW of the point, the holding ground is either loose or rocky.

95 *East Point* **light** (943) is shown at an elevation of 88 feet (27 m) from a white octagonal tower 64 feet (19.5 m) high, with a red peak. East cardinal **light** and whistle **buoy** *NDN* (942) is moored 1.7 miles NE of East Point.

Milne Bank covers a large area to the south of East Point. The bottom is of sandstone, thinly covered in places with red sand, with a least depth of 32 feet (9.7 m). The east edge of the bank is steep-to and tide rips are frequently seen when the tidal stream is flowing to the SW. In strong NE gales, the sea can be very heavy.

97 The **tidal streams** set very strongly towards and over the **reef** off East Point, and attain a rate of 2.5 knots between the north end of Milne Bank and East Point.

Chart 4403

98 **East Point to Durell Point**. — The *Canadian Coast Guard* has completed a review of the marine aids to navigation system in the harbours and waterways between East Point to Durell Point.

99 The visual aids to navigation in these waters are designed to support the safe movement of marine craft until visibility is reduced to five (5) miles. When visibility drops below 5 nautical miles, mariners should reduce speed, exercise **caution** and ensure safe navigation by using on-board electronic navigation systems.

100 From East Point to Basin Head, 8 miles to the SW, the coast is formed of sand hills and beaches. **South Lake** is a narrow, shallow pond inside the sand dunes, with a drying outlet. Cliffs commence at **Basin Head**.

EAST POINT LIGHT (2013)



Basin Head Harbour $(46^{\circ}23'N, 62^{\circ}07'W)$ is protected by wooden **breakwaters** 38 feet (11.6 m) apart. A sandbar across the entrance impedes entry, which can only be attempted at high water by boats not exceeding a 3-foot (0.9-m) draft. A foot bridge with a vertical clearance of 13 feet (4 m) connects the breakwaters, which have a least depth of 3 feet (0.9 m) along the inside faces. Beneath the **bridge** in mid-channel, there is a depth of 4 feet (1.2 m). **Currents** on the outflow from the basin are very strong. The surrounding area and beaches are a Provincial Park and a Fisheries Museum complex. A Marine Protected Area extends for 3 miles along the shore, to a distance of 0.8 mile, centred on Basin Head Harbour.

102 **Shallop Rock**, drying, lies on a **reef** extending 0.4 mile south from **Red Point**. From this point to **Colville Bay**, the coast is free of detached shoals, and the 10-fathom (18.3-m) line runs parallel to the shore, about 0.5 mile off. Colville Bay, at the mouth of the **Souris River**, provides good **anchorage** with offshore winds.

Chart 4419

103 **Souris Harbour** $(46^{\circ}21'N, 62^{\circ}15'W)$, on the east side of Colville Bay, is protected by a **breakwater** which extends about 1700 feet (518 m) from **Knight Point**. The Port of Souris, which consists of the infrastructure in Souris Harbour, is managed by the *Souris Harbour Authority*. Souris is considered the best harbour on the east side of Prince Edward Island. Depths in and around Souris Harbour are subject to change as a result of silting and scouring. Dredging is carried out periodically and mariners are **cautioned** that varying amounts of infilling must be expected.

104 The town of **Souris**, population 1053 in 2016, is a fishing, farming and commercial centre for northeastern Prince Edward Island. A **hospital** is located in the town. A **ferry** operates to Îles de la Madeleine year-round, as of the 2015-2016 season. To the NE of Knight Point are two large buildings that are used as food processing plants. The water tower, 0.7 mile north of Knight Point, is **conspicuous**.

Pilotage is available but not compulsory. Masters of vessels requiring a pilot should make arrangements through the *Atlantic Pilotage Authority (APA)*, 12 hours tentative, 6 hours firm, before arrival, at the pilot boarding station. The station is located 1.6 miles SSE of **Swanton Point**, the east entrance point to Colville Bay. Pilotage arrangements can normally be made through the vessel's local marine agent or else directly with the *APA*. The *APA* can be contacted by telephone: 1-877-272-3477; or email, dispatch@atlanticpilotage.com.

106 The master of a vessel that is to depart or make a move and requires a pilot must report 6 hours prior to the ETD.

107 A light (947) is shown at an elevation of 89 feet (27.2 m) from a white tower, 47 feet (14.4 m) high, with a red peak, situated close SE of the inner end of the **breakwater** at Knight Point.

SOURIS HARBOUR (2005)



108 A light (948) is shown from a skeleton tower at an elevation of 34 feet (10.5 m) on the outer end of the breakwater.

109 Fairway **light** and whistle **buoy** *NA* (946) is moored 1 mile SW of Swanton Point.

110 The Public **wharf**, 850 feet (260 m) long and 140 feet (43 m) wide, lies close inside the breakwater. The shipping berth, 600 feet (183 m) long on the north side of the wharf, has depths of 17 to 20 feet (5.2 to 6.1 m) alongside, and there are depths of 15 to 17 feet (4.5 to 5.2 m) along the south side. The elevation of the deck of the wharf is 7 feet (2.1 m).

The *Eastpac (Eastpack)* wharf, north of the Public wharf, is 300 feet (91 m) long and 105 feet (32 m) wide at the outer face. There are depths of 10 to 12 feet (3 to 3.6 m) along the south face, and 4 to 7 feet (1.2 to 2.1 m) along the north face. A marginal wharf joins the Eastpac wharf and the Public wharf. There are depths of 12 feet (3.6 m) alongside. There are two boat haulouts and a storage adjacent to the marginal wharf.

112 A small craft basin, enclosing depths of 3 to 8 feet (0.9 to 2.4 m), is situated north of Eastpac wharf. The ferry terminal has two wharves; the one to the west of the boat basin has depths of 15 to 20 feet (4.5 to 6.1 m) alongside, while the **wharf** NW of the basin has depths of 15 feet (4.5 m) alongside.

113 All the wharves are lighted and fresh water and electricity are available. Fuel and diesel are available at dockside, and minor repairs can be affected. Supplies are available in Souris.

114 The *Souris Marina* is located inside the breakwater, at the landward end, south of the public wharf. There are a reported 900 feet (274 m) of floating docks, with water depths ranging from 13 to 18 feet (3.9 to 5.5 m). A 60-foot (18.3-m) vessel can be accommodated. Laundry, showers, garbage disposal, wireless Internet are available, as is access to a 35-ton travel-lift.

Lifeboat station. — Souris is the location of a *Canadian Coast Guard* station and a **Search and Rescue** cutter, the *CCGS Cape Spry*. The vessel is

BAY FORTUNE (2013)



operational from about May 1 to November 30. All distress situations should be communicated to *Joint Rescue Coordination Centre at Halifax (JRCC Halifax)* via the *Canadian Coast Guard Marine Communications and Traffic Services Centre (MCTS)*, or by any other available means. See inside cover or Appendix for contact information.

Chart 4403

Between **Souris Head** ($46^{\circ}20^{\circ}N$, $62^{\circ}17^{\circ}W$), a wooded bluff, and Cape Spry (Spry Point), 7 miles to the SW, there are several bays separated by sharp, steep headlands and points of red sandstone.

Rollo Bay has depths of 7 fathoms (12.8 m) over sand, and is a poor anchorage with onshore winds. There are lesser depths on the west side of the bay because of **silting** from **Fortune River**.

118 **Bay Fortune (Fortune Bay)**, an expansion of Fortune River inside projecting sand spits and **breakwaters**, is suitable for small craft and can be navigated as far as the settlement of **Fortune Bridge**, 2 miles upstream. The river is reported to be deep and clear of obstructions beyond a bar close inside the entrance.

119 The entrance, close north of **Abells Cape (Cape Abell)**, is narrow between two wharves, with a depth of 11 feet (3.4 m) reported in mid-channel. A breakwater, in disrepair, extends east from the north wharf. The approach channel, marked by **buoys**, has a reported depth of 5 feet

(1.5 m). Bay Fortune provides good shelter from all but persistent NE winds, which make the approach difficult.

120 The north **wharf** at the entrance is 70 feet (21 m) long. A berthing face 300 feet (91 m) long, extends east from the wharf, with depths ranging from 2 to 4 feet (0.6 to 1.2 m) alongside. On the south side, two L-shaped **wharves** form a boat basin. The east wharf has a face 115 feet (35 m) long with a least depth of 4 feet (1.2 m) on either side. The east face of the basin dries, as does the south face, 220 feet (67 m) long. The west L-shaped wharf has an outer face 135 feet (41 m) long with a least depth of 4 feet (1.2 m) on either side. The west face of the basin has a face 150 feet (46 m) long with depths of 4 to 7 feet (1.2 to 2.1 m) alongside. There is a **launching ramp** at the SW corner of the basin. This facility is lighted, water and electricity are available.

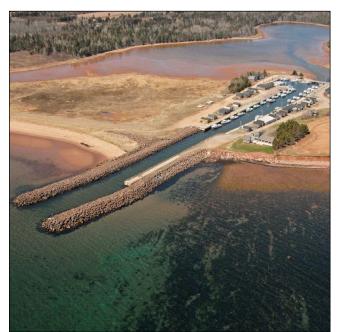
121 **Howe Bay**, the shallow indentation SW of Rollo Bay, is entered between **Howe Point** and **Durell Point**.

Charts 4935, 4403

122 **Annandale to Graham Pond**. — The *Canadian Coast Guard* has completed a review of the marine aids to navigation system between Annandale to Graham Pond. This includes the harbours and waterways of Graham Pond, Sturgeon Bay, Montague River, Georgetown Harbour, Cardigan River and Launching Pond.

123 The visual aids to navigation in these waters are designed to support the safe movement of marine

LAUNCHING POND (2013)



craft until visibility is reduced to five (5) miles. When visibility drops below 5 nautical miles, mariners should reduce speed, exercise **caution** and ensure safe navigation by using on-board electronic navigation systems.

Chart 4935

124 Boughton River, which flows into **Boughton Bay**, expands inside projecting points to form a shallow harbour. Sand bars build up outside the entrance and sand partly fills the bay. Cape Spry (Spry **Point)**, the east entrance point to the bay, has a few detached rocks extending from it. A narrow **buoyed** channel, suitable only for vessels drawing less than 0.9 m (3 feet), leads into the harbour. The channel is subject to silting. A sector light (949.5) is shown from a white tower having a red and white daymark, on the north side of the entrance. The white sector indicates the preferred approach. Fairway light buoy NE (948.5) is moored 2 miles SE of Annandale Public wharf. The harbour is reported to have easy access except during SE swells. Boughton River, west of Annandale to Poplar Point, is mostly occupied by aquaculture facilities which impede safe navigation.

125 The community of **Annandale** is situated near the point of land at the north entrance to the harbour. A small boat harbour is located there. The Public **wharf**, which extends south, is 79 m (260 feet) long with a least depth of 1.2 m (4 feet) alongside its berthing faces. The wharf is 40 m (130 feet) across, and there is a **launching ramp** at its SE corner. There is a boat basin on the east side of the wharf, with an entrance 11 m (36 feet) wide. A rock **breakwater** extends west and south from the stem of the wharf to form a second boat basin on the west side of the Public wharf, having an entrance 20 m (66 feet) wide. The basin on the east side, and the wharves to the west side have depths of 0.6 to 1.2 m (2 to 4 feet). A **light** (950.3), is shown from a mast, having a green and white daymark, on the outer end of the breakwater. Electricity and fresh water are available.

126 A Public wharf at Chapel Point, on the south shore nearly 3 miles above Annandale, is used primarily to service aquaculture. The wharf extends 76 m (250 feet) from the shore to an outer end 13.7 m (45 feet) long and 8.3 m (27 feet) wide, with a least depth of 0.6 m (2 feet) at the outer face.

127 **Launching Pond** (46°13'N, 62°25'W), 2.2 miles south of

Annandale, is a shallow draft fishing harbour entered by a narrow channel between two **breakwaters**. Starboard hand **light buoy** *NY2 (951.5)* is moored 0.4 mile ESE of the entrance. The entrance channel is subject to **silting** and there is a depth of 1.2 m (4 feet) inside the basin. Privately maintained **lights** *(951, 951.2)* are shown at the outer end of each breakwater from steel masts. The **wharf**, with a continuous berth 600 m (1968 feet) long, is lighted, and electricity, fresh water, gasoline and diesel are available. The limit of navigation is the **bridge**, which has a vertical clearance of 0.8 m (2 feet).

Boughton Island is joined to the mainland by a sand bar, and surrounded by drying mud banks and ledges. Boughton Point, at the SE end, is a cliff of red sandstone 9 m (30 feet) in elevation. Boughton Ledge, with some rocks above water at its outer end, extends 0.6 mile from the east side of the island. The unlighted east cardinal buoy *NJA* is moored east of Boughton Ledge.

Cardigan Bay is 3 miles wide at its entrance between Boughton Point and **Panmure Head**, the NE point of **Panmure Island**, which lies on the SW side of the bay. The bay offers good **anchorage** with offshore winds in 11 to 18 m (6 to 10 fathoms), mud bottom.

130 Panmure Island is partly wooded and there are cliffs of red sandstone 12 m (40 feet) in elevation along its NE coast. A grassy sand bar joins Panmure Head to the mainland. **Panmure Ledge**, with a depth of 1.5 m (5 feet) at its outer end, extends 0.6 mile east from Panmure Head.

PANMURE HEAD LIGHT (2005)



131 A light (953) is shown at an elevation of 25 m (82 feet) from a white tower with a red peak, on Panmure Head. Fairway light buoy *NH* (952.5) is moored 0.9 mile NE of Panmure Head.

132 **Burnt Point (Cardigan Point)** divides Cardigan Bay into the **Cardigan River**, which flows into the head of the bay on the NW side, **Georgetown Harbour**, to the east and at the confluence of **Brudenell River** and **Montague River**, and **Clarks (Livingstone) Bay**, **Sturgeon Bay**, and **St. Marys Bay**, to the south.

133 Cardigan River. — MacPhee Shoal and Maitland Flat on each side constrict the river mouth, but there is a buoyed channel with a least depth of 5.5 m (18 feet) for 5 miles above Burnt Point (Cardigan Point), and small craft can proceed another 2 miles as far as the bridge at the village of Cardigan, population 269 in 2016. Aquaculture facilities are located along the shores of Cardigan River between Ferry Point and Cardigan, and caution should be exercised in navigation.

134 At Cardigan, on the south shore, the Cardigan Marina wharf is 41 m (130 feet) long at the face with alongside depths of 1.8 m (6 feet) at the outside corner. The corner of the wharf adjacent to the **bridge** dries. There are strong **currents** beneath the bridge, which has a vertical clearance of 1 m (3 feet). On the east side of the bridge are several small craft floating docks having depths of 2.1 m (7 feet). Fuel and provisions are available nearby.

Georgetown Harbour

135 **Panmure Spit** extends NW from **Billhook Point**, the NW end of Panmure Island. **Cardigan Shoal**, on the north side of the approach, projects south from Burnt Point (Cardigan Point); it is marked by starboard hand **light buoy** *NH4 (953.4)*. There is a channel 0.2 mile wide between these dangers. The buildings of the defunct *East Isle Shipyard* are **conspicuous** from seaward.

136 **Thrumcap Spit** protects the harbour on the SE side and forms a bay, bounded on the west side by **Gaudin Point** and its projecting sand spit. **Knoll Shoal**, at a depth of 2.7 m (9 feet), is situated south of Thrumcap Spit; it is marked by starboard hand **light buoy** *NH10 (954)*. **Wightmans Point (St. Andrew Point)** is situated on the SW side of the approach to Georgetown Harbour, opposite Thrumcap Spit.

Pilotage is available but not compulsory. Masters of vessels requiring a pilot should make arrangements through the *Atlantic Pilotage Authority (APA)*, 48 hours tentative, 6 hours firm, before arrival at the pilot boarding station, which is located 5.2 miles east of Panmure Head. Pilotage arrangements can normally be made through the vessel's local marine agent or else directly with the *APA*. The *APA* can be contacted by telephone: 1-877-272-3477; or email, <u>dispatch@atlanticpilotage.com</u>.

138 The master of a vessel that is to depart or make a move and requires a pilot must report six hours prior to the ETD.

139 Georgetown Marine **Terminal** is 300 m (985 feet) long and 41 m (135 feet) wide. The berth on the east side, 175 m (575 feet) from the outer end, has depths of 5.8 to 7.3 m (19 to 23) feet alongside. The berth on the west side, 168 m (550 feet) from the outer end, has depths of 8.5 to 7.6 m (27 to 24) feet alongside. There is a depth of 7.2 m (23 feet) along the seaward end of the wharf. The elevation of the deck of the wharf is about 1.5 m (5 feet). Fresh water, fuel and electricity are available.

140 The Queens **Wharf** (fishermans wharf) extends 175 m (575 feet) to a depth of 2.4 m (8 feet) at its outer end. An L-shaped **wharf** extends 68.6 m (225 feet) east from the Queens Wharf, having an L-end 38 m (125 feet) long. This creates sheltered berthing space along the faces of the wharf, and on a series of floating wharves close to shore.

141 *East Isle Shipyard* is located on the eastern end of the Georgetown waterfront; it carried out steel and aluminum ship building, ship repair and refit, and other heavy industrial fabrication. The company was part of



Irving Shipbuilding Inc., but it was defunct as of 2013. Ships to 14 m (46 feet) in length were constructed there, and the facility has a 680-tonne marine railway. The buildings are still there and are **conspicuous**.

142 The town of **Georgetown** had a population of 555 in 2016.

143 There is **anchorage** between Cardigan Shoal and Knoll Shoal in depths of 8 to 9 m (26 to 29 feet), mud. The best anchorage is between Thrumcap Spit and Gaudin Point spit, in about 9 m (30 feet), with the outer end of Queens Wharf (fishermans wharf) in line with the church tower; it is good holding ground. There is good **anchorage** upstream near Brudenell Point. The rate of the **tidal stream** is less than one knot.

144 Brudenell River and Montague River unite at **Brudenell Point**. Brudenell River is navigable as far as **Brudenell Island (Brudenell Islet)**, 1.3 miles above the mouth, and small craft can navigate as far as the head of the tide, about 3 miles farther upstream. *Rodd Marina* operates from *Rodd Brudenell River Resort*, to the west of Brudenell Island (Brudenell Islet). A floating wharf with several finger slips extends 142 m (465 feet) from the shore, with depths of 1.2 to 1.8 m (4 to 6 feet). Electricity and fresh water are available.

Lower Montague, a settlement of about 530 people, is situated on the south side of the Montague River near its mouth. There is a Public wharf with an outer end 24 m (80 feet) wide and a depth of 2.7 m (9 feet) alongside. The sides of the wharf, 40 m (130 feet) long, have depths of 0.3 to 2.7 m (1 to 9 feet) alongside. A light (957) is shown from a mast on the NE corner of the wharf. Electricity is available on the wharf. There is a launching ramp on the west side of the wharf, close to the shore.

146 **Montague**, population of 1961 in 2016, is a town situated on both sides of the Montague River 4 miles upstream of Brudenell Point. Montague is a fishing, farming

MONTAGUE (2013)



and commercial centre for southeastern Prince Edward Island. Provisions and several services are available.

147 The east Public **wharf** has a face 104 m (340 feet) long with a least depth of 3 m (9 feet) alongside. A **launching ramp** is situated at the inner end. The west Public **wharf**, 49 m (160 feet) long at the face, has a least depth of 2.7 m (8 feet) alongside.

148 The *Montague Marina* has several floating wharves opposite to the Public wharves. The outer end of the west portion has depths of 2.8 to 3.1 m (9 to 10 feet), the middle and east portions have from 2.3 to 3.9 m (7 to 12 feet). Fresh water and electricity are available dockside, and provisions are available in Montague. There are showers in the nearby Visitor Information Centre.

149 Several **aquaculture** facilities are located along the shores of Georgetown Harbour, Brudenell River and Montague River and **caution** should be exercised in navigation. Many small craft anchorages may not be accessible, due to the aquaculture.

150 Clarks (Livingstone) Bay, Sturgeon Bay and St. Marys Bay have a common entrance between Panmure Spit and the formerly named **Grave Point** to the west. The entrance is narrow and shoals rapidly in several areas. The channel is **buoyed**.

151 Aquaculture facilities are situated in the entrance channel, off Wight (White) Point at the head of the entrance channel, and also in the centre of St. Marys Bay.

152 A Public **wharf** on the south side of Sturgeon Bay extends to an outer end 18.3 m (60 feet) long and 18.3 m (60 feet) wide at the outer face, with a depth of 0.6 m (2 feet) alongside. A Public **wharf** with a face 58 m (195 feet) long adjoins the east bank of the **Sturgeon River**, close north of the highway **bridge**. The NE corner of the wharf shoals, but the remaining portion of the wharf has a depth of 0.6 m (2 feet) alongside. The approach channel is marked by stakes and the wharf is used by shallow draft fishing vessels.

153 Between Panmure Head and **Cape Sharp** (Terras Point) (46°06'N, 62°26'W), a shoal extends about 0.6 mile offshore. Graham Ledge, situated about 0.6 mile SE of Cape Sharp (Terras Point), has a least depth of 1.6 m (5 feet). Fairway light buoy NP (958.5) is moored on the east side of Graham Ledge.

C 154 **Graham Pond** is a shallow draft fishermen's harbour that is entered between **breakwaters** 10 m (33 feet) apart. **Lights** (959, 960) are shown from skeleton towers at the outer end of each breakwater. A detached rock **breakwater** 61 m (200 feet) long, lies 30.5 m (100 feet) ENE of the north breakwater. There are depths of 0.3 to 1.2 m (1 to 4 feet) alongside the wharves inside the pond.

155 **Caution** is advised in the vicinity of Graham Pond, as a **submarine cable** runs from the shoreline close north of the entrance to the harbour, easterly to landfall on Cape Breton Island.

156 **Murray Harbour**. — The *Canadian Coast Guard* has completed a review of the marine aids to navigation system for Murray Harbour.

157 The visual aids to navigation in these waters are designed to support the safe movement of marine craft until visibility is reduced to five (5) miles. When visibility drops below 5 nautical miles, mariners should reduce speed, exercise **caution** and ensure safe navigation by using on-board electronic navigation systems.

158 **Murray Harbour** is formed by the confluence of five rivers which expand into a partially drying shallow basin containing five wooded islands joined together by drying mud flats. **Poverty Beach** is a sand spit extending south from **Irvings Cape (Cody Point)** for over 1.5 miles to a location close west of **Beach Point**, which is a grassy spit projecting from the south side. The **buoyed** navigation channel runs between the two spits. A breakwater extending south from Irvings Cape is in **ruins**. A church spire at **Murray Harbour North**, 0.7 mile WNW of Irvings Cape, is **conspicuous**.

CAPE BEAR LIGHT (2005)



A sand bar, with a least depth of 2.1 m (7 feet) in the channel through it, extends to seaward for over 1 mile from the entrance. This channel is sometimes impassable in easterly winds because of the line of **breakers** which may extend from Irvings Cape to **Murray Head**. 160 Clay and sandstone cliffs, about 12 m (40 feet) in elevation, run west from Murray Head towards Beach Point, and south towards **Cape Bear** ($46^{\circ}00'N$, $62^{\circ}28'W$), the SE point of Prince Edward Island.

161 *Cape Bear* light (971) is shown at an elevation of 16.6 m (55 feet) from a skeleton tower, having red and white daymarks. Close west is the former white square light structure.

Bear Reef, of sandstone and large stones, extends east from the coast between Murray Head and Cape Bear. East cardinal **light buoy** *NN* (970.4) is moored 1 mile NE of Cape Bear, close east of Bear Reef.

163 Leading **lights** (964, 965), at the entrance to Murray Harbour, lead 234° over the bar and through the channel to within 274 m (900 feet) of Beach Point. The front light is shown from a white tower with a red stripe on Beach Point. The rear light is shown from a similar tower on **Penny Point**. Fairway **light buoy** *NM* (961) is moored 1.3 miles NE of Beach Point.

164 Due to continuous silting, depths in Murray Harbour are subject to change and aids to navigation may be moved to mark the best channel. Anchorage in the harbour is only suitable during fine weather as the holding ground, though mud, is reported to be poor. The tidal streams run at a rate of two knots off Beach Point.

165 Inside the harbour entrance, on the south shore, two L-shaped **breakwater wharves** enclose a fisherman's basin with continuous wharf



MURRAY HARBOUR — BEACH POINT (2013)

MURRAY HARBOUR (SOUTH RIVER) (2013)



frontage along the inside faces. Sheds stand on both breakwaters and fish plants lie on the south side of the basin. The inside face of the east breakwater is 52 m (170 feet) long with a depth of 2.1 m (7 feet) alongside. A **light** (967) is shown from a skeleton tower at the outer end of this breakwater. The inside face of the west breakwater is 82 m (270 feet) long with a depth of 1.5 m (5 feet) alongside. Between the breakwaters, the channel has a reported depth of 2.4 m (8 feet). There is a **launching ramp** on the south side of the basin. The wharves are lighted and fresh water, fuel and electricity are available.

Murray Harbour, population 258 in 2016, is a village at the head of navigation on the **South River**, 2.4 miles above Beach Point, and 1 mile above **Machons Point**. A dredged channel, about 30 m (100 feet) wide, in two courses, leads to the Public wharf; it is staked. Leading **lights** (969.5, 969.6), in line bearing 233¹/₂°, are situated to the west of the village. Both lights are shown from towers having white daymarks with red stripes.

167 The Public **wharf** at Murray Harbour, on the NW side of the channel, is in four parts parallel to the stream: 22, 73, 55 and 61 m (72, 240, 180 and 200 feet) in length. The outer part dries at the extreme east end, and the remaining parts have depths of 0.6 to 2.4 m (2 to 8 feet) alongside. There is a concrete **launching ramp** adjacent to the **bridge**, which has a vertical clearance of 1.5 m (5 feet). Fresh water and electricity are available. The Public **wharf** on the opposite shore is 61 m (200 feet) long with alongside depths of 0.9 m (3 feet) near the bridge, to 2.4 m (8 feet) at the east end. Floating wharves of a small **marina** *(Bowdridge Landing)* follow the shoreline, extending 67 m (220 feet) from the east end of the Public wharf.

168 A Public **wharf** and fish plant are situated 0.3 mile SW of Machons Point. The wharf has two **piers**; the NE pier is 34 m (110 feet) long, and floating wharves extend from the end, with depths of 1.8 to 2.1 m (6 to 7 feet) alongside. The pier to the SW extends 15.2 m (50 feet) with depths of 0.6 m (2 feet) alongside the outer face. A concrete **launching ramp** lies between the piers. A marginal **wharf** face, with depths of 1.2 m (4 feet) runs 48.8 m (160 feet) NE from the stem of the larger pier. Fresh water and electricity are available.

Murray River is a village, population 304 in 2016, at the head of navigation on the **Murray River**. A Public **wharf** with a face 64 m (210 feet) long is situated on the south shore at the village; there is a **launching ramp** at the NE end of the wharf. There are depths of 1.8 m (6 feet) along the centre part of the wharf, but the east end dries, and near the highway **bridge** there is a depth of 0.6 m (2 feet). The bridge has a vertical clearance of 0.6 m (2 feet). An L-shaped floating wharf extends from the south shore, adjacent to the bridge. **Aquaculture** facilities are located along the shores of the Murray River and **caution** should be exercised in navigation.

170 The **Mink River** and the **Greek River** are situated on the north side of the basin; the channel

MURRAY RIVER (2013)



through these rivers is staked. *Cahoon Wharf*, near the head of navigation on Greek River, is L-shaped with an outer end 15 m (50 feet) long and a depth of 1.2 m (4 feet) alongside.

171 *Clows Wharf*, opposite the mouth of Greek River, has an outer end 12 m (38 feet) long and a depth of 1.8 m (6 feet) alongside. The adjoining wharf has an outer end 11 m (35 feet) wide and depths of 0.3 to 0.9 m (1 to 3 feet) alongside. Several private moorings are located off the outer ends of these wharves. Fresh water and electricity are available, and there is a **launching ramp** situated between the wharves.

Chart 4403

172 **Fishermans Bank** ($46^{\circ}01$ 'N, $62^{\circ}16$ 'W), centred 8 miles east of Murray Head, is of sandstone thinly covered with stones, gravel and broken shells. The general depth over the bank is 6 to 9 fathoms (11 to 16.5 m), but there is a least depth of 4 fathoms (7.3 m).

Prince Edward Island — North Coast

Chart 4023

173 From East Point to North Cape, the north shore forms a bight. The harbours are small and shallow, with narrow entrances through sand bars which become impassable in a heavy sea. All harbour entrances break in a moderate sea and in some areas it becomes impossible to locate the best channel. With few exceptions, **anchorage** is poor along this coast. The bottom is of red sandstone, thinly covered in places with sand and gravel, making for poor holding ground.

174 The channels through the bars are likely to be blocked or shifted by storms. Leading lights may be shifted without notice and **buoys** moved or lifted. The latest local information should be checked before crossing the bars or entering the harbours along this coast.

175 Between East Point ($46^{\circ}27$ 'N, $61^{\circ}58$ 'W) and St. Peters Bay, 32 miles west, the coast is formed of red sandstone cliffs, with occasional short stretches of sandy beach at the mouths of small streams. Shallow water extends about 0.5 mile offshore, with the 10-fathom (18.3m) line generally about 1 mile from the shore. The bottom is sandstone.

North Lake Harbour, 4 miles west of East Point, is a fisherman's harbour with an entrance channel 45 feet (14 m) wide between **breakwaters**. Piers extend along both sides of the channel into North Lake Harbour, which are joined by a road **bridge** near the inner end. The piers are lighted and electricity is available. (See ENC *CA576730*)

177 Leading **lights** (1039, 1039.1), in line bearing $204\frac{1}{2}^{\circ}$, are shown from towers having white daymarks with red stripes in the approach to North Lake Harbour. The front light is situated on the outer end of the east breakwater. A **light** (1039.5), shown from a mast

NAUFRAGE HARBOUR (2013)



having two red and white daymarks, is situated on the end of the west breakwater. Fairway **light** and bell **buoy** *JA* (1038.5) is moored about 1 mile NE of the entrance to North Lake Harbour.

178 Two wind farms (*not shown on the Chart*) are **conspicuous** along this coast. One farm, with 10 turbines, is located 1 mile SE of North Lake Harbour. Each turbine nacelle is 393 feet (120 m) in elevation, with selected turbines marked by a fixed red **light**. Another wind farm, having 10 turbines, is centred around the community of **Hermanville** (*not shown on the chart*), 9 miles west of North Lake Harbour. Each of the turbine nacelles is 426 feet (130 m) in elevation and selected turbines are marked by a fixed red **light**.

Naufrage Harbour, 19 miles west of East Point, is a small boat basin entered between **breakwaters** 40 feet (12 m) apart, with a reported depth of 5 feet (1.5 m) inside the basin. A road **bridge**, with a vertical clearance of 11 feet (3.4 m), crosses the entrance close within the breakwaters. A **light** (1041.1) is shown at an elevation of 20 feet (6 m) from the bridge. The faces of a Public **wharf** line both sides of the harbour.

180 A light (1042) is shown at an elevation of 84 feet (25.6 m) from a white tower situated on Shipwreck Point, close west of the entrance to the harbour ($46^{\circ}28$ 'N, $62^{\circ}25$ 'W).

A **light** (1040.2) is shown from a mast, having a green, white and black daymark, on the outer end of the east breakwater. A **light** (1040.5) is shown from a skeleton tower on the outer end of the west breakwater. Fairway **light buoy** JC (1040.05) is moored about 1 mile NE of Shipwreck Point.

Chart 4425

St. Peters Bay, 14 miles west of Shipwreck Point, is approached over a sand bar with a depth in the channel of less than 8 feet (2.4 m), and entered between encroaching grassy sand spits which leave a narrow, shifting channel with less than 4 feet (1.2 m) in some parts. The channel takes a sharp turn to the east immediately inside the entrance. **Tidal streams** in the entrance run 3 to 4 knots maximum.

183 Fairway **light buoy** *JD* (1043.1) is moored 0.5 mile north of the entrance to St. Peters Bay. Owing to changing conditions within the entrance, the channel **buoys** may be moved to indicate the best channel. Local knowledge and the latest information are essential to enter this bay safely.

184 Within the entrance, the bay trends ESE for 7 miles. The village of **St. Peters Bay (St. Peters)**, population 237 in 2016, is situated at the head of the bay. Four rivers and some smaller streams flow into the bay. **Aquaculture** sites are located in the inner sections of the bay, and are marked at each corner with a yellow cautionary **buoy**.

185 Two **breakwaters** enclose a boat basin 600 feet (183 m) long and 400 feet (122 m) wide, with a depth of 4 feet (1.2 m), at **Red Head**. The **wharves** are lighted and electricity, fresh water, diesel and gasoline are available. A **light** (1046.5) is shown from a mast on the outer end of the east breakwater.

Savage Harbour $(46^{\circ}25')$, $62^{\circ}50'W$) is situated 3.5 miles west of St. Peters Bay. There is a retaining wall on the east side of the entrance. A **light** (1047) is shown from a mast having a red and white daymark on the outer end of the retaining wall. Fairway **light buoy** JE (1046.81) is moored 0.8 mile NNE of the light.

187 Savage Harbour is mostly entered at high water during fair weather. Once inside, the harbour offers fairly good shelter from north winds, however, SE to SW winds create choppy waters. Owing to changing conditions, **buoys** may be moved to mark the best channel in the entrance.

188 There is a Public **wharf** on the west side of the harbour, 0.5 mile inside the entrance. The face parallel to the shore is 240 feet (73 m) long with a depth of 4 feet (1.2 m) alongside. A **pier** extends 200 feet (61 m)

1-29

RED HEAD (ST. PETERS BAY) (2013)



from the east side of this wharf to a depth of 4 feet (1.2 m). The wharf is lighted and electricity, fresh water, diesel and gasoline are available. There is a concrete **launching ramp** between the pier and a floating wharf 110 feet (33.5 m) to the east, the latter of which extends 220 feet (67 m) from shore.

189 **Tracadie Bay**, about 8 miles west of Savage Harbour, lies at the west end of a range of sand hills 50 to 60 feet (15 to 18.3 m) in elevation. A shifting sand bar extends for 0.5 mile from the entrance, with depths of 3 to 5 feet (0.9 to 1.5 m) in a channel less than 300 feet (91 m) wide through the bar. Fair weather and recent knowledge of the condition of the channel are necessary to cross the bar safely. The maximum rate of the **tidal streams** in the entrance is about two knots.

Fairway **light buoy** *JH* (1047.51) is moored 1.6 miles NW of the entrance to Tracadie Bay. The channel is **buoyed**, but owing to changing conditions, the **buoys** may be moved to mark the best water.

191 Inside the entrance, the channel trends in a SE direction and there are drying flats on either side of the channel; those on the west side extend for over 1 mile toward the wharf. Beyond the flats, the bay deepens to about 12 feet (3.7 m) and expands to a width of 2 miles. A **buoyed** channel runs westward towards the wharf. **Aquaculture**, in the form of mussel farming, occupies a good portion of this part of the bay. **Winter River** is a branch of the harbour extending to the west. 192 A U-shaped Public **wharf** lies on the west side of the harbour, about 0.9 mile SW of the entrance. The outer face, 200 feet (61 m) long, has depths of 10 feet (3 m) alongside, except near the NE corner where there is 5 feet (1.5 m) alongside. The north face of the wharf is 150 feet (46 m) long with depths of 2 to 8 feet (0.6 to 2.4 m) alongside. A floating wharf extends SE from the west side of the wharf. Good shelter is reported at this facility. Fresh water, electricity, diesel and gasoline are available.

193 **Cape Stanhope** $(46^{\circ}26^{\circ}N, 63^{\circ}09^{\circ}W)$ lies 4.2 miles west of the entrance to Tracadie Bay. A **light** (1051) is shown at an elevation of 36 feet (11 m) from a red and white tower, 27 feet (8.2 m) high, on the cape. A **fog signal** of one blast every 30 seconds is sounded from a horn on the light-tower; the horn points 005°. Fairway **light buoy** JJ (1050.05) is moored 1.1 miles NNE of the light.

Covehead Bay, entered close west of Cape Stanhope, is navigable only by small craft as the depth in the entrance is 2 feet (0.6 m). A highway **bridge** with a vertical clearance of 9 feet (2.7 m) crosses the entrance. A **light** (*1053.5*) is shown at an elevation of 28 feet (8.5 m) from a mast on the highway bridge.

195 Close inside the bridge, on the east side, is a marginal Public **wharf** 544 feet (166 m) long. From the south corner of the marginal face, to the north corner, depths of 5 to 9 feet (1.5 to 2.7 m) can be found. There is a **launching ramp** and floating dock at the south end of the wharf. The channel into Covehead Bay is

NORTH RUSTICO HARBOUR ENTRANCE (2013)



buoyed, but owing to changing conditions, the **buoys** may be moved to mark the best water.

Chart 4023

The coast between Cape Stanhope and **Orby Head** ($46^{\circ}30$ 'N, $63^{\circ}20$ 'W), a red sandstone headland 120 feet (37 m) in elevation, forms a bight where the 3-fathom (5.5-m) line is seldom less than 0.8 mile off the shore.

Chart 4467

197 **Rustico Bay and New London Bay**. — The *Canadian Coast Guard* has completed a review of the marine aids to navigation system for Rustico Bay and New London Bay. This includes the harbours and waterways of Rustico Bay, Hunter River, French River, Southwest River, New London Bay and Stanley River.

198 The visual aids to navigation in these waters are designed to support the safe movement of marine craft until visibility is reduced to five (5) miles. When visibility drops below 5 nautical miles, mariners should reduce speed, exercise **caution** and ensure safe navigation by using on-board electronic navigation systems.

199 **Rustico Bay** is entered at the west end of **Robinsons Island (Rustico Island)** over a shifting sand bar through which there is frequent dredging. Local knowledge is necessary to enter this bay safely as there are many sand bars and eel grass patches. The bay branches into several rivers and small creeks. 200 Two **breakwaters** extend from the west side of the harbour entrance. A **light** (1055) is shown from a mast at the outer end of the north breakwater, which is L-shaped. A **light** (1057) is shown on the SE corner of the inner breakwater from a mast. A **light** (1056) is shown from a white tower with a red roof, situated close to the shore along the bight formed by the two breakwaters. Fairway **light buoy** JK (1054) is moored 0.7 mile NE of the outer breakwater.

201 There are a few small wharves, stages and sheds along the shore at **North Rustico Harbour**, situated close NW of the inner breakwater. The small boat basin at the NW side of the harbour, is reported to have hazardous underwater wharf pilings. **Caution** is advised.

202 The village of **North Rustico**, population 607 in 2016, lies 0.8 mile west of the harbour entrance. Along the north shore, there is a **wharf** with a continuous berth 1750 feet (533 m) long. A **pier** extends from the east end of the wharf, and a **light** (1057.5) is shown from a skeleton tower at the outer end of this pier. There are reported depths of 4 feet (1.2 m) in this area. **Aquaculture** operations are located on the **Hunter River**, south of North Rustico.

203 **New London Bay**, 6 miles west of Orby Head, lies at the west end of a long range of sand hills about 55 feet (17 m) in elevation. The entrance to the bay, about 0.2 mile wide, is obstructed by a shifting sand bar with a depth over it of about 5 feet (1.5 m). The remains of a breakwater protect the entrance

NORTH RUSTICO — MAIN WHARF (2013)



on the east side. Fairway **light buoy** *JM* (1058) is moored 0.9 mile NE of the entrance to the bay. A **light** (1060.01) is shown at an elevation of 43 feet (13 m), from a red and white structure on the western shore of the entrance.

204 The Hope River, Stanley River,

Southwest River and **French River** discharge into the bay, and are navigable for short distances by small craft. Some channels in New London Bay are marked with **buoys**, others by stakes. **Aquaculture** operations are located along the shores of the bay, **caution** is advised.

205 A Public **wharf** is situated on the south shore of the French River at **South Landing** (local name). Consisting of an irregular, L-shaped marginal face, depths alongside range from 5 feet (1.5 m) at the NW end to 7 feet (2.1 m) at the eastern end. A **launching ramp** is situated near the centre of the wharf. On the north shore, at the head of the river, there is a **wharf** with a depth of 5 feet (1.5 m) at the outer face.

206 A Public **wharf** parallels the highway **bridge** at the settlement of **New London**, 2 miles above the mouth of the Southwest River. It is 220 feet (67 m) long with a depth of 4 feet (1.2 m) on the SW side; there is a small inlet, with a **launching ramp** situated at its head.

207 The settlement of **Stanley Bridge** lies about 1 mile above the mouth of Stanley River. A sheltered inlet is formed by a **breakwater** 361 feet (110 m) long; a **launching ramp** is located at the SE corner. The shores of the inlet are lined with floating wharves, having depths of 1 to 4 feet (0.3 to 1.2 m). There is a marginal **wharf** face at the head of the inlet, with a depth of 5 feet (1.5 m) alongside. A floating wharf runs parallel to the river channel, having depths of 11 to 15 feet (3.3 to 4.5 m) alongside.

Chart 4023

208 **Cape Tryon** $(46^{\circ}32^{\circ}N, 63^{\circ}30^{\circ}W)$, 7 miles west of Orby Head, is a **conspicuous** cliff of red sandstone ranging as high as 110 feet (33.5 m) in elevation. A **light** (1061) is shown at an elevation of 109 feet (33.3 m) from a white tower on the cape.

Chart 4491

209 Malpeque Bay, about 8 miles west of Cape Tryon, is entered through Ship Channel, between Profitts Point (Cape Aylesbury) and Fish Island (Billhook Island). Many rivers and creeks flow into Malpeque Bay, and it also contains several islands.

210 Ship Channel is obstructed by a bar which extends 3.5 miles east from Fish Island (Billhook Island), with depths of 10 feet (3 m) in the fairway of the **buoyed** channel. In bad weather, all signs of the channel are obliterated by heavy **breakers**. The bottom is of sandstone, thinly and unevenly covered with sand. The channel deepens inside the bar, but the depths are very uneven and there are **shoals** on each side of the fairway. The channel shifts, and the latest local information is essential for safe entry. In Ship Channel, the **tidal flow** is

ALBERTON HARBOUR (2013)



from 1 to 2 knots. The streams are strongest just inside **Malpeque Harbour** and off **Royalty Point**. Farther in the bay, the streams are much weaker and seldom reach a rate of one knot.

211 Fairway **light buoy** *JP* (1065.05) is moored 2.25 miles ENE of Profitts Point (Cape Aylesbury). The approach to Malpeque Bay is **buoyed**.

212 Malpeque Harbour has sufficient room and depth for **anchorage**. The bar outside prevents the sea from entering, and **Horseshoe Shoals** shelter the anchorage from the west. There are depths of 18 to 60 feet (5.5 to 18.3 m) and good holding ground of sand and clay.

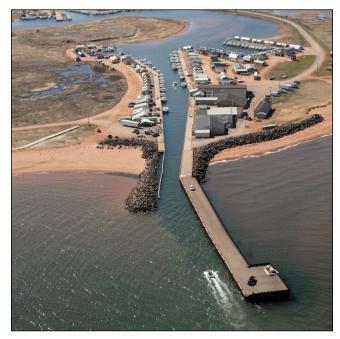
213 **Darnley Basin** is a small boat harbour to the SE of Ship Channel. The entrance channel is through the spit SW of **Darnley Point**, into the basin. A **buoyed** channel leads west from the basin to a small boat harbour at the head of a cove 0.4 mile south of Royalty Point. A channel continues from the south end of the basin, beneath a **bridge** with a vertical clearance of 10 feet (3 m), to a T-shaped Public **wharf** close east of **Burial Point**. This wharf was in poor condition in 2013. There are depths of 4 to 6 feet (1.2 to 1.8 m) alongside. A **light** (1071.2) is shown at an elevation of 11 feet (3.5 m) from the centre of the bridge span. The settlement of **Malpeque**, situated to the SW of Burial Point, is one of the oldest on Prince Edward Island.

214 There is a small **launching ramp** at **Bentick Cove** (Bentinck Cove), to the west of the south shore of Malpeque Bay, the site of a former public wharf.

215 The **Grand River (Ellis River)** flows into the SW side of Malpeque Bay. The **submerged ruins** of two wharves extend from the north and the south bank of the river, one close WSW of **Black Point**, and the other 0.5 mile NW of Black Point.

216 **Lennox Island**, a First Nation, lies on the NW side of Malpeque Bay. A **bridge**, vertical clearance of 8 feet (2.4 m), crosses **Lennox Channel**, joining the island to **Sharps (Sharp) Point**. A ruined wharf

TIGNISH HARBOUR (2013)



is situated on the south side of the channel, close west of **Oyster Point**. A **wharf** extends from the south side of Lennox Island. **Conspicuous** objects are a prominent white church and spire situated close NE, and a water tower NNW of the wharf, on Lennox Island.

217 The **Bideford River (Goodwood River)**, with a **buoyed** channel, extends west and NW from Sharps (Sharp) Point. An **aquaculture** facility, is located near the head of the river. An L-shaped Public **wharf** extends from the west side of the river to a depth of 3 feet (0.9 m) near the settlement of **Bideford**.

Charts 4023, 4491, 4492

218 The coast between Fish Island (Billhook Island) and the entrance to Cascumpec (Cascumpeque) Bay, 18 miles NW, is formed of sand dunes and beaches. **Conway Narrows (The Narrows)**, an inside passage with very little water, drying in places, connects Malpeque Bay and Cascumpec (Cascumpeque) Bay. There are entrances through the sand dunes at **Hardys Channel** and **Goose Harbour (Palmer Inlet)**. Fairway **light buoy** *JS (1071.35)* is moored about 0.3 mile ENE of the Hardys Channel entrance.

219 The channel to **Brooks River** (former Little **Channel**) is **buoyed**, and, has depths of only 2 to 3 feet (0.6 to 0.9 m). A small boat basin, known locally as *Milligan's Wharf* is located on the north side of the entrance to Brooks River (former Little Channel).

Alberton Harbour

Chart 4492

Alberton Harbour, at the north end of Cascumpec (Cascumpeque) Bay, just inside the entrance channel, is well sheltered and has fair anchorage depths for small vessels. The entrance is obstructed by a sand bar and is subject to considerable silting. As the channel through the bar constantly shifts, the leading lights and buoys may be moved to mark the best channel and the latest local knowledge is essential to enter this harbour safely. Inside the entrance, a clear channel trends SW for 1 mile, and then turns south between Oultons Island (Savage Island) and Bury Head (Cascumpeque Point).

221 Mariners are **cautioned** that under certain conditions of tide and weather, the entrance channel becomes impossible to navigate because of **breakers**. The normal maximum rate of the **tidal streams** in the entrance is 1.5 knots, but in certain conditions they can exceed four knots.

Fairway **light buoy** *JV* (1075.05) is moored 1.6 miles ESE of the harbour entrance.

223 Leading **lights** mark the channel in the entrance and to the wharves in Alberton Harbour at **Alberton South (Northport)**. Lights (1081, 1082) are in line bearing 245°. The front light is shown from a skeleton tower having a white daymark with a red stripe; it is situated near a shed near the outer end of the Public wharf. The rear light is a white tower with a red stripe situated on the shore close to the west.

224 In fine weather, there is temporary **anchorage** off the outer bar in about 36 feet (11 m), sand. The anchorage in the channel within the entrance is secure, but confined, in about 18 to 30 feet (5.5 to 9.1 m) of water.

225 The T-shaped Public **wharf** at Alberton South (Northport) extends 404 feet (123 m) from the shore to an outer end 328 feet (100 m) long with depths of 6 to 16 feet (1.8 to 4.9 m) alongside. A T-shaped **wharf**, 126 feet (38 m) long, with depths of 8 to 10 feet (2.4 to 3 m) alongside, is situated close NE. The short T-shaped wharf, and a **breakwater** to the NE form a sheltered inlet, where there is a marina *(Northport Pier Marina)*. A boat basin, protected by a **breakwater**, is located at the SW end of the Alberton South (Northport) waterfront. A marginal face and floating wharves, having depths of 6 feet (1.8 m), line the basin.

NORTH CAPE (2013)



Alberton, population 1145 in 2016, is a town on the north side of the harbour. There is a small **hospital** in the town. Supplies may be obtained locally.

227 Cascumpec (Cascumpeque Bay) is very shallow, with a maximum depth of 16 feet (4.9 m) in the centre surrounded by large areas of very shallow water and drying flats. Several rivers, navigable for some distance by boats, indent the bay. The deepest of these is **Foxley River**, with a channel having depths of 10 to 37 feet (3 to 11.3 m), extending about 2 miles upstream from the mouth. On the south side of **Gordons (Gordon) Point**, near the mouth of the river, a T-shaped Public **wharf** extends 230 feet (70 m) from the shore to an outer end 31 feet (9.4 m) long with depths of 2 and 3 feet (0.6 and 0.9 m) alongside. A breakwater close to the east is in disrepair.

Chart 4023

228 **Cape Kildare** $(46^{\circ}53^{\circ}N, 63^{\circ}59^{\circ}W)$ is a cliff of red sandstone 30 feet (9 m) in elevation. The surrounding land is red and topped with clumps of trees. There are no other high sand hills north of Alberton Harbour.

C Tignish Harbour, 4.5 miles north of Cape Kildare, at the mouth of the **Tignish River**, is protected at the entrance by long **breakwaters** on each side. **Tignish Run** is the name given to the entrance channel. A **light** (1083) is shown from a mast at the outer end of the north breakwater.

230 Wharves line the inner basin at Tignish Harbour, and there is a large fish plant about 0.4 mile inside the harbour entrance at **Judes Point**. Fuel and some supplies can be obtained locally. (See ENC *CA576728*)

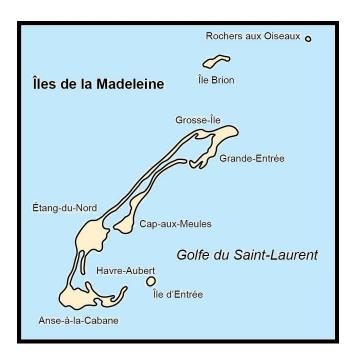
231 Seacow Pond is a small boat harbour protected by two breakwaters 5 miles north of Tignish. There is a depth of about 3 feet (0.9 m) in the entrance. A light (1084.7) is shown from a mast, having a green and white daymark, on the outer end of the south breakwater. A privately maintained light (1036.1), is shown from the north breakwater.

North Cape $(47^{\circ}03^{\circ}N, 64^{\circ}00^{\circ}W)$ is a low red cliff with **reefs** and shallow water extending north and east. Irregular depths continue north, terminating in **North Cape Reef**, 4.5 miles off, and with a depth of 32 feet (9.8 m). A **light** (1036) is shown at an elevation of 80 feet (24 m) from a white octagonal tower 50 feet (15.3 m) high, situated on the cape. North cardinal **light** and bell **buoy** *DS* (1037) is moored 1.6 miles north of the cape.

A radio **tower**, elevation 271 feet (83 m), marked by **lights**, and several wind turbines stand on North Cape.

Chapter 2

Îles de la Madeleine



Îles de la Madeleine

Charts 4002, 4022, 4023, 4024, 4950

The **Îles de la Madeleine** archipelago, population 12 475 in 2016, is located in the middle of the Gulf of St. Lawrence. The region is split into two municipalities: **Les Îles-de-la-Madeleine** and **Grosse-Île**, which together form the **Communauté maritime des Îles-de-la-Madeleine**, part of the Province of Quebec.

The main group of islands is located about 50 miles NW of Cape St. Lawrence on Cape Breton Island and consists of a few islands linked by two strings of sandy ridges and beaches. The group of islands forms a 35-mile long crescent-shape protecting large shallow lagoons which can be entered through narrow channels. Île d'Entrée $(47^{\circ}17'N, 61^{\circ}42'W)$ is the only exception and is also the highest island of the group, from which it is isolated.

3 The sand bars that link the main group of islands are only a few meters above sea level in some locations, while they form relatively high sand hills in other places.

4 The central region of the islands features rounded hills, often dome-shaped, 43 to 169 m in elevation. The islands are partially wooded, but their trees are small. Otherwise, the islands are covered in grass. The climate in the region is not as harsh as that of mainland Quebec, but summers are cool and humid. Rain and mists are common.

5 In fine weather, the red cliffs, green vegetation, blue sky and water, and yellow sands paint a striking picture of contrasts, quite different from any other part of the Gulf of St. Lawrence. Even in poor weather, the view is striking: remote hilltops can be seen through the rain and mist, seemingly linked by a long string of **breakers** masking the sand bars. In the fall, foggy weather and easterly gales are predominant.

6 Fishing and tourism drive the islands' economy. Several laws and regulations, including the *Fisheries Act*, the *Species at Risk Act*, the *Oceans Act*, the *Navigation Protection Act* and the *Canadian Environmental Assessment Act*, 2012, serve to protect the fish habitat and govern the transfer of ballast water, dredging activities, dumping at sea, back-filling and the construction or removal of infrastructure. Mariners must be familiar with the permits needed and associated obligations, and must comply with the regulations.

De-ballasting. — Vessels bound for the Îles-de-7 la-Madeleine or that are moored or anchored there, must comply with the Ballast Water Control and Management Regulations. Discharging of ballast water within ten nautical miles of the Îles de la Madeleine archipelago is prohibited unless the ballast water was pumped on board in a designated area off Canada's east coast at a minimum distance of five miles from the shore. Masters should consult the document entitled A Guide to Canada's Ballast Water Control and Management Regulations (TP 13617), published by Transport Canada.

8 The Department of Fisheries and Oceans (DFO) has determined that ballast water taken from:

- any waters located west of $068^{\circ}W$, 1.
- any waters located within 10 miles of the Canadian 2. shoreline,

may contain noxious products in such quantities or concentration that they would alter, degrade or destroy fish habitat within the Îles de la Madeleine archipelago. Therefore, only ballast water taken in areas not mentioned above may be discharged into Lagune de la Grande Entrée or within 10 miles of the Îles de la Madeleine archipelago (protected waters).

9 All vessels planning to de-ballast into the protected waters defined above shall, at least three days in advance, send a fully completed ballast water reporting form by e-mail to atlanticballastwater@tc.gc.ca. No release of ballast water into this protected zone may take place until authorized by a Transport Canada representative.

10 An ODAS light buoy (1411.2) marked IML-15, is anchored 25 miles WNW of Brion Island and 42 miles north of L'Étang-du-Nord.

Any person or vessel that contravenes these 11 provisions is liable to severe fines under the Fisheries Act.

There is a regular vehicle and passenger ferry 12 service operating between Souris (Prince Edward Island) and Cap-aux-Meules. An additional vehicle and passenger ferry service, operates seasonally between Montréal, Québec City, Gaspé and Cap-aux-Meules.

Current and tidal streams. — The speed 13 and direction of the tidal streams around the Îles de la Madeleine archipelago vary considerably. They are influenced by the currents and winds of the Gulf of St. Lawrence.

A few miles off Île Brion and Rochers aux 14 Oiseaux, north of the main group of islands, the current usually sets to the SE, but the flood current is encountered between the main group of islands and Île Brion. This flood current sets to the NW and breaks up into two currents where it meets Pointe de l'Est and Pointe

Old-Harry - including the surrounding shoals. This deviates the current to the SW towards Île d'Entrée, nearly causing a slack in the bay between Île de la Grande Entrée and the cape Le Moine-Qui-Prie, as well as in Baie de Plaisance.

The other part of the tidal stream sets north 15 ~ 《 of Île Brion, flowing from Pointe de l'Est to Le Gros Cap (on Île du Havre Aubert). The main part of the current sets to the SW, while the other part flows along the south shore of Île du Havre Aubert and meets the current coming from Pointe de l'Est. The currents join and gradually shift direction, while mixing with the generally weak flood currents which set to the west.

16

On the SE side of the islands, the ebb current flows strongly out of the lagoons and Baie de Plaisance, between Dune Sandy Hook and Île

d'Entrée. It sets to the west along the south shore of Île du Havre Aubert, rounding the island, then sets to the NE along the north shore of the islands, between Le Gros Cap and Pointe de l'Est. Next, the ebb current sets to the NE on the sandy ridge lying about 1.2 miles NNE off Pointe de l'Est, where it meets with the main current which sets to the SE and which flows around the north side of the islands.

17 ←‴

These conditions represent the general rule and are almost always present in fine weather, with occasional interruptions. The rate of these

currents rarely reaches 1 knot, except close to the shore and around the points. The ebb current is usually stronger than the flood current and the westerly winds increase its speed, while the rate of the flood is increased by easterly winds. However, the meeting of the ebb currents added to the shallow depths and strong easterly winds cause a heavy and breaking sea.

The hourly surface current forecasts for the Gulf 18 of St. Lawrence are available on the St. Lawrence Global Observatory website at www.ogsl.ca (click on the Ocean Forecasts link). This site provides a 48-hour forecast of the direction and speed of surface currents.

19 The tidal range is about 0.9 m during spring tides and about 0.6 m during neap tides. On the west shore of the islands, the tide is almost diurnal.

20 For more information on water levels, mariners should consult the Canadian Tide and Current Tables and the Tidal Information table shown on the charts. In addition, a network of digital water level gauges is in place along the St. Lawrence River and the Gulf of St. Lawrence, between Montreal and Cap-aux-Meules. COWLIS (Coastal and Ocean Water Level Information System), provides realtime water levels at different sites. Up-to-date information on water levels can be obtained by contacting the MCTS centres by VHF radio, calling the automated information service at 1-877-775-0790, or by visiting www.tides.gc.ca.

HAVRE DE LA GRANDE ENTRÉE (2013)



21 During winter, **buoys** are removed and some are replaced with spar **buoys**. For information on the positioning and removal of **buoys** consult the radio broadcast and/or written *Navigational Warnings*.

Îles de la Madeleine — East Coast

Chart 4950

²² **Île de l'Est**, NE of the Îles de la Madeleine archipelago, features a **conspicuous** isolated hill $(47^{\circ}37'N, 61^{\circ}28'W)$ — also known as **Cap Nord-Est**, with cliffs which rise to 62 m in elevation. From a distance, one could mistake the cape as the NE end of the group of islands, because the land to the east is much lower.

23 **Pointe de l'Est** $(47^{\circ}37'N, 61^{\circ}23'W)$, low and sandy, forms the east end of Île de l'Est. There are a few low sandy hills on the point and others further inland that reach higher elevations and form a range.

24 Pointe de l'Est National Wildlife Area (Environment and Climate Change Canada) is located near Pointe de l'Est; access regulations apply. 25 A sand bar, with a depth of 4 m, lies about 1 mile south of Pointe de l'Est. East cardinal **light buoy** *YY* (1480) is moored 2.4 miles east of Pointe de l'Est; a **racon** (----) operates from this **buoy**.

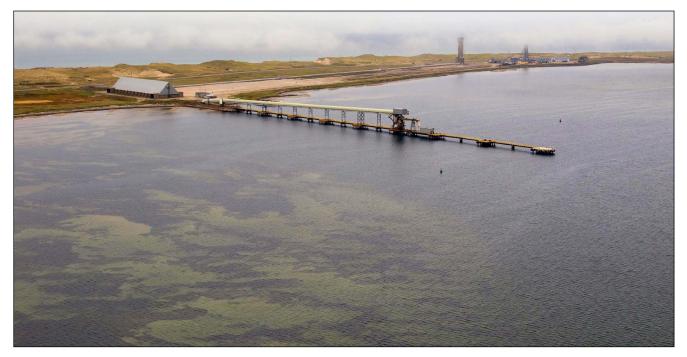
26 **Récif Doyle** — formed by pinnacles — has depths of 6.9 m and is situated 6.3 miles ESE of Pointe de l'Est. The sea very seldom breaks on the reef, other than during gales.

Île de la Grande Entrée features low hills and is located SW of Île de l'Est, which it connects with at Pointe Old-Harry, a narrow cape featuring moderately high red sandstone cliffs. The sandy bay which is entered between **Pointe Old-Harry** and Pointe de l'Est provides an **anchorage** sheltered from all winds except those from west to NE, through north; however, anchorage is not recommended because of the **shoals** lying on either side.

28 The wharf situated on the north side of Pointe Old-Harry is in **ruins** and its access is prohibited. Submerged boulders have been reported in the area. The hamlet of **Old-Harry** is located here.

Haut-fond Clark, with a depth of 4.9 m, lies 8.5 miles SE of Pointe Old-Harry.

MINES SELEINE (2013)



30 Les Colombines, located SE of Île de la Grande Entrée, is a patch of rocky pinnacles and small areas of shallow water, with depths as little as 1.1 m. 31 Starboard hand **light buoy** *Y8 (1481)* is moored off Les Colombines, 3.2 miles SSE of Pointe Old-Harry.

32 **Banc Goodwin**, with a depth of 5.8 m, lies 6.6 miles SSE of Pointe Old-Harry.

Chart 4954

33 **Havre de la Grande Entrée** is the largest of the inner lagoons, extending SW to Île du Cap aux Meules.

34 The village of **Grande-Entrée** is located on the east side of the entrance to Havre de la Grande Entrée. There is a post office and fresh water is available. There is a **medical clinic** in Grosse-Île.

Seleine harbour authority at 418-985-2931. A combination of the flood current, good visibility and fine weather

conditions are essential to enter the harbour. **Pilotage** is available but not compulsory at Havre de la Grande Entrée. Tug assistance can be obtained at Cap-aux-Meules by contacting the *Mines Seleine* harbour master. The leading **lights** and **buoys** may be moved to mark the best channel.

³⁶ Two **conspicuous towers**, standing at 40 m each and marked with red **lights**, are used for mining activities, are situated 0.6 mile north of *Mines Seleine* wharf. They are visible from the harbour's entrance approaches. A telecommunication **tower**, marked with red **lights**, is situated on top of La Grosse Île.

A sector light (1483.5) shown from a skeleton having a rectangular white daymark with horizontal red bands, is on the point. The white sector indicates the preferred approach. A **spoil ground** is located close NW of the leading line.

38 The section of the Public wharf at **Pointe de la Grande Entrée** west of the **launching ramp** is in **ruins**. A fish plant is situated SE of the wharf. Two boat basins are entered close east of the wharf. The harbour is managed by the harbour authority *Administration Portuaire du Havre de Pêche de Grande-Entrée*. (See ENC *CA579084*)

39 Grosse \hat{lle} sector **light** (1485.5) (privately maintained) featuring an orange and black daymark, is on the southern part of the island; the white sector, showing an arc of 10 minutes, is centered on the bearing 034°04'.

POINTE-BASSE (2018)



The white sector leads through **Chenal de la Grande Entrée**, passing close west of **Île du Chenal**.

40 Leading **lights** (private) (1486, 1486.1), in line bearing 287°, are located at about 0.5 mile west of *Mines Seleine* wharf.

41 *Mines Seleine* wharf is linked to the NW shore of the harbour by a **causeway** and catwalk measuring 380 m long and 10 m wide. The wharf is used primarily for loading salt used for road de-icing. On average, 1.4 M tonnes of salt are handled yearly. An abandoned **submarine cable** links the wharf's inner end to **Île Seleine**.

42 Several **aquaculture** facilities, marked with yellow cautionary **buoys**, are located in Havre de la Grande Entrée; **caution** is advised in the vicinity of the aquaculture facilities.

Chart 4950

43 **Île Shag** $(47^{\circ}29'N, 61^{\circ}42'W)$ is a small sandstone island, 18 m in altitude, lying close offshore about 7 miles SW of Île de la Grande Entrée.

44 An ODAS seasonal **buoy** *MPO* is moored close SE of Île Shag.

45 A **wind turbine**, 54 m in altitude and marked with a red **light**, stands close to the shore, 1.8 miles WSW of Île Shag.

46 **Buttes Pelées** $(47^{\circ}24'N, 61^{\circ}46'W)$, on **Île du Havre aux Maisons**, about 11 miles SW of Île de la Grande Entrée, are **conspicuous**; they form cliffs which, on the east side, rise to an elevation of 108 m and are greyish-white with a reddish aspect at their base.

A **breakwater**, extending from the shore for 77 m to the east, is situated at **Dune-du-Sud**.

HAVRE-AUX-MAISONS (2013)



48 A decommissioned lighthouse, a white **tower** with a red upper part, is situated on the cape **Le Moine-Qui-Prie** $(47^{\circ}23'N, 61^{\circ}46'W)$ which forms the SE end of Île du Havre aux Maisons.

49 **Butte Ronde,** a **conspicuous** hill of 102 m in elevation and featuring a cross on its summit lies close north of Le Moine-Qui-Prie.

50 **Offshore dangers**. — **Chaîne Échouerie**, a fishing ground composed of rocky pinnacles with a least depth of 2.1 m, extends east from Île du Havre aux Maisons. **Récif Alright** is a **reef** extending east from Chaîne Échouerie; a starboard hand **light buoy** *Y12 (1487)* is moored close east of the reef.

51 **La Perle** is a **reef** lying about 8 miles ESE of Le Moine-Qui-Prie. The reef is composed of rocks and has a least depth of 2.9 m. It is always dangerous to approach the reef since even a moderate sea breaks on it strongly. Starboard hand **light buoy** *Y16 (1512)* is moored on the east side of the reef. 52 Several **aquaculture** facilities are situated NNE and east of La Perle, and SE of Le Moine-Qui-Prie. These facilities are marked with yellow cautionary **buoys** and **caution** should be exercised in the vicinity.

53 **Pointe-Basse**, a hamlet located 0.7 mile west of Le Moine-Qui-Prie, shelters a fishing harbour. The harbour is formed by a **breakwaterwharf** and a **breakwater**. The wharf, 105 m long with an elevation of 1.6 m, has a 60-m section perpendicular to the wharf. There is also a spur **wharf**, 45 m long which is extended by a floating wharf 25 m long. Another floating wharf 25 m long iabuts the inside of the breakwater situated at the outer end of the wharf. A **launching ramp** is at the inner end of the west breakwater. The harbour is managed by the harbour authority *Administration Portuaire de Pointe-Basse et Pointe-aux-Loups*. (See ENC *CA579102*)

54 Depths from the dredged areas shown on the Pointe-Basse diagram are obtained from recurrent dredging. Owing to continuous **silting** mariners should

FATIMA (ANSE DE L'HÔPITAL) (2018)



expect to find less water in some locations. For the latest information on depths it is recommended to check with the local authority.

Artificial reefs, with depths of 2.1 m, have 55 been installed 0.9 mile WSW of Pointe-Basse wharf.

Chart 4955

56 Havre aux Maisons is located on the west end of Île du Havre aux Maisons. The harbour is entered through a narrow buoyed channel; the buoys in the channel may be moved at any time to mark the best channel. Owing to continuous silting, the limiting depth inside the harbour may be less in some places.

A fixed highway bridge, with a 57 vertical clearance of 6.3 m, links Île du Cap aux Meules and Île du Havre aux Maisons. The channel under the bridge is marked with lights and leads into Lagune du Havre aux Maisons. There are piles under the bridge, west of the channel. Overhead cables, with a least vertical clearance of 5.9 m, are 0.2 miles upstream from the bridge. Anchorage is prohibited on either side of the

overhead cables area owing to the presence of submarine cables that cross the channel. A crib is located on the west side of the channel immediately downstream from the overhead cables. An outfall pipe extends from the shore just upstream from the overhead cables; a submerged crib, with a depth of 8.9 m, is located at the outer end of the outfall pipe. Another submerged crib, with a depth of 5.1 m, is 50 m NNW of the previous crib. A crib in ruins, drying 1 m, is on the west shore immediately upstream from the overhead cables.

58 **Caution**. — Owing to current, wind and wave dynamics, the shoreline in the area of the bridge may be changed. There are piles close upstream of the bridge.

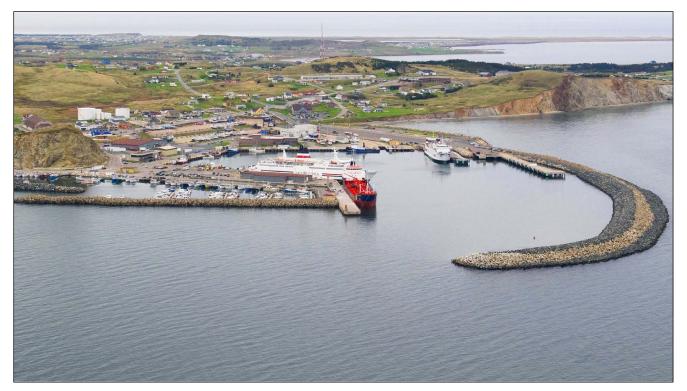
59

Inside Lagune du Havre aux Maisons and near Pointe à Mounette there

are wharves in **ruins**, a **marina** (Club nautique du Chenal) protected by two breakwaters, and a launching ramp. See the Appendix for marina facilities.

A small harbour, formed by two 60 breakwaters, is located in Fatima, NNW of Pointe

CAP-AUX-MEULES (2013)



à Richard (47°24'N, 61°52'W). The harbour provides shelter to the **wharf Quai du Cap-Vert**, a **marina** and a **launching ramp**. A **buoyed channel** that leads through Lagune du Havre aux Maisons provides access to the facilities. Fuel is available.

61 There are several **aquaculture** facilities in Lagune du Havre aux Maisons. These facilities are marked with yellow cautionary **buoys** and **caution** should be exercised in the vicinity.

Port de Cap-aux-Meules

Chart 4956

62 **Île du Cap aux Meules** is located close SW of Île du Havre aux Maisons. The coast of the island is lined with cliffs in several areas that steadily gain elevation to form the **conspicuous** peak of **Butte du Vent**, situated in the centre of the island. **Cap aux Meules**, 45 m in elevation, is a **conspicuous** grey sandstone point situated near the centre of the island's east coast. There is a lookout on the cape.

63 **Towers** marked with red **lights**, **conspicuous** from seaward, are situated 0.6 miles north of Cap aux Meules.

64 The village of **Cap-aux-Meules**, located near the cape, is the islands' administrative centre. Facilities in Cap-aux-Meules include a **hospital**, post office, shipyard, several businesses, mechanical workshops, hull repair shops, electronics, grocery and hardware stores, and accommodations. **Ferries** for vehicles and passengers link the island to Île d'Entrée, and to the mainland via Souris (Prince Edward Island) and Montreal. There are also ferry and cruise ship terminals. Îles-de-la-Madeleine Airport is located on Île du Havre aux Maisons.

65 **Port de Cap-aux-Meules** is a harbour that features, in its NE section, a large basin protected by **wharves** and a **breakwater** and open year-round. **Pilotage** services are available upon request by contacting *CTMA*. Tugs of 500 to 750 HP are available from *CTMA Dragage* & *Remorquage* at 418-937-7018.

66 Leading **lights** (1497, 1498), in line bearing 330°, featuring fluorescent orange daymarks with a black vertical stripe, are situated on the jetty that extends in a SE direction. A **light** (1496.5) is shown from a mast and marks the outer end of the breakwater.

67 The north, west and south sides of the basin are fringed by **wharves**. The NE part of the harbour has two **wharves** used by the ferries; a dolphin is linked to the west wharf. Mariners must refer to the current chart to know the depths along the wharves. In the northern part of the harbour, there is a 7-m wide slipway equipped with a 100-tonne capacity travel lift. Electricity, fresh water and diesel are available at the wharves. The bulk of the handled goods are petroleum products and miscellaneous cargo.

68 A seasonal floating wharf, used as a landing pier for cruise ship shuttles, is attached to the spur wharf in the SW part of the basin.

69 An 89-m long wharf equipped with a **Ro-Ro ramp** is situated on the south side of the harbour. The 180-m long jetty extends in a SE direction. The decks of the wharves/jetties have the following elevations: 1.8 m (south wharf), 2.3 m (jetty extending in a SE direction), 2.6 m (ferry wharf located north of the basin) and 1.3 m for the other wharves. An outfall pipe extends 82 m from the shore, close to the east breakwater's inner end.

Oil tankers must obtain assistance from tugs 70 70 Oil tankers must obtain assistance from the to access the harbour. A cathodic protection system to control corrosion is in operation at the Cap-aux-Meules commercial wharf and at the two wharves used for the ferries. When berthing at these wharves specific operating procedures must be observed to prevent damage to vessels. Pre-authorization from the harbour master must be obtained prior to performing diving work. For more information, as well as directives to follow, contact the Harbour Master at 418-986-3785 or 418-937-7635. Schedule B of Practices and Procedures for Public Ports published by Transport Canada (www.tc.gc.ca) states the following: "Oil tankers and ships involved in a towing operation shall not enter/ *depart/maneuver within the limits of the Public Port of* Cap-aux-Meules when the speed of the wind is greater than 20 knots."



Port de Cap-aux-Meules also has a second basin in the SW part

which is protected by breakwaters. There is a 150-m long Public wharf, with floating wharves, which forms the north side of the basin. A marina (Club nautique de Cap-aux-Meules) is situated in the SE part. See the Appendix for marina facilities. A seasonal light (1498.5) is shown from a mast and marks the SW end of the south breakwater, at the entrance to the basin. This part of the harbour is managed by the harbour authority Administration portuaire du Havre Polyvalent de Cap-aux-Meules.

71

A Canadian Coast Guard seasonal search 72 and rescue station operates from Cap-aux-Meules. Requests for assistance can be addressed at any time to the Marine Rescue Sub-Centre (MRSC Quebec) via a Coast Guard Radio Station by VHF radio on channel 16

(156.8 MHz) or on the 2182 kHz frequency, by digital selective calling (DSC) frequency, by telephone at 1-800-463-4393, or by cell phone by dialing *16, which will establish a direct contact with the closest MCTS centre. It should be noted that it is not possible for the Canadian *Coast Guard* to trace the origin of calls made using a cell phone and that some areas do not have cellular coverage.

Ice. — Shore-fast ice usually begins to form 73 in mid-December and its concentration increases in the approach to Port de Cap-aux-Meules a month later. Generally, the ice cover decreases to mere tenths in mid-April and this whole area is clear of ice by mid-May.

Chart 4950

Pointe de l'Échouerie is situated 1.5 miles SSW 74 of Cap-aux-Meules.

Le Gros Cap, the SE end of Île du Cap aux 75 Meules, forms a high ledge 18 m in elevation. A tower, 49 m in elevation and marked with red lights, is situated 2 miles WNW of Le Gros Cap.

76 Rocks, awash, extend up to 25 m off Le Gros Cap and breakers occur in the vicinity.

Île du Havre Aubert is the SW island of Îles de 77 la Madeleine and is linked to Île du Cap aux Meules by two sandy ridges, which protect a large and shallow lagoon.

There are **conspicuous towers** on the island. Les 78 **Demoiselles** $(47^{\circ}14'N, 61^{\circ}52'W)$ are two **conspicuous** rounded hills of 69 m and 82 m in elevation, which provide good landmarks in the approach to Havre Aubert from the NE. The north face of the highest of the two hills shows dark red cliffs. An illuminated cross, 53 m in elevation, dominates the hill situated 0.2 mile east of Les Demoiselles.

Baie de Plaisance, which can be 79 1 t entered between Île du Havre Aubert and Île du Cap aux Meules, is the best roadstead of the Îles de la Madeleine archipelago and the only one where vessels can find shelter during the summer months; easterly gales are very uncommon during this period. However, when anchoring in this bay, mariners should be extremely cautious during easterly gales.

Chart 4957

80 There is good **anchorage** with a depth of Ĵ 8 m, sandy clay bottom, with **Cap Gridley** $(47^{\circ}14'N,$ 61°50'W) bearing SSW, 0.7 mile distant. The cape, which displays grey sandstone cliffs on its NE side, forms the NW entrance point to Havre Aubert. Larger vessels can anchor further offshore in depths of 9 m.

HAVRE-AUBERT (2018)



There are artificial **reefs**, with depths of 81 4.5 m, located 1.4 miles NW of Cap Gridley. Their purpose is to enhance the marine environment by restoring and improving marine productivity and biodiversity.

82 The submerged **ruins** of a jetty, extending 136 m from the shore, are situated close west of Pointe Shea.

Havre Aubert is entered between 83 Cap Gridley and the tidal sandy flats to the SE. The very narrow entrance channel is buoyed. A sector light (1505.5), with a white and red daymark, is situated on the south side of Havre Aubert near Pointe à Fox. The white sector leads into the entrance channel. Remains of a wharf, composed of concrete blocks protecting a point, are situated 95 m south of Cap Gridley.

84 The village of Havre-Aubert has a post office and several restaurants, shops, an aquarium and a museum. There is a medical clinic in the village of Bassin.

A Public wharf, 160 m long with an 85 elevation of 1.4 m, borders the entrance channel. A cathodic protection system to control corrosion is in operation at the wharf. When berthing at this wharf specific operating procedures must be observed to prevent

damage to vessels. For more information, as well as directives to follow, mariners should contact the harbour authority Administration Portuaire de l'Île du Havre-Aubert at 418-937-2858. A small basin is adjacent to the Public wharf; there are floating wharves and a launching ramp nearby. Refer to the chart for depth information. Another wharf, 100 m long, forms the NW side of the basin; water and power are available. Owing to continuous silting mariners should expect to find less water in some places.

A marina (Club nautique 86 Les plaisanciers du Havre) has a 111-m long jetty and is situated in the NW part of Havre Aubert. Floating wharves are adjacent to the jetty. See the Appendix for marina facilities. The entrance channel to the marina is buoyed (privately maintained) and subject to silting. For the latest information on depths, boaters should contact the Harbour Master.

87

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There is good anchorage for small craft in Havre Amherst and there are private mooring buoys.

88 Ice. - Shore-fast ice usually begins to form in mid-December and its concentration increases in the approach to Havre Aubert a month later. Generally, the ice cover decreases to mere tenths in mid-April and the whole area is clear of ice by mid-May.

HAVRE-AUBERT MARINA (2013)



Chart 4950

⁸⁹ Île d'Entrée ($47^{\circ}17'N$, $61^{\circ}42'W$) is the highest island of the Îles de la Madeleine archipelago and the only inhabited island that is separated from the main group. **Big Hill** ($47^{\circ}17'N$, $61^{\circ}42'W$) — unnamed on the chart — is the summit of Île d'Entrée rising to an elevation of 169 m. The east coast of Île d'Entrée is composed of red cliffs, ranging from 50 to 100 m in elevation between **Cap Blanc** and **Cap Noir. La Cormorandière** is a **conspicuous** red sandstone rock, close off the island's NE shore.

90 A light (1511) is shown from a tower on top of a cliff at La Black Head, situated at the NE end of Île d'Entrée.

91 A decommissioned lighthouse, in the form of a white **tower** and a red upper section, is situated on **Pointe de la Light**, on the south side of Île d'Entrée.

92 The village of **L'Île-d'Entrée** is situated on the west side of the island. There is a post office and **medical clinic**. A seasonal vehicle and passenger **ferry** service operates between the island and Île du Cap aux Meules.

by a breakwater to the SW, has a 90-m long east face; the

ferry uses the first 38 metres at the north end of the wharf. There are also floating wharves and a **launching ramp**. The north end of the west wharf is reserved for the ferry and features a **loading ramp**. Seasonal **lights** (1510.3, 1510.6), situated on the outer end of each breakwater, mark the entrance to the harbour. A sector **light** (1510.5) is shown from a grey tower on the west point of Île d'Entrée. The harbour is managed by the harbour authority Administration Portuaire de l'Île d'Entrée. (See ENC CA579168)

94 On the L'Île-d'Entrée diagram, the depths shown in the dredged areas were obtained from recurrent dredging. Owing to continuous **silting** mariners should expect to find less water in some places. For the latest information on depths it is recommended to check with the local authority.

95 **La Passe**, with a depth of 5 m, is a narrow **buoyed channel** passing between Île du Havre Aubert and Île d'Entrée. Owing to **silting**, depths in La Passe may be less than shown on the chart. An abandoned **submarine cable** extends between the Public wharf at L'Île-d'Entrée and the NE end of **Dune Sandy Hook** (47°16'N, 61°47'W). A group of drying rocks, named **La Digue**, on which **breakers** occur, are NE of the starboard hand **light buoy** YM12 (1508).

L'ÎLE-D'ENTRÉE (2013)



Îles de la Madeleine — South and West Coasts

⁹⁶ The south coast of Île du Havre Aubert — between Dune Sandy Hook and the lagoon **Le Bassin**, situated nearly 5 miles WSW — is formed by sand dunes and beaches with **shoal water** extending 0.5 to 1 mile offshore. The shore becomes high and steep 1.5 miles west of the entrance of Le Bassin.

97 A decommissioned lighthouse, a white **tower** with a red upper section, is situated on top of **Cap du Sud** $(47^{\circ}13'N, 61^{\circ}58'W)$.

98 **Aquaculture** facilities, marked with yellow cautionary **buoys**, are situated within Le Bassin.

99 There is an **anchorage** — sheltered from winds NW to NE, through north — off the entrance to Le Bassin, with depths of 10 to 15 m, sand bottom.

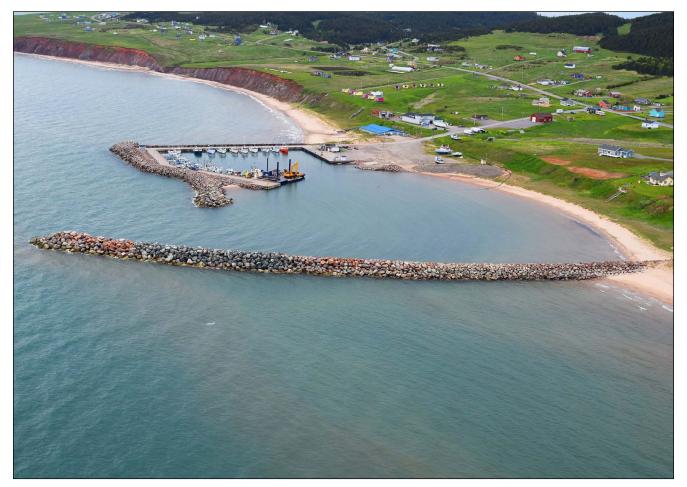
Anse à la Cabane is a small bight between Cap du Sud and **Le Gros Cap**, 1.4 miles to the west. It offers a safe **anchorage** during NE winds; the best anchorage is in the middle of the bay, about 0.8 mile offshore, with depths of 10 to 15 m, sand bottom. 101 There is a fishing harbour at **L'Anse-à-la-Cabane (Millerand)** close NW of Cap du Sud. A **breakwater** extends easterly from the L-shaped Public **wharf**, 103 m by 135 m. Another **breakwater** protects the SE side of the harbour; the channel between the two breakwaters is 59 m wide. There is a **launching ramp** and a fish plant at the wharf. The harbour is managed by the harbour authority *Administration portuaire de l'île du Havre-Aubert*. (See ENC *CA579170*)

102 On the L'Anse-à-la-Cabane diagram, the depths shown in the dredged areas were obtained from recurrent dredging. Owing to continuous **silting** mariners should expect to find less water in some places. For the latest information on depths it is recommended to check with the local authority.

103 A seasonal **light** (1499.3) is shown from a mast on the outer end of the SE breakwater. Another seasonal **light** (1499.35) is shown from a mast on the east outer end of the breakwater adjacent to the wharf.

Fond Georges, a **shoal** with a depth of 15.5 m, is situated 12.1 miles SE of Île du Havre Aubert.

L'ANSE-A-LA-CABANE (MILLERAND) (2018)



105 Le Corps-Mort is an island situated about 7.5 miles west of Île du Havre Aubert; it is rocky, steep and resemble a pyramid when seen from the east or west, but when seen from the north or south, it looks like a horizontal human body.

A reef extends one mile SE from the east 106 extremity of Le Corps-Mort. Soundings give little warning as you approach Le Corps-Mort, as the depths remain fairly even. A shoal area, with a depth of 15.9 m, is situated 5.1 miles SSW of Le Corps-Mort.

West Coast of Île du Havre Aubert. — 107 The coast between Le Gros Cap and the hamlet of L'Étang-des-Caps presents red cliffs rising to an elevation of nearly 30 m. Shoal water extends up to 0.5 mile off this part of the coastline and the bottom is uneven. The ruins of two jetties extend from the shore about 2.1 miles NNW of Le Gros Cap.



West Coast of Île du Cap aux Meules. — 108 **Île aux Goélands** is situated close off the SW

extremity of Île du Cap aux Meules; the island is small and rocky, rising to an elevation of 19 m. Cap à Savage (47°22'N, 61°58'W) — unnamed on the chart — situated close NE of Île aux Goélands, is steep and rocky. An above-water wreck and submerged ruins lie close to the extremity of Cap à Savage.

109 Anse de l'Étang du Nord is a cove entered between Cap à Savage and Cap à Fidèle, 0.5 mile to the north. In the cove there are three breakwaters protecting a fishing harbour. One of the breakwaters extends perpendicularly 120 m SE from the north breakwater. Seasonal lights (1491.1, 1491.2, 1491.3), shown from masts, mark the end of each breakwater and light buoys mark the entrance channel. The south breakwater has collapsed. There are submerged rocks on either side of the riprap. The village of L'Étang-du-Nord has a post office, restaurants, accommodation and tourism services are also available.

110

There are two Public wharves in Anse de l'Étang du Nord; one wharf can

L'ÉTANG-DU-NORD (2018)



accommodate a few small craft with authorization from the port authority. There is also a marina (*Marina L'Étang-du-Nord*) and a **launching ramp** in Anse de l'Étang du Nord. See the Appendix for marina facilities. The first wharf, 200 m long with a deck elevation of 1.3 m, extends along the north breakwater. A floating wharf, 70 m long, is situated along the breakwater extending in a SE direction. The second wharf, with its west face encased in stone, extends 130 m with a perpendicular section at its inner end. This harbour is managed by the harbour authority *Administration du Havre de pêche de L'Étang-du-Nord*. (See ENC *CA579147*)

111 A decommissioned lighthouse, a white tower and a red upper section, is situated on top of **Cap du Phare** (47°23'N, 61°58'W). **Submarine** telecommunication **cables** run from the shoreline, northwesterly to landfall on the mainland at L'Anse-à-Beaufils in the Gaspésie region (Quebec). Mariners must consult the chart to locate the cables and are cautioned against anchoring near them.

112 **Offshore dangers**. — The **Récifs du Cheval Blanc** are reefs lying about 5 miles west of Île aux Goélands, forming a group of pinnacles nearly 183 m in diameter on which the sea breaks and with a least depth of 3.4 m. 113 **Pierre du Gros Cap**, lying 4 miles NW of Cap du Phare, is a **reef** with a least depth of 6.2 m; the sea breaks over the reef only in heavy weather.

Îles de la Madeleine — Northwest and North Coasts

114 Between Cap du Phare and **Cap de l'Hôpital**, 3.3 miles to the NE, the coast of Île du Cap aux Meules is rocky and generally composed of red sandstone cliffs. A **breakwater** extends offshore for about 90 m near **Anse de l'Hôpital** (unnamed on the chart). An above-water **wreck** lies on Dune du Nord, 5,5 miles NE of Cap de l'Hôpital.

115 The coast between Cap de l'Hôpital and **Île aux Loups**, about 10 miles to the NE, is formed by sand dunes and sandy beaches. Île aux Loups is composed of sandstone cliffs.

116 There is a 46-m long Public **breakwater** wharf at Pointe-aux-Loups. There is a launching ramp. South of the wharf there is a 190-m long breakwater extending in a NW direction. The harbour is managed by the harbour authority *Administration Portuaire de Pointe-Basse et Pointe-aux-Loups*. (See ENC *CA579220*)

POINTE-AUX-LOUPS (2018)



117 A **light** (1491.5) shown from a mast is at the outer end of the north breakwater.

118 Owing to continuous **silting** mariners should expect to find less water in some locations. For the latest information on depths it is recommended to check with the local authority.

119 The coast between Île aux Loups and **Cap du Dauphin**, which is at the north end of **La Grosse Île** and situated 9.5 miles to the NE, is composed of sand dunes and sandy beaches. Cap du Dauphin forms a steep bluff. However, the highest elevation, 93 m, is at the SW end of La Grosse Île.

120 **Récif Glawson**, with a depth of 11.2 m, lies 5.3 miles west of Cap du Dauphin, at the east end of a **rocky shoal**.

121 Two **conspicuous towers**, 40 m high, marked with red **lights** and used for mining activities, are situated 1.4 miles WSW of Cap du Dauphin; the towers can be seen from any area north or west of La Grosse Île. A telecommunication **tower**, marked with red **lights**, is situated on top of La Grosse Île.

122 The harbour at **Grosse-Île-Nord**, protected by two **breakwaters**, is situated on the east side of Cap du Dauphin. There is a 100-m long **wharf** in the north part of the harbour, as well as floating wharves and a **launching ramp**. Another **breakwater**, detached from the shore, is 121 m NNE off the harbour entrance; this breakwater is 175 m long. (See ENC *CA579101*) 123 A seasonal **light** (1481.6) is shown from a mast on the outer end of the south breakwater. A second **light** (1481.3) marks the outer end of the north breakwater. Cautionary **light buoy** YGR (1481.2) is moored just to the north of the north breakwater. Starboard hand **light buoy** YG2 (1481.1) is moored at the entrance of the dredged area leading to the harbour.

124 Depths from the dredged areas shown on the Grosse-Île-Nord diagram are obtained from recurrent dredging. Owing to continuous **silting** mariners should expect to find less water in some locations. A sand bar, running in an east–west direction, with a depth of 1.3 m in places, lies NE of the harbour entrance. For the latest information on depths, it is recommended to check with the local authority.

125 The coast between Cap du Dauphin and Pointe de l'Est, composed of sand dunes and sandy beaches, curves over a distance of 6 miles. With NE winds the sea heaps up and waves swell, making navigation in this area hazardous. East of Cap du Dauphin there is an **anchorage**, sheltered from south winds, with a good holding ground and sand bottom.

Île Brion (47°47′N, 61°28′W), situated 9 miles north of the main group of islands, is composed of layers of red sandstone, red clay and gray sandstone. The rock forming the cliffs projecting over a large part of the shore is soft and brittle. Wave erosion, combined with bad weather has formed caves and grottos in the cliffs. The peninsula

GROSSE-ÎLE-NORD (2018)



at the east extremity is connected to the island only by a narrow drying sandy run.

127 The island is partly covered by stunted trees. The highlands also present a large vegetated green area. The cliffs on the north side of the island are much higher than those on the south side, which are indented by several small coves. The island's highest point is situated in the NE part. Île Brion is an ecological reserve and access regulations apply to this protected area.

> 128 A light (1479) is shown from a white tower on Cap Noddy, which is the west end of the island.

129 There is **anchorage** sheltered from north winds 1 mile offshore in the roadstead situated SE of Île Brion in depths of 10 m, sand bottom. In fine weather and when the wind blows from the south, there is an **anchorage** off the bay indenting the north shore of the island. A **wreck**, in 7.3 m of water, lies north of Île Brion, north of the bay.

Rochers aux Oiseaux is a group of rocks lying 10.5 miles ENE off Île Brion; the rocks are composed of red sandstone affected by wave erosion. In general, the cliffs around the rocks rise vertically. Northern gannets and other seabirds nest on all the ridges and in each crack in the cliffs. *Rochers-aux-Oiseaux Migratory Bird Sanctuary (Environment and Climate Change Canada)* is also located in this area and access regulations apply to this protected area.

131 **Rocher aux Oiseaux**, 40 m in elevation, is the SE rock of the group. **Rocher aux Margaulx** is smaller and lower; it is divided into three hummocks linked to each other at the base. **Breakers** occur about midway between Rocher aux Oiseaux and Rocher aux Margaulx.

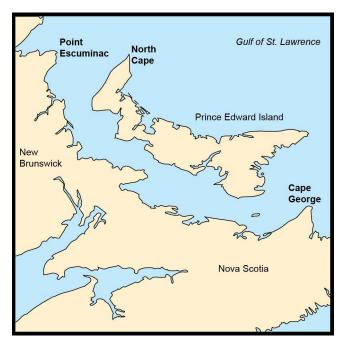
132 A light (1478), on top of Rocher aux Oiseaux (47°50'N, $61^{\circ}09'W$), is shown from a skeleton tower however, its lower part is closed (former lighthouse structure).

133 A **conspicuous** telecommunication **tower** stands on top of Rocher aux Oiseaux. Other historic buildings around the former lighthouse structure can still be seen.

134 A rocky shoal extends between Île Brion and Rochers aux Oiseaux. Even though the least depth over the shoal is 10.3 m, a swell forms over this ridge and groundings have occurred. Mariners are advised against sailing over the shoal.

Chapter 3

Northumberland Strait



Confederation Bridge

Chart 4023

Northumberland Strait separates Prince Edward Island from the coast of Nova Scotia and New Brunswick, and is about 160 miles long. The navigable breadth of the narrowest part, Abegweit Passage, off Cape Tormentine $(46^{\circ}07'N, 63^{\circ}46'W)$, is 5.5 miles.

2 The hourly surface currents forecasts for the Gulf of St. Lawrence are available on the *St. Lawrence Global Observatory* website at <u>www.ogsl.ca</u> (click on the *Ocean Forecasts* tab). A mariner can obtain hourly details of the direction and speed of surface currents forecasted for the subsequent 48 hours.

3 Dense fogs seldom occur in Northumberland Strait. The prevailing SW wind of summer loses much of its moisture in passing over the land of Nova Scotia and becomes a warm dry wind off its northern coast.

4 The Anchorage Regulations prohibit anchorage in a two mile wide area crossing the Northumberland Strait to safeguard submarine power cables. The limits of the area extend from the vicinity of Cape Bruin, New Brunswick ($46^{\circ}11$ 'N, $63^{\circ}59$ 'W), to Fernwood, P.E.I. A number of submarine cables cross Northumberland Strait close SE of the Confederation Bridge. These extend from the New Brunswick shore around Cape Tormentine to land near Port Borden, P.E.I.; some also land along the shore close west of Bells Point. This is not an official cables area, and is not covered under the Anchorage Regulations. Caution is advised.

5 Mariners are requested to exercise **caution** when navigating near the ferry crossing between Caribou Harbour and Wood Islands. Ferries, when either approaching or leaving a terminal and when operating at reduced speeds, are not as manoeuvrable as other vessels. Vessels fitted with radiotelephone should make use of bridge-to-bridge communications in compliance with good navigational practices.

6 The **Confederation Bridge** crosses the Northumberland Strait joining Jourimain Island, New Brunswick, and Borden Point, Prince Edward Island, 6.9 nautical miles distant. The *Northumberland Strait Vessel Traffic Services Zone* has been established to facilitate traffic through the Northumberland Strait. For additional

CONFEDERATION BRIDGE (2005)



information, consult the *Radio Aids to Marine Navigation* (Atlantic, St. Lawrence, Great Lakes, Lake Winnipeg Arctic and Pacific).

7 The bridge is composed of 44 concrete navigation spans. Pier 1 is the easternmost above water on the Prince Edward Island side, and Pier 44 is the westernmost above water on the New Brunswick side.

8 For important information concerning navigation in the approaches to and under the Confederation Bridge, consult the *Guidelines for Navigation Under The Confederation Bridge* (<u>https://tc.canada.ca/en/marine-</u> <u>transportation/marine-safety/guidelines-navigation-under-</u> <u>confederation-bridge-2009-tp-13681-e</u>).

9 It has been reported that during summer, in the early evening and early morning, the piers of the Confederation Bridge become surrounded by fog across its entire length. In the evening, bridge superstructure could cool more quickly than the surrounding air, and heat would be conducted away from the piers to cool the surrounding air to below the dew point. In the morning, the bridge could take longer to heat in the upper levels and conduct heat away from the piers to cool the surrounding air to below the dew point.

Cape George to Pictou Harbour

Chart 4404

10 The coast between Cape George and Merigomish Harbour, 27 miles SW, is bold and free of off-lying dangers. The land rises to a ridge 2 to 3 miles inland and reaches a summit of 335 m, 3.5 miles south of Arisaig Point.

11 There is a Public wharf at the community of Livingstone Cove, 3.5 miles west of Cape George. The east face of the outer section, 21 m long, has a least depth of 1.2 m alongside. The east face of the inner section, 52 m long, has depths up to 1.8 m alongside. The adjoining marginal wharf has depths up to 0.6 m alongside, and there are shoaler depths in the approach. Livingstone Cove offers no shelter during westerly winds and only fair shelter from northerly winds. A light (892.5) is shown from a mast on the outer end of the Public wharf.

12 **Malignant Cove**, 10 miles SW of Cape George, has a small stream at its head, and is a good landing place for boats. **Sugarloaf Hill**, 196 m in elevation, lies 1 mile inland. **Frenchmans Barn** is a **conspicuous** rock formation 2 miles SW of **Dunn Point**, the SW point of Malignant Cove.

LIVINGSTONE COVE (2013)



There is a small boat harbour on the 13 west side of Arisaig Point, 2.6 miles SW of Dunn Point. A breakwater 147 m long, extending from the point, has berthing space on its east side in depths of 0.6 m to 1.2 m. A light (894.1) having a green and white daymark, is shown from a skeleton tower at the outer end of the breakwater. A second L-shaped wharf extends 85 m from the shore on the SE side of the harbour; the L-end is 40 m long. A light (894.2) having a red and white daymark, is shown from a mast at the outer end of the wharf. There are two floating wharves extending from the inside face. A marginal wharf, 29 m long, and a launching ramp, 7.3 m wide, lie at the head of the harbour. There is a depth of 0.6 m alongside the marginal wharf. A conspicuous white building, built to resemble a lighthouse, is situated close NW of the harbour at Arisaig.

14 A rock **breakwater**, 74 m long and 12 m wide, is situated close east of the outer breakwater. The white steeple of the church at the community of **Arisaig** is **conspicuous**.

15 At the community of Lismore, 5.4 miles SW of Arisaig Point, two breakwaters, 37 m apart, form a very active fishing harbour. Sand bars sometimes obstruct the entrance. The east breakwater, 194 m long, has an L-end 46 m in length. The east face of the breakwater is a Public wharf with a berth 192 m long and depths of 0.6 to 1.2 m alongside. A light (896) is shown from a mast on the outer end of the east breakwater. A light (896.1) is shown from a mast on the outer end of the west breakwater. Another

light (895) is shown from a skeleton tower, having a red and white rectangular daymark, situated on the shore near the wharf.

16 A **conspicuous** wind farm, comprised of 27 turbines, is visible for miles in the area of Lismore. The turbines are centered on a location atop **Browns Mountain**, 3.5 miles SE of Lismore. Each turbine is marked by a white strobe **light** for daytime, and a fixed red **light** for nighttime visibility.

Chart 4445

Big Merigomish Island, 150 feet (46 m) in elevation, is composed of clay and sandstone with thin seams of coal visible at **Coal Point**, where the cliffs are 35 feet (11 m) in elevation. A sand dune 2.5 miles long connects the east end of the island to the mainland.

18 The entrance to Merigomish Harbour (45°39'N, 62°27'W) lies at the west end of Big Merigomish Island, between Kings Head and Merigomish Point. The buoyed channel between the shoal banks is only 700 feet (213 m) wide and, at the entrance to the inner harbour between Savage Point and Dulse Rocks, it narrows to 300 feet (91 m). The tidal streams at this point frequently run at a rate of 5 knots, but within the harbour, the rate is generally less than 1.5 knots.

4 miles SW up a bay containing many islands, coves and

LISMORE (2013)



precipitous headlands. Several small streams enter the harbour. Good small craft **anchorage** is available in the harbour, however, there are a few **aquaculture** sites. A **submarine cable** crosses the harbour to Big Merigomish Island, 1.7 miles east of Savage Point. **French River** is navigable for boats through a narrow marked channel as far as the **bridge** at the community of **Merigomish**.

20 A T-shaped Public **wharf** is situated 0.3 mile NE of Savage Point. A marked channel, narrow and shallow, leads from abreast of Savage Point to the wharf. The outer face is 80 feet (24 m) long with a least depth of 4 feet (1.2 m) alongside. A floating wharf, 55 feet (17 m) long, extends from the east end of the wharf. It has a least depth of 5 feet (1.5 m) alongside.

21 A wharf, 110 feet (33.5 m) long and 29 feet (8.8 m) wide, with a depth of 2 feet (0.6 m) at the outer end, is situated 0.4 mile SSE of Hardwood Point. There is no berth on the north side, while the inner portion dries.

22 Little Harbour, 3 miles west of Merigomish Harbour, is entered between **Roy Island** and **Black Point** and is only suitable for small boats. Narrow, intricate channels lead through drying flats into shallow inner basins with only a few small pools where the depths are from 6 to 10 feet (1.8 to 3 m). Several **aquaculture** sites are reported to be established in the harbour. **Roy Ledge**, a rocky shoal with a least depth of 11 feet (3.4 m), lies 0.3 mile north of Roy Island.

Charts 4404, 4445

23 Between Little Harbour and the entrance to Pictou Harbour, the coast is lower and shoal water extends farther offshore. **Roaring Bull Point** presents a low cliff to seaward, marked by a **conspicuous** red patch. A **reef** of sandstone extends 0.3 mile NE from the point and terminates in a rock drying 4 feet (1.2 m). **Chance Harbour**, to the SE of the point, is nearly dry at low water.

24 A Public **wharf** used by fishing vessels is situated at the point close west of Roaring Bull Point; it is protected by a rock **breakwater**. The wharf is 291 feet (89 m) long and 20 feet (6 m) wide with depths of 3 to 4 feet (0.9 to 1.2 m) along the south face of the outer section. This section is decked, and the deck has an elevation of 4 feet (1.2 m). The inner portion has floating docks extending alongside for 170 feet (52 m).

Charts 4938, 4404

25 **Mackenzie Head**, 2 miles west of Roaring Bull Point, is a sharp pointed cliff of clay and sandstone 12 m in elevation. **Mackenzie Shoal** is a rocky bank with a least depth of 4.3 m, extending from 0.6 to 0.8 mile NE of Mackenzie Head. Vessels should not pass south of this shoal.

26 **Pictou Road**, between Mackenzie Head and **Logans Point**, although open to NE winds, affords good **anchorage** in 9.1 m, clay and mud, 1 mile north of Mackenzie Head.

PICTOU HARBOUR — ENTRANCE (2005)



27 **Macdonald Reef** extends 0.4 mile east of Logans Point, with a rock drying 0.1 m near its outer edge. Starboard hand **light buoy** *SP6 (911.5)* is moored close east of Macdonald Reef. The 5 m contour line runs almost parallel to the coast, about 0.35 mile offshore to **Cole Point**, a clay and sandstone cliff 9.1 m in elevation, from which **Cole Reef** extends 0.4 mile.

Chart 4938

28 **Pictou Harbour** is entered from Pictou Road between **Lowdens Beach** and **Lighthouse Beach**. About 2 miles inside the entrance, the harbour expands into three arms, the mouths of **East River of Pictou**, Middle River of Pictou, and West River of Pictou. A **causeway** blocks the entrance to the West River of Pictou and Middle River of Pictou. The harbour is usually closed by ice from the beginning of January to mid April.

29 Pictou Harbour is a Public Harbour administered by the Department of Transport. The harbour includes all navigable waters west of a line joining Roaring Bull Point (45°40'48"N, 62°34'30"W) to Logans Point (45°42'54"N, 62°38'20"W); (chart 4404).

30 The town of **Pictou**, population 3186 in 2016, stands on the north shore of the harbour and on the slope of a ridge rising to 61 m. A spur of this ridge forms **Battery Point**. The most **conspicuous** building is the Catholic church, of red brick with a spire, situated near the summit of a hill east of the town. A large blue water tower is also **conspicuous**. A very tall chimney, marked with strobe **lights**, has been constructed at the power plant in the vicinity of Stonehouse Point and is reported to be visible from seaward.

The least depth in the channel, over the bar, is 6.7 m. Within the bar, depths of 7.5 to 12 m extend nearly to the causeway. The channel is **buoyed**.

Leading **lights** (903, 904), in line bearing 262°, lead over the bar. The front light is shown from a white square tower having a red stripe, and a

PICTOU HARBOUR (2005)



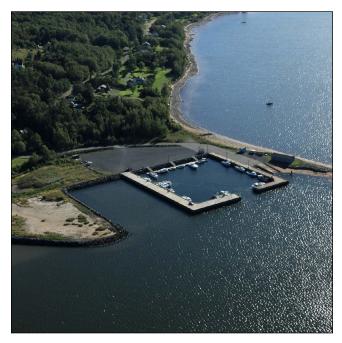
red upper portion. The rear light is shown from a skeleton tower having a white daymark with a red vertical stripe. The lights are situated on the north shore about 0.7 mile west of Lighthouse Beach. The leading lights are remotely activated by VHF Radio. To activate: depress radio microphone switch 5 times within 5 seconds, on VHF channel 65A (156.275 MHz). The lights will activate for 30 minutes, and if additional time is required, this procedure can be repeated. A **light** (906.4) is shown from a skeleton tower with a red and white daymark at the NW end of Lighthouse Beach. Fairway **light buoy** *SJ* (900.5) is moored 1.4 miles ENE of Cole Point.

33 **Pilotage** is available but not compulsory. As the channel over the bar is only 122 m wide, with **tidal streams** sometimes attaining a rate of 2.5 knots, pilotage is recommended for those without local knowledge. Within the harbour, tidal streams of about 0.5 knot can be expected. Masters of vessels requiring a pilot should report via any coastal radio station their ETA to Pilots Pictou, 12 hours before arrival at the pilot boarding station. The station is located 1.8 miles NNE of Roaring Bull Point *(Chart 4404)*. Arrangements for a pilot are normally made through the vessel's local marine agent, or else directly with the *Atlantic Pilotage Authority (APA)*. The *APA* can be contacted by telephone: 1-877-272-3477; or email, <u>dispatch@atlanticpilotage.com</u>.

The master of a vessel that is to depart or make a move and requires a pilot must report four hours prior to the ETD.

36 A wharf (Pier C), is 198 m long with depths of 5.7 to 8.3 m along the east side and 6.3 to 8.2 m along the outer 137-m length of the west side. There is a freight shed on the wharf. Pier C is operated as a Public port and is privately operated by *Straitline Stevedoring Ltd.*, Pictou, N.S.

PICTOU LANDING (2013)



2.4 to 3.4 m along the sides. A small **marina** is operated from this pier, at **Town Point**. It also serves as a base for a seasonal Inshore **Rescue** Boat, operated by the *Canadian Coast Guard*.

38 West of Pier B is a wharf in a state of disrepair. Close west of this, is the Northumberland Fisheries Museum wharf.

At Pictou Landing, on the south side of the harbour, two L-shaped Public wharves extend 105 m from the shore, to form an enclosed boat basin. Two lights (905.4, 905.5) are shown at the entrance to the basin. A floating wharf 60 m long lies at the head of the basin, with depths of 2.1 m alongside. Depths inside the west wharf range from 1.5 to 4 m. Inside the east wharf, depths range from 2.1 to 3.3 m. There are berths along the outer (eastern) face of the east wharf, with depths ranging from 1.5 to 2.4 m. A launching ramp is located close west of the basin; adjacent is a breakwater 25 m long, and there are submerged ruins of a wharf extending from the breakwater NNW for 75 m.

40 An abandoned **submarine cable** crosses the harbour close north of **Seaview Point** to the opposite shore near **Moodie Point**. Another abandoned **cable** is laid from the NW end of Lighthouse Beach to a position near Moodie Point. A **wreck** lies on the bottom at 6 m, on the edge of the main channel, 0.7 mile west of **Christie Point**.

There is also an **underwater pipeline** extending 680 m from Norway Point, to a private **light buoy**.

41 Aecon Atlantic Industrial Inc. operates a ship repair facility at Battery Point. The marine railway has a capacity of 4000 tonnes. A privately maintained **light** is situated on the east wharf, which is the load-out wharf; the west wharf is the outfit wharf. The outfit wharf is 213 m long with a limiting depth of 4 m alongside.

42 The usual **anchorage** is to the east of the Pictou wharves in 10.3 to 12.1 m, mud. Anchorage is **prohibited** in the area within a radius of 305 m from the inner end of the marine railway.

43 Water and diesel oil are available at the quay. A fresh **water line** is laid onto Pier C; electrical power is available. Provisions and fuel are easily obtained in the town.

44 At **Campbell Point**, 0.45 mile NE of Battery Point, the *Pictou* Marina is entered between two **breakwaters** about 23 m apart. There is a depth of about 1.5 m in the entrance and 1.8 m alongside the floating wharves. Haulout services, repairs, gasoline, marine hardware, fresh water and limited overnight berthing are available.

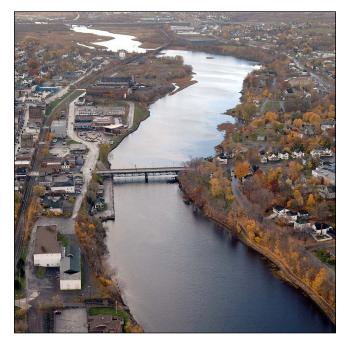
45 *Hector Quay Visitors* Marina operates in summer at the west end of Pictou Harbour. A replica of the ship *Hector* is located there, along with an interpretive centre. There are 25 berths with a reported minimum depth of 2.4 m. There is also water and power, showers and laundry, and a pump-out. Fuel and provisions are available nearby. A **light** (906.6), privately maintained, is shown at the outer end of the floating wharf.

46 The East River of Pictou is navigable from Pictou to New Glasgow, a distance of 6.5 miles, and is entered close east of **Abercrombie Point**. The narrow channel is marked by leading **lights** and **buoys** which may be moved to suit the conditions prevailing.

47 The channel from the river entrance to Trenton, a distance of 4.5 miles, is in three long reaches which avoid many of the curves and bends in the stream. The charted depth in the first two reaches, as far as **Stonehouse Point**, is 3.3 m, and 2.9 m in the third reach. **Silting** takes place and the latest local information should be obtained before navigating the river. **Aquaculture** sites are reported to exist in the shallow areas outside the main channel.

48 A large power plant is situated on Stonehouse Point. A **causeway** and bascule **bridge** cross the river at the point. The bridge has a vertical clearance of 7.6 m in the closed position. Close above the bridge, **overhead** power **cables**, with a vertical clearance of EAST RIVER — STONEHOUSE POINT (2005)

EAST RIVER — NEW GLASGOW (2005)



21 m, cross the channel. The eastern channel is not recommended, owing to its proximity to the power plant and generating equipment; the western channel is **buoyed**. There are three **conspicuous** smokestacks at the power plant — two are 92 m in elevation and have red and white stripes, while the other is 157 m in elevation and marked by white strobe **lights**.

49 **Norway Point** is located WSW of the Pictou wharves. Port hand **light buoy** *SJ19 (905.6)*, lies 0.5 mile SE of Norway Point, and marks the entrance to a narrow channel in the first reach of the river. The second reach, marked by **buoys**, trends toward a location just north of Stonehouse Point, where the third reach begins. The river is **buoyed** as far as Trenton.

50 Both **Trenton**, population 2474 in 2016, and **New Glasgow**, population 9075 in 2016, are towns having several factories. A **submerged pipeline** ends in the channel about 91 m SSW of the south end of Trenton.

51 *Riverfront* Marina operates from the **wharf** at New Glasgow and is managed by the town; it is situated just below the **bridge**. The wharf is 114 m long with a depth of 2.1 m alongside. Several floating piers adjoin to the north having a least depth of 1.3 m. A **launching ramp** is located close north of these piers. A nearby visitor centre has showers and washrooms. Electricity, pump-out and garbage disposal are available. Fuel and supplies are available locally. Opposite the marina, additional floating wharves extend 120 m north of the road bridge, along the west bank of the river. The effective limit of navigation is the **bridge**, with 1.8 m of vertical clearance.

Pictou to Cape Tormentine

Chart 4404

52 **Pictou Island**, nearly 8 miles NE of the entrance to Pictou Harbour, is composed of clay and sandstone and is 46 m in elevation near its centre. The north side is wooded and the coast is formed of low cliffs. A **submarine cable** runs from **Roger Point**, low and sandy, to **Widow Point**, on the mainland. A **reef** extends 0.5 mile from **East End**, the east extremity of the island. Deep water lies north and south of this reef and vessels should not pass close on either side, especially with a flood or west-going stream. **Pictou Banks** extend from the west end of Pictou Island for three-quarters of the distance across the channel towards the mainland. Pictou Island has a population of about 45.

53 A light (899.5) is shown from a skeleton tower with red and white banded daymarks on the SE

PICTOU ISLAND — WHARF (2013)



point of the island. A light (897) is shown from a similar tower, having red and white banded daymarks on West End.
A detached breakwater lies about 0.3 mile SW of East End.

55 A boat basin, having two wharves protected by breakwaters, is situated on the south side of the island, 0.7 mile east of West End. There is reportedly very little water in the basin between the breakwaters, and the wharves are primarily used by fishing boats. A light (898) is shown from a mast, having a black, white and green daymark, on the outer end of the west breakwater. Another light (898.5) is shown from a mast, having a red and white daymark, on the east breakwater. A third light (899) is shown at an elevation of 10.8 m from a white tower, situated close NW of the west breakwater.

Chart 4940

Middle Grounds, a chain of rocky patches with a least depth of 2.6 m, cover a part of Pictou Banks about midway between West End, Pictou Island and **Gull Point**, the NE end of **Caribou Island**. A wreck with 7.9 m of water over it lies 1 mile west of Middle Grounds. The superstructure has been removed and it lies in an east-west direction. The maximum height of the wreck above the seabed is 3 m. A **light** (918) (45°46'N, 62°41'W) is shown at an elevation of 12.6 m, from a white square tower on Gull Point.

57 **Caribou Channel** lies between the SW end of Pictou Banks and the **reefs** extending from **Munroes Island** and Caribou Island. **Caribou Harbour** is situated between the mainland, with Caribou Island to the north and Munroes Island on its east side. A dredged channel, subject to continual **silting**, lies between Caribou Island and Munroes Island and is used by a ferry service to Prince Edward Island. The ferries operate between May and December.

The inner, dredged channel is **buoyed**, with the depth reported to be maintained at 4.6 m. Starboard hand **light** and bell **buoy** *SP2 (919)* is moored about 0.7 mile NNE of Gull Point. Port hand **light** and bell **buoy** *SS1 (913)* is moored 0.45 mile north of Munroes Island; a **racon** (— •) operates from this **buoy**.

59 The ferry terminal at **Caribou** consists of two ferry berths, with **wharves** having an elevation of 3.2 m. *Fishermen's Wharf* extends 70 m from the east side of the ferry terminal; this wharf is 6 m wide and has a least depth of 1.2 m alongside. There is a least depth of 0.9 m alongside the wharves in the basin close to the south. Close to the east is a **breakwater** which protects an L-shaped floating wharf, with depths of 1.5 to 2.1 m alongside. Boats can secure to the ferry wharf for a distance of 30 m to the north of Fishermen's Wharf where there is a least depth of 2.1 m.

3-10

CARIBOU HARBOUR (2013)



Chart 4405

60 The coast between **Caribou West Gully** and Cape John, 15 miles west, is nearly straight and unbroken, with shallow water extending 0.4 mile off it. Low cliffs of clay and sandstone, with a maximum elevation of 50 feet (15 m), predominate. There is good landing for boats in fine weather.

CAPE JOHN (2013)



61 **Toney River**, population of about 100, is an active shallow draft fishing harbour 5 miles west of Caribou West Gully. The inner harbour is entered between two **breakwaters** which extend north from two Public **piers**. Between these piers, the channel is 39 feet (12 m) wide with a depth of 3 feet (0.9 m).

62 The west breakwater, rock, is the longer breakwater. A **light** (919.7) is shown from a mast on the outer end of the west pier. Port hand **light buoy** SU1 (919.6) is moored 0.25 mile north of the wharf.

63 The inner harbour has a concrete **pier** on its east side, and several floating wharves on the west side. There is a **launching ramp** and floating wharf at the head of the harbour.

64 **MacDonalds Cove** is a small bight with a sandy bottom, 4 miles west of Toney River. A sand beach extends along the length of the cove. An L-shaped concrete breakwater-wharf extends from the west side of the cove. This breakwater-wharf is in disrepair and no longer in use, however, it provides some shelter from the NW for small boats.

65 **Skinners Cove**, 3.5 miles east of Cape John, is a shallow draft fishing harbour protected by two **breakwaters** 46 feet (14 m) apart, with a depth of 1 foot (0.3 m) between them. A **light** (920.1) is shown from a skeleton tower with a red and white rectangular daymark, on the outer end of the west breakwater.

BARRACHOIS HARBOUR (2005)



WALLACE HARBOUR (2013)



Chart 4497

 $\overbrace{12}^{66}$ $\overbrace{63^{\circ}08'W}, \text{ with steep sandstone cliffs}$ 12 to 15 m in elevation, is the east entrance point to Amet Sound, which affords good anchorage for vessels of moderate size. The entrance is divided by Amet Island Shoals and Waugh Shoal into three passages. John Bay, Brule Harbour, Barrachois Harbour and Tatamagouche Bay all lie at the inner end of the sound. The passages into the sound are complicated by erratic tidal streams.

67 **Amet Island** presents sandstone cliffs on every side. It is flat and grassy on top, about 6 m in elevation, and is constantly diminishing in size from erosion. **Reefs** and shoals surround the island. **Amet Island Shoals** extend 4 miles east, and 2 miles SE of the island, and there are depths of 0.3 m, 1 mile from the island. **Eastern Peak**, at a depth of 4.3 m, lies 3 miles NE of the light. A **light** (921) is shown at an elevation of 11.9 m, from a skeleton tower near the centre of the island. The SE edge of Amet Island Shoals is marked by starboard hand **light buoy** UA2 (920.5).

68 **Waugh Shoal**, 2 miles WNW of Amet Island, is a rocky bank with a least depth of 3.4 m towards the north, steep-to part of the shoal.

69 **Saddle Island**, wooded and low, is joined at low water to the north side of **Malagash Point**, the west entrance point of Amet Sound. **Washball Reef** runs out 1 mile from the east end of the island, with **Washball Rock**, awash, 0.4 mile from the island.

John Bay is clear of detached shoals. The head of the bay is encumbered by sandy shoals, drying out 1 mile at the mouth of **River John**. A bar across the river mouth has a depth of 0.3 m, and a **staked** channel leads as far as the **bridge** at the settlement of **River John**, population of about 320. The bridge has a vertical clearance of 3.2 m. **Long Point** is located 2.6 miles SSE of Cape John, across John Bay. A **conspicuous** wind turbine is visible close south of the point.

71 There are two L-shaped rock **breakwaters** that protect a small boat basin on east side of **Reef Point**, 0.5 mile south of Cape John. A marginal **wharf** 61 m long is located at the head of the basin, with a **launching ramp** and a floating wharf 72 m long, situated close east. There are least depths of 1.5 m at the marginal wharf, and 2.1 m at the floating wharf. Two **lights** (921.2, 921.21) are shown at the entrance to the boat basin.

72 **Brule Harbour**, on the SE side of the settlement of **Brule Point**, is shallow with the greater

part consisting of drying mud flats and weeds. **Weatherbies Spit**, and the drying flats extending 0.5 mile SE from the spit, provide some protection for small craft. All that remains of the wharf at **Brule** are above-water **pilings**.

73 **Brule Shoals**, 1 mile north of **Weatherbies Point**, with a least depth of 2.7 m, parallel the shore for 1 mile.

74 **Barrachois Harbour** is entered between **Peninsula Point** and **Chambers Point** by a narrow channel with a depth of about 4 m. **Jollimore Reef**, drying 0.6 m at the outer end, extends 0.3 mile NW from Peninsula Point; port **light buoy** *UD3 (920.6)* is moored at the western extent of the reef. **Middleground Shoal**, with a least depth of 1.5 m, lies in the entrance to the harbour. The harbour contracts to a very narrow channel about 1 mile south of Chambers Point, with depths of 0.2 to 2.4 m, and turns SE near a highway **bridge**, having a vertical clearance of 1.5 m. A small Public **wharf** lies on the west side of the channel below the bridge.

75 Sunrise Shore Marina has been constructed on the south shore of Barrachois Harbour at Waldegrave, close east of the highway bridge. A manmade harbour has been dredged to a reported depth of 2.1 m. There are 65 small craft berths, boat storage and launching facilities. The area is lighted. Fuel, water and electricity, laundry facilities, showers, garbage disposal and wireless Internet are available. The entrance channel is about 15 m wide with a reported depth of only 0.6 m. Arriving or departing 3 hours from high or low tide is reported to be the safest procedure.

76 **Tatamagouche Bay** affords good **anchorage** with soft mud bottom everywhere for shallow draft vessels. The head of the bay shoals rapidly and **McNabs Bay** is nearly all dry.

77 Malagash Public wharf near Blue Sea Corner has an L-end 82 m long; there are no berths along the stem. There is a depth of 0.6 m in the basin formed by the wharf. A light (921.1) is shown from a skeleton tower on the SE corner of the wharf.

78 **Waughs (Waugh) River** is approached through a very narrow channel through drying mud flats. There is reported to be a depth of 1.5 m as far as the bend of the river near the village of **Tatamagouche**. The channel is **buoyed**.

79 **Treen Bluff**, 1.5 miles west of Saddle Island, is a low cliff, with **Treen Reef** extending 0.5 mile north from it to a depth of 3.1 m. **Gravois Point**, 2.5 miles west of Treen Bluff, is the highest part of the clay and sandstone cliffs in the vicinity.

Chart 4402

80 **Wallace Harbour**, at the mouth of the **Wallace River**, has depths of 14 to 30 feet (4.3 to 9.1 m) in a narrow channel between drying mud flats. In the outer approach, the channel is **buoyed** for a passage south of **Oak Island Bar**, sand, and then NW through **Ship Bar**, to enter **Ship Channel**. Fairway **light buoy** *UH* (921.3) is moored 1 mile east of Oak Island Bar.

81 Oak Island Bar has a least depth of 7 feet (2.1 m), sand, while Ship Bar has a least depth of 14 feet (4.3 m). A sector **light** (924) is shown from a white tower on the south side of the harbour at **Macfarlane Point**. The white sector leads through Ship Channel, which is **buoyed**. **Tidal streams** attain a rate of 1.5 knots in the entrance. The ebb is a little stronger in spring from the snow run-off.

82 Within the harbour, drying flats of stiff, red clay lie on each side of the channel. The land on the south shore rises gradually to the summit of a ridge, 400 feet (122 m) in elevation. A drying middle ground, 0.5 mile west of **Palmer Point**, further narrows the channel width to 300 feet (91 m). From nearly abreast of the middle ground, a narrow channel leads south and east through the drying flats of **Lazy Bay**, which has gypsum cliffs 30 feet (9.1 m) in elevation at its head. A **conspicuous** abandoned lighthouse stands on the north shore of Wallace Harbour, about 0.6 mile WNW of Palmer Point.

83 There is an L-shaped Public **wharf** at the settlement of **Wallace** on the south side of the harbour. There is a least depth of 11 feet (3.4 m) along the 140-foot (43-m) outer face; the wharf extends 394 feet (120 m) from shore. A **light** (925.1) is shown from a skeleton tower on the outer end of this wharf. A **bridge**, with a vertical clearance of 13 feet (4 m), crosses the river at **Betts Point**, 0.5 mile west of the wharf. Wallace has a population of about 250.

Anchorage is available, 18 to 36 feet (5.5 to 11 m), mud, inside the harbour entrance close west of Palmer Point, where the channel is 750 feet (229 m) wide. Fairly safe anchorage may be found in 19 to 27 feet (5.8 to 8.2 m), mud, west of the port hand light buoy *UH5 (921.6)*, off Hortons (Horton) Bank.

Fox Harbour, between Mullins Point and **Mackenzie Point**, consists of a channel through drying flats of red clay and weeds. The entrance is obstructed by a bar with a depth of 1 foot (0.3 m).

Charts 4405, 4406

⁸⁶ The coast between Mackenzie Point and **Pugwash Point** (45°52'N, 63°40'W) is unbroken and composed of clay and sandstone cliffs about 50 feet (15 m) in elevation, rising inland to a ridge 150 feet (46 m) in elevation.

Chart 4498

87 Pugwash Road, at the confluence of Pugwash River and River Philip, lies between Pugwash Point and Lewis Head. Reefs extending from both points reduce the usable area of the road and caution is necessary in the approach. Pugwash Reef dries out for nearly 0.5 mile from Pugwash Point, and its western extent is marked by west cardinal light buoy UN (925.6). Lewis Reef runs north 3 miles from Lewis Head, with patches of 5 and 7 feet (1.5 and 2.1 m). Ballast Ground, 2.5 miles NE of Lewis Head, has patches with 11 and 12 feet (3.4 and 3.7 m); the east edge of the shoal is marked by starboard hand light buoy UK2 (925.2). Fishing Point (local name) is 0.4 mile SW of Pugwash Point. There is an abandoned former light structure situated at the western extremity of Fishing Point. A conspicuous radio tower, about 330 feet (101 m) in elevation, is situated about 2.5 miles SSW of this point, though not shown on Chart 4498.

88 The channel from Pugwash Road into the harbour is marked by leading **lights** and **buoys**. Mariners are **cautioned** that due to shifting sand, the depths in the approaches to Pugwash Harbour may vary considerably from those shown on the chart. There is frequent dredging in Pugwash Road.

89 The outer leading **lights** (939, 940), in line bearing 205°, are shown from skeleton towers having white daymarks with red stripes, situated in the vicinity of **Bergmans Point (Bergeman Point)**.

90 Leading **lights** (927, 928), in line bearing 160½°, lead through Pugwash Road. These are shown from skeleton towers having white daymarks with red stripes, situated on the south shore of Pugwash Road, midway between **Fox Point** and **Biglow Point** (local name).

91 Leading **lights** (931, 932), in line bearing 086½°, lead across **Pugwash Bar**. These are shown from skeleton towers having white daymarks with red stripes, situated on the east shore of Pugwash Road, close north of **Stevens Point**.

92 Leading **lights** (935, 936), in line bearing 350¹/₂°, lead into the entrance to Pugwash River. These are shown from skeleton towers having white daymarks with red stripes, and are situated to the east of Fishing Point.

93 **Pugwash Harbour**, in the entrance to Pugwash River, is small but sheltered. The channel is difficult and the **tidal streams** run up to two knots in the

PUGWASH HARBOUR (2013)



entrance. Just within **Page Point** is a small basin formed by the bend of the river where currents can run up to 4.5 knots. The navigation season is from April to December.

Pilotage is compulsory. Masters of vessels bound for Pugwash shall report via any coastal radio station their ETA to Pilots Pugwash, 12 hours before arrival at the pilot boarding station, which is situated 2 miles north of Pugwash Point. Pilotage arrangements can normally be made through the vessel's local marine agent, or else directly through the *Atlantic Pilotage Authority (APA)*. The *APA* can be contacted by telephone: 1-877-272-3477; or email, dispatch@atlanticpilotage.com.

95 The master of a ship that is to depart or move within the compulsory pilotage area must report to Pilots Pugwash four hours before the ETD.

96 **Pugwash**, population of 736 in 2016, lies on the east side of the harbour. There is a small **hospital** in the village. The K + S Windsor Salt Company wharf at **Oxley Point** is 478 feet (146 m) long on the west face, with a depth of 24 feet (7.3 m) alongside. The south face, 489 feet (149 m) long, has a depth of 20 feet (6 m) alongside, and shoals to 15 feet (4.5 m) at the eastern end. A depth of 11 feet (3.3 m) lies mid-channel, 305 feet (93 m) SW of the east corner. The deck of the wharf has an elevation of 8 feet (2.4 m). A conveyor loading tower is **conspicuous** from the approaches to the harbour. Fresh water can be obtained by tank truck. Fuel and diesel are available. Tug assistance is obtained from local fishermen.

97 A Public **wharf** extends from the west shore of the river. Used by fishermen, it is 200 feet (61 m) long and 40 feet (12 m) wide, with a reported depth of 21 feet (6.4 m) at the outer end. There is a marginal face 105 feet (32 m) long, adjacent, and the wharf has a deck elevation of 4 feet (1.2 m). Close north is a small private **marina**, with floating docks.

98 A **bridge** with a vertical clearance of 12 feet (3.7 m) crosses Pugwash River, east of the Salt Company wharf. Several rock cribs of a former bridge

CAPE TORMENTINE (2013)



extend across the river close west of the bridge. The least depth over the cribs is 1 foot (0.3 m). A channel, 60 feet (18 m) wide and with a depth of 16 feet (4.9 m), leads between two cribs about 300 feet (91 m) south of the old bridge abutment on the north side of the river. Boats can proceed upstream for several miles above the bridge.

99 *Pugwash Yacht Club* lies to the south of the Salt Company wharf, and west of **Chapel Point**.

100 River Philip is obstructed by a drying bar of sand and stones, leaving a narrow tortuous channel on its south side, close north of **Rocky Ledge**, with depths of 4 feet (1.2 m) or less in places. The channel from **Philip Bar** to Port Philip is marked by **buoys** at some of the essential points. Boats can ascend the river for about 9 miles. The river discharges little water, except at the freshet.

101 A **bridge**, with a vertical clearance of 9 feet (2.7 m), crosses the river at **Port Philip**. Underwater **obstructions** from an old bridge are situated close downstream of the bridge. These are not marked and make the channel **hazardous**; local knowledge is essential.

Chart 4406

102 There is a Public wharf at Northport, on the Shinimicas River, near the river mouth. The wharf, which is situated adjacent to the highway bridge, has a total length of 85 m. The south portion, 41 m long, has depths of 0.6 to 0.9 m alongside. The north end of the north portion dries alongside. The bridge has a vertical clearance of 0.9 m, and there is an overhead cable close downstream of the bridge. The narrow channel through mud flats is buoyed, and has a reported depth of 0.3 m. Fairway light buoy UP (940.3) is moored 0.25 mile NE of the entrance to the channel. A concrete launching ramp is located across the river from the Northport wharf.

103Baie Verte, between Coldspring Head andIndian Point, 9 miles north, is completely open to east

winds. There is an abandoned lighthouse on Coldspring Head (45°58'N, 63°52'W). Aggermore Rock, with 5.2 m of water over it, lies 4 miles NNE of Coldspring Head. Laurent Shoal, with depths of 4.9 m, lies close NW of Aggermore Rock.

Spear Shoal, of sand and sandstone, lies 2 miles south of Indian Point, with **Heart Shoal** extending west of Spear Shoal. Both have least depths of 2.4 m.

105 **Tidnish River** enters the bay on the south side, 7.5 miles west of Coldspring Head. There is a narrow boat channel, with depths of 0.6 to 2.1 m, through flats of mud and weeds. Starboard hand **light buoy** *XA2* (1085) marks the entrance to the channel, and the channel is marked by stakes as far as the **bridge**, about 2 miles above the entrance. On the east bank, about 0.4 mile below the bridge, there is a boat launching area.

106 **Gaspereau River** flows into the head of the bay on the north side. Fort Monckton Point $(46^{\circ}03'N, 64^{\circ}04'W)$ is situated at the west entrance to the river. There is a depth of 0.6 m in the boat channel to the bridge at Port Elgin, population 408 in 2016. There is a Public wharf 71 m long, parallel to the channel on the north bank, with a depth of 0.6 m alongside, situated about 1.2 miles from the entrance to the channel. A bridge has a vertical clearance of 1.2 m. Small boats can proceed as far as another bridge 0.2 mile further upstream. A third bridge is situated close west, with fourth bridge 0.3 mile beyond that.

Chart 4905

107 **Cape Tormentine** $(46^{\circ}07^{\circ}N, 63^{\circ}46^{\circ}W)$ is the site of an abandoned terminal of the discontinued ferry service to Prince Edward Island, situated at the village of **Cape Tormentine**.

Tormentine Reef lies 2.7 miles east of Indian Point and part of it dries. **Rock Reef**, an extensive rocky area, lies between Tormentine Reef and Indian Point. Port hand **light** and bell **buoy** *X5* (1089) is moored 3.7 miles east of Cape Tormentine.

109 The ferry terminal **pier** extends about 0.4 mile from the shore and then divides into two arms which form a docking basin. Access to the outer arm of the ferry terminal pier is restricted as of 2013, and that portion of the pier declared unsafe. Two detached **breakwaters**, each 0.1 mile long, lie in a NNE/SSW direction, about 0.1 mile SE of the outer ends of the pier arms. Starboard hand **light buoy** *XD4* (1095.1) is moored north of the northern breakwater, and port hand **light buoy** *XD5* (1096) is moored NW of the southern breakwater. **A light** (1091.5) is shown from a skeleton tower, having green, white and black daymarks, at the NE end of the northern detached breakwater. A **light** (1090) is shown from a white square tower at the outer end of the outer pier. Another **light** (1094) is shown from a mast on the outer end of the inner pier.

111 A Public **wharf**, 91 m long, extends at right angles from the inner arm of the ferry docking basin. The wharf has a depth of 1.2 m alongside. A **breakwater**, situated close to the south, forms a basin for small craft, and a fueling dock is located on the SW side of the basin. A **light** (1094.6) having a green, white and black daymark, is shown from a mast on the outer end of this breakwater.

112 **Submarine cables** are laid across Northumberland Strait between the former ferry terminal and **Amherst Cove** (PEI). Vessels are cautioned against anchoring near these cables.

Cape Bear to Charlottetown

Chart 4404

113 **North side of Northumberland Strait**. — The south coast of Prince Edward Island, from Cape Bear to Wood Islands, is formed of sandstone cliffs, in some places 12 to 15 m in elevation. There are few beaches or landings and no harbours along this very exposed stretch of coast.

Charts 4405, 4940

Wood Islands are separated by the dredged channel leading to the ferry terminal. They present sandstone cliffs to seaward, and the west island is joined to the main coast by a long sand bar with dunes upon it. A **light** (976) is shown at an elevation of 72 feet (22 m) from a white square tower 52 feet (16 m) high on the south side of the island.

115 The terminal for the Wood Islands-Caribou ferry lies in the enclosure between the islands and the connecting sand bar and road. Guard **piers**, each 600 feet (183 m) long, protect the entrance channel which is 200 feet (61 m) wide. Lights (975, 975.1) are shown at the outer ends of the guard piers from skeleton towers, with port and starboard daymarks, respectively. Starboard light buoy NS2 (972.5) is moored about 1000 feet (305 m) south of the east guard pier.

116 The approach to the ferry **dock** is 480 feet (146 m) wide and dredged to a limiting depth of 14 feet (4.3 m). Owing to continuous **silting**, local knowledge is required. There are two ferry

WOOD ISLANDS (2007)



WOOD ISLANDS LIGHT (2005)



berths. On the east side of the ferry wharf, there is a small craft harbour with wharves having depths of 4 to 12 feet (1.2 to 3.7 m) alongside. This is the preferred fishing harbour on the SE part of Prince Edward Island. Fresh water is available. The community of **Wood Islands** has a population of about 200.

117 Two **submarine cables** (telecommunication) are laid across Northumberland Strait between Wood Islands and Caribou West Gully, Nova Scotia.

There is good **anchorage** in NW winds within 1 mile east of Wood Islands in depths of 18 to 54 feet (5.5 to 16.5 m).

Chart 4405

Indian Rocks (45°56'N, 62°47'W) lie parallel to the coast between Wood Islands and Bell Point, 3.3 miles further west, with their south edge being 1.5 miles offshore. The water is deep close south of these rocks, and breakers and rips are almost always present on the drying part. **Tidal streams** in deep water close outside Indian Rocks frequently run at three knots. Starboard hand **light** and whistle **buoy** N8 (977) is moored 2 miles SW of Indian Rocks.

PRIM POINT LIGHT (2005)



the channel between Indian Rocks and the shoal water inshore is 0.5 mile wide, but depths are irregular and **tidal streams** strong and it should only be used by small craft.

121 **Bell Point** is a sandstone cliff 32 feet (10 m) in elevation. **Bell Point Reef** extends 0.7 mile south of the point. The outer edge of the reef is steep-to and should be given a wide berth.

Belle River, 1 mile NW of Bell Point, has a small tidal harbour with a drying bar at the mouth. There are **ruins** of breakwaters on each side of the entrance, and **ruins** of wharves within the harbour. A fish plant is located on the SE bank of the river.

123 **Stuart Point (Stewart Point)** lies close west of Belle River and, from it, **Rifleman Reef** extends 2 miles SW. The soundings off Rifleman Reef are very irregular and deep water close to it gives no warning of the presence of the reef. It should be given ample clearance.

Flat River, 2.5 miles NW of Stuart Point (Stewart Point), is only suitable for small boats. Shoal water extends 1 mile SW from **Big Point (Jenyns Point)**, the SE entrance point of Flat River.

Chart 4466

125 **Pinette River** (46°03'N, 62°56'W) is obstructed by **Pinette Shoals**, which extend 2 miles SW from **Pinette Point**. The river has a **dangerous** bar at its entrance, which dries in places. There is a channel over this bar with a reported depth of 5 feet (1.5 m).

Considerable **silting** has been reported in the approaches to the river; local knowledge is required.

126 **Pond Point** is on the shore north of the entrance to Pinette River. The channel upriver is **buoyed**.

127 **McAuley Wharf** (*local name*), about 1 mile above Pinette Point, has depths of 3 to 7 feet (0.9 to 2.1 m) along its east side, which is 275 feet (84 m) long. A **breakwater** extends east and south of the wharf to form a sheltered inlet.

128 A Public wharf is situated on the south side of the bridge at Selkirk Point, near the settlement of Pinette. The west face, parallel to the channel, is 125 feet (38 m) long with depths of 4 to 10 feet (1.2 to 3 m) alongside. The east face is 100 feet (30 m) long, but was in some disrepair as of 2013. The bridge between these wharves has a vertical clearance of 5 feet (1.5 m).

Hillsborough Bay, 7 miles wide at the entrance, between **Point Prim (Prim Point)** on the SE side and St. Peters Island to the west, opens into a broad expanse of water with many shoals and rocks. The NE part of the bay is seldom used by shipping, except for local fishermen, and its navigation should not be attempted without local knowledge.

130 A deep channel leads from the middle of the bay to Charlottetown, the principal harbour and capital of Prince Edward Island. 131 East side of Hillsborough Bay. — Point Prim (Prim Point) presents low sandstone cliffs 10 to 15 feet (3 to 4.5 m) in elevation to seaward. Prim Reefs extend 2.5 miles west from the point. A light (983) is shown at an elevation of 68 feet (20.7 m) from a white circular tower 61 feet (18.6 m) high on Point Prim (Prim Point) (46°03'N, 63°02'W). Starboard hand light buoy C2 (984) is moored off the west end of the reefs.

132 **Orwell Bay**, the SE arm of Hillsborough Bay, leads to **Orwell River**, **Vernon River** and **Seal River**. From **Cameron Island**, near the north side of Point Prim (Prim Point), the foreshore increases in width until it stretches halfway across Orwell Bay.

133 Boats can ascend Vernon River, through a channel marked by stakes, as far as **Vernon Bridge**, where there is a small floating **wharf** on the west side of the river. There is a staked boat channel up Orwell River for more than 1 mile.

134 **Pownal Bay** is shallow and exposed to west winds. A large part of it dries, but there is some shelter for small craft near its head.

Governors Island, in the middle of Hillsborough Bay, low and partly wooded, is surrounded by shoals, **reefs** and **foul ground**. **Governors Shoals** extends SW from the island for 2.5 miles, with many rocks and hazards. A submerged crib, with 1 foot (0.3 m) of water over it, lies 1 mile SW of the island, and **Fitzroy Rock**, with 20 feet (6.1 m) of water over it, lies nearly 2 miles SW of the south point of Governors Island. **Astyanax Rock**, with a drying height of 2 feet (0.6 m), lies 0.4 mile NNW of the NW point of Governors Island.

Alexandra Bay (Squaw Bay), NE of Governors Island, provides good **anchorage** for small vessels, in depths of 9 to 15 feet (2.7 to 4.6 m), mud. Several **conspicuous** radio **towers** are situated to the NNW of **Alexandra Point (Squaw Point)**. There is a charted safety zone for a land-based firing range to the SW of Alexandra Point (Squaw Point), **caution** is advised.

St. Peters Island is of moderate height and fronted on the east side by cliffs of red clay and sandstone 35 feet (11 m) in elevation. The central part of the island is wooded. **St. Peters Shoals** extend up to 2 miles off the island and **St. Peters Island Bar**, drying 1 to 4 feet (0.3 to 1.2 m), joins the island to **Rice Point** to the NW. **St. Peters Spit** dries for over 1 mile from the NE end of the island. The spit is marked by east cardinal **light buoy** *CJB* (983.5). The unlighted south cardinal **buoy** *CJA* is moored to the south of St. Peters Island. A **light** (1007) is shown at an elevation of 67 feet (20.6 m) from a white tower with a red upper part on the SE side of the island.

St. Peters Road, to the north of the island, is sheltered by the island and spit, but with depths of 9 to 15 feet (2.7 to 4.6 m) it is only suitable as a small vessel **anchorage**. A spire 0.2 mile inland from **Bacon Point**, on the north shore, is **conspicuous**.

Bacon Cove, at the SW end of St. Peters Road, dries at low water. A **buoyed** channel, dredged to a reported depth of 4 feet (1.2 m), leads to *Nine Mile Creek Wharf*, an L-shaped Public **wharf** on the south side of the cove. The wharf has an outer L-end 130 feet (40 m) long with depths of 1 to 3 feet (0.3 to 0.9 m) alongside; it is protected by a **breakwater** 290 feet (88.4 m) long, close SW. A **light** (1006) is shown from a mast, having a red and white daymark, on the outer end of the wharf.

Charts 4466, 4460

140 **Charlottetown**, the principal port and capital of Prince Edward Island, possesses a fine natural landlocked harbour, situated at the confluence of three rivers: Hillsborough River, North River and West River. The city, population 69 325 in 2016, has beautiful parks and fine public buildings, and is built mainly to the west of Hillsborough River, at its junction with North River. The principal exports are agricultural products. There is a *Canada Border Services Agency* office in Charlottetown. A seasonal Inshore **Rescue** Boat, operated by the *Canadian Coast Guard*, is stationed on the Charlottetown waterfront.

141 **Outer approaches.** — The channel leading through Hillsborough Bay to Charlottetown is in two reaches. The outer reach is 0.3 mile wide with a least depth of 36 feet (11 m) in the vicinity of Fitzroy Rock. The remainder of the fairway is wider and deeper.

142 Three sets of leading **lights** mark the channel into Charlottetown. Leading **lights** (991, 992) in line bearing 019¹/₂° are shown from red towers with black stripes at **Haszard Point**, to the west of Alexandra Point (Squaw Point). Starboard hand **light buoy** *C4* (989) is moored SW of Fitzroy Rock, close east of the line of these lights.

143 Leading lights (994, 995), in line bearing 337°, are shown from the east shore of North River at Brighton Shore and lead between Spithead and Alexandra Shoal (Squaw Shoal). The front light is shown from a square tower with a red upper part, and the rear light from a white tower with a red stripe.

Pilotage is compulsory. Masters of vessels bound for Charlottetown must report via any coastal



radio station their ETA to Pilots Charlottetown at least 12 hours before arrival at the pilot boarding station, which is located 5.3 miles SW of Point Prim (Prim Point). Pilotage arrangements can normally be made through the vessel's local marine agent, or else directly through the *Atlantic Pilotage Authority (APA)*. The *APA* can be contacted by telephone: 1-877-272-3477; or email, <u>dispatch@atlanticpilotage.com</u>.

145 The master of a vessel that is to depart or move within the compulsory pilotage area must report to Pilots Charlottetown six hours before the ETD.

Chart 4460

146 Inner approaches. — The entrance to the harbour, between Seatrout Point and Blockhouse Point, is reduced to a navigable width of 0.2 mile by steep-to shoals extending from both shores. A light (993) is shown at an elevation of 18.3 m from a white square tower 12.6 m high, on Blockhouse Point.

147 The channel leads between **Battery Point**, on the east, and **Canceaux Point**, on the west side, into the broad basin of Charlottetown Harbour. Leading **lights** (996, 997), in line bearing 197½°, are shown from white towers with red stripes on the south shore of **Warren Cove**, and as a back-range, lead toward the waterfront.

The **tidal streams** run at a rate of 2.5 knots at the entrance to the harbour and 1.7 knots off the

wharves. The streams continue about 15 minutes after high and low water on the shore.

149 The twin steeples of the Cathedral are **conspicuous** and easily identified. Two other spires are also prominent. A chimney, 63 m in elevation and with red **lights**, is **conspicuous**. A radio **tower**, 80 m in elevation and also with red **lights**, is situated 0.8 mile west of Blockhouse Point. A large hotel on the Charlottetown waterfront is very prominent.

150 There is good **anchorage** in depths of 5.4 to 15.9 m in the area where the three rivers meet. The usual anchorage is off the wharves where the channel is more than 0.2 mile wide with depths of 11.9 to 18.4 m. There is a fuel unloading dolphin located near the centre of the river, 0.2 mile WSW of the centre of the bridge. An **underwater pipeline** runs north from the dolphin to the shore. **Caution** is advised.

151 The *Port Charlottetown Marine Terminal* is 240 m long with an outer face 183 m long with depths of 11.8 to 13 m alongside at the south berth. The east berth has depths ranging from 5.9 to 7.7 m. Water and oil pipelines are laid onto the **wharf**.

152 Mariners are advised that the two mooring bollards adjacent to both the east and west sides of the *Port Charlottetown Marine Terminal* are used for mooring purposes only, and not winching.

153 Close west is a floating **wavebreak** which protects the cove west of the marine terminal, including berths of a private **marina**.

154 The former *Canadian Coast Guard* marine depot **wharf** (*Queens Wharf*) is 107 m long and 91 m wide with a depth of 8.8 m at the outer face.

155 The *Quartermaster* Marina is situated at *Peake's Wharf*, close NE of the former *Coast Guard* wharf. There are 175 berths alongside floating piers with reported depths of 1.2 to 5.2 m alongside. Vessels of up to 17 m in length may be accommodated. Full marina services, including fuel, pump-out, showers and laundry are available. The *Charlottetown Yacht Club* is situated close west of the former *Coast Guard* wharf. There are several floating wharves with depths of 0.6 to 4.9 m alongside. Full marina services are available.

156 Fuel, fresh water and provisions are easily obtained in Charlottetown. Small repairs can be made by local machine shops. Air service is available from Charlottetown Airport, which is located 4 miles north of the waterfront. There is a regional **hospital** located in Charlottetown.

CHARLOTTETOWN HARBOUR (2005)



157 Hillsborough River is navigable for small vessels for several miles above the bridge at Charlottetown. There is a vertical clearance of 4 m under the bridge, which is lighted and has daymarks at the southern approach. The ruins of the former bridge abutments remain in the river. North River and West River are obstructed by causeways about 3 miles above their entrances into the harbour. The channel in the West River is buoyed to the causeway. There is a passage for small craft through the causeways. In West River, the passage is only useable at high water slack. With a rising and falling tide, dangerous tide rips can develop.

Charlottetown to Summerside

Charts 4405, 4406

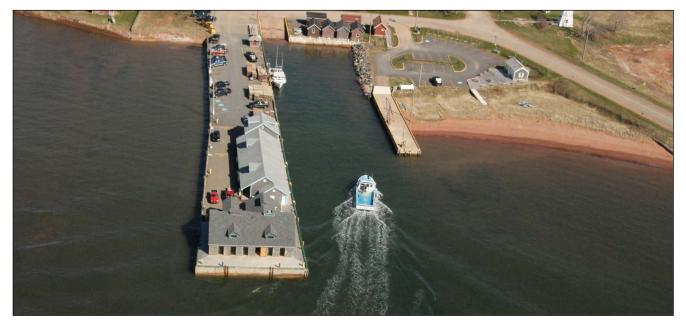
158 From St. Peters Island to Black Point,9 miles WNW, the coast is unbroken, except for the

small indentation of **Canoe Cove**. The **ruins** of a detached breakwater, which dries 3 feet (0.9 m), lie at the entrance to the cove. Small boats can obtain some shelter. A **conspicuous** television **tower**, 1070 feet (326 m) in elevation and with red **lights**, is situated 4 miles NNW of Canoe Cove.

159 **Inman Rock**, with a reported least depth of 4 feet (1.2 m), and **Inman Reef**, with 21 feet (6.4 m), lie 0.8 mile SW and 1.5 miles SSE of Black Point, respectively.

160 Victoria Harbour (46°12'N, 63°29'W) is a small shallow harbour off the mouth of East Branch Westmoreland River (Westmorland River). The harbour is entered between MacIvors Point (Brocklesby Head), situated 2.4 miles WNW of Black Point, and Tryon Shoals. Tryon Shoals dry for over 1.5 miles from the shore. The 3-fathom (5.5-m) line lies 2 miles south of Tryon Head. Starboard hand light buoy N14 (1014) is moored south of Tryon Shoals, 2.5 miles south of Birch Point.

VICTORIA HARBOUR (2013)



161 The village of Victoria, population 119 in 2001, is situated at the mouth of the river. There is a Public **wharf** 400 feet (122 m) long with depths of 4 to 6 feet (1.2 to 1.8 m) along the east face and 5 to 8 feet (1.5 to 2.4 m) along the west face. A **light** (1008.2) is shown from a mast, having a green, white and black daymark, on the outer end of the wharf

162 A **causeway** and bridge span the East Branch Westmoreland River (Westmorland River) about 350 feet (107 m) east of the wharf. The **bridge** has a vertical clearance of 6 feet (1.8 m). A public beach is located 0.2 mile SE of the bridge.



163 The approach to Victoria Harbour is marked by **buoys**. Fairway **light buoy** *NX* (1009.11)

is moored 1 mile south of **Cameron Point**. A beach, comprised of mud and sand, lies on the eastern side of the approach; the NE extent of Tryon Shoals lie on the western side. Both the beach and shoals are submerged at high tide.

164 Victoria Harbour is entered east of **Pauls Bluff**, through a narrow, **buoyed** channel. Owing to changing channel conditions, the **buoys** may be moved to suit the best channel. A tower, resembling a light structure is situated in the village of Victoria.

165**Tidal streams** in the anchorage are weakand irregular, but sometimes reach 1.5 knots for

short periods along the edge of the shoals and in the entrance.

166 Between Tryon Head and **Bells Point**, 4.5 miles west, the coast is indented by three drying coves separated by bluff points.

Chart 4905

167 **Port Borden** is the site of an abandoned terminal for the discontinued ferry service between New Brunswick and Prince Edward Island. The adjacent community of **Borden-Carleton** had a population of 724 in 2016. The community is the terminus of the Confederation Bridge, which crosses the Northumberland Strait from New Brunswick to Prince Edward Island. Fuel and supplies are available in Borden-Carleton.

168 The harbour is formed by a **pier** extending SE from **Borden Point**. A **breakwater** attached to the outer end of the pier runs for 122 m in a SW direction. A **light** (1017.5) is shown from a white tower on the outer end of this pier. A detached **breakwater**, running in a NE-SW direction, lies 0.1 mile SE of the outer end of the pier. A **light** (1015) is shown from a mast at the SW end of the breakwater.

169 A Public wharf, 230 m long with an L-end 18 m long with a depth of 1.3 m alongside, is situated on the north side of the harbour. An F-shaped wharf extends 400 m from shore near **Amherst Point**. The wharf was formerly used in the construction of the Confederation Bridge.

PORT BORDEN (2005)



Charts 4406, 4905

170 Between Borden Point and **Seacow Head**, a low flat point, 6 miles NW, the coast is indented with several coves divided by points of red sandstone and clay cliffs. This portion of the coast is known as **Sevenmile Bay**. There is **anchorage** for small craft, with offshore winds, in fine weather outside of the area described below. A **light** (1018) is shown at an elevation of 27 m from a white tower 18 m high, on Seacow Head.

171 A privately maintained **light** is shown from two masts, with a **no anchorage** symbol, on the shore of a cove 1 mile east of Seacow Head ($46^{\circ}19'N$, $63^{\circ}49'W$). See the information at the beginning of this chapter.

172 **Bedeque Bay**, shallow and open, contains Summerside Harbour and Sunbury Cove. Shallow water extends across the mouth of the bay from Seacow Head and continues along the coast to Cap (Cape) Egmont, 15 miles distant. **Ives Point**, a peninsula extending into the bay on the north coast, is fronted by the extensive **Miscouche Bank**, which dries for nearly 1.5 miles south of the point. A **conspicuous** radio **tower**, with red **lights**, is situated on the east side of Ives Point.

Chart 4459

173 The approaches to Summerside Harbour lie between the east end of Miscouche Bank and the **shoals** extending from the east side of Bedeque Bay off **Salutation Cove**. There is safe summer **anchorage** in 6 m, sand and clay, but open to southerly winds. The shoals and land on both east and west sides of the anchorage prevent heavy seas when the winds are from other directions. Fairway **light buoy** *DE* (1018.3) is moored 2 miles NW of Seacow Head. Port hand **light buoy** *DE1* (1018.18) is moored 2.44 miles SW of MacCallums Point.

174 **MacCallums Point**, 3.5 miles north of Seacow Head, is faced by sandstone cliffs 8 m in elevation. The land rises to 15 m inland. A private residence with a structure resembling a lighthouse, is located on the NW portion of the point.

SUMMERSIDE HARBOUR (2005)



175 A **breakwater** extends from MacCallums Point to the outer end of **Indian Spit**. A **light** (1020) is shown at an elevation of 14 m, from a white octagonal tower 12.9 m high, on an octagonal concrete **pier** at the outer end of the breakwater ($46^{\circ}23$ 'N, $63^{\circ}49$ 'W).

176 **Summerside Harbour** is entered through a narrow dredged and **buoyed** channel which commences about 0.8 mile west of MacCallums Point and leads NE and ENE into the harbour. The channel is reported to be maintained to a depth of 6.7 m. The depth in the turning basin at the end of the channel is reported to be 6.4 m. **Siltation** and infilling is known to occur in Summerside Harbour; **lights** and **buoys** may be moved to mark the best channel. Shoaler depths than charted may be found. **Caution** is advised.

177 **Summerside**, population 16 587 in 2016, is situated on the north side of the harbour. The principal exports are agricultural and fish products. Customs services are available indirectly from a designated central office. *Canada Border Services Agency* can be contacted by telephone at 1-800-461-9999, or via email: <u>contact@cbsa.gc.ca</u>.Navigation is year-round with icebreaker support. Summerside is the location of a *Canadian Coast Guard* station and a **Search and Rescue** cutter, *Cap Nord*. The operation is seasonal, running from April to December.

Pilotage is available but not compulsory. Masters of vessels requiring a pilot should make arrangements through the *Atlantic Pilotage Authority (APA)*, 48 hours tentative, six hours firm before arrival at the pilot boarding station, which is situated about 3 miles west of Seacow Head. Pilotage arrangements can normally be made through the vessel's local marine agent, or else directly with the *APA*. The *APA* can be contacted by telephone: 1-877-272-3477; or email, <u>dispatch@atlanticpilotage.com</u>.

179 The master of a vessel that is to depart or move and requires a pilot must report to the *APA* six hours before the ETD.

180 Leading **lights** (1018.1, 1018.2), in line bearing 029°, are used in the outer approach. Both lights are shown from white square towers having white daymarks with red stripes, situated on the north shore of Bedeque Bay, west of the town. Leading **lights** (1021, 1022), bearing 072°, are used in the main channel. The front light is shown from a skeleton tower having a white daymark with a red stripe near the outer end of the Public wharf. The rear light is shown at an elevation of 24.8 m, from a white square tower with a red stripe, situated on the shore.

181 The red building of the *Prince Edward Island Tax Centre* is a prominent landmark. To the west of this building is a **conspicuous** blue water tank. To the east of this building is a **conspicuous** blue water tank, which is situated 1.2 miles north of the Public wharf. A **conspicuous** red and white **tower**, 31 m in elevation, marked by red **lights**, is located on the top of a building about 0.1 mile north of Queen's wharf. A radio mast, 58 m in elevation, marked by red **lights**, is located nearly 2 miles ENE of Queen's wharf.

182 The Public **wharf** is 350 m long. There are reported depths of 4.2 to 7.3 m alongside. The elevation of the deck of the wharf is 1.2 m. A **water main** is laid onto the wharf, and there is a heated shed.

183 Holman **wharf**, 135 m long and 22 m wide, has depths from 1.5 to 2.4 m along the outer 90 m length on its east side. The approach depth is 2 m, but there is a depth of 1.9 m 50 m east of the outer end of the wharf. SUMMERSIDE HARBOUR — INDIAN SPIT (2005)

A marginal **wharf** with a least depth of 0.9 m joins Holman wharf to the Public wharf.

184 Queen's **wharf**, L-shaped and extending from shore 130 m, lies close west of Holman wharf. There is a least depth of 1.2 m along the east side of the wharf.

185 The Summerside Yacht Club lies close east of the Public wharf. A **breakwater** gives good shelter for small craft in depths of 1.6 to 2.6 m along several floating piers. A **light** (1022.5) is shown at an elevation of 5.3 m from a skeleton tower having a red and white rectangular daymark, with a red triangle in its centre, on the outer end of the breakwater. The light is visible from 269° through west and north to 029°. The Summerside Yacht club operates a full service **marina**, and monitors VHF channels 16 and 68. There is a **launching ramp** at the SE corner of the sheltered basin.

186 Fuel and diesel oil can be obtained by tank truck. Fresh provisions are readily available.

Ice. — The average thickness attained by level shore-fast ice at Summerside is 56 cm with a record maximum thickness of 73 cm (1977). Break-up normally begins during the first week of April with the harbour clear of ice by the fourth week of April. Freeze-up usually begins after the middle of December with a solid ice cover forming before the end of the month. Two to five weeks variation in break-up and freeze-up can occur.

CAP (CAPE) EGMONT LIGHT (2005)



188 The harbour channel turns to the SE just off the Public wharf and a narrow channel over 5.8 m deep extends for 1.5 miles, between **Holman Island** and **McDonald Point**, towards the shallow mouth of **Dunk River**. **Wilmot River** dries at its mouth on the east side of Summerside Harbour.

Summerside to North Cape

Charts 4406, 4905

189 **Sunbury Cove** nearly dries, leaving only a narrow channel through the flats, suitable only for small boats. The twin spires of Miscouche church are **conspicuous** from the cove.

190 From the west point of Bedeque Bay to Cap (Cape) Egmont, shoal water extends off the coast for 1.2 miles to the 5 m contour line. **Fifteen Point** is identified by the **conspicuous** twin spires at **Mont-Carmel (Mount Carmel)**, close to the point. The **ruins** of a breakwater, drying 0.9 m, lie about 0.1 mile offshore and 0.5 mile west of Fifteen Point.

191 **Cap (Cape) Egmont** is a prominent sandstone cliff 15 m in elevation. A **light** (1024) is shown at an elevation of 19.8 m from a white square tower 12.4 m high on the cape ($46^{\circ}24$ 'N, $64^{\circ}08$ 'W). Starboard

WEST POINT BOAT BASIN (2013)



hand **light buoy** *DG2 (1024.5)* is moored 0.25 mile west of Cap (Cape) Egmont.

Chart 4905

192 **Egmont Bank**, a narrow ridge of fine red sand with a least depth of 7.3 m, commences 4 miles SW of Cap (Cape) Egmont and the bank extends 3 miles in a NW direction. There is a channel with depths of 11.9 to 15.5 m between it and the cape. **Conspicuous** microwave **towers**, with elevations of about 69 m and marked by red **lights**, are situated 5 miles NE of Cap (Cape) Egmont.



193Egmont Bay, between Cap (Cape)Egmont and West Point, is an open bight

17 miles across. There is good **anchorage** with offshore winds, but vessels should not approach inside the 10-m line.

194 At Fishing Cove, about 0.5 mile north of Cap (Cape) Egmont, there is a Public wharf 160 m long. A breakwater extends south from the end of the wharf for 138 m. A light (1025.5) is shown from a mast on the outer end of this breakwater. A second breakwater extends to the west for 122 m from the shore, forming an enclosed boat basin with depths of 0.6 to 1.2 m. A light (1025) is shown from a mast on the outer end of this breakwater.

195 Canoe Gully (*local name*), entered1.5 miles north of Red Head, is a narrow, shallow

channel between sand bars which leads to a boat basin at the mouth of **Haldimand River**. Rapid **silting** takes place and the depth in Canoe Gully is only 0.3 m. Inside the boat basin, there are reported depths of 0.3 to 1.2 m between two L-shaped Public **wharves**. Fairway **light buoy** *DH* (1023) is moored off the entrance to Canoe Gully, and the channel into the Gully is **buoyed**.

196 The channel is **buoyed** within Canoe Gully. leading to the wharves. The lights (1026, 1027) are in line bearing 106°, and are shown from skeleton towers, having white daymarks with red stripes. A **light** (1027.31) is shown from a mast, having a green and white daymark, on the outer end of the outer Public wharf.

197 Enmore River and Percival Bay are situated at the head of Egmont Bay. They are approached by very narrow, intricate channels through partly drying flats of sand, clay and oyster beds, extending 1.5 miles from the shore. Fairway light buoy *DJ* (1027.45) is moored off the entrance to Enmore River. The channel is buoyed west of Moores Point. There is an L-shaped Public wharf with a depth of 0.6 m at the end, situated to the SW of Moores Point. A concrete launching ramp is located at the base of the wharf.

198 The entrances of **Brae River**, 4.2 miles NW of **Grande Digue Point**, and **Wolfe Inlet**, on the north shore of Egmont Bay, are obstructed by drying sand bars.

WEST POINT LIGHT (2005)



Charts 4905, 4906

199 West Point consists of sand hills 3.7 m in elevation. A privately maintained **light** (1029) is shown at an elevation of 20 m, from a square tower with black and white bands, on the sand beach at West Point ($46^{\circ}37$ 'N, $64^{\circ}23$ 'W).

200 West Spit, of sand over sandstone, covered in places with only a few metres of water, runs 3.5 miles NW from West Point. It nearly joins West Reef, a narrow rocky ridge with a least depth of 5.5 m, lying 3.5 miles offshore at its north end. The narrow passage between West Reef and West Spit should not be attempted as the soundings are irregular and the tidal streams strong, sometimes reaching a rate of 2.5 knots. The streams cause a heavy sea when running against the wind. Starboard hand light and whistle buoy D8 (1030) is moored on the west side of the reef.

201 A breakwater-wharf and a breakwater extend from the shore

east of West Point and form a boat harbour with a depth of 1.2 m. There is a continuous berthing face of 200 m within the harbour, and a concrete **launching ramp** is situated at the NE corner. A **light** (1028.2) having a red and white daymark with a green square in the center, is shown from a skeleton tower on the outer end of the breakwater-wharf. The *West Point* Marina is operated from this harbour.

SKINNERS POND (2013)



From an area 1 mile north of West Point, to Cape Wolfe, there is a **conspicuous** wind farm. There are 55 turbines dispersed along the shore. None display daytime lights, and some are marked with fixed red **lights** at night, to delineate the extents of the wind farm.

Chart 4906

203 **NW coast of Prince Edward Island**. — From **Cape Wolfe**, 6 miles north of West Point, the coast trends NE for 27 miles to North Cape. Red clay and sandstone cliffs, with stretches of sandy beaches, prevail along this shore. It is prudent to remain to seaward of the 20 m contour line when passing along this portion of the coast.

204 There are few ponds and shallow inlets where boats can obtain shelter, but they are entered through narrow, nearly drying channels in the sandy beaches which shift in heavy weather and sometimes are completely blocked.

December 205 At **Howards Cove**, near **Seal Point**, 1.5 miles NE of Cape Wolfe, there are two **breakwaters** forming a small boat harbour. There is a least depth of 1.2 m in the harbour entrance and 0.6 to 1.2 m along the faces of the **wharves** inside the harbour. A **light** (1032) is shown at an elevation of 14 m from a white tower with a red peak, situated on the shore behind the head of the harbour. A **light** (1031) is shown from a skeleton tower, with a red and white daymark having a red triangle in its centre, on the outer end of the south breakwater. A **light** (1031.5) is shown from a mast on the outer end of the west breakwater. Starboard hand **buoy** DN2 (1027.6) is moored 0.5 mile west of Seal Point.

Miminegash Harbour, at the entrance to **Miminegash Pond**, 12 miles NE of Cape Wolfe, has **breakwaters** protecting its entrance channel. A **light** (1033.5), shown from a skeleton tower having green and white daymarks, is at the outer end of the north breakwater. The channel leads to an inner boat basin, lined with **wharves**. **Miminegash Reef**, a nearly drying ledge of rocks, runs parallel to and 0.5 mile off the shore at the entrance to the pond. Fairway **light buoy** DP (1032.05) is moored to the north of Miminegash Reef. The reef is marked by an east cardinal **light buoy** DPB (1032.35), and a south cardinal **light buoy** DPA (1032.45). (See ENC CA576729)

Pond. A breakwater extends in a westerly direction, protecting an inner entrance, which is flanked by a **pier** to the north, and a **breakwater-wharf** to the south. Depths of 0.8 m can be found in the entrance channel with 1.2 m inside the basin. There is an almost continuous wharf face lining the boat basin. A **light** (1035.5) is shown from a mast on the north breakwater; another **light** (1035) is shown from a mast on the outer end of the south breakwater-wharf. A **launching ramp** is located in the NE corner of the basin.

Cape Tormentine to Point Escuminac

Charts 4406, 4905

Jourimain Island, joined to the mainland by sand bars and marshes, appears as two islands when seen from a distance. Marshes and drying flats bisect the island. The tower of a disused light, white, octagonal and 15.5 m high, is situated on **Cape Jourimain** at the NE end of the island $(46^{\circ}09'N, 63^{\circ}48'W)$.

209 The SE end of **Sand Reef** lies 1 mile NE of the outer **pier** of the former Cape Tormentine ferry terminal. The reef extends NW from this point for 2 miles to **Jourimain Rocks**, with less than 1.8 m over them. The area between Jourimain Rocks and Cape Jourimain is very shallow and **foul**.

210 **Gunning Point** is the north tip of Jourimain Island. **Jourimain Shoal**, a **shoal** patch drying 0.3 m, lies 0.8 mile NW of Gunning Point. 211 There is a Public **breakwater-wharf** 4.5 miles west of Gunning Point, at **Botsford**, but there is a depth of only 0.3 m at the south face of the irregularly shaped structure which is 232 m long. At the inner east end, there is a **launching ramp** and a marginal **wharf** 39.6 m long. A **light** (1097) is shown from a skeleton tower on the outer end of the breakwater-wharf.

212 A privately maintained **light** is shown from two masts, with a **no anchorage** symbol, on the shore near **Murray Corner** ($46^{\circ}10^{\circ}N$, $63^{\circ}57^{\circ}W$). See the information at the beginning of this chapter.

213 **Little Shemogue Harbour** is completely filled with drying flats, except for a narrow, shallow boat channel leading to a small rock breakwater. A boat haulout slip is located at the inner end of the breakwater on the south side. There is extensive **aquaculture** occurring at the head of Little Shemogue Harbour.

214 **Shemogue Harbour**, mostly filled with drying mud flats, has a narrow, shallow **buoyed** channel leading to a small boat **anchorage**.

Chart 4905

215 At the community of **Petit-Cap**, 2 miles NW of the entrance to Shemogue Harbour, there is an irregularly shaped Public **breakwaterwharf**, 253 m long. At the outer part, formed by two L-ends, is a U-shaped basin with a depth of about 1.5 m. The outer L-end is 57 m long. There is a **launching ramp** in the basin. **Lights** (1099.5, 1100) are shown from skeleton towers on the outer ends of the breakwaters.

Cap Pelé (46°14'N, 64°16'W), 4.5 miles WNW of Petit-Cap, is 12 m in elevation. The settlement of **Bas-Cap-Pelé**, part of the village of **Cap-Pelé** (**Cap Pelé**), population 2425 in 2016, is located at the cape. A church tower in the village, 1.5 miles SW of the cape, is **conspicuous** from seaward.

Les is a Public breakwater-wharf with a U-shaped outer end. The main stem is 175 m long with two outer sides 65 and 46 m in length. A breakwater extends from shore to enclose a basin. A launching ramp is situated at the inner end of the breakwater-wharf. A light (1101) is shown on the shore south of the breakwater-wharf, from a skeleton tower with a red and white daymark. Another light (1100.5) is shown from a skeleton tower on the outer end of the breakwater-wharf. Water intake pipes extend from shore near the two fish plants close east of the wharf.

L'Aboiteau, a pond, lies 1.5 miles west of Cap Pelé. The channel in the approach, and in the entrance between two **breakwaters**, is

SHEDIAC HARBOUR — POINTE-DU-CHÊNE (2005)



11 m wide, and has a least depth of 1.5 m. The west breakwater is 85 m long. The east breakwater is 42 m long, and its south end joins a marginal **wharf** which follows the shore to the SSE. Floating wharves extend from shore at the end of the marginal wharf. A **launching ramp** is located at the south end of the pond. The west side of the pond dries. A **light** (*1102*) is shown from a skeleton tower on the outer end of the east breakwater. Fuel is available, and supplies can be obtained in small quantities.

219 There is a Public wharf at **Robichaud**, between the mouths of the **Aboujagane River** and the **Kouchibouguac River**, which enter the sea about 1 mile east of **Pointe aux Bouleaux**. This wharf is about 120 m in length with an L-end 105 m long with a depth of 1.3 m along the inner face. The wharf is protected by a rock **breakwater**. A **light** (*1103*) is shown from a pipe swing pole, having a red and white daymark, on the western edge of the wharf. Another **light** (*1103.5*) is shown from a mast on the eastern extremity of the wharf A small boat haulout is located on the east side of the wharf. There is a second wharf, 76 m long with a depth of 1.5 m, on the east side of Kouchibouguac River, adjacent to the highway **bridge**. The wharf appeared to be in some disrepair in 2013. Starboard hand **light buoys** *XK2* and *XK6 (1102.3, 1102.5)* are moored 0.35 mile NNW of the wharf at Robichaud.

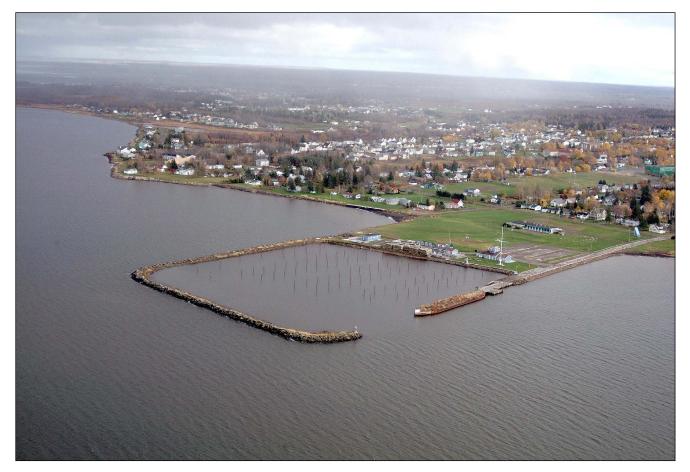
Charts 4905, 4909

220 **Shediac Bay** ($46^{\circ}16'N$, $64^{\circ}30'W$) is shallow, with depths of 6 m in most of the area of the bay. It is only suitable for small draft vessels. **Shediac Island** occupies much of the bay. The passage west of the island has very little depth, with only 0.3 m of water in the narrowest part. There are staked oyster beds in the passage.

221 **Shediac River** flows into the bay west of Shediac Island. A staked channel leads to a small **wharf** situated close east of a highway **bridge** crossing the river at **Shediac Bridge**.

222 **Shediac Harbour** has a least depth of 2.7 m between **Pointe du Chêne**, on the mainland, and

SHEDIAC BAY MARINA (2005)



Snake Point, the south end of Shediac Island. The head of the harbour, south of Shediac Island, has depths of 1.5 to 3 m in the centre, with good anchorage and shelter for small craft. Shediac Harbour is generally closed by ice from the first week of December to early April.

223 The Scoudouc River flows into Shediac Harbour at its southern extremity. A staked channel passes under a highway bridge, which has a clearance of 2.4 m.

224 Medea Rock, at a depth of 2.1 m, lies about 2 miles NE of Pointe du Chêne. Zephyr Rock, 1 mile west of Medea Rock, has 2.4 m of water over it. Chêne Bank extends 0.6 mile north from Pointe du Chêne. It is reported that the best approach is from the north by following the **buoys**, which lead through the best channel. Medea Rock and the shoals south of it make the approach from the east dangerous, except for small craft.

Fairway light and bell buoy XN (1105) is moored 225 at the outer end of the north channel into Shediac Bay, 2.9 miles NE of the wharf at Pointe du Chêne. Buoys

lead through the north channel into the inner channel and Shediac Harbour.

Caution. — Lights, buoys and beacons 226 may be moved to suit changing conditions. The channel is only 0.1 mile wide off the NW edge of Chêne Bank; light buoys mark the channel into the harbour. The deeper part of the harbour is unsafe in NE gales experienced in autumn and swells may also enter the harbour at high water in a NE summer storm.

Chart 4909

The Public wharf at the village of 227 Pointe-du-Chêne has an outer face 150 m long with depths of 3.3 to 5.2 m alongside. The elevation of the wharf deck is 0.9 m. Southwest Pier, with an earth deck, extends from the south side of the Public wharf. Submerged and above water ruins extend more than 30 m off the outer end of the pier.



228

A boat basin, protected by the Public wharf and entered through a narrow gap



between boulder **breakwaters** on the north side, has depths of 0.8 to 2.5 m. Inside this basin, *Pointe-du-Chêne Yacht Club* operates a **marina**. There are 125 berths, and full marina services are available. A **launching ramp** is located on the west side of the basin. A **light** (*1110.5*) shown from a skeleton tower having a red and white daymark, is situated on the north end of the Public wharf. A **light** (*1111.1*) is shown from a mast having a red triangular daymark, on the outer end of the breakwater extending east from the Public wharf.

229 The *Canadian Coast Guard* seasonally operates an Inshore **Rescue** Boat from the wharf at Pointe- du-Chêne.

230 A channel, dredged to a depth of 1.5 m, leads to a boat basin and Public **wharf** at the town of **Shediac**, population 6664 in 2016, 1 mile SW of Pointe-du-Chêne. The boat basin is protected by an L-shaped boulder **breakwater**, 2.4 m in elevation, and a sunken barge close off the outer end of the Public wharf. A **light** (1111.5) is shown from a mast, having a green and white daymark, on the outer end of the breakwater. The Public wharf has a depth of 0.9 m on its west side. Shediac Bay Yacht Club and **marina** operates from the basin. There are 162 berths for small craft.

231 **Cap de Caissie** $(46^{\circ}19'N, 64^{\circ}31'W)$ is situated on the north side of Shediac Bay, about 2.5 miles NNE of Shediac Island. **Grande Digue Bank** *(local name)*, with a least depth of 3.7 m, extends 2 miles NE from Cap de Caissie. A former light structure is visible on the cape. 232 A boat harbour is situated about 0.4 mile south of Cap de Caissie. The opening into the basin is 16 m wide. A **light** (1112) is shown from a skeleton tower on the outer end of the north breakwaterwharf. There are depths of 0.3 to 1.5 m along the inside faces of the north and south Public **breakwater-wharves**. The north breakwater-wharf, L-shaped, extends 80 m from shore, to an L-end 40 m long. The south breakwater-wharf extends 105 m from shore. A **launching ramp**, 6.7 m wide, is located at the head of the boat harbour.

233 **Cocagne Harbour** (46°21'N, 64°35'W) is very shallow and suitable only for small craft; local knowledge is essential. The harbour is sheltered by **Cocagne Island** and a series of sand bars, partly dry at low water, which stretch from the north end of the island to the mainland. The island is 18 m in elevation and wooded. Fairway **light buoy** XT (1113.01) is moored 1.7 miles ENE of the island.

234 Leading **lights** (1116, 1117) lead through the entrance channel. The front light is a white square tower with a red stripe, and the rear light has a white daymark with a red stripe. These are situated on the south side of the mouth of **Cocagne River**. The channel is **buoyed** and staked. A **bridge**, with a vertical clearance of 2.5 m, crosses the river at the head of the harbour. The river is navigable for boats several miles upstream.

Cocagne is situated on the peninsula on the east side of the harbour. Two **breakwaters** form a

BUCTOUCHE HARBOUR (2013)



small boat basin having depths of 0.6 to 1.6 m, situated almost 1 mile SW of **Pointe aux Renards**. On the north side of the boat basin is a marginal **wharf** 60 m long, from which floating wharves extend 85 m south. A Public **wharf** is located on the east side of the basin. A **light** (1114) is shown from a skeleton tower with a red and white daymark having a green square in its centre, on the south end of the outer breakwater. A full service marina, the *Cocagne Cape* Marina, operates from this boat basin.

236 The settlement of **Côte-d'Or** is situated on the west side of the harbour. There is a wharf in **ruins** and several buildings of a fish plant located at the point. A water **intake pipe** extends 175 m NW of the wharf in ruins.

237 The *Cocagne* Marina is situated on the north side of the Cocagne River, close upstream of the highway **bridge** which has a vertical clearance of 2.5 m. An L-shaped **breakwater**, protecting the marina, extends 145 m from the shore, with an L-end 192 m long. It is a full service marina, with 65 berths. Supplies are available locally.

Buctouche Outer Bar extends 7 miles north from abreast of Cocagne Island, parallel to the coast. Depths run from 3 to 5.8 m. **North Patch** is at the NE end.

239 The settlement of **Cormierville** is situated 1 mile NW of Cocagne Island. A **breakwater** extends in an easterly direction to form a protected boat harbour. An L-shaped Public **wharf**, with an outer end 72 m long, extends from the shore close north. There are several small **piers** extending from the main wharf and adjacent wharf faces. There are depths of 0.9 to 1.4 m alongside these wharves. The channel leading to the wharf has a depth of 0.6 m. A **light** (*1118.5*) is shown from a skeleton tower on the wharf.

240 **Dune de Buctouche**, a partially grass covered narrow isthmus of sand and clay, extends 5.5 miles in a SE direction from the mainland, north of the mouth of Buctouche River, and forms a shallow bay inside it. Much of this bay is filled with extensive flats of mud and eel grass which nearly dries at low water. This bar is subject to continual change due to the action of sea and wind. **Buctouche Road**, within Buctouche Outer Bar, is only 0.6 mile across at its widest and deepest part, where a depth of 6 m can be found. In spite of some shelter from seaward provided by Buctouche Outer Bar, it is a very exposed **anchorage**.

241 A light (1122) is shown at an elevation of 11 m from a white tower, on the south end of the Dune de Buctouche ($46^{\circ}28$ 'N, $64^{\circ}37$ 'W). East Cardinal light buoy XVA (1119.2) is moored 0.8 mile, ESE of the light on the dune.

242 Saint-Thomas-de-Kent is a settlement on the SE side of the entrance to Buctouche Harbour. An L-shaped Public wharf is situated at Crossman Point (local name), 1.7 miles SE of Dixon Point. The wharf extends 126 m from the shore to an outer face

BUCTOUCHE MARINA (2005)



109 m long with a depth of 0.9 m alongside, and there is a **launching ramp** at the base of the wharf. A **light** (1119.5) is shown from a skeleton tower on the outer end of the wharf.

243 Buctouche Harbour and Buctouche River.
— South of the end of Dune de Buctouche, there is a narrow buoyed channel leading through the shoals to the town of Bouctouche, population 2361 in 2016, about 5 miles from the entrance. A white coloured water tower, 62 m in elevation, is situated in the town and is conspicuous from seaward. A church, with a spire having an elevation of 53 m, is situated close west of the Public wharf. A hospital is located at Sainte-Anne-de-Kent, about 5 miles from Bouctouche.

244 A **buoyed** channel leads through **Baie de Buctouche** to Buctouche Harbour, west of Dune de Buctouche. **Dixon Point** is on the south side of Buctouche Harbour, **Pointe à Jérôme** is on the north side. The inner channel is very narrow in places; **caution** is advised.

245 **Priest Point**, with a low sandy spit extending SW, lies on the north side of the inner channel.

246 **Caution** is advised with regard to the numerous **aquaculture** installations which line Buctouche Harbour.

247 A Public **wharf** 67 m long with a depth of 6.7 m alongside is situated on the north side of the **Buctouche River**, just below the highway **bridge**. The elevation of the deck of the wharf is 1.2 m. At the south end, there is a boat **launching ramp**. 248 Bouctouche Marina (Sawmill Point Boat Basin) lies on the north side of the harbour, 0.4 mile NE of the highway **bridge**. A **breakwater** 220 m long protects several finger piers. It is a full service **marina**.

Chart 4905

249 **Saint-Édouard-de-Kent** is a community situated about 6 miles NW of Dune de Buctouche. An L-shaped **breakwater-wharf** encloses a boat basin with depths of 1.2 m. A **light** (*1126*) is shown from a skeleton tower, having a red and white daymark, on the outer end of the wharf.

250 **Rivière Chockpish**, 2.6 miles north along the coast from Saint-Édouard-de-Kent, affords shelter to boats in the shallow river mouth. **Breakwaters**, 12 m apart, form the entrance into the river, where there is a depth of 1.1 m. A **light** (*1127*) is shown from a mast on the outer end of the north breakwater. A second **light** (*1127.2*) is shown from a mast, having a green, white and black daymark, on the outer end of the south breakwater.

251 Two marginal Public **wharves** are situated below the highway **bridge** — one on each side of the river. A **launching ramp** is located at the west end of the wharf on the south shore. A floating **wharf** runs along the shore, close SE of the highway bridge.

Chart 4909



252 **Richibucto Cape** (46°40'N, 64°43'W) is a sandstone and clay cliff 9 m in elevation, situated

RICHIBUCTO CAPE (2005)



13 miles north of Dune de Buctouche. A **light** (1128) is shown at an elevation of 18 m, from a white square tower on the cape.

253 At Richibucto Cape, there is a small boat basin with an entrance 23 m wide at the SE corner of the **breakwaters** enclosing the basin. A **light** (1129) is shown from a mast on the outer

RICHIBUCTO HARBOUR — ENTRANCE (2005)



SE end of the breakwater. The basin is divided into two parts by a centre **pier** 61 m long, and there are marginal wharves around its perimeter. There are depths of 1.3 to 1.8 m in the basin. Gasoline and diesel fuel are available and a **launching ramp** is situated at the inner end of the harbour. **Silting** occurs in the harbour and approach channel, and local knowledge is essential.

254 **Richibucto River** enters Northumberland Strait 5.5 miles NW of Richibucto Cape. The entrance, **Richibucto Gully**, lies between two sand spits, **North Richibucto Dune** and **South Richibucto Beach**, each several miles in length and with sand dunes over 9 m in elevation. The **buoyed** channel over **Richibucto Bar** is narrow and shifts with the action of gales and ice. Local knowledge is essential and local pilots are available. Fairway **light** and bell **buoy** *Q* (1131) is moored 2 miles from the entrance to Richibucto River.

255 Within the entrance, **Richibucto Harbour** widens into an expanse of nearly drying mud and weeds. On the north side, a shallow bay leads to lagoons lying within North Richibucto Dune, and on the south side, within South Richibucto Beach, is **Baie du Village**, with **Indian Island** dividing the two. **Aquaculture** installations are common in the bays, coves and along the shoreline of this area. **Caution** is advised.

Richibucto, a town with a population of 1266 in 2016, is situated on the west side of the river, 3.5 miles from the entrance. The **buoyed** channel leading to the wharves from the entrance is intricate and marked by

RICHIBUCTO (2013)



leading **lights**. Owing to changing conditions, the leading **lights** and **buoys** are moved to mark the best channel.

257 The first leading **lights** (1142, 1143), in line bearing 046°, are situated on the west side of North Richibucto Dune. The lights are shown from skeleton towers, having red daymarks with white vertical stripes.

258 The second leading **lights** (1145, 1146), in line bearing $065\frac{1}{2}^{\circ}$, are situated on the west side of South Richibucto Beach. The lights are shown from skeleton towers having red daymarks with white vertical stripes.

259 The third leading **lights** (1151, 1152), in line bearing $227\frac{1}{2}^{\circ}$, are situated in Richibucto. The lights are shown from skeleton towers having white daymarks with red vertical stripes.

260 The Public **wharf** at Richibucto is 229 m long at the outer face, parallel to the channel, with depths of 4.3 to 6.2 m alongside. The elevation of the deck is 2.1 m. A **light** (*1152.5*) is shown from a mast having a green, white and black daymark, at the north end of the wharf. Inside the wharf is a protected boat basin with depths of 0.7 to 2.1 m.

261 The full-service *Richibucto* Marina is located along the west shore of the above-mentioned boat basin. There are 60 berths at a series of floating wharves.

262 Forbes wharf, a Public **wharf** used by fisherman, is situated close south of the main wharf. It extends 135 m from the shore to an outer end 40 m wide. There are depths of 1.4 m along the north face, 3.8 m at the outer end, and 1.5 m along the south face. A **launching ramp** is located on the south side. Fresh water is available.

263 Close south of Forbes wharf is a second protected boat basin, sheltered by a floating wave break. Floating wharves are located in the basin, with depths of 1.3 to 2.5 m alongside. A marginal **wharf** and a fuel dock are located along the western shore, having depths of 1.3 m alongside. A **light** (1141) is shown

from a mast having a green, white and black daymark, on the north end of the outermost floating wharf, at the entrance to the basin.

264 A narrow channel, **buoyed** in places, leads through **Northwest Branch** of Richibucto Harbour. **Pointe de l'Église** extends from the south shore. A **marina** is operated from a small craft basin formed between a **breakwater** and a small L-shaped **wharf**, situated on the west side of the point. The entrance to the basin has a limiting depth of 1.2 m. There are several small finger **jetties**.

Chart 4906

265 Between Richibucto Gully and **Pointe de Pruche**, almost 16 miles to the north, the water is shallow and **foul** for a considerable distance offshore. The coast is low, with sand bars and beaches enclosing extensive shallow lagoons, through which rivers flow. NE gales send a heavy swell to the shore.

266 Kouchibouguacis River discharges into Baie de Saint-Louis. Goulet de Terre-Noire is the main entrance to the lagoon from seaward. Fairway light buoy XX (1152.8) is moored about 1 mile ENE of the entrance to Goulet de Terre-Noire. Buoys mark the channel, but the depth over the bar and into the lagoon is variable, with less than 0.9 m in places.

267 At **Cap-de-Saint-Louis**, about 1.5 miles up the Kouchibouguacis River, there is a small craft basin that is used by shallow draft fishing vessels.

Kouchibouguac River, after flowing for more than 1 mile through an extensive nearly drying lagoon named **Kouchibouguac Bay**, enters the sea through sand bars at **Little Gully**. The sand bar at the entrance, with a depth of about 0.5 m, frequently shifts in easterly gales. The channel is at all times narrow and intricate, and should not be attempted without local knowledge. It is reported that there may be unmarked rocks in the channel through Kouchibouguac Bay; **caution** is advised. 269 On the north side of the entrance to the Kouchibouguac River, at the entrance to the lagoon, there is a Public **wharf** at **Loggiecroft**. At the eastern extreme, there is an L-shaped **breakwater-wharf** extending 65 m from the shore to an outer end 24 m long with a reported depth of 1.2 m alongside. A marginal face, having a **launching ramp** in its centre, runs 125 m to the SW, with depths of 1.2 to 1.7 m. Close SW, there are three floating wharves, each about 45 m long, which extend from the shore.

The entrance to **Rivière au Portage**, about 5 miles SW of Pointe de Pruche, offers a shallow harbour for small boats. The channel into the lagoon at the river mouth has a depth of 0.4 m.

271 At the settlement of **Pointe-Sapin**, 1 mile SW of Pointe de Pruche, there is a harbour for fishing boats. **Siltation** is known to occur around Pointe-Sapin, **caution** is advised. The entrance into the basin between two **breakwaters** is 21 m wide. A detached **breakwater** is located about 76 m to the south of the east breakwater. A **light** (1161.2) is shown from a skeleton tower, having a red and white daymark, at the outer end of the east breakwater. Another **light** (1162.3) is shown from a skeleton tower, having a green and white daymark, on the SW corner of the east breakwater. A third **light** (1159.5) is shown from a skeleton tower, having a red and white daymark, situated on the SW end of the detached breakwater. (See ENC CA576727)

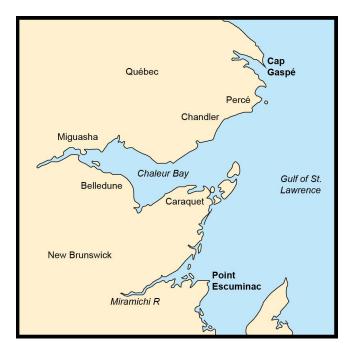
A sector **light** (1159.6) is shown from a skeleton tower to the NE of Pointe-Sapin harbour. The white sector indicates the preferred approach.

273 The church at the village is **conspicuous**.

274 The coast between Pointe de Pruche and Point Escuminac, 6 miles to the north, is low, and shallow water extends some distance from it. **Sapin Ledge** *(local name)*, with a least depth of 3.7 m, lies 2 miles east of Pointe de Pruche. Port hand **light buoy** *X25 (1161.5)* is moored east of the ledge.

Chapter 4

Gulf of St. Lawrence — West Shore Point Escuminac to Cap Gaspé



Miramichi Bay

Charts 4024, 4911, 4912

Miramichi Bay, 14 miles wide at the entrance, is separated from Miramichi Inner Bay by a chain of low, sandy and partly wooded islands which stretch across the bay in a broken curve from south to north shores. Miramichi Bar, of sand, extends off these islands to a maximum distance of three miles seaward, with very little water over it in places. From the outer bar, narrow and shifting channels wind 26 miles through the inner bay and Miramichi River to the ports of Chatham and Newcastle.

Tides and tidal streams. —

Because of the shallow nature of the bay, estuary and river, local weather conditions can at times cause observed water levels to differ from those predicted in the *Canadian Tide and Current Tables* by up to plus or minus 0.5 m, or more. Differences of more than 1 m may sometimes occur.

3 Tidal streams typically have rates of 1 to 1.5 knots in the outer bay, but can increase up to 2 to 3.5 knots or more in the narrows between islands. With respect to tides, both the rate and direction of the streams can be greatly affected by winds.

Pilotage is compulsory in all navigable waters within a line drawn from Pointe Morin $(47^{\circ}13 \text{ 'N}, 65^{\circ}06 \text{ 'W})$ to the north end of Portage Island, then on a bearing of 114° to $47^{\circ}07^{\prime}30^{\prime\prime}N$, $64^{\circ}47^{\prime}W$, and then on a bearing of 191° to Point Escuminac light.

5 Between April 16 and December 10, masters of vessels bound for ports within the compulsory pilotage area must report via any coastal radio station their ETA to Pilots Miramichi at least 12 hours before arrival at the pilot boarding station, which is located three miles NNE of Point Escuminac.

⁶ Between December 11 and April 15, pilots for Miramichi board at the southern Strait of Canso boarding station in position $45^{\circ}24$ 'N, $61^{\circ}01$ 'W. Masters of vessels must report their ETA to Pilots Cape Breton at least 24 hours before arrival at the pilot boarding station.

ESCUMINAC (2013)



7 The master of a vessel that is to depart or move within the compulsory pilotage area must report to Pilots Miramichi 4 hours before the ETD.

8 **Caution**. — Due to increased infilling, **buoys** may not provide the degree of accuracy required by mariners navigating the Miramichi River system. Various *Navigational Warnings* are in effect regarding depths in the area. Further commercial usage of this channel in its current condition is solely at the discretion of vessel masters who are requested to exercise extreme **caution** and monitor for the issuance of new *NAVWARNS*.

9 **Ice**. — Miramichi Bay and Miramichi River are open to navigation all year round, however, ice may hinder navigation during the winter months. Icebreaker assistance is available if required.

10 **Caution**. — *Canadian Armed Forces* air-to-air firing area CYD 705 lies off the north approach to Miramichi Bay. For other details, consult the annual edition of *Canadian Notices to Mariners*.

Buoys, leading **lights** and beacons may be moved or altered to suit the changing conditions in the channels. **Silting** takes place in the fairway and depths may vary from those shown on the chart.

12 Aquaculture. — The waters in and around Miramichi Bay, as well as its coves and shorelines, sustain many aquaculture operations. Mariners are **cautioned** that these can present surface **dangers** and underwater hazards, both of which can result in **fouling**.

Chart 4911

13 South shore of the outer bay. — Point Escuminac $(47^{\circ}04'N, 64^{\circ}48'W)$ is a low sandstone cliff, wooded on top. Escuminac Reef extends north and east from the point.

14 Point Escuminac light (1163) is shown at an elevation of 22 m from a white hexagonal tower. The light is obscured between the bearings of 110° and 120°. A fog signal of two blasts every minute is sounded from a horn situated close to the light. Two radio towers, 80 and 40 m in elevation, stand close W and SW, respectively. Port hand light buoy X31 (1162) is moored 2.8 miles north of Point Escuminac.

IDENTIFY and SET UP: 15 The village of **Escuminac** has a Public boat harbour with two boat basins, formed by **wharves** and **breakwater-wharves**. A **light** (*1165.9*) is shown from a mast at the western end of the outer breakwater. A second **light** (*1165.8*) is shown from a skeleton tower having red and white daymarks, on the end of the wharf close south of the outer breakwater. There is a marginal **wharf** and **launching ramp** at the southern edge of the south boat basin. Depths in the boat basins range from 0.6 to 1.9 m.

16Huckleberry Gully, the main entrance toBaie Sainte-Anne, lies 6 miles west of Point

Escuminac between Huckleberry Island, 10 m in elevation and partly wooded, and Preston Beach. The channel is marked by **buoys** and has a least depth of 0.3 m. The channels within Baie Sainte-Anne are staked or buoyed, but they are narrow, shallow and intricate.

There are **ruins** of a wharf at the community 17 of Baie-Sainte-Anne, on the SE side of the bay. The twin spires of the church in the community are **conspicuous**.

There is a launching ramp situated at the highway 18 bridge at the mouth of Eel River, at the south end of Baie Sainte-Anne.

There is an L-shaped Public **wharf** at the 19 settlement of Hardwicke near the NW side of Baie Sainte-Anne. It is situated close below the highway bridge crossing the French River. The outer face is 56 m long and 10 m wide with a depth of 0.9 m alongside. A launching ramp is located close west of the stem of the wharf, and there are floating wharves to the east. The channel is staked as far as the bridge.

20 Ship Channel is the deepest passage leading to Miramichi Inner Bay. The dredged channel, marked by buoys and leading lights passes between Miramichi Bar and Fox Island. The Lump is a shoal at the SE end of the channel. Spit Shoal extends from the NW end of Fox Island.

21 Portage Island Channel joins the north part of Ship Channel. Fairway light buoy ME (1173.91) is moored at the entrance to Portage Island Channel.

Ship Channel is entered at its south end over 22 Outer Bar. Fox Island South leading lights (1170.5, 1170.6), in line bearing $248\frac{1}{2}^{\circ}$ and shown from skeleton towers having red daymarks with black stripes on the south end of the island, mark this approach.

Strong **tidal streams**, with rates as high as 23 3.5 knots, are known to flow in and out of Miramichi Bay, between Portage Island and Fox Island.

The navigation channel in Miramichi Bay is 24 **buoyed**, but mariners must refer to up-to-date navigation products, as there are frequent aids to navigation changes in this area.

Charts 4911, 4912

Miramichi Inner Bay — Channels. 25 — The main entrance to the inner bay leads between Fox Island and Portage Island and follows across Horse Shoe Bar and Grand Dune Flats, towards the estuary of Miramichi River. Oak Channel and Sheldrake **Channel** lead into the river. A yellow steel **pile**, 4 m in elevation, is situated 0.2 miles west of the NW end of Fox Island.

26 Horse Shoe Bar range beacons, in line bearing 044¹/₂°, are situated on the south end of **Portage** Island. A day beacon, having rectangular daymarks visible at 2.5 miles, is also situated on the south end of Portage Island.

Grand Dune Outer leading lights (1187, 27 1187.1), bearing 102°, and Grand Dune Flats leading lights (1196, 1197), bearing 282°, are in coincidence through the Grand Dune Flats channel. The Grand Dune Flats lights are situated on the mainland west of Grand Dune Island. The front light of the Grand Dune Outer leading lights is situated on a pier south of the NW end of Fox Island. The rear light is situated in the centre of the island. All lights are shown from skeleton towers having red daymarks with black stripes.

South shore of Inner Miramichi 28 Ŀ Bay. — Bay du Vin provides good anchorage for small vessels, in 5.6 m, mud, west of Bay du Vin Island. An obstruction, a wooden pile with a depth of 4 m over it, lies 1.6 miles NW of the SW end of the island.



Bay du Vin Harbour, on 29 the south side of Bay du Vin Island, is sheltered from all winds, and the small anchorage area is deep. Strong tidal streams, with a rate at times in excess of 4.5 knots, flow through the harbour. Gardiner Spit, of sand, extends north from Point Gardiner into the

30 A sector light (1191) is shown at an elevation of 9.5 m from a skeleton tower with a red and white rectangular daymark, situated on the south side of the island opposite Point Gardiner. The white sector indicates the preferred channel from the SW.

Chart 4912

harbour.

Bay du Vin River, in the SE corner of the 31 bay, has depths of 1.2 to 1.8 m in the entrance. There is a Public wharf with a depth of 0.9 m alongside, at the bridge about 0.5 miles above the river mouth.

Black River flows into the SW corner of the 32 bay. A narrow and twisting channel, marked by stakes, has a depth of about 1.8 m as far as a bridge which is in ruins. Caution is advised, as the ruins remain in the river.

MIRAMICHI RIVER — SHIPPING CHANNEL (2005)



Miramichi River

33 The passage to **Miramichi River** from Miramichi Inner Bay continues through **Middle Ground** and Oak Channel. A maximum **speed limit** of 7 knots is in effect for the Miramichi River above port hand **light buoy** *M37* (*1199*), which is moored south of **Oak Point** (47°07'N, 65°16'W).

Anchorage grounds are scarce for large vessels because of the narrow channel in most parts of the river. Good anchorage grounds lie off the SW part of Portage Island in Miramichi Inner Bay. Vessels should wait in this anchorage for good weather before proceeding inward or outward.

35 Moody Point leading **lights** (1198.8, 1198.9), in line bearing $257\frac{1}{2}^{\circ}$, are shown from skeleton towers having red daymarks with black stripes, situated on the north shore near Moody Point.

36 Oak Channel leading lights (1200, 1201), in line bearing 223°, are shown from skeleton towers having red daymarks with black stripes, situated on the south side of the river west of Napan Bay.

37 *Oak Point* leading **lights** (1202.5, 1202.6), astern bearing 024°, are shown from skeleton towers having red daymarks with black stripes, situated on the north shore in the vicinity of Oak Point.

38 Grant Beach leading **lights** (1207, 1208), in line bearing 278°, lead through Sheldrake Channel. Both lights are shown from skeleton towers having red daymarks with black stripes, situated on the north shore.

39 Lower Newcastle leading **lights** (1209.5, 1209.6), in line bearing $256\frac{1}{2}^{\circ}$, are shown from

skeleton towers having red daymarks with black stripes, situated on the north shore.

40 St. Andrews Bank leading **lights** (1208.8, 1208.9), in line bearing 248°, are shown from skeleton towers having red daymarks with black stripes.

41 Leggett Shoal leading **lights** (1209.7, 1209.8), are in line astern bearing $043\frac{1}{2}^{\circ}$. The front light is shown from a mast, and the rear light is shown from a skeleton tower. Both lights have red daymarks with black stripes, and are situated on the north shore near Lower Newcastle.

42 Millbank leading **lights** (1212.5, 1212.6), in line bearing $252\frac{1}{2}^{\circ}$, are shown from skeleton towers having red daymarks with black stripes, situated on the north shore of the river, NW of Middle Island.

43 **Middle Island** is joined to the south shore by a **causeway**, and restricts the channel to the north side of the river.

44 The wharf at **St. Andrews Point** is L-shaped with an L-end 60 m long. There are depths along the L-end of 0.9 to 1.5 m. The outer end is **foul** and there is no berth along the stem. A **launching ramp** lies close to the SW.

45 There is a privately owned T-shaped **wharf** on the north shore below Millbank, with a least depth of 5.8 m along the 105 m outer face. The elevation of the deck of the wharf is 1.2 m.

46 The community of **Chatham** stretches along the south bank of the river, commencing above Middle Island and extending along the shore for about 1.5 miles. In 2016, Chatham had a population of 511. There is sufficient channel width off the town for **anchorage**.



MIRAMICHI — CHATHAM MARINE TERMINAL AND STATION WHARF MARINA (2005)

47 **Tidal streams**. — The average duration of the flood tide at Chatham is 5 hours 45 minutes, and the ebb, 6 hours 40 minutes. The average rate of the flood stream is 1 knot, and that of the ebb, 2 knots. At times the rate may be greater.

A bridge with a vertical clearance of 35 m crosses the river 1.7 miles upstream of Middle Island. The width between supporting piers on each side of the channel is 152 m. The channel under the span is marked by lights. The supporting piers are marked by lights (1215.5, 1215.6). A submarine cable is laid across the river, close upstream of the bridge.

49 The former *NB Power* oil wharf, 0.5 miles SW of Middle Island, is derelict.

50 The *Chatham Marine Terminal* at Chatham, 0.4 miles upstream of the *NB Power* wharf, has a berth 170 m long, with a least depth of 7 m alongside. The wharf deck has an elevation of 1.8 m. There is a warehouse on the wharf. Charted **ruins** extend from the SW end of the wharf, **caution** is advised.

51 Station Wharf Marina, 0.4 miles upstream of the Chatham Marine Terminal, has a wharf face 136 m long with a least depth of 6.7 m alongside. It is a full-service marina; there are several finger piers, including a number for transient boaters.

52 Chatham is a parish of the larger **Miramichi** city area. Miramichi had a population of 27 523 in 2016. Fuel and fresh water are available at most wharves and marinas in this area, and fresh provisions are plentiful. Marine engine and boat repair services are available.

53 **Miramichi River above Chatham.** — Wright **Bank**, commencing just above the bridge and extending upstream for about 2.7 miles in the centre of the river, separates the river into two channels. The deeper, **buoyed** channel lies on the south side of the river.

A wharf formerly used for shipping cement is situated 0.4 miles SW of the bridge, on the south side of the river. It is 67 m long with a least depth of 5.7 m alongside. The elevation of the deck of the wharf is 0.9 m. In 2013, this wharf appeared to be inactive.

55 There is a **wharf** adjacent to a paper mill, situated on the south side of the river, 1.1 miles SW of the bridge. It is 104 m long with depths of 5.5 to 7.3 m alongside. The elevation of the deck of the wharf is 1.5 m.

56 The *Miramichi Boating and Yacht Club* lies on the north side of the river, at **Douglastown**. There is a small craft harbour formed within the **ruins** of an old wharf with 30 berths and a reported depth of 2 m within the harbour.

57 On the north bank of the river, at the western end of Wright Bank, is the indentation of **French Fort Cove**. Close SW is the city of **Newcastle**, also part of the Miramichi city area. The area has an airport and a **hospital**.

58 The Morrissey **Bridge**, near Newcastle, has a swing span which formerly allowed a channel width of 24.4 m. The bridge is dilapidated, and is closed to vehicle traffic, and the swing span is not functioning. The bridge has a vertical clearance of 2.4 m when closed. A **submarine cable** and an **overhead** power **cable**, vertical clearance of 30 m, cross the river close south of the bridge. For safety reasons, a vessel passing under this cable must maintain a clearance of at least 3.7 m.

59 A highway **bridge**, with a clearance of 6 m, crosses the river at **Strawberry Point**, 0.4 miles south of the Morrissey Bridge. This bridge and the Morrissey Bridge restrict navigation on the Miramichi River south of Newcastle to very small recreational craft.

60 The *Newcastle Marine Terminal*, situated below the **bridge** at Strawberry Point, has a length of 310 m and a least depth of 8 m alongside. Depths of less than 8 m are situated along the south 30 m face of the **wharf**. A depth of 4 m lies close off the north end of the wharf. The deck has an elevation of 2 m. A wooden retaining wall, with a least depth of 6.5 m extends 58 m south from the wharf. Two **conspicuous** oil tanks stand adjacent to this wall. The *Newcastle Marine Terminal* is operated by the *Miramichi Port Committee*.

61 *Ritchie Wharf Park* is located 0.2 miles downstream of the *Newcastle Marine Terminal*. There are floating wharves, having depths of 3 to 3.6 m alongside. Park facilities, shops and services are accessible on shore.

62 The Northwest Miramichi River and the Southwest Miramichi River, separated by Beaubears

MIRAMICHI BOATING AND YACHT CLUB (2005)

Island, are extensions of the river south of Strawberry Point. Both rivers are marked by **buoys**.

63 A forest products wharf, on Southwest Miramichi River, is the only serviceable wharf of any size above Strawberry Point. The adjacent plant was closed as of 2013, and the wharf appeared inactive at that time. The wharf is 215 m long with a least depth of 5.8 m alongside. The elevation of the deck of the wharf is 1.8 m. The channel to the wharf has a least depth of 4.6 m, but this should be checked with local authorities, and before any attempted use of the wharf. A **submerged outfall pipe** extends into the channel from the north end of the wharf.

Charts 4911, 4912

64 North shore of Miramichi Bay. — Neguac Beach commences as drying sand bars 0.5 miles north of the tip of Portage Island, and becomes a low island of sand dunes extending to the mainland, enclosing the partly drying Neguac Bay.

65 **Portage Gully**, with a shallow **buoyed** channel, leads between Portage Island and the sand bars of Neguac Beach into Miramichi Inner Bay and Neguac Bay. In places the channel depth is less than 1.6 m.

66 The Public **wharf** at **Lower Neguac** is roughly L-shaped, and has a berthing face 61 m long, on the north side. A rock **breakwater** extends 130 m south from the inner end of the wharf. The depth in



the approach is about 1.4 m. A **light** (1230.1) is shown from a skeleton tower with a red and white daymark on the west side of the wharf.

67 At the village of **Neguac**, population 1684 in 2016, there is an L-shaped Public **wharf** with several small spurs extending from it. The main stem is 235 m long and the outer end 160 m in length. A boat haulout is located on the south side of the main stem. A rock **breakwater** protects a floating wharf to seaward. A **light** (1229) is shown from a mast having red and white rectangular daymark, with a red triangle in its centre, on the outer end of the breakwater.

68 The church spires at Neguac and **Burnt Church Point** are **conspicuous**. A radio **tower**, 165 m in elevation and marked by red **lights**, is situated 1.4 miles NW of Neguac.

69Burnt Church Public wharf is
situated 1.25 miles SW of Burnt ChurchPoint. The usable outer section is about 103 m long with an

L-end 62 m long. A **light** (1228) is shown from a skeleton tower on the outer end of the wharf.

Miramichi Bay to Miscou Island

Chart 4024

70 This stretch of the coast, 50 miles long, is low and wooded, with sand bars and beaches, often enclosing shallow lagoons through which rivers flow to the sea. The entrances to these lagoons and rivers are narrow, shallow and sometimes blocked by shifting sand bars. They afford shelter to boats, but there are no ports or harbours for larger ships. Shoal water extends a considerable distance from the coast, but there are no detached shoals.

71 The hourly surface currents forecasts for the Gulf of St. Lawrence are available on the *St. Lawrence Global Observatory* website at <u>www.ogsl.ca</u> (click on the *Ocean*

MIRAMICHI — NEWCASTLE MARINE TERMINAL (2005)



TRACADIE-SHEILA WHARF (2008)



Forecasts tab). A mariner can obtain hourly details of the direction and speed of surface currents forecasted for the subsequent 48 hours.

Charts 4906, 4024

Tabusintac Bay $(47^{\circ}21'N, 64^{\circ}57'W)$ is enclosed by sand dunes and beaches. The shape and position of the sand bars off the bay are subject to continual change. A channel leads into the bay, however, it often becomes sand-blocked and dries. Starboard hand **light** and bell **buoy** *TA2* (*1238*) is moored south of the entrance, and starboard hand **light buoy** *TA2/2* (*1238.05*) is moored close east of the entrance. **Tabusintac River** flows into the bay, and depths in the staked channel leading to it increase to as much as 5.5 to 9.1 m. The channel is narrow and intricate, and suitable only for small boats; local knowledge is essential. The **tidal stream** flows 10 miles up the Tabusintac River, which runs through undulating country with occasional steep banks of sandstone up to 30 m in elevation.

73 At McEacherns Point $(47^{\circ}20'N, 64^{\circ}58'W)$, on the north side of the river near the mouth, there is a small craft basin between two Public wharves. The entrance is 18 m wide. The north wharf, L-shaped, has an outer end 55 m long. The south wharf is a dog-leg and 94 m long. Fuel pumps are located near the inner end of the south wharf. A light (1238.7) is shown from a mast at the SE corner of the south wharf.

At the community of **Tabusintac**, 2 miles above the river mouth, there is a highway **bridge** that restricts river navigation beyond this point. Below the bridge is a U-shaped floating wharf, with a concrete **launching ramp** at the north end.

To There is a small wharf in **ruins** at **Bayshore** $(47^{\circ}23'N, 64^{\circ}56'W)$, on the west side of Tabusintac Bay, about 2 miles NNE of the river entrance.

76 The entrance channel to **Big Tracadie River** $(47^{\circ}29'N, 64^{\circ}52'W)$ is used by local fishing boats. A **light** (1239) is shown from a mast on the south side of the entrance.

77 At Val-Comeau, there are two Public wharves on the south bank of the Big Tracadie River. The main wharf is T-shaped with an outer face 89 m long. A light (1239.8) is shown from a skeleton tower on the outer end of this wharf. A breakwater-wharf close west has a marginal face 56 m long, and has floating wharves extending from its outer end. A light (1239.85) is shown from a mast on the outer end of the breakwaterwharf. (See ENC CA576726)

Baie de Tracadie, separated from the sea by long sandy beaches, is shallow and nearly dry in parts. The entrance channel, through **Tracadie Gully**, is **buoyed**. At the town of **Tracadie-Sheila**, population 3184 in 2016, there is a Public **wharf** with an outer end 55 m long and a depth of 1.5 m alongside. A light (1244.9) is shown from a pipe swing pole on the wharf. A

SHIPPEGAN GULLY (2013)



conspicuous church with twin spires stands in the town; a water tower stands 0.4 miles WSW of the church.

The floating wharves of a private marina (Marina de Tracadie), are located close north of the Public wharf. A decorative lighthouse is located onshore, adjacent to the marina.

The entrances and channels to Val-Comeau 80 and Tracadie are used by local fishermen. The sand bars and shallow channels shift with every storm. While buoyed, no attempt should be made to enter either gully without recent knowledge of conditions.

81

Chart 4486



Pokemouche Gully

(47°40'N, 64°47'W) is about 0.1 miles wide between sand bars. The shifting sand generally leaves a narrow channel with a depth of 1 foot (0.3 m) into the gully, and depths of 3 to 4 feet (0.9 to 1.2 m) further in; the channel is marked by buoys. Local knowledge of prevailing conditions is essential. At Inkerman, within Baie de Pokemouche, there is an L-shaped Public wharf situated on the east side of the river close downstream of the highway bridge crossing the Pokemouche River. The wharf is 226 feet (69 m) long with an outer face 75 feet (22.8 m) in length. A light (1246.8) is shown from a pipe swing pole on the outer end of the wharf.

Petit-Pokemouche Gully is situated 2 miles NNE 82 of Pokemouche Gully.

Chart 4920

Shippegan Gully, the south entrance to 83 Baie de Shippegan (Shippegan Harbour), has a partly drying sand bar which shifts in heavy gales, but there is a dredged channel for small craft. Breakwaters have been constructed to improve the channel. Local knowledge is essential to enter the gully.

84 A light (1254) is shown at an elevation of 15.6 m, from a tower situated on Shippegan Beach to the NE of the entrance to the gully. A light (1250.5), having a green, white and black daymark, is shown from a mast at the south end of the west breakwater. Fairway light buoy TJ (1248) is moored about 0.6 miles SSE of the entrance to the gully. A racon (• —) operates from this buoy. The approach and the channel within are marked by buoys, but owing to changing conditions, they may be moved to mark the best channel.

85 Inside the curved breakwater, there is a marginal Public wharf, floating wharves and a launching ramp. There is a charted depth of 0.3 m in the channel leading to the wharf.

Tidal streams. — The flood stream sets 86 south, the ebb stream north, and the turn of the flow

SAINTE-MARIE-SUR-MER (2008)



occurs at about half tide in Baie de Shippegan (Shippegan Harbour). Slack water normally lasts for 10 minutes. The flood is somewhat stronger than the ebb, with the maximum rate in either direction being about 5 knots at spring tides in the south entrance.

Charts 4486, 4913

Île Lamèque — East side. — Rocky patches, with depths of little more than 12 feet (3.7 m) over them, extend to 1 mile off some parts of this shore, and breakers occur to about 1.5 miles offshore in bad weather. Miscou Island is situated close north of Île Lamèque, separated from it by narrow channels. Wilson Bank extends about 2.5 miles offshore from the east side of Miscou Island.

Chart 4913

Ner is situated 5.5 miles NE of Shippegan Gully. A boat basin for fishing craft, about 91 by 145 m, is protected on the north and east sides by a **breakwater** and L-shaped **wharf**, and on the south side by a **breakwater** and a **wharf**. The entrance is 17 m wide. There are reported depths of 0.6 to 1.5 m in the basin. A **light** (1262), having a red and white daymark, is shown from a skeleton tower on the outer end of the breakwater. Another **light** (1262.3) is shown at an elevation of 12.7 m, from a skeleton tower inland, west of the basin. A **launching ramp** is situated at the inner end of the south wharf.

89 Fox Dens Gully, situated $\langle \rangle$ 12.5 miles NE of Shippegan Gully, separates Fox Dens Beach from Île Lamèque, and is a shallow entrance used by local fishermen into Miscou Harbour. A light (1262.8) is shown at an elevation of 4.5 m from a skeleton tower on the south end of Fox Dens Beach. A narrow channel runs 0.4 miles south to an L-shaped Public wharf at the SE corner of Miscou Harbour. The channel is used by small boats only, and has a limiting depth of 0.2 m. The wharf is 138 m long and 38 m wide at the outer end with a depth of 1.2 m alongside. A light (1262.9) is shown from a mast, having a red and white triangular daymark, on the outer end of the wharf. A marginal wharf, boat haulout and another wharf are situated adjacent to the wharf. An L-shaped breakwater protects the facility. This area is subject to rapid **silting**.

90 **Miscou Gully**, about 1.5 miles north of Fox Dens Gully, separates Fox Dens Beach from Miscou Island, but the entrance is very shallow and is reported to be unnavigable.

Chart 4486

91 **Birch Point**, the NE end of Miscou Island, is a sandstone face about 10 feet (3 m) in elevation, with trees growing out to the point.

92 A light (1264.7) is shown at an elevation of 80 feet (24.5 m) from a white octagonal tower, on Birch Point. A racon (--) operates from this light.

93 **Northwest Miscou Point**, with a grassy sand hill marking it, is fronted by shoals extending for 3 miles to the 5-fathom (9.1-m) line. The north end of Miscou Island is fronted by steep sandy beaches. West cardinal **light** and whistle **buoy** *EB* (*1265*) is moored about 1 mile NW of Northwest Miscou Point.

94 **Miscou Banks** extend for 22 miles NE of Miscou Island. The shoalest part of the banks lies NE of Birch Point.

Chart 4024

95 An ODAS **light buoy** (*1037.6*), marked *IML-6*, is moored 26 miles ENE of Shippegan Gully and 43 miles north of North Cape (Prince Edward Island).

Chaleur Bay

Chart 4486

Chaleur Bay, the largest bay in the Gulf of St. 96 Lawrence, is deep and free of detached shoals, except near its shores. It gradually becomes shallow towards the west end of the bay.

97 The bay is named and noted for its milder climate in comparison with the weather outside in adjacent parts of the gulf. Fogs, which are frequent outside the bay, seldom enter far into the west of the bay, though rain and mist will accompany easterly gales.

The south shore is generally low, but there are 98 cliffs of 100 feet (30 m) in elevation between Caraquet and Bathurst. The north shore, with a range of hills running parallel to the coast, just a few miles inland, has summits exceeding 1700 feet (518 m) in elevation. The main features of both shores are the red cliffs of sandstone and shale, with intervening sandy beaches.

99 Tidal streams are regular within the bay, and the rate seldom amounts to 1 knot. Off the mouth of the bay, the streams are erratic both in rate and direction, especially over the Miscou Banks. The tidal range is of about 2.9 m during spring tides and of about 1.4 m during neap tides. For more information on the water levels, see the Canadian Tides and Current Tables and the tidal table on the charts. The most recent

MISCOU CHANNEL — FROM THE WEST (2005)

information on water levels can be obtained at any Marine Communications and Traffic Services (MCTS) Centre over the VHF, or by phoning the automated information service at 1-877-775-0790, or at www.charts.gc.ca. Additionally, the hourly surface currents forecasts for the Gulf of St. Lawrence are available on the St. Lawrence Global Observatory website at <u>www.slgo.ca</u>. (Ocean Forecasts tab). A mariner can obtain hourly details of the direction and speed of surface currents forecasted for the subsequent 48 hours.

100 During winter, buoys are removed and some are replaced by spar **buoys**; please refer to the radio and/or published Navigational Warnings for more information on the mooring and removal of buoys.

Chaleur Bay — South Shore — Miscou to Heron Island

Chart 4913

101 Miscou Flat, of sandstone, with less than 5.5 m over it 2 miles offshore, extends west of Miscou Island. West cardinal light buoy EAE (1266) marks the western extremity of Miscou Flat.

102

Shippegan Flat, of sandstone, partially and thinly covered with sand, has a least depth of 0.9 m



over it. It extends 5 miles west from **Black Point**, the NW extremity of Île Lamèque. A **light** (1275) is shown at an elevation of 17.6 m from a skeleton tower with a red and white rectangular daymark on Black Point.

103 **Miscou Harbour** is entered from the west through **Miscou Channel**, which is less than 0.2 miles wide at one part. The **buoyed** channel lies between steep-to shoals. **Submarine cables** cross the harbour entrance.

104 Fairway **light buoy** *EA* (1267) marks the approach to the channel. The harbour is entered by passing under the Miscou Island bridge, which joins the communities of Little Shippegan and **Miscou Harbour**. The **bridge** has a centre navigation span of 161 m, with a clearance of 16 m. Abandoned **submarine cables** are located close east of the bridge. Owing to changing conditions, the **buoys** may be moved to mark the best channel into the harbour.

MISCOU HARBOUR — NORTH SIDE (2013)

 \searrow

105 Close east of **Harper Point**, at Miscou Harbour, an L-shaped Public

breakwater-wharf extends 225 m SSE from the shore. Floating wharves extend west from the wharf. A marginal face and **launching ramp** are located at the head of the boat basin formed by the breakwater. A boat storage and service area is located on the west side of the wharf near its inner end. A **light** (1274.1) is shown from a mast, having a green and white daymark, on the west side of the entrance to the boat basin. Another **light** (1274.2) is shown from a mast, having a red and white daymark, on the outer end of the breakwater-wharf.

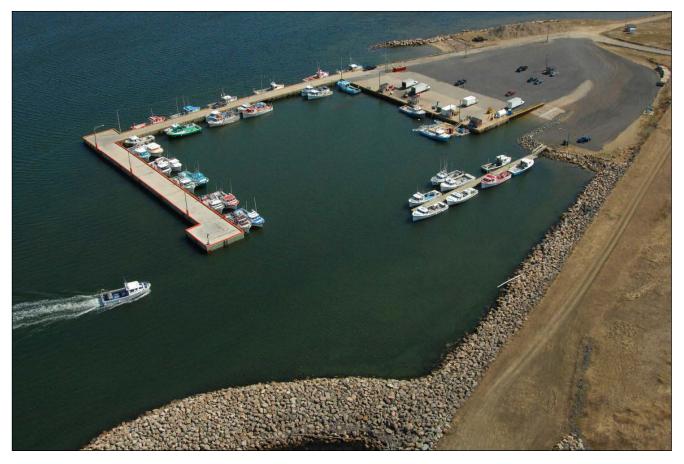
106 There is a boat basin on the opposite shore at Little Shippegan. An L-shaped Public wharf is protected by an irregular breakwater to the NW. A marginal wharf face and launching ramp are situated at the south end of the boat basin. A light (1273.5) is shown from a mast, having a green, white and black daymark, on the outer end of the wharf.

107
dry

07 **Petite-Rivière-de-l'Ile** lies in a small lrying bay 1.3 miles SW of Black Point. Local

<image>

MISCOU HARBOUR — SOUTH SIDE (2013)



knowledge is necessary to navigate the shallow channel through the drying flats.

Shippegan Channel, leading to Baie de Shippegan (Shippegan Harbour) from the north, is deep, but the **buoyed** passage is narrow between the steep-to shoals, and there are several turns, marked by leading **lights**. Smaller bays and inlets branch off from Baie de Shippegan (Shippegan Harbour) and the town of Shippagan lies at the head of the bay. Owing to changing conditions, the leading **lights** and **buoys** may be moved to mark the best channel. There may be less water than charted, local knowledge is essential. Baie de Shippegan and Shippegan Channel are frozen over between the middle of December and the middle of April.

109 The Baie de Shippegan, and the adjacent bays and inlets, are festooned with **aquaculture** operations and installations. **Caution** is advised with regard to navigation and anchoring.

110 Fairway **light** and whistle **buoy** *EG* (*1276.2*) is moored on the alignment line of the outer leading lights,

about 5 miles to seaward of the Pointe de Petite-Lamèque front light. A **racon** (— — •) operates from this **buoy**.

N 111 The outer leading **lights** (1277, 1278), in line bearing 151° , are shown from skeleton towers having black daymarks with red stripes, situated on the north side of **Pointe de Petite-Lamèque**. These lights lead over the edge of the **shoal** on the west side of Shippegan Channel, with a least depth of 7.6 m.

112 Pointe à Marcelle leading **lights** (1283, 1283.1), in line bearing 194°, are shown from skeleton towers having black daymarks with red stripes, on the SE end of **Pokesudie Island**.

113 A navigation **beacon** is situated on **Pointe à Peinture**.

114 Pointe à Bernache lights lead through the central part of Baie de Shippegan. Leading **lights** (1286.3, 1286.4), in line bearing 179¹/₂°, are shown from skeleton towers having black daymarks with red stripes, situated NW of the town of Shippagan.

SHIPPAGAN (2013)



Note: The second second

Chart 4920

116 **Shippagan**, a town of 2603 in 2011, has cold storage and fish plants, and a peat moss plant. A

conspicuous church spire has an elevation of 25 m. The town is a commercial fishing centre, and the waterfront is busy, with many wharves and a large boatyard.

117 A **causeway** connects Île Lamèque to the mainland close south of the wharves. A lift **bridge** in the causeway has a raised clearance of 12 m and a channel width of 12 m; the closed clearance is 2.7 m. The bridge operator can be contacted on VHF channel 17 (156.85 MHz). It is reported that the radio communication with the bridge operator is only effective within 1 km of the lift bridge. Abandoned **submarine cables** cross Baie de

LAMÈQUE (2013)



Shippegan (Shippegan Harbour) close south of the causeway, and a **submerged pipeline** extends 0.35 miles NE from shore near the **marina**.

118 Three L-shaped **wharves** and a rock **breakwater** extend from the shore west of the bridge to form three basins. The entrance to the centre basin is about 52 m wide, and the entrance to the south basin, about 45 m wide. An ice plant stands on the centre wharf. A marginal wharf, between the centre and north wharves in the centre basin, is 146 m long with a depth of 3.2 m alongside. There is a depth of 2.7 m at the outer end of the south wharf. A **light** (1291.5) is shown from the outer end of the north wharf.

119 **Lifeboat station**. — *Canadian Coast Guard* lifeboat *Cap Breton* (call sign CGYY) is stationed at a wharf adjacent to the SW side of the causeway. It operates within a 50 mile radius from its base and is operational from about May 1 to November 30. All distress situations and calls for assistance should be communicated to *JRCC Halifax* via the nearest coastal radio station or by any other available means (see inside cover). 120 A **marina** is operated by *New Brunswick Aquarium and Marine Centre* from the basin north of the north wharf. It is protected by a rock **breakwater**. There are 100 berths, fuel, showers, laundry, dining facilities and wireless Internet. Marine supplies and repair services are available locally, and a Travel-lift is accessible. The entrance channel to the marina has reported depths as shoal as 0.4 m, and depths of 0.4 m can be found in the basin.

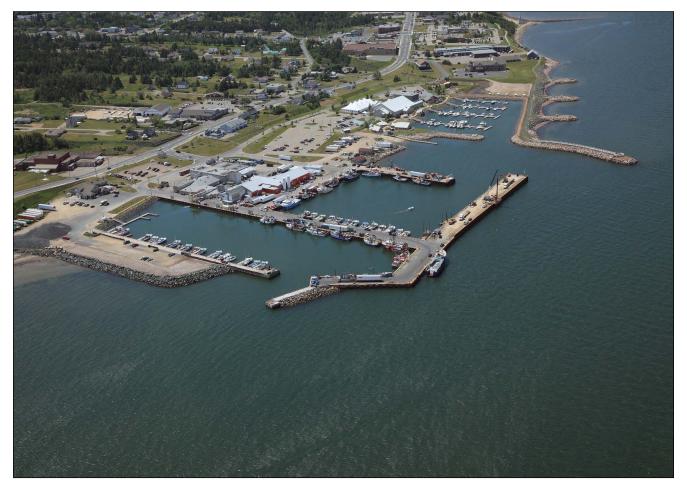
Savoy Landing is situated at the NE end of the causeway. On the west side of the causeway is a **wharf** 150 m long with a depth of 1.4 m at the outer end. A **light** (1292) is shown from a skeleton tower on the outer end of the wharf.

Chart 4913

Baie de Petite-Lamèque, on the NE side of Baie de Shippegan, is shallow but there is **anchorage** off the mouth. The remains of a wharf, with **submerged ruins** extending from it, are situated on the north side of the bay.

4-16

CARAQUET (2018)



123 **Baie de Lamèque**, the NE arm of Baie de Shippegan, south of Baie de Petite-Lamèque, is a good harbour in all winds.

124 The town of **Lamèque**, population 1285 in 2016, is situated at the head of the bay. A **conspicuous** orange water **tower**, 47 m in elevation, is situated about 1 mile NE of the harbour. There is a **hospital** in the town.

Chart 4920

125 A **buoyed** channel leads through Baie de Lamèque into a basin.

L26 The harbour at Lamèque consists of two basins formed by three Public **wharves**. A **breakwater** extends SW from the outer face of the north wharf; a **light** (1301) is shown from a mast having a green, white and black daymark, at the outer end of the breakwater. The south basin has berths 100 m long on its south and east sides, with depths of 5.5 m alongside. A **light** (1296.1) is shown from a mast having a red and white daymark, on the east side of the entrance to the south basin. The north basin has berths with depths of 2.9 to 4.2 m alongside. A fish processing plant lies adjacent to the north side of the north basin. A **launching ramp** is located close east of the south wharf.

Chart 4913

Saint-Simon Inlet, on the west side of Baie de Shippegan and south of Pokesudie Island, affords sheltered **anchorage** in 6 to 9 m. There are **ruins** of a wharf on the south side of **Baie Saint-Simon-Nord**.

128 **Caraquet Harbour** extends along the south shore of Chaleur Bay, west of Pokesudie Island. The harbour is well sheltered, protected from the north by **Caraquet Island** and its surrounding shoals, and the drying sands extending SE from **Pointe de Maisonnette**, 3 miles west of Caraquet Island. Baie de Caraquet, enclosed by Pointe de Maisonnette, is wide but shallow. In 2016, the town of Caraquet had a population of 4248, and the village of Bas-Caraquet had a population of 1305.

Pilotage is available but not compulsory. 129 Masters of vessels requiring a pilot should report via any coastal radio station their ETA to Pilots Caraquet, 12 hours before arrival at the pilot boarding station which is located 5 miles north of Pokesudie Island. Pilotage arrangements can normally be made through the vessel's local marine agent or else directly with the Atlantic Pilotage Authority (APA). The APA can be contacted by telephone: 1-877-272-3477; or email, dispatch@atlanticpilotage.com.

The master of a vessel that is to depart or make a 130 move and requires a pilot must report four hours prior to the ETD.

Ice. — The average thickness attained by 131 undisturbed fast ice is 78 cm, with a record maximum of 92 cm measured in 1977. Ice begins to develop across the approaches usually during the later half of December and clears during the first week of April.

132 Caraquet Channel, the east entrance channel, is narrow and crooked between the steep edges of Caraquet Shoal and Pokesudie Shoal, but it is buoyed and marked by leading lights, and has a least depth of 5.3 m until abeam the east end of Caraquet Island. A second entrance channel, though shallow, lies close west of Caraquet Island; it is also buoyed. A light (1322) is shown at an elevation of 22.3 m from a skeleton tower having a white rectangular daymark on the west end of Caraquet Island.

Fisherman Ledge, 2.5 miles north of Caraquet Island, consists of rock and stones with a 133 least depth of 3.7 m near the middle. Fisherman Channel, between this ledge and the shoals and ledges extending from Caraquet Island, has charted depths of 7.6 to 12.5 m, but should not be used for passage by vessels of any size.

Caraquet leading lights (1310, 1311), are in 134 line bearing 227°. The front light is shown from a white tower with a red stripe, the rear light is shown from a skeleton tower having white daymark with a red stripe, situated to the east of Stoke Point.

Middle Caraquet leading lights (1313.2, 135 1313.3), in line bearing 244°, are shown from skeleton towers having red daymarks with white stripes, situated near Pointe d'Herbe. A conspicuous water tower, 66 m in elevation and marked by red lights, stands 0.6 miles SSW of the rear light.

Stoke Point leading lights (1314.2, 1314.3) 136 lead 094° from the west entrance, and are shown

from skeleton towers having red daymarks with white stripes, at Stoke Point.

137 Pointe à Brideau is situated close west of the boat basins at Caraquet.

Chart 4920

138 At Bas-Caraquet, near Stoke Point, there is a Public breakwater-wharf extending 300 m from the shore to an outer end 35 m long. The breakwater-wharf is in ruins; caution is advised. A marine service centre and marine railway are situated close west of the breakwater-wharf. The buildings to the south are reported to be conspicuous from seaward. Close west of the marine railway, there is a Public wharf 250 m long with an L-end and a spur extending to the west. The L-end is 46 m long with depths of 3.9 m along the outer face and 3.5 m along the inner face.



The Public wharf at Middle 139 Caraquet, together with a breakwater extending from its outer L-end and a

breakwater to the east, form a basin for small craft where the Marina de Bas-Caraquet operates. There is a depth of 2.2 m in the entrance, but there are shallower depths inside the basin. Lights (1314, 1314.1) are shown on the outer ends of each breakwater, from a skeleton tower and a mast, respectively. A launching ramp is situated at the SE corner of the boat basin.

140 At Caraquet, a rock breakwater, the main Public

wharf (Young wharf), and the eastern breakwater-wharf form four basins. The centre basin is almost bisected by a Public wharf which extends 95 m from the shore into the basin. Oil tanks and a conspicuous fish plant are located at the inner end of Young wharf. The wharf is roughly T-shaped, and has a 270 m long stem, with an outer portion 300 m long. Lights (1319, 1319.1) are shown from a mast and a skeleton tower respectively, at the outer ends of the entrance to each basin. The breakwater at the western end of the west basin extends to Pointe à Brideau, and protects several floating docks of a small marina. A light (1319.5) is shown from a mast having a red and white triangular daymark, on the northern end of the breakwater. Lights (1319.6, 1319.7) are situated on either side of the entrance to the marina, within the basin. A submarine pipeline extends from shore in the centre basin, through the entrance and in a NE direction for a total of 440 m.

Caraquet is a regional centre, and there are 141 supplies and services readily available. A large hospital is located along the Caraquet waterfront. The Collège communautaire de Nouveau-Brunswick has a campus in

PORT DE BELLEDUNE (2005)



Caraquet, offering courses in fisheries. It is located close west of the wharves, along the waterfront.

Chart 4913

At Pointe de Maisonnette, the Public wharf was in **ruins** in 2013. A large sand dune (**Dune de Maisonnette**) and sandy shoal, extend 2.5 miles SE from the point.

Chart 4486

143 Low sand hills extend along the coast from Pointe de Maisonnette for 3 miles to the west. Sandstone cliffs, about 100 feet (30 m) in elevation, then commence and continue for the next 25 miles to Bathurst Harbour. A **light** (1324) is shown at an elevation of 56 feet (17 m) from a skeleton tower at the north extremity of Pointe de Maisonnette ($47^{\circ}50'N$, $65^{\circ}00'W$). L-shaped **breakwater-wharf** with a stem 710 feet (217 m) long. A rock **breakwater extends** to the shore 0.2 miles WSW, leaving an entrance 140 feet (42 m) wide. A **light** (1325.4) is shown from the outer end of this breakwater. Leading **lights** (1325, 1325.1), in line bearing 195°, are shown in the approach from skeleton towers having white daymarks with red stripes. The irregular L-shaped end, with reported depths of 2 to 4 feet (0.6 to 1.2 m) alongside, extends from the stem of the wharf. A **light** (1325.5) is shown from a mast at the outer end of the L-shaped extension. A **launching ramp** is located at the inner end of the breakwater on the west side.

Image: 145Grande-Anse, a fishing village of
population 899 in 2016, is situated 8 mileswest of Pointe de Maisonnette. The green church spire,
198 feet (60 m) in elevation, is very conspicuous. Two
large breakwaters form a boat harbour, and protect a small

floating wharf. There is a reported depth of 4 feet (1.2 m) in the harbour, and there is a **launching ramp** in the SE corner. **Lights** (1326.1, 1327.1) are shown from skeleton towers on the outer end of each breakwater.

Point (47°45'N, 65°22'W), 8.4 miles SW of Grande-Anse, at **Stonehaven**, there is a small harbour. It is formed by a **breakwater** 512 feet (156 m) long, with an L-end 256 feet (78 m) long extending west, and a Public **wharf** 229 feet (70 m) long on the west side. There is a reported depth of 10 feet (3 m) at the outer end of the wharf. A **light** (1328) is shown from a mast, on a hill above the wharf. Another **light** (1328.5) is shown from a mast situated on the breakwater. A **launching ramp** is located adjacent to the inner end of the breakwater.

147 **Nepisiguit Bay** is a deep open bight, 17 miles wide at its mouth, between Grindstone Point and **Pointe Verte**. Bathurst Harbour lies at the head of the bay. Fish traps may extend up to 0.5 miles offshore along the coast between Grindstone Point and Bathurst Harbour.

148 **Miller Brook** $(47^{\circ}40^{\circ}N, 65^{\circ}30^{\circ}W)$ is a small fishing harbour, accessible through a narrow channel between two **breakwaters**. It is situated near the community of **Salmon Beach**, about 4 miles east of the entrance to Bathurst Harbour.

Chart 4920

149 **Bathurst Harbour**, at the mouth of **Nepisiguit River**, is entered through a narrow channel dredged in the bar extending 1.5 miles to seaward of the river mouth, between **Carron Point** and **Youghall Point**. Within the entrance there is an extensive basin, but much of it dries at low water, except for the channels of three rivers which unite below Bathurst.

150 The city of **Bathurst**, population 31 110 in 2016, is situated on the point of land dividing Nepisiguit River from **Middle River**. A regional **hospital** is located in the city. A public park and beach are situated at Youghall Point. The *Bathurst* Marina with full services operates from the south side of Youghall Point. A narrow **buoyed** channel leads from Bathurst Harbour to the marina basin.

Masters of vessels requiring a pilot should report via any coastal radio station their ETA to Pilots Bathurst, 12 hours before arrival at the pilot boarding station. The station is located 3.6 miles north of **Belloni Point** (*chart* 4486). Pilotage arrangements can normally be made through the vessel's local marine agent or else directly with the *Atlantic Pilotage Authority (APA)*. The *APA* can be contacted by telephone: 1-877-272-3477; or email, <u>dispatch@atlanticpilotage.com</u>.

152 The master of a vessel that is to depart or make a move and requires a pilot must report four hours prior to the ETD.

Tidal streams in the main channel run at a rate of about 2 knots, and over the bar setting fairly in and out at about 1.5 knots.

154 Due to ice and winter conditions, the **navigation season** in the Bathurst area is from mid April to early December.

155 The channel into Bathurst is marked by **buoys** which are moved as necessary. Owing to continuous **silting**, depths in the channel are subject to change; there may be less water than shown on the chart. Mariners should not attempt to enter without local knowledge.

156 The wharf at Bathurst, on the east side of the Nepisiguit River, has an outer face 123 m long. In 2000, there were depths of 1.7 m, at its north end, to 2.1 m, at its south end, alongside. This wharf is in disrepair.

157 The former Smurfit-Stone wharf, on the west side, has an outer face 150 m long with a least depth of 2.2 m alongside. The adjacent plant is demolished and the wharf has fallen into disrepair.

Chart 4486

158 The west shore of Nepisiguit Bay, from Youghall Point to Pointe Rochette, 8.5 miles NNW, is low. Houses are built along this shore, which is a combination of lowlying rocks and sandy beaches. A **conspicuous** illuminated cross, 146 feet (44 m) in elevation, is situated on a church at the village of **Beresford**, 4.4 miles NW of Youghall Point.

Chart 4920

159 The boat basin at **Pointe Rochette** ($47^{\circ}47'N$, $65^{\circ}42'W$) is formed by an L-shaped **breakwater-wharf** 190 m long, and an L-end 110 m long. A **light** (1339) is shown from a skeleton tower at the outer end of the breakwater-wharf. A small **breakwater** extends 50 m from the western side of the basin to form an entrance 45 m wide. A **light** (1339.2) is shown from a mast having a green, white and black daymark, on the outer end of the small breakwater. Depths ranging from 0.4 to 1.7 m are found within the basin, and there is a **launching ramp** at the NW corner.

160 The nearby village of **Petit-Rocher**, population 1897 in 2016, has fuel and provisions available.

SAINTE-THÉRÈSE-DE-GASPÉ (2018)



Chart 4486

161 An enclosed basin is situated at the village of **Pointe-Verte**, population 886 in 2016, 5.2 miles NNW of Petit-Rocher. The basin is formed by an L-shaped **breakwater-wharf**, and an inner L-shaped wharf, with a passage between them 75 feet (23 m) wide. The basin has depths of 2 to 4 feet (0.6 to 1.2 m). A detached rock **breakwater** lies off the north side of the breakwater-wharf. A **light** (1339.8) is shown from a skeleton tower on the outer end of this breakwater. A **light** (1340) is shown from a skeleton tower on the NW corner of the inner wharf.

Chart 4920

162 The **Port of Belledune** is an artificial harbour operated by *Belledune Port Authority (BPA)*. It is contained by a **breakwater** and four marine terminals. In an average year, 90 ships call at the port, which handles on average 2.15 million tonnes of general and bulk cargo. The nearby community of **Belledune** had a population of 1417 in 2016.

163 Any ship approaching the waters of the *BPA* must follow certain guidelines before dropping anchor or mooring within this zone. A vessel wishing to enter the waters of the Port of Belledune must provide detailed information to obtain a traffic clearance. The information includes the name of the ship, port of registry, the names of the owner, master and agent of the ship, the ship's draught, gross tonnage, a description of the goods to be loaded or unloaded, and any other information requested by the *Port Authority*.

164 The booklet *Port Information and Advice to Masters* is available from the *BPA*.

165 The harbour is approached from the NE in Chaleur Bay and entered between **Belledune Point** $(47^{\circ}54'N, 65^{\circ}50'W)$ and the outer end of the **breakwater** 0.4 miles NW. A **light** (1340.1) is shown from a skeleton tower on Belledune Point. Another **light** (1340.2) is shown from a skeleton tower, having a red and white daymark on the outer end of the breakwater. There are privately maintained (charted) port entry lights, including sector **lights** and wharf extremity **lights** within the harbour.

166 The *Port Authority* maintains marine radio communication, and provides instructions to a vessel initially on VHF marine safety and calling channel 16. Radio communication is then moved to 65A - USA or channel 11 as working frequencies (156.8 and then 156.275 or 156.55 MHz).

167 The approach channel has a width of about 145 m and a reported depth of 11.6 m. It is suggested by the *Port Authority* that fully laden bulk carriers (destined for Terminal 2) restrict their safe arrival draft to 12.6 m and berth at high tide (dock water density is 1018 to 1025 kg/ m3). The other Terminals have shoaler depths alongside, please see the descriptions later in the chapter.



168 The Port of Belledune is not yet compulsory as to **pilotage**, but is

4-21

GRANDE-RIVIÈRE (2013)



recommended. The users of shipping services at the Port of Belledune require non-Canadian vessels to use the services of a local *Atlantic Pilotage Authority (APA)* licensed harbour pilot. The port has restrictions for docking in certain wind conditions and may require a vessel to use the services of a tug, two of which are normally available. The tugs double as the pilot boat which meets arriving vessels between 1.5 and 2 miles NE of the breakwater, with main pilot boarding position being at $47^{\circ}56'N$, $65^{\circ}48'W$. There are designated **anchorages** 1.5 and 3 miles NE of the breakwater in 27 and 33 m, in good holding ground, hard mud, but with little shelter. These anchorages are $47^{\circ}56'N$, $65^{\circ}48'W$, and $47^{\circ}58'N$, $65^{\circ}48'W$, respectively. The prevailing winds are from the NW and the port offers good shelter.

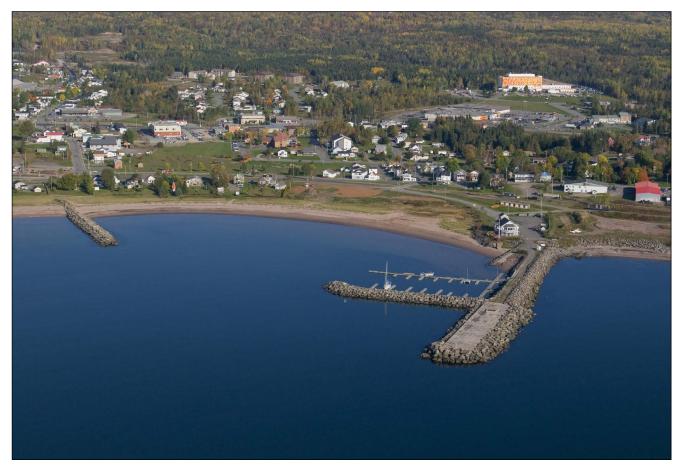
169 Masters of vessels requiring a pilot should report via any coastal radio station their ETA 12 hours before arrival at the pilot boarding station. Pilotage arrangements can normally be made through the vessel's local marine agent or else directly with the *Atlantic Pilotage Authority (APA)*. The *APA* can be contacted by telephone: 1-877-272-3477; or email, <u>dispatch@atlanticpilotage.com</u>. The master of a vessel that is to depart or make a move and requires a pilot, must report four hours prior to the ETD.

170 The port is open to shipping all the year and is ice-free most winters. Prevailing easterly winds bring pack ice into Chaleur Bay, making the approaches to Belledune difficult at times with heavy and rafted ice. Vessels arriving at ice-covered anchorages during winter are advised not to drop anchor, but to optionally consider slow steaming well clear of the port, until an ice-free berth becomes available.

171 The Terminal 2 (NB Power) coal **wharf** and the Terminal 1 (Glencore Canada Inc.) **wharf** lie on the south side of the breakwater. The coal wharf, situated to seaward, is 307 m long, 28 m wide, and has reported depths of 13.8 to 14.3 m alongside. The Glencore Canada Inc. wharf is 155 m long, 15 m wide, with a reported depth of 10.4 m alongside. A third **wharf**, the Terminal 3 (M.D. Young), lies on the south side of the port. It is 455 m long, 100 m wide, and has reported depths of 10.3 to 11.3 m alongside, in its 2 berths. A fourth **wharf**, the Terminal 4 (Rayburn Doucett) wharf, also lies on the south side of the port. It handles Roll-on Roll-off (Ro-Ro) and break-bulk cargo. The Ro-Ro berth has 8.9 m of water alongside, while an adjacent barge berth has 5.7 m alongside.

172 An orange and white private mooring **buoy** (1.83 m by 3.05 m), equipped with a flashing yellow light may be established during the open water season in position $47^{\circ}54'37.5"N$, $65^{\circ}50'16.8"W$, approximately 125 m east of the M.D. Young terminal wharf. The establishment of this **buoy** is dependent upon operational needs of the Terminal 3 tenant. The characteristics of the **light buoy**: Flash 0.5 seconds, Eclipse 3.5 seconds. A light blue buoyant mooring hawser (marked with one fluorescent **buoy**) remains permanently attached to the release hook of the **buoy** while in position. It extends about 137 m to the furthest easterly mooring bitt at the crib section 9 of the

CLUB NAUTIQUE DE CHANDLER (2005)



wharf apron. The **buoy** is used when a bow or stern extends beyond the east end of the berth, especially with winds from between NE and SE.

173 The wharves are serviced by road (all Terminals), rail (Terminals 3 and 4), conveyors (Terminals 1, 2 and 3) and pipelines (Terminals 1 and 2).

174 At the port, water, bunker and diesel oil can be supplied by tank truck. In the case of a vessel fueling by tank truck, vessels should have a prior BPA authorization, dangerous goods permit, fuel transfer safety checklist, and special environmental restrictions with respect to alongside fuel delivery at certain berths only. Minor ship repairs can also be made, again with consideration of prior *BPA* authorization, hot work permit, safety checklist, and adherence to environmental restrictions pertaining to work at certain berths.

Chart 4486

175 A **conspicuous** power station and a chimney having an elevation of 598 feet (182 m) are located on the shore 1.5 miles west of Belledune Point.

The **shoal water area** bordering the coast increases in width west of Belledune Point, and extends over 1 mile from shore off the entrance to Jacquet River. The shoal water area narrows again off **Black Point**, and then surrounds **Heron Island** ($48^{\circ}00'N$, $66^{\circ}09'W$).

177 Heron Island is wooded, moderately high, and its NE coast consists of red sandstone cliffs about 40 feet (12 m) in elevation.

178 There is a small fishing wharf located 0.2 miles from the entrance to the Jacquet River. The wharf, which dries alongside, is situated on the west side of the river, just below the railway bridge.

NEWPORT POINT (2013)



LES ÎLOTS-DE-NEWPORT (2005)



179 **Heron Channel**, between Heron Island and the mainland, is narrow and shallow. The channel is intricate and is used only by small craft. **Heron Rock**, at a depth of 4 feet (1.2 m), lies in the middle of the east entrance.

INVITE: 180 There is an L-shaped Public wharf at the west end of West Point Island, on the south side of Heron Channel, 1.9 miles ESE of Pointe La Roche. The wharf is 248 feet (76 m) long, with an outer end 65 feet (20 m) long and a depth of 5 feet (1.5 m) alongside. A light (1340.8) is shown from a skeleton tower on the outer end of the wharf. A causeway connects the island to the mainland. Wharf ruins extend from the shore close west of the mouth of the Benjamin River, about 1 mile SE of the above-mentioned light.

Chaleur Bay — North Shore — Cap d'Espoir to Eel River

Chart 4485

181 **Cap d'Espoir** (48°25'N, 64°19'W) consists of red sandstone cliffs about 15 m in elevation with high ridges found further inland. A narrow **shoal** extends SE from the cape for nearly 2 miles. **Haut-fond Leander**, with a depth of 4.6 m and on which the sea breaks with strong winds, lies about 1.5 miles offshore and is the shallowest spot on the bank. All vessels, except small craft, must pass south of this bank.

182 Cap d'Espoir light (1403) is shown from a lighthouse at the end of the cape.

Chart 4921

N I83 The fishing harbour of **Sainte-Thérèse-de-Gaspé** is located 3 miles west of Cap d'Espoir. The harbour's entrance is protected on its south side by a **breakwater** and on its north side by a **breakwater-wharf** 30 m away. Two seasonal **lights** (1401.3, 1401.4) stand on the end of each breakwater. The south breakwater has an extra **light** (1401.5). The fishing harbour is managed by the harbour authority, *Administration portuaire de Sainte-Thérèse-de-Gaspé*.

184 Inside the fishing harbour, there are two mooring basins and a **launching ramp** for small craft. There are floating docks in the inner basin. A **crib**, with a depth of 2.1 m, is located on the north side of the floating wharf situated at the head of the basin. The crib is about 10 m from the outer end of the floating wharf. The inside of the harbour is dredged periodically. See the chart for depth information. Owing to continuous **silting** mariners should expect to find less water in some locations. For the latest information on depths mariners should contact the local authority.

Grande-Rivière, with a population of 3408 in 2016, is a fishing centre located 7 miles west of Cap d'Espoir. A **breakwater** protects the mouth of the river which is subject to **silting**.

At Pointe Verte, there is a fishing harbour protected by two breakwaters located 58 m apart at the entrance. Seasonal lights (1399, 1399.2) are located at the end of each breakwater. There is an L-shaped wharf 294 m long and 75 m wide. Floating wharves and a launching ramp are situated in the north part of the basin. There are fish plants along the shore of the harbour. The fishing harbour is managed by the harbour authority Administration portuaire de Grande-Rivière.

187 Water intake pipelines, with 6.4 m of water over their ends, lie close SE of the south breakwater.

Chart 4485

188 An illuminated cross is situated 0.8 miles NNW of Pointe Verte. The church near the mouth of La Grande **Rivière** is **conspicuous**.

189 A rocky shoal extends from the shore for 0.9 miles, 2.6 miles east of the village of Pabos. The village is located between Grande-Rivière and Chandler. There are two artificial reefs, one with a depth of 3.7 m, located on the rocky shoal (48°22'N, 64°33'W) and the other, with a depth of 5.8 m is located 1.1 miles WNW of the first reef.

Chart 4921

190 The town of **Chandler**, with a population of 7546 in 2016, is located 15 miles WSW of Cap d'Espoir. The town has a **hospital**.

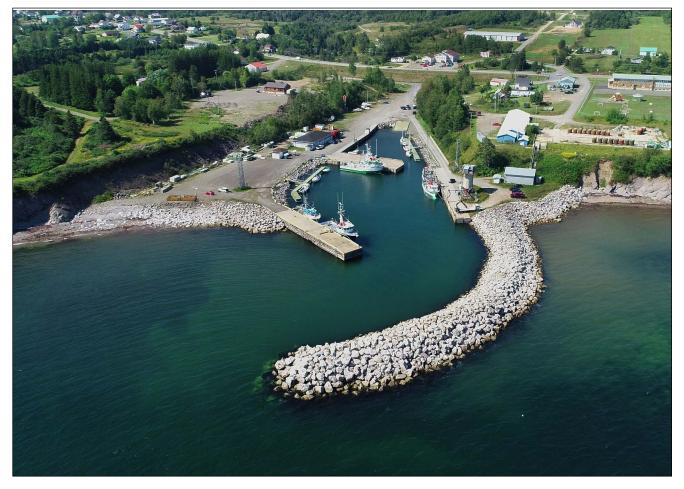
191 The spire and the cupola of the church are **conspicuous**.

A light (1393) is shown from a tower on **Île Dupuis** which is surrounded by **reefs**. Leading **lights** (1395, 1396), in line bearing 321° and shown from fluorescent-orange daymarks with a black stripe, are situated on the shore NNW of Île Dupuis and lead into Anse à l'Îlot.

193Two above-water wrecks lie close SE of ÎleDupuis. Two outfall pipes, located 91 m and

4-25

GASCONS (2019)



0.4 miles SW of the front leading light respectively, extend 0.1 miles from the shore.

194 A 458-m long crescent-shaped **breakwater** lies 0.5 miles east of the Île Dupuis light. A wharf in **ruins** extends from the outer end of the breakwater. For safety reasons, it is not permitted to berth at the wharf. A **light** (1392.7) is shown from a tower on the outer end of the wharf.

195 An old wharf in ruins, situated on the east side of Anse à l'Îlot, is fringed with boulders forming a jetty. This jetty, along with a perpendicular breakwater, shelters a launching ramp and a marina (Club nautique de Chandler). See the Appendix for additional information on the marina. A private light (1394) stands at the outer end of the jetty and a private starboard daybeacon stands at the outer end of the breakwater.

Chart 4486

196 Close west of **Pointe du Grand Pabos** and about 3 miles SW of Chandler, the mouth of **Rivière de l'Anse aux Canards** affords shelter to small craft.

197 A conspicuous radio tower with red lights stands on Pointe du Grand Pabos.

Chart 4921

198 At Newport Point, a hamlet located 1.5 miles SW of Pointe du Grand Pabos, there is a wharf protected by two breakwaters. A light (1389) is shown from a tower on Pointe de Newport, east of the harbour entrance.

199 *Pointe de Newport's* seasonal leading **lights** (1390, 1391) in line bearing 342°, shown from fluorescent-orange daymarks with a black stripe, lead into the approach of the harbour. The front light is at the outer end of the commercial wharf, at the west entrance, while the rear light stands close to the inner end of the wharf. There is

PORT-DANIEL-EST (2018)



a depth of 3.6 m (2015) on the range line. The fairway **light** and bell **buoy** *NEWPO* (*1388*) is moored 0.5 miles SSE of the front range light. Lateral **buoys** mark the harbour entrance.

200 The NE side of the plant **wharf** is 40 m long with a floating wharf; the SE side of the wharf is 64 m long. There is another **wharf**, 149 m long, protected by the west breakwater.

201 The L-shaped public **wharf**, 125 m long and 30 m wide, extends from the north shore of the harbour. The wharf is equipped with a cargo winch. A travel lift and a **launching ramp** are located NW of the wharf. A marine service centre for the fishing industry and a storage area are situated north of the wharf. The fishing harbour is managed by the harbour authority, *Administration portuaire de Newport*.

Chart 4486

A former fishing harbour, no longer maintained, is at the mouth of the river in the hamlet Les Îlots-de-Newport, 1.8 miles NNE of Pointe Noire.

203 The mouth of the river is bordered by boulders and protected by **breakwaters**. The river banks, bordered with rocks, leave a 36-foot (11-m) wide passage. Further upstream, a 82-foot (25-m) long **wharf** with a 33-foot (10-m) long floating wharf border the SW shore of the river.

In the harbour, there are depths of 3 to 6 feet (0.8 to 1.8 m) but owing to **silting** they can be less.

205 An **outfall pipe**, with 9 feet (2.7 m) of water over its outer end, extends south 410 feet (125 m) from the shore about 985 feet (300 m) east of the harbour entrance. A rocky **shoal**, with a depth of 1 foot (0.2 m), lies 515 feet (157 m) SSE of the river entrance; two islets lie 0.5 miles south of this entrance.

4-27

SHIGAWAKE (2013)



206 **Pointe au Maquereau**, 5.5 miles SSW of Pointe de Newport, is steep, dark and wooded, displaying craggy rocks rising steeply to an elevation of 200 feet (61 m).

207 **Pointe Reddish**, composed of red limestone, can sometimes be mistaken for an island. Close NE of the point the mouth of the stream **Ruisseau Chapados** shelters the fishing harbour at **Gascons**; the narrow entrance to the harbour is protected by a **jetty** on the west side and a **breakwater** on the east side. There are **wharves**, floating wharves, a **launching ramp** and water and power outlets. The fishing harbour is managed by the harbour authority called *Administration portuaire de Gascons*. (See ENC *CA579104*)

208 Anse aux Gascons leading lights (1382, 1382.1), in line bearing $319\frac{1}{2}^\circ$, are in the approach to the harbour. The lights are shown from fluorescent-orange daymarks with a black stripe. A seasonal light (1383) is shown from a mast on the south end of the breakwater; the light operates at night only. 209 Due to **silting** in the harbour entrance depths can be less than those shown on the Gascons diagram.

Two **towers**, 948 feet (289 m) in elevation and with red **lights**, stand 1.6 miles NNW of Pointe Reddish.

211 The mouth of Rivière de l'Anse à la Barbe is 1.2 miles west of Pointe Reddish. It shelters the fishing harbour of Gascons-Ouest. On the west part, there is a 489 feet (149 m) long wharf with depths (2020) between 1 and 7 feet (0.3 and 2 m). The wharf is equipped with a cargo winch located at its south end. The river entrance is protected by breakwaters 43 feet (13 m) apart.

Chart 4921

Baie de Port-Daniel, open to the east, is entered between La Vieille and **Pointe du Sud-Ouest (Pointe de l'Ouest). Port-Daniel-Gascons** had a population of 2210 in 2016. The bay affords good **anchorage** in 10.1 m, mud; it provides good shelter from all winds, except those from south to east which cause a strong swell. A **light** (1379) is shown from a lighthouse on Pointe du Sud-Ouest (48°09'N, 64°57'W).

SAINT-GODEFROI (2013)



PASPÉBIAC (2018)





BONAVENTURE (HAVRE DE BEAUBASSIN) (2018)



213 The *McInnis Cement* marine terminal in Anse à la Loutre extends 445 m from the shore. The 330-m berthing length of the terminal is composed of pillars connected by a catwalk with the transshipment tower situated on the central pillar. A conveyor system supported by towers connects the terminal to well-illuminated facilities on shore. Depths alongside the terminal range between 12.2 and 14 m.

Rivière Port-Daniel flows slowly into the northern part of Baie de Port-Daniel over a large **mud bank** and a drying bar. On the east side of the river mouth, in **Port-Daniel-Est**, an L-shaped **breakwater-wharf** protects a small craft basin. A seasonal **light** (1379.5) stands on the SW outer end of the breakwater-wharf. There is a **launching ramp** at the north end of the small craft basin. The fishing harbour is managed by the harbour authority, *Administration portuaire de Port-Daniel-Est*. (See ENC CA579253)

215 Charted depths from dredged areas shown on the Port-Daniel-Est diagram are obtained from periodic dredging. Owing to continuous **silting** mariners should expect to find less water in some locations. For the latest information on depths mariners should contact the local authority.

216 A fixed railway **bridge**, with a vertical clearance of 7.3 m and a fixed highway **bridge**, with a vertical clearance of 2 m, cross the river mouth. Close below the highway bridge there is an **overhead cable** with a vertical clearance of 7.3 m. Between the two bridges, there is a 68-m long **seawall** on the east side of the river.

217 An **outfall pipe** extends 244 m from the shore at the mouth of the stream **Ruisseau Castilloux**. The end of the outfall pipe has 2 m of water over it.

Chart 4486

Colline de Port-Daniel (Colline Daniel),
1.5 miles SW of Pointe du Sud-Ouest (Pointe de l'Ouest), is
400 feet (122 m) in elevation and is the highest point along this stretch of the coast.

219 **Pointe Smith** lies 4.5 miles farther to the SW. The harbour at **Shigawake**, which had a

NEW RICHMOND (2018)



population of 292 in 2016, lies close west of the point and is protected from the west by a **jetty** and from the east by a former wharf that is now fringed with boulders. There are floating wharves with a total length of 58 m and a spur wharf, extending to the west, is linked to the outer end of the jetty. Power outlets are available.

220 Owing to continuous **silting** mariners should expect to find less water in some locations. For the latest information on depths mariners should contact the local authority.

221 The entrance to the harbour at **Saint-Godefroi**, which had a population of 380 in 2016, located 2 miles SW of Pointe Smith, is marked by two **light buoys**. A **breakwater-wharf** is on the SW side of **Pointe Trachy**. A second **breakwater** lies close west of the breakwater-wharf; there is a narrow passage between the breakwaters measuring 14 m wide. A **light** (1376) shown from a tower stands close to the outer end of the wharf. Another **wharf**, a **launching ramp** and a slipway are in the northern part of the basin. There are cargo winches and water and power outlets at the harbour. (See ENC *CA579105*)

222 Depths from the dredged areas shown on the Saint-Godefroi diagram are obtained from periodic dredging. Owing to continuous **silting** mariners should expect to find less water in some locations. For the latest information on depths mariners should contact the local authority.

223 Artificial **reefs** are placed in various locations between Pointe Smith and Pointe de Paspébiac. Their purpose is to enhance the marine environment by improving marine productivity and biodiversity. The fishing harbour is managed by the harbour authority, *Administration portuaire du havre de pêche de Saint-Godefroi*.

Chart 4921

Pointe de Paspébiac (48°01'N, 65°15'W) is the extremity of a triangle-shaped sand and shingle beach

which surrounds a shallow and partially drying lagoon. Outflow from the lagoon, near its NE end allows small craft to enter at high water.

Starboard hand light buoy *AP2 (1373)* is moored on the SW side of the sand spit that extends from the point.
Two radio towers, 125 m in elevation and marked by red lights, are situated on the mud flats in the lagoon.

227 There is a commercial fishing harbour in the municipality of

Paspébiac, which had a population of 3164 in 2016. The fishing harbour is protected by a breakwater to the west and an irregular shaped commercial wharf to the SE. There is a breakwater at the outer end of the wharf allowing an approximately 90-m wide entrance. A cathodic protection system to control corrosion is in operation on the north section of the wharf, which is owned by Small Craft Harbours, Fisheries and Oceans Canada. When berthing at this wharf specific operating procedures must be observed to prevent damage to vessels. For more information, as well as directives to follow, mariners should contact the Administration portuaire de Paspébiac. The south section of the wharf, owned by Transport Canada, is permanently closed to navigation. For safety reasons, it is forbidden to moor there. Fishermen use the floating wharves located north of the wharf; the wharves have a total length of 112 m. There is a marina (Marina de Paspébiac) NW of the wharf. See Appendix for additional information on the marina. Water and power outlets, as well as a launching ramp — accessible only at high water owing to silting — are available in the harbour. A fish plant and *Banc de* Pêche de Paspébiac National Historic Site of Canada are in the NE part of the harbour.

Lights (1373.3, 1374) situated on the outer end of the breakwaters mark the entrance to the basin.



229 Two **submerged** water intake **pipelines** extend close east of the commercial wharf.

230 The best **anchorage** in **Baie de Paspébiac** is 1 mile west of Pointe de Paspébiac, in about 10 m, clay. There is good shelter except from winds from west to SE through south; SW winds generate a considerable swell but the holding ground is very good.

231 **Aquaculture** facilities, marked by yellow cautionary **buoys**, are located along the shores of Baie de Paspébiac; mariners should proceed with **caution** when navigating in this area.

Pointe de New Carlisle, 3.2 miles west of Pointe de Paspébiac, is sandy and wooded. **Shoal water** extends some distance off the point along the coast in a westward direction. A microwave **tower**, 107 m in elevation, stands nearly 0.3 miles north of Pointe de New Carlisle.

Chart 4486

234 **Pointe Bonaventure**, 5 miles west of Pointe de New Carlisle, is a low red sandstone cliff.

235 nor

There are several **jetties** perpendicular to the north shore of Chaleur Bay for erosion prevention.

Chart 4921

236 Havre de Beaubassin, 2.2 miles NW of Pointe Bonaventure, is a small craft harbour at the mouth of Rivière Bonaventure. Owing to continuous silting mariners should expect to find less water in some locations. These conditions may be found as far as 300 m off the SSW outer end of the breakwater situated at Pointe de Beaubassin. For the latest information on depths mariners should contact the local authority. The harbour is managed by the harbour authority, *Administration portuaire de Bonaventure*.

237 Bonaventure leading **lights** (1369, 1369.1), in line bearing 010° and with fluorescent-orange daymarks with a black stripe, are in the approach to the harbour. A decommissioned lighthouse is situated just SW of the front light. Private **buoys** are moored in the harbour to mark **shoal water**.

238 In the harbour there is a 275 m long wharf, a launching ramp and floating wharves for the marina (Marina *de Bonaventure*). See the Appendix for marina facilities.

Chart 4486

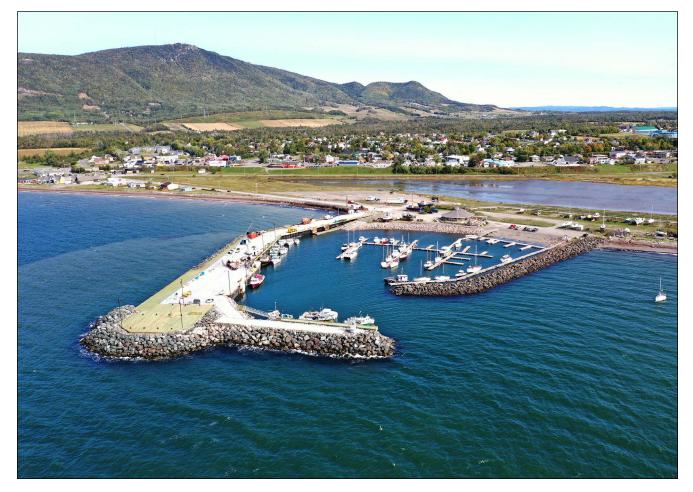
239 **Ruisseau-Leblanc** is a hamlet located 8 miles WNW of Pointe Bonaventure. There is a fishing harbour protected from the east by a breakwater and from the south by a breakwater pier, as well as a boat ramp on the shore.

240 Owing to the **silting** in the entrance to the harbour, mariners should contact local users for the latest information on depths. Mariners are advised to exercise **caution** when navigating in the area.

241 A wreck, used for diving purposes, with 38 feet (11.6 m) of water over it, lies 0.5 miles SSW off the wharf in Ruisseau-Leblanc. The diving site is marked by a private diving **buoy**. In **Caplan**, there is an **outfall pipe** extending about 820 feet (250 m) from the shore and parallel to the east side of the boulder jetty.

242 The **ruins** of a former wharf, approximately 1315 feet (400 m) east of the mouth of Rivière Caplan, extend perpendicularly from the shore for about

CARLETON-SUR-MER (2020)



985 feet (300 m). There may be boulders present and depths may be less than charted. **Caution** is advised

243 At the mouth of **Rivière Caplan**, 13.4 miles WNW of Pointe Bonaventure, there is a 131-foot (40-m) long wooden **wharf**; its seaward end is bordered with rocks. Local knowledge is required to access the river channel that leads to the wharf. There is a **launching ramp**.



244In New Richmond, in thevicinity of Black Cape, on Pointe

Howatson, 1.3 miles NW of Caps Noirs, there is an unused jetty. A small fishing harbour and a marina (*Club nautique de New Richmond*), protected by a breakwater that lies perpendicular to the wharf, are located in a basin on the east side of the wharf. There are also floating wharves for fishing vessels and a launching ramp in the basin. A private light stands on the east outer end of the breakwater. See the Appendix for marina facilities. (See ENC CA579254) 245 Owing to continuous **silting**, mariners should expect to find less water in some places. For the latest information on depths mariners should contact the local authority. A **crib** covered by water is located 66 feet (20 m) NE of the breakwater.

There are tanks, **conspicuous** from offshore, located north of the wharf. A radio **tower** stands on a hill ENE of the wharf.

247 An **outfall pipe** extends 0.5 miles from the shore, 0.2 miles west of Pointe Howatson.

Baie de Cascapédia is shallow and **Rivière Cascapédia**, flowing into the head of the bay over drying mud and sand flats, can only be entered by small craft. **Cribs** in **ruins** lie in the mouth of the river. A 102 feet (31 m) long floating wharf, where small craft can berth, is on **Pointe Taylor** situated on the south side of the mouth of **Petite rivière Cascapédia**.

Artificial **reefs** are placed in a number of 249 different areas located SW of New Richmond. Their purpose is to enhance the marine environment by improving marine productivity and biodiversity in the eastern part of Baie de Cascapédia.

Caps de Maria, on the west side of 250 Baie de Cascapédia form a steep bluff 143 feet (44 m) in elevation. Pointe Tracadigache is a triangleshaped sand bar surrounding a drying lagoon; the point has a sand spit extending 0.5 miles in a southerly direction. A private light (1365) is shown from a red and white tower situated on Pointe Tracadigache.

251 Conspicuous towers stand on top of Mont Saint-Joseph 2.9 miles NNE of Pointe Tracadigache. There is a prominent wind farm in the area.

Baie Tracadigache is bordered with shoal 252 water.

253 Aquaculture facilities are located along the shores of Baie de Cascapédia and Baie Tracadigache. Generally they are marked with yellow cautionary **buoys**; mariners should proceed with caution when navigating in this area. Unmarked artificial reefs have also been placed close to Pointe Tracadigache.

Chart 4921

254 The town of Carleton-sur-Mer, with a population of 4073 in 2016, is situated 1 mile north of Pointe Tracadigache. There is a medical clinic in Carleton-sur-Mer and a hospital in the municipality of Maria.

255 The Carleton-sur-Mer Public wharf is administered by Fisheries and Oceans Canada in partnership with the Town of Carleton-sur-Mer. The inside depths of the harbour are between 0.4 m on the N side and 5.2 m on the SE side (2019). There is a crib with a depth of 4 m in the middle of the harbour. There are floating docks there. The harbour is protected at the SE by a breakwater and at the SW by another breakwater attached to the wharf. A light stands on the end of this breakwater. This light operates at night only. These facilities are managed by the Harbour Authority of Carleton-sur-Mer.



The basin has a marina (Club nautique de 256 *Carleton-sur-Mer*) and a launching ramp. See the Appendix for a marina facilities.

Saint-Omer Migratory Bird Sanctuary 257 (Environment and Climate Change Canada) is located in the barachois NNW of Baie Tracadigache, opposite the administrative sector of Saint-Omer; access regulations apply.

Chart 4486

There is good anchorage in 30 to 40 feet 258 Ļ (9.1 to 12.2 m), mud, 1 mile NW of Pointe Tracadigache. There is also good anchorage in about 25 feet (7.6 m), mud, about 3 miles west of the west end of Heron Island, and about 1.5 miles north of the mouth of Charlo River.

259 Eel Bay lies south of Inch Arran Point, which is the south entrance point to the **Restigouche** River. The Eel River flows into the bay through a marshy lagoon. A sewer outfall pipe extends from the west shore of the bay.

260 A church, with **conspicuous** twin stone spires, is situated 0.7 miles west of Inch Arran Point; close west of this is a large brick building with distinctive turrets.

Restigouche River — Miguasha-Ouest to Campbellton

Chart 4426

Bonamy Rocks (48°03 'N, 66°21 'W) extend 261 almost 0.5 miles east of the point south of Inch Arran Point. They are steep, high and broken. Banc de Miguasha, of sand and stones, extends 1 mile SW from Pointe de Miguasha, on the east side of the river mouth. A starboard hand light buoy EX2 (1362), is moored 0.9 mile SW of Pointe de Miguasha.

Pilotage for Restigouche River is 262 compulsory. Masters of vessels must report via any coastal radio station their ETA to Pilots Dalhousie at least 12 hours before arrival at the pilot boarding station, which is located about 4 miles east of Inch Arran Point (chart 4486). Pilotage arrangements can normally be made through the vessel's local marine agent or else directly with the Atlantic Pilotage Authority (APA). The APA can be contacted by telephone: 1-877-272-3477; or email, dispatch@atlanticpilotage.com.

263 The master of a vessel that is to depart or move within the compulsory pilotage area must report to Pilots Dalhousie 4 hours before the ETD.

Dalhousie Harbour is situated at the mouth of 264 Restigouche River. The nearby town of Dalhousie had a population of 3126 in 2016. Customs services are available at Dalhousie, and a hospital is located there. Restigouche River is open to navigation all year round, however, ice may hinder navigation during the winter months. Icebreaker assistance is available if required.

4-34

L'ANSE-À-BEAUFILS (2013)



ÎLE BONAVENTURE (2013)



PERCÉ (2020)

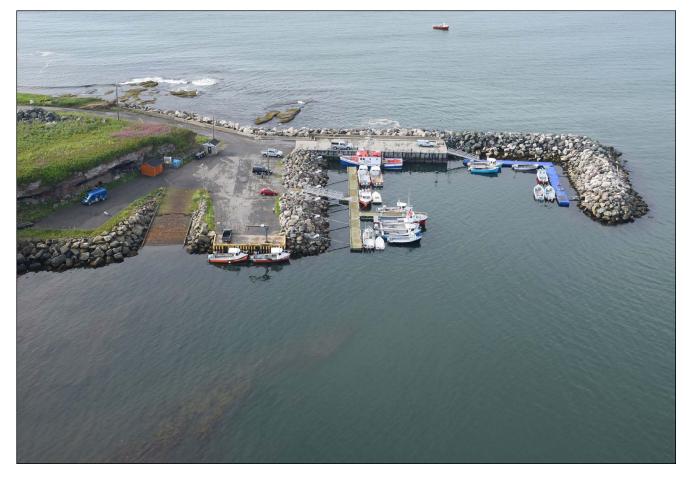


265 The maximum rate of the **tidal streams** in the river mouth is about two knots. The river and harbours within it are subject to continuous **silting**, and there may be less water than shown on the chart. Dredging is carried out periodically in Dalhousie Harbour.

266 The Inch Arran Point leading **lights** (1343, 1343.1), in line bearing 287° , are shown at Inch Arran Point. The front light is shown from a white tower with a red stripe, the rear light is shown from a skeleton tower having a white daymark with a red stripe.

267 The marine terminal at Dalhousie (East **Wharf**) is situated 0.7 miles NW of Inch Arran Point. It is 630 feet (192 m) long with two mooring dolphins 250 and 500 feet (76 and 152 m) east of the wharf, to allow for a berth 1115 feet (340 m) in length. In 2013, the depth alongside was 23 feet (7 m). The elevation of the deck of the wharf is 6 feet (1.8 m). The wharf is adapted for roll-on, roll-off operations, and bulk cargo. The *Dalhousie Harbour East* leading **lights** (1343.7, 1343.8), in line bearing 268°, are shown from skeleton towers having white

MAL-BAY (2018)



daymarks with red stripes, and lead into this wharf. A **light** (1343.6) is shown from a skeleton tower having a red and white rectangular daymark, on the east end of the wharf.

Middle Ground (local name), of sand and stones, and with a least charted depth of 2 feet (0.6 m), lies on the north side of the channel to the north of the marine terminal. The unlighted north cardinal **buoy** *EV* is moored on the north side of Middle Ground. A **light** (1344) is shown on the north side of the terminal at an elevation of 69 feet (21 m) from a skeleton tower having a red, white and green rectangular daymark. Another **light** (1345) is shown from a skeleton tower, having a green, white and black daymark. The light is situated on a point of land which is located along Dalhousie Harbour, between the east and west marine terminals.

269 Close west of the East Marine Terminal, the former ferry wharf is situated at the head of a small inlet. An L-shaped **wharf** used by fishing boats, extends 164 feet (50 m) from shore, and there are depths to 6 feet (1.8 m) alongside.

270 Dalhousie West Marine Terminal (West Wharf), 600 feet (183 m) long, lies at the west end of the harbour. Mooring dolphins allow for a berth 1165 feet (355 m) in length. In 2013, the depths alongside were 21 to 33 feet (6.4 to 10 m). The wharf is served by electricity, an oil pipeline, fresh water, and is mostly used for bulk cargo. A former **booming ground** is located between this wharf and the disused Bowater Paper Company wharf 0.3 miles to the east. Intermodal rail service is available in the area.

271 *Dalhousie Regional* Marina operates from a facility to the SW of the West marine merminal. There are several floating wharves and a **launching ramp**. Fuel oil, diesel oil and stores can be obtained in Dalhousie.

272 The settlement of **Miguasha-Ouest** is situated on the north shore of Restigouche River, NNE of Dalhousie. The wharf, in **ruins**, is closed to navigation and berthing is prohibited; vessels are not to approach the wharf within 65.6 feet (20 m)

A 262-foot (80-m) long **breakwater** shelters the former ferry docking area and has a depth of 8 feet (2.4 m). There is a dolphin 49 feet (15 m) east of the breakwater.

274 The channel between Dalhousie and Campbellton is wide and deep for the first 5 miles, but then narrows and shoals gradually. The channel is marked by **buoys**; between **Pointe au Chêne** and Campbellton, it is no longer maintained by dredging.

275 The city of **Campbellton**, population 13 114 in 2016, is situated on the south shore of the Restigouche River, 14 miles upstream from Dalhousie. The **wharf** at Campbellton is 1450 feet (442 m) long. There is a depth of 10 feet (3 m) situated 10 feet (3 m) off the north face, 75 feet (23 m) from the east end. Minor engine and hull repairs can be undertaken in Campbellton. The city is a regional centre and supplies are readily available here. A large regional **hospital** is also located in Campbellton.

A **conspicuous** white statue, 233 feet (71 m) in elevation, is situated on top of a **conspicuous** red brick building about 0.4 miles SSE of the wharf.

277 A fixed highway **bridge** crosses the river, linking Campbellton (NB) to Pointe-à-la-Croix (QC). The bridge has a clearance of 44 feet (13 m); only small craft can navigate above the bridge. A **launching ramp** and floating wharves are situated just above the bridge, on the north shore.

Cap d'Espoir to Cap Gaspé

Chart 4921

278 There is a harbour situated at **L'Anse-à-Beaufils** about 3 miles north of Cap d'Espoir. The harbour is formed by a basin and a Public **wharf**, which are both protected on the south side by a curved **breakwater**. The entrance to the harbour, 25 m wide, is on the NE side. There is a **daybeacon** on the outer end of the wharf. The harbour is managed by the harbour authority, *Administration portuaire de Percé et l'Anse-à-Beaufils*.

279 Depths in the entrance channel and inside the harbour are obtained from periodic dredging. Owing to continuous **silting**, mariners should expect to find less water in some places. For the latest information on depths mariners should contact the local authority.

280 In the basin there is a **marina** managed by the harbour authority, *Administration portuaire de Percé et l'Anse-à-Beaufils*. See the Appendix for marina facilities. A **launching ramp** is situated close to the inner end of the wharf. A catwalk, immediately below the fixed highway **bridge**, has a vertical clearance of 4.1 m.

281 There are artificial **reefs** in the following locations: 0.9 and 1.4 miles north of Cap d'Espoir (48°25'N, 64°19'W); 0.8 and 1 mile ENE of L'Anse-à-Beaufils. Mariners are not to drop anchor in the vicinity of the reefs. There are also **submarine** telecommunication **cables** that run between the shores of L'Anse-à-Beaufils and an area north of L'Étang-du-Nord (Îles de la Madeleine).

L'ANSE-À-BRILLANT (2018)



Mariners must refer to the appropriate chart for their position and are not to drop anchor in the vicinity of the cables.

Chart 4485

282 **Île Bonaventure** (48°30'N, 64°10'W), about 137 m in elevation, has steep red sandstone cliffs that reach 76 m in elevation in certain places. Numerous seabirds nest on ledges and fissures in the cliffs. The passage between the island and the mainland is clear, but heavy swells frequently roll through it and around the island.

283 There is a **wharf** equipped with a radar reflector on the WNW side of the island. The Bonaventure Island and Percé Rock Migratory Bird Sanctuary (Environment and Climate Change Canada) and Parc national de l'Île-Bonaventure-et-du-Rocher-Percé (Parcs Québec) are located in this area; access regulations apply.

Baie de Percé, NW of Île Bonaventure, is formed by **Cap Blanc** and **Rocher Percé**. Rocher Percé is **conspicuous** for its vertical cliffs, 88 m in elevation, for the large cleavage in its SE end and for the circular passageway that runs through the rock..

285 The town of **Percé**, with a population of 3103 in 2016, has a **wharf** which extends in a SE direction. A **light** (1409) is shown at the outer end of the wharf.

286 There are artificial reefs in the following locations: 0.3 miles north of Cap Blanc with a least depth of 6.3 m, and 0.4 mile SW of Cap Blanc with a least depth of 5.6 m. Mariners are cautioned against anchoring near the reefs. **Récif de Percé**, with a few rocks drying 3 feet (0.9 m), extends 0.4 mile from the shore, SE of at the wharf; there is also a rocky islet, 3 feet (1 m) in elevation.

287 **Mont Sainte-Anne** rises to an elevation of 340 m and is located 1 mile inland from the town of Percé. Several **conspicuous towers** soverlook the mountain.

GRANDE-GRAVE (2013)



La Malbaie, open to the east, is bordered at its head by a gravel and sandy beach that surrounds a lagoon. The south shore of the bay, between Rocher Percé and a position 1 mile NW of **Pointe des Cannes de Roches**, rises to a steep bluff over 198 m in elevation. The north shore is composed of intermittent low sandstone cliffs and occasional beaches.

289 A 130-m long outfall pipe, with 6 m of water over its outer end, extends from Cap Barré.
290 Barachois is a village situated on the shore at the NW end of La Malbaie. The entrance to the lagoon is on the north side and small craft can pass under a fixed railway bridge which has a vertical clearance of 7.5 m. A sand bar forms in the approach to the lagoon downstream of the bridge. A former landing pier in ruins is upstream of the bridge.

Chart 4921

291 There is a Public **breakwater-wharf** in the hamlet of **Mal-Bay** on the north shore of La Malbaie. There are floating wharves in the basin formed by the breakwater-wharf. There is a **launching ramp** on the NE side of the inner end of the wharf. A seasonal **light** (1410) is on the breakwater. This harbour is managed by the harbour authority, *Administration portuaire de l'Anse-à-Brillant et St-Georges-de-Malbaie*.

292 Anchorage off Mal-Bay is not recommended because of frequent SE gales, preceded by fog, and usually accompanied by heavy seas.

Chart 4485

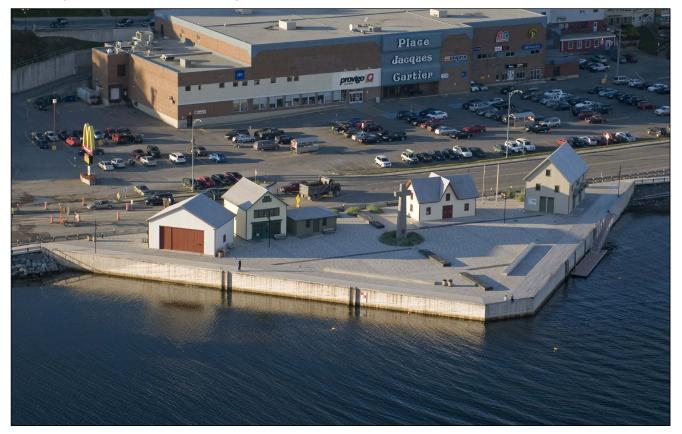
293 **Pointe Saint-Pierre**, the south entrance point of Baie de Gaspé, is low with a number of houses on it. **Île Plate** is a low sandstone island lying 0.4 miles off Pointe Saint-Pierre (48°38'N, 64°09'W). A GASPÉ HARBOUR (POINTE OF SANDY BEACH) (2013)



PORT OF GASPÉ (2013)



GASPÉ (BIRTHPLACE OF CANADA) (2013)



light (1412), shown from a tower with rectangular fluorescent-orange daymarks, is situated on the island.

294 A depth of 13.6 m lies 1 mile SE of Cap Gaspé. A **bank** with a depth of 25.3 m, situated 5 miles SE of Cap Gaspé, forms the NW part of **Banc des Américains**. Banc des Américains extends 10 miles to the SE where there is a depth of 13.3 m. **Tide rips** occur occasionally at these locations.

295 The **Bancs-des-Américains Marine Protected Area (MPA)** extends from Île Bonaventure to near Cap Gaspé and eastward for more than 18 miles. The MPA includes Banc des Américains. Restrictions apply to this MPA and are described in the *Banc-des-Américains MPA Regulations*. For more information, please visit the *Fisheries and Oceans Canada* website at www.dfo-mpo.gc.ca.

296 An ODAS **light buoy** *IML-11 (1412.5)* is moored 1 mile SE of Banc des Américains.

Baie de Gaspé

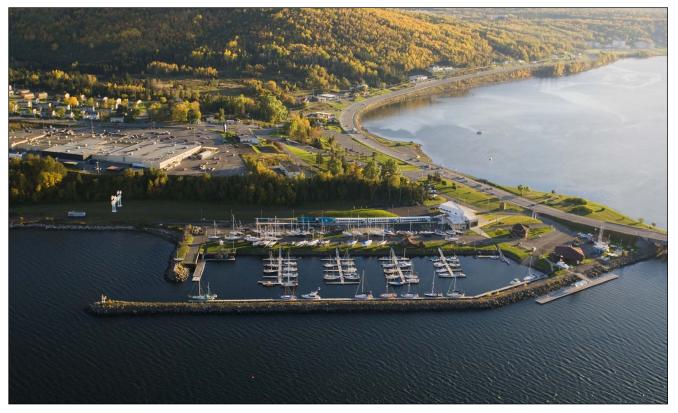
297 **Baie de Gaspé** extends over a distance of more than 17 miles and has a harbour and an excellent roadstead in its NW end. The SW shore of the bay, from Pointe Saint-Pierre to Douglastown 12 miles up the bay, presents a succession of precipitous headlands with cliffs reaching 46 m.

298 Meteorological observations for Gaspé are recorded at the airport and do not necessarily apply to the prevailing conditions in Baie de Gaspé.

Anse à Brillant, about 7.5 miles NW of Pointe Saint-Pierre, shelters a fishing harbour. The harbour is fringed by two wharves with an overall length of 205 m.

300 The 12-m wide entrance to the fishing harbour has depths (2020) of 1.2 m. Two **breakwaters**, which extend in a NE direction, form the entrance. Within the first 80 m of the harbour there are depths (2020) of 0.6 to 1.8 m. There is a **launching ramp** and cargo winches. Owing to continuous **silting** mariners should expect to find less water in some places. For the latest information

GASPÉ MARINA (2013)



on depths, mariners should contact the local authority. This harbour is managed by the harbour authority, *Administration portuaire de l'Anse-à-Brillant et St-Georges-de-Malbaie*.

301 Anse-à-Brillant leading lights (1414, 1415), in line bearing 205°, are in the outer approach. The lights have fluorescent-orange daymarks with a black stripe. A starboard hand light buoy BR2 (1413.1) is moored 0.5 mile offshore, NNE of the fishing harbour.

302 The roadstead off Douglastown is extensive and offers **anchorages** in depths of 11 to 18 m, mud and clay bottom. SE winds create a heavy swell but there is good shelter from other wind directions.

303 Two **aquaculture** facilities, marked by yellow cautionary **buoys**, are situated 0.7 mile east and 1.4 miles SE of **Cap Haldimand**, respectively.

304 The residential district of **Douglastown**, amalgamated with the town of Gaspé, is situated on the south side of the mouth of **Rivière Saint-Jean**. A narrow channel passes under the fixed railway **bridge** which crosses the river mouth. 305 **Cap Gaspé**, the north entrance point of Baie de Gaspé, is a limestone headland at the extremity of the narrow peninsula of **Presqu'île de Forillon**. Cliffs rise to an elevation of 183 m on the NE side of the peninsula. Cap Gaspé dips to the SW and the cliffs are lower on that side.

306 A rocky area extends the south end of Cap Gaspé in a SE direction. A **shoal**, with a depth of 13.6 m, is situated 1 mile SE of Cap Gaspé. There is also an extensive rocky **shoal**, with a depth of 25.3 m, 5 miles SE of Cap Gaspé forming the NW part of Banc des Américains. **Tide rips** occur at times.

307 Presqu'île de Forillon is part of *Forillon National Park*. Regulations apply to access the Park and use its facilities.

308 Cap Gaspé light (1426) is shown from a lighthouse on the south end of the cape ($48^{\circ}45'N$, $64^{\circ}10'W$).

309 The NE shore of Baie de Gaspé is steep-to and free of detached shoals up to Rocher Seal 7 miles NW of Cap Gaspé.

Solution 310 At **Grande-Grave**, 3.6 miles NW of Cap Gaspé, there is a small harbour with a **wharf** protected by **jetties**. A **light** (1421) is shown from a

mast on the outer end of the wharf. There is a **launching ramp** in the small harbour.

311 Local knowledge is required as there may be **shoals** in the entrance channel and along the wharf. These facilities are managed by *Parks Canada*; regulations apply to both the access and use of the facilities.

312 A **conspicuous tower**, with an elevation of 320 m and red **lights**, stands on a hill 2.8 miles NNW of Grande-Grave.

Gros cap aux Os is 7.6 miles NW of Cap Gaspé. A **light** (1420.5) is shown from a tower on the cape. **Rocher Seal**, with a depth of 1.2 m, lies 0.8 miles ESE of the cape. A **wreck** lies 0.2 mile SE of the cape.

Port of Gaspé

Chart 4416

Havre de Gaspé is located west of the natural breakwater formed by **Pointe de Sandy Beach** which is low and linked to **Batture de Sandy Beach**, a drying sandy bar. The harbour is nearly 4.5 miles long and has an average width of 1 mile with a mostly muddy bottom; the harbour is a safe roadstead.

315 **Bassin du Nord-Ouest** and **Bassin du Sud-Ouest** are two extensions of the harbour. Ice usually forms around December 15th in the harbour.

316 **Aquaculture** facilities, marked with yellow cautionary **buoys** and lateral **buoys**, are situated year-round in Bassin du Nord-Ouest.

Big Markov State State

318 The rate and the direction of the **tidal streams** vary greatly in the outer bay, in the narrow passage and in the inner harbour. These tidal streams are strongly influenced by local winds and the natural flow of the upstream rivers.

319 The **Port of Gaspé** is located on the south side of the harbour near the Hamlet of **Sandy Beach** and is administered by the *Société portuaire du*

Bas-Saint-Laurent et de la Gaspésie; the Harbour master has an office on site, telephone: 418-368-6679 or 418-360-5123 (24/7). The port is open year round; *Canadian Coast Guard* icebreakers ensure access during the winter.

320 **Pilotage** is not compulsory, but it can be requested from the Harbour master.

321 Arrival information. — Gaspé is a customs port of entry for commercial vessels but is not a quarantine station; refer to *ATL 100 – General Information* for details about the Quarantine Regulations. Extensions to the deratting certificate can be issued there in accordance with the *International Health Regulations*.

322 **Regulations**. — *Public Ports and Public Port Facilities Regulations* apply to vessels at berth, at anchor, maneuvering or otherwise under way in the harbour.

323 The Harbour master has full authority over vessels in the harbour and may order them to move, use tugs, moor or anchor at designated locations.

Mooring. — The public wharf is 231 m long and 34 m wide and has two berths, 1 and 2. The respective lengths of the mooring berths are 180 m and 175 m. See the chart for depths.

325 A cathodic protection system is installed on the wharf. When berthing at the wharf, **operating procedures** must be observed to prevent damage to vessels.

326 **Supplies**. — Fresh water (seasonal) and fuel are available.

327 **Port services**. — Minor repairs, stevedores and moorage are available.

328 **Transportation**. — Gaspé is connected to the provincial road system. There is a regional airport nearby.

There are many **conspicuous** oil tanks in the vicinity of the wharf.

330 West of the wharf there is an **outfall pipe** extending 142 m from the shore. The depth at the outer end of the outfall pipe is 11.8 m.

331 South of the wharf, there are submerged **ruins** of a slipway and an abandoned pipeline joining the wharf to shore. There is a **shipyard** *(Chantier Naval Forillon)* about 200 m south of the wharf. The shipyard has an 800-ton capacity slipway with a 200-ton transfer system and a workshop.

332 **Banc de Lourdes** is an area of **shoal water** extending nearly 0.5 mile NW of **Pointe de Lourdes**. The entrance to Bassin du Sud-Ouest lies between Pointe de Lourdes and **Pointe Jacques-Cartier**. **Batture Paddy** is on the north shore of Bassin du Sud-Ouest just south of Pointe Jacques-Cartier. Monseigneur-Ross fixed highway **bridge**, with a centre vertical clearance of 6.1 m, crosses the narrows at the entrance to Bassin du Sud-Ouest. Two abandoned **submarine cables** cross the narrows close above the bridge.

333 Bassin du Sud-Ouest extends 1.2 miles upstream of the fixed bridge. *Birthplace of Canada* historic site is on the north shore of Bassin du Sud-Ouest, about 0.2 miles upstream of the bridge. A landing pier and floating wharves allows easy access to Three Nations wharf. Refer to current chart for depths at wharf. A submarine pipeline is laid across Bassin du Sud-Ouest about 0.9 miles SW of the bridge.

334 The town of **Gaspé**, with a population of 15,063 in 2021, has a **hospital**. The nearby airport offers scheduled flights. West of the bridge there is a wharf in **ruins**. *Gaspé* Marina (*Club Nautique Jacques-Cartier*), protected by **breakwaters**, is located on the south shore of the harbour close east of the bridge. An 82-m long floating wharf, owned by the marina, is close to the inner end of the north breakwater. See Appendix for additional information on the marina.

335 Privately maintained **lights** (1417.4, 1417.5) are shown from towers on the outer end of each breakwater.

Note. — For a description of the Gulf of St. Lawrence above Cap Gaspé consult Sailing Directions booklet ATL 110 — St. Lawrence River — Cap Whittle/Cap Gaspé to Les Escoumins and Anticosti Island.



Sail Plan

Adapted from Transport Canada Publication TP 511E.

Fill out a sail plan for every boating trip you take and file it with a responsible person. Upon arrival at your destination, be sure to close (or deactivate) the sail plan. Forgetting to do so can result in an unwarranted search for you.

Owner Information				
Name:				
Address: Telephone Number:		Emergency Contact Number:		
Boat Information				
		_ Licence or Registration Num	ber:	
		Length:		
		Deck:		
gine Type:		_ Distinguishing Features:		
Communications				
	HF:	VHF:	MF:	
-		er:		
		····		
Safety Equipment on B				
Salety Equipment on B				
ifeiackets (include number):				
		Dinghy or Small Boat (include	e colour):	
_iferafts:		_ Dinghy or Small Boat (include		
_iferafts: Flares <i>(include number and t</i> y	/pe):			
Liferafts: Flares <i>(include number and t</i> y Other Safety Equipment:	/pe):			
Liferafts: Flares <i>(include number and t</i> y Other Safety Equipment: Trip Details — Update 7	/pe): These Details	Every Trip		
Flares <i>(include number and ty</i> Other Safety Equipment: Trip Details — Update T Date of Departure:	/pe): These Details	Every Trip _ Time of Departure:		
Liferafts: Flares <i>(include number and t</i> y Other Safety Equipment: Trip Details — Update T Date of Departure: Leaving From:	/pe): These Details	Every Trip		

The responsible person should contact the nearest Joint Rescue Coordination Centre (JRCC) or Maritime Rescue Sub-Centre (MRSC) if the vessel becomes overdue.

Act smart and call early in case of emergency. The sooner you call, the sooner help will arrive.

JRCC Victoria (British Columbia and Yukon) 1-800-567-5111

+1-250-413-8933 (Satellite, Local or out of area) # 727 (Cellular) +1-250-413-8932 (fax) jrccvictoria@sarnet.dnd.ca (Email)

JRCC Trenton (In Canada) 1-800-267-7270

+1-613-965-3870 (Satellite, Local or Out of Area) +1-613-965-7279 (fax) <u>jrcctrenton@sarnet.dnd.ca</u> (Email)

MRSC Québec (Quebec Region) 1-800-463-4393

+1-418-648-3599 (Satellite, Local or out of area) +1-418-648-3614 (fax) mrscqbc@dfo-mpo.gc.ca (Email)

JRCC Halifax (Maritimes Region) 1-800-565-1582

+1-902-427-8200 (Satellite, Local or out of area) +1-902-427-2114 (fax) jrcchalifax@sarnet.dnd.ca (Email)

MRSC St. John's (Région de Terre-Neuve-et-Labrador) 1-800-563-2444

+1-709-772-5151 (Satellite, Local or out of area) +1-709-772-2224 (fax) <u>mrscsj@sarnet.dnd.ca</u> (Email)

MCTS Sail Plan Service

Marine Communications and Traffic Services Centres provide a sail plan processing and alerting service. Mariners are encouraged to file Sail Plans with a responsible person. In circumstances where this is not possible, Sail Plans may be filed with any MCTS Centre by telephone or marine radio only. Should a vessel on a Sail Plan fail to arrive at its destination as expected, procedures will be initiated which may escalate to a full search and rescue effort. Participation in this program is voluntary.

See Canadian Radio Aids to Marine Navigation.



Other References

Information for the Protection of Right Whales: <u>https://www.dfo-mpo.gc.ca/fisheries-peches/commercial-commerciale/atl-arc/narw-bnan/index-eng.html</u>

Atlantic Pilotage Authority Regulations: https://www.atlanticpilotage.com/acts-regulations/

Meteorological data: https://www.canada.ca/en/services/environment/weather.html

Marine Forecasts and Warnings for Canada: <u>https://weather.gc.ca/marine/index_e.html</u>

Current Predictions (Data Viewer by DFO - MSDI Dynamic Current Layer): <u>https://gisp.dfo-mpo.gc.ca/apps/dataviewer/?locale=en</u>

Customs: https://www.cbsa-asfc.gc.ca/travel-voyage/pb-pp-eng.html

SAR: Search and rescue (ccg-gcc.gc.ca)

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