

CEN 301

Canadian Sailing Directions

St. Lawrence River, Montréal to Kingston









Pictograph legend



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Record of Changes

II

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

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he Second Edition of *Sailing Directions, CEN 301—St. Lawrence River, Montréal to Kingston,* 2010, has been compiled from Canadian Government and other information sources. In general, 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.

This edition introduces a new layout of the geographical areas.

General information for the Great Lakes is grouped in one booklet: *Sailing Directions, CEN 300* — *General Information, Great Lakes.* It contains navigational information and a brief description of the main port facilities as well as geographic, oceanographic and atmospheric characteristics. Booklet *CEN 300* also includes a geographical index for the Great Lakes area.

The geographical areas are described in a series of booklets; their limits are shown on the back cover of each booklet. For more information, consult the *Catalogue of Nautical Charts and Publications 3*, *Ontario / Manitoba, Including the Great Lakes.*

Tidal, water level and current information has been revised by the Tides, Currents and Water Level Section of the *Canadian Hydrographic Service*.

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

Remarks

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

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

Tidal information is not given; this information is available in *Canadian Tide and Current Tables*. Any known unusual changes in water level, however, are mentioned.

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.

Wrecks are described where they are relatively permanent features having significance for navigation or anchoring.

Units and terminology used in this booklet

Latitude and longitude 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 offshore. 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 given in nautical miles of 1,852 m.

Speeds are given in knots, which means nautical miles 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 that these be confirmed by the appropriate local authority.

All the **marinas** that could be located were asked for details of their facilities and the depths at their docks. As these facilities often change from year to year, it is suggested that users contact the marina operators for confirmation of depths and facilities available.

Elevations and **vertical clearances** are given above chart datum.

Heights of structures, as distinct from the elevations, refer to the heights of structures above the ground.

Deadweight tonnage and **mass** are expressed in metric tonnes of 1,000 kilograms (2,204.6 pounds). The kilogram is used for expressing small masses.

Where sections are quoted verbatim from U.S. Coast Pilot 6, the figures in square brackets [thus] after the **units of measurement** are the International System of Units (SI) equivalent in nautical miles, metres or tonnes, as provided by CHS.

Numbers in brackets following the population identify the census year. The number in brackets after the name of a light or light buoy is its *List of Lights, Buoys and Fog Signals* number. Numbers in brackets following data that is subject to change is the year the data was last verified.

Time, unless otherwise stated, is expressed in Eastern Standard Time or Eastern Daylight Saving Time. Details of local time kept will be found in Sailing Directions booklet CEN 300 — General Information, Great Lakes.

Public wharf is a Government wharf that is available to the public. It may be shown on older charts as "Government Wharf" or "Govt Whf". A fee is usually charged for dockage. Many of these wharves are reserved for use by local fishing fleets or by other agencies.

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. **Prominent** objects are those which are easily identified but are not conspicuous.

Small craft refers to pleasure craft and, in general, to small vessels with shallow draught.

Pictographs are symbols shown at the beginning of certain paragraphs to allow quick reference to information or to emphasize details. The Pictograph Legend is shown on the inside front and back covers of this booklet.

For information on Government of Canada publications, regulations and services mentioned in this book, visit:

http://www.marineservices.gc.ca/

References to other publications:

International Maritime Organization

Visit https://www2.imo.org/b2c_imo/b2c/init.do to order:

- International Code of Signals
- IMO Standard Marine Communications Phrases
- International Aeronautical and Marine Search and Rescue Manual (IAMSAR)

Parks Canada

• Rideau Canal • Trent-Severn Waterway National Historic Sites of Canada Boating Safety: http://www.pc.gc.ca/~/media/lhn%20nhs/on/rideau/pdf/BoatingSafely2008 e.ashx

St. Lawrence Seaway Management Corporation

• The Seaway Handbook: http://www.greatlakes-seaway.com/en/pdf/handbook.pdf

U.S. Department of Commerce, National Oceanic and Atmospheric Administration, National Ocean Service

• U.S. Coast Pilot 6, Great Lakes: http://www.nauticalcharts.noaa.gov/nsd/coastpilot6.htm

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
min	minute
MHz	megahertz
mm	millimetre
Μ	International Nautical Mile
t	metric tonne
0	degree (plane angle)
'	minute (plane angle)

Directions

Ν	north
NNE	north northeast
NE	northeast
ENE	east northeast
E	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

CCG	Canadian Coast Guard
CHS	Canadian Hydrographic Service
DWT	deadweight tonnage
ETA	estimated time of arrival
ETD	estimated time of departure
HF	high frequency
HW	high water
IGLD	International Great Lakes Datum
LW	low water
MCTS	Marine Communications and Traffic Services
NAD	North American Datum
No.	number
SAR	Search and Rescue
USA	United States of America
VHF	very high frequency
VTS	Vessel Traffic Services

Montréal to Beauharnois

General

Chart 1400

1 A brief history and general description of the *St. Lawrence Seaway* is given in *Sailing Directions* booklet *CEN 300 — General Information, Great Lakes.*

2 Seaway Practices and Procedures, previously known as Seaway Regulations, and other information pertinent to the use of the Seaway are contained in the Seaway Handbook. The Seaway Handbook is kept up to date by Seaway Notices.

3 An up-to-date copy of the *Seaway Handbook* must be carried by every vessel in transit through the *St. Lawrence Seaway*; copies may be obtained from the Information Officer, *St. Lawrence Seaway Management Corporation*, 202 Pitt Street, Cornwall, Ontario, K6J 3P7, telephone 613 932-5170, fax 613 932-5037, or at *http://www. greatlakes-seaway.com/.*

4 A *Pleasure Craft Guide* for the *St. Lawrence Seaway* offers information on operating pleasure craft in the locks between Montréal and Lake Ontario and in the Welland Canal. This publication may also be requested from the *St. Lawrence Seaway Management Corporation*. In the interests of safety, craft of less than 6 m in length or 900 kg in weight are not permitted to transit through the *Seaway* locks. Pleasure craft over 20 m in length must be fitted with VHF radiotelephone equipment.

5 The five Canadian and two American locks between Montréal and Iroquois raise ships 68.9 m to the level of Lake Ontario. With the exception of Iroquois Lock, where water is admitted or released by partly opening the upper or lower lock gate, all locks fill and empty through sluices at the bottom of the lock; the operation takes about seven minutes and there is little turbulence. The concrete walls of the locks are sheer; when the lock gates are open they fit flush into the lock walls. The concrete approach walls to the locks are generally low, with heights of 1.2 to 3 m.

6 The maximum size of vessels that can use the *Seaway* locks is 222.5 m in length and 23.2 m in breadth. Vessels up to 225.5 m in length and 23.8 m in breadth may be considered, under certain conditions, upon application to the Manager, *St. Lawrence Seaway Management Corporation*.



7 The minimum overhead clearance of structures and cables crossing the *Seaway* is 36.6 m. No vessel shall transit if any part of the vessel or anything on the vessel extends more than 35.5 m above water level.

8 For details of ship dimensions, refer to item 3 of *Seaway Practices and Procedures* in the *Seaway Handbook*.

9 Any changes to these allowed dimensions are announced in *Seaway Notices*. Mariners may have drawings of the ship reviewed for compliance to these dimensions free of charge. For details, refer to Appendix 3 of the *Vessel Transit and Equipment Requirements* in the *Seaway Handbook*.

10 **Caution**. — Vessels with **flared bows**, high **raked sterns** or **superstructures** that could overhang the walls of locks, when the vessel is not parallel to the lock wall, must exercise extreme caution in the vicinity of **bascule bridges**. Bascule bridges also impose restrictions on vessel dimensions; for details refer to Appendix I of *Seaway Practices and Procedures* in the *Seaway Handbook*.

11 The maximum permissible **draught** in the *St. Lawrence Seaway* is 7.92 m, or the maximum permissible draught **announced in a Seaway Notice**. For additional information, refer to item 29 of *Seaway Practices and Procedures* in the *Seaway Handbook*.

12 The channel widths vary from a minimum of 55 m between bridge abutments and 68 m in canals flanked by two embankments, to 182 m in improved channels.

13 The section of the *Seaway* described in this chapter normally opens to navigation on April 1 and closes on December 15. The actual dates depend on weather and ice conditions and are announced in *Seaway Notices*.

14 *Seaway* mileage markers show distances in nautical miles from the start of the *Seaway* mileage in the Port of Montréal. There are distance markers every mile along the banks of Canal de la Rive Sud and Canal de Beauharnois.

15 The **current** between Montréal and Lake Ontario varies with the width of the river channel. The current in the canals is generally slight except in the Canal de Beauharnois where the rate, although moderate, varies with the volume of water passing through the power dam. In lakes and open reaches, currents vary from 0.2 to 1 knot; in the narrower sections of the river the currents are 2 to 3.5 knots.

16 **Caution**. — The **strongest currents** are in the channels around Cornwall Island. At times of high water levels, currents can reach 8 knots in Pollys Gut at the west end of the island, and 7 knots along the north side of the island, east of the *Seaway International Bridge*. Depending on the number and position of sluice gates open on the Iroquois Control Dam, the currents in the east approaches to the Iroquois Lock may, under certain conditions, set across the channel. Mariners are also cautioned that the rate of the current may vary in anchorage areas and that the current may set in more than one direction in a particular anchorage area.

17 **Caution**. — There are **speed limits** in the *St. Lawrence Seaway* for all vessels over 12 m in length. Item 28 and Schedule II of *Seaway Practices and Procedures* in the *Seaway Handbook* specify speed limits for both normal and high water levels. The speed limits shown on the charts are for normal water levels. Mariners are cautioned that a lower speed limit may be in effect, depending on the actual water level.

Pilotage is compulsory for most vessels in transit through the *St. Lawrence Seaway* and on the Great Lakes *(see Sailing Directions booklet CEN 300—General Information, Great Lakes)*. Upbound and downbound vessels passing through the Port of Montréal normally change pilots at Saint-Lambert Lock. Between Montréal and Lake Ontario, there are pilot change points at Upper Beauharnois Lock and at Snell Lock. A pilot boarding station off Cape Vincent, New York, is used for changing Lake Ontario pilots.

19 Masters of vessels requiring pilotage service must give at least 12 hours notice to *Pilots Cornwall*, giving ship's name, draught, estimated time of arrival at a pilot station or departure from a port, and destination. The message must be confirmed at least 4 hours prior to arrival or departure. Pilotage messages can be relayed, free of charge, through any *Marine Communications and Traffic Services (MCTS)* centre. Upbound vessels berthed in Montréal make arrangements for pilots directly; this is usually handled by the ship's agent through *Pilots Cornwall*.

20 For further information on pilotage, consult the *Annual Edition of Notices to Mariners* and *Sailing Directions* booklet *CEN 300* — *General Information, Great Lakes.*

21 The *St. Lawrence Waterway Vessel Traffic Services* system controls shipping in and below Montréal. Masters of vessels upbound into the *Seaway* shall inform *Montréal Traffic* on VHF Channel 10 (156.5 MHz) at CIP 23, at Tracy, and again at CIP 25, at Cap St. Michel. The *VTS* centre, a part of *MCTS Montréal*, will notify the pilot office of the pilot requirements. Details of the *St. Lawrence Waterway Vessel Traffic Services* system are given in *Radio Aids to Marine Navigation (Atlantic, St. Lawrence, Great Lakes, Lake Winnipeg and Eastern Arctic)*.

22 The **Seaway Traffic Control** system provides for the safe and efficient scheduling of vessels through the *St. Lawrence Seaway*. Vessels are required to maintain a continuous radio watch on the assigned frequency while in a *Seaway Traffic Control* sector. Details of the *Seaway Traffic Control* system are given in Schedule III of *Seaway Practices and Procedures* in the *Seaway Handbook*. 23 It should be noted that the local routine expression "Stay to the north", used in the St. Lawrence River communications, means to hug the "north shore" or the starboard limit for vessels navigating upbound. By agreement, an upbound vessel on the St. Lawrence River considers the "north shore" to be on its starboard side while the "south shore" is considered to be on its port side.

24 This chapter describes the St. Lawrence River and the *St. Lawrence Seaway* from the start of the *Seaway* mileage in the Port of Montréal to Beauharnois, a distance of 27 miles. This section includes two *Seaway* locks.

Montréal to Canal de la Rive Sud

To ensure an orderly movement of traffic into the *St. Lawrence Seaway* from Montréal, an **order of transit roster** is prepared and maintained by *Montréal Vessel Traffic Services (VTS)* centre, in conjunction with *Seaway Traffic Control.*

When an upbound vessel berthed in Montréal is ready to depart, the Master shall report to *Seaway Beauharnois* on VHF 14 (156.7 MHz) to establish order of passing; then switch back to *Montréal Traffic* on VHF 10 to proceed.

27 Seaway Traffic Control calling-in point No. 2, and calling-in point No. 27 for the St. Lawrence Waterway Vessel Traffic Services system, is in Canal de la Rive Sud 0.3 mile downstream of Pont Jacques-Cartier. Upbound vessels report entering Seaway Traffic Control Sector 1 to Seaway Beauharnois on VHF channel 14, and leaving St. Lawrence Waterway Vessel Traffic Services Sector 5 to Montréal Traffic on VHF channel 10; downbound vessels report entering Sector 1 to Seaway Beauharnois on VHF channel 10, and leaving Sector 1 to Seaway Beauharnois on VHF channel 14, when passing this point.

Canal de la Rive Sud

Chart 1429

28 **Caution**. — **Rapides de Lachine**, in the St. Lawrence River, is **dangerous** over a distance of 1.6 miles because of **shallow reefs**, **rocky bars** and **strong currents**.

29 **Canal de la Rive Sud**, 16 miles long, is entered in the Port of Montréal and follows the east and south shores of the St. Lawrence River, bypassing **Bassin de La Prairie** and Rapides de Lachine to enter Lac Saint-Louis 2 miles west of Kahnawake. The canal has a least width of 68 m except under **Pont Jacques-Cartier**, where there is a minimum usable width of 61 m. The canal includes the Saint-Lambert and Côte Sainte-Catherine Locks, which handle the 14.6-m difference in elevation between Lac Saint-Louis and the Port of Montréal. The canal embankments are lit at night.

30 Pont Jacques-Cartier Bridge East light (2379.6, Atlantic Coast List of Lights, Buoys and Fog Signals), a fixed green light on the underside of the bridge, marks the centre of the Seaway channel.

31 There is a **speed limit** in Canal de la Rive Sud. For more details on speed limits, see Item 28 and Schedule II of *Seaway Practices and Procedures* in the *Seaway Handbook*.

31.1 **Speed limit**. — The maximum speed for small craft operators, at any time, is 5.4 knots (10 km/h) within 50 metres of the shore of Notre-Dame Island. Outside the area referred above, the maximum speed between 9:00 pm and 7:00 am, in any water body around the Island of Montréal, is 13.5 knots (25 km/h).

32 **Saint-Lambert Lock** has a lift of 4 to 6 m. The downstream approach wall, on the west side of the canal, has a berthing length of 653.5 m. The upstream approach wall, also on the west side of the canal, has a berthing length of 458 m. The width of the canal is 68.6 m at the downstream approach wall and 145 m at the upstream approach wall.

SAINT-LAMBERT LOCK (2008)



1-3

CÔTE SAINTE-CATHERINE LOCK (2008)



³³ The main span of *Pont Victoria*, a combined road and railway bridge, crosses at the lower end of Saint-Lambert Lock; a diversionary road and railway **bridge** crosses at the upstream end. Each bridge has a vertical lift section with overhead clearances of 12 and 7 m, respectively, when lowered and 41 and 37 m in their raised position.

4 It is reported that water from the regulating channel, east of Saint-Lambert Lock, sets NW on to the lower approach wall; a reverse flow sets in a southerly direction along the wall towards the lower lock entrance.

Saint-Lambert Lock to Côte Sainte-Catherine Lock

35 From Saint-Lambert Lock to **Côte Sainte-Catherine Lock**, a distance of 7 miles, the canal has a least width of 91 m. The canal is flanked to the west and north by an illuminated embankment, and to the east and south by short sections of rubble embankment and islets. **Overhead power cables** link some of the islets.

An **overhead power cable** with a clearance of 45 m crosses the canal 0.2 mile upstream of Saint-Lambert Lock. *Club de yacht de Saint-Lambert*, a private facility on the east shore 0.8 mile SSE of Saint-Lambert Lock, has a launching **ramp**.

38 **Pont Champlain**, a highway **bridge** 1.6 miles upstream of Saint-Lambert Lock, spans the St. Lawrence as a viaduct from Montréal to **Île des Soeurs** and becomes a high-level bridge over the Canal de la Rive Sud to the east shore. This bridge has a vertical clearance of 37 m. 39 An ice control structure, consisting of a number of piers joined by a service bridge, extends from Île des Soeurs to the Seaway embankment, close upstream of Pont Champlain.

40 *Turning Basin No. 1*, 1.7 miles south of *Pont Champlain*, is on the east side of the canal. *Turning Basin No. 2* is on the south side of the canal, downstream of the approach wall for the Côte Sainte-Catherine Lock.

41 At the city of **La Prairie**, 2.7 miles south of *Pont Champlain*, there is a Public **wharf** for small craft. This wharf is 24 m long and 3 m wide with an elevation of 1.5 m. There is a launching **ramp**.

42 There is a Public **wharf** and a launching **ramp** on the south shore at **Delson**. The wharf is 14 m long and 4 m wide with an elevation of 0.6 m.

43 A Public **wharf**, in ruins, and a launching **ramp** are on the south shore, SW of *Turning Basin No. 2*.

44 **Caution**. — Several **submerged cables and pipelines** cross the canal between Saint-Lambert and Côte Sainte-Catherine Locks.

45 Côte Sainte-Catherine Lock has a lift of 10 to 11 m. The lower approach wall has a berthing length of 319 m; it is on the north side of the canal. Above the lock, the upper approach wall, also on the north side, has a berthing length of 318 m. Abreast of the approach walls the canal has been widened to 137 m. A bascule **bridge** spans the lock at its upstream end.

PORT DE CÔTE SAINTE-CATHERINE WHARF (2008)

Côte Sainte-Catherine Lock to Lac Saint-Louis

46 The canal above Côte Sainte-Catherine Lock extends 6.8 miles in a westerly direction to Lac Saint-Louis. This section of the canal has a least width of 76 m.

47 **Caution**. — A hydro-electric power plant is upstream of the lock, south of the canal. Booms, marked by yellow **lights**, surround the area upstream of the power plant; berthing is prohibited. Pleasure craft are advised to keep well clear of the power plant.

48 The **Port de Côte Sainte-Catherine wharf** lies along the south side of the canal 0.8 mile west of the lock; it is 1,219 m long with a depth of 8.2 m. There are bulk storage facilities at the wharf; many warehouses and factories are a short distance inland.

49 **Overhead cables**, with a clearance of 46 m, cross the canal 2.3 to 2.6 miles upstream of Côte Sainte-Catherine Lock.

50 **Caution**. — A **shoal area** on the north side of the canal, starting 0.5 mile west of the overhead cables, is marked by **buoys** and **light buoys**. Large vessels should avoid meeting in this buoyed section.

51 **Kahnawake** $(45^{\circ}25'N, 73^{\circ}41'W)$, a village on *Kahnawake Indian Reserve 14*, is at the lower end of Lac Saint-Louis on the south side of the canal abreast the head of Rapides de Lachine. Canal de la Rive Sud enters Lac Saint-Louis 1.5 miles west of Kahnawake.

52 **Pont Honoré-Mercier**, a high-level highway **bridge** with a clearance of 39 m, and two railway **bridges** cross the canal and the river at Kahnawake. Each railway bridge has a lift-bridge section across the canal, with a vertical clearance of 14 m when lowered and 39 m when raised. White **lights** are shown from the piers of the bridges on each side of the channel. 53 **Caution**. — A vessel's approach to the **lift bridges** is governed by light signals controlled by the bridge operator, or if necessary, by VHF radio on Channel 14. Whistle signs are installed, for upbound vessels, 0.7 mile downstream of the bridges. For downbound vessels, the whistle sign is 0.8 mile upstream of the bridges. Unless a vessel's approach to the lift bridges has been acknowledged by flashing amber lights on the triangular, yellow and black checkerboard caution sign, the master shall notify the bridge operator by VHF radio when the vessel comes abreast of the whistle sign. For more details, refer to the *General Transit Information* section of *Vessel Transit and Equipment Requirements* in the *Seaway Handbook*.

54 There are **emergency mooring** facilities on the north side of the canal 0.2 mile upstream of the railway bridges. Pontoons moored alongside ensure a depth of 8.2 m in the berth, which is 143 m long.

55 **Île Tekakwitha** lies south of the canal, west of Kahnawake.

56 *Kahnawake Marina*, on the SW side of Île Tekakwitha, offers dockage with power and water, pump out, **ramp**, repairs and salvage, 2 tonne hoist, picnic and camping area, pay phone, snack bar and licensed restaurant, ice and gasoline.

57 *Tekakwitha Island* light (4) is shown from a mast on the west end of the island.

Solution 58 Kahnawake Dyke light (5) is shown from a mast on the west end of the north embankment of Canal de la Rive Sud, at the entrance to Lac Saint-Louis $(45^{\circ}25'N, 73^{\circ}43'W)$.

UPPER ENTRANCE TO CANAL DE LA RIVE SUD (2008)

Lac Saint-Louis, Seaway Channel

Chart 1430

59 **Lac Saint-Louis** is an expansion of the St. Lawrence River between Rapides de Lachine and **Île des Cascades**. The lake is scattered with rocky shoals and the land near the shore is low.

60 On each side of **Île Perrot**, at the west end of the lake, there are narrow shallow boat passages which lead into the part of the Ottawa River named Lac des Deux Montagnes. 61 The east side of Île Perrot is generally low with many residences on its shores. **Pointe du Moulin** ($45^{\circ}22'N$, $73^{\circ}51'W$) is the eastern point of Île Perrot. The two main population centres on the island are the city of L'Île-Perrot and the village of Notre-Dame-de-l'Île-Perrot.

62 A historic windmill on Pointe du Moulin is conspicuous.

63 **Caution**. — Numerous **depths**, **shoaler** than those charted, may exist outside the *St. Lawrence Seaway* channel in the Lac Saint-Louis area. Mariners are warned to exercise caution when navigating in these waters. 64 There are **speed limits** in Lac Saint-Louis. For more details on speed limits, see Item 28 and Schedule II of *Seaway*

Practices and Procedures in the Seaway Handbook.

64.1 **Speed limit**. — In Lac Saint-Louis, the maximum speed for small craft operators, at any time, is 5.4 knots (10 km/h) within 50 metres of the shore of the Island of Montréal, except at René-Lévesque Park, at the entrance to

Canal de Lachine, where the distance extends to 300 metres from shore. Outside the area referred above, the maximum speed between 9:00 pm and 7:00 am, in any water body around the Island of Montréal, is 13.5 knots (25 km/h).

65 A **current** sets fair with the channel through the *Seaway* channel in Lac Saint-Louis at a rate of 1 to 1.5 knots, except for the section between buoy *A18*, NW of Île Saint-Bernard, and the west end of Canal de la Rive Sud embankment. In this section, the **current** sets NE across the channel and increases to about 2 knots because of the constriction of the lake at this point and the extensive shallows in the area of Île Saint-Nicolas.

⁶⁶ **Île Saint-Nicolas** (45°24'N, 73°45'W), a privately owned island with a picnic and camping site, lies on the north side of the channel 1 mile west of *Kahnawake Dyke* light.

67 There is a *Seaway Traffic Control* calling-in point off Île Saint-Nicolas for downbound vessels. Consult Schedule III of *Seaway Practices and Procedures* in the *Seaway Handbook* for details of the *Seaway Traffic Control* system.

68 **Pointe Johnson** lies 0.3 mile SE of Île Saint-Nicolas.

69 Pointe Johnson Direction light (8.2) is 0.4 mile WSW of the point. This light, visible on a bearing of 248¹/₂°, leads through Canal de la Rive Sud from Île Tekakwitha to Lac Saint-Louis.

 N
 70
 Kahnawake range lights (16.1, 16.2) are in line bearing 266½°. Both light towers are offshore;

the front tower is 2.3 miles west of Île Saint-Nicolas. A **racon**, identification Morse "G" (---•), is on the front tower.

71 Dorval Course range lights (14.2, 14.3) are in line bearing 044°. Both range towers are offshore; the front tower is 1 mile NW of Île Saint-Nicolas (45°25′N, 73°46′W).

72 There is a Seaway Traffic Control calling-in point for upbound vessels in Lac Saint-Louis abreast of Pointe du Moulin. Consult Schedule III of Seaway Practices and Procedures in the Seaway Handbook for details of the Seaway Traffic Control system.

73 *Melocheville range* lights (32.3, 32.4) are in line bearing 241¹/₂°. The front light tower is on the shore 1 mile west of the Lower Beauharnois Lock.

74 **Pointe Fortier** (45°21'N, 73°54'W) lies 2 miles WSW of Pointe du Moulin. There is a Public **wharf** and a launch **ramp** near the point.

75 *Pointe Fortier* **light** (30.5) is 0.7 mile NE of Pointe Fortier. This light is visible on the centreline of the downstream entrance to the Lower Beauharnois Lock on a bearing of 024°.

76 **Point Fortier Anchorage**, on both sides of the channel south of Pointe Fortier, has mud and sand bottom. Vessels waiting for transit of Lower Beauharnois Lock anchor here, mud and sand bottom; anchorage in the *Seaway* channel is prohibited.

76.1 When outflows from Pointe-des-Cascades dam are 1,850 m³/s or greater, there is an increase in cross currents downstream of Beauharnois Lock 3 and meets are not permitted from the end of the wall at Beauharnois Lock 3 to 1000 m downstream of the end of the wall.

Currents in the anchorage areas are variable and may set in more than one direction. There are generally wide eddies in the anchorage area NW of the *Seaway* channel; these eddies flow in a counterclockwise direction. The current is usually 0.1 to 1 knot, depending on the flow into Lac Saint-Louis.

78 **Caution**. — There are several sailing clubs in Lac Saint-Louis. The number and positions of moored **regatta buoys** may change at any time.

79 (Canal de Beauharnois is described in the next chapter.)

Small-Craft Routes

Chart 1429

Canal de Lachine

80 **Canal de Lachine** is 6.6 miles long and allows small craft to proceed from Vieux-Port de Montréal to Lac Saint-Louis, avoiding Rapides de Lachine and Canal de la Rive Sud of the *St. Lawrence Seaway.* The canal has been designated as *Lachine Canal National Historic Site of Canada.*

81 Closed as a commercial waterway in 1970, the canal officially re-opened to pleasure-craft navigation in the summer of 2002. Operated by *Parks Canada*, the use of the canal is governed by the *Historic Canals Regulations*; for more information see *CEN 300* — *General Information*, *Great Lakes*. Canal de Lachine, which includes **5 locks**, is open from May 14 to about October 14 and is crossed by some **20 fixed bridges** and **footbridges**.

From Pointe du Havre of Cité-du-Havre, the lower entrance of the canal is entered west of Pointe du Moulin à Vent. The maximum dimensions of vessels allowed to transit the canal are 48.7 m in length and 11.6 m in width. The overhead clearance is 2.4 m and the maximum draft is 2 m. Boaters should contact the lock operators, on VHF channel 68, in order to obtain daily depths and clearances available on the canal.

The **navigable channel** within Canal de Lachine is 9 m wide and is marked by **spar buoys**; night navigation is prohibited. The **speed limit** in the canal is 5.5 knots (10 kilometers per hour) over the bottom. **Anchorage** is prohibited in the canal. Waiting and night berths are available above and below each lock.

Caution. — The narrow channel under **Lafleur Bridge**, 6 miles from the lower entrance of the canal, allows the passage of only one small craft at a time; vessels proceeding downbound have the right of way. Flashing **lights** mark the approaches to the bridge.

All types of small craft, with a few exceptions, are allowed on the canal. For more information, contact *Parks Canada* or visit: *http://www.pc.gc.ca*.

Chart 1430

North shore of Lac Saint-Louis

The Arrondissement de **Lachine** $(45^{\circ}26'N, 73^{\circ}41'W)$ is on the north shore at the entrance to Canal de Lachine. The city of **Dorval**, population 18,088 (2006), lies 2 miles west of Lachine.

87 The three domes of a convent at Lachine and the two spires of a church close west of it are prominent. Except

UPPER ENTRANCE TO CANAL DE LACHINE (2008)



where obscured by Île Dorval, the Dorval church **spire** is **conspicuous**.

In order to avoid Rapides de Lachine *(previously mentioned)*, a small-craft route leads from the *St. Lawrence Seaway* channel to Lachine and then to the upriver entrance of Canal de Lachine. This route is marked by **buoys** and **light buoys** and by the **lights** of *Dixie range* and *Lachine range*. A second route branches NW from a position 0.7 mile NNW of Île Saint-Nicolas and joins a route that leads from Dorval west along the south shore of Île de Montréal to the Ottawa River. These routes are marked by **buoys** and **light buoys**.

89 **Caution**. — Owing to changing conditions, **buoys** in Lac Saint-Louis may be moved to mark the best small-craft channels. Also, owing to the **background illumination** of the communities on Île de Montréal, aids to navigation may be difficult to identify at night. Mariners are advised to exercise caution when entering small-craft channels.

90 Dixie sector light (1201.5), shown from a concrete base with a red and white cylindrical daymark, is 0.6 mile south of Île Dorval; the white sector indicates the preferred channel.

91 The Public **wharf** at Lachine is an irregular concrete and sheet steel piling structure with a total length of 183 m and an elevation of 2.4 m. There is a launching **ramp** on the east side of the wharf.

92 *Lachine range* lights (1194, 1195) are in line bearing 067°. The front light tower is on the outer end of the Lachine Public wharf.

93 Association des Pêcheurs et Chasseurs Sportifs du lac Saint-Louis, a private facility east of the Public wharf, had depths of 2.4 m and offered gasoline. Other facilities are for the use of members and guests. A sailing school, École de voile de Lachine, is close east of Association des Pêcheurs et Chasseurs Sportifs du lac Saint-Louis.

94 *Club de Yacht de Lachine*, a marina on the north shore of Lac St. Louis at Canal de Lachine, offers dockage with power and water, pump out, **ramp**, engine repairs, picnic area, pay phone, showers, laundromat, ice, groceries, some boat hardware, propane barbeques, snack bar, restaurant, licensed dining room and gasoline, and monitored VHF Channel 68.

A seasonal **ferry** service for pedestrians and cyclists links the landings at Lachine, close to the upstream entrance of Canal de Lachine, and at Châteauguay, south of Île Saint-Bernard.

⁹⁶ **Île Dorval** (45°26'N, 73°45'W) lies 0.25 mile offshore at Dorval. A private **ferry** operates between Dorval and Île Dorval. Immediately east of Pointe Picard, there are marine facilities, floating wharves and numerous **mooring buoys**. Many private wharves extend from the mainland shore between **Pointe Marion** and **Pointe Picard**, north of the island.

96.1 **Caution**. — Scientific equipment is installed between the north and south shores of Lac Saint-Louis for about 0.5 mile on each side of Île Dorval. Mariners should exercise **caution** when navigating outside the small craft channels.

97 A **pipeline** and **submerged power cables** cross from Dorval to Île Dorval. An **abandoned cable** crosses from the south side of Île Dorval to the *Dorval Course range* lights and on to the *Kahnawake range* lights.

98 **Submerged water intakes** extend offshore 0.15 mile west of Pointe Picard. The outer ends of some of the pipelines are marked by **buoys**.

99 *Royal St. Lawrence Yacht Club*, a private club at Dorval, has a launching **ramp**.

POINTE-CLAIRE, LOOKING WEST (2008)



100 **Caution**. — The **ruins** of a concrete **crib** lie north of the buoyed channel, 1.2 miles west of Île Dorval. This area is marked by yellow **buoys** and a **south cardinal buoy**.

101 **Caution**. — A rocky **shoal**, drying 0.6 m, is 0.6 mile SE of Pointe Charlebois.

102 *Venture Sailing Club* is a private club on the west shore of **Baie de Valois**, west of Dorval. *Pointe-Claire Canoe Club* is also here. There are launching **ramps**.

103 The city of **Pointe-Claire** $(45^{\circ}26'N, 73^{\circ}49'W)$, population 30,161 (2006), is on the south shore of Île de Montréal, 3 miles west of Dorval.

104 The Public **wharf** at Pointe-Claire is 33 m long, with depths of 0.9 m. The wharf has an elevation of 1.5 m. There is a launching **ramp** on the SE side of the wharf. The approach **channel** to the wharf has a depth of 2.1 m.

105 A church with a **spire**, near the shore 0.2 mile WSW of the Public wharf at Pointe-Claire, is **conspicuous**.

Pointe-Claire wharf range lights (1213, 1214) are in line bearing 310½°. The front light is on the outer end of the wharf. These lights are privately maintained.

107 **Submerged pipelines** extend 0.1 mile offshore, immediately downstream and upstream of the Pointe-Claire Public wharf.

108 *Pointe-Claire Yacht Club* is a private club close north of the Public wharf.

109 The city of **Beaconsfield**, population 19,194 *(2006)*, lies west of Pointe-Claire.

110 Beaconsfield Yacht Club, 0.6 mile west of the Pointe-Claire Public wharf, offers dockage with power and water, pump out, **ramp**, 5 tonne hoist, mast stepper, picnic area, pay phone, showers, snack bar, restaurant with licensed dining room, ice, gasoline and diesel fuel, and monitored VHF Channels 16 and 68.

111 *Lord Reading Yacht Club*, 1 mile farther west, has a small dredged basin enclosed by breakwaters; two privately maintained **lights** are shown from the breakwaters at the

DOWNSTREAM OF BECKER'S DAM TO SAINTE-ANNE-DE-BELLEVUE (2008)



entrance to the basin ($45^{\circ}25'N$, $73^{\circ}52'W$). Most facilities are for the use of members and guests.

A Canadian Coast Guard inshore rescue boat, 112 based at Beaconsfield Yacht Club, provides search and rescue services in the area during the boating season. Distress calls can be made, at any time, using the Digital Selective Calling (DSC) alarm signal on VHF Channel 70 (156.525 MHz) and/or voice procedure on VHF Channel 16 (156.8 MHz), or by contacting the Marine Rescue Sub-Centre (MRSC Québec) by telephone 1-800-463-4393. Owners of certain cellular telephone models may also dial *16 which will put them in direct contact with a Marine Communications and Traffic Services (MCTS) centre. It should be noted that it is not possible for the Canadian Coast Guard to trace the origin of calls for those using their cellular telephone and that certain areas do not have cellular coverage. (See information on Search and rescue in Sailing Directions booklet CEN 300 — General Information, Great Lakes.)

113 A **submerged pipeline**, in ruins, 0.3 mile SW of *Lord Reading Yacht Club* extends 0.25 mile offshore. The outer end of these ruins is marked by a privately maintained **south cardinal buoy**.

114 **Île Dowker** (45°24'N, 73°54'W), SW of Beaconsfield, has an elevation of 38 m to the tops of the trees. **Pointe Dowker** is the north point of Île Dowker; small craft have anchored in the sheltered area to the SE. Private **hazard buoys** are north of the small-craft route, SW of Pointe Dowker. 115 **Pointe à Quenet** is on the south shore of Île de Montréal, 0.7 mile NE of Île Dowker. Launch **ramps** are east and west of Pointe à Quenet.

116 **Caution**. — An **outfall** extends 193 m from the shore west of Pointe à Quenet.

117 **Pointe Caron** is on the south shore of Île de Montréal 0.8 mile west of Île Dowker. *Baie d'Urfé Yacht Club*, a private club close west of Pointe Caron, has a launch **ramp**.

118 **Pointe Madore** is on the north shore of Île Perrot, 1.2 miles WSW of Île Dowker. **Baie Madore** lies SE of Pointe Madore.

To Ottawa River, north of Île Perrot

119 The main small-craft route to the Ottawa River, with a least depth of 2.3 m (2006) and marked by **buoys** and **light buoys**, passes north of Île Dowker, then turns SW towards Pointe Madore. The route is narrow through **Chenal Lynch**, on the NW side of Île Dowker.

120 **La Passe** is a **buoyed** channel between Île Dowker and Île Perrot. This channel is 30 m wide and has a depth of 0.9 m (2001). A 0.1-m **shoal** lies in the channel, south of the western tip of Île Dowker, close west of the charted position of buoy *AE 28*.

121 The small-craft route leads SW from the intersection of La Passe and Chenal Lynch and passes south of **Haut-fond de l'Île Grassy**, a wide area of drying rocks and shingle.

122 About 0.5 mile west of Point Madore the route turns towards the NW and becomes very narrow, passing between

LOWER ENTRANCE TO SAINTE-ANNE-DE-BELLEVUE CANAL (2008)



two **dykes** known as **Becker's Dam**. The dykes restrict the channel to 35 m wide for 383 m. The channel then leads towards the *Sainte-Anne-de-Bellevue Canal National Historic Site of Canada*.

123 *Pointe de Brucy* light *(1225)* is on the north end of the west dyke of Becker's Dam, 0.3 mile SE of the entrance to Sainte-Anne-de-Bellevue Canal.

124 The town of **Sainte-Anne-de-Bellevue**, population 5,197 *(2006)*, is at the SW end of Île de Montréal at the entrance to the Ottawa River.

124.1 The **public wharf** at Sainte-Anne-de-Bellevue is located on the north shore 400 feet (122 m) east of the downstream entrance to the lock. It is 120 feet (37 m) long, 5 feet (1.5 m) high and has a depth of 6 feet (1.8 m).

125 **Sainte-Anne-de-Bellevue** Lock, at *Sainte-Anne-de-Bellevue* Canal National Historic Site of Canada, raises vessels 0.9 m from the level of Lac Saint-Louis to the level of Lac des Deux Montagnes. The lock is 54.9 m long and

11.9 m wide; it has a depth of 2.7 m over the sills. There are launching ramps above and below the outer ends of the lock.
126 Highway and railroad bridges cross from Île de Montréal to Île Perrot at Sainte-Anne-de-Bellevue, with a vertical clearance of 13 m at the lock and 9.4 m at Rapides de Sainte-Anne.

Marine Ste-Anne, on the north shore close east of the Sainte-Anne-de-Bellevue Lock, offered seasonal dockage with power and water, ramp, repairs and salvage, 10 tonne hoist, pay phone, boat hardware and gasoline. Marine Ste-Anne sells new and used boats.

128 *Club nautique de l'Île-Perrot* is a private club 0.5 mile east of Baie Madore. The boat docks at the club are protected by an L-shaped breakwater 84 m long and 4.6 m wide.

129 A **submerged pipeline** 0.5 mile east of Pointe Madore extends 0.3 mile offshore in a NW direction; the outer end is marked by a private **cautionary buoy**. 130 *Marina de l'Île Perrot*, in Baie Madore, offered dockage with power and water, pump out, **ramp**, repairs and salvage, boat hardware, 5 tonne hoist, picnic area, pay phone, showers, laundromat, snack bar and licensed restaurant, ice, gasoline and diesel fuel. A privately maintained buoyed channel leads to this marina.

131 *Marina Allard*, south of **Île Bellevue**, offered dockage with power and water, pump out, **ramp**, engine repairs, boat hardware, small boat rentals, showers, bait and tackle, snack bar, restaurant and licensed dining room, ice, gasoline and diesel fuel.

To Ottawa River, west of Île Perrot

132 A second small-craft route to the Ottawa River, beginning at *Pointe Fortier Anchorage*, leads NW from Canal de Beauharnois past the south and west sides of Île Perrot.

133 **Melocheville**, a part of the town of Beauharnois, is west of the Lower Beauharnois Lock. *Marina de Melocheville Inc.* offered dockage with power and water, pump out, showers, ice and gasoline. Picnic area, pay phone, snack bar and restaurant with licensed dining room were near by. There is a launching **ramp** 0.1 mile west of the marina.

134 **Caution**. — The Lower Beauharnois Lock weir regulates the level of water in the canal between Upper and Lower Beauharnois Locks. Excess water discharges along the east breakwater of the Melocheville marina basin. Access to the marina becomes **dangerous** when the weir sluices are open, due to a **strong current and eddies**.

135 A **submerged sewer outfall** 0.75 mile west of the Lower Beauharnois Lock extends 0.15 mile offshore.

136 Control dams cross the St. Lawrence River WNW of the Beauharnois dam, in the vicinity of Île des Cascades, **Pointe des Cascades** and Pointe du Buisson. Caution is advised for small craft.

137 The entrance to the **Canal de Soulanges** ($45^{\circ}20'N$, $73^{\circ}59'W$), now closed to navigation, lies NW of Pointe des Cascades.

138 An L-shaped stone **breakwater** 0.5 mile west of the entrance to the Canal de Soulanges has an elevation of 1.2 m. This breakwater shelters two concrete **wharves**, elevation 3 m, and a launching **ramp**.

Marina Pointe-Cascades, at the wharves, offered dockage with power and water, **ramp**, camping, pay phone, showers, laundromat, ice and a licensed dinner theatre. Privately maintained **lights** mark the entrance to the marina.

140 (The Ottawa River above Sainte-Anne-de-Bellevue Lock and Pointe des Cascades is described in Sailing Directions booklet CEN 308 — Rideau Canal and Ottawa River.)

South shore of Lac Saint-Louis

141 Four **conspicuous radio towers** 1.3 miles SSE of *Kahnawake Dyke* light have air obstruction **lights**.

142 **Île Saint-Bernard (Île des Soeurs Grises)** (45°23'N, 73°46'W), 1 mile wide, lies 1 mile SW of Pointe Johnson. The north shore of the island is low and wooded. This island is a wildlife sanctuary, managed by *Héritage Saint-Bernard*.

143 **Le Tertre**, a small but **conspicuous** green **hill** on the SW end of Île Saint-Bernard, is fringed by trees. A **conspicuous cross** on the hill has an elevation of 32 m. A **chimney** 0.1 mile SE of Le Tertre is **conspicuous** from the west.

144 **Rivière Châteauguay** flows into the lake on both sides of Île Saint-Bernard. The city of **Châteauguay**, population 42,786 (2006), is on the river.

145 The channel along the east side of Île Saint-Bernard, leading to Châteauguay, is privately buoyed and has a least depth of 0.3 m.

146 A road **bridge** with a vertical clearance of 6.4 m crosses both channels of Rivière Châteauguay at the SE end of Île Saint-Bernard; a railway **bridge**, with a clearance of 4.8 m, crosses the river 0.2 mile upstream. The railway bridge is no longer in use.

147 *Châteauguay Marine*, on the south side of the west channel of Rivière Châteauguay, south of Île Saint-Bernard, offered dockage, **ramp**, repairs, some boat hardware, picnic area, bait and gasoline.

148 Association Chasse et Pêche Saint-Bernard, a private fishing club on the west shore of Rivière Châteauguay north of the railway bridge, offered dockage, boat rentals, bait, tackle and a licensed dining room for members and guests.

149 *R. L. Marine & Sports*, on the west shore of Rivière Châteauguay close south of the railway bridge, offered dockage with power outlets, pump out, **ramp**, repairs and salvage, boat hardware and gasoline. A restaurant with licensed dining room was near by.

150 A seasonal **ferry** service for pedestrians and cyclists links the landings at Châteauguay, south of Île Saint-Bernard, and at Lachine, close to the upstream entrance of Canal de Lachine.

151 A road **bridge** with a vertical clearance of 4.4 m crosses the west branch of the river at the SW end of Île Saint-Bernard. A small wharf, on Île Saint-Bernard east of the bridge, is private.

152 A water intake pipe, in ruins, extends 0.15 mile west from the SW end of Île Saint-Bernard.

153 The town of Léry $(45^{\circ}20'N, 73^{\circ}49'W)$, population 2,385 (2006), is on the SE shore 2.6 miles SW of Île Saint-Bernard.

154 *Woodlands Yacht Club* is a private club at Léry.

155 The Public **wharf** at Léry is 79 m long and 5 m wide for most of its length; it is 21.3 m wide at the outer end. Rock rubble almost surrounds the outer end of the wharf; only the NE face is usable, with a depth of 0.9 m. 156 This stretch of shore is fronted by a wide group of low islands, known as **Îles de la Paix**. These numerous islands are part of a national wildlife area and a migratory bird sanctuary. *Environment Canada* access regulations apply to these protected areas.

157 **Caution**. — **Overhead cables**, with a vertical clearance of 14 m, cross the channel between Île du Docteur, in the south part of Îles de la Paix, and Maple Grove.

158 The town of **Beauharnois**, population 11,918 (2006), is on the south shore of the lake 6 miles SW of Île Saint-Bernard.

159 The Beauharnois Public wharf, at the east entrance point of **Rivière Saint-Louis**, is an irregular structure 61 m by 61 m, with a deck elevation of 2.4 m. There are launching **ramps** nearby. Directly north of the wharf and centered on this one, an area 215 m seaward by 230 m parallel to the coast is designated as unsuitable for anchorage and may present **hazards** to surface navigation. This area contains 53 submerged anchor blocks and the remains of a breakwater. Cables connect the blocks and cause an obstruction to navigation.

160 Club de voile de Beauharnois is close west of the Public wharf. The sailing club has a T-shaped jetty, and a mooring area for club boats extends across the mouth of Rivière Saint-Louis.

161 The church at Beauharnois, near the east bank of Rivière Saint-Louis, has **two conspicuous spires**. A **water tower** is 0.2 mile ESE of the church. A disused factory close west of the mouth of Rivière Saint-Louis has a **conspicuous chimney**. The four **chimneys** of *Alcan*, 0.9 mile west of the water, are **conspicuous**.

162 The Beauharnois **power dam** and generating station, operated by *Hydro-Québec*, is west of the town of Beauharnois. There are many transmission **towers** around the Beauharnois dam area.

163 Lower Beauharnois Lock and Upper Beauharnois Lock *(described in the next chapter)* lie west of the power dam.

Beauharnois to Cornwall

General

Chart 1400

This chapter describes the St. Lawrence River from 1 the west end of Lac Saint-Louis to Cornwall, at the west end of Lake St. Francis, a distance of 42 miles. Between Lac-Saint-Louis and Lake St. Francis, the natural riverbed north of Île de Valleyfield is steep, shallow and has numerous cascades. The Canal de Beauharnois, with two Seaway locks, bypasses this section of river.

1.1 Real-time water level information for St. Lawrence River at Summerstown is available from the Canadian Hydrographic Service Automated Water Level Gauge, telephone number 613-931-2089 and for St. Lawrence River at Cornwall from the Canadian Hydrographic Service Automated Water Level Gauge, telephone number 613-930-9373. (More information on water levels is given in Sailing Directions booklet CEN 300 — General Information, Great Lakes.)

Canal de Beauharnois

Chart 1431

2 The Canal de Beauharnois, leading from Lac Saint-Louis to Lake St. Francis, is 12.5 miles long. The Seaway channel in the canal has a least depth of 8.2 m with a least width of 182 m, except in the short channel between the Lower Beauharnois Lock and the Upper Beauharnois Lock, which has a least width of 91 m. The two Beauharnois locks are at the Lac Saint-Louis end of the canal; these locks together handle the 24 m difference in elevation between the two lakes.



3

Caution. — Submerged pipelines and cables cross Canal de Beauharnois.

There are **speed limits** in the Canal de Beauharnois. For more details on speed limits, see Item 28 and Schedule II of Seaway Practices and Procedures in the Seaway Handbook.

Lower Beauharnois Lock, west of the Beauharnois 5 power dam, has a lift of 12 to 13 m. The downstream approach wall, on the east side of the channel, has a berthing length



BEAUHARNOIS LOCKS (2008)



of 379 m. A tunnel under the lock carries traffic between Beauharnois and Melocheville. The upper approach wall is on the east side of the channel above the lock. The lock and approach walls are illuminated at night.



5.1 *Lower Beauharnois Lock* **light** is shown from the outer end of the NW approach wall.

Caution. — Strong cross currents

have been reported in the downstream approach to Lower Beauharnois Lock. The strength of the cross current varies considerably, depending on the flow from the power dam.

7 There is a *Seaway Traffic Control* callingin point for downbound vessels exiting Lower Beauharnois Lock. A message confirming pilot requirement, or berth in Montréal, is given here. Consult Schedule III of *Seaway Practices and Procedures* in the *Seaway Handbook* for details of the *Seaway Traffic Control* system.

8 The channel between the Lower and Upper Beauharnois Locks is 0.5 mile long, with a least width of 91 m. Between the two locks there are four sets of **overhead power lines**, with a vertical clearance of 45 m or of 43 m under vigorous icing conditions. The lock approach walls are on the east side, at both ends of the channel. Between the approach walls there is a berthing face, 503 m long, parallel to the channel.

9 **Upper Beauharnois Lock** has a lift of 11 to 12 m. Above Upper Beauharnois Lock, the approach wall has a berthing length of 575 m, also on the east side of the channel. A **rock dyke**, 457 m long, extends southwards from the end of this approach wall. There is a **small-craft berthing wall** on the west side of the channel above the Upper Beauharnois Lock. A least depth of 7.6 m was found off this wall in 1998.

10 *Pont Penn Central*, a railway swing **bridge**, crosses at the upper end of Upper Beauharnois Lock.

10.1 A highway **bridge**, for Highway A30, spans the canal upstream of the railway bridge.

11 Upper Beauharnois South Wall Approach light (35) is shown from a mast on the south end of the above-mentioned rock dyke.

12 Upper Beauharnois Lock range lights (33, 34), in line bearing $028\frac{1}{2}^{\circ}$, are on the upstream approach wall of the lock.

Pilots for transit through the *St. Lawrence Seaway* usually change at Upper Beauharnois Lock.
 Melocheville Anchorage, east of the *Seaway* channel 1 mile SW of Upper Beauharnois Lock, has

depths of 9.8 to 12.5 m.

15 **Caution**. — Two **submerged pipelines** cross the channel and the anchorage area 0.9 mile upstream of the south tip of the rock dyke.

16 **Caution**. — Five **ice boom** anchorages project NW from the SE side of the canal. These ice booms are at 1-mile intervals starting close above *Pont Penn Central*. Two of these ice booms cross the *Melocheville Anchorage*; mariners are cautioned to avoid these areas when anchoring. Numerous ice boom anchor **buoys** and small wooden **floats** may also be encountered near the upstream end of the anchorage area. Operators of small craft are cautioned to avoid these dangers.

 $\begin{tabular}{|c|c|c|c|c|c|c|}\hline 17 & Powerhouse range lights (37, 37.1) are in line bearing 046¹/₂°. The range towers are on the east shore of the canal with the front tower near the above-mentioned submarine pipelines. \end{tabular}$

18 Saint-Louis Bridge range lights (41, 42), in line bearing $060\frac{1}{2}^{\circ}$, are on the east bank of the canal near the south limit of *Melocheville Anchorage*.

19 **Pont Saint-Louis**, a combined road and rail **bridge**, crosses Canal de Beauharnois 5.3 miles SW of the entrance to Upper Beauharnois Lock. A section of the bridge, 54.9 m in length, is raised vertically to allow a minimum vertical clearance of 36.5 m. The vertical clearance of the bridge when closed is 4.2 m. White **lights** are shown from guard cells on each side of the channel, in the upstream and downstream approaches.

20 **Caution**. — A vessel's approach to the lift bridge is governed by light signals controlled by the bridge operator, or if necessary, by VHF radio on Channel 14. Whistle signs are installed, for upbound vessels, 1 mile downstream of the bridge. For downbound vessels, the whistle sign is 1.6 miles upstream of the bridge. Unless a vessel's approach to the lift bridge has been acknowledged by flashing amber lights on the caution sign, the master shall notify the bridge operator by VHF radio when the vessel comes abreast of the whistle sign. For more details, refer to Sections 4 and 5 of *Vessel Transit and Equipment Requirements* in the *Seaway Handbook*. **2**1 Saint-Louis Direction **light** (47.5), on the east side of Pont Saint-Louis close south of the channel, is visible on a bearing of $226\frac{1}{2}^{\circ}$.

2 Saint-Louis Bridge Steering light (57.5), on the south shore 2.2 miles west of Pont Saint-Louis, is visible on a bearing of $240\frac{1}{2}^{\circ}$.

23 Two sets of **overhead power cables**, with a minimum clearance of 44 m, cross Canal de Beauharnois 0.9 mile NE of *Pont Saint-Louis*.

24 An **emergency anchorage area** south of the *Seaway* channel upstream of *Pont Saint-Louis* has a least depth of 8.2 m.

25 **Caution**. — A disused **ice boom** anchorage is 2 miles west of *Pont Saint-Louis*; ice boom anchor **buoys** and small wooden **floats** may be encountered. Operators of small craft are cautioned to avoid these dangers.

26 Three **conspicuous chimneys** 2.3 miles west of *Pont Saint-Louis* have air obstruction **lights**.

27 Three sets of range lights indicate midchannel courses between *Pont Saint-Louis* and *Pont de Valleyfield*, a distance of 4.9 miles.

28 Valleyfield East range lights (61, 62), on the south shore of the canal midway between the two bridges, are in line bearing $248\frac{1}{2}^{\circ}$.

29 *Saint-Louis range* lights (*51, 52*), on the south shore close west of *Pont Saint-Louis*, are in line bearing 090°.

30 Valleyfield Bridge range lights (59, 60), on the south shore east of Valleyfield East range lights, are in line bearing $107\frac{1}{2}^{\circ}$.

Port de Valleyfield is on the north shore of Canal de Beauharnois, near the intersection of the *Saint-Louis range* and *Valleyfield Bridge range*. The port is connected by road to the city of Salaberry-de-Valleyfield *(described later in this section)*. Imports include steel, bitumen, bauxite, cocoa, industrial salt, road salt, liquid bulk and zinc concentrate. Exports include sulfuric acid, bitumen, general cargo, grain and liquid bulk.

32 Port de Valleyfield is administered by the *Société du Port de Valleyfield*.

33 There is a customs **sufferance warehouse** at Coteau-du-Lac. For more information, contact the *Border Information Service*, at 1-800-461-9999 for service in English or 1-800-959-2036 for service in French, or visit: *http://www.cbsa-asfc.gc.ca.*

34 The **basin** is 76 m wide and has two cargo berths. The north berth has a total length of 622 m, with a deck elevation of 4 to 4.3 m. The southern berth has a length of 274 m, with a deck elevation of 4 m. On the north side of the basin is a warehouse, 122 by 76 m. On the south side is another warehouse, 61 by 30 m.

The basin and wharves had general depths of 7.3 to 8.0 m (2008), with a least depth of 7.3 m located 80 m from

PORT DE VALLEYFIELD (1994)



the head of the harbour. For more information, contact the harbourmaster at 1-450-373-4021.

³⁶ **Pont de Valleyfield** ($45^{\circ}13'N$, $74^{\circ}07'W$) is a combined road and rail **bridge**. It has a vertical lift section, 54.9 m in length, across the *Seaway* channel. The vertical clearance of the lift section is 36.6 m when raised and 3.5 m when closed. White **lights** are shown from guard cells on each side of the channel, in the upstream and downstream approaches to the bridge.

37 **Caution**. — A vessel's approach to the lift bridge is governed by light signals controlled by the bridge operator, or if necessary, by VHF radio on Channel 14. Whistle signs are installed, for upbound vessels, 0.9 mile downstream of the bridge. For downbound vessels, the whistle sign is 1.6 miles upstream of the bridge. Unless a vessel's approach to the lift bridge has been acknowledged by flashing amber lights on the caution sign, the master shall notify the bridge operator by VHF radio when the vessel comes abreast of the whistle sign. For more details, refer to Sections 4 and 5 of *Vessel Transit and Equipment Requirements* in the *Seaway Handbook*.

38 There is an **emergency anchorage area** upstream of *Pont de Valleyfield* on the south side of the *Seaway* channel. The anchorage had depths of 8.2 to 13.4 m (1990). The bottom is clay except for a patch of rock with a depth of 9.8 m in mid-river 0.15 mile west of the bridge and a rock with a depth of 8.2 m near the SW corner of the anchorage.

39 Beauharnois Canal Upper Entrance range lights (75, 76), on the north shore of the canal between Pont de Valleyfield and Lake St. Francis, are in line bearing 083¹/₂°. The front light is visible from upstream over an arc of 180°.

40 Seaway Traffic Control calling-in point No. 5, for downbound vessels, is at the upstream entrance to Canal de Beauharnois. Consult Schedule III of Seaway Practices and Procedures in the Seaway Handbook for details of the Seaway Traffic Control system.

 $\underbrace{41}_{\text{Beauharnois, near buoy } C49, \text{ sets in a } 098^{\circ} \text{ direction}}_{\text{at a rate of up to 3 knots.}}$

42 **Caution**. — Two **ice boom** moorings at the upper entrance to Canal de Beauharnois indicate the locations of **ice booms** during the winter season and **submerged cables and anchors** during the navigation season.

43 There is a **floating breakwater**, 76 m long, on the south edge of the channel at the location of the ice booms; a

SALABERRY-DE-VALLEYFIELD (1994)



similar **floating breakwater** is on the north side of the channel.

44 Lac Saint-François South breakwater **light** D1 (84) and Lac Saint-François South Cautionary **light** (84.5) are on the south float. Lac Saint-François North breakwater **light** D2 (85) and Lac Saint-François North Cautionary **light** (85.5) are on the north float. 45 The town of **Salaberry-de-Valleyfield**, population 39,672 (2006), is on the south shore of **Baie Saint-François** at the NE end of Lake St. Francis. Several church **spires** and tall factory **chimneys** are **conspicuous** from the lake.

46 A Canadian Coast Guard inshore rescue boat is based at Salaberry-de-Valleyfield from May to September each year. For more information, see Search and rescue in Sailing Directions booklet CEN 300 — General Information, Great Lakes.

47 A **channel** marked by *light buoys DV4* (78.8) and *DV6* (79) and by spar **buoys** leads into the harbour at Salaberry-de-Valleyfield from a position on the *Seaway* 0.5 mile west of the floating breakwaters.

48 **Caution**. — A **submerged cable** crosses the Salaberry-de-Valleyfield channel from **Pointe aux Brodeur** to **Île aux Chats**.

49 **Pointe Rousson** is the south entrance point to the harbour at Salaberry-de-Valleyfield. **Île de la Grosse Pointe** is a small, low-lying island SW of Pointe Rousson.

49.1 **Caution**. — Île Mercier (shown west of the tip of Grosse Pointe on the 2003 Edition of Chart 1431)

has been eroded by ice into a **shoal**, **depth unknown**. There are other **shoals** between Grosse Pointe and Île de la Grosse Pointe. Boaters should keep clear of this area.

A floating fountain at the head of Salaberry-de-Valleyfield harbour, installed at the beginning of each boating season, is marked by **lights** and **lighted buoys**. North of the fountain, inside **Pointe aux Anglais**, a yellow spar buoy marks a crib, submerged 1 m, at the outer end of a potable water intake. Another yellow spar, at the east end of the harbour, marks a floating boom protecting the mouth of Rivière Saint-Charles. This river is not navigable.

51 *Marina Valleyfield*, in Baie Saint-François at Salaberry-de-Valleyfield, had depths of 1.2 to 3 m (2006) and offered dockage with power and water, pump out, garbage disposal, **ramp**, mast stepper, pay phone, showers, laundromat, ice, groceries, snack bar, restaurant with licensed dining room, gasoline and diesel fuel, and monitored VHF Channel 68. *Marina Valleyfield* is an authorized dealer for *Canadian Hydrographic Service* nautical **charts** and publications.

52 *Marina Coteau-du-Lac*, on the St. Lawrence River near Coteau-du-Lac, had a depth of 0.9 m (2006) and offered dockage with power, **ramp**, repairs and salvage, picnic area, boat hardware and fishing tackle.

53 *Parc Marina Enr.*, on the St. Lawrence River near Coteau-du-Lac, offered paddle boat rentals and picnic area.

Lake St. Francis — Eastern part

Charts 1431, 1432

Seaway Channel

54 From Canal de Beauharnois through **Lake St. Francis**, the *Seaway* channel has a least width of 137 m for the first 2 miles. The limiting depth in the channel in Lake St. Francis is 8.2 m.

55 The **current** in the channel immediately upstream of Canal de Beauharnois sets fair with the channel at a rate of 2 knots.

56 There are **speed limits** for traffic in Lake St. Francis. Consult Item 28 and Schedule II of *Seaway Practices and Procedures* in the *Seaway Handbook* and *Seaway Notices* for details of speed limits.

Pointe au Foin downstream range lights (94, 94.1), in line bearing $263\frac{1}{2}^\circ$, are in line with the *Beauharnois Canal Upper Entrance range* lights. The front tower is close north of **Pointe au Foin** ($45^\circ13^\circ N$, $74^\circ17^\circ W$). The rear tower has two daymarks, one daymark faces to the east and the other faces SW. The rear light is visible on bearings of $353\frac{1}{2}^\circ$ through west to the shore.

Chart 1432

58 Pointe au Foin upstream range lights (94.2, 94.3) are in line bearing 029°. The towers are on white circular cribs in shoal water SW of the point. The lights are visible on the line of the range.

59 There are three irregularly shaped **anchorage areas**, one to the north and two to the south of the *Seaway* channel, between the charted positions of buoy *D5* and buoy *D17*. This is *Saint-Zotique Anchorage*.

60 Pointe Beaudette range lights (99, 99.1) are in line bearing $242\frac{1}{2}^{\circ}$. The front tower is on a crib in shoal water NE of **Pointe Beaudette** ($45^{\circ}12^{\circ}N$, $74^{\circ}19^{\circ}W$); the rear tower is on the point. The lights are visible on the line of the range.

61 *Île Chrétien range* **lights** (104, 105) are in line bearing 209°. The front tower is on a white circular crib 0.4 mile NE of **Île Chrétien** ($45^{\circ}10'N$, $74^{\circ}20'W$). The rear tower is on the east end of the island.

62 **Caution**. — A **submerged power cable** crosses from the south shore, SE of Île Chrétien, around the west end of Île Chrétien to the rear light and continues to the front light-structure of the *Île Chrétien range*.

63 **Caution**. — A submerged power cable crosses from a point on the north shore between Pointe Beaudette and **Pointe aux Anglais**, 0.6 mile NE, to the front light structure of the *Pointe Beaudette Range*. This cable continues to the *Pointe au Foin upstream range*. 64 The Seaway channel, on a course of 209°, passes between **Pointe Mouillée Flats** and **Haut-fond de Port Lewis**. The channel is at least 259 m wide and has a shingle and mud bottom. From a point south of Pointe Beaudette (45°12'N, 74°20'W), near the charted position of buoy D24, the channel extends in a 234½° direction for 5.6 miles, passing south of Pointe Mouillée Flats and north of **Haut-fond Saint-Anicet**, to a position west of **Pointe Dupuis** (45°08'N, 74°25'W). The channel on this course is at least 168 m wide with a mud bottom. Except for aids to navigation, there are no prominent landmarks in the Pointe Dupuis area.

65 A slight current sets diagonally across the *Seaway* channel on the above-described 209° course; the current is less than 0.5 knot in most of Lake St. Francis.

66 Saint-Anicet Shoal light D27 (107) is on a circular crib 1.5 miles WSW of Île Chrétien.

67 Saint-Anicet East range lights (99.4, 99.5) are in line bearing $054\frac{1}{2}^{\circ}$. Both light towers are on offshore cribs. The front light is 1 mile NNW of **Pointe Saint-Louis** (45°10'N, 74°18'W). The lights are visible only on the range.

68 Saint-Anicet West range lights (114.1, 114.2) are in line bearing 234¹/₂°. Both light towers are on offshore cribs. The front light is 1.2 miles WSW of Pointe Dupuis. These lights, visible only on the range, are in line with the Saint-Anicet East range lights.

69 Pointe Dupuis range lights (111, 112), in line bearing 086¹/₂°, are close north of the point. Each light is visible over an arc of 360°. The channel along the range line of these lights has a width of 137 m.

70 There are Seaway Traffic Control callingin points at Saint-Anicet Shoal light for upbound and downbound vessels. Consult Schedule III of Seaway Practices and Procedures in the Seaway Handbook for details of the Seaway Traffic Control system.

North shore of Lake St. Francis, eastern part

71 The NE shore of Lake St. Francis is generally low and wooded.

The village of **Coteau-Landing** $(45^{\circ}15'N, 74^{\circ}13'W)$, population 3,764 (2006), is at the NE end of Lake St. Francis. The village is opposite the upstream entrance to Canal de Soulanges, now closed to navigation.

73 A T-shaped **breakwater** and promenade, at Coteau-Landing, extends 274 m south into the lake. The outer end is 100 m long, 7 m wide and 2.1 m in elevation. The breakwater is an old sheet steel and concrete wharf now faced with stone rip-rap; vessels cannot berth here (2006). A 168-m long detached **breakwater**, east of the T-shaped breakwater, is heavily wooded and resembles an island.

74 Canal de Soulanges Upper Entrance light (83) is shown on the SE end of the detached breakwater.

Camping Coteau Landing, at the western end 76 of Canal de Soulanges, had depths of 4.3 m (2006) and offered dockage, picnic and camping area, pay phone, drinking water, showers, laundromat and ice.

A submerged sewer outfall crosses the entrance to 77 Canal de Soulanges and extends 61 m SSE of the inner end of the canal entrance pier.

The village of Saint-Zotique, population 78 5,251 (2006), lies 2 miles SW of Coteau-Landing. Pointe au Foin (previously mentioned), 2 miles farther SW, is a low bare projection less than 3 m in elevation.

A microwave **tower** 0.6 mile NNW of Pointe au Foin 79 has an elevation of 58 m; it has air obstruction lights.

Rachel Marine Sport, at the end of a 80 canal west of Pointe au Foin, had depths of 0.6 to 0.9 m (2006) and offered dockage with power and water, pump out, ramp, boat hardware, engine repairs and salvage, water taxi service, picnic area and ice.

81 There are two Public launching ramps at *Plage* de Saint-Zotique, a day-use park just east of Rachel Marine Sport. Other facilities here include power, water, rentals, tennis, swimming beach and children's playground.

Castagnier Marine Enr. is a boat dealer and marina 82 at 548 Principale, Saint-Zotique.

83 Pointe Beaudette (previously mentioned) resembles an island when seen from a distance. The Provincial boundary between Quebec and Ontario lies 0.3 mile west of Pointe Beaudette.

A submerged power cable (previously mentioned) 84 crosses from the shore in a SE direction to the front light of the Pointe Beaudette range.

A decommissioned light-structure, 9.8 m high 85 with an elevation of 13 m, is at the south end of Pointe Beaudette (2006). Because of surrounding trees, the tapered, square wooden tower is visible only from the south.

85.1 Two unlighted mooring buoys, privately maintained, are 0.4 mile south of Pointe Beaudette.

Nadeaus Point (45°09'N, 74°26'W), with Westleys 86 Point close westward, is 5 miles SW of Pointe Beaudette.

Creg Ouav Marina, 0.5 mile NE of Nadeaus 87 Point, had depths of 0.6 to 2.1 m (2006) and offered dockage with power and water, pump out, ramp, repairs, crane, pay phone, showers, laundromat, boat hardware, snack bar, restaurant and licensed pub, ice, gasoline and diesel fuel, and is an authorized dealer for *Canadian Hydrographic* Service nautical charts and publications. The channel to the marina is marked by privately maintained buoys. The Landings Restaurant is next to the marina.

Creg Quay Marina is a Canada Border Services 88 Agency telephone reporting site for pleasure craft; to report, dial 1-888-226-7277.

Nadeaus Point (Creg Quay) light (112.2) is 89 the outer end of the west breakwater at the entrance to the marina.

A submerged outfall pipeline runs 0.2 mile SE from 90 the outer end of the west breakwater.

Caution. — A submerged power cable 91 crosses from the west side of Westleys Point to the north tip of the unnamed island lying SSW of the point.

South shore of Lake St. Francis, eastern part

The south shore of the eastern part of the lake is 92 generally low and wooded. Île des Francs-Tireurs is a small island close north of **Pointe Biron** (45°11'N, 74°15'W).

Île Raymond Yacht Club is a private club 93 on the NE shore of Île des Franc-Tireurs. The main yacht club floating wharf is 33 m long; a 38-m long wharf, on the south side of a breakwater on the north side of the yacht club, provides additional berthing. Each structure has an elevation of 0.8 m. With depths of 0.3 to 1.2 m (2006), facilities included dockage with power and water, paddle boat rentals, motel accommodation, picnic area, pay phone, drinking water, showers, restaurant and licensed patio pub, ice and gasoline.

94 Two privately maintained lights (92.2, 92.3) are on the floating wharf of the yacht club.

95 **Caution**. — A **rock** with a drying height of 0.1 m is close off the east end of the north breakwater. Three silos 0.5 mile SW of Île Raymond Yacht Club are prominent.

96

97 Caution. — Overhead power cables with a clearance of 7 m cross from Île des Franc-Tireurs to the mainland. An overhead telephone cable, with a clearance of 6.7 m, crosses WSW from the island to an islet.

At Port Lewis, 1.5 miles west of Pointe Biron. 98 there is a T-shaped Public wharf with an outer face 30 m in length and 1.5 m in elevation. The wharf had a depth of 1.5 m (2006). There is a launching ramp next to the wharf.

99 Marina Port Lewis, at the Public wharf, had depths of 0.9 to 1.5 m (2006) and offered dockage with power and water, **ramp**, repairs and salvage, boat hardware, 3.5 tonne hydraulic trailer, personal watercraft rentals, pay phone, toilets, bait and tackle, indoor winter storage, ice and gasoline, and monitored VHF Channels 68 and 16.

100 Caution. — A submerged power cable crosses from Port Lewis to the rear light of the Saint-Anicet East range, and from there to the front light.

At Saint-Anicet (45°08'N, 74°22'W), there is church 101 with a conspicuous silver dome. A conspicuous cross east of the settlement is 23 m high.

102 Historical note. — This is the church where Cardinal Émile Léger was baptized. He served here for

many years before heading the archdiocese of Montréal as Archbishop of the Roman Catholic Church.

103 Saint-Anicet Public **wharf** has an outer face 18 m long and depths of 1.2 to 2.1 m (2006). The deck of the wharf has a height of 1.2 m. Near the wharf are public washrooms, picnic area, buoyed swimming area, restaurant and snack bar, and a hotel.



104 Caution. — The ruins of a crib, awash, are79 m NE of the wharf.

Caution. — A submerged power cable crosses from the Saint-Anicet Public wharf to *Saint-Anicet Shoal* light *D27*. Close NE of Pointe Dupuis, a submerged cable crosses from the rear light of the *Pointe Dupuis range* to the front light on Île Minguy. Close south of Pointe Dupuis, a submerged power cable crosses from the shore to the front light of the *Saint-Anicet West range*; submerged power cables run from there to *Lancaster Bar* light *D41*, and to the rear range light and other range lights further SW.

106 **Pointe Latreille** lies 1.7 miles south of Pointe Dupuis.

107 There are two marinas in the bay SW of Pointe Latreille.

108 *Marina St-Anicet Inc.*, 0.2 mile SSW of Pointe Latreille, had depths of 0.3 m (2006) and offered dockage with power and water, pump out, **ramp**, repairs and salvage, boat hardware, 5 tonne hoist, paddleboat, fishing boat, and houseboat rentals, picnic area, showers, bait and tackle, ice and gasoline.

109 *Pourvoirie Bernard Hart*, on the west side of the bay, had depths of 0.3 m (2006) and offered dockage, **ramp**, small boat rentals, water taxi service, picnic and camping area, pay phone, bait and tackle, liquor, drinking water, ice and gasoline.

110 **Pointe au Cèdre** lies 2.3 miles SSW of Pointe Dupuis.

111 There is a launching **ramp** at Pointe au Cèdre. The **causeway** of the former Public wharf lies SW of the ramp.

Lake St. Francis — Western part

Seaway Channel

112 **Lancaster Bar** $(45^{\circ}07'N, 74^{\circ}27'W)$ is an area of shallow water NW of Pointe au Cèdre. The *Seaway* channel cuts through the bar, with a minimum depth of 9.1 m. Through the western part of Lake St. Francis, the channel has a least width of 137 m. The channel is well marked by buoys and range lights.

The current across Lancaster Bar is reported to set fair with the channel at a rate of 1 knot or less.
 Lancaster Bar light *D41 (116)* is on an island at the NE end of Lancaster Bar.

115 Lancaster range lights (123, 124), in line bearing 229°, lead through the dredged channel at Lancaster Bar. Both range towers are on offshore cribs. The front light is 0.5 mile NNW of **Butternut Island** (45°06'N, 74°29'W). The rear light is visible from downstream over an arc of 180°.

116 Camerons Island Lower range lights (130, 131) are in line bearing $207\frac{1}{2}^{\circ}$. The front light is on a crib 0.4 mile NNE of **Île Thompson (Camerons Island)** (45°04'N, 74°31'W); the rear light is on the north shore of the island. The lights are visible from downstream over an arc of 180°.

117 There are **speed limits** in this section of the *Seaway* channel. For more details on speed limits, see Item 28 and Schedule II of *Seaway Practices and Procedures* in the *Seaway Handbook*.

Caution. — A submerged power cable crosses the *Seaway* channel 0.4 mile north of Butternut Island. Another **power cable** crosses the channel 0.4 mile north of Île Thompson.

119 Butternut Island range lights (126, 127) are in line bearing 046°. The front light is at the NW end of Butternut Island; the rear light is on a crib 0.3 mile NE of the island. The lights are visible from upstream over an arc of 180°.

120 Stanley Island East Direction light (141.5), on the east end of Stanley Island (45°03'N, 74°33'W), is visible on a bearing of 226°.

121 Camerons Island Upper range lights (136, 137) are in line bearing $059\frac{1}{2}^{\circ}$. The front light is on a crib west of Île Thompson; the rear light is on the north tip of the island. The lights are visible from upstream over an arc of 180° .

122 *Stanley Island* **light** *D67 (144)* is on the NW side of the island.

Caution. — A submerged power cable crosses the *Seaway* channel from the SW end of **Renshaw Island** ($45^{\circ}03'N$, $74^{\circ}33'W$) to the NE end of Stanley Island.

 $\underbrace{\mathbf{N}}_{124} \qquad Clark \ Island \ \mathbf{light} \ D70 \ (146) \ \text{is on the east} \\ \text{end of } \mathbf{Clark} \ \mathbf{Island} \ (45^{\circ}03'N, 74^{\circ}34'W).$

125 Stanley Crab Direction light (144.5) is on Stanley Crab (45°03'N, 74°34'W). The light is visible on a bearing of 083°.

126 *McGibbons Point Direction* light *D80 (153)*, shown from **Provast Point** (45°02'N, 74°37'W), is visible on a bearing of 263°.

 $\underbrace{127}$ The **current** is reported to set at a rate of 1.5 knots between Clark Island and **Île Saint-Régis** (45°01'N, 74°38'W).

128 There are two irregularly shaped **anchorage areas**, one north and one south of the main channel, between Clark Island and McGibbons Point. This is the *Dickerson Island Anchorage*.

Chart 1433

129 Cornwall Island range lights (164, 165), on the east end of Cornwall Island ($45^{\circ}00'N$, $74^{\circ}43'W$), are in line bearing 241°. The front light is at the east end of the island ($45^{\circ}01'N$, $74^{\circ}40'W$). The lights are only visible on the line of the range.

130 Two irregularly shaped **anchorage areas**, one north and one south of the main channel on the *Cornwall Island range*, are known as *Stonehouse Point Anchorage*.

131 Colquhoun Islands are NW of the Seaway channel,SW of Flannigans Point.

North shore of Lake St. Francis, western part

Finney Creek is 2 miles SW of Westleys Point (*previously described*). A submerged sewer pipeline runs 0.7 mile east from the east entrance of the creek. A potable water intake is 0.3 mile further south; it runs 0.7 mile east from the shore to a submerged crib with a depth of 9.6 m.

133 **South Lancaster** is on the NE side of the mouth of **Raisin River** (45°08′N, 74°30′W). A small-craft channel from the *Seaway* channel to Raisin River is marked by **buoys**.

134 The river is crossed near its mouth by two highway **bridges** and farther inland by a railway **bridge**; the highway bridge 0.1 mile from the river mouth has a vertical clearance of 3 m; the double bridge of *Highway 401*, 0.5 mile farther upstream, has a vertical clearance of 2.4 m. Raisin River has a least **depth** of 0.9 m to a point 0.1 mile east of the railway bridge.

135 Raisin River Marina Ltd., on the east shore of Raisin River close north of the first highway bridge, had depths of 0.6 to 2.1 m (2006) and offered dockage with power, pump out, concrete **ramp**, repairs, boat hardware, 8 tonne hoist, canoe and boat rentals, water taxi service, bait and tackle, snack bar, ice and gasoline.

Raisin River Marina is a Canada Border Services Agency telephone reporting site for pleasure craft; to report, dial 1-888-226-7277.

137 The Public **wharf** at South Lancaster is a concrete structure on the St. Lawrence shore. The outer 18 m of the wharf is 4.9 m wide and had depths of 0.9 to 1.8 m (2006).

138 **The Cairn** is an islet 0.3 mile south of South Lancaster. A conical stone **cairn** on this islet has an elevation of 16.5 m and is prominent. The cairn is not visible from southern approaches due to large trees on the south side of the islet.



139 There is a marina SW of South Lancaster, 0.6 mile west of The Cairn.

140 *Mac's Marina* had depths of 0.3 to 0.6 m (2006) and offered dockage with power and water, pump out, **ramp**, repairs and salvage, boat hardware, forklift, fishing and pontoon boat rentals, water taxi service, bait and tackle, snack bar, ice and gasoline.

141 **Hamilton Island** (45°04'N, 74°32'W), 9.1 m high, lies close west of the *Seaway* channel. Hamilton Island is connected to the mainland to the west by a bridge which has a vertical clearance of 1.5 m; a shallow passage for small craft passes under this bridge.

142 **Pilons Point** and **Camerons Point**, to the SW, lie north of Hamilton Island.

143 T & I Campground Resort, 0.5 mile NNE of Pilons Point, had depths of 0.9 m (2006) and offered dockage, sand **ramp**, picnic and camping area, pay phone, drinking water, showers, laundromat, groceries, bait and tackle, snack bar, restaurant and licensed dining room, propane and ice. The docks are for the use of campground patrons.

144 *Cameron's Point Campsite*, 0.35 mile SW of Pilons Point, had depths of 0 to 1.2 m (2006) and offered some dockage, gravel **ramp**, picnic and camping area, pay phone, drinking water, showers, laundromat, some groceries, bait, ice and snack bar.

145 Renshaw Island *(previously mentioned)*, separated from Hamilton Island by a narrow boat channel, is flat and 1.5 m high with a few trees *(1994)*. There is a **starboard hand daybeacon** on the SE tip of the island.

146 Stanley Island *(previously mentioned)*, about 12 m in elevation, is on the SE side of the main ship channel south of Renshaw Island. There are cottages on the island. There is a **starboard hand daybeacon** on the SE tip of the island.

147 **Caution**. — A **submerged power cable** crosses the boat channel between Hamilton and Renshaw Islands.

148 **Summerstown** is on the mainland NW of Renshaw Island.

149 The Public **wharf** at Summerstown is L-shaped, 49 m long and 12 m wide at the face, with an elevation of 0.9 m. There were depths of 0.9 to 1.2 m (2006).

150 Summerstown Public wharf is a *Canada Border Services Agency telephone reporting site* for pleasure craft; to report, dial 1-888-226-7277.

151 *Glendale Restaurant*, 30 m east of the Summerstown Public wharf, has limited small-craft dockage (2006).

152 Two **silos** on the mainland 0.2 mile NE of the Summerstown Public wharf are prominent.

153

There are three marinas near Summerstown.

Roger's Marina, on the mainland NW of Hamilton Island, had depths of 0.6 m (2006) and offered dockage with power, **ramp**, repairs and salvage, boat hardware, hoist, small boat rentals, water taxi service, bait and tackle, snack bar, ice and gasoline.

155 *Whimpy's Marina*, on the mainland west of Hamilton Island, had a depth of 0.6 m (2006) and offered dockage with power and water, paved **ramp**, repairs and salvage, boat hardware, 7 tonne hoist, fishing boat rentals, bait and tackle.

156 Summerstown Marina, 0.9 mile SW of the Summerstown Public wharf, had depths of 1.2 m (2006) and offered dockage with power and water, **ramp**, repairs, boat hardware, 10 tonne hoist, water taxi service, picnic area, bait and tackle, snack bar, ice and gasoline.

157 *Summerstown Marina* is a *Canada Border Services Agency telephone reporting site* for pleasure craft; to report, dial 1-888-226-7277.

158 **Danis Point** is on the north shore, 1.1 miles west of Clark Island *(previously mentioned)*.

Two **submerged water intakes**, 0.2 mile east of **Flanigans Point** ($45^{\circ}02'N$, $74^{\circ}38'W$), extend 0.2 mile offshore. A **sewer outfall** 0.1 mile downstream of the water intakes extends 0.2 mile offshore.

160 The yellow brick buildings of *The Islamic Institute*, on a hill 0.3 mile NNE of Flanigans Point, are prominent.

South shore of Lake St. Francis, western part

161 Most of the western part of the south shore of the lake is low and sometimes submerged. Low islands lie offshore. Larger islands include **Île Christatie**, **Île Plum** and **Île Ronde** ($45^{\circ}03'N$, $74^{\circ}32'W$).

162 A tower with air obstruction lights, elevation 136 m, is 0.6 mile SE of the mouth of Ruisseau McMillan ($45^{\circ}03'N$, $74^{\circ}27'W$).

163 The **Rivière aux Saumons** flows into the lake through the low marshy shore south of Île Ronde. The *Réserve nationale de faune du lac Saint-François compté d'Huntingdon* extends along the shore from Pointe au Cèdre west to Rivière aux Saumons. This wetland area is protected under the *Canadian Wildlife Act*; a permit from *Environment Canada* is required to land here.

164 West of Rivière aux Saumons, the marshland and islands continue, including **Île Simard**, **Île Goose** and **Île Cow**.

165 Île Saint-Régis *(previously mentioned)* is a larger and slightly higher island at the west end of Lake St. Francis. South of Île Saint-Régis, the **Rivière Saint-Régis (St. Regis River)** flows into the St. Lawrence River. The Indian settlement of **Saint-Régis** is on the west side of the mouth of this river. The International Boundary between Canada and the United States passes south of the village.

166 Two **submerged power cables** cross the entrance to Rivière Saint-Régis.

167 Cornwall Island (*previously mentioned*), Île Saint-Régis and the smaller islands to the east are part of the *Akwesasne Indian Reserve*.

Approaches to Cornwall

168 The Cornwall Channel of the *St. Lawrence Seaway* branches to the west from the *Seaway* channel south of the Colquhoun Islands. The channel has a least width of 129 m, and is marked by buoys.

169 **Pilon Island** lies north of the Cornwall Channel west of the Colquhoun Islands. There are a number of private wharves on the north side of the island, and on the protected shore north of the island. **Windmill Point** is 1.5 miles WSW of Pilon Island. A **conspicuous wind-powered electric generator** is on the point.

170 A **submerged cable** crosses from the NW shore of Pilon Island NNW to the mainland. A **submerged water intake** 0.3 mile west of Pilon Island extends 0.4 mile offshore. There is another **submerged water intake** 0.2 mile east of Windmill Point.

Gray's Creek Marina, north of Pilon Island at the entrance to **Grays** Creek, had depths of 0.9 to 1.5 m (2006) and offered dockage with power and water, pump out, concrete **ramp**, picnic area, washrooms, bait, tackle, snack bar, ice and gasoline.

172 *Gray's Creek Marina* is a *Canada Border Services Agency telephone reporting site* for pleasure craft; to report, dial 1-888-226-7277.

173 *Cornwall Marina Co-operative Ltd.*, on the north shore 0.1 mile west of Gray's Creek, is private.

The city of **Cornwall**, population 45,965 (2006), is on the north shore of the St. Lawrence River, north of Cornwall Island. There are several industrial plants in the city. Cornwall has bus and rail services. *Highway 401* is 3 km north of the harbour. The *St. Lawrence Seaway Management Corporation* has their operating headquarters in Cornwall. The distance by the *Seaway* channel from Montréal is 69 miles.

175 The harbour at Cornwall is a Public harbour administered by *Transport Canada*.

176 The *Canada Border Services Agency* offers customs and immigration services in Cornwall. There is a customs **sufferance warehouse** at the port. For more information, contact the *Border Information Service*, at 1-800-461-9999 for service in English or 1-800-959-2036 for service in French or visit: *http://www.cbsa-asfc.gc.ca*.

CORNWALL (1994)



177 Cornwall **wharf**, 175 m long with a depth of 8.2 m (2006), is 0.4 mile west of Windmill Point. This wharf is operated by *Transport Canada* (2008). Tugs are not normally required for berthing; with sufficient notice, tugs can be available for emergency or standby use. A transit shed on Cornwall wharf has 1,055 m² of storage space for general cargo.

178 *B&W Bingley Steel Works Limited* offers hull, engine and boiler repairs.

179 *Cornwall Marina 200*, 0.3 mile upstream of the Cornwall wharf, had depths of 1.5 m (2006) and offered dockage with power and water, pump out, picnic area, pay phone, showers, laundromat, snack bar, ice, gasoline and diesel fuel, and monitored VHF Channel 68.

180 *Cornwall Marina 200* is a *Canada Border Services Agency telephone reporting site* for pleasure craft; to report, dial 1-888-226-7277.

 $\underbrace{ 181 \quad Cornwall Marina \, light (163.2) \text{ is at the south} }_{\text{entrance point of the basin } (45^{\circ}01'N, 74^{\circ}43'W). }$

182 The north *Seaway International Bridge* crosses the channel between Cornwall and Cornwall Island. This bridge has a vertical clearance of 9.6 m.

183 **Overhead power lines**, with a clearance of 20 m, cross the channel 0.4 mile west of the bridge, near the abutments of the former *Roosevelt Bridge*.

Colquhoun Islands to Raquette Point

184 From the point where the *Seaway* channel passes between Île Saint-Régis and the two Colquhoun Islands to the NW, the channel alters direction to pass between the SW end of Île Saint-Régis and Cornwall Island, from where it passes between Cornwall Island and the mainland shore of the United States. The channel in this area has a least width of 129 m south of Cornwall Island. The channel is well marked by **lights** and **buoys**.

185 **Saint-Régis Dyke** is the local name given to the cribwork, 152 m in length, 0.2 mile from the NE end of Cornwall Island. The **tower** of an abandoned lighthouse stands on the east end of this cribwork.

186 A **submerged cable** crosses from Saint-Régis to the west end of Île Saint-Régis, and then across the *Seaway* channel to the east end of Cornwall Island.

187 There is a *Seaway Traffic Control* calling-in point between Île Saint-Régis and Cornwall Island for upbound vessels. Consult Schedule III of *Seaway Practices and Procedures* in the *Seaway Handbook* for details of the *Seaway Traffic Control* system.

188 Third Crab Sector light (158) is on a white circular crib close SSW of Third Crab (45°01'N, 74°39'W). The white sector indicates the preferred channel.
 189 Light 2 (172) is on the SE end of Cornwall Island (45°00'N, 74°40'W).

190 *Light 4 (179)* is 0.4 mile WSW of *Light 2*.

191 Light 10 Sector light (185) is on a pile crib near the middle of the south shore of Cornwall Island ($45^{\circ}00'N$, $74^{\circ}43'W$). The white sector of this light indicates the preferred channel from the east.

192 Light 10 Direction light (185.2), on the same structure as Light 10 Sector light, is visible from $044\frac{1}{2}^{\circ}$ to $051\frac{1}{2}^{\circ}$, with increased intensity on a bearing of 048° .



193 A current study in November 1978 recorded a NE'ly **current** of 2 to 3 knots south of the Colquhoun Islands. A **current** of 3 knots sets fair with the channel between Cornwall Island and Île Saint-Régis. The **current** at the turn in the channel SE of Cornwall Island can reach 3 knots at high water levels. At high stages of the **Raquette River**, which enters the *Seaway* channel from the southwest, west of Saint-Régis, the waters of the river set NE across the channel and form eddies along the shore of the SE end of Cornwall Island. East of **Raquette Point** ($45^{\circ}00'N$, $74^{\circ}43'W$), the **current** sets fair with the channel at a rate of 2.5 knots.

Cornwall to Brockville

General

Chart 1400

This chapter describes the St. Lawrence River and the 1 St. Lawrence Seaway from Cornwall to the city of Brockville, a distance of 48 miles. This section includes three Seaway locks.

Cornwall Wiley-Dondero Iroquois Prescott

1.1 Real-time water level information for St. Lawrence River at Morrisburg is available from the Canadian Hydrographic Service Automated Water Level Gauge, telephone number 613-543-3361. Real-time water level information for St. Lawrence River below Iroquois Lock is available from the Canadian Hydrographic Service Automated Water Level Gauge, telephone number 613-652-4839 and for St. Lawrence River above Iroquois Lock from the Canadian Hydrographic Service Automated Water Level Gauge, telephone number 613-652-4426. Real-time water level information for St. Lawrence River at Brockville is available from the Canadian Hydrographic Service Automated Water Level Gauge, telephone number 613-345-0095. (More information on water levels is given in Sailing Directions booklet CEN 300 — General Information, Great Lakes.)

Cornwall to Iroquois Lock

Chart 1433

2 From Raquette Point (45°00'N, 74°43'W, described in Chapter 2), south of the middle part of Cornwall Island, the Seaway channel trends SW to the south Seaway International Bridge, a highway suspension bridge that spans the channel between Cornwall Island and the United States' shore. The bridge has a vertical clearance of 37 m and a channel width of 183 m.

Pollys Gut is the name of the narrow channel that 3 separates the west end of Cornwall Island from Massena Point in the United States.

A current study in July 1986 recorded rates of 3 to 8 knots through Pollys Gut and into the Seaway channel above the Seaway International Bridge, the rate depending on the outflow from the Moses-Saunders Power Dam. A rock training wall north of the Seaway channel at the



south end of Pollys Gut deflects the major flow of water ESE into the *Seaway* channel. A training dyke, west of the training wall, also deflects the flow of water into the ship channel to the east; currents of 1 to 2 knots were observed in this area. Rates east of the bridge were 3 to 4 knots. Rates north of Cornwall Island, 0.3 mile east of the bridge, were 4 to 7 knots.

5 At high stages of the Raquette River, the water of the river set NE across the channel and form eddies along the shore. East of Raquette Point, the current sets fair with the channel at a rate of 2.5 knots.

6 The flow from the Grass River is light except at high stages of the river, but the effect on upbound vessels proceeding into Snell Lock at reduced speed is pronounced and must be considered.

[from U.S. Coast Pilot 6, Chapter 4, partial]

7 **Raquette River** flows into the S side of the St. Lawrence River near lower end of Cornwall Island. The river has depths of 12 feet (3.7 meters) at the mouth, but shoals rapidly to 2 feet (0.6 meter) and has several small islands and a submerged crib within 0.7 statute mile (0.6 nm) of the mouth.

8 **Calling-in point** – Upbound vessels shall contact "Seaway Eisenhower" on VHF-FM channel 12 when about 0.5 statute mile (0.4 nm) below Seaway International Bridge. After initial contact, vessels shall guard VHF-FM channel 12. (See the Seaway Handbook for details.)

9 **Grass River** flows into the S side of the St. Lawrence River just below the E end of Wiley-Dondero Canal. The river is navigable for about 6.5 statute miles (5.6 nm) to the junction with Massena Canal, but is obstructed by numerous boulders near the junction. The three bridges that cross the river below the junction have a least clearance of 39 feet (11.9 meters).

10 Wiley-Dondero Canal, cut in part through the U.S. mainland, extends from just W of the mouth of Grass River W for about 10 statute miles (8.7 nm) past the Long Sault Islands to the vicinity of the Croil Islands. The canal, with its two locks, serves to raise vessels from the level of Lac Saint-Francois to that of Lake St. Lawrence. Bertrand H. Snell Lock, at the E end of the canal, has a normal lift of 45 to 49 feet (13.7 to 14.9 meters). Dwight D. Eisenhower Lock, 3.5 statute miles (3 nm) W of Snell Lock, has a normal lift of 38 to 42 feet (11.6 to 12.8 meters).

11 *A* speed limit of 6 knots is enforced in the canal between Eisenhower and Snell Locks.

12 **Calling-in point** – Downbound vessels shall contact "Seaway Eisenhower" on VHF-FM channel 12 when approximately abeam of the central island of the Croil Islands. After initial contact, vessels shall guard VHF-FM channel 12. (See the Seaway Handbook for details.) 13 **Currents, Wiley-Dondero Canal** – Crosscurrents with velocities to 2 knots have been reported in the Wiley-Dondero Canal. These currents set NE along the lower end of the Long Sault Islands and ESE at the upper end of the islands.

14 Standby areas for small craft awaiting transit through the locks are on the S side of the canal just W of Snell Lock and just E of Eisenhower Lock. The areas are each marked by a buoy. Mooring cells for deep-draft vessels awaiting transit are on the S side of the canal 0.9 statute mile (0.8 nm) W of Snell Lock, 1.1 statute miles (1 nm) E of Eisenhower Lock, and 1.6 statute miles (1.4 nm) W of Eisenhower Lock. Each set of mooring cells is marked at each end by a light, and all but the latter have a catwalk.

15 **Massena Canal**, a former power canal, extends SE from the St. Lawrence River near the upper end of the Long Sault Islands for 2.8 statute miles (2.4 nm) to the junction with Grass River. The canal is closed to navigation by a dam at either end. **Massena**, NY, at the junction of Massena Canal and Grass River, is the site of the field headquarters of the Saint Lawrence Seaway Development Corporation. (See Appendix A [of U.S. Coast Pilot 6] for address.)

16 The Coast Guard maintains a **Marine Safety Detachment** office in Massena. (See Appendix A [of U.S. Coast Pilot 6] for address.)

Massena is a customs port of entry.

17

18 **Quarantine, customs, immigration, and agricul**tural quarantine – (See chapter 3 [of U.S. Coast Pilot 6], Vessel Arrival Inspections, and appendix [of U.S. Coast Pilot 6] for addresses.)

19 **Quarantine** is enforced in accordance with the regulations of the U.S. Public Health Service. (See Public Health Service, chapter 1 [of U.S. Coast Pilot 6].)

20 Wharf – Metropolitan Petroleum Co., Inc. receives petroleum products at a wharf on the S side of Wiley-Dondero Canal in 44°57'57"N., 74°55'05"W. The wharf has 650 feet [198 m] of berthing space with dolphins and a depth of 30 feet [9.1 m] alongside in 1977.

21 Chart *1434 – Coming out of Wiley-Dondero Canal on the S side of Croil Islands, the vessel route turns SW on the S side of Cat Island and Cat Island Shoal, thence N of Wilson Hill Island, S of Weaver Shoal, N of Bradford Island, Crysler Shoal, and Goose Neck Island Shoals, between Doran Shoal on the E and Broder Island on the W, and N of Murphy Islands and Murphy Shoal to the vicinity of Morrisburg, ON.

22 The light marking the N side of the Crysler Shoal is equipped with a racon.

23 About 1.5 statute miles (1.3 nm) SSW of Crysler Shoal, a channel leads S to a marina. The marina provides gasoline, diesel fuel by truck, water, ice, electricity, sewage pump-out, some marine supplies, and a launching ramp. A 10-ton [9.1-tonne] lift is available for hull and engine repairs.
In 1977, depths of 4 to 8 feet [1.2 to 2.4 m] were reported alongside the berths.

Chart 1433

Lake St. Lawrence

Lake St. Lawrence is contained at its east end by Eisenhower Lock and two dams. Moses-Saunders Power Dam, 3 miles NE of the lock, extends from the east end of Barnhart Island across the International Boundary to the Canadian mainland. Long Sault Spillway Dam connects the mainland north of Eisenhower Lock to the west end of Barnhart Island. Lake St. Lawrence extends SW to Iroquois Lock and Iroquois Control Dam. In general, the shores of the lake are low and the current, which varies with the flow through the Iroquois Control Dam, is not strong.

25 There are **speed limits** in Lake St. Lawrence. For more details on speed limits, see Item 28 and Schedule II of *Seaway Practices and Procedures* in the *Seaway Handbook*.

26 **Caution**. — There is a danger of being swept over the Moses-Saunders Power Dam or the Long Sault Spillway Dam when the spillway gates are opened. All vessels are cautioned not to approach within 305 m of these structures.

27 **Long Sault** is on the north shore of Lake St. Lawrence. Long Sault had a post office, a grocery and butcher shop, and a liquor store (2006).

28 Long Sault Marina, at Long Sault, had depths of 1.2 to 3.0 m (2006) and offered dockage with power and water, pump out, **ramp**, repairs, some boat hardware, 10-tonne hoist, picnic area, showers, bait, tackle, restaurant, ice and gasoline, and monitored VHF Channels 16 and 68. Long Sault Marina is a Canada Border Services Agency telephone reporting site for pleasure craft; to report, dial 1-888-226-7277.

29 *Stormont Yacht Club*, close east of *Long Sault Marina*, is private.

A buoyed **channel** leading to *Long Sault Marina* and *Stormont Yacht Club* is entered between **Dickinson Island** and **Heriot Island** ($45^{\circ}00'N$, $74^{\circ}55'W$). Another buoyed **channel** leading to the small-craft facilities at Long Sault is entered SSE of **Moulinette Island** ($45^{\circ}01'N$, $74^{\circ}53'W$).

The **bridge** between Dickinson Island and Heriot Island has a vertical clearance of 6.4 m. The **bridge** between **Mille Roches Island** and the mainland shore has a vertical clearance of 5.5 m.

A private orange and white **mooring buoy** is in the centre of the approaches to the bay south of the causeway between Dickinson Island and **Hoople Island**.

Chart 1434

Wilson Hill Anchorage is north of the ship channel, south of **Ault Island** (44°57′N, 75°03′W).

The **Crysler Park Memorial**, a **conspicuous** needleshaped **monument** 15 m high with an elevation of 23 m, erected on a mound 0.4 mile west of the west end of Ault Island, commemorates the Battle of Crysler's Farm in 1813. An abandoned light-structure with an elevation of 9.1 m is 0.2 mile NE of the Crysler Park Memorial, at **Upper Canada Village**. A white **church** and its **steeple**, 0.1 mile north of the abandoned light-structure, are **conspicuous**.

35 Crysler Park Marina, in Marina Bay on the north shore west of Crysler Farm Battlefield Park, had depths of 1.8 m (2006) and offered dockage with power and water, pump out, ramp, some boat hardware, camping, pay phone, showers, laundromat, groceries, ice, gasoline and diesel fuel, and monitored VHF Channel 68. The channel leading to the marina had a reported depth of 2.4 m (2006). Crysler Park Marina is an authorized dealer for Canadian Hydrographic Service nautical charts and publications.

36 Crysler Park Marina is a Canada Border Services Agency telephone reporting site for pleasure craft; to report, dial 1-888-226-7277.

37 A privately **buoyed channel** leads to the entrance of the marina, which is marked by a privately maintained **light**.

38 *Light 68 (237)* is on a white circular crib off Weaver Shoal, 0.5 mile SE of **Cooks Point** (44°56'N, 75°05'W).

Light 70 (238) is 0.3 mile south of Cooks Point. *Weaver Shoal range* lights (244.5, 244.6), in line bearing 262°, are on the Canadian shore 2.4 miles WSW of Cooks Point.

41 A **submerged crib**, with 1 m of water over it, lies SW of Weaver Shoal, 40 m WSW of *Light 68*.

42 There are *Seaway Traffic Control* calling-in points SW of Cooks Point for upbound and downbound vessels. Consult Schedule III of *Seaway Practices and Procedures* in the *Seaway Handbook* for details of the *Seaway Traffic Control* system.

43 The **wreck** of the *Eastcliffe Hall*, which sank in 1970, lies in the channel west of Crysler Shoal ($44^{\circ}55'N$, $75^{\circ}06'W$). The least depth over the wreck is 10.3 m. A second **wreck**, with a least depth of 11.5 m, lies close to the SW.

44 Goose Neck Island Shoals range lights (247.5, 247.6) are in line bearing $254\frac{1}{2}^{\circ}$. The front light is 0.4 mile WSW of the south end of Macdonald Island (44°55'N, 75°08'W).

45 Doran Shoal range lights (242.5, 242.6), in line bearing 040°, are on the north shore 0.7 mile west of Marina Bay.

46 Ogden Island range lights (258.4, 258.5), in line bearing 237°, are at the NE end of Ogden Island ($44^{\circ}53'N$, $75^{\circ}12'W$).

Light 81 (248) is on the NW side of Doran Shoal 47 (44°54'N, 75°09'W).

Light 82 (249) is on the NW side of the channel 48 opposite Light 81.

The village of Morrisburg is on the north shore 49 opposite Murphy Islands (44°54'N, 75°11'W) (previously mentioned), which are wooded.

The United Church spire, near the shore, and the 50 water tower, 50 m in elevation, behind the town, are conspicuous.

Morrisburg Town Dock, at Morrisburg, is an 51 L-shaped Public wharf that extends 23 m from the shore with an end section 33 m long. The wharf had depths of 2.1 m (2006) and offered dockage and concrete ramps.

Morrisburg Town Dock is a Canada Border Services 52 Agency telephone reporting site for pleasure craft; to report, dial 1-888-226-7277.

Morrisburg Boat Docks Park, east of the Public 53 wharf, offered washrooms, picnic tables, tennis courts, pay phone, drinking water, showers, children's playground and supervised swimming beach (2006).

Mariatown (44°53'N, 75°12'W) lies 1 mile SW of 54 Morrisburg.

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56

Morrisburg Anchorage, with depths of 11.2 to 21.4 m, lies NW of the Seaway channel at Morrisburg. Canada Island, thinly wooded (2006) and flat and about 1.5 m in elevation, lies SW of the anchorage area.

There is a **speed limit** on this stretch of the *Seaway* 57 channel. For more details on speed limits, see Item 28 and Schedule II of Seaway Practices and Procedures in the Seaway Handbook.

The current along the reach from Morrisburg 58 to Iroquois reaches 2 knots. The current sets northwards east of Canada Island. There may be an easterly set into Little River at the upper end of Ogden Island.

[from U.S. Coast Pilot 6, Chapter 4, partial]

59 Waddington, NY, is a village on the S side of Little River, the channel of the St Lawrence River S of Ogden Island. The village wharf had a reported depth of 27 feet [8.2 m] alongside in 1977.

Mariatown Approach range lights (263.4, 60 ****. 263.5), in line bearing 255°, are on the NW shore opposite the centre part of Ogden Island. The lights are visible on the line of the range. In 1994, the lower part of the front range was obscured by houses.

61 Mariatown range lights (259.2, 259.3), in line bearing 057°, are at Mariatown. The lights are visible on the line of the range.

Light 92 (259) is on the point at Mariatown. 62

Light 96 (263) is near the Mariatown Approach 63 range lights. A submerged power cable extends to this structure from the shore.

There is a prominent silo with a red and white striped 64 top on the NW shore near the Mariatown Approach range lights.

Flagg Bay is on the north shore at Rapide Plat Point, 65 0.5 mile SW of the Mariatown Approach range.

A wharf SW of the mouth of Flagg Bay is 66 232 m long, with five breasting dolphins with elevations of 2.4 m. Self-unloading bulk carriers and oil tankers discharge at this facility.

There is a **speed limit** on this section of the Seaway 67 channel. For more details on speed limits, see Item 28 and Schedule II of Seaway Practices and Procedures in the Seaway Handbook.

There is a Seaway Traffic Control calling-68 in point, for upbound vessels, near buoy 98 at the west end of Ogden Island. Consult Schedule III of Seaway Practices and Procedures in the Seaway Handbook for details of the Seaway Traffic Control system.

A submerged high pressure gas pipeline crosses 69 the river 1.15 miles upstream of Ogden Island.

Pinetree Point is on the NW shore 1.5 miles SW of 70 the west end of Ogden Island. The village of Iroquois, with a population of 1,211 (1991), is 1.5 miles farther SW.

Iroquois Lock lies between Harkness Island 71 (44°49'N, 75°19'W) and Iroquois Island, 1 mile south of the village of Iroquois. Iroquois Control Dam extends east from the north end of Harkness Island to Rockway Point on the United States' shore. This dam controls the level of Lake St. Lawrence.

Iroquois Lock has a lift of 0.1 to 2 m. The lower ap-72 proach wall, on the west side of the channel, has a berthing length of 236 m. The upper approach wall, also on the west side, has a berthing length of 670 m. The lock and approach walls are illuminated at night. A bascule bridge crosses at the lower end of the lock. Iroquois Lock is the seventh and final lock of the route from Montréal to Lake Ontario.

A radio tower on the north part of Harkness Island 73 has an elevation of 52 m; it has air obstruction lights. This radio tower is the most conspicuous object in the Iroquois Lock area. A water tank, elevation 49 m, and a church spire, elevation 34 m, in the village of Iroquois, are prominent. The church may be obscured by trees (1994).

The sluices of the Iroquois Control 74 Dam are numbered 1 to 32 from the United States' shore. Small craft may, at their own risk, pass through sluice No. 30 for upstream passage and sluice No. 28 for downstream passage. The overhead clearance is 2.5 m; the sluice openings are marked by port and starboard hand daybeacons. Although the dam is usually operated in a fully open

IROQUOIS LOCK (1994)



position, some or all of the gates may be closed or partially closed without notice. **Currents** with rates of up to 3 knots have been observed downstream of sluices 28 and 30 with the dam operating in a partially closed position.

75 A current usually sets to the north in the approach to Iroquois Lock. The strength of the current depends on the number and position of the sluice gates opened in the Iroquois Control Dam. The current to be expected under certain conditions is shown on the chart.



76 There is an **emergency anchorage area** SE of the channel 1 mile NE of Iroquois Lock.

The entrance to the **Old Galop Canal** is 0.3 mile NNW of the entrance to the Iroquois Lock. There is a smallcraft basin on the north side of the entrance to the canal. The channel leading to the basin is marked by privately maintained **buoys**.

Galop Canal Marine, at the east end of the Old Galop Canal, had depths of 4 m (2006) and offered dockage with power and water, **ramp**, picnic area, ice, gasoline and diesel fuel. *Galop Canal Marine* is a *Canada Border Services Agency telephone reporting site* for pleasure craft; to report, dial 1-888-226-7277.

79 Iroquois Approach range lights (280.4, 280.5), in line bearing $241\frac{1}{2}^{\circ}$, are near the small-craft basin. The lights are visible on the line of the range.

⁸⁰ Iroquois Lock Direction light (274.4) is on the NW shore near the village of Iroquois ($44^{\circ}51'N$, $75^{\circ}18'W$). The light is visible on a bearing of 026° .

[from U.S. Coast Pilot 6, Chapter 4, partial]

81 The upbound channel coming out of Iroquois Lock is marked by a 205°48' leading light on **Sparrowhawk Point** [44°48'N, 75°20'W].

Iroquois on VHF channel 11 (156.550 MHz) with vessels name, location and next ETA. The master of a downbound vessel shall also give notice of *Laurentian Pilotage Authority* harbour or river pilots required at St. Lambert Lock.

83 For further information on pilotage, consult *Sailing Directions* booklet *CEN 300* — *General Information*, *Great Lakes* and the *Annual Edition of Notices to Mariners*.

Iroquois Lock to Prescott

The town of Prescott lies 11.5 miles SW of Iroquois Lock. The village of Cardinal and the community of Johnstown lie 4 and 8 miles, respectively, SW of Iroquois Lock.

85 This part of the river is 1 mile wide and has several islands. The Old Galop Canal, separated into two sections by the village of Cardinal, parallels the NW shore for the first 8 miles. The terrain on the Canadian side of the river is gently sloping and marshy in places; the United States' shore consists of steep clay banks, eroding in places. The islands that were formed during the construction of the *Seaway* in 1958 are generally covered with tall grasses and shrubs. On the natural islands that have not been developed there are large deciduous

trees near the water line. There are many summer cottages and permanent homes along the shores on both sides of the river; the surrounding land is mostly open farmland fringed by trees.

In addition to the deep-draught *Seaway* channel, other **routes** are available for **small craft**. The Old Galop Canal can be entered at several places. Small craft can enter the canal 0.6 mile NE of Cardinal through a gap in the embankment and follow the canal as far as Cardinal. The canal can also be entered south and SW of Cardinal, and followed west and SW, passing north of Prison Island and through North Channel, west of Drummond Island. Pleasure craft can also use a channel between Galop Island and the United States' mainland; a **cable area** crosses this channel.

Iroquois Marine Services, 0.35 mile west of the Iroquois Lock at the north end of the Old Galop Canal, had depths of 1.5 to 1.8 m (2006) and offered dockage with power and water, pump out, two **ramps**, engine repairs, 25 tonne hoist, some boat hardware, picnic area, pay phone, showers, snack bar, ice, gasoline and diesel fuel, and monitored VHF Channels 68 and 70. The approaches to this marina are marked by **daybeacons** and **buoys** and had a depth of 1.2 m (2006). This marina is an authorized dealer for *Canadian Hydrographic Service* nautical **charts** and publications. *Iroquois Marine Services* is a *Canada Border Services Agency telephone reporting site* for pleasure craft; to report, dial 1-888-226-7277.

Caution. — Cross currents near the upper approach wall at Iroquois Lock may cause difficulty when berthing; currents of 0.5 to 1.5 knots have been recorded setting ENE across the upstream approach to the lock.

89 **Toussaint Island**, on the NW side of the *Seaway* channel 1 mile SW of Iroquois Lock, is 19 m high and covered with grass and shrubs. **Presqu'ile**, 0.1 mile to the NW, is 14 m high and is also covered with grass and shrubs.

90 A **speed limit** is in effect on this stretch of the *Seaway* channel. For more details on speed limits, see Item 28 and Schedule II of *Seaway Practices and Procedures* in the *Seaway Handbook*.

91 *Light 114 (285)* is on the SE shore of Toussaint Island.

92 *Toussaint Island West* light (285.5) is 0.15 mile SW of *Light 114*.

93 The **current** between Toussaint Island and Sparrowhawk Point sets in a NE direction diagonally across the channel at a rate of 2.5 knots. Between Sparrowhawk Point and Chimney Island (44°44′N, 75°26′W, shown on Chart 1435), the **current** sets fair with the channel. **Currents** of 3 and 2.3 knots have been recorded between Cardinal and Chimney Island. Upstream of the Ogdensburg-Prescott International Bridge, near buoy 131A (shown on *Chart 1435)*, the observed **current** was 1.4 knots fair with the channel.

Two **radio towers** lie NW of the river 0.85 mile NW of *Light 115*. One of the towers has an elevation of 108 m. The NE **chimney** of *Canada Starch Company*, at Cardinal, has an elevation of 51 m; the SW **chimney** has an elevation of 40 m.

95 **Frazer Shoal** is a shallow area extending downstream from Cardinal, on the NW side of the channel.

Chart 1435

The village of **Cardinal** $(44^{\circ}47'N, 75^{\circ}23'W)$ is 4 miles upstream of Iroquois Lock. Vessels unload corn at the berths of the *Canada Starch Company* plant; three ships used the port in 2006.

97 The **wharf** faces at Cardinal, from the upstream end, are 55 m, 148 m and 95 m long. The wharves have an elevation of 2.4 m and had depths of 4 to 8.2 m (2006); there was shallower water at the downstream end and off the face. The approach to the Cardinal berths can be difficult because of the **current** and limited space.

A submerged water intake extends into the river south of the south face of the Cardinal wharf. Submerged sewer outfall pipelines are 0.2 mile NE and 0.15 mile SW of the wharf.

99 There is a *Seaway Traffic Control* calling-in point off Cardinal for downbound vessels. Consult Schedule III of *Seaway Practices and Procedures* in the *Seaway Handbook* for details of the *Seaway Traffic Control* system.

100 Drummond Island range lights (297, 298) are in line bearing $236\frac{1}{2}^\circ$. The front light is on the east side of Lame Squaw Island (44°45'N, 75°26'W). The rear light is on Drummond Island.

101 A **submerged cable area** extends across the *Seaway* channel from Lame Squaw Island. Another **submerged cable area** extends SW from the upper end of Galop Island. The cable areas indicate the locations of ice booms during the winter season and submerged cables and anchors during the navigation season.

North Channel, 90 m wide, is a passage cut between Drummond Island and **Spencer Island** (44°45'N, 75°27'W), and also between Drummond Island and the NW shore of the river. A groyne extends SSW and then WSW from Spencer Island.

103 A **small-craft channel** leads northwards east of Spencer Island from the SW end of North Channel.

104 A **conspicuous** communications **tower** 0.8 mile NNW of Spencer Island has an elevation of 120 m; it has air obstruction **lights**.

105 **Ogdensburg-Prescott International Bridge**, a highlevel suspension **bridge** with a vertical clearance of 40 m,

CARDINAL (1994)



spans the river between **Johnstown** and the U.S. shore 2 miles NE of Ogdensburg. The main piers, elevation 84 m, are 350 m apart. White **lights** are shown from the main towers on each side of the channel; a green **light** shown from each side of the main span indicates the centre of the channel. The main towers have air obstruction **lights**.

The bridge has two **radar reflectors** to help identify the piers. Each reflector is mounted on a tripod with the centre of the reflector at an elevation of 7.9 m. The tripods are at the outer ends of the piers, 3 m from the bridge tower structure. One reflector on each pier faces upstream.

107 Two **Racons**, identification Morse Code letters "H" ($\cdot \cdot \cdot$) and "T" (—), operate during the navigation season from the main towers on the SE and NW sides of the channel, respectively.

108 The **Port of Prescott** (44°44'N, 75°28'W), on the NW shore 0.5 mile upstream of the bridge, is a major transshipment point for grain. This terminal at one time was administered and operated by *Ports Canada* as the *Lower Lakes Terminal*; it is now administered by the Township of Edwardsburg/Cardinal. The Port Manager is available at 1-613-925-4228. In 2007, 42 ships used the port.

109 The Port of Prescott is a Canada Border Services Agency commercial vessel reporting site. For more information, contact the Border Information Service, at 1-800-461-9999 for service in English or 1-800-959-2036 for service in French, or visit: *http://www.cbsa-asfc.gc.ca*.

110 The grain elevator, a long narrow structure with wharves on both sides, has a capacity of 154,020 tonnes of grain. Railway car loading facilities are at the inshore end of the elevator. The railway yard has space for 125 cars.

111 There is a fluorescent-orange rectangular **daymark** on the SE side of the grain elevator.

112 Self-unloading vessels, only, can discharge grain products or bulk cargoes at the port.

113 The unloading berth, slip "B" on the north side of the elevator, is 398 m long, with a depth of 7.9 m. There is a hopper for receiving grain discharged by ships. The loading berth, slip "A" on the south side of the elevator, is 282 m long and had a depth of 7.6 m in 1992. This berth is equipped with eleven spouts for loading grain. There is also berthing space for vessels waiting to load or unload. The wharves have an elevation of 2.7 m. For the loading of railway cars or trucks, there are four elevator legs with a capacity of 476 tonnes per hour.

There is an open stockpile area of 5,580 m² north of the *Harbour Front Dock*, opposite unloading slip "B", for the storage of salt and nitrates. There is an open stockpile area of 2,415 m² south of *Port Dock*, opposite slip "A".

PORT OF PRESCOTT (1994)



Caution. — In 1994, there was a **submerged obstruction** 23 m east of the NE corner of the jetty on the south side of slip "A". This obstruction is a pile or metal object, submerged by 7.7 m.

Pilots and tugs are available for berthing at the *Port of Prescott*; pilots require four hours notice.
 St. Lawrence Marina, on the west shore 0.2 mile north of the Port of Prescott, had depths of 0.9 to 1.5 m (2006) and offered dockage with power and water, pump out, concrete ramp, hull and engine repairs, boat hardware, small boat and motor rentals, picnic area, pay phones, showers, restaurant and dining room, ice and gasoline. *Prescott Machine and Welding Inc.* is near by. The channel to this marina is privately buoyed; it had a depth of 0.6 m (2006).

118 *St. Lawrence Marina* and the *Port of Prescott* are *Canada Border Services Agency telephone reporting sites* for pleasure craft; to report, dial 1-888-226-7277.

119 **Windmill Point** (44°43'N, 75°29'W) is on the NW shore 0.9 mile SW of the Port of Prescott.

120 A white circular **tower** with a red upper part on Windmill Point has an elevation of 31 m; this abandoned light-structure is maintained by *Parks Canada*.

121 The town of **Prescott**, population 4,180 *(2006)*, is on the NW shore 3 miles upstream of the suspension bridge. Prescott has rail and bus services. By the *Seaway* channel, Prescott is 110 miles from Montréal.

122 The *Canada Border Services Agency (CBSA)* has an office in Prescott. For more information, contact the *Border Information Service*, at 1-800-461-9999 for service in English or 1-800-959-2036 for service in French, or visit: *http://www.cbsa-asfc.gc.ca.*

123 A ruined ferry slip fronts a landfill area at the east end of the Prescott waterfront.

124 Sandra S. Lawn Harbour Marina, west of the landfill area, had depths of 2.1 m (2006) and offered dockage with power and water, pump out, picnic area, pay

PRESCOTT (1994)



phone, showers, laundromat, ice, gasoline and diesel fuel, and monitored VHF Channel 68. This marina is an authorized dealer for *Canadian Hydrographic Service* nautical **charts** and publications.

****.

125 *Prescott Heritage Harbour* light (312.5) is at the south side of the entrance to the marina.

126 A wreck, submerged 10.5 m, is close offshore at the west end of the marina breakwater.

127 In Prescott, the **blockhouse** of Fort Wellington, elevation 29 m; the Anglican Church **spire**, elevation 55 m; and a **water tower** with an elevation of 61 m are **conspicuous**. A grey silo with a red and white top, elevation 45 m, is SW of the town.

Along the waterfront, west of the marina, are a breakwall and a wharf owned by the town. The breakwall is 66 m long, with an elevation of 1.8 m. There were depths of 3.4 to 5.8 m along the face (2006). From early May until late September, pleasure craft can berth at this breakwall. The wharf, called *Prescott Town Dock*, is for the use of pleasure craft. The wharf is 76 m long with a deck elevation of 1.8 m. There were depths of 5.2 to 7.3 m along the face (2006).

129 Sandra S. Lawn Harbour Marina and Prescott Town Dock are Canada Border Services Agency telephone reporting sites for pleasure craft; to report, dial 1-888-226-7277.

130 The *Canadian Coast Guard (CCG)* maintains a base in Prescott. There is a *Marine Communications and Traffic Services (MCTS)* centre, dockage for several small to medium *CCG* vessels and a work area with several warehouse buildings. 131 At the Prescott *Canadian Coast Guard* base there are two wharves, each 100 m long with an elevation of 1.8 m. There were depths of 4.6 to 5.8 m at the outer face of the downstream wharf and 3.4 to 5.5 m at the outer face of the upstream wharf; the basin between the two wharves had depths of 1.8 to 3.7 m *(2006)*. There is a buoy storage and repair depot and a helicopter hangar near the downstream wharf.

132 The shore property for 305 m upstream of the *Canadian Coast Guard* base is the municipal *Centennial of Confederation Prescott Community Park*. Facilities include an excellent concrete launching **ramp**, picnic area, swimming pool, river-side swimming area, tennis courts, children's playground, drinking water and showers (2006).

133 **Caution**. — Mariners and small-craft operators are cautioned that the wash from passing ships may cause an uncomfortable **surge** at the Prescott wharves.

134 **Caution**. — The testing of various aids to navigation may be heard and seen in the vicinity of the Prescott *Canadian Coast Guard* base. Mariners should not confuse aids being tested with the standard channel aids.

135 A **submerged water intake** 0.16 mile upstream of the *Canadian Coast Guard* base extends 90 m offshore; the crib at the outer end has a depth of 5.2 m.

136 *Prescott Anchorage*, with 8 anchorage areas, is in the river upstream of Prescott.

137 Anchorage is prohibited in a **cable area**, 0.5 mile wide, that extends across the river from Prescott to Ogdensburg, NE of the anchorage area. [from U.S. Coast Pilot 6, Chapter 4, partial]

138 Two small marinas on the U.S. shore behind Galop Island provide gasoline, diesel fuel, water, ice, electricity, some marine supplies, launching ramps, and repairs to trailerable craft.

139 **Chart *1435 – Ogdensburg, NY,** is a town and harbor on the SE side of the St. Lawrence River about 42 statute miles (36.5 nm) above Snell Lock and 62 statute miles (53.9 nm) below Lake Ontario. The harborfront is separated from the main river channel by an extensive shoal bank. The **Oswegatchie River** enters the St. Lawrence River near the upper end of the harbor.

140 **Channels** – Entering from the St. Lawrence River, the upper entrance to the harbor is through a dredged channel leading to the mouth of the Oswegatchie River, thence upstream to just below the third highway bridge. The harbor's lower entrance is through the turning basin at the E end of the harbor and thence through the city front channel to the mouth of the Oswegatchie River. The channel limits are marked by lighted and unlighted buoys.

In 2014, the controlling depths were 17 feet [5.2 m] in the upper (west) entrance channel to the mouth of the Oswegatchie River, thence 17 feet [5.2 m] in the city-front channel to the junction with the upper entrance channel, with lesser depths to 13 feet [4 m] along the edges, and 15 feet [4.6 m] in the Oswegatchie River channel to the project limit below the third highway bridge. The lower (east) entrance channel has a project depth of 19 feet [5.8 m] to East Entrance Lighted Buoy 4, however, the local port authority has deepened and widened the channel to their dock. General depths of 19 to 21 feet [5.8 to 6.4 m] were available in the turning basin with lesser depths along the south edge.

142 *Caution* – *Ruins of a ferry pier extend from shore on the W side of the upper entrance channel.*

143 **Bridges** – Fixed highway bridges crossing Oswegatchie River 0.6, 0.63, and 0.7 statute mile (0.5, 0.55, and 0.6 nm) above the entrance have a least clearance of 8 feet (2.7 meters).

144 *Ogdensburg is a customs port of entry.*

145 **Quarantine, customs, immigration and agricultural quarantine** – (See chapter 3 [of U.S. Coast Pilot 6], Vessel Arrival Inspections, and appendix [of U.S. Coast Pilot 6] for addresses.)

146 **Quarantine** is enforced in accordance with the regulations of the U.S. Public Health Service. (See Public Health Service, chapter 1 [of U.S. Coast Pilot 6].)

147 Wharf – Ogdensburg Bridge and Port Authority Marine Terminal: (44°42'32"N., 75°29'11"W.); 1,250-foot [381-m] face; 27 feet [8.2 m] alongside; deck height, 8-10 feet [2.4-3.1 m]; 75,000 square feet [6,968 sq m] covered storage; three open storage areas with a 120,000-ton [108,863 tonne] capacity; two portable electric conveyers; water and electrical shore-power connections; receipt and shipment of general and bulk cargo; owned and operated by Ogdensburg Bridge and Port Authority.

148 **Supplies** – Diesel oil, water, provisions, and some marine supplies are available at Ogsdenburg.

149 *Small-craft facilities* – Marinas at Ogdensburg can provide transient berths, gasoline, water, ice, electricity, pump-out facility, marine supplies and launching ramps.

Prescott to Brockville

150 Between Prescott and Brockville the St. Lawrence River is generally deep and broad. On the Canadian side of the river there is a mixture of industrial buildings, summer cottages and permanent homes. The United States' side of the river has numerous summer cottages. Large deciduous trees line the shoreline on each side of the river. Generally, the terrain on the south side of the river is higher than the land on the north side. There are cottages and coniferous trees on the islands between the Three Sisters Islands and Brockville.

The *Seaway* channel follows the natural route of the river in a 223° direction for 6 miles, then on a course of 231° for another 3.3 miles to the Brockville downstream harbour limit; the only offshore hazard in this section is **Catamaran Shoal** ($44^{\circ}37'N$, $75^{\circ}37'W$).

152 **Speed limits** are in effect on this stretch of the *Seaway* channel. For more details on speed limits, see Item 28 and Schedule II of *Seaway Practices and Procedures* in the *Seaway Handbook*.

153 A Kemira Chemicals Canada Inc. plant $(44^{\circ}39'N, 75^{\circ}35'W)$ is 3.5 miles upstream of Prescott on the Canadian side of the river. There is a **floodlight**, privately maintained, on a pole on the outer end of a rubble and concrete breakwall.

154 Two **submerged outfalls** NE of the breakwall extend offshore. Only one of these is in use. *Dyno Nobel Inc*, another chemical plant, is west of the *Kemira* plant. Three **submerged pipelines** extend into the river from the Canadian shore 0.8 mile upstream of the *Kemira* breakwall; the outer limits of the pipelines are marked by **buoys**.

155 **Conspicuous** structures at the *Kemira* plant include a **chimney**, elevation 73 m, and a **water tower**, elevation 62 m, 0.1 mile SW of the chimney.

156 **Maitland** is on the Canadian side of the river 2 miles SW of the *Kemira* plant.

157 A historic stone windmill **tower**, close to the shoreline at Maitland, has an elevation of 28 m. A red and white **radio tower**, 0.4 mile NW of the windmill tower, has an elevation of 179 m; it has air obstruction **lights**.

¹⁵⁸ There is a *Seaway Traffic Control* callingin point opposite Maitland for downbound vessels.



BROCKVILLE AND THREE SISTERS ISLANDS (1994)

Consult Schedule III of *Seaway Practices and Procedures* in the *Seaway Handbook* for details of the *Seaway Traffic Control* system.

[from U.S. Coast Pilot 6, Chapter 4, partial]

159 ...**Catamaran Shoal,** covered 12 feet (3.7 meters), is marked on the N side by a buoy about 8 statute miles (7 nm) above Ogdensburg...

160 The **Three Sisters Islands** lie in mid-river 2 miles upstream of Catamaran Shoal. The NW and largest island, **McNair Island** ($44^{\circ}36'N$, $75^{\circ}40'W$), is 5 m high and wooded. The two smaller islands, **Murray Island** and **Bogardus Island**, are 3 m high with a few trees and bushes. The Canadian shore abreast of these islands is 6 m in elevation with hills rising to 50 m close inland.

161 A **speed limit** is in effect from *light buoy 137A*, near Three Sisters Islands, to *Light 186*, on Deer Island in the Summerland Group (*Chart 1436*). For more details on speed limits, see Item 28 and Schedule II of *Seaway Practices and Procedures* in the *Seaway Handbook*.

162 The *Grenville Christian College* is 0.8 mile SW of Maitland; the **chimney**, elevation 55 m, is **conspicuous**. *Brockville Psychiatric Hospital* is on a hill 0.7 mile north of McNair Island. A **conspicuous** microwave **tower** 0.7 mile ENE of the hospital has an elevation of 140 m and is fitted with air obstruction **lights**.

[from U.S. Coast Pilot 6, Chapter 4, partial]

163 **Charts *1435, 14770 – Morristown, NY,** is a village and small-craft harbor on a small inlet on the southeast side of the river opposite the Three Sisters Islands. A dredged basin just off the public dock had depths of 5 to 9 feet [1.5 to 2.7 m] in 2016.

165 **Small-craft facilities** – A public dock and launching ramp are on the E side of the inlet. In 1977, a depth of 10 feet (3 meters) was reported alongside the dock. Two marinas at Morristown provide transient berths, gasoline, diesel fuel by truck, water, ice, electricity, sewage pump-out, some marine supplies, and a launching ramp. A 5-ton [4.5 tonne] mobile lift is available for hull and gasoline engine repairs.

Chart 1435

166 **North McNair Shoal**, a rock with 4.3 m of water over it, lies 0.1 mile NW of McNair Island; the main ship channel lies SE of the shoal. **South McNair Shoal**, with a depth of 3 m, lies 0.3 mile SW of McNair Island.

167 *North McNair Shoal light buoy 136 (319)* marks the south side of North McNair Shoal. *South McNair Shoal light buoy 137A (320.2)* marks the north side of that shoal.

168 The city of **Brockville**, population 21,957 (2006), is on the NW shore 10 miles SW of Prescott. The downstream limit of the harbour is 0.1 mile SW of McNair Island; the upstream limit is near **Smith Island** and **Refugee Island**

(44°34'N, 75°42'W). Brockville has bus and rail services. By
the Seaway channel, Brockville is 119 miles from Montréal.
The Canada Border Services Agency (CBSA) has an
office in Brockville. For more information, contact the Border
Information Service, at 1-800-461-9999 for service in English
or 1-800-959-2036 for service in French, or visit: http://www.
cbsa-asfc.gc.ca.

Blockhouse Island, connected to the mainland by a causeway at its NE end, is a municipal park. Tunnel Bay is the inner end of the basin protected by Blockhouse Island.
A submerged water intake 0.3 mile NE of Blockhouse Island extends 220 m offshore.

172 The Blockhouse Island jetty $(44^{\circ}35'N, 75^{\circ}41'W)$ extends SW from Blockhouse Island. A *Golden Hawk* aerobatic jet plane mounted on a pedestal on Blockhouse Island jetty is prominent. Brockville Public **wharf**, on the Blockhouse Island jetty, is 142 m long and had depths of 0.6 to 3 m (2006). Facilities included dockage with power and water, picnic area, pay phones and ice.

173 The **conspicuous** town **clock tower**, elevation 42 m, is north of Blockhouse Island. A **conspicuous water tower** 0.75 mile NW of the Public wharf has an elevation of 74 m.

174 Brockville breakwater **light** (321) is on the outer end of the Public wharf.

175 Skelton Island 138 light (322) is on the SE side of Skelton Island ($44^{\circ}35'N$, $75^{\circ}42'W$).

176 *Brockville Municipal Harbour*, operated by the City of Brockville at the head of Tunnel Bay adjacent to the public park, had depths of 0.9 to 1.8 m (2006) and offered dockage with power and water, picnic area, pay phones, showers, laundromat, snack bar and ice. All the facilities of Brockville are within walking distance, including groceries, restaurants and the *Tourist Information Centre*.

177 *Excel Marine Ltd.*, on the west side of *Brockville Municipal Harbour*, had depths of 0.9 to 2.1 m (2006) and offered dockage with power and water, pump out, **ramp**, boat hardware, houseboat rentals, ice, gasoline and diesel fuel. Engine repairs can be done off-site.

178 *Brockville Public Ramp*, near the entrance to the marina, had a depth of 2.1 m (2006). This ramp is not suitable for boats over 6 m in length.

179 *Brockville Yacht Club*, a private club 0.2 mile SW of the Public wharf, had depths of 0.6 to 1.5 m (2006).

180 *Henry Street Public Ramp*, east of the yacht club, had a depth of 0.6 m (2006) and offered a good ramp in downtown Brockville.

181 *Gilbert Marine Ltd.*, SW of the yacht club, had depths of 0.6 to 1.5 m (2006) and offered dockage with power and water, pump out, **ramp**, repairs and salvage, boat hardware, canoe and boat rentals, ice and gasoline.

182 *Gilbert Marine Ltd.* is an authorized dealer for *Canadian Hydrographic Service* nautical **charts** and publications.

183 Brockville Municipal Harbour and Brockville Yacht Club are Canada Border Services Agency telephone reporting sites for pleasure craft; to report, dial 1-888-226-7277.

Seaway Channel Brockville to Lake Ontario

General

Chart 1400

1 This chapter describes the *St. Lawrence Seaway* from Brockville Narrows to Lake Ontario, a distance of 45 miles. *(The Canadian Middle Channel and small-craft routes to Kingston are described in Chapter 5.)*

1.1 Real-time water level information for St. Lawrence River at Brockville is available from the *Canadian Hydrographic Service Automated Water Level Gauge*, telephone number 613-345-0095 and for Lake Ontario at Kingston from the *Canadian Hydrographic Service Automated Water Level Gauge*, telephone number 613-544-9264. (More information on water levels is given in Sailing Directions booklet *CEN 300* — *General Information, Great Lakes.*)

Brockville Narrows

Chart 1435

2 The **Brockville Narrows** section of the *Seaway* channel extends from the upper end of the Brockville harbour limit to the vicinity of **Lily Bay**, 3.5 miles SW of the Brockville Public wharf.

3 **Caution**. — Many of the local islands have day-use parks and there is much **small-craft activity** in Brockville Narrows during the summer months.

4 Caution. — Bow waves and wake from passing ships can cause severe surging. Dangerous conditions along the shore may arise when upbound vessels increase speed in the Brockville Narrows between McDonald Point and Hillcrest Point. Masters of upbound vessels are urged to maintain a safe, constant speed through the Brockville Narrows area until well clear of Hillcrest Point. For more details on speed limits, see Item 28 and Schedule II of *Seaway Practices and Procedures* in the *Seaway Handbook*.

5 **Brock Group** (44°34'N, 75°43'W) is the group of islands in mid-river between Brockville and Lily Bay. Refugee Island, a park operated by the *Brockville Parks Commission*, is the NE island of the group. **American Island** and **Myers Island** lie at the SW end of the group. The Brock Group islands are generally rocky and wooded; the islands appear to rise



sheer from the water. Several of the islands of this group are part of the *Brockville Parks* system and have small wharves and other day-use facilities.

6 **Stovin Island**, another of the islands of the Brock Group, is 0.7 mile SW of Refugee Island. Stovin Island is part of the *St. Lawrence Islands National Park*. There are four **wharves** on the island; for more information on park facilities, visit *http://www.pc.gc.ca/pn-np/on/lawren/visit/ index_e.asp.*

7 **Sheaffe Island**, known locally as **Black Charlie Island**, lies 0.5 mile SSW of Stovin Island; it has 6 small wharves.

8 The river between the Brock Group and the United States' shore has many shoal patches. This part of the United States' shore is 12 to 25 m high.

9 The **current** is reported to set fair with the channel through the Brockville Narrows at rates of 2 to 3.5 knots.

 $\underbrace{10 \qquad McCoy \, Island \, 141 \, \text{light} (324) \text{ is on the north} }_{\text{side of McCoy Island} \, (44^{\circ}34'N, 75^{\circ}42'W). }$

11 *Royal Island 142* **light** (325) is on a shoal SW of **Royal Island**; this island is across the *Seaway* channel from McCoy Island.

12 *Light 143 (326)* is on a pier 0.15 mile SW of McCoy Island.

13 *Light 144 (328)* is on McDonald Point Shoal (44°34'N, 75°43'W).

14 *Stovin Island 145* light *(329)* is on the NW side of the island.

15 Needles Eye Island 146 light (330) is on the south side of Needles Eye Island ($44^{\circ}33'N$, $75^{\circ}43'W$).

16 *Light 147 (335)* is on a pier 0.4 mile SW of Myers Island.

Brockville Narrows to Bartlett Point

Charts 1435, 1436, 1437

17 This section of the river is the beginning of the **Thousand Islands** region, which extends from Brockville to Lake Ontario; it is thickly strewn with islands, large and small, with deep water channels between them.

Chart 1435

18 De Watteville Island range lights (333, 334) are in line bearing 037°. The front light is on the south side of **De Watteville Island** ($44^{\circ}33'N$, $75^{\circ}44'W$). The lights are visible on the line of the range.

19 *Light 150 (338)* is on a pier NW of the channel, 1.4 miles SW of De Watteville Island.

20 *Light 151 (339)* is to the SE of the channel, 0.4 mile upstream of *Light 150*.

The ruins of an abandoned lighthouse stand on **Cole Shoal**, 0.2 mile NNW of *Light 150*.

22 **Butternut Bay** (44°31'N, 75°47'W) is 2.4 miles SW of Lily Bay. A floating wharf at Butternut Bay, 30.5 m long with several finger wharves on its north side, is private.

Chart 1436

23 Crossover (Brockville) range lights (339.3, 339.4) are in line bearing $013\frac{1}{2}^{\circ}$. The front light is 0.8 mile NE of Butternut Bay. The lights are visible on the line of the range.

Union Park Anchorage is 0.5 mile SE of Butternut Bay.

25 The **current** near *buoy 153*, west of Whaleback Shoal, sets in a 030° direction at a rate of 0.4 knot.

Charts 1435, 1436

Small-craft channel

A small-craft channel, with a least charted depth of 2.1 m, branches from the *Seaway* channel at *Union Park Anchorage* and follows parallel to the Canadian shore west of the Amateur Islands and Grenadier Island to a position south of Tar Island where it joins the Canadian Middle Channel *(described in the next chapter)*. This small-craft route is marked by **lights** and **buoys**.

27 **Sifton Point** is 2 miles SW of Butternut Bay. The land rises to an elevation of 30 m behind the point.

Brown's Bay is 0.5 mile SW of Sifton Point. *Brown's Bay Provincial Park* had depths of 0.3 m (2006) and offered a **ramp**, picnic area, pay phone, drinking water, change room, ice, snack bar, sandy beach and children's playground. Canoe and small boat rentals were available near by. The park is a *Canada Border Services Agency telephone reporting site* for pleasure craft; to report, dial 1-888-226-7277.

29 **Chimney Island** $(44^{\circ}28'N, 75^{\circ}50'W)$, so named because of a conspicuous stone chimney in the middle of the island, is close to the Canadian shore 2 miles SW of Sifton Point.

30 The community of **Mallorytown Landing** is 1.3 miles SW of Chimney Island.

31 Mallorytown Landing is a *Canada Border Services Agency telephone reporting site* for pleasure craft; to report, dial 1-888-226-7277.

32 The administrative headquarters for the **St. Lawrence Islands National Park** are at Mallorytown Landing. This is the only part of the park accessible by car; the rest of this unique park includes eighteen islands and eighty islets stretching from Brockville to Kingston. Mallorytown Landing Park, at Mallorytown Landing, had depths of 0.3 to 1.8 m (2006) and offered dockage, an excellent concrete **ramp**, picnic area, pay phone, drinking water, showers, first aid station, children's playground and sandy beach. Camping was available near by. The **wharf**, on the SW end of Bridge Island, is 30 m long and 2.4 m wide with an elevation of 1.6 m. There was a depth of 1.7 m at the outer end and 2.5 m in the approaches (2006).

34 *T. J. Guild Marine Ltd.*, just east of the Mallorytown Landing wharf, had depths of 0.7 to 1.7 m (2006) and offered dockage with power and water, pump out, repairs, boat hardware, bait, tackle, some groceries, ice and gasoline.

35 *Mallorytown Landing* and *T. J. Guild Marine Ltd.* are *Canada Border Services Agency telephone reporting sites* for pleasure craft; to report, dial 1-888-226-7277.

36 *Chimney Island* light (354) is on an islet SE of Chimney Island.

Haffie Shoal light (355) is on Haffie Shoal, a rock0.7 mile SW of Chimney Island.

38 Goose Island light (358) is on a crib NE of Goose Island (44°25'N, 75°53'W).

39 Duck Rock light (359) is on an islet west of Duck Island ($44^{\circ}24'N$, $75^{\circ}54'W$).

40 Buck Island light (361.2) is on a rock west of Buck Island ($44^{\circ}23'N$, 75°55'W).

41 **Grenadier Island**, rocky and wooded, with its north end 2.2 miles west of the north end of Oak Island, is more than 4 miles long in a NE-SW direction. The NE and SW ends and the central section of Grenadier Island are part of *St. Lawrence Islands National Park*. There are several **wharves** on the island; the main wharf is in a sheltered bay near the middle of the east side of the island. For more information on park facilities, visit *http://www.pc.gc.ca/pn-np/ on/lawren/visit/index e.asp.*

42 *Grenadier Island Golf and Country Club* is a *Canada Border Services Agency telephone reporting site* for pleasure craft; to report, dial 1-888-226-7277.

43 **Adelaide Island**, NE of Grenadier Island, is part of *St. Lawrence Islands National Park*. There is a picnic area here.

44 Submerged cables cross the small-craft channel from Tar Island to Grenadier, Buck and Little Grenadier Islands; the positions of these cables and another submarine cable crossing the channel downstream of Goose Island are shown on the chart.

Whaleback Shoal to Lone Brother Island

[from U.S. Coast Pilot 6, Chapter 4, partial]

45 **Charts 1435, 14770, 14771** – ...At Whaleback Shoal, about 3 statute miles (2.6 nm) above Brockville Narrows, the vessel route turns SSW for 2.5 statute miles (2.2 nm) on the E side of **Bay State Shoal** and **Crossover Island**. This reach is marked by a **013**½° lighted range and by Chippewa Point Directional Light at the lower and upper end, respectively.

45.1 *Anchorages* — *A* designated anchorage marked by buoys is on the west side of the vessel route abreast the turn at Whaleback Shoal.

46 **Calling-in point** – Upbound vessels shall contact "Seaway Clayton" on VHF-FM channel 13 and downbound vessels shall contact "Seaway Iroquois" on VHF-FM channel 11 when approximately abeam of Crossover Island. After initial contact, vessels shall guard VHF-FM channels 13 (upbound) and 11 (downbound). (See the Seaway Handbook for details.)

47 **Oak Point, NY**, is a small summer resort on the SE side of the river 2.4 statute miles (2.1 nm) above the upper end of Brockville Narrows. Boats drawing not more than 6 feet (1.8 meters) can land here, but caution is advised to avoid the shoals and small islands in the landing approach.

48 **Blind Bay** is a small inlet just *E* of Chippewa Point Directional Light. A sign marks the *E* side of the entrance. Several overhead cables with a reported least clearance of 28 feet (8.5 meters) cross the entrance channel. In 1977, a reported depth of 4 feet [1.2 m] could be carried along the N shore to a marina in the NE corner. Some marine supplies and gasoline engine repairs are available.

49 Charts *1436, 14771 – From Blind Bay, the vessel route follows a series of short reaches across the mouth of Chippewa Bay and passes NW of Superior Shoal, SE of Jorstadt Island, NW of Haskell Shoal, thence SE of Grenadier Island on the SE sides of Empire Shoal and Sister Island Shoal, NW of Third Brother Island, and SE of Lone Brother Island.

50 Chippewa Bay, on the SE side of the river, is enclosed by Chippewa Point, Cedar Island, and Oak Island. The bay is filled with numerous small islands, rocks, and shoals; local knowledge is advised. Chippewa Bay, NY, a village on the E side of the bay, can be reached by boats drawing 4 feet [1.2 m]. Schermerhorns Landing, 2.5 statute miles (2.2 nm) SW, has a marina with gasoline, water, ice, electricity, some marine supplies, and a launching ramp. A 5-ton [4.5 tonne] forklift can haul 21-foot (6.4-meter) boats for hull and gasolene engine repairs.

Lone Brother Island to Bartlett Point

[from U.S. Coast Pilot 6, Chapter 4, partial]

51 **Charts *1437, 14772** – From Lone Brother Island, the vessel route continues SW, between **Ironsides Shoal** on the NW and **Ironsides Island** and **Inner Ironsides Shoal** on the SE, thence SE of **Whiskey Island Shoal** off the mouth of Goose Bay.

52 **Goose Bay** is on the SE side of the St. Lawrence River, SE of Whiskey Island Shoal and the upper end of Grenadier Island. The bay is very shallow and has a mud bottom with numerous rocks.

53 **Charts *1437, 14772** – From Whiskey Island Shoal, the main vessel route leads SW between the **Summerland Group** on the NW and the **Excelsior Group** on the SE. **Deer Island**, close SW of the Summerland Group, is marked on the SE side by a light.

54 Above Deer Island, the vessel route passes the lower end of Wellesley Island and leads SE of the Manhattan Group, Frontenac Shoal, and Pullman Shoal and NW of Sunken Rock Island, Sunken Rock Shoal, and Cherry Island.

55 *Westminster Park, NY, is a summer resort at the lower end of Wellesley Island. The wharves at the village are in ruins and submerged.*

56 *Alexandria Bay, NY,* is a summer resort village on the SE side of the river opposite the lower end of Wellesley Island. Wharves at the village are easily approached from the river. **Broadway Shoal,** in the approach to the village, has a depth of 13 feet (4 meters) and is marked by a buoy.

57 *Alexandria Bay is a customs port of entry.*

58 Quarantine, customs, immigration, and agricultural quarantine – (See chapter 3 [of U.S. Coast Pilot 6], Vessel Arrival Inspections, and appendix [of U.S. Coast Pilot 6] for addresses.)

59 **Quarantine** is enforced in accordance with the regulations of the U. S. Public Health Service. (See Public Health Service, chapter 1 [of U.S. Coast Pilot 6].)

60 *Alexandria Bay Coast Guard* Station is on the SE side of Wellesley Island about 1,000 feet [305 m] W of Cherry Island.

61 **Small-craft facilities** – Small bays at either end of the village have anchorage for boats drawing 6 to 11 feet (1.8 to 3.4 meters). The 460 foot (140-meter) village dock, about 0.25 statute mile (0.2 nm) NE of Cherry Island, had a reported depth of 7 feet (2.1 meters) alongside in 1977. Marinas at Alexandria Bay provide gasoline, diesel fuel, water, ice, electricity, sewage pump-out, marine supplies, and launching ramps. Mobile lifts to 60 tons [54 tonnes] and a 15-ton [13.6-tonne] marine railway that can handle 80-foot (24.4-meters) craft are available for hull, engine, and electronic repairs. Machine shops can repair shafts up to 3 inch [7.6 cm] diameter.

62 **Charts *1437, 14772, 14773 – American Narrows** (Upper Narrows) separates Wellesley Island from the U.S. mainland for about 6 statute miles (5.2 nm) from Cherry Island SW to the upper end of Wellesley Island. The channel through the narrows is generally deep, has a least width of 450 feet (137 meters), and is well marked by lights and buoys. The channel is bordered throughout its length by small islands and shoals.

63 The lower entrance to the narrows is marked by a **218**° leading light at the village of Point Vivian, about 1 statute mile (0.9 nm) SW of Cherry Island.

64 **Currents** – In 1976, currents from Alexandria Bay to Point Vivian were determined to be from 1.2 to 1.5 knots. In 1976, the current at the Thousand Islands Bridge was determined to be 2.8 knots.

65 In 1977, it was reported that the river current often reaches 2 knots in the entrance to the narrows from about 0.3 to 0.8 statute mile (0.3 to 0.7 nm) above Cherry Island and thence 1.5 to 2 knots SW to Swan Bay.

66 **Swan Bay** and **Brown Bay** are shallow inlets about 2.5 statute miles (2.2 nm) above Cherry Island on the SE and NW sides of the narrows, respectively. During the summer, gasoline is available at a small marina on the NE side of Swan Bay. In 1977, the reported depths were 3 feet (0.9 meter) in the approach and 6 feet (1.8 meter) alongside.

67 **Thousand Islands Bridge,** a suspension span with a clearance of 150 feet (45.7 meters), crosses the narrows just W of Swan Bay.

Niagara Shoal, covered 3 feet [0.9 m] and marked on the N side by a lighted buoy, is on the SE side of the narrows 1.5 statute miles (1.3 nm) above the bridge. Coming out of the narrows at the upper end of Wellesley Island, the vessel route passes SE of Granite State Shoals, marked by a light, and NW of Rock Island Reef, marked by a lighted buoy.

69 **Fineview, NY**, is a small settlement on Wellesley Island just below Granite State Shoals. A dock at the settlement is suitable for skiffs only because of many rocks off the end. In 1977, the reported depths were less than 2 feet (0.6 meter) alongside.

70 **Thousand Island Park** is a private summer resort at the upper end of Wellesley Island. In 1977, the resort dock had a reported depth of 10 feet (3 meters) alongside, but the dock approach from the river channel is narrow and obstructed by numerous rocks.

Fishers Landing, NY, is a settlement 0.8 statute mile (0.7 nm) SE of Fineview on the W side of **Mullet Creek Bay**. Marinas **can** provide gasoline, ice, some marine supplies, and launching ramps. Forklifts can haul out craft to 5 tons [4.5 tonnes] for hull and gasoline engine repairs. In 2002, *depths of 6 to 12 feet (1.8 to 3.5 meters) were reported available at the berths.*

72 Charts *1437, 14773, 14774 – Above American Narrows, the vessel course is through a wide area of generally deep water. The route passes NW of Little Round Island and North Colborne Island, marked by a light, thence SE of Chapman Shoal, marked by a light and racon, and thence between Washington Island to SE and Calumet Island to NW.

A marina on the E side of **Spicer Bay**, about 1.2 statute miles (1 nm) E of Little Round Island, provides gasoline, water, ice, electricity, some marine supplies, and a launching ramp. A 12-ton [10.9-tonne] fixed lift can handle 36-foot (11-meter) craft for hull and engine repairs. In 1977, the reported controlling depths were 4 feet (1.2 meters) in the approach and 5 feet (1.5 meters) alongside the berths.

74 *Clayton, NY, is on the SE side of the St. Lawrence River about 20 statute miles (17.4 nm) below Lake Ontario. Grindstone Island is in midriver NW of Clayton, and Washington Island is close to shore NE of the village.*

75 A causeway connects Washington Island to Clayton. The fixed span near the island end of the causeway has two 33 foot (10.1-meter) openings, each with a clearance of 6 feet (1.8 meters).

76 *Clayton is a customs port of entry.*

77 **Quarantine, customs, immigration, and agricultural quarantine** – (See chapter 3 [of U. S. Coast Pilot 6], Vessel Arrival Inspections, and appendix [of U.S. Coast Pilot 6] for addresses.)

78 **Quarantine** is enforced in accordance with the regulations of the U. S. Public Health Service. (See Public Health Service, chapter 1 [of U.S. Coast Pilot 6].)

79 **Small-craft facilities** – The deep water of the river extends to within a short distance of the wharves at Clayton, at which there are depths up to 24 feet (7.3 meters). The city dock reported depths of 4 to 20 feet (1.2 to 6.1 meters) alongside in 1977. The dock has a 2 hour mooring limit. The municipal dock, marked at the outer end by a private light, is at the foot of Mary Street. In 1977, depths of 4 to 20 feet [1.2 to 6.1 m] were reported alongside. Submerged ruins are on the S side at the inner end of the dock. Water and electricity are available.

80 Several marinas at Clayton and on Calumet Island provide gasoline, diesel fuel, water, ice, electricity, sewage pump-out, marine supplies, and launching ramps. Lifts to 30 tons [27.2 tonnes] and a 50-ton [45.4-tonne] marine railway that can handle 65-foot (19.8-meter) craft are available for hull, engine, and electronic repairs. Mast-stepping service is available at Calumet Island.

81 *Above Clayton and Calumet Island, the vessel course passes SE of Calumet Shoal, marked by a light, and thence N of Bartlett Point. A light is close off the point. A 16-foot* [4.9-m] spot is marked by a buoy about 0.5 statute mile (0.4 nm) WNW of Bartlett Point.

Bartlett Point to Tibbetts Point

Chart 1438

82 **Wolfe Island** (44°13'N, 76°15'W), in Canadian waters, has a total length of 15.5 miles, with its narrow NE part rising to an elevation of 30 m.

83 **Hickory Island**, the largest of a group between Grindstone Island and Wolfe Island, is partly wooded and 24 m high. Its SW shore has clay cliffs. **Arabella Island** lies 0.1 mile SE of Hickory Island.

84 **Wolfe Island Cut**, close off the east end of Wolfe Island, is a dredged channel connecting the *Seaway* channel and the open water between Wolfe and Howe Islands. This channel, 140 m wide, has a depth of 6.1 m in its SE entrance; the channel is marked by **buoys** and **light buoys**.

A **submerged power cable** crosses Wolfe Island Cut from Wolfe Island to Arabella Island and continues on to Hickory Island. A **submerged telephone cable** also crosses the cut from Wolfe Island to Arabella Island.

86 Wolfe Island light (378) is on Quebec Head (44°14′N, 76°11′W), which is the NE end of Wolfe Island.

87 **Port Metcalf** is a small settlement near Quebec Head. Several private wharves are nearby.

88 There is a traffic control calling-in point at the south entrance to Wolfe Island Cut for upbound vessels leaving the *Seaway* channel. For downbound vessels entering the *Seaway* channel, there is a calling-in point at the north entrance to Wolfe Island Cut. Consult Schedule III of *Seaway Practices and Procedures* in the *Seaway Handbook* for details of the *Seaway Traffic Control* system.

89 There is a **speed limit** in this section of the *Seaway*. For more details on speed limits, see Item 28 and Schedule II of *Seaway Practices and Procedures* in the *Seaway Handbook*.

90 **Beauvais Point**, 0.4 mile SSE of Quebec Head, is the east end of Wolfe Island. **Banford Point** is on the south shore of Wolfe Island 3 miles WSW of Beauvais Point.

Channel SE of Wolfe Island

[from U.S. Coast Pilot 6, Chapter 4, partial]

91 **Charts *1438, 14802** – From Bartlett Point, the vessel course continues SW for about 6 statute miles (5.2 nm), passing SE of the lower end of Wolfe Island and NW of the light that marks **Linda Island**. A shoal with a least depth of

11 feet (3.4 meters) is marked at the N end by a lighted buoy 0.9 statute mile (0.8 nm) W of Linda Island. Near this shoal the course turns W, parallel to the Wolfe Island shore, and is marked at the W end by a directional light on **Bayfield Island** ...

92 A marina on the E side of **Millen Bay**, 2.8 statute miles (2.4 nm) SW of Linda Island, provides transient berths, gasoline, water, electricity, some marine supplies, a launching ramp, and minor repairs. In 1977, the reported controlling depths were 5 feet (1.5 meters) in the approach and 2 to 10 feet (0.6 to 3 meters) at the berths.

93 Charts *1439, 14802 – The vessel course turns S between Carleton Island on the E and Carpenter Point on the W... Hinckley Flats Shoal, on the W side of this reach, is marked on the E side by two lighted buoys. Feather Bed Shoal, on the E side of the channel, is marked by a lighted buoy.

Chart 1438

94 Bayfield Island Sector light (384) is on the east side of Bayfield Island (44°12'N, 76°20'W). The centre of the white sector leads $263\frac{1}{2}^{\circ}$ past the north side of Carleton Island.

95 Irvine Point range lights (380, 381) are in line bearing $013\frac{1}{2}^{\circ}$. The front light is on Irvine Point (44°12'N, 76°19'W). These lights in line lead through the channel between Bayfield and Carleton Islands to a position abreast of *buoy 240*, 2.3 miles south of Bayfield Island. The lights are visible on the line of the range.

[from U.S. Coast Pilot 6, Chapter 4, partial]

96 **Cape Vincent, NY**, is a village and small-craft harbor on the south side of the St. Lawrence River about 3 statute miles [2.6 nm] below Lake Ontario. A dredged channel leads along the city front on the St. Lawrence River. The channel is protected by a 1,380-foot-long [420-meter] breakwater which parallels the shore. The ends of the breakwater are marked by lights. In 2015, the controlling depth was 15 feet [4.6 meters] in the channel.

98 *Cape Vincent is a customs port of entry.*

99 **Quarantine, customs, immigration, and agricul**tural quarantine – (See chapter 3 [of U. S. Coast Pilot 6], Vessel Arrival Inspections, and appendix [of U.S. Coast Pilot 6] for addresses.)

100 **Quarantine** is enforced in accordance with the regulations of the U. S. Public Health Service. (See Public Health Service, chapter 1 [of U.S. Coast Pilot 6].)

101 *Harbor regulations* – (See 33 CFR 207.610, chapter 2 [of U.S. Coast Pilot 6], for harbor regulations.)

102 *Small-craft facilities* – Deep water can be carried to the docks in the harbor, and vessels up to 10-foot (3-meter)

draft can be accommodated. Marinas in the harbor provide transient berths, gasoline, diesel fuel, water, ice, electricity, sewage pump-out, some marine supplies, and a launching ramp. Mobile lifts to 16 tons [14.5 tonnes] are available for hull, engine, and electronic repairs.

Chart 1439

Above Cape Vincent, the vessel course extends SW for about 4 statute miles (3.5 nm) to the waters of Lake Ontario. **Tibbetts Point Light** (44°06'02"N., 76°22'14"W.), 69 feet [21 m]above the water; is shown from a white conical tower on the New York shore at the head of the St. Lawrence River. **Tibbetts Point Traffic Lighted Buoy** is about 1.8 statute miles (1.6 nm) W of the light.

Point Alexandria (44°08'N, 76°21'W), the eastern part of Hornes Point, is on the SE side of Wolfe Island.

105 A passenger and automobile **ferry** operates seasonally between Point Alexandria and Cape Vincent, NY.

106 Point Alexandria **wharf**, 27 m square with an elevation of 1.5 m, is used by the Wolfe Island—Cape Vincent ferry. There are depths of 2.7 to 3 m along the outer face of this wharf (2006). There is a pay phone.

107 Point Alexandria wharf is a *Canada Border Service Agency Telephone Reporting Site* for pleasure craft; to report, dial 1-888-226-7277, or contact the *Border Information Service* at 1-800-461-9999 for service in English or 1-800-959-2036 for service in French.

108 Two **submerged cables** cross the main channel between Point Alexandria and Cape Vincent.

Pilotage is compulsory for vessels in transit through the *St. Lawrence Seaway* between Montréal and Lake Ontario. Downbound vessels from Lake Ontario are boarded by pilots off Cape Vincent.

110 For further information on pilotage, consult the *Annual Edition of Notices to Mariners* and *Sailing Directions* booklet *CEN 300 — General Information, Great Lakes.*

111 Seaway authorities may require upbound or downbound vessels to anchor between *buoy 245*, off Tibbetts Point, and Bartlett Point. This is in the interest of safety to better expedite river and lake traffic and for the scheduling of pilots. However, vessels are not to anchor west of Carleton Island unless instructed by a *Seaway* officer under the provisions of the *Seaway Practices and Procedures*.

112 *Cape Vincent* traffic control calling-in point is off Point Alexandria, for upbound and downbound vessels. Consult Schedule III of *Seaway Practices and Procedures* in the *Seaway Handbook* for details of the Seaway traffic control system. A radio tower 3.5 miles NW of Point Alexandria has an elevation of 271 m. It is conspicuous from Lake Ontario and from downstream on the river. It has air obstruction lights.
Bear Point, 4.5 miles SW of Point Alexandria, is the south end of Wolfe Island. The point is rock, 3 m in elevation. For a distance of 0.5 mile NE of the point there are dark cliffs.

¹¹⁵ From a position NW of Cape Vincent, the *Seaway* channel alters to a direction of 234° for 4 miles and enters Lake Ontario between Tibbetts Point and Bear Point.

116 (The areas west and SW of Wolfe Island are described in Sailing Directions booklet CEN 302 — Lake Ontario.)

Canadian Middle Channel and adjacent waters

General

Chart 1400

1 This chapter describes the Canadian Middle Channel and small-craft routes of the St. Lawrence River from the junction with the *St. Lawrence Seaway* channel at Ironsides Island to Lake Ontario, a distance of 30 miles. *(The approaches to Kingston and the channel NW of Wolfe Island are described in Chapter 6.)*

Canadian Middle Channel

Charts 1436, 1437

2 **Canadian Middle Channel** branches off from the *Seaway* channel near Ironsides Island $(44^{\circ}24'N, 75^{\circ}51'W)$. The Canadian Middle Channel passes through the Thousand Islands on the Canadian side of the International Boundary to the deep water channel north of Wolfe Island that leads to Kingston. The channel is marked by **lights** and **buoys**.

Caution. — Numerous **submerged power cables** lead between the islands along this route; some cross the channel. Not all are described. Mariners should check shorelines carefully for cable markers before anchoring and while fishing.

4 There is a **speed limit** of 9.5 knots over the bottom for all vessels over 12 m in length in the Canadian Middle Channel and adjacent waters.

5 Grenadier Island light (361) is on the south end of the island $(44^{\circ}23'N, 75^{\circ}54'W)$.

6 Tar Island light (361.3) is on an islet south of Tar Island $(44^{\circ}23'N, 75^{\circ}55'W)$.

7 *Buck Island* light is described in Chapter 4, along with the small-craft route between Grenadier and Tar Islands.

8 The SW end of Grenadier Island is part of St. Lawrence Islands National Park of Canada. An L-shaped Public wharf extends from the park into a boat channel between Grenadier Island and Little Grenadier Island. For details on park facilities, visit http://www.pc.gc. ca/pn-np/on/lawren/visit/index e.asp.

9 **Rockport** is a resort community on the Canadian mainland 0.4 mile west of Tar Island light.



ROCKPORT (1994)



10 At Rockport, a Public **wharf** 30 m long and 6.1 m wide, with a deck elevation of 1.8 m, extends in a SW direction from the south end of the waterfront. There are depths of 2.1 to 2.7 m at the outer end of this wharf. There is a public boat launching **ramp** north of the wharf. The L-shaped former Public **wharf** north of the ramp is condemned and fenced off.

Ed Huck Marine Ltd. had depths of 2.2 m in 1995 and offered dockage with power and water, pump out, **ramp**, engine and hull repairs, 40 tonne hoist, boat hardware, boat rentals, sales and service of new and used boats and motors, water taxi service, pay phone, showers, laundromat, snack bar, groceries, ice, gasoline and diesel fuel, and monitored VHF Channels 16 and 68.

12 *Rockport Marine* offered dockage, small **ramp**, repairs and salvage, hoist, boat hardware and propane.

13 *Howards Marine* has sales, storage and repair facilities on the *Thousand Islands Parkway*.

14 *Andress Boat Works* had depths of 1.3 to 4.7 m (2006) and offered dockage with power and water, pump out, repairs and salvage, 8 tonne hoist, boat hardware, boat and houseboat rentals, water taxi service, pay phone, groceries, some bait, tackle, snack bar, ice and gasoline.

15 *Ed Huck Marine Ltd., Howards Marine* and *Andress Boat Works* are authorized dealers for *Canadian Hydrographic Service* nautical **charts** and publications.

16 Rockport CBSA Office, Ed Huck Marine, Howards Marine and Andress Boat Works are Canada Border Services Agency telephone reporting sites for pleasure craft; to report, dial 1-888-226-7277. Chart 1437

17 **Club Island**, 18 m in elevation, lies 0.15 mile south of the Rockport shore. **Hill Island**, 3 miles long with an elevation of 43 m, is in Canadian waters north of Wellesley Island.

18 A **conspicuous** white **tower**, with an observation deck known as *Thousand Islands Skydeck*, stands on the west part of Hill Island; this structure, 110 m in elevation, has air obstruction **lights**.

19 A Canadian Coast Guard inshore rescue boat is based at Hill Island from May to September each year. For more information, see Search and rescue in Sailing Directions booklet CEN 300 — General Information, Great Lakes.

20 **Raft Narrows** is the section of the Canadian Middle Channel north of Club and Hill Islands and south of the Canadian mainland. The north shore of the narrows is bold, rising abruptly to elevations of 25 to 45 m; the water is deep close to the shore.

A submerged power cable crosses the Canadian Middle Channel from the south part of Tar Island to Cleopatra Island, an islet off the north end of Wellesley Island. Another cable crosses from the mainland to Club Island, and a submerged power cable crosses Raft Narrows 0.5 mile east of the *Thousand Islands Bridge*.

23 The Canadian *Thousand Islands Bridge* crosses the Canadian Middle Channel at Raft Narrows. This is a



THOUSAND ISLANDS BRIDGE — RAFT NARROWS (1994)

suspension **bridge** with a main span 228.5 m long and a vertical clearance of 41 m between the Canadian mainland and **Georgina Island**. Two **lights** on each side of the bridge, 152 m apart, indicate the navigable channel. The two main bridge uprights have air obstruction **lights**, at an elevation of 68 m. A steel arch **bridge**, 106 m long with a vertical clearance of 22 m, spans **Lost Channel** between Georgina Island and **Constance Island**. Between Constance and Hill Islands, there is a continuous-truss **bridge** of two 91 m spans with a vertical clearance of 13 m. The **bridge** at the **International Rift**, between Hill and Wellesley Islands, is a twinned 27 m rigid-frame structure of reinforced concrete with a vertical clearance of 6.3 m.

24 The Canada Border Services Agency (CBSA) has a Telephone Reporting Centre (TRC) in Lansdowne, north of the Thousand Islands Bridge, near Gananoque, Ontario. Most marinas on the St. Lawrence River are CBSA Telephone Reporting Service (TRS) providers and have a telephone on site for customs reporting; to report, dial 1-888-226-7277. For more information, contact the Border Information Service, at 1-800-461-9999 for service in English or 1-800-959-2036 for service in French, or visit http://www.cbsa-asfc.gc.ca. 25 Georgina Island is part of *St. Lawrence Islands National Park of Canada* and has **wharves** for small craft. For more information about the park, visit *http://www. pc.gc.ca/pn-np/on/lawren/visit/index e.asp.*

A **submerged power cable** crosses the Canadian Middle Channel 0.2 mile west of the *Thousand Islands Bridge*.

27 **Wood Island** (44°22'N, 76°00'W) (not named on the chart), 0.3 mile west of Georgina Island, has cliffs at the SW end.

28 Wood Island light (362) is on an islet east of Wood Island.

29 *Wallace Island* **light** (*362.3*) is on an islet off the NW shore of **Wallace Island**.

30 Fiddlers Elbow light (362.5) is on the east side of Ash Island ($44^{\circ}21'N$, $76^{\circ}00'W$).

31 **Historical Note**. — The Canadian Middle Channel formerly split at Georgina Island to pass either side of Wood Island; upbound vessels kept to the north of Wood Island, downbound vessels kept to the south. Upbound vessels made a sharp, almost 180° turn to port to pass southward down the west side of Wood Island; this turn was known as **Fiddlers** **Elbow**. The channel from Fiddlers Elbow past the west side of Wood Island is no longer marked.

32 Canadian Middle Channel passes east of *Wood Island* light and continues SW between Wallace Island and Ash Island.

→ 33 There is a 1 knot **current** in the channel in this part of the river.

A **submerged power cable** crosses the Canadian Middle Channel between Ash and Wallace Islands. Another **submerged power cable** crosses from Ash Island to Wood Island.

35 *Lyndoch Island* light (363) is on the NW side of Lyndoch Island.

36 Myers Island light (363.2) is on the north side of the channel 0.1 mile north of Myers Island ($44^{\circ}21'N$, $76^{\circ}01'W$).

Small-craft route

A small-craft route branches west off the Canadian Middle Channel at the west end of Georgina Island and passes north of Wood Island; this route passes Ivy Lea and rejoins Canadian Middle Channel near Sir William Shoal.

Ivy Lea, part of Leeds and the Thousand Islands Township, is a summer resort on the Canadian mainland 0.5 mile NNW of Ash Island.

39 At the east end of Ivy Lea is an L-shaped Public **wharf** known as *Ivy Lea Township Dock*; the outer face is 35 m long with an elevation of 1.5 m and a depth of 0.7 m. There is a launching **ramp** next to the Public wharf.

40 *Smugglers Inn*, just west of the public wharf, offers dockage for their clientele.

41 *Village Quay*, around a bay 0.2 mile west of Ivy Lea, had depths of 1.2 m (2006) and offered dockage with power and water, **ramp**, 15 tonne hoist, engine and hull repairs, showers and ice.

42 Blue Heron Marine Ltd., 0.5 mile SW of Ivy Lea, in the bay entered between **Garrett Point** and **Champagne Island**, had depths of 1 m (2006) and offered dockage with power outlets, **ramp**, boat hardware, engine repairs, salvage work, 10 tonne marine railway and 6 tonne hoist.

43 *Williams Marine Inc.*, next to *Blue Heron Marine*, offered dockage, **ramp**, pumpout, electricity, full-service machine shop, laundry and showers. A hoist with a 20-tonne capacity is on site. Campgrounds and a grocery store are nearby. Depths over 5 m are available (2006).

44 *Peck's Marina*, next to *Williams Marine*, offered dockage for vessels up to 14 m in length, **ramp**, propane, gasoline and diesel fuel, pumpout, water, ice, electricity, laundry, showers, restaurant and motel. A full-service small-craft repair shop has recently been completed. Boat restorations are also done. 45 *River Rat Marine*, also in the bay enclosed by Garrett Point and Champagne Island, offered dockage, **ramp**, engine and hull service, marine supplies, showers and a hydraulic trailer for vessels up to 9.1 m in length. Depths up to 3 m are available (2006).

46 *Ivy Lea Marina*, on the mainland west of Champagne Island, had depths of 2.1 m (2006) and offered dockage with power and water, pump out, **ramp**, boat hardware, engine and hull repairs, 35 tonne hoist, canoe and boat rentals, water taxi service, motel accommodation, pay phone, showers, snack bar, restaurant, licensed dining room and ice.

47 Ivy Lea Township Dock, Smugglers Inn, Village Quay, Williams Marine, Peck's Marina, River Rat Marine and Ivy Lea Marina are Canada Border Services Agency telephone reporting site for pleasure craft; to report, dial 1-888-226-7277.

Canadian Middle Channel, continued

48 From Myers Island, the Canadian Middle Channel extends towards the SW by **The Navy Islands**. Several islands in this group commemorate commanders of British gunboats and survey vessels that served in the St. Lawrence River and the Great Lakes from 1812 to 1817. **Stave Island** is the largest and SW island of the group. **Sir William Island**, the east island of the group, is 3 m in elevation and covered with trees. **Sir William Shoal**, with a depth of 1.8 m, lies on the north side of the channel 0.15 mile SE of Sir William Island, and **Steeple Shoal**, with a depth of 1.5 m, lies 0.35 mile SW of Sir William Island; both of these shoals are marked by **buoys**.

49 **Mulcaster Island**, 0.8 mile NE of Stave Island, is one of The Navy Islands and part of the *St. Lawrence Islands National Park of Canada*. Facilities include hiking trails and barbecues. There are three floating **wharves** on this island, one on the east shore and two on the south side. For more information about the park, visit *http:// www.pc.gc.ca/pn-np/on/lawren/visit/index e.asp.*

50 **Caution**. — A **submerged power cable** crosses the channel between Stave Island and **Downie Island**. Another **submerged power cable** crosses from the north end of Stave Island in a NNE direction to the mainland.

51 From a position between **Prince Regent Island** (44°19'N, 76°05'W) and **Canoe Point**, the NE end of Grindstone Island, the Canadian Middle Channel enters **The Lake Fleet Islands**, to the SW, and passes north of **Camelot Island**. Individual islands of The Lake Fleet Islands group bear the names of British gunboats and surveying vessels operating on the St. Lawrence River in the years 1812 to 1817.

52 A **submerged power cable** crosses the Canadian Middle Channel between two small islands, one near Prince Regent Island and the other near Canoe Point. 53 Astounder Island light (365.3) is on a crib 0.1 mile SE of Astounder Island (44°19'N, 76°06'W).

54 **Caution**. — Numerous **submerged power cables** cross between the islands of The Lake Fleet group. One cable crosses the Canadian Middle Channel from **Niagara Island** (44°18′N, 76°06′W) to **Dumfounder Island**.

55 Camelot Island is part of the *St. Lawrence Islands National Park of Canada*. **Endymion Island**, also part of the park, lies 0.3 mile east of Camelot Island.

56 Numerous floating **wharves**, maintained by *Parks Canada*, are on Camelot Island and Endymion Island. For more information on park facilities, visit *http://www.pc.gc.ca/pn-np/on/lawren/visit/index_e.asp.*

Chart 1438

57 **The Punts** (44°18'N, 76°08'W) is a small broken islet 0.7 mile west of Camelot Island. **Leek Island** lies 0.7 mile WSW of The Punts. Leek Island, one of the Admiralty Islands, is part of the *St. Lawrence Islands National Park of Canada.*

• 58 The Punts light (371.2) is on an islet close north of The Punts.

59 From Camelot Island, the Canadian Middle Channel leads north of The Punts and then passes between Leek Island and **McRay Point** ($44^{\circ}17'N$, $76^{\circ}09'W$), the NW point of Grindstone Island.

60 **Howe Island** is 7.5 miles long and reaches an elevation of 40 m. **Gillespies Point** is at the east end of the island.

61 A passage, leading north between Aubrey Island (44°18'N, 76°12'W) and Mermaid Island, branches NE towards Gananoque, and NW, north of Howe Island.

62 The Canadian Middle Channel continues WSW to end at the junction with the deep-water channel *(described later in this chapter)* in the large open water area between Howe and Wolfe Islands.

Small-Craft routes

end of the island.

Chart 1437

Gananoque Narrows to Bateau Channel

Gananoque Narrows, only 30 m wide, lies between
Stave Island and Prince Regent Island (44°19'N, 76°05'W).
64 The current through Gananoque Narrows sets in an easterly direction at a rate of 1 knot.
65 Prince Regent Island light (365) is on the NE

66 *Gananoque Narrows East* **light** (364.9) is on a reef 90 m NNE of *Prince Regent Island* light.

67 *Gananoque Narrows West* **light** (365.2) is on an islet 0.3 mile west of *Prince Regent Island* light.

68 Two **submerged power cables** cross the channel at Gananoque Narrows from the south end of Stave Island to Prince Regent Island.

69 **Halsteads Bay** and the community of the same name lie 1.6 miles north of Gananoque Narrows.

70 Anchor Marina, at Halsteads Bay, had depths of 0.6 m (2006) and offered dockage, a **ramp**, convenience store, marine supplies, engine repair, water taxi and barge service.

71 *Thousand Islands Village Motel*, west of *Anchor Marina*, had depths of 0.7 m and less (2006) and offered dockage, **ramp**, boat rentals, picnic area, camping, pay phone, housekeeping accommodation, showers, bait, tackle, water, and ice.

72 *Jackstraw Shoal* light (366) is 1.5 miles west of Gananoque Narrows, on **Jackstraw Shoal**, on the north side of the channel.

73 **Gordon Island**, north of the channel between Gananoque Narrows and Jackstraw Shoal, is part of the *St. Lawrence Islands National Park of Canada*; facilities include washrooms, barbecues and hiking trails. There are floating **wharves** on the island. For more information on park facilities, visit *http://www.pc.gc.ca/pn-np/on/lawren/visit/ index_e.asp.*

Chart 1438

74 **Corn Island** (44°19'N, 76°08'W), mostly wooded and 3 m high, lies 0.5 mile SW of Jackstraw Shoal.

The town of **Gananoque**, with a population of 5,285 (2006), is built along both sides of the **Gananoque River**. A swing **bridge** crosses near the mouth of the river, and a road **bridge** crosses 0.3 mile upstream. The swing bridge has a vertical clearance of 4.4 m when closed; it is opened only on application to the town authorities. Between the two bridges, the stream is 45 m wide with wooden wharves along both shores. The shore east of the town to **Sturdivants Point**, 2.5 miles away, rises to an elevation of 12 m.

76 A Public **wharf**, with a total length of 177 m and an elevation of 1.8 m, extends SW along the shore from the mouth of the river.

Gananoque Municipal Marina, on the north shore west of the Gananoque river, had depths of 0.7 to 2.6 m (2006) and offered dockage with power and water, pump out, **ramp**, picnic area, pay phone, showers, laundromat, ice, and a free shuttle to the facilities of Gananoque, most of which are within walking distance. The entrance to the basin is between a headland to the east and the east end of a combined breakwater and boom which protects the basin.

78 Gananoque *Public Utilities Commission (P.U.C.)* day-use wharves are at the SE corner of the basin.

Gordon Marine, 0.2 mile east of the swing bridge at the mouth of the Gananoque River, had depths of 2.7 to 3.7 m (2006) and offered dockage with power and water, pump out, engine repairs, 10 tonne hoist, boat hardware, sales and service of new and used boats and motors, pay phone, showers, laundromat, ice, gasoline and diesel fuel.

Gananoque Inn has a wharf and small boat basin for clientele on the east bank of the river just inside the entrance.

81 *Brennan Marine*, on the west side of the river 0.5 mile upstream of the mouth, had depths of 2.1 to 2.4 m (2006) and offered repairs and salvage, new and used boat and motor sales and service, canoe and boat rentals, boat hardware, drinking water, ice and gasoline.

82 *Gordon Marine* and *Donevan's Hardware Ltd.*, 135 King Street East, at Gananoque, are authorized dealers for *Canadian Hydrographic Service* nautical **charts** and publications.

83 Gananoque *CBSA* office, *Gananoque Municipal Marina*, Gananoque *P. U. C.* wharves, *Gordon Marine*, *Brennan Marine* and *Gananoque Inn* are *Canada Border Services Agency telephone reporting sites* for pleasure craft; to report, dial 1-888-226-7277.

84 Gananoque Floating breakwater light (366.5) is on the outer end of a floating breakwater-wharf at Gordon Marina, 0.2 mile east of the swing bridge (44°19'N, 76°09'W).

85 *Gananoque Harbour* **light** (367), privately maintained, is on the outer end of the headland at the east entrance point of the *Gananoque Municipal Marina*.

86 **Submerged cables and pipelines** extend offshore in the vicinity of Gananoque.

The **Admiralty Islands**, with individual islands named after members of the British Admiralty for the years 1812 to 1814, lie in the triangular area between Gananoque, Grindstone Island, and Howe Island.

Caution. — Many **submerged power cables** cross from the mainland to the Admiralty Islands and between islands in the group.

89 **McDonald Island** (44°19'N, 76°10'W) is part of the *St. Lawrence Islands National Park of Canada*. For more information on park facilities, visit *http://www.pc.gc. ca/pn-np/on/lawren/visit/index_e.asp*.

90 Spectacles Shoal light (368) is on Spectacles Shoal (44°19'N, 76°11'W), west of McDonald Island.

91 **Aubrey Island** (44°18′N, 76°11′W) and **Mermaid Island** are the two SW islands of the Admiralty Islands; these islands are part of the *St. Lawrence Islands National Park of Canada.* On the NE side of Aubrey Island there is a T-shaped **wharf** with an outer face 23 m long, elevation 1.5 m, and depths of 1.5 to 2.7 m (1994). Deep water lies east of Aubrey Island. **Beaurivage Island**, 0.4 mile north of Mermaid Island, is also part of the park. There are several wharves on the island. For more information on park facilities, visit *http://www.pc.gc.ca/pn-np/on/lawren/visit/index_e.asp.*

92 *Aubrey Island* light (370) is on the east side of Aubrey Island.

93 *Beaurivage Island* light (369) is on an islet SW of Beaurivage Island.

94 Between Gananoque and **Bishops Point**, 1.7 miles to the SW, the mainland shore rises to 30 m.

Bateau Channel

95 **Bateau Channel**, entered west of the Admiralty Islands between Bishops Point and Gillespies Point, lies between Howe Island and the Canadian mainland.

96 **Caution**. — A **cable ferry** runs from the mainland at Bishops Point to Gillespies Point. To avoid striking the submerged cables, vessels are cautioned to keep well clear of the ferry when it is in transit.

97 *Clark's Marina*, at the end of a dredged channel on the north shore 1.3 miles NW of Bishops Point, had depths of 0.6 m (2006) and offered dockage with power and water, pump out, small **ramp**, repairs and salvage, 6.5 tonne hoist, houseboat rentals near by, showers, propane, ice and gasoline. There were depths of 0.3 m (2006) in the approach channel.

Johnson Bay is a shallow, marshy inlet on the north shore of Howe Island. Grog Island (44°18'N, 76°15'W) is an islet on the north side of Bateau Channel off the mouth of Johnson Bay. Trident Point is on the mainland north of Johnson Bay.

Trident Yacht Club, a private facility at Trident Point, had depths of 1.1 to 2.1 m in 1994.

100 A submerged power cable crosses Bateau Channel from Trident Point SE to Cooks Point. Submerged power and telephone cables cross the entrance to Johnson Bay.

101 *Bateau Channel light 2 (394.4)* is on the mainland 1.1 miles west of Trident Point.

102 *Bateau Channel light 3 (394.5)* is on the north shore of the channel 0.5 mile WSW of *Bateau Channel* light 2.

103 **Caution**. — A **cable ferry** runs from the mainland to Howe Island, 3.4 miles SW of Trident Point. To avoid striking the submerged cables, vessels are cautioned to keep well clear of the ferry when it is in transit. The **submerged pipelines** of the bubbler system for the ferry also cross the channel here.

104 Two **submerged power cables** cross Bateau Channel near the above-mentioned ferry route and bubbler system.

105 Howe Island Ferry light (394.6) is on the outer end of the ferry wharf on the mainland side of Bateau Channel $(44^{\circ}17'N, 76^{\circ}20'W)$.

✓ 106 The current in Bateau Channel reaches 0.6 knot near *Bateau Channel* light 3.

Chart 1439

107 **Cassidys Point** $(44^{\circ}16'N, 76^{\circ}21'W)$, a peninsula at the SW end of Howe Island, is on the SE side of the west entrance to Bateau Channel. **Spit Head**, the SW tip of Cassidys Point, is long, narrow, rocky and 1.2 m in elevation.

108 **Cassidy Shoal** lies in mid-channel 0.25 mile NW of Cassidys Point; the route passes west of the shoal to join the deep-water channel north of Wolfe Island.

• Cassidy Shoal light (394.7) is on the NE end of the shoal.

110 **Treasure Island**, off the NW shore 0.9 mile west of Cassidys Point, is connected to the mainland by a causeway; the island is privately owned.

111 *Treasure Island Marina*, in the cove on the west side of Treasure Island, had depths of 0.9 to 1.3 m (2006) and offered dockage with power and water, pump out, **ramp**, repairs and salvage, 65 tonne mobile crane, some boat hardware, houseboat rentals, picnic area, pay phone, showers, laundromat, restaurant and licensed dining room, propane, ice, gasoline and diesel fuel.

112 *Treasure Island Marina* is a *Canada Border Services Agency telephone reporting site* for pleasure craft; to report, dial 1-888-226-7277.

Chart 1438

Channel north of Wolfe Island

113 The deep-water channel north of Wolfe Island, from Quebec Head, narrows at the west end of Howe Island and continues in a westerly direction for upbound vessels.

114 A **conspicuous silo** on the SW side of **Quinns Bay** (44°16′N, 76°17′W) is grey with a silver-coloured top.

• Howe Island light (393) is on the south side of Howe Island ($44^{\circ}15'N$, $76^{\circ}18'W$).

116 **Oak Point** (44°14'N, 76°20'W), on the north side of Wolfe Island, lies 1.3 miles WSW of *Howe Island* light.

Caution. — A **submerged power cable** crosses the deep-water channel, from Oak Point to the south side of Howe Island.

118 **Cold Bath Shoal**, a rocky patch with a least depth of 2.7 m, lies 0.4 mile NNW of Oak Point.

119 *Cold Bath Shoal light buoy H39 (394)* marks the north side of the shoal. The channel is only 0.1 mile wide here.

Chart 1439

120 **Knapp Point** (44°14'N, 76°24'W), densely wooded, lies 2.8 miles west of Oak Point. The NW side of Knapp Point drops off steeply. A decommissioned light **tower**, 6.1 m high, white with a red upper part, stands on the north end of the point.

121 A **conspicuous water tower** on the NW shore 2 miles WNW of Knapp Point has an elevation of 80 m; this water tower is silver in colour.

122 **The Spectacles**, in two parts and covered with bushes and trees, lie 0.8 mile NE of Knapp Point. **Milton Point** is 0.7 mile north of Knapp Point.

123 *The Spectacles light buoy* H42 (395) marks the south side of the shoal water. *Spit Head West Cardinal light buoy* HJ (394.8) lies 0.5 mile east of The Spectacles.

From a position north of Cold Bath Shoal, the deepwater channel continues to a position 0.25 mile off Knapp Point. Bateau Channel, described earlier, joins this channel near The Spectacles.

125 A **conspicuous radio tower** 0.9 mile north of Milton Point has air obstruction **lights**. A **conspicuous** cylindrical **water tower** 0.8 mile NE of Milton Point has an elevation of 81 m; it is mint green in colour.

126 **Milton Island**, part of the *St. Lawrence Islands National Park of Canada*, is close SW of Milton Point. A **wharf** is in the cove at the east end of the island. For more information on park facilities, visit *http:// www.pc.gc.ca/pn-np/on/lawren/visit/index e.asp.*

Caution. — A submerged power cable crosses from the mainland to the east end of Milton Island; from there the cable crosses the channel to **Brophy Point**, on Wolfe Island 0.3 mile east of Knapp Point. Three other submerged power cables cross from the mainland to a position east of Milton island, and across the channel to Brophy Point.

128 **Bayfield Shoal**, an isolated rocky patch with a depth of 2.4 m, lies 0.9 mile WSW of Knapp Point.

129 *Bayfield Shoal light buoy H43 (397)* marks the north side of the shoal.

130 From a position 0.25 mile off Knapp Point, the deepwater channel continues in a WSW direction to the approaches to Kingston Harbour.

131 **Caution**. — Magnetic **compass** readings are **erratic** in the area between Spit Head and Kingston Harbour, 6 miles to the SW, due to **magnetic anomalies**. Magnetic variation may range from 27°W to 3°E. Extreme caution is necessary when using a magnetic compass.

132 (The area SW of Bayfield Shoal, the approaches to Kingston Harbour and Kingston are described in Chapter 6.)

Kingston Harbour and approaches

General

Chart 1439



1 This chapter describes the approaches to Kingston Harbour from Dawson Point in the east to Everett Point and Simcoe Island in the west, including the NW shore of Wolfe Island. The city and harbour of Kingston are also described. (*The areas east and NE of Dawson Point are described in Chapter 5.*)

Caution. — Proceeding westwards past Kingston into the North Channel is considered to be "proceeding from seaward" or "upstream"; red buoys and beacons are kept to starboard. Entering Kingston Harbour from Lake Ontario is also heading "upstream", with buoys and beacons marked accordingly. Vessels approaching Kingston from the west must be alert for the change in the buoyage system in the approach to Kingston.

2.1 Real-time water level information for Lake Ontario at Kingston is available from the *Canadian Hydrographic Service Automated Water Level Gauge*, telephone number 613-544-9264. (More information on water levels is given in *Sailing Directions booklet CEN 300* — *General Information*, *Great Lakes.*)

Caution. — The normal Magnetic Variation (2007) for the area around Kingston Harbour is 13°W. Due to **magnetic anomalies**, however, magnetic compass readings in this area are erratic; Magnetic Variation may range from 27°W to 3°E. Extreme caution is necessary when using a magnetic compass.

Channel north of Wolfe Island — Dawson Point to Everett Point

Charts 2017, 1439

Eastern Approach to Kingston

4 From a position 0.25 mile off Knapp Point *(Chart 1439)*, the deep-water channel continues in a 248° direction to the approaches to Kingston Harbour.

5 **Cedar Island** (44°14'N, 76°27'W), north of the channel 1 mile east of Kingston, is wooded and separated from the CEDAR ISLAND AND KINGSTON (1994)



mainland by a boat channel. An old Martello tower stands on the south part of the island.

There are small-craft wharves on the north and NW shores of Cedar Island. The island is part of the St. Lawrence Islands National Park of Canada. For more information on park facilities, visit http://www.pc.gc.ca/pn-np/ on/lawren/visit/index e.asp.

Cedar Island light (401) is at the south end of Cedar Island, 150 m from the Martello tower.

Deadman Bay is entered between the south end 8 of Cedar Island and Point Henry, with the ramparts of Fort Henry close north of the point. An old Martello tower stands on the SE side of Point Henry. The bay can also be entered through a narrow boat channel between the north end of Cedar Island and Cartwright Point. The wharves in Deadman Bay are private; they belong to Canadian Forces Base Kingston Yacht Club.

Point Frederick is the south end of the peninsula 9 on the east side of Kingston Harbour.

10 Caution. — Shoal water extends more than 0.1 mile off Point Henry and Point Frederick.

Point Frederick Shoal is an isolated shoal, less than 11 3 m deep, off Point Frederick.

12 Point Frederick Shoal light buoy KH2 (405.6) marks the south edge of the shoal.

Navy Bay lies between Point Henry and Point 13 Frederick. The wharves on the west side of the bay are controlled by Royal Military College of Canada authorities.

A conspicuous water tower 0.9 mile NNE of the 14 NE end of Cedar Island has an elevation of 80 m. This tower (previously mentioned in Chapter 5) is silver in colour and has air obstruction lights.

NW shore of Wolfe Island

Dawson Point (44°13'N, 76°26'W), low-lying and 15 wooded, is on Wolfe Island, 1.3 miles SE of Cedar Island. A ferry wharf at Dawson Point is 43 m long 16 and 29 m wide at the face; the wharf has three moor-

ing dolphins and an elevation of 2.7 m. An abandoned ferry wharf 15 m to the west is in disrepair; it is 70 m long and 20 m wide at the face, with an elevation of 2.5 m. There are no facilities for boaters at these wharves.

A light is shown from a mast on a crib west 17 of the outer end of the Dawson Point ferry wharf. The light is privately maintained.

18 Caution. — A submerged power cable crosses in a southerly direction from the mainland 1 mile east of Cartwright Point, near Ravensview, to Dawson Point. An abandoned submerged cable crosses from the same position on the mainland to Knapp Point (Chart 1439). The submerged pipeline of the ferry bubbler system crosses

towards Kingston Harbour from the ferry wharf at Dawson Point; this is the winter ferry route between Wolfe Island and Kingston.

Ferguson Point lies 1.2 miles SW of Dawson Point. 19 Between Dawson Point and Ferguson Point the shore is low and dotted with trees. Barrett Bay is a bight lying SW of Ferguson Point.

Ferguson Point light buoy KA1 (398) and Wolfe 20 Island light buoy KA5 (399) mark the route through Barrett Bay.

21 Four conspicuous radio towers 0.5 mile SE of Dawson Point (shown on Chart 1439) have an elevation of 67 m; they have air obstruction lights. Two silos and a large silver-roofed barn 0.4 mile SW of Dawson Point are prominent.

22 Garden Island (44°12'N, 76°28'W) lies 0.6 mile west of Ferguson Point. The island is low-lying with a small settlement on its NE part.

Marysville, part of Frontenac Islands township, is 23 on the south shore of Barrett Bay. Marysville has churches, hotel, post office, garages, restaurants, general store and a bakery.

The Public wharf at Marysville is 47 m long 24 and 28 m wide and had depths of 0.4 to 0.9 m in 1994; there is a concrete **ramp**, on the east side of the wharf, and a pay phone. The approach to this wharf is marked by **buoys**. A passenger and automobile ferry, Wolfe Islander III, 25 plies between Wolfe Island and Kingston on a regular schedule. The ferry berths at Marysville during the high water season from about May to August; during winter and the low water season, the ferry berths at Dawson Point.

Marysville wharf light (399.3) is on the outer 26 dolphin off the Public wharf. The light is privately maintained.

General Wolfe Marina, 0.1 mile east of the 27 Public wharf, had depths of 0.8 m in 1994 and offered dockage with power and water, ramp, snack bar and ice.

Six radio towers 1.2 miles SW of Marysville have 28 an elevation of 66 m; the towers have air obstruction lights. Simcoe Island (44°10'N, 76°32'W), off the NW end 29 of Wolfe Island, has scattered trees. Lucas Point is the NE end of Simcoe Island.

(The areas west and SW of Simcoe Island are 30 described in Sailing Directions booklet CEN 302 — Lake Ontario.)

31 Boat Channel, between Simcoe Island and Wolfe Island, is narrow. There are shoals in its NE approaches.

32

Several submerged cables cross Boat Channel.

A Public wharf on the south side of Simcoe 33 Island, 0.5 mile SW of Lucas Point, is in disrepair (1994).

Caution. — Frontenac Islands Ferry Service 34 operates a cable ferry from the Public wharf on Simcoe Island to a small wharf on Wolfe Island. To avoid striking the submerged cables, vessels are cautioned to keep well clear of the ferry when it is in transit.

36 There is a small-craft harbour 0.9 mile SW of the Simcoe Island Public wharf.

Western Approach to Kingston

The entrance to the northern channel of the 37 St. Lawrence River from Lake Ontario is through Lower Gap, which lies between Simcoe Island and Amherst Island.

Everett Point (44°13'N, 76°35'W), on the north 38 shore 3 miles NW of Simcoe Island, is geographically the NW entrance point of the St. Lawrence River.

(The areas west and SW of Everett Point are de-39 scribed in Sailing Directions booklet CEN 302 - Lake Ontario.)

A shoal spit extends 0.4 mile SSW of Everett Point; 40 a **buov** marks the outer end.

Melville Shoal, in the middle of Lower Gap, is an 41 extensive shallow area with a depth of 0.5 m. Middle Ground lies 0.8 mile east of Melville Shoal.

Nine Mile Point (44°09'N, 76°33'W) is the SW end 42 of Simcoe Island.

Nine Mile Point light (419) is on the west end 43 of the point.

44 Four Mile Point is on the NW side of Simcoe Island.

Snake Island Bank is a shallow rocky area 0.7 mile 45 NW of Four Mile Point. Snake Island (44°11'N, 76°33'W), on the NW edge of the bank, is a small island with a few trees.

Snake Island light buoy K5 (415) lies 0.5 mile NNW 46 of Snake Island.

There is a channel, with depths less than 4 m, be-47 tween Four Mile Point and Snake Island Bank.

48

Caution. — Two submerged cribs lie 0.5 mile NW of Four Mile Point.

On the north shore, Point Pleasant, with the com-49 munity of Reddendale to the north, is 0.5 mile SE of Everett Point.

50 A submerged water intake 0.1 mile east of Point Pleasant extends 0.2 mile offshore.

Carruthers Point (44°12'N, 76°33'W) lies 1.2 miles 51 east of Everett Point.

Carruthers Point Sector light (412) is shown 52 on the SSW end of the point. The white sector indicates the preferred channel.

Sand Bay lies on the west side of Carruthers 53 Point.

The DuPont Canada plant, 0.2 mile north of Sand 54 Bay, has three conspicuous chimneys. A tall apartment

building east of the head of Sand Bay is prominent. The most **conspicuous** object in Kingston from the south and SW is the large white concrete **chimney**, elevation 71 m, at the *Kingston General Hospital*.

55 **Caution**. — A **submerged power cable** crosses from Sand Bay to Four Mile Point on Simcoe Island. Another **submerged power** cable crosses from Sand Bay to Wolfe Island.

56 **Caution.** — **Submerged water intakes** extend 0.3 mile south of Carruthers Point; a signboard marks the shore end of the pipelines. This is a **prohibited anchorage area**. A **submerged sewer outfall** extends 0.1 mile offshore from a position 0.1 mile NE of the shore end of the intake pipelines.

57 **Myles Shoal** and **Penitentiary Shoal** are reefs in the western approach to Kingston.

58 *Myles Shoal light buoy K1 (407)* and *Penitentiary Shoal light buoy K3 (409)* mark the north sides of these dangers.

Kingston

⁵⁹ The city of **Kingston** (44°14'N, 76°29'W), with a population of 117,207 (2006), is near the NE end of Lake Ontario at the confluence of the St. Lawrence River and the Cataraqui River. The distance from Kingston to the St. Lambert lock at Montréal is 162 miles by the main ship channel of the *St. Lawrence Seaway*.

60 There are several light industries in the area. The city is connected by rail and highway to major Canadian centres. The local airport offers charter and scheduled air services.

61 **Kingston Harbour** extends from Cataraqui Bay along the south and east sides of the city to Cedar Island and Point Henry. The offshore harbour limit is a line joining Carruthers Point and the SW end of Cedar Island, which is a distance of more than 4 miles.

62 Kingston Harbour is owned by the *Department of Fisheries and Oceans*, but is administered by the municipality of Kingston. The commercially developed parts of the harbour include Cataraqui Bay and the outer harbour frontage, the harbour proper south of *LaSalle Causeway (shown on Chart 1513)*, and Inner Harbour, north of the causeway.

63 The Canada Border Services Agency (CBSA) has an Inland Customs Office, with electronic data interchange capabilities, in Kingston for commercial shippers. For more information, contact the Border Information Service at 1-800-461-9999 for service in English or 1-800-959-2036 for service in French, or visit http://www.cbsa.gc.ca/menu-eng. html. 64 **Pilotage** is compulsory in the Kingston Harbour area; pilotage services for ships moving in the harbour are arranged through *Pilots Cornwall*.

65 (For further information on pilotage, consult Sailing Directions booklet CEN 300 — General Information, Great Lakes and the Annual Edition of Notices to Mariners.)

66 The **speed limit** in Kingston Harbour is 7 knots.

Kingston outer harbour

67 **Cataraqui Bay** is entered between Carruthers Point and **Samson Point**. The bay is generally shallow. A granite block breakwater with elevations of 2.4 to 3.4 m, and almost joined to shore at Carruthers Point, extends ENE across the mouth of Cataraqui Bay.

68 Cataraqui Bay South breakwater light (411) is at the east end of the granite breakwater. Cataraqui Bay Inside breakwater light (411.5) is at the south end of a breakwater on the east side of the bay. Both lights are privately maintained.

69 The Cataraqui Bay inside breakwater projects south from a former elevator **wharf** on the east side of Cataraqui Bay; the breakwater is made of rubble from the demolished elevator. The wharf forms the west side of a small harbour known locally as **Elevator Bay**.

Lake Ontario Park Campground, operated by the *City of Kingston Parks and Recreation Department* on the east shore and on the hillside east of Elevator Bay, had depths of 0.1 to 1.7 m (2006) and offered a **ramp**, picnic area, tent and trailer sites, pay phone, drinking water, showers and snack bar.

71 On the promontory east of *Lake Ontario Park Campground*, there is a former wharf, once used to receive coal for the heating plant at the *Kingston Psychiatric Hospital* and *Rockwood Hospital for the Insane*. Both of these facilities are long closed; the wharf has been filled in and paved over. There are no berthing facilities here.

72 **Portsmouth Harbour** (44°13'N, 76°31'W), a small bay near the west limit of Kingston outer harbour, is protected by a pier extending from the west shore. A concrete breakwater 114 m long extends SE from near the head of the pier.

73 A Canadian Coast Guard search and rescue cutter is based at Portsmouth Harbour from mid-April to mid-December each year, though these dates are subject to change (see information on Search and rescue in Sailing Directions booklet CEN 300 — General Information, Great Lakes).

74 Extensive facilities for sailboats were built here for the 1976 Summer Olympics. These facilities, known as *Portsmouth Olympic Harbour*, occupy the entire bay and are operated by the *Kingston Parks and Recreation Department*. The harbour entrance, between the breakwater and the east shore, is 38 m wide. *Portsmouth Olympic Harbour*

PORTSMOUTH HARBOUR (1994)



had depths of 1.0 to 3.1 m (2006). There are 5 launching **ramps** for public use; a fee applies. Gasoline, diesel fuel and sewage pump-out are available. All dockage in *Portsmouth Olympic Harbour* is leased to boaters by the City of Kingston. Transient boaters intending to berth at *Portsmouth Olympic Harbour* should call ahead on VHF Channel 68, or phone 613-546-4291, to reserve a slip; most transient boaters use the facilities closer to downtown Kingston.

75 *Portsmouth Olympic Harbour* is a *Canada Border Services Agency telephone reporting site* for pleasure craft; to report, dial 1-888-226-7277.

 $\mathbf{N} \quad \begin{array}{c} 76 \quad Portsmouth \ wharf \ \text{light} \ (410) \ \text{is on the outer} \\ \text{end of the breakwater at the mouth of the bay.} \end{array}$

An apartment building, near the shore west of Portsmouth Harbour, and the long grey walls of *Kingston Penitentiary* on the east side of the entrance make good **landmarks**.

78 **Caution**. — The **submerged ruins** of two small wharves lie east of the *Kingston Penitentiary* frontage.

79 The L-shaped Public Utilities **wharf**, 0.6 mile east of Portsmouth Harbour, has an elevation of 2 m; depths of 3 m were found along its outer face (2006).

80 *Kingston Public Utilities wharf* **light** (407.5) is on the east end of the wharf. The light is privately maintained.

81 A **submerged water intake** west of the Public Utilities wharf extends 0.5 mile offshore. Another **submerged water intake** lies east of the main pipeline.

82 *Kingston General Hospital (previously mentioned)* is 0.4 mile east of the Public Utilities wharf. 83 *Kingston Yacht Club*, a private organization 0.3 mile east of the hospital, is near the SW entrance point of Kingston Harbour; its basin is protected by a breakwater marked with four **lights** (406.1, 406.2, 406.3, 406.4). The yacht club had depths of 0.6 to 8.1 m (2006) and offered dockage with power and water, pump out, marine railway and hoist, pay phone, showers, snack bar and licensed dining room, ice, gasoline and diesel fuel. *Kingston Yacht Club* is an authorized dealer for *Canadian Hydrographic Service* nautical **charts** and publications.

84 *Kingston Yacht Club* is a *Canada Border Services Agency telephone reporting site* for pleasure craft; to report, dial 1-888-226-7277.

A disused **submerged water intake** extends offshore NE of the *Kingston Yacht Club* breakwater. There are **submerged cables** crossing to Wolfe Island from near the *Kingston Yacht Club* breakwater.

86 East of *Kingston Yacht Club* is the site of the former *Kingston Shipyards*. This is now the home of the *Marine Museum of the Great Lakes*. The red-hulled former *Canadian Coast Guard* ship *Alexander Henry* is moored here (2009) and makes a good **landmark**, as does a yellow-coloured apartment building near the museum.

The **dome** of the city hall is below the city skyline but at night the illuminated clock faces may make a good landmark for approaching boaters.

88 Other prominent structures are the tall square Gothic tower of *St. Mary's Cathedral*; the dome of *St. George's Cathedral*, elevation 48 m; and several other church spires.

Kingston Harbour

89 **Caution**. — Strong east or NE winds can lower the water level in Kingston Harbour; strong west or NW winds can increase it. For details of wind and atmospheric pressure effects on Lake Ontario, see information on water levels in *Sailing Directions* booklet *CEN 300* — *General Information, Great Lakes*.

90 Some silting has been reported in Kingston Harbour.

91 **Carruthers Shoal** is an extensive shallow bank on the west side of the entrance to Kingston Harbour.

92 The L-shaped boulder breakwater of *Flora MacDonald Confederation Basin* extends from the west shore and encloses an area north and west of Carruthers Shoal. A second breakwater extends north from near the NE end of the L-shaped breakwater, protecting the central portion of the basin.

93 *Confederation Marina* **light** (405.8) is near the NE end of the L-shaped breakwater.

94 The former *Fairbanks Morse (Canada) Ltd.* wharf, slated for redevelopment (2009), and the *Ramada Inn* wharf lie inside the south part of the basin.

95 Flora MacDonald Confederation Basin Marina, on the NW shore of Kingston Harbour north of the Ramada Inn wharf, is also operated by Kingston Parks and Recreation Department. The marina had depths of 2.1 to 2.3 m (1994) and offered dockage with power and water, picnic area, pay phone, showers, laundromat and ice. All the facilities of downtown Kingston are a short walk from the marina, including a motel, groceries and several restaurants. 96 Flora MacDonald Confederation Basin Marina is a Canada Border Services Agency telephone reporting site for pleasure craft; to report, dial 1-888-226-7277.

97 Kingston Harbour breakwater, with a Martello Tower in the middle, protects the north section of *Flora MacDonald Confederation Basin.*

98 *Kingston Harbour breakwater* **light** (405.5) is at the NE end of the breakwater.

99 The City of Kingston owns the former coal wharf $(44^{\circ}14'N, 76^{\circ}29'W)$ at the north end of the basin. Known as *Crawford Wharf*, it is 107 m long and 21 m wide, with an elevation of 2.1 m. The wharf perimeter is lighted. This wharf is reserved for the use of larger transient vessels, by previous arrangement, and local cruise and tour boats (2009).

100 The *Holiday Inn* wharf is close north of Crawford Wharf. Next north is a private wharf, elevation 2.1 m, with five finger piers on its north side. This wharf is in disrepair (2006).

101 The passenger and automobile **ferry** *Wolfe Islander III* plies between Kingston Harbour and Wolfe Island on a regular schedule.

102 The Kingston-Wolfe Island **ferry wharf**, managed by the *Ontario Ministry of Transportation*, is the NE wharf in Kingston Harbour. The wharf is 76 m long and 15 m wide, with an elevation of 2.4 m and depths of 5.4 m in 1994. The ferry generally berths on the north side of the wharf.

103 *Kingston Ferry Terminal* light (403.4) is on the NE corner of the ferry wharf.



KINGSTON HARBOUR (1994)

104 A **bubbler system pipeline** (*previously mentioned*) is laid along the ferry route from the wharf to the Dawson Point wharf.

105 On the east side of Kingston Harbour are the parklike grounds of the *Royal Military College of Canada*.

LaSalle Causeway

106 LaSalle Causeway(shown on Chart 1513) crosses Cataraqui River 0.5 mile north of Point Frederick. Two sections of the causeway, linked by three bridges, connects Kingston to Barriefield and Canadian Forces Base Kingston. Two of the channels through the causeway are marked by lights. Lasalle Causeway separates Kingston Harbour from Inner Harbour and marks the south end of the Rideau Canal.

107 (The Rideau Canal, a small-craft route between Kingston and Ottawa, is described in Sailing Directions booklet CEN 308 — Rideau Canal and Ottawa River.)

A small-craft channel under a fixed bridge near the east end of the causeway has a vertical clearance of 5.5 m. The channel under the bridge is separated into two passages, each 15 m wide, by the bridge support piers. Vessels keep to starboard when passing under the bridge. The entrances are marked by daybeacons and **lights**.

109 An unmarked passage under a bridge near the west end of the causeway has a vertical clearance of 1.8 m.

110 **LaSalle Causeway Bascule Lift Bridge**, which spans the middle opening in the causeway, has a horizontal clearance of 38 m. When the bridge is closed it has a vertical clearance of 1.8 m. LaSalle Causeway Bascule Lift Bridge is maintained by Public Works and Government Services Canada.

111 *LaSalle Causeway Bascule Lift Bridge* is raised every hour from 06:00 to 22:00, except at 08:00, 12:00, 16:00 and 17:00 (2008). From 22:00 to 06:00 the bridge opens by prior arrangement for commercial and Government craft. The signal for requesting the bridge to be opened is *three long blasts followed by one short blast*.

Caution. — **Submerged power and telephone cables**, housed in a pipeline, cross the openings in the causeway.

113 On the south side of the west end of the causeway is the frontage of Fort Frontenac and buildings belonging to *Canadian Forces Base Kingston*.

Inner Harbour

114 **Inner Harbour** lies north of LaSalle Causeway. **Anglin Bay** is on the west side of Inner Harbour.

115 There are **wharves** along the north side of the causeways. East of the bascule bridge, the wharf is 189 m long with an elevation of 2.3 m and depths of 3.6 m, mud bottom (1994). West of the bascule bridge is a *Public* *Works and Government Services Canada* wharf 97 m long with an elevation of 1.9 m and depths of 3.1 m (1994).

The wharf north of the east end of *Lasalle Causeway* is *Department of National Defence* property, as is the area on the north side of the west end of *Lasalle Causeway*.

117 *MetalCraft Marine Inc.* operates a dry dock in Anglin Bay. The dry dock is 63 m long and 14.6 m wide, with a depth of 3.4 m over the sill. All types of ships and smaller vessels can be repaired. Tugs are available.

Kingston Marina, in Anglin Bay, north of the west end of the causeway, had depths of 1.1 to 2.3 m in 1994 and offered dockage with power and water, **ramp**, repairs and salvage, marine railway, boat hardware, 70 tonne hoist, picnic area, pay phone, showers, ice, gasoline and diesel fuel.

119 Nunavut Marine Ltd., 37 Bay Street; Pride Marine Group Inc., 4032 Bath Road; Vandervoort Hardware, 77 Princess Street, and West Marine, 1092 Princess Street are authorized dealers for Canadian Hydrographic Service nautical charts and publications.

120 **Historical note**. — Founded in 1673 by the Comte de Frontenac, Kingston is one of the oldest communities in Canada, predated only by Québec and Montréal. Frontenac built a log fort here, then in 1678 LaSalle, the first commander of the fort, was granted the land and launched the first ship to sail the Great Lakes.

121 In its early days Kingston, which was then known as *Fort Frontenac*, was under French control. It was taken over by the British in 1758, and in 1784 it was settled by a group of United Empire Loyalists fleeing from New York who renamed it *Kingstown*.

122 In 1838 Kingston was incorporated as a town, soon being chosen as the capital of Upper Canada. Kingston continued to prosper and in 1846 was incorporated as a city.

123 Due to its strategic location, Kingston has always been closely linked with ships and ship building. This tradition is preserved in the *Marine Museum of the Great Lakes* at the former Kingston Shipyards, and in the replica paddle-boats *Island Queen* and *Island Princess* that cruise from the waterfront to the Thousand Islands and the Rideau Waterway.

124 *Royal Military College of Canada* is on the south end of the peninsula forming the east side of the harbour. Kingston is also the home of *Queen's University*. As well as being a thriving city, Kingston is a major visitor centre with many events, festivals, performances and exhibitions throughout the year.

125 The city boasts many historic sites, galleries and museums, some of which, such as the *Canadian Forces Communications and Electronics Museum* and the *Agnes Etherington Art Centre*, are open all year. Some, such as the *Pump House Steam Museum* and the little-known *Correctional Service of Canada Museum*, housed in the

Kingston Penitentiary former warden's residence, are open daily during summer months.

126 Old Fort Henry, now known as Fort Henry National Historic Site of Canada, was built in 1832 to 1834. The fort comes alive during summer months with demonstrations of nineteenth century military action, and is a living reminder of earlier threats of armed invasion from the south.

127 *Murney Tower National Historic Site of Canada*, one of four 1846 martello towers in the area, was part of Kingston's defence system and now houses a historical museum. 128 Agnes Etherington Art Centre is an art gallery with a collection of over 3,000 traditional and contemporary works. The Centre also hosts visiting exhibitions and cultural activities during the year.

129 *International Hockey Hall of Fame* has exhibits of artifacts and photographs tracing the game's development since its birth here in 1885.

130 *Domino Theatre*, *Grand Theatre* and *Theatre 5* offer live stage productions during the summer months.

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.

Sail Plan	
Owner Information	
Name:	
Address:	
Telephone Number:	_ Emergency Contact Number:
Boat Information	
Boat Name:	Licence or
	 Registration Number:
Sail: Power:	Type:
	Deck:Cabin:
Engine Type:	_ Distinguishing Features:
	umber:
Radio Channels Monitored: MMSI (Maritime Mobile Service Identity) N	
Radio Channels Monitored: MMSI (Maritime Mobile Service Identity) N Satellite or Cellular Telephone Number: Safety Equipment on Board Lifejackets and PFD's <i>(include number)</i> : _	umber:
Radio Channels Monitored: MMSI (Maritime Mobile Service Identity) N Satellite or Cellular Telephone Number: Safety Equipment on Board	umber:
Radio Channels Monitored: MMSI (Maritime Mobile Service Identity) N Satellite or Cellular Telephone Number: Safety Equipment on Board Lifejackets and PFD's <i>(include number)</i> : Liferafts (include type and colour): Flares (include number and type):	umber: Dinghy or Small Boat (<i>include colour</i>):
Radio Channels Monitored: MMSI (Maritime Mobile Service Identity) N Satellite or Cellular Telephone Number: Safety Equipment on Board Lifejackets and PFD's <i>(include number)</i> : Liferafts (include type and colour): Flares (include number and type):	umber: Dinghy or Small Boat <i>(include colour)</i> :
Radio Channels Monitored: MMSI (Maritime Mobile Service Identity) N Satellite or Cellular Telephone Number: Safety Equipment on Board Lifejackets and PFD's <i>(include number)</i> : Liferafts (include type and colour): Flares (include number and type): Other Safety Equipment: Trip Details — Update These Deta	umber: Dinghy or Small Boat <i>(include colour)</i> :
Radio Channels Monitored: MMSI (Maritime Mobile Service Identity) N Satellite or Cellular Telephone Number: Safety Equipment on Board Lifejackets and PFD's <i>(include number)</i> : Liferafts (include type and colour): Flares (include number and type): Other Safety Equipment: Trip Details — Update These Deta Date of Departure:	umber:
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Radio Channels Monitored: MMSI (Maritime Mobile Service Identity) N Satellite or Cellular Telephone Number: Safety Equipment on Board Lifejackets and PFD's <i>(include number)</i> : Liferafts (include type and colour): Flares (include number and type): Other Safety Equipment: Trip Details — Update These Deta Date of Departure: Leaving From: Proposed Route: Stopover Points (include date and time):	umber:

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 (Great Lakes and Arctic) 1-800-267-7270 +1-613-965-3870 (Satellite, Local or Out of Area) +1-613-965-7279 (fax) jrcctrenton@sarnet.dnd.ca (Email)

MRSC Québec (Quebec Region) 1-800-463-4393

+1-418-648-3599 (Satellite, Local or out of area) +1-418-648-3614 (fax) <u>mrscqbc@dfo-mpo.gc.ca</u> (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 (Newfoundland and Labrador Region) 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*.

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