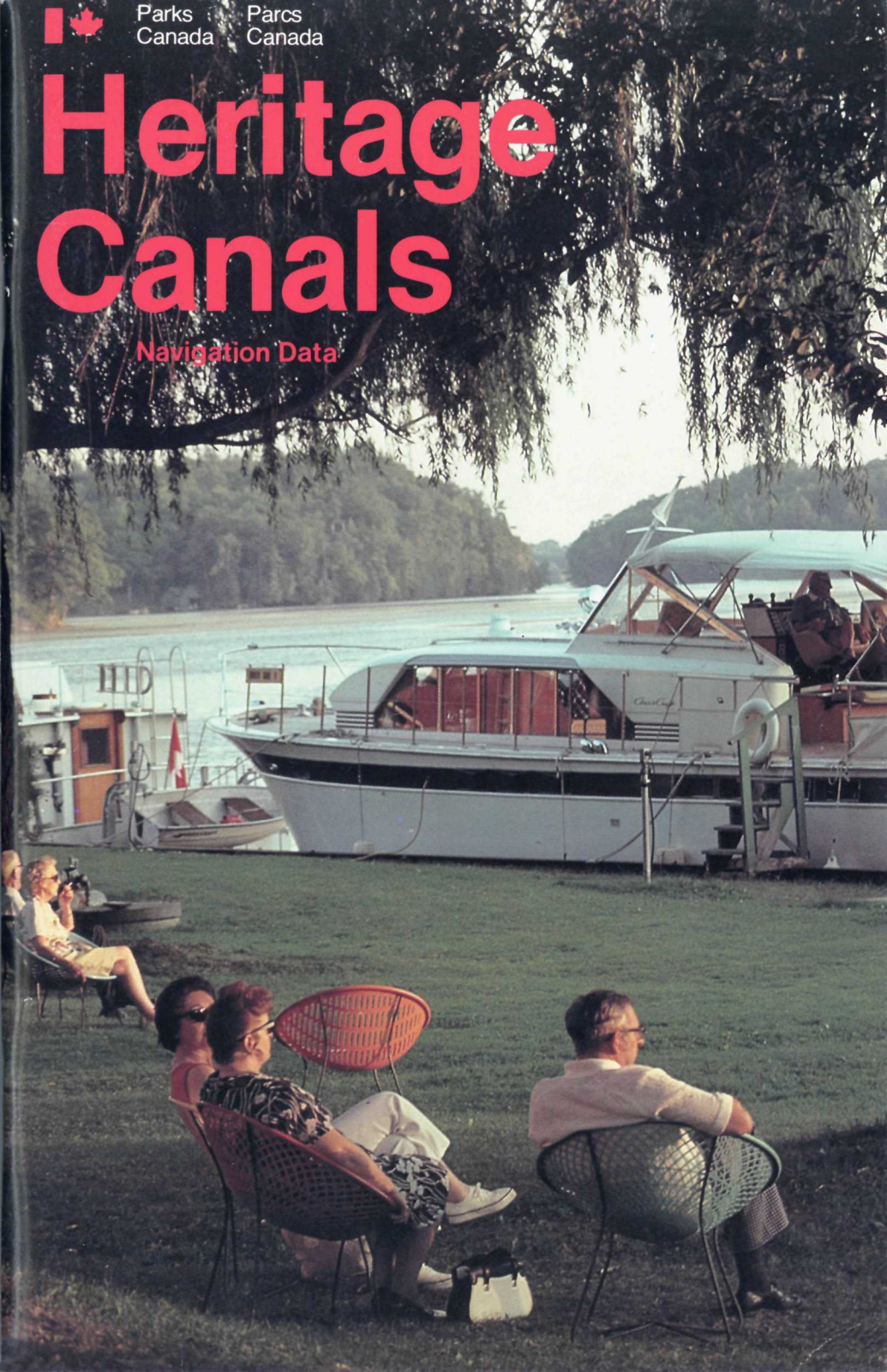
Parks Canada Parcs Canada

Heritage Canals

Navigation Data



Published by authority of
the Minister of the Environment

QS-7083-000-BB-A3
Catalogue No. R58-1/1984
ISBN 0-662-52075-0

Canada

Jones Falls, Rideau Canal, Ontario

Welcome to Canada's Heritage Canals

Each year Canada's heritage canals are used by thousands of skaters, skiers, joggers, cyclists, sightseers . . . and boaters too! Built by the British in the early 19th century for purposes of trade and defense, these same canals are now popular recreational waterways.

In Quebec, the Chambly and St. Ours canals, built to overcome rapids on the picturesque Richelieu River, are within easy reach of several million Canadians. Pack a lunch and spend a day on the Richelieu - driving, walking or navigating. Along the way, Fort Chambly and Fort Lennox provide a glimpse of Canada's turbulent early years.

On the banks of the Lachine Canal near downtown Montreal are bicycle paths, cross-country ski trails, picnic tables and interpretive displays. The original warehouses which line the canal banks are an interesting study of Canadian commercial development.

The single locks of the Carillon and Ste. Anne de Bellevue canals open the route for boaters to travel 192 km from Montréal to Ottawa where a flight of eight locks leads into the Rideau Canal.

Flowing through the heart of Canada's capital the Rideau Canal makes Ottawa one of our most attractive cities. In winter, this section of the canal becomes the world's longest skating rink, almost seven kilometres from end to end.

There's plenty to see along the canal that Lieutenant Colonel John By completed 150 years ago. Blockhouses and lockmasters' houses are excellent examples of early 19th century military architecture, and the hand-operated machinery, massive wooden gates and cutstone walls are engineering marvels, built under difficult conditions. Roads parallel the canal for most of its length, and a trail from Ottawa to Kingston is popular with hikers.

From Lake Ontario the Trent-Severn Waterway stretches 386 km from the rolling farmland near Lake Ontario to the islands of Georgian Bay, favourite subjects of the famous Canadian Group of Seven artists. The Trent-Severn can be enjoyed by car or by boat - for a day's outing or an extended visit.

The imposing lift lock at Peterborough is still as much of a marvel as at its opening when an editorial writer predicted, "This will make Peterborough a place of pilgrimage, from far and near, for there will be perpetual unrest in the public mind to see the wonderful and massive mechanism by which the simple natural law of equilibrium makes . . . a barge laden with 25,000 bushels of wheat, drop as gently and smoothly as a tuft of down."

On the Sault Ste. Marie Canal, pleasure boats pass larger ships carrying cargo through the all-Canadian route between lakes Superior and Huron. The canal has been an important link in the Great Lakes - St. Lawrence shipping route for more than 80 years.

Another heritage canal still used by commercial carriers is the St. Peters in Nova Scotia through the isthmus separating Bras d'Or Lake and the Atlantic. Passage through this canal is free and picnic sites and campgrounds are nearby.

Canada's heritage canals have many recreational uses, but they still serve their original purpose of opening important inland routes to navigation. Parks Canada's canals open the lockgates to thousands of kilometres of navigable waterways and provide cruising opportunities unrivalled anywhere in the world for their beauty and variety.

Whether you're out for a Sunday stroll, training for the Boston marathon, or captain of your own clipper, Canada's heritage canals are yours to enjoy. This booklet provides important details about cruising the canals; more information on the history of the canals and their interpretive programs can be obtained by writing the canal offices at the addresses listed on page 5.

Contents

Section 1
General Information

NOTICE
St. Peters Canal will be closed to navigation for 12 months beginning in September, 1984. Parks Canada will reconstruct the walls at the Bras d'Or Lake entrance to the canal.

1.1 Introduction
This booklet is issued for the guidance of those who use the Heritage Canals system operated by Parks Canada. May your voyage be a safe and pleasurable one.

1.2 Location
Heritage Canals under the jurisdiction of Parks Canada may be summarized briefly as:

Ontario
- Ottawa to Kingston (Rideau Canal System)
- Trenton to Port Severn (Trent-Severn Waterway)
- Bay of Quinte to Lake Ontario (Murray Canal, part of Trent-Severn Waterway)
- Lake Superior to Lake Huron (Sault Ste. Marie Canal)

Quebec
- Sorel to Lake Champlain (St. Ours Canal and Chambly Canal)
- Montreal to Ottawa (Ste. Anne de Bellevue Canal and Carillon Canal)
- Montreal Harbour to Lake St. Louis (Lachine Canal) closed to through navigation.

Nova Scotia
- Atlantic Ocean to Bras d'Or Lakes, Cape Breton Island, (St. Peters Canal)

The location of these Heritage Canals is shown on the map (centre page). Detailed information on each canal will be found in other sections of this booklet.

1.3 Comments
Parks Canada constantly seeks to improve the service offered by the Heritage Canals system. Comments and opinions of those who travel the Heritage Canals are useful in achieving this aim. Suggestions, or requests for information should be directed in writing to the following:

Quebec Canals
Superintendent, Parks Canada,
1369 Bourgogne Street,
Chambly, Quebec J3L 1Y4 (514) 658-0681

Rideau Canal
Superintendent, Parks Canada, 12 Maple Avenue N., Smiths Falls, Ontario K7A 1Z5 (613) 283-5170

Trent-Severn Waterway
Superintendent, Parks Canada,
Ashburnham Drive, P.O. Box 567,
Peterborough, Ontario K9J 6Z6
(705) 742-9267

Sault Ste. Marie Canal
Superintendent,Parks Canada, Sault Ste. Marie Administration Bldg., Sault Ste. Marie, Ontario P6A 1P0 (705) 942-6262

St. Peters Canal
Superintendent, St. Peters Canal, Parks Canada, P.O. Box 8, St. Peters, Nova Scotia B0E 3B0 (902) 535-2118

1.4 Interpretive Programs
Interpretive programs, including museums, theatres, guided walks, exhibits and publications have been developed at many of the lockstations. Information concerning these programs may be obtained from the lockmasters.

1.5 Provincial Government Literature
Descriptive literature and information on tourist facilities along the Rideau Canal and Trent-Severn Waterway is published by the Ontario Ministry of Industry and Tourism and is available on request from their office, 10A Parliament Buildings, Toronto, Ontario. Those intending to transit the St. Lawrence Seaway may obtain a copy of *The Pleasure Craft Guide* from the St. Lawrence Seaway Authority, 320 Queen Street, Ottawa, Canada K1R 5A3. Similar information for Quebec waterways may be obtained from Quebec Ministry of Recreation, Game and Fish, Quebec City, Quebec, and for Nova Scotia waterways from Nova Scotia Department of Tourism, Halifax, Nova Scotia.

It is also advisable to obtain a copy of the appropriate provincial boating regulations.

Section 2
Cruising Information

2.1 Regulations

The use and operation of the canal systems are governed by *Heritage Canals Regulations.* This booklet can be purchased from the superintendents of the respective canals and from the Canadian Government Publishing Centre, Supply and Services Canada, Ottawa, Ontario K1A 0S9. A copy of these regulations shall at all times be kept on board each vessel navigating these canals.

2.2 Speed Limits

(i) *Heritage Canals Regulations stipulate that:*

No vessel shall exceed the speed limit for the area designated on a sign in the area.

(ii) Trent-Severn Waterway & Rideau Canal boaters are cautioned that certain sections of these Canals have speed limits.

These sections are usually narrow channels or canal cuts, congested traffic areas and difficult navigation channels.

(iii) Sault Ste. Marie Canal speed limit is 6.1 knots and subject to specific instructions to a particular vessel.

All speed limit areas on the canals are part of the Canada Shipping Act, Boating Restriction Regulations.

The signs are either posted along the shoreline or on small white buoys anchored on the edge of the channel. Signs will be posted every 800 m in longer sections where speed limits exist.

There are two types of signs - the boundary marker, which marks the beginning or end of a speed limit section, and the speed limit sign, which acts as a reminder. Wherever these signs are posted, the police will be able to charge the boater under the Regulations when the maximum allowable speed limit is exceeded.

Directional/Boundary Speed Limit Sign

Regular Speed Limit Sign

Directional/Boundary Speed Limit Sign

Speed limit signs such as illustrated above may be posted on white buoys or posts on shore.

(iv) Other Waters

The following is taken from Section 240 of the "Criminal Code of Canada" and applies to all Canadian waters including those covered by *Heritage Canals Regulations:* — "Everyone who navigates or operates a vessel or any water skis, surfboard, water sled or other towed object on any of the waters or territorial waters of Canada, in a manner that is dangerous to navigation, life or limb, having regard to all the circumstances including the nature and condition of such waters and the use that at the time is or might reasonably be expected to be made of such waters, is guilty of:—

(a) an indictable offence and is liable to imprisonment for two years, or

(b) an offence punishable on summary conviction.

(v) Boaters are requested to pay particular attention to signs regarding the limiting of wake from vessels.

(vi) The height of the bottom of the wash limit bar used in conjunction with the symbol for restricting wash shall be not less than 20 cm above the surface of high water when calm.

Boating restriction symbol

Limit Bar

2.3 Navigation Aids on Canals

(i) Day Beacons

(1) The Port Beacon is used on bridge piers, lock entrances and as a channel marker on shore to indicate the port side of the channel when proceeding upstream.

Port Hand

Port Beacon

(2) The Starboard Beacon is used on bridge piers, lock entrances and as a channel marker ashore to indicate the starboard side of the channel when proceeding upstream.

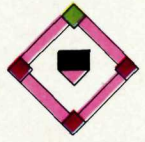
Starboard hand

Starboard Beacon

(3) Leading Beacons provide directional targets to assist navigation across long reaches or at junctions where the main channel may not be clearly defined.

Junction (preferred channel to left)

Junction (preferred channel to right)



Leading Beacons

(ii) Buoys

Buoys on the canals conform to the standard buoyage system. They consist of spars and may be port, starboard, mid channel, or middle ground buoys. Generally the channels are not equipped for night navigation. A booklet *Canadian Aids to Navigation* is available free from:
Transport Canada, Ottawa, Ontario
K1A 0N5.

2.4 Vessel Lockage Permits and Fees

A Vessel Lockage Permit is required by all vessels, other than canoes or skiffs that are not equipped for propulsion by sail or mechanical means, wishing passage through a lock on the Trent-Severn Waterway or Rideau Canal, in the Province of Ontario and the Carillon, Ste. Anne, St. Ours, or Chambly Canals in the Province of Quebec.

No fees are charged at the Sault Ste. Marie Canal. Owners are required to register their boat at the canal office on their first trip only through the canal.

Canal fees are subject to annual revision and are published in the current issue of Parks Canada folder, *Heritage Canal Fees and Hours of Operation*; obtainable from, Parks Canada Information Division, Ottawa, Ontario, K1A 1G2 and most lockmasters' offices.

Vessel Lockage Permits are not transferable between vessels or refundable. They allow passage through lock stations during normal hours of operation and may be purchased at many marinas, at canal offices and most lock stations. Advance purchase will reduce locking time. The permit must be carried on the vessel.

Permits must be presented for passage at each lock station.

2.5 Licensing of Vessels

Heritage Canal Regulations stipulates that all Canadian vessels other than canoes or skiffs not equipped for propulsion by sail or mechanical means, be licensed under the Small Vessel Regulations or registered in accordance with the Canada Shipping Act. Vessels from other countries must be licensed and marked according to the laws of their home country excepting canoes or skiffs as noted above.

2.6 Vessel Clearances

Throughout this booklet the dimensions, depth of water on the sills of locks and the depths, draughts and minimum overhead clearances in the various reaches are given for normal conditions.

The locks on some canals are narrower at the bottom than at the water surface. Some locks have a lift-wall in front of the upper gates which limits the length of vessels which can be accommodated. Cases where doubt exists with respect to draught, length, beam, clearance, etc., should be referred to the superintendent of the canal concerned.

2.7 Navigation Charts

Canals navigation charts may be ordered by mail, payment included, from:
Hydrographic Chart Distribution Office
P.O. Box 8080,
1675 Russell Road, Ottawa, Ontario
K1G 3H6.
(613) 998-4931
Prices quoted were in effect as of June 1, 1982, and are subject to change.
Navigation charts are also available from some canal offices.

2.8 Entry from Foreign Ports

Boats entering Canada from foreign ports *are required to obtain clearance papers* from the Collector of Customs at the Port of Entry.

(a) Those travelling to the Chambly Canal will find a Collector of Customs at Lacolle, Quebec.

(b) Those travelling the Rideau Canal will find customs offices at Kingston on Lake Ontario.

(c) Those travelling the Trent-Severn Waterway will find customs offices at Trenton on Lake Ontario and Midland on Georgian Bay.

(d) Those travelling through the Sault Ste. Marie Canal will find customs and immigration information at the canal Information Centre.

2.9 Signals for Locks and Bridges

It is requested that a whistle, horn or siren be sounded to signal the lockmaster or bridgemaster of your approach—

Bridges, locks	Three blasts of five seconds each.

As most of the lockgates are manually operated, it is normal to open only one gate for small craft. If boaters for any reason wish both gates to be opened to facilitate the passage of a craft in or out of the lock, indicate by giving the following signal—Four short blasts of three seconds duration.

2.10 Approach Wharves

Certain portions of tie-up and entrance walls at locks are designated as "approach wharves". Each approach wharf is marked by a sign having a white letter "A" on a blue background. A horizontal blue band is painted on the wharf as an additional means of identification. The purpose of these approach wharves is to provide mooring space for vessels while they are waiting to be locked.

Heritage Canals Regulations states that vessels shall not be moored at approach wharves during the operating day except while waiting for lockage.

2.11 Fire Prevention
During a lock operation (except on the Sault Ste. Marie Canal), boaters are not allowed to smoke, idle engines or use open-flame appliances, and should not restart their engines until so instructed by the lock operator.

2.12 Power Outlets
Outlets for the supply of electrical power to vessels are not available at lock or bridge stations or from Parks Canada service buildings adjacent to the canal.

2.13 Sailboat Facilities
Mast raising or lowering facilities are not available at Parks Canada lockstations, bridge stations or service buildings, except on the Chambly Canal. However, some marinas do provide these facilities.

2.14 Pollution
The pollution of Heritage Canals is becoming more acute each year. In order to help alleviate the problem, the canals have provided toilet facilities and garbage cans at all operating stations. Boaters are urged to make use of these facilities.

2.15 Boat Campers
In most areas, boat campers are permitted to use Heritage Canal reserve lands for camping purposes when on a trip through the system. Boat campers are not permitted to stay more than 48 hours at a lock station and must apply to the lockmaster for permission to camp. The lockmaster will issue a permit and campers must comply with its provisions and any other directions of the lockmaster.

2.16 Weed Obstructions
Water weed growth in many areas adjacent to navigation channels is very heavy during the summer months. To avoid fouling water intakes and propellers, vessel operators should proceed with caution if they deviate from the buoyed channel.

2.17 Traffic Lights
At many of the locks, red and green navigation lights have been installed to control vessels. No vessel shall pass a "limit of approach" sign unless the light is green. A flashing red light means that the lock is being prepared for your vessel.

2.18 Distress Calls Priority
Calls can be made on a marine radio channel 16 (156.8 MHz)* or on citizen band radio channel 9. The Department of Communications advises three priorities for distress calls. DISTRESS: A distress signal MAYDAY indicates that the station sending the signal is: i) threatened by grave and imminent danger and requires immediate assistance; or ii) aware that a ship, aircraft or other vehicle is threatened by grave and imminent danger and requires immediate assistance.

URGENCY: An urgency signal PAN indicates that the station calling has a very urgent message to transmit concerning the safety of a ship, aircraft or other vehicle or of some person on board or within sight.

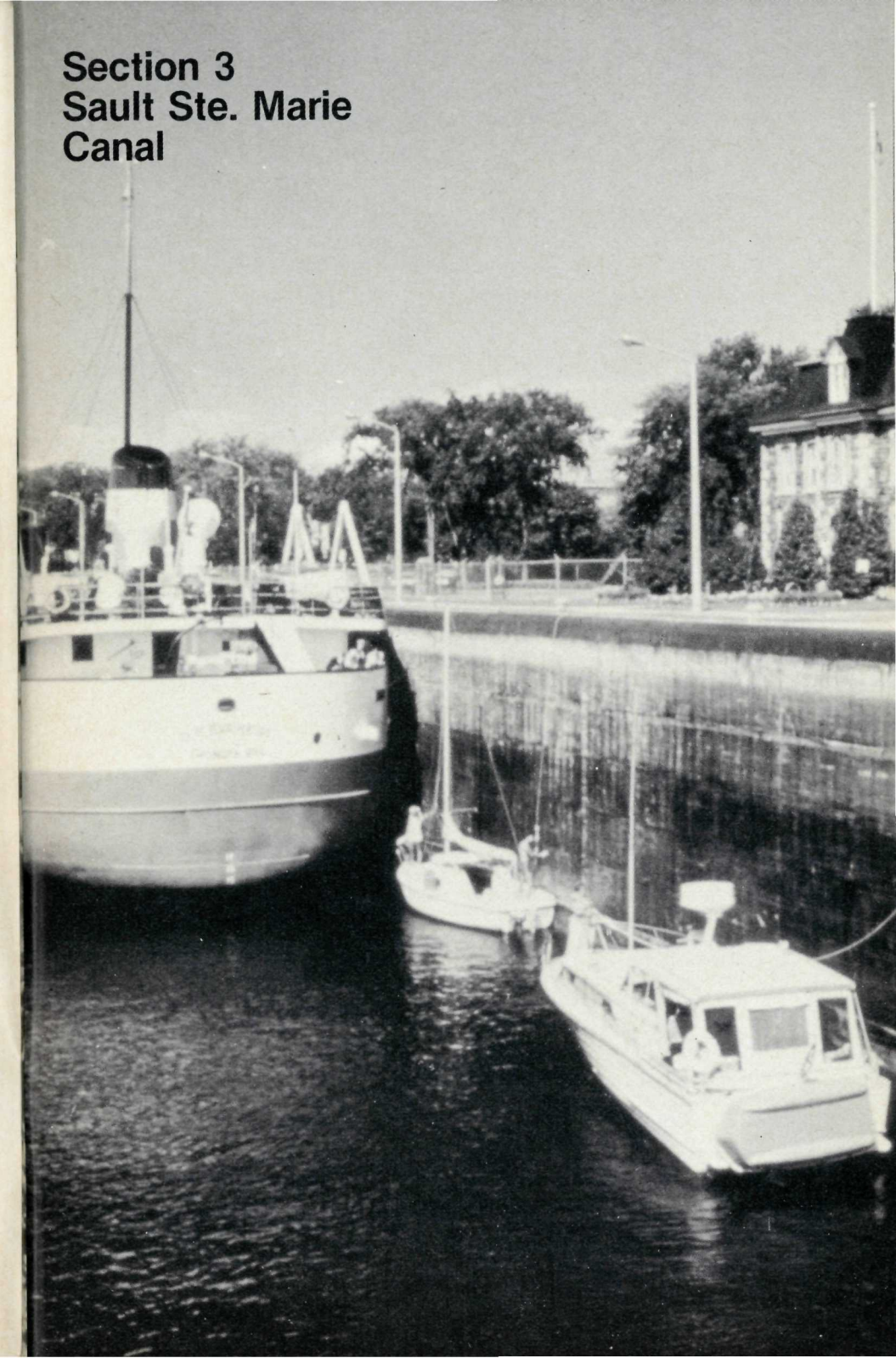
SAFETY: The safety signal SECURITY indicates that the station calling is about to transmit a message concerning the safety of navigation or giving an important meteorological warning.

*(See also 3.3 (i)).

2.19 Season
Exact opening and closing dates vary from year to year. The canals are generally open to navigation from mid-May to mid-October.

Sault Ste. Marie Canal, Ontario

Section 3
Sault Ste. Marie Canal



The 1.93 km long Sault Ste. Marie (Canadian) Canal carries the waters of Lake Superior downstream to Lake Huron. The canal cuts through the length of St. Mary's Island near the north shore of the St. Mary's River. The single lock is 274.32 m long, 18.29 m wide and has a lift of 5.79 m, with an average depth of 5.56 m. This is the only main line commercial lock in the St. Lawrence Seaway under the jurisdiction of Parks Canada.

The minimum overhead clearance under International Bridge, located west of the lock, is 37.79 m at low water datum. There is also a C.P.R. swing bridge slightly to the west of the International Bridge.

3.1 Charts

Navigation charts for the St. Mary's River system and its associated canals may be purchased year-round from: Superintendent, Parks Canada, P.O. Sault Ship Canal, Sault Ste. Marie, Ontario P6A 1P0. A remittance payable to the Receiver-General for Canada must accompany all chart orders.

St. Mary's River Charts (U.S.A.)

14882	Whitefish Bay to Sault Ste. Marie	$7
14883	Sault Ste. Marie to St. Joseph Island	$7
14884	St. Joseph Island to Drummond Island	$7

Canadian Charts

2288	St. Joseph Channel	$6
2295	Meldrum Bay to St. Joseph Island	$6

Navigation charts for the north shore of Lake Superior and the west shores of Lake Huron and Georgian Bay are also available at the Sault Ste. Marie Canal Administration Building and from the Hydrographic Chart Distribution Office, (see 2.7.)

3.2 Docking and Launching Facilities

Docking piers are located at each end of the canal and there is a boat launching ramp on the northwest tip of St. Mary's Island. South of the Sault Ste. Marie Canal are four larger U.S. controlled locks.

3.3. Radio Services

This list includes VHF call stations, as VHF radios are mandatory for commercial vessels and highly recommended for small craft; local marine channels; and local radio stations whose broadcasts are heard in the Sault Ste. Marie area so that boaters may be informed of local weather conditions and news.

Sault Ste. Marie Canal

The Sault Ste. Marie Canal, constructed between 1887 and 1895, provides an all-Canadian water link between Lake Superior and Lake Huron.

Nearly 200 years ago, Gother Mann, a British Engineer, suggested the turbulent rapids of the St. Mary's river could be by-passed by a canal, and, in 1798, the first Sault Ste. Marie Canal was completed. Built by the North West Company of Montreal, the canal was designed to carry fur trade canoes and bateaux. In spite of its small size the canal was extremely useful in the transfer of goods between company ships on lakes Huron and Superior. The canal was destroyed in 1814 by the Americans.

The construction of a modern canal to carry wheat from the Canadian West and minerals from Lake Superior was begun in 1887. At the time of its completion the canal incorporated many advanced features. For example an emergency swing dam on the north side of the upper entrance was intended to reduce the flow of water in the event of an accident. When the *Perry G. Walker* rammed the lower lock gates in 1909, all the lock gates were dragged from their anchorage. Thanks to the emergency swing dam, the canal was back in service in only 12 days.

An exhibit of maps, photographs and artifacts connected with the canal's history is located in the administration building.

(i)

VHF frequency	*Station*	*Channel*	*Function*
156.8	MHz	16	distress-calling and standby
156.7	MHz	14	working Canadian stations
156.6	MHz	12	working U.S. stations

(ii)

Local Marine Channel Call Letters	*Location*
VDX23 (Canadian Canal)	Sault Ste. Marie Canal Traffic Control Station No. 8
VBB Sault	Canadian Coast Guard
	United States Coast Guard
SOO Control	United States Coast Guard
WUD31	St. Mary's Falls Canals on Channels 16 VHF and 51 AM

(iii)

Station	*Frequency*	*Location*
CFYN	1050	Sault Ste. Marie, Ont.
CJNR	730	Blind River
CJWA	1240	Wawa
CKCY	920	Sault Ste. Marie, Ont.
CKNR	1340	Elliot Lake
CKNS	930	Espanola
CHAS-FM	100.5	Sault Ste. Marie, Ont.
CJQM-FM	104.3	Sault Ste. Marie, Ont.
WSMM-FM	99.5	Sault Ste. Marie, USA
WSOO	1230	Sault Ste. Marie, USA
WSUE-FM	101.5	Sault Ste. Marie, USA

3.4 General Data

Length	1.93 km
Average width	18 m
Number of locks	1
Length of lock	274.3 m
Total lift	5.79 m
Normal draught	5.5 m
Maximum vessel dimensions	236.8 m (length) 18 m (beam) 33.5 m (mast)
Bridges	2
1. swing, International Railway, overhead clearance	4.6 m
2. International Highway, vertical clearance	36.6 m

3.5 Speed Limit

A speed limit of 10 km/h (6 mph) is enforced between piers in the upper and lower approaches to the canal.

3.6 Approach Wharves

The east approach channel to the Canadian canal is 5.5 m to 6.1 m deep and is marked by buoys and two range lights at 46°31'N, 84°21'W. These lights north of the east entrance to the canal in line bearing 322°30', lead from their intersection with Bayfield Rock range line to the lower entrance of the canal.

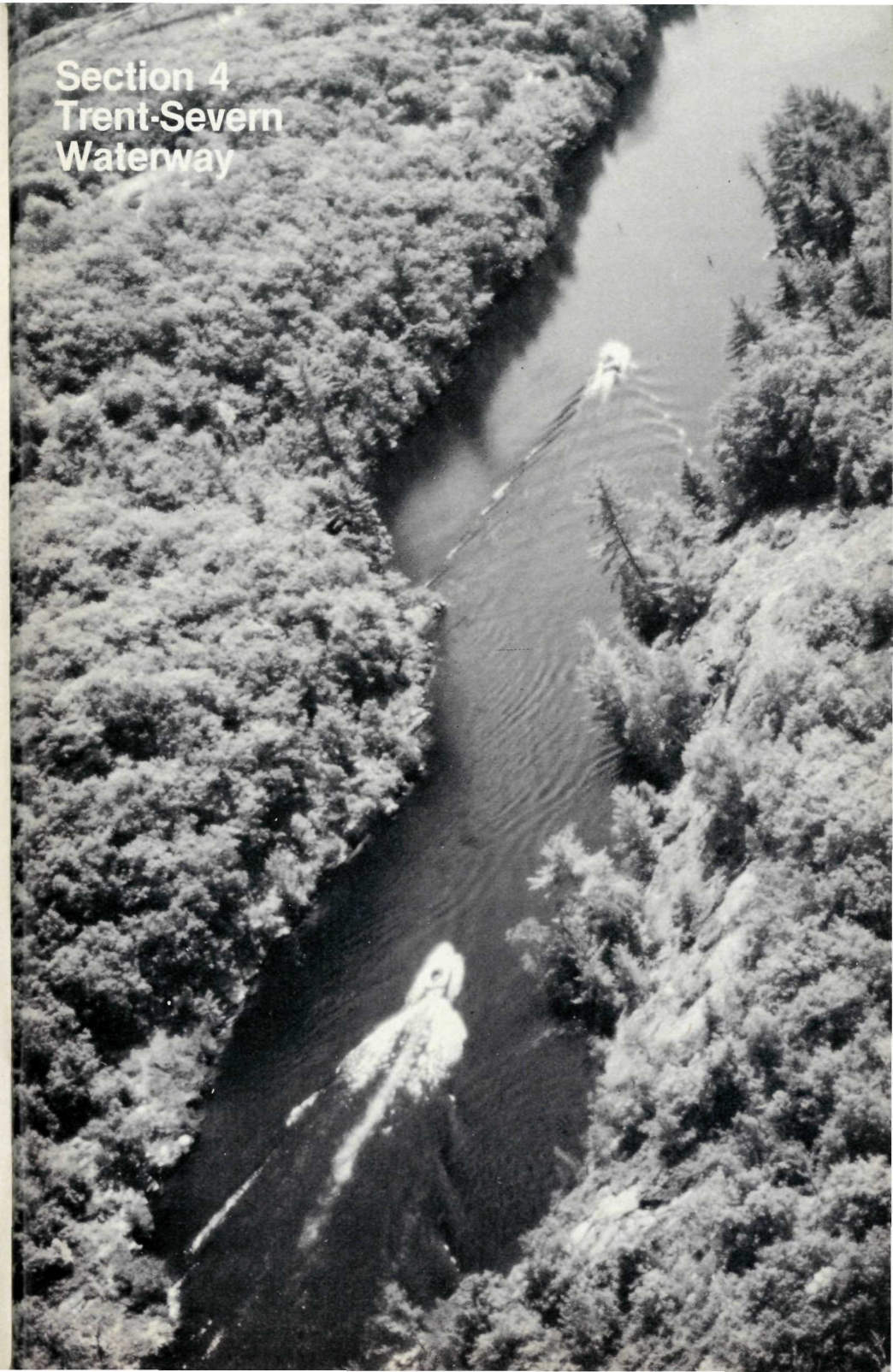
A nine-storey hotel, about 550 m southeast of the SE pier, and the City Hall are conspicuous features on the east side of the channel.

The west approach channel is marked by buoys and range lights located south of the Algoma Steel Corporation dock.

3.7 Moorings

Upbound recreational craft shall moor at the knuckle of the NE Pier, marked by a sign and blue light. Use the telephone to obtain instructions. For upbound vessels, the SE pier, being on the port side, is the approach and mooring pier while awaiting the lock. For downbound vessels, the NW pier, on the port side, is the approach and mooring pier while awaiting the lock. Moorings to either the NE and SW pier can only be under instructions from the lockmaster.

Section 4 Trent-Severn Waterway



Trent-Severn Waterway, Ontario

The distance from Lake Ontario to Georgian Bay, following the Trent-Severn Waterway is about 386 km and there are 43 locks and a marine railway. The passage through each lock normally takes 15 to 20 minutes. The total length of the actual canal channels is about 65 km and the remainder of the main route (338 km) is through improved lake and river channels.

The navigation draught, as defined in the Canadian Nautical Charts for the Trent-Severn Waterway, is the navigation channel depth of water. Boaters are to use their own judgement on whether the channel depth is sufficient for the draught of their boat.

4.1 Charts

Charts may be ordered from, and are for sale at the Trent-Severn Waterway Office, Ashburnham Drive, P.O. Box 567, Peterborough, Ontario K9J 6Z6 and the Hydrographic Chart Distribution Office (see 2.7). A remittance payable to the Receiver General for Canada in Canadian funds must accompany all chart orders. Prices in effect as of June 1, 1982.

Charts are also available for direct sale at the following stations:
Lockmaster, Lock 1, Trenton, Ont.
Trent-Severn Waterway Office, Kirkfield, Ont.
Lockmaster, Port Severn Lock, Port Severn, Ont.

Trent-Severn Waterway

From Lake Ontario at Trenton to Port Severn on Georgian Bay the Trent-Severn Waterway winds through some of the most beautiful country in Canada.

The waterway traces its history back to 1825 when Peter Robinson, a United Empire Loyalist, was chosen by the Colonial Office to lead immigrants from famine-ravaged Ireland to Upper Canada. Large numbers of these settlers came to the Trent valley.

As the settlers moved inland, pressure increased for the completion of a canal system to improve travel and stimulate the growth of communities along the waterway. The settlers' petitions were answered when work began on a small wooden lock at Bobcaygeon. The canal's construction, troubled, piecemeal and spasmodic, dragged on for 85 years, as local advocates pressed for completion of the system, from Trenton, on the Bay of Quinte, to Port Severn on Georgian Bay. On July 12, 1920, the motor launch *Irene* became the first vessel to make a complete trip through the system. The trip required nine days.

Steamboats began to operate on the Trent-Severn Waterway in the 1830s, hauling log booms and moving freight and livestock. By the late 1800s the steamers catered to scores of pleasure-seekers. Excursions were the most popular recreational activity of the day.

The opening of the Peterborough hydraulic lift lock in 1904 was considered one of the world's foremost construction achievements. With a drop of 20 m, this lock remains the highest in the world.

Its location in the heart of Ontario's recreation land, has made the Trent-Severn Waterway a scenic route for pleasure craft and a major tourist attraction.

No. 2031	Murray Canal, Presqu'île Bay to Trenton	$6
No. 2069	Bay of Quinte	$6
No. 2021	Trenton to Healey Falls Lock	$9.50
No. 2022	Healey Falls Lock to Peterborough	$9.50
No. 2023	Peterborough to Buckhorn, including Stony Lake	$9.50
No. 2024	Buckhorn to Bobcaygeon, including Chemung Lake	$11.00
No. 2025	Bobcaygeon to Lake Simcoe	$9.50
No. 2026	Lake Scugog and Scugog River	$7.50
No. 2028	Lake Simcoe and Lake Couchiching	$7.50
No. 2015	Lake Simcoe Scale 1 in. = 1 statute mile	$6.00
No. 2029	Lock 42 to Port Severn	$7.50
No. 2202	Port Severn to Parry Sound	$11.00

4.2 Storms and Squalls — Lake Simcoe and Lake Couchiching

Sudden storms are frequent on Lakes Simcoe and Couchiching and every care and seamanlike precaution should be observed when navigating the lake, especially in small craft. Mariners entering the lake can usually obtain information on the condition of its water from the Canal staff at Locks 41 and 42, and from the marina operators in the vicinity of the Atherley Narrows. For detailed weather information, dial: Marine Radio 161.9.

4.3 Big Chute Marine Railway

The new railway accommodates vessels with 100 t displacement, 1.83 m draught, 35 m length and 7.3 m beam.

For vessels having peculiar hull configurations contact the superintendent at the Trent-Severn Waterway Office.

4.4 Channel below Big Chute, km 374

The channel below Big Chute marine railways is winding and there is considerable discharge from the power-house which forms a crosscurrent below the marine railways, particularly at times when the flow is above normal. Those who have not previously navigated this channel are warned to proceed with caution. Those going downstream should ask for direction from the operators of the marine railway.

At Little Chute, approximately three kilometres downstream of Big Chute, the channel is very narrow with a strong current; boaters should proceed with care.

4.5 Radio Stations

This list of local radio stations whose broadcasts are heard along the Trent-Severn Waterway is supplied so that boaters may be informed of local weather conditions and other information of interest to persons using the canal facilities.

Station	*Frequency*	*Location*
CHAY-FM	93.1	Barrie
CKBB	950	Barrie
CJBQ	800	Belleville
CKCB	1400	Collingwood
CKWS	960	Kingston
CFRC	1490	Kingston
CKLC	1380	Kingston
CKLY	910	Lindsay
CKMP	1230	Midland
CKAN	1480	Newmarket
CFOR	1570	Orillia
CKAR	1350	Oshawa
CFBQ	1340	Parry Sound
CHEX	980	Peterborough
CKPT	1420	Peterborough
CBL	740	Toronto
CFRB	1010	Toronto
CHIN	1540	Toronto
CHUM	1050	Toronto
CKEY	590	Toronto
CKFH	1430	Toronto
CFTR	680	Toronto
CJBC	860	Toronto (French)

4.6 Canal Lake and Mitchell Lake

Boaters are advised to navigate with care in Canal Lake and Mitchell Lake, due to numerous stumps and logs. These objects come loose from time to time and may float, partially submerged, into channel areas.

4.7 Trent-Severn Waterway — Distance and General Data

Kilometres from Trenton	Structure, Locality, etc.	Bridge Clearances (metres)	Lock Dimensions in Metres: Usable Length	Minimum Width	Normal Draught	Average Lift
	(Lake Ontario—Mean level, 74.95 m above M.S.L.; Standard low water, 74.07 m above M.S.L.)					
0.00	Entrance to Bay of Quinte					
0.00	Bridge 1—Dundas St., Trenton—Highway—Swing					
0.51	Fixed Bridge	7.80				
0.58	Bridge 2—C.N.R.—Swing					
1.38	Bridge 3—C.P.R.—High level	13.21				
2.80	Bridge 4—C.N.R.—High level	9.30				
2.86	Trenton, Lock 1		46.94	9.75	2.44	5.36
3.60	Bridge 4A—High level—Highway	7.47				
3.88	Sydney, Lock 2		46.94	9.75	2.44	6.10
5.95	Bridge 5—Glen Miller—Fixed	6.71				
6.20	Glen Miller, Lock 3		46.94	9.75	2.44	8.23
8.29	Batawa, Lock 4		46.94	9.75	2.44	5.49
10.27	Trent, Lock 5		46.94	9.75	2.44	5.49
11.68	Frankford, Lock 6		46.94	9.75	2.44	4.88
12.25	Bridge 6—Frankford—Fixed	6.71				
12.89	Emergency Dam					
22.24	Glen Ross, Lock 7		46.94	9.75	2.44	3.05
22.29	Bridge 7—Glen Ross—Highway—Swing					
22.46	Bridge 8—C.N.R.—Swing					
40.65	Percy Reach, Lock 8		46.94	9.75	2.44	5.97
42.50	Meyers, Lock 9		46.94	9.75	2.44	4.88
45.04	Haigues Reach, Lock 10		46.94	9.75	2.44	7.32
47.76	Ranney Falls, Locks 11 and 12 in flight		46.94	9.75	2.44	14.63
47.87	Bridge 11—Highway—Swing					
49.51	Bridge 13—C.N.R.—High level	8.74				
50.09	Bridge 14—Campbellford—Fixed	6.71				
51.76	Campbellford, Lock 13		46.94	9.75	2.44	7.01
54.23	Crowe Bay, Lock 14		46.94	9.75	2.44	7.62
58.19	Healey Falls, Lock 15		46.94	9.75	2.44	6.64
58.22	Bridge 15—Highway—Swing					
58.75	Healey Falls, Locks 16 and 17 in flight		46.94	9.75	2.44	16.46
59.76	Fixed Bridge	6.71				
69.77	Bridge 17—Trent Bridge—Fixed	6.71				
82.27	Hastings, Lock 18		46.94	9.75	2.44	2.74
82.32	Bridge 18—Highway—Swing					
83.59	Bridge 19—C.N.R.—Swing					
91.72	Entrance to Rice Lake					
111.03	Mouth of Otonabee River					
123.18	Bridge 20—Bensfort—Fixed	7.75				
129.29	Bridge 21—Wallace Point—Fixed	7.75				
140.54	Fixed Bridge	7.75				
142.79	Scott's Mills, Lock 19		37.18	9.75	1.83	2.44
142.94	Bridge 22—Fixed	6.71				
143.11	Bridge 23—C.N.R.—Swing					
144.03	Ashburnham, Lock 20		36.57	9.75	1.83	3.66
144.19	Bridge 24—Maria St.—Swing					
144.37	Bridge 25—C.P.R.—Swing					
	For navigation between Lake Ontario and Lock 19, twelve (12) hours notice must be given by vessels of more than 1.83 m draught.					
144.98	Peterborough Lift Lock—Lock 21		42.36	9.75	1.83	19.81
145.75	Bridge 26—Norwood Road—High level	7.21				
146.44	Bridge 27—Warsaw Road—Highway—Swing					
146.48	Guard Gate					
150.04	Fixed Bridge	6.71				
150.05	Guard gate—Nassau					
150.18	Bridge 28—C.N.R.—Swing					
151.66	Nassau Mills, Lock 22		36.57	9.75	1.83	4.27
152.61	Otonabee, Lock 23		36.57	9.75	1.83	3.66
155.09	Douro, Lock 24		36.57	9.75	1.83	3.66
156.55	Sawyer Creek, Lock 25		36.57	9.75	1.83	3.05
158.85	Lakefield, Lock 26		36.57	9.75	1.83	4.78
159.30	Bridge 30—Lakefield—High level	7.16				
159.37	Guard Gate—Lakefield					
167.96	Bridge 31—Young's Point—High level	6.71				
168.10	Young's Point, Lock 27		45.72	9.75	2.69	2.21
168.13	Guard Gate—Young's Point					
181.70	Fixed Bridge	9.45				
181.79	Foot Bridge	7.31				
181.79	Burleigh Falls, Lock 28		37.79	9.75	1.83	7.32
184.64	Lovesick, Lock 30		36.57	9.75	1.83	1.07
194.15	Fixed Bridge	6.71				

4.7 Trent-Severn Waterway — Distance and General Data (Cont'd)

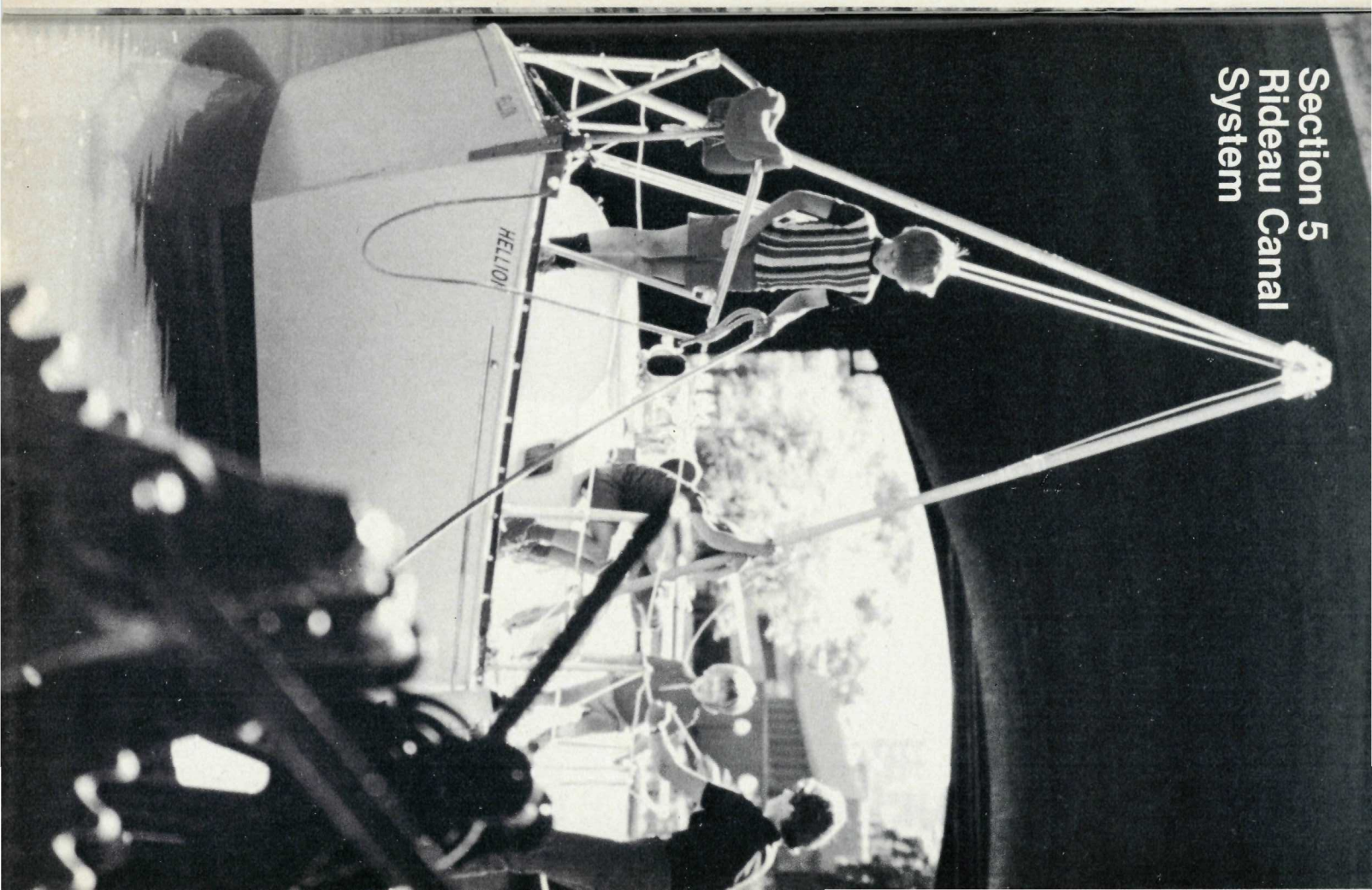
Kilometres from Trenton	Structure, Locality, etc.	Bridge Clearances (metres)	Lock Dimensions in Metres: Usable Length	Minimum Width	Normal Draught	Average Lift
194.18	Buckhorn, Lock 31		31.39	9.75	1.83	3.51
209.46	Bridge 61—Chemung Lake—Fixed	6.71				
213.50	Bridge 34—Gannon's Narrows—High level	6.71				
221.61	Fixed Bridge—Bobcaygeon	6.71				
222.33	Bridge 35—Bobcaygeon—Swing					
222.39	Bobcaygeon, Lock 32		47.24	9.75	1.83	1.65
222.43	Guard Gate					
238.15	Sturgeon Point	*Branch, Sturgeon Lake to Port Perry*				
251.33	Fixed Bridge (Wellington St.)	4.56				
251.52	Fixed Bridge (Lindsay St. N.)	3.83				
251.58	Lindsay Lock, Lock 33		36.57	9.75	1.83	2.13
252.41	Fixed Bridge (Footbridge)	3.22				
252.95	Fixed Bridge (C.N.R.)	9.60				
254.03	Fixed Bridge (Lindsay St. S.)	4.29				
255.97	Fixed Bridge (Hwy. 7 Bypass)	3.68				
234.47	Port Perry					
247.21	Fixed Bridge	7.82				
247.21	Foot Bridge	7.31				
247.21	Fenelon Falls, Lock 34		36.57	9.75	1.83	7.19
247.77	Bridge 37—C.N.R.—Swing					
252.90	Rosedale, Lock 35		45.72	9.75	1.83	1.22
254.21	Fixed Bridge	6.78				
254.40	Entrance to Balsam Lake					
		(Balsam Lake—Summit level, 256.34 m *above M.S.L.)*				
263.75	Guard gate—Balsam Lake					
265.89	Bridge 39—Victoria Road—Fixed	6.78				
268.43	Bridge 40—Portage Road—High level	7.39				
270.14	Guard Gate					
272.36	Guard Gate—Kirkfield					
272.52	Kirkfield Lift Lock—Lock 36	7.57	42.36	10.06	1.83	14.94
278.34	Bridge 42—High-level arch	8.56				
281.96	Bridge 43—Bolsover—Highway—Swing					
284.57	Bridge 44—Boundary Road—Highway—Swing					
284.88	Bolsover, Lock 37		36.57	9.75	1.83	6.62
286.50	Talbot, Lock 38		36.57	9.75	1.83	4.27
286.74	Bridge 46—Kane's—Fixed	6.71				
289.04	Portage, Lock 39		36.57	9.75	1.83	3.96
289.78	Thorah, Lock 40		36.57	9.75	1.83	4.27
290.83	Gamebridge, Lock 41		36.57	9.75	1.83	3.51
290.91	Bridge 47—Gamebridge—High level					
292.37	Bridge 48—C.N.R.—High level	6.91				
293.10	Bridge 50—Lakeshore Road—Highway—Swing					
293.18	Entrance to Lake Simcoe					
		*(Lake Simcoe Level—*218.94 m *above M.S.L.)*				
317.91	Fixed Bridge	6.96				
318.05	Bridge 52—C.N.R.—Atherley Narrows—Swing					
335.13	Bridge 54—Muskoka Road—High level	6.71				
336.53	Bridge 55—C.N.R.—Washago—Swing					
337.70	Guard Gate—Couchiching					
337.73	Couchiching, Lock 42		47.24	9.75	2.13	6.17
337.75	Bridge 56—Couchiching—Highway—High level	9.45				
342.30	Bridge 57—Hamlet—Highway—Swing					
357.86	Bridge 58—C.N.R.—Ragged Rapids—High level	10.36				
361.16	Swift Rapids, Lock 43		36.57	9.75	1.83	14.33
361.38	Footbridge and Emergency Gate	7.31				
366.99	Bridge 59—C.P.R.—Severn Falls—High level	10.24				
374.04	Big Chute, Lock 44, Marine Railway		30.48	7.31	1.83	17.68
387.07	Port Severn, Lock 45		25.60	7.01	1.83	3.66
387.07	Bridge 60—Port Severn—Highway—Swing					
387.09	Entrance to Georgian Bay					

(Lake Huron — Mean level 176.97 m *above M.S.L. Standard low water* 176.33 m *above M.S.L.)*

The depth of water on lock sills varies with prevailing weather conditions and winds, and on occasion may be below normal.

			Length in Kilometres	
	No. of Locks	*Normal Draught (Metres)*	*Canal*	*Lake or River*
1. Murray Canal—Presqu'ile Bay to Bay of Quinte		2.90	12.12	
Bay of Quinte from Murray Canal to Trenton				4.83
2. Trent-Severn Waterway				
Trenton to lower entrance Lock 19, Peterborough	18	2.44	14.08	128.74
Lock 19 Peterborough to Big Chute	23	1.83	39.43	191.83
Big Chute Marine Railway		1.83		
Big Chute to Georgian Bay at Port Severn	1	1.83		13.04
Totals	42		65.63	338.44
Total distance, Presqu'ile Bay to Port Severn—404.06 km				
Branches of Trent—Severn Waterway				
Buckhorn Lake to Bridgenorth	0			14.48
Sturgeon Lake to Lindsay	1	1.83	0.16	15.93
Lindsay to Port Perry	0	1.22		40.23

Rideau Canal, Ontario



Section 5
Rideau Canal System

Rideau Canal
Now a scenic waterway, the Rideau Canal was constructed by the British military after the War of 1812 to provide Upper Canada (now Ontario) with a safe transportation route in the event of an American attack. The canal made it possible to navigate from Montreal in Lower Canada to Lake Ontario bypassing the rapids of the St. Lawrence and the international boundary.

Lieutenant-Colonel John By of the Royal Engineers supervised the construction of the canal system to connect Kingston, which was then Upper Canada's largest town, and Bytown, a tiny settlement at the mouth of the Rideau. The canal was opened in the summer of 1832 and served as a valuable commercial artery until the 1850s. After its transfer to the colonial government by Britain, the Ottawa and Rideau system became a local transportation route for an area poorly served by roads. Today the historic and scenic Rideau Canal is a recreational corridor for pleasure-boaters investigating Canada's history.

Fourteen locks lift vessels 50.04 m from Lake Ontario to Newboro, the highest point on the canal; 31 other locks lower vessels 83.21 m to the level of the Ottawa River. There are 23 lockstations where visitors can learn about past and present canal operations. Highlights include:

Kingston Mills - At Lockmaster Anglin's visitor centre, films, exhibits, and displays tell the story of the canal. The restored blockhouse, one of four on the canal, has been furnished to the 1839 period of occupancy by the Frontenac County militia.

Jones Falls - The keystone arch dam, the highest in North America when constructed in 1830, was recognized as an outstanding colonial engineering feat. Today the calm basin waters echo the hammer blows of the Rideau Canal blacksmith producing hardware in his 1843 smithy. The hilltop lockmaster's house has been restored and furnished to illustrate a 19th-century lockmaster's lifestyle.

Merrickville - The largest blockhouse on the canal is now a local museum at Merrickville with many artifacts of the area on display. Walking and driving tours of Merrickville and the surrounding countryside are described. The lockside ruins of one of the first woollen mills in Upper Canada are worth exploring.

Burritts Rapids - The Tip to Tip Trail passes cool cedar forests, muskrat marshes, historic houses and a beech nut grove and introduces visitors to the details of canal operations. Trail brochures are free at the lock office.

Ottawa - In winter this stretch of the canal becomes a 6.3 km skating rink. Thousands of skaters travel the historic route from Ottawa Locks to Hartwell's Locks through the heart of downtown Ottawa.

Ottawa Locks - This flight of eight locks is unique in Canada; it lifts boats the 24-m from the Ottawa River to the man-made portion of the canal. The oldest building in Ottawa, which was a supply depot during construction of the canal, now houses the Bytown Museum. The Ottawa locks will be closed for 22 months beginning in September 1982.

The distance from Lake Ontario, to the Ottawa River following the Rideau Canal route is about 201 km. There are 47 operating locks, including the Tay Branch, the passage through each of which normally takes 10 to 15 min.

The total length of actual canal channel is about 19 km and the remainder of the main route is through improved lake and river channels. The speed limit in dug canal channels is 9 km/h or as posted. It is emphasized that the speed limit on Dow's Lake in the City of Ottawa is 9 km/h and this is rigidly enforced.

The Tay Branch is reached by two locks from Lower Rideau Lake to the raised waters of the Tay River which it follows to the Town of Perth, a distance of about 10 km.

5.1 Charts
Charts may be ordered from the Rideau Canal office, 12 Maple Avenue, N., Smiths Falls, Ontario K7A 1Z5 and Hydrographic Chart Distribution Office (see 2.7). A remittance payable to the Receiver General for Canada must accompany all chart orders.

Charts are also sold at the following stations during navigation season:
Ottawa Locks
Smiths Falls Detached Lock
Kingston Mills Locks
Chaffeys Locks
Narrows Lock
Poonamalie Lock
Merrickville Locks
Burritts Rapids Lock
Long Island Locks

Rideau Canal Charts

1513—Smiths Falls to Kingston including Tay Branch to Perth	$11
1512—Smiths Falls to Ottawa	$9.50

5.2 Radio Stations
This list of local radio stations whose broadcasts are heard along the Rideau Canal is supplied so that boaters may be informed of local weather conditions and other information of interest to persons using the canal facilities.

Station	*Frequency*	*Location*
CBO-FM	103.3	Ottawa
CBO	920	Ottawa
CBOF	1250	Ottawa (French)
CBOF-FM	102.5	Ottawa (French)
CFGO	1440	Ottawa
CKCH	970	Hull (French)
CIMF-FM	94.9	Hull (French)
CKOY	1310	Ottawa
CKBY-FM	105.3	Ottawa
CJRC	1150	Ottawa (French)
CFRA	580	Ottawa
CFMO-FM	94.0	Ottawa
CHEZ-FM	106.1	Ottawa
CJET	630	Smiths Falls
CJET-FM	101.1	Smiths Falls
CKWS	960	Kingston
CKLC	1380	Kingston

5.3 Rideau Canal—Distance and General Data

Kilometres from Ottawa	Structure, Locality, etc.	Bridge Clearances (metres)	Lock Dimensions in Metres: Normal Draught	Lock Dimensions in Metres: Average Lift
	(Useful length of all locks 30.5 m approx.)			
	(Ottawa River—Mean level 40.84 m above M.S.L.)			
0.00	Ottawa River, Ottawa			
0.00	Ottawa Locks, 1 to 8, in flight		1.52	24.08
0.35	Plaza—Concrete arch and steel bridge	7.92		
0.64	Mackenzie King—Concrete fixed span bridge	8.23		
0.87	Laurier Avenue—Steel arch bridge	8.23		
2.41	Fixed Bridge	7.92		
2.51	Bridge 1—Vertical Lift—Pretoria Ave.			
2.52	Bank Street—Concrete arch bridge	8.84		—
5.50	Bronson Avenue—Concrete fixed span bridge	6.71		—
6.71	Hartwell Locks, 9 and 10 in flight		1.52	6.55
8.21	Fixed Bridge	8.53		
8.42	Hogs Back Locks, 11 and 12 in flight		1.52	4.42
8.45	Bridge 4—Swing—Hogs Back; canal enters Rideau River			
11.96	C.N.R. High-level bridge	9.45		
14.89	Lock 13—Black Rapids			—
22.93	Long Island Locks, 14 to 16 in flight		1.52	2.79
23.06	Bridge 5—Swing—Long Island, over Lock 16		1.52	7.72
25.80	Manotick—High level—Fixed bridge	7.01		
37.01	Kars—High level—Fixed bridge	6.71		
37.54	Public Wharf			
46.35	Highway 416—High level—Fixed bridge	6.71		
49.05	Channel to Kemptville		*South Rideau Branch to Kemptville*	
53.72	Kemptville Wharf		*Navigable, shallow draught vessels only*	
51.38	Becketts—High level—Fixed bridge	8.53		
62.65	Lock 17—Burritts Rapids		1.52	2.74
63.45	Bridge 9—Swing—Burritts Rapids			
67.32	Flight Lock 18—Nicholsons		1.52	1.98

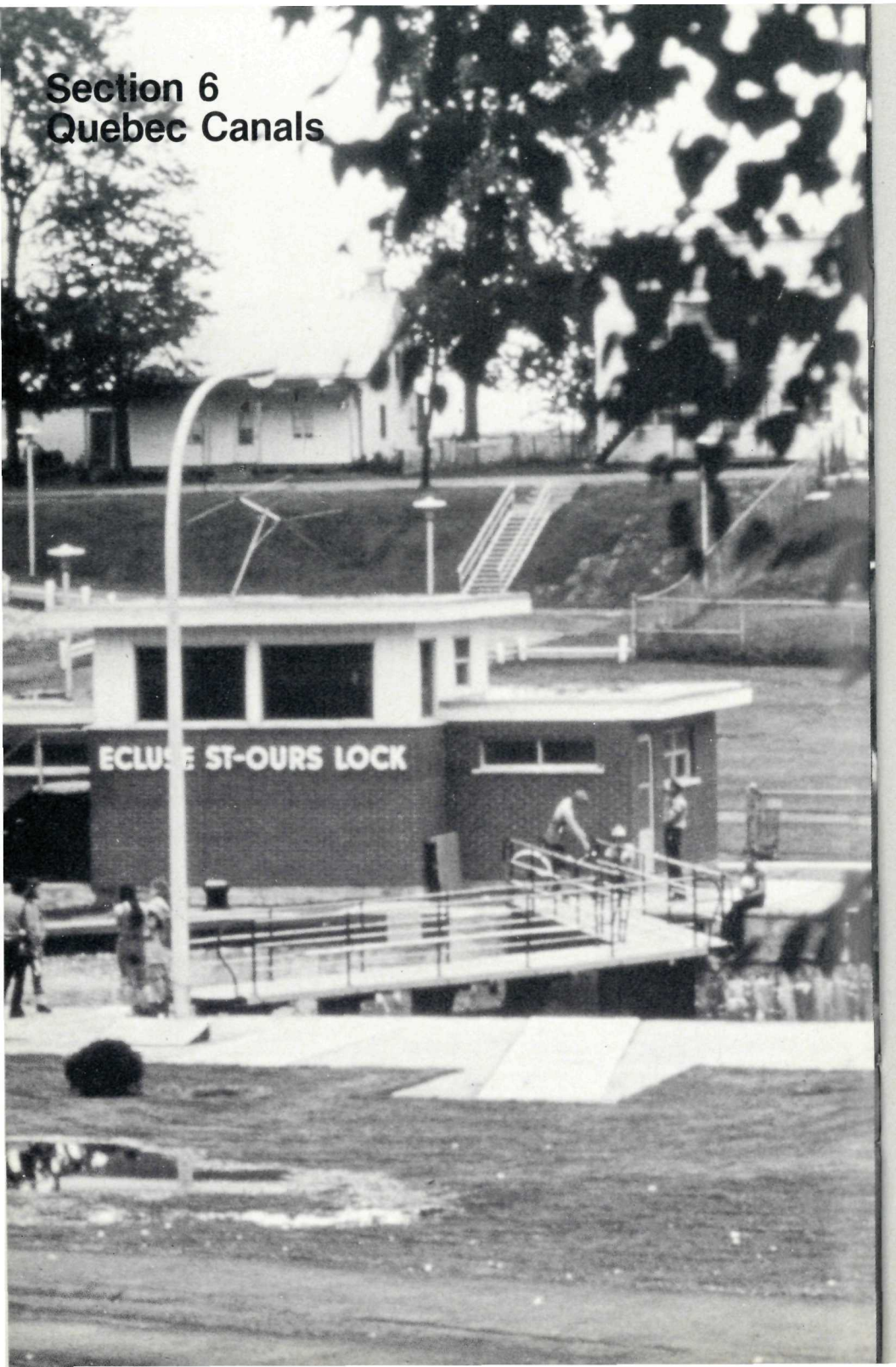
67.74	Flight Lock 19—Nicholsons		1.52	2.44
67.75	Bridge 10—Swing—Nicholsons—over Lock 19		1.52	2.31
68.40	Lock 20—Clowes			
71.29	Merrickville—C.P.R. High-level bridge	11.89		
71.86	Flight Lock 21—Merrickville		1.52	2.64
71.95	Flight Lock 22—Merrickville		1.52	3.05
72.11	Flight Lock 23—Merrickville		1.52	1.83
72.11	Bridge 11—Swing—Merrickville over Lock 23			
84.99	Lock 24—Kilmarnock		1.52	0.61
85.00	Bridge 13—Swing—Kilmarnock, over Lock 24			
90.47	Lock 25—Edmonds		1.52	2.79
92.89	C.P.R. High-level bridge—Smiths Falls	9.14		
92.89	Old Slys Locks 26 and 27, in Flight		1.52	4.88
92.97	Bridge 15—Swing—Old Slys			
94.21	Fixed Bridge—Entrance Lock 29A	7.92		
*94.22	Smiths Falls—High Lock 29A		1.52	7.92
94.72	Bridge 19—Swing—Abbott Street			
94.76	Smiths Falls Detached Lock 31		1.52	2.59
94.92	C.N.R. Bascule bridge			
98.14	Lock 32—Poonamalie		1.52	1.75
99.10	Entrance to Lower Rideau Lake			
104.17	Diversion to Tay Branch	*Tay Canal to Perth*		
105.89	Canal entrance—Beveridge Bay—Rideau Lake			
106.21	Lock 33—Beveridges		1.52	3.66
106.36	Fixed Bridge	6.71		
106.73	Lock 34—Beveridges		1.52	3.96
107.86	Bridge 26—Rideau Ferry—Fixed	8.53	*(Total length of Tay Branch* 9.85 km*)*	
115.10	Perth, Craig St.—Fixed bridge—Public wharf	2.36		
115.50	Perth, Beckwith St.—Fixed bridge	1.58		
115.64	Perth, Drummond St.—Fixed bridge	2.90		
115.74	Perth, Basin Wharf			
115.81	Gore St.—Fixed bridge, end of canal			
116.55	Diversion to Portland		*Channel to Portland Wharf on South Shore*	
126.97	Portland Public Wharf		*Big Rideau Lake*	

5.3 Rideau Canal — Distance and General Data (Cont'd)

Kilometres from Ottawa	*Structure, Locality, etc.*	*Bridge Clearances (metres)*	*Lock Dimensions in Metres* Normal Draught	Average Lift
128.78	Lock 35—The Narrows		1.52	0.91
128.78	Bridge 27—Swing—The Narrows			
128.87	Entrance to Upper Rideau Lake *(Summit level 124.36 m above MSL)*			
128.87	Diversion to Westport		*Channel to Westport Wharf on West Shore*	
132.32	Westport—Public wharf		*Upper Rideau Lake*	
135.87	Newboro—High level—Fixed bridge	8.23		
136.37	Lock 36—Newboro		1.52	2.36
144.42	C.N.R. High-level bridge	9.14		
144.84	Lock 37—Chaffeys		1.52	3.28
144.84	Bridge 30—Swing—Chaffeys			
148.30	Lock 38—Davis		1.52	2.74
154.41	Fixed Bridge—Officer's Quarters	7.01		
155.22	Lock 39—Jones Falls		1.52	4.19
155.27	Jones Falls basin			
155.44	Locks 40 to 42 in flight—Jones Falls		1.52	13.64
159.93	Diversion to Morton			
162.54	Morton dam; no public wharf		*Channel to Morton Dam*	
162.35	Diversion to Seeleys Bay		*on Morton Creek*	
163.39	Seeleys Bay Public Wharf		*Channel to Seeleys Bay*	
165.89	Bridge 36—Swing—Brass' Point		*Village and Wharf*	
172.65	Locks 43 and 44 in flight—Upper Brewers		1.52	5.49
173.13	Fixed bridge	6.71		
175.51	Bridge 39—Swing—Lower Brewers, over entrance to Lock 45			
175.51	Lock 45—Lower Brewers (Washburn)		1.52	3.96
191.20	Lock 46—Kingston Mills		1.52	3.00
191.20	Bridge 41—Swing—Kingston Mills over Lock 46			
191.23	Kingston Mills basin			
191.36	Locks 47 to 49 in flight—Kingston Mills		1.52	10.72

191.39	C.N.R. high-level bridge over Locks 47 and 48	8.23	
192.41	Highway 401—Fixed bridge	7.32	
198.80	Kingston—LaSalle Causeway—Bascule bridge Small craft under 4.27 m vertical clearance may pass through LaSalle Causeway by using the small boat channels at the eastern end of the causeway. *(Lake Ontario—Mean level,* 74.95 m *above M.S.L.)* *(Standard low water* 74.07 m *above M.S.L.)*		

Section 6
Quebec Canals



St. Ours Lock, Richelieu River, Quebec

Chambly Canal
The opening of the Chambly Canal marked the beginning of heavy commercial traffic on the Richelieu River. Boats from as far away as Bytown - Canada's future capital - passed through the canal on their way to markets in the United States. Schooners, small sailboats, and later, paddlewheelers, carried wood, grain, coal, iron, and other goods as local and international trade flourished.

The economic importance of the canal declined as other methods of transportation were developed and trade in lumber declined.Today the canal is a popular recreational corridor in winter and summer. Nine locks along a distance of 19 km between Chambly and Saint-Jean lift boats 22 m. Most of the locks are still hand-operated.

Saint-Ours Lock
The construction of the Saint-Ours Lock, which opened in 1849, marked another step in increasing the north-south flow of trade on the Richelieu River.

Wood, coal, hay, flour, iron, and copper moved between Canada and the United States through the Chambly Canal and the Saint-Ours Lock.

Today the Saint-Ours Lock is popular with recreational boaters travelling between Lake Champlain and the St. Lawrence River.

Carillon Lock
The Carillon Lock, built between 1960 and 1963, is an impressive single-lock concrete structure. It is 57 m by 14 m and carries boats over a difference in water level of 20 m in one operation, a feat that formerly would have required ten locks.

The first construction at this site dates from 1825 and the remains of the lower lock of the original canal can still be seen.

The British, fearing an American blockade of the St. Lawrence River, decided to build a series of canals on the Ottawa River to ensure a military supply route between Montréal and Kingston. The Carillon Lock became a commercial waterway for moving wood from the forests of the Ottawa Valley.

Sainte-Anne-de-Bellevue Lock
Thousands of recreational boaters pass through the Sainte-Anne Lock between the Ottawa Valley and the St. Lawrence River each year.

In 1816 a lock was built between Ile Perrot and the mainland by a private company that charged its competitors high tolls to use the waterway. As a result of numerous petitions to the legislature of Lower Canada, a second lock was built between 1840 and 1843.

Built of cut stone the lock was poorly designed with a winding shallow channel. In 1882 a better lock was built parallel to the first. It measured 2.7 m deep, 61 m long, and 14 m wide.

Lachine Canal
Between 1825 and 1959, ships of the St. Lawrence River bypassed the Lachine Rapids between the port of Montréal and Lac Saint-Louis through the Lachine Canal.

Construction of the first canal began in 1821 when 500 men dug a channel 14.5 m wide with seven locks. Work continued on that project until 1825. Modifications during the 19th century created the existing canal, which is 4.2 m deep, 82 m to 91 m wide, and about 13.7 m long, with five locks.

At the turn of the 19th century the Lachine Canal was the site of the largest concentration of industry in Canada because of its proximity to the port of Montréal, the commercial transport it carried, and its hydraulic potential. The opening of the St. Lawrence Seaway in 1959 marked the end of navigation on the canal. The bridges were fixed in position and the locks closed.

Today the canal is a popular urban recreational facility. Situated on the southwestern sector of the Island of Montréal, it crosses five cities: Lachine, La Salle, Montréal West, Ville Saint-Pierre, and Montréal.

A bicycle path along the historic canal becomes a favourite cross-country ski trail in winter. Some stretches are used by canoeists in summer and skaters in winter. Picnic tables are provided.

6.1 Charts
Navigation charts covering these waters may be obtained at the following addresses in Montreal: Kelvin & Hughes (Canada) Ltd., 401 McGill Street; Harrison Company, 1448 St. Catherine St. West; Gabriel Aero-Marine Instruments Ltd., 351 St. Paul St., West.

Charts may be ordered by mail, payment enclosed, from: Hydrographic Chart Distribution Office (see 2.7). Prices as of June 1, 1982.

Ottawa River charts	
1511—Ottawa to Carillon	$9.50
1510—Lake of Two Mountains	$7.50
1410—Lake St. Louis	$6.00
Richelieu River charts	
1325—Sorel to Beloeil Bridge	$6.00
1326—Chambly Basin to Lake Champlain	$6.00

6.2 Radio Stations
This list of local radio stations whose broadcasts are heard along the Quebec Canals System is supplied so that boaters may be informed of local weather conditions and other information of interest to persons using the canal facilities.

Station	*Frequency*	*Location*
CBF	690	Montreal (French)
CBF-FM	100.7	Montreal (French)
CBM	940	Montreal
CBM-FM	93.5	Montreal
CFCF	600	Montreal
CFGL-FM	105.7	Laval (French)
CFQR-FM	92.5	Montreal
CHRS	1090	Longueuil (French)
CITE—FM	107.3	Montreal (French)
CJAD	800	Montreal
CJFM-FM	95.9	Montreal
CJMS	1280	Montreal (French)
CKMF-FM	94.3	Montreal (French)
CKAC	730	Montreal (French)
CKGM	980	Montreal
CKLM	1570	Laval (French)
CKOI-FM	96.9	Verdun (French)
CKVL	850	Verdun (French)

6.3 Ottawa River Route
Drifting and submerged logs may create a danger to navigation, particularly to high speed craft. Appropriate caution should be exercised at all times.

Ste. Anne Canal
The distance from the Ste. Anne Canal to the Carillon Canal is 83.2 km. There is a launching ramp for small craft near the lock.

Length	600 m
Number of locks	1
Dimensions of lock	60.96 m by 13.72 m
Total lift	91 cm
Normal draught	2.74 m
Overhead clearance with 2.74 m of water on lower sill	12.62 m

Below Ste. Anne Canal, there is a channel (Baker's Dam) measuring 366 m in length, by 36.6 m in width, located 800 m below the lock and rapids, through the shoal.

Carillon Canal
The Carillon Canal replaces the old Carillon and Grenville Canals.

The distance from the Carillon Canal to the foot of the Rideau Canal in Ottawa is 109.5 km.

Length	805 m
Number of locks	1
Dimensions of lock	57.3 m X 13.72 m
Total lift	19.81 m
Normal draught	2.74 m
Breadth of canal at bottom	13.72 m to 15.24 m
*Breadth of canal at water surface	13.72 m to 24.38 m
Minimum overhead clearance	12.8 m (lock bridge)

The lock is power operated with a vertical lift gate at the lower end, and sector gates at the upper end. Four floating bollards are provided in the lock. The lock is lighted by electricity. Between Carillon Canal and the foot of the Rideau Canal, the minimum overhead clearance is 12.8 m under Perley Bridge, at Grenville.

*A floating wharf, installed inside the lock, reduces its breadth to 12 m. This wharf can be removed to permit access to larger vessels.

6.4 Lachine Canal

The Lachine Canal, which is 13.7 km long and averages 4.27 m in depth, transects the southwest of Montreal Island between Lake St. Louis and Montreal Harbour.

This canal differs from the others in the Heritage Canal System, for the lock at the eastern end is filled in and the canal is closed to through traffic. In addition, all moving bridges have been permanently fixed into place, so that boating on the Lachine canal is limited to non-motorized pleasure craft.

6.5 Richelieu River Route

St. Ours Canal

Length	240 m
Number of locks	1
Dimensions of lock	103.3 m by 13.72 m
Normal draught	3.66 m
Total lift	1.52 m
Minimum overhead clearance	No restrictions

The lock is operated and lighted by electricity.

From St. Ours Lock to the foot of the Chambly Canal the distance is 51.5 km and the normal draught is 3.66 m. The minimum overhead clearance under the Trans-Canada Highway bridge located 3.22 km downstream of Beloeil is 15.24 m.

There is a launching ramp for small craft near the lock.

Chambly Canal

Length of canal	18.96 km
Number of locks	9
Dimensions of locks:—	
Lift Locks 1 to 8	Width, from 6.97 m to 7.42 m Length, from 36.73 m to 38.4 m
Guard Lock 9 at St. Jean	36.75 m by 7.12 m
Total lift	24.38 m
Normal draught	1.98 m
Breadth of canal at bottom	11 m
Breadth of canal at water surface	18.29 m
Minimum overhead clearance	8.84 m (Highway high-level bridge)

The canal overcomes the rapids between Chambly and St. Jean. The locks are hand-operated and the canal is lighted by electricity. From St. Jean to the International Boundary the distance is 35.4 km. Winches for lowering and raising masts upon entering and leaving the canal are available.

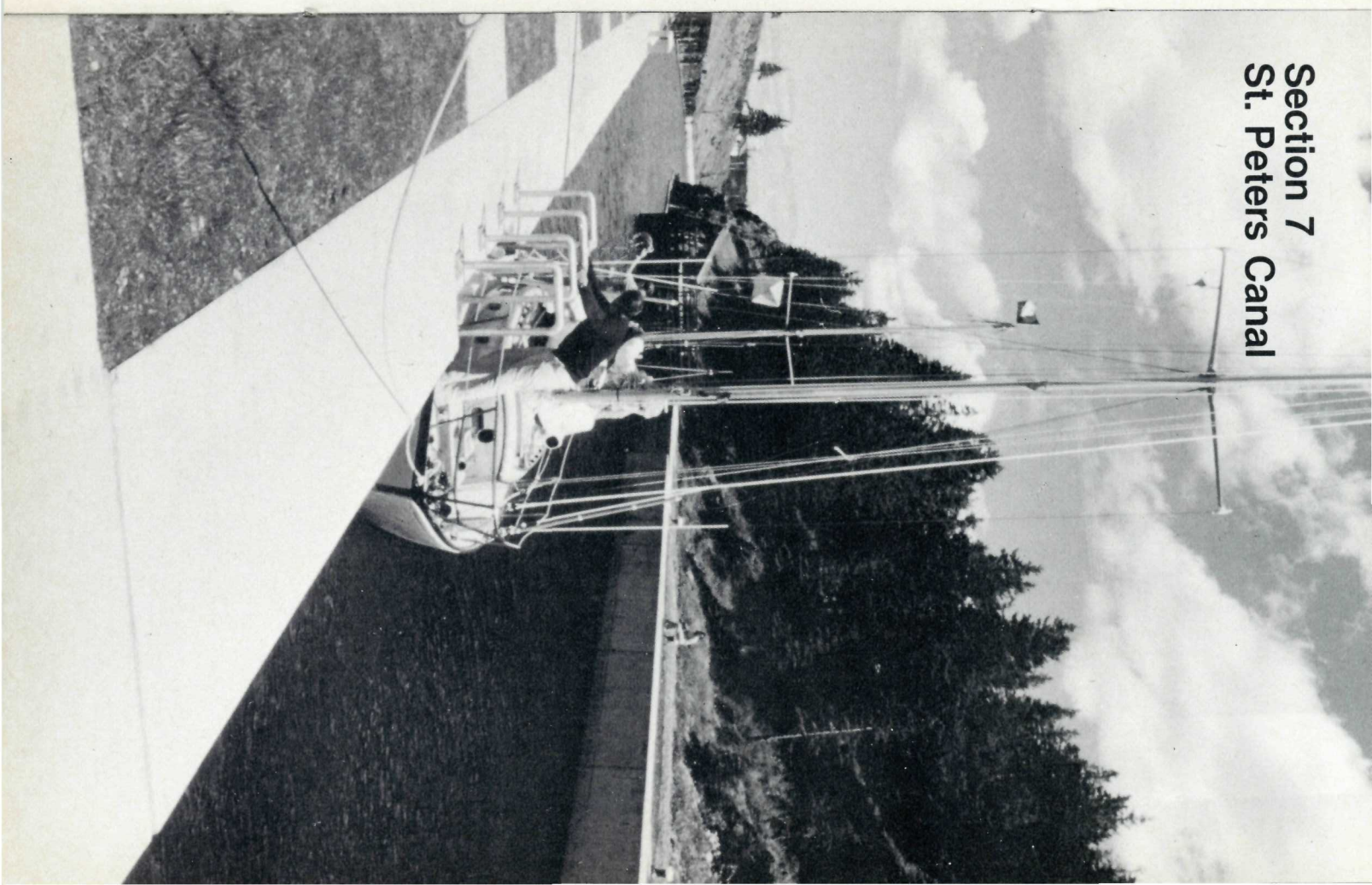
6.6 Chambly Canal — Distance and General Data

Kilometres from Chambly	*Structure, Locality, etc.*	*Lock Dimensions in Metres*				
		Length Between Hollow Quoins		*Minimum Width*	*Normal Draught*	*Lift*
		total	*serviceable*			
0.00	Entrance—Chambly Basin (outer end of guide pier)					
*0.00	Winch for lowering and raising masts					
0.19	Lock 1	38.35	34.00	7.09	1.98	4.72
0.23	Lock 2	38.38	33.98	7.09	1.98	2.96
0.27	Lock 3	38.40	34.02	7.05	1.98	2.99
0.29	Bridge 1 — Swing — Bourgogne St., Chambly					
1.16	Lock 4	36.73	34.07	7.04	1.98	2.19
1.35	Lock 5	36.78	34.03	7.21	1.98	2.44
1.50	Lock 6	36.78	34.28	6.97	1.98	2.50
1.74	Bridge 2 — Open — rue de l'Église, Chambly					
2.03	Lock 7	36.78	34.20	7.09	1.98	2.26
2.09	Highway high-level bridge-clearance 8.84 m, boulevard Perigny, Chambly					
2.43	C.N.R. Bridge—Chambly Canton—Swing	38.40	34.07			
2.57	Lock 8			7.21	1.98	2.74
2.59	Bridge 3 (Mark's)—Rolling					
3.43	Bridge 4—Swing—Farm road					
4.44	Bridge 5—Swing—Farm road					
5.34	Overpass, High-level-Clearance 9.14 m, Autoroute 10					
6.03	Bridge 7—Swing—Highway					
8.96	Bridge 9—Ile Ste. Therese—Swing—Highway					
13.39	Bridge 10—Ile Ste. Therese—Swing—Highway					
15.45	Siphon Culvert					
15.70	Highway high-level bridge—Clearance 8.84 m					
17.91	Lock 9	36.75		7.12	1.98	1.58
18.07	C.P.R. Bridge at St. Jean—Swing					
18.52	Bridge 12 (Gouin) at St. Jean—Bascule—Highway					
18.83	Entrance—Richelieu River (end of guide pier)					

Kilometres from Chambly	Structure, Locality, etc.	Lock Dimensions in Metres: Length Between Hollow Quoins	Minimum Width	Normal Draught	Lift
*18.86	Winch for raising and lowering masts				
18.96	Upper end of wharf				
	Total Lift				24.38

*Available during hours of operation

St. Peters Canal, Cape Breton Island, Nova Scotia



Section 7
St. Peters Canal

This canal cuts through the isthmus that separates Bras d'Or Lake from St. Peters Bay, Cape Breton Island, Nova Scotia.

Length of canal	about 805 m
Breadth at water line	16.76 m
Lock	1 tidal lock, 4 pairs of gates
Dimensions of lock	91.44 m x 14.45 m
Normal draught	*4.88 m*
Depth of water on sills	5.18 m at lowest water
Extreme rise and fall of tide in St. Peters Bay	2.13 m

There is one highway swing bridge. Clearance when the bridge is in a closed position — 6.1 m. The swing bridge and lockgates are electro-hydraulically operated and the bridge is illuminated for night use.

Normal lockage time for small craft is 15 min; however, when the swing bridge must be opened lockage time is extended to 45 minutes.

At the north end of Bras d'Or Lake there is a fixed highway bridge with a 35.7 m clearance.

Visitors can take advantage of picnic grounds and camping sites in a nearby provincial park.

7.1 Charts
Navigation charts covering the St. Peters Canal can be obtained from the Hydrographic Chart Distribution Office (see 2.7) and from the St. Peters Canal Office. P.O. Box 8, St. Peters, Nova Scotia:

No. 4336—St. Peters Bay	$6
No. 4354—Bras d'Or Lakes	$6

Prices as of June 1, 1982.

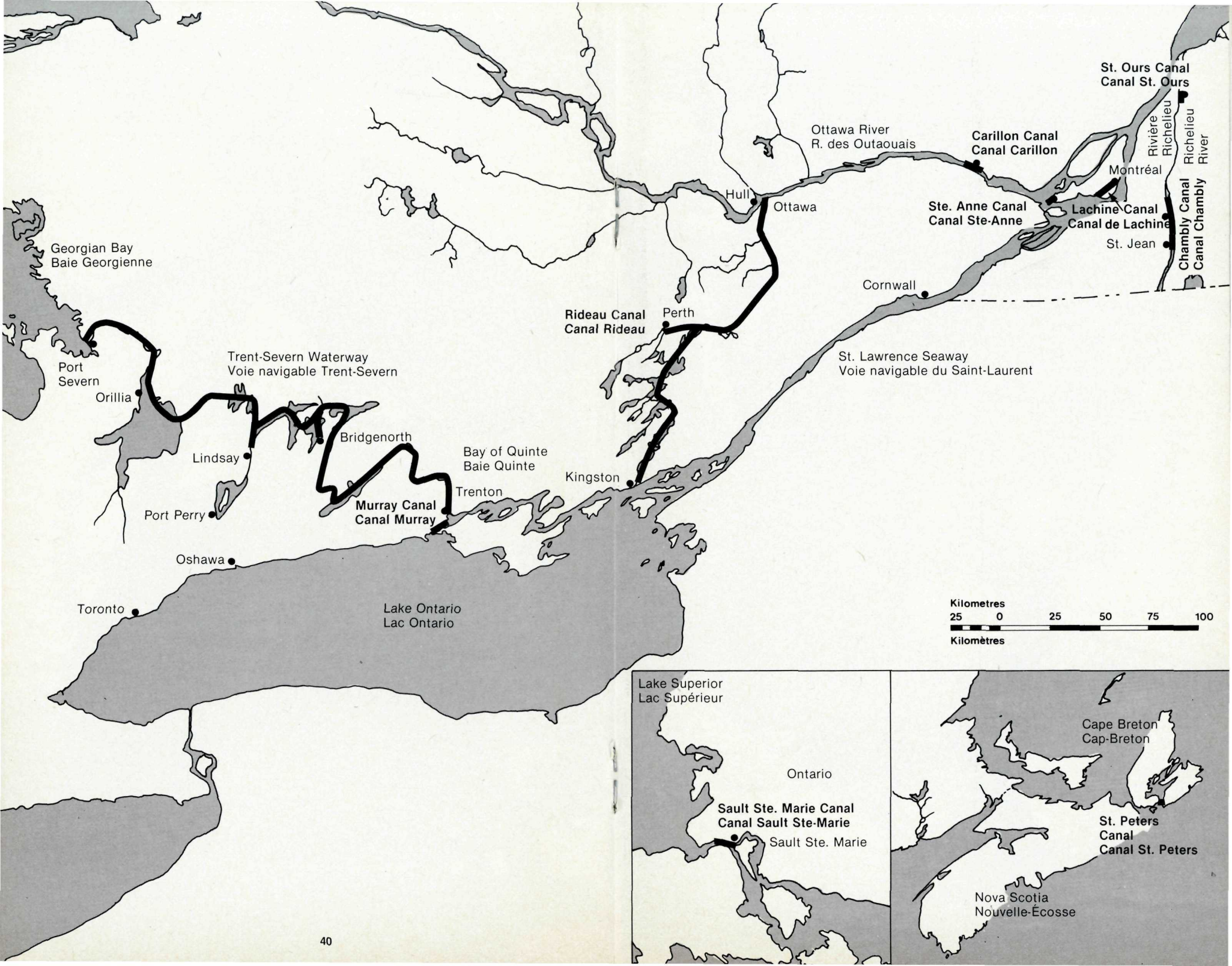
7.2 Radio Stations
The following radio stations are listed so that boaters may be informed of local weather conditions and news.

Station	*Frequency*	*Location*
CIGO	1410	Antigonish
CJFX	580	Port Hawkesbury

St. Peters Canal
Commanding the isthmus separating the Atlantic Ocean and Bras d'Or Lake, St. Peters had always been considered an ideal site for fortifications, and has been a centre of Cape Breton's fishing industry since Nicolas Denys established the first European settlement in 1653. Denys and his French successors erected small forts, and in 1793-1794 the British built Fort Dorchester on the east side of St. Peters. Evidence of Fort Dorchester can still be found.

Construction of the canal along traces of a French portage across the narrow isthmus began in 1854, but was not completed until 1869. The canal was enlarged in 1876-1880, again in 1912-1918, and is now about 805 m long.

NOTICE
St. Peters Canal will be closed to navigation for 12 months beginning in September, 1984. Parks Canada will reconstruct the walls at the Bras d'Or Lake entrance to the canal.


St. Ours Canal
Canal St. Ours
Rivière Richelieu
Richelieu River
Ottawa River
R. des Outaouais
Carillon Canal
Canal Carillon
Montréal
Hull
Ottawa
Ste. Anne Canal
Canal Ste-Anne
Lachine Canal
Canal de Lachine
St. Jean
Chambly Canal
Canal Chambly
Georgian Bay
Baie Georgienne
Cornwall
Rideau Canal
Canal Rideau
Perth
Trent-Severn Waterway
Voie navigable Trent-Severn
St. Lawrence Seaway
Voie navigable du Saint-Laurent
Port
Severn
Orillia
Bridgenorth
Lindsay
Bay of Quinte
Baie Quinte
Kingston
Trenton
Murray Canal
Canal Murray
Port Perry
Oshawa
Toronto
Lake Ontario
Lac Ontario
Kilometres
25 0 25 50 75 100
Kilomètres
Lake Superior
Lac Supérieur
Ontario
Sault Ste. Marie Canal
Canal Sault Ste-Marie
Sault Ste. Marie
Cape Breton
Cap-Breton
St. Peters
Canal
Canal St. Peters
Nova Scotia
Nouvelle-Écosse