CEN 305

Canadian
Sailing Directions

Lake Huron, St. Marys River, Lake Superior

12/2021

Fisheries and Oceans Canada
Pêches et Océans Canada

Canada

Pictograph legend

 **Anchorage**

 **Current**

 **Radio calling-in point**

 **Wharf**

 **Caution**

 **Lifesaving station**

 **Marina**

 **Light**

 **Pilotage**

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

Users of this publication are requested to forward information regarding newly discovered dangers, changes in aids to navigation, the existence of new shoals or channels, or other information that would be useful for the correction of nautical charts and publications affecting Canadian waters to: chsinfo@dfo-mpo.gc.ca.

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Record of Changes

As the CHS acquires new information, relevant changes are applied to Sailing Directions volumes in order to maintain safety of navigation. It is the responsibility of the mariner to maintain their digital Sailing Directions file by ensuring that the latest version is always downloaded. Visit charts.gc.ca 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

Chapter / Paragraph	Description of Change

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PREFACE

The First Edition of *Sailing Directions, CEN 305 — Lake Huron, St. Marys River, Lake Superior*, 2000, 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 Bureau.

This edition uses a new presentation of the description 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, Great Lakes and St. Lawrence River*.

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

The information quoted from the *List of Lights, Buoys and Fog Signals* in the Appendix is updated monthly by the Canadian Coast Guard and is available at the Fisheries and Oceans Canada web site: www.notmar.com.

The photographs are by the Canadian Hydrographic Service, Fisheries and Oceans Canada.

Users' comments concerning the format, content or any other matter relating to *Sailing Directions* would be appreciated and should be forwarded to the Director General, Canadian Hydrographic Service, Fisheries and Oceans Canada, Ottawa, Ontario, Canada K1A 0E6.

Canadian *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 only where they have special navigational significance or where the scale of the chart is too small to show details.

The word "**private**", when applied to an aid to navigation, means the aid is privately maintained and may not appear in the *List of Lights, Buoys and Fog Signals* and may be changed without warning.

Chart references, in italics in the text, normally 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 and may affect surface navigation.

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, refer 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. The marine facilities information listed in the Appendix is a compilation of the details reported by each marina operator. 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 refer to ground level. Heights of islands refer to chart datum.

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

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

Numbers in brackets after population statistics is 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.

Time is given in Eastern Standard Time or Eastern Daylight Saving Time. Information on time zones is given in the 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 the symbols placed at the beginning of certain paragraphs. Their main purpose is to allow quick reference to information or to emphasize details. Consult the Pictograph Legend shown on the back cover of this booklet

References to other publications:

Canadian Coast Guard
- *List of Lights, Buoys and Fog Signals*
- *Radio Aids to Marine Navigation (Atlantic and Great Lakes)*
- *Ice Navigation in Canadian Waters*
- *Annual Edition of Notices to Mariners*
- *The Canadian Aids to Navigation System*
- *Merchant Ship Search and Rescue Manual (CANMERSAR)*

Environment Canada
- *Great Lakes Marine Weather Guide*
- *Great Lakes Climatological Atlas*

Canadian Hydrographic Service
- *Canadian Tidal Manual*
- *Chart No. 1 — Symbols, Abbreviations and Terms*
- *Tides in Canadian Waters*
- *Notes on the Use of Loran-C Charts*
- *Canadian Tide and Current Tables*
- *Catalogue of Nautical Charts and Publications (Great Lakes)*

U.S. Department of Commerce, National Ocean Service
- *U.S. Coast Pilot 6, Great Lakes*

The St. Lawrence Seaway Management Corporation
- *Seaway Handbook*

ABBREVIATIONS

Units

°C	degree Celsius
cm	centimetre
ft	foot
h	hour
ha	hectare
kHz	kilohertz
km	kilometre
kn	knot
kPa	kilopascal
m	metre
min	minute
MHz	megahertz
mm	millimetre
t	metric tonne
°	degree (plane angle)
'	minute (plane angle)

Directions

N	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
HF	high frequency (radio)
HW	high water
IGLD	International Great Lakes Datum
LW	low water
M	million, mega
MCTS	Marine Communications and Traffic Services
NAD	North American Datum
SAR	Search and Rescue
VHF	very high frequency (radio)
VTS	Vessel Traffic Services

Lake Huron — East shore

General

Chart 2200

1 This chapter covers the Canadian waters of Lake Huron from the head of St. Clair River northward for 135 miles to Cape Hurd at the NW end of the Bruce Peninsula.

[From U.S. Coast Pilot 6, Chapter 10, partial]

1.1 ***Caution***. *— A special use airspace, bounded by the following coordinates,*

1.2 *45°17'00"N., 83°00'00"W.;*

1.3 *45°20'24"N., 82°31'18"W.;*

1.4 *44°31'00"N., 82°19'54"W.;*

1.5 *44°27'42"N., 82°47'08"W.;*

1.6 *is used periodically for air to air gunnery practice from the surface to an altitude of 45,000 feet [13,720 m] from sunrise to sunset. The using agency is the Commander, Permanent Field Training Site Detachment, Phelps-Collins ANGB, Alpena, MI, and the controlling agency is Minneapolis ARTC Center, Federal Aviation Administration.*

2 The southern two-thirds of the east shore of Lake Huron is generally low and flat and fronted by a band of shallow water that deepens gradually. The northern one-third, particularly in the area of Fishing Islands, is irregular with many reefs.

3 **Caution**. — Between Point Edward and Cape Hurd, Goderich is the only harbour suitable for Seaway-draught vessels and Stokes Bay is the only anchorage suitable for smaller vessels. Only a few of the small-craft anchorages are accessible in bad weather.

4 Most of the Canadian charts referred to in this chapter are based on modern surveys carried out between 1974 and 1999. *Chart 2292*, however, is based largely on lead line surveys carried out much earlier but incorporates any dangers discovered during more recent echo-sounder surveys.

4.1 **Light buoys**. — An *Ocean Data Acquisition System (ODAS)* meteorological light buoy, marked *45149*, is moored 16 miles west of Bayfield. *ODAS* light buoy *45008* is moored 33 miles WNW of Point Clark.

5 **Caution**. — The possibility of encountering unreported dangers is greatest in areas such as **Fishing**

Islands that have uneven bottom topography and were surveyed by lead line.

6 Depths and elevations quoted in this chapter refer to chart datum *(see Sailing Directions booklet CEN 300 — General Information, Great Lakes)* and thus agree with charted values. Because *Chart 2292* is based on an older water level datum, depths and elevations on that chart must be corrected to refer them to the presently adopted datum for Lake Huron. The required correction is noted on the chart. *(More information on older water level datums is given in Sailing Directions booklet CEN 300 — General Information, Great Lakes.)*

6.1 Real-time water level information for Lake Huron at Point Edward is available from the *Canadian Hydrographic Service Automated Water Level Gauge*, telephone number 519-344-0263 and for Lake Huron at Goderich from the *Canadian Hydrographic Service Automated Water Level Gauge*, telephone number 519-524-8058. *(More information on water levels is given in Sailing Directions booklet CEN 300 — General Information, Great Lakes.)*

7 *Sarnia Vessel Traffic Services (VTS)* Zone covers Canadian waters from *Long Point light* in Lake Erie to the south end of De Tour Passage, in Lake Huron. Information on this system is given in *Radio Aids to Marine Navigation (Atlantic, St. Lawrence, Great Lakes, Lake Winnipeg and Eastern Arctic);* visit http://www.ccg-gcc.gc.ca/eng/CCG/MCTS_Radio_Aids.

8 Upbound and downbound sailing courses and limits recommended by the *Lake Carriers Association* and the *Canadian Shipowners Association (see Sailing Directions booklet CEN 300 — General Information, Great Lakes)* are shown on the charts.

9 Pilotage is compulsory in the Great Lakes. For details of the pilot control areas see the annual edition of *Notices to Mariners*. Masters of vessels intending to navigate in Great Lakes waters should consult the *Great Lakes Pilotage Regulations*.

Northern approaches to St. Clair River

Charts 14862, 14865

10 Lake Huron flows into St. Clair River at the south end of the lake. The village of **Point Edward**, Ontario, *(43°00'N, 82°25'W)* and the city of **Port Huron**, Michigan, *(both described in Sailing Directions booklet CEN 304 – Detroit River, Lake St. Clair, St. Clair River)* lie on opposite banks at the head of the river.

11 **Caution**. — The **current** is reported to flow past Point Edward at a rate of more than 4 knots.

12 The *Blue Water Bridge*, the grain **elevator** at Sarnia and a tall apartment **building** close east of *Sarnia Yacht Club Basin* are **conspicuous** from Lake Huron *(Chart 14852)*. A chimney and a storage tank at a paper plant close south of *Fort Gratiot light* are prominent.

13 There is a ship channel 5 miles long and 800 feet (244 m) wide dredged from the deep water of Lake Huron to the head of the St. Clair River through a large **shoal** area at the southern end of the lake. The controlling depth in the channel is promulgated periodically in the *United States Coast Guard Local Notices to Mariners*.

14 **Caution**. — The master of any vessel in Lake Huron requiring a pilot for southward passage through the St. Clair River should not enter the buoyed channel until the pilot has boarded. A vessel awaiting a pilot should stay clear of the channel entrance.

[from U.S. Coast Pilot 6, Chapter 10, partial]

15 ***Fort Gratiot Light*** *(43°00'23"N., 82°25'21"W.), 82 feet [25 m] above the water, is shown from a white brick conical tower on the W side of the head of St. Clair River. Port Huron Coast Guard Station is close S of the light. A* ***regulated navigation area*** *has been established off the Coast Guard Station. (See* ***33 CFR 165.1 through 165.13 and 165.920****, chapter 2 [of U.S. Coast Pilot 6], for limits and regulations.)*

15.1 *Dredging spoils are adjacent to both sides of the dredged channel. On the E side of the channel, the spoil bank extends about 4 [3.5] miles N from Point Edward and is about 1 [0.9] mile wide with depths of 6 to 12 feet [1.8 to 3.6 m]. A wreck, covered 15 feet [4.5 m], is E of the channel 3.4 [3] miles NE of Fort Gratiot Light. On the W side of the channel, the spoil bank has depths of 9 to 15 feet [2.7 to 4.5 m] for 4.5 [3.9] miles N of Fort Gratiot Light, thence 16 to 24 feet [4.9 to 7.3 m] for another 1.5 [1.3] miles N.*

16 ***Black River Canal****, entered about 1.4 [1.2] miles NNW of Fort Gratiot Light, extends SW for about 1.1 [1] miles to its junction with the Black River.*

17 *From the head of the St. Clair River NNW for 19 [16.5] miles to Lexington, the shore is low. In this stretch, the lake bottom is generally rocky with depths to 18 feet [5.5 m] extending 1.3 [1.1] miles offshore. A shoal with a least depth of 12 feet [3.7 m] is 0.9 [0.8] mile NE of the mouth of* ***Burtch Creek****, 7 [6.1] miles S of Lexington. A 16-foot [4.9-m] diameter potable water intake extends from shore 5.7[5] miles NNW of Fort Gratiot Light NE for 5 [4.3] miles to a crib covered 38 feet [11.6 m]. A wreck, covered 29 feet [8.8 m], is 10.7 [9.3] miles NNE of Fort Gratiot Light.*

18 The ship channel is marked by **light buoys**. The north end is marked by *Lake Huron Cut light buoy 11 (U.S. 10085)* on the west side and *Lake Huron Cut light buoy 12 (U.S. 10090)* on the east side. The south end is marked

POINT EDWARD AND ST. CLAIR RIVER (1998)

by *Lake Huron Cut light buoy 1 (U.S. 10035)* on the west side and *Lake Huron Cut light buoy 2 (770)* on the east side.

19 *Lake Huron Cut light 7 (U.S. 10065)*, on the west side of the channel 2 miles from the north end, is shown at an elevation of 47 feet (14.3 m) from a white cylindrical **tower** with a square green **daymark**. The light structure has a **foghorn** and a **racon**.

20 *Point Edward range (768, 769)*, on the east side of the head of St. Clair River, leads through the inner section of the buoyed channel to the intersection with *Fort Gratiot range (U.S. 9990, 10000)*.

21 *Sarnia Airport*, 5 miles east of Point Edward, has an aeronautical **light**.

22 The *Sarnia Yacht Club* establishes an array of 9 spar **buoys** 0.5 to 3.5 miles east of the Lake Huron Cut ship channel each year during the boating season. These buoys are used during club regattas.

23 The area east of the southern 3 miles of the dredged channel has **shoals** and **obstructions** formed by spoil from dredging operations.

24 There are three **submerged wrecks** 9 miles NNE of *Fort Gratiot light*. Another **submerged wreck** is 3 miles NE of *Fort Gratiot light*.

24.1 There are two **submerged wrecks**, depth unknown and not charted, 8.25 and 12.5 miles NE of *Fort Gratiot Light*, respectively.

25 Sarnia is a **Customs** vessel clearing station for commercial traffic and a vessel reporting station for pleasure craft.

26 There are *Sarnia Vessel Traffic Services Zone* calling-in points for upbound and downbound vessels at Lake Huron Cut. These are mandatory reporting points under the provisions of the *St. Clair and Detroit River Navigation Safety Regulations*. *(Consult Radio Aids to Marine Navigation (Atlantic, St. Lawrence, Great Lakes, Lake Winnipeg and Eastern Arctic for more information.)*

Point Edward

27 **Sarnia Yacht Club Basin** is on the east shore of Lake Huron close north of Point Edward. **Breakwaters** on both sides of the entrance protect the basin.

28 The harbour is entered between the breakwaters. The entrance channel is subject to **silting** but is reported to be dredged periodically to a depth of 8 feet (2.4 m).

29 **Caution**. — A **current** of 2 to 4 knots flows SW across the harbour entrance.

30 There is a **conspicuous** apartment **building** close east of the harbour.

COW CREEK (1998)

31 The entrance to the harbour is marked by **lights** and **daymarks**. These aids are privately maintained.

32 There is a privately maintained **lighted range** on the south side of the harbour. Each range mark consists of two fixed green lights in a vertical line shown from a mast with an orange diamond-shaped **daymark**. The lights in line bearing 184° lead to the harbour from offshore.

33 *Sarnia Yacht Club* is in the western part of the harbour, *Lake Huron Yachts* is in the eastern part. *Blunt's Barge* is the chandlery store here.

34 Both marinas at Point Edward are **Customs** vessel reporting stations for pleasure craft.

Point Edward to Goderich

Charts 2228, 2260

35 There is a *Sarnia Vessel Traffic Services Zone* calling-in point for downbound vessels at *latitude 43°10'N. (Consult Radio Aids to Marine Navigation (Atlantic, St. Lawrence, Great Lakes, Lake Winnipeg and Eastern Arctic) for more information.)*

36 **Caution**. — There are many **fishing nets** between Sarnia and Cedar Point and from Stoney Point to Grand Bend. These nets hang from the surface and are set in strings of ten or more nets extending as far as three miles offshore. There are usually passages through the nets every 200 m, marked by black flags.

37 **Blue Point** *(43°06'N, 82°09'W)*, 13 miles ENE of Point Edward, is wooded and prominent.

38 The coast from Point Edward 11 miles eastward towards Blue Point is low and thinly wooded. A coastal bluff, elevation 15 m, begins 2 miles SW of Blue Point. The bottom, good holding ground of mostly sand and **boulders**, shelves gently towards the shore.

39 A sand and stone **reef**, dry in places, lies close offshore 2.4 to 3.3 miles east of *Point Edward range.*

40 **Caution**. — The **ruins**, **awash**, of a rock crib have been reported near this reef. This danger is not charted.

41 **Cow Creek** enters the lake 8 miles ENE of Point Edward. Two **breakwaters** 107 m long form the entrance and make a refuge for small boats; this is exposed to northerly and westerly winds. The creek is subject to **silting**. There is a clearance of 3.6 m under a highway **bridge** 0.1 mile from the mouth of the creek. There are private **wharves**

HIGHLAND GLEN (1998)

upstream of this bridge. A current of 1 knot has been reported in Cow Creek.

42 A private **radio tower** near the shore 0.6 mile WSW of the entrance to Cow Creek is 21 m high, elevation 28 m. A **radio tower** 2.4 miles east of the creek has an elevation of 91 m. Both towers have air obstruction **lights**.

43 The coast is low with a shallow **bank** of **boulders** and **stones** that extends up to 2 miles offshore between Blue Point and Kettle Point, 9 miles to the NE. The coast rises to an elevation of 16 m3 miles NE of Blue Point.

44 *Highland Glen Conservation Area* is a day-use park, with picnic areas, operated by the *St. Clair Region Conservation Authority* 1.5 miles ENE of Blue Point. There is a concrete **launching ramp** 5.9 m wide, protected by two sheet steel **breakwaters**. The east breakwater is longer and is marked by an orange **light**. The area inside the breakwaters dries at chart datum (1998).

45 **Cedar Point** is 5 miles NE of Blue Point.

46 **Caution**. — There is a large drying **rock**, known locally as **Rock Island**, 0.3 mile west of Cedar Point. The waters to the north, between Rock Island and the shore, are dangerous without local knowledge. Breaking waves usually mark Rock Island.

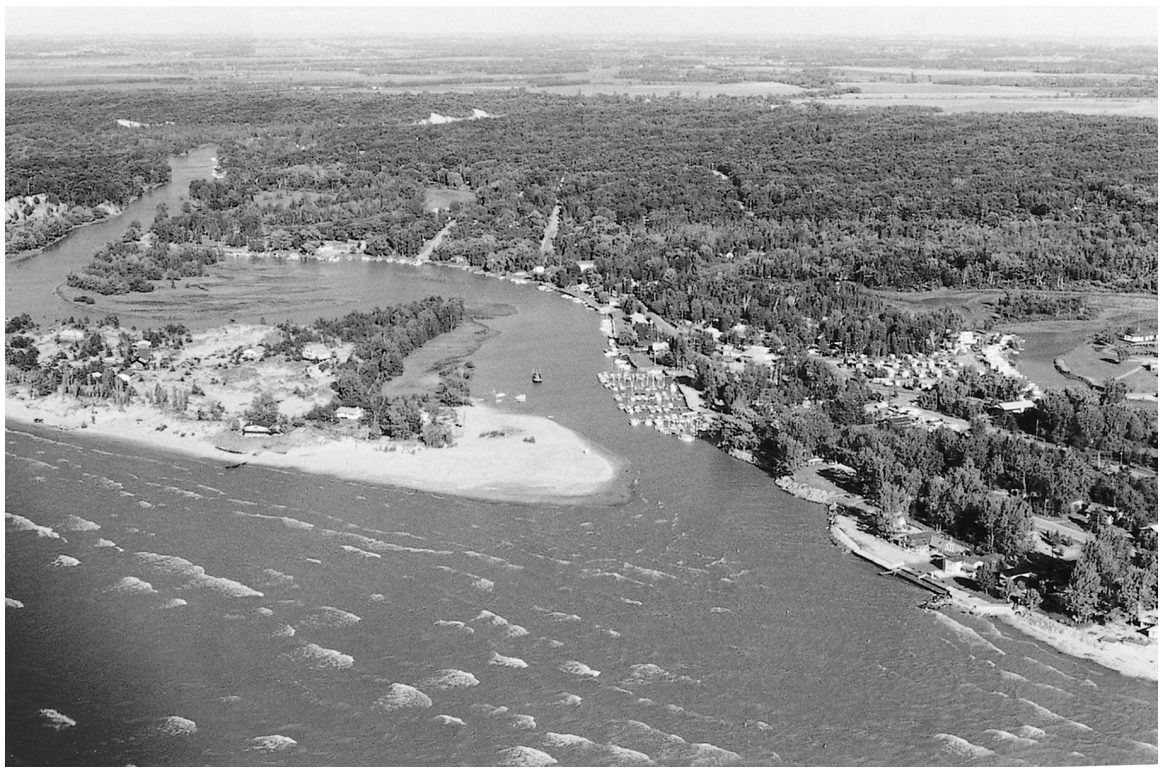
47 *Orchard View Park* is a private trailer park and campground 0.5 mile SW of Cedar Point. It has a privately maintained orange **light**. *Cedar Cove Marina* is 0.1 mile to the NE. Fishing charters are available locally. Private **buoys** mark the approach to this marina.

48 The community of **Forest**, 6 km SE of Cedar Point by paved road, has churches, banks, post office, several shops, pharmacy, motels, hotel, restaurants, laundromat, museum, liquor and beer store, veterinarian, dentist and a medical centre.

49 **Kettle Point** *(43°13'N, 82°01'W)* is the north end of **Cape Ipperwash**. The point is named for the round boulders resembling kettles that are found on the shale beds in the vicinity. **Kettle Point Reef** extends 2 miles NW from Kettle Point. The reef is marked to the NW by *Kettle Point Reef light buoy V4 (771)* and to the west by a **buoy**.

50 There is a prominent **water tower** with an elevation of 58 m 3.7 miles SE of Kettle Point. The tower has air obstruction **lights**.

PORT FRANKS (1991)



51 A **submerged water pipeline** extends 0.4 mile offshore close south of the marina. The intake **crib** at the outer end has a depth of 1.8 m.

52 **Stony Point**, solid rock scattered with boulders, is 3 miles east of Kettle Point. The shore becomes a fine sand beach between Stony Point and Grand Bend, 10 miles to the NE, backed by a thin growth of stunted pines and by sand dunes that show up well in the afternoon sun.

53 A **submerged water intake pipeline** 0.6 mile ESE of Kettle Point extends 0.5 mile offshore.

Port Franks

55 The west branch of **Ausable River** enters the lake at Port Franks, 5 miles east of Kettle Point. There is a harbour, used by pleasure craft and fishing vessels, at the river entrance. The river is reported to be navigable for 5 miles with depths from 0.9 to 3.7 m over sand and clay bottom.

56 A prominent **lookout tower** 3.5 miles ENE of the entrance to the west branch of Ausable River has an elevation of 63 m.

57 Ausable River entrance is scoured annually by spring run-off to a reported depth of 1.8 m. The channel is subject to **silting**. There are reported to be depths of 1.2 to 1.5 m during the boating season. Deepest water is usually on the south side.

58 **Caution**. — A shifting **sandbank** with depths as little as 0.3 m lies off the entrance channel. Local marinas often guide visiting craft on request.

59 The entrance channel is marked by privately maintained **buoys**. These buoys may be moved to indicate the best channel.

60 **Caution**. — The approaches to Port Franks are unsafe and there is **surging** inside the river entrance in moderate or strong **NW winds**.

61 The community of **Port Franks** is 0.5 mile upstream of the river mouth. Port Franks has churches, a general store, post office, a museum and restaurants.

62 The *Highway 21* **bridge** over the Ausable River 2 miles inland has a vertical clearance of 5.3 m.

63 Port Franks is a **Customs** vessel reporting station for pleasure craft.

64 *Rivermouth Marina*, *Huron Shores Marine*, *Lighthouse Marina*, *Burnett Great Lakes Marine* and *Seven Winds Marina* are at Port Franks. *Kennedy's Landing* is a private facility.

65 *Port Franks Conservation Area* is administered by the *Ausable and Bayfield Conservation Authority*. Facilities include dockage with power and water, ramp, picnic area, showers and ice.

GRAND BEND (1991)

66 *Harbourside Trailer Park* has no facilities for small craft.

68 *Pinery Provincial Park* extends along the shore for 4.6 miles NE of Port Franks. This park is set in one of the largest forests in southwest Ontario. There are campsites but no small-craft facilities. Vessel operation is prohibited within 300 m of shore but day anchorage is allowed at the north and south ends of the park.

Grand Bend

69 **Grand Bend** *(43°19'N, 81°46'W)*, on the north branch of **Ausable River** 7.5 miles NE of Port Franks, is a summer resort with a large amusement park. The village of Grand Bend, population 1,027 (1996), has churches, bank, medical centre, doctor, dentist, post office, stores of all kinds, hotels, motels, veterinarian, restaurants, laundromat, liquor and beer store, golf, tennis and *Lambton Heritage Museum*. The buildings in the community are prominent from offshore.

70 A red and white **television tower** 0.8 mile south of the Grand Bend harbour entrance is 46 m high, elevation 62 m. A red and white **television tower** 1 mile east of the harbour entrance is 64 m high, elevation 71 m. Both towers have air obstruction **lights**. A prominent building on the beach NE of Grand Bend harbour makes a good **landmark**.

71 The harbour at Grand Bend is a recreational harbour administered by the *Department of Fisheries and Oceans* and managed by the municipality.

72 A *Highway 21* **bridge**, clearance 7.2 m, crosses Ausable River 0.5 mile from the harbour entrance.

73 Grand Bend harbour is formed by a dredged area in the mouth of Ausable River west of the *Highway 21* bridge. The harbour entrance is protected by concrete **piers** extending out into the lake but is open to the west.

74 **Caution**. — Moderate or strong **west or NW winds** cause **surging** in the harbour.

75 **Caution**. — **Sand bars** tend to form around the entrance to Grand Bend and NW winds can cause rapid **silting**. The entrance channel is reported to be maintained by dredging during the boating season. Mariners are cautioned to approach the entrance with care.

76 There are privately maintained **buoys** in the entrance channel. The buoys are reported to be moved to best mark the channel.

77 There are depths of 1.5 to 1.9 m in the harbour, with depths of 0.9 to 1.5 m along the north and south shores (1988). A **Public wharf** on the north shore has depths of 0.3 m. The boat basin on the south shore near the south pier has reported depths of 1.1 m (1996). Visiting craft

usually berth alongside the retaining wall on the north side of the harbour. The elevation of the retaining wall is 1.5 m.

78 *Grand Bend light (774)* is on the outer end of the north pier. There is a **foghorn** at the light.

79 There is a starboard-hand **daybeacon** at the outer end of the south pier; there is a privately maintained **light** above the daybeacon.

80 Grand Bend is a **Customs** vessel reporting station for pleasure craft.

81 *Grand Bend Harbour*, operated by the village of Grand Bend; *Manore Marine*, east of the bridge on the north shore of the river; and *Southwest Marine Services*, *Roszell-Warner Marine* and *Saga Bound Bookstore*, all in town, are local marinas and marine suppliers. *Grand Bend Yacht Club* is a private facility on the south side of Ausable River.

82 A sandy beach, fringed with large trees, extends 15 miles northwards to Bayfield. The beach is backed by a clay bluff that rises to an elevation of 15 m 0.5 mile NE of Grand Bend. There is a shallow **bank** 0.4 mile wide off this shoreline. The bank is **foul** and covered with large **boulders** between **Dewey Point**, 7 miles NNE of Grand Bend, and Bayfield.

83 There is a prominent **microwave tower** 2.1 miles NE of Grand Bend.

84 A **submerged water pipeline** 1.9 miles NNE of Grand Bend extends 1.3 miles offshore to an intake **crib** submerged 8.7 m.

85 **Cantin Shoal** is 0.7 mile offshore 2.8 miles NNE of Grand Bend.

85.1 A wreck, in about 22 m of water, lies 7.6 miles NW of Grand Bend.

86 There is a prominent white church **spire** topped with a white cross 1 mile NE of Dewey Point. A **conspicuous communications tower** 0.6 mile NE of Bayfield harbour has an elevation of 134 m; it has air obstruction **lights**.

87 The **wreck** of a steel vessel 37 m long lies 0.3 mile south of Bayfield. This wreck is in two sections (1991).

Charts 2228, 2261

Bayfield

88 **Bayfield River** *(43°34'N, 81°42'W)* enters the lake 15.5 miles north of Grand Bend. The harbour at Bayfield is entered between two **breakwaters** at the mouth of the river. The south breakwater is 195 m long. The north breakwater is 64 m long but extends farther into the lake due to the configuration of the shore. The harbour extends 0.5 mile

BAYFIELD (1991)

inland to a **bridge** at *Highway 21*. The entrance to Bayfield harbour is subject to **silting** and is reported to be maintained by dredging.

89 **Caution**. — A **submerged sewer outfall** 0.1 mile north of the harbour entrance extends 200 m offshore.

90 The harbour at Bayfield is a recreational harbour administered by the *Department of Fisheries and Oceans* and managed by the municipality.

91 *Bayfield wharf light (776)* is on the south breakwater.

92 *Bayfield range lights (775.5, 775.6)* are on the north side of the entrance.

93 The **Public wharf** on the south side of the harbour is 213 m long with depths of 1.5 to 2.1 m (1991).

94 There is a fishermen's **wharf** 152 m long on the north side of the harbour with a depth of 2.1 m (1991).

95 The *Highway 21* **bridge** across the river at the east end of the harbour has a clearance of 4.7 m. There is an **overhead power cable**, clearance 7.8 m, close downstream of the bridge.

96 The village of **Bayfield**, south and east of the harbour, has a population of 833 (1996) which increases to more than 2,000 in the summer. Bayfield has churches, several stores, doctor, dentist, post office, restaurants, motels, hotels, laundromat, liquor and beer store, service stations, golf and tennis and a bank.

97 Bayfield is a **Customs** vessel reporting station for pleasure craft.

98 *Harbour Lights Marina*, on the north side of the entrance channel; *Bayfield Marine Services*, on the north side of the harbour; *South Shore Marina*; and *Bayfield Village Marina* offer a variety of services and goods. *Colonial Cottages* is a private facility on the north shore.

99 There is a clay bluff 23 m high along the coast between Bayfield and Goderich, 10.5 miles to the north, with a few farm buildings visible from offshore.

100 **Blacks Point**, 3 miles south of Goderich, is not prominent but a grey **water tower** with air obstruction **lights**, 1 mile to the SE, is **conspicuous**.

101 There is a sewage treatment plant 0.9 mile south of Goderich. A boulder **breakwater**, marked at the outer end by a privately maintained yellow **buoy**, extends 0.3 mile offshore from the plant.

Chart 2228

Goderich

102 **Goderich Harbour** *(43°45'N, 81°44'W)* is close south of the mouth of **Maitland River**. The harbour limits include the waters of the harbour and the approaches for 1 mile offshore. Goderich is the largest producer of salt in

GODERICH (1998)

North America and is a major shipment port for grain. The port was used by 252 commercial vessels in 1999.

103 The shafts, buildings and **storage domes** of the *Sifto Canada* salt mine on the east side of the outer harbour and the grain **elevators** along the south side of the inner harbour are **conspicuous**. Church **spires** in the town are prominent.

104 A dredged channel marked by privately maintained seasonal **buoys** leads along the north side of the harbour breakwall and through the river entrance to two marina basins. This channel is reported (2000) to be dredged each year to a depth of 2.4 m.

105 **Caution**. — **Westerly winds** can cause strong **surging** in the Maitland River entrance.

106 The town of **Goderich**, population 7,428 in 1997, is built on high land SE of the harbour. The town has all the commercial and service facilities of a busy resort town, including banks, doctors, dentists, a hospital and a veterinary clinic. Goderich is on *Highways 8* and *21* and has truck and rail freight and express services. *Goderich Municipal Airport* is 3 km north of town.

107 A *Canadian Coast Guard Search and Rescue Cutter* is based at Goderich during the navigation season *(see information on search and rescue in Sailing Directions booklet CEN 300 — General Information, Great Lakes)*. Direct all calls to the *Sarnia MCTS Centre*, call sign *VBE. (Consult Radio Aids to Marine Navigation (Atlantic, St. Lawrence, Great Lakes, Lake Winnipeg and Eastern Arctic) for more information.)*

108 Goderich is a **Customs** vessel clearing station for commercial traffic and a vessel reporting station for pleasure craft.

109 Two detached concrete **breakwaters**, with an entrance opening 160 m wide, protect the outer harbour. The inner harbour is an artificial basin entered between the *Sifto Canada* **wharf** and a concrete **pier** 55 m to the south. The pier is illuminated.

110 Vessels loading salt lie abreast of the conveyor-loader on the *Sifto Canada* wharf. This wharf has wooden fenders.

111 **Caution**. — Self-unloading vessels sometimes **obstruct** the entrance channel with their unloading equipment while being loaded from the conveyor system.

112 The entrance channel has been dredged as shown on the chart. **Buoys** mark the dredged turning basin in the outer harbour.

113 A **submerged power cable** crosses the outer harbour between the shore end of the south pier and the outer breakwater.

114 **Caution**. — Water levels in Goderich inner harbour fluctuate with the direction and force of the **wind**.

115 **Caution**. — Moderate or strong **westerly winds** cause strong **surging** in the harbour. Waves reflecting off the walls of the basin in **north gales** and **SE winds** can create uncomfortable seas and local **surging** in the basin entrance and inner harbour.

116 *Goderich Main light (777)* is on a high bluff south of the harbour entrance. This light is obscured to the south by trees (1998).

117 *Maitland River light (778.5)* is on the outer end of the boulder breakwater that forms the south side of the river entrance.

118 *North Breakwater light (778)* and *South Breakwater light (779)* are on the west ends of the breakwaters.

119 *North Pier range lights (780, 781)* lead through the channel between the breakwaters.

120 There is an aeronautical **radiobeacon** 20 m NNW of the front range structure.

121 The grain **elevators** along the south side of the inner harbour have a capacity of 129,000 tonnes of wheat. There are four marine legs, with an unloading capacity per leg of 700 tonnes of wheat per hour, and two loading spouts. The **wharves** have a steel rubbing strake and are fitted with rubber tire fenders. There is a steel turning pad with rubber shock absorbers near the south corner of the basin.

122 *MacDonald Marine* operates four small tugs; the tugs monitor VHF Channel 14. *MacDonald Marine* also offers tours of the harbour and the waterfront.

123 Electrical power is available at the wharves; water and fuel can be supplied by tanker truck. There is a good selection of marine services and technicians in town.

124 *Maitland Inlet Marina*, on the north side of the Maitland River entrance, and *Maitland Valley Marina*, on the south side of the river in a basin east of **Indian Island**, offer a clubhouse, pool and private beach; *Snug Harbour* is a municipal marina on the west side of the inner harbour; *Argyle Marine and Small Engines* is in town.

124.1 *Maitland Valley Marina* and *Snug Harbour* are *Canada Border Services Agency telephone reporting sites*.

125 The town of Goderich, incorporated in 1827, is noted for its magnificent heritage homes and natural elegance, enhanced by the unique layout of its octagonal town square. The town is home to the *Huron County Museum* and the 1842 *Huron Historic Gaol* and has a small *Marine Museum* near the south pier. There are three fine beaches connected by a boardwalk. The 215-m long *Menestung Bridge*, a former railway bridge across Maitland River, leads to three walking trails, and there is an exotic animal farm 15 km NE of town.

126 Goderich was voted "The Prettiest Town in Canada" in the *National Communities in Bloom* competition in 1998, judged on landscape architecture, environmental efforts, community involvement and vision for the future. In February 2000, Goderich was second only to the Irish town

of Castlecove as "The Prettiest Town in the World" in the international *Nations in Bloom* contest.

Goderich to Fishing Islands

Charts 2261, 2291, 2228

127 There is a clay bluff 15 to 34 m high along the shore from Goderich 3 miles north to **Wright Point** *(43°48'N, 81°44'W)*. The bluff, 30 to 61 m back from the shoreline, is 15 to 18 m high from Wright Point for 4 miles north to Port Albert. The edge of the bluff is mostly lined with trees but the land beyond is cleared.

128 *Point Farms Provincial Park* is at Wright Point. The park has campsites but no small-craft facilities (1999).

129 **Martin's Point** and **Quaid's Bay** are 3.7 miles north of Wright Point.

130 **Port Albert** *(43°53'N, 81°43'W)* is a small community at the mouth of **Nine Mile River**. The river entrance is closed by a dry **gravel bar**.

131 A clay bluff 30 m high rises close behind the shoreline from Port Albert northward to within2 miles of Point Clark. Houses and barns are prominent among the few remaining trees on the farmland beyond the bluff.

132 There is a prominent grain **elevator** and two prominent **silos** one mile inland 1.3 miles NE of Port Albert.

133 The grain **elevator** and two **silos** 3.4 miles farther north at Amberley are also prominent. The elevator has an elevation of 72 m and has an air obstruction **light**.

134 **Point Clark** *(44°04'N, 81°46'W)*, 12 miles north of Port Albert, is low and sandy with a few boulders near the shoreline. The land behind the point is thickly wooded. Point Clark, **Amberley Beach**, to the south, and **Lurgan Beach**, to the north, are lined with cottages.

135 **Clark Reef**, a **boulder shoal** 0.8 mile west of Point Clark, is marked by a **buoy**.

136 *Point Clark light (782)* is shown from the western tip of the point.

137 *Point Clark Lighthouse National Historic Site* includes the light structure. The former lightkeeper's house at Point Clark is a museum.

POINT CLARK (1998)

138 *Pine River Boat Club*, close north of Point Clark light, is a private facility with some sheltered **wharves** and a **launching ramp**. The small harbour here is difficult to enter without local knowledge. Fishing charters are available locally.

139 **Caution**. — A **rock** with a depth of 1.3 m lies 0.4 mile WNW of Point Clark light. A **rock** with a depth of 1.2 m lies 0.4 mile off Lurgan Beach.

Chart 2228

140 There is a *Sarnia Vessel Traffic Services Zone* calling-in point for upbound and downbound vessels WSW of *Point Clark light*. *(Consult Radio Aids to Marine Navigation (Atlantic, St. Lawrence, Great Lakes, Lake Winnipeg and Eastern Arctic) for more information.)*

Charts 2261, 2291, 2228

141 The shore is low, sandy and boulder-strewn between Point Clark and Kincardine, 8 miles to the NE. There is a clay bluff 15 to 23 m high 0.1 to 0.3 mile inland. Farm buildings beyond the bluff stand out clearly from the lake. **Bruce Beach**, **Poplar Beach** and **Boiler Beach** are lined with cottages.

142 **Caution**. — A **rock** 0.35 mile off Bruce Beach and a **rock** 0.2 mile off Boiler Beach have depths of 0.9 m.

143 **Tolmie Reef** is 1.3 miles offshore and 3.5 miles NNE of Point Clark.

144 There is a **conspicuous** red and white **microwave tower** 0.6 mile inland of Bruce Beach and a similar **tower** 1.1 miles inland of Poplar Beach. Both towers have air obstruction **lights**.

Chart 2291

Kincardine

145 The municipality of **Kincardine**, population 12,000 (1999), is at the mouth of **Penetangore River** *(44°11'N, 81°39'W)*. Kincardine has all the facilities of a busy resort town. There is a hospital and a small municipal airfield with scheduled and charter services.

146 A church **spire** and a **water tower** in the NE part of the town; a **water tower** on a hillside 1 mile east of the town; and a red and white **microwave tower** 1 mile NE of the harbour are prominent.

147 The harbour at Kincardine is a recreational harbour administered by the *Department of Fisheries and Oceans* and managed by the municipality.

KINCARDINE (1998)

148 Kincardine harbour is an artificial basin at the river mouth, entered between two parallel **piers** 25 m apart. A **bridge** over the river at the NE corner of the basin has a vertical clearance of 4 m. The harbour entrance is protected by a detached **breakwater**, 175 m long, that lies 240 m NW of the north pier.

149 **Caution**. — The entrance breakwater has no lights and at high water levels may be partially submerged.

150 **Caution**. — A wave-baffle wall extends into the entrance channel from the south pier.

151 **Caution**. — Moderate or strong **west winds** can cause **surging** in the harbour.

152 **Caution**. — The entrance channel is dredged periodically but depths in the channel and basin may be less than charted because of continual **silting** from the river.

153 *Kincardine sector light (783)* is near the west end of the north pier. The green sector shows north of the entrance. There is a user-activated **foghorn** at the light.

154 *Kincardine light (784)* is near the NE corner of the harbour.

155 *Kincardine Yacht Club* operates a clubhouse and marine museum in the lighthouse of *Kincardine light*.

156 Kincardine is a **Customs** vessel reporting station for pleasure craft.

157 *Kincardine Yacht Club Marina* is in the south part of the harbour. *Ogg's Marine* offers engine repairs and sales and service of outboard motors. Laundry facilities, propane, restaurants and shopping are nearby.

158 *Rotary Park* and *Wildfang Scout Park*, both on the river east of the bridge, have private **wharves** and **launching ramps** (1999).

Charts 2261, 2291

159 A **submerged water pipeline** 0.2 mile north of Kincardine north entrance pier extends 0.4 mile offshore; the intake **crib** at the outer end has a depth of 3.7 m.

160 There is a prominent red and white **radio tower** at Kincardine Hospital 1 mile NNE of the harbour; the tower has air obstruction **lights**.

161 **Horton Point** is 1 mile north of Kincardine. **McRae Point** is a low boulder point 4.8 miles further to the NNE. The shoreline for 2 miles north of Horton Point is sandy beach with occasional boulders. A shallow **bank** extends 0.5 mile offshore between the two points.

162 There are three prominent **silos** 1.8 miles SSE of McRae Point. A **radio tower** *(Chart 2291)*, elevation 144 m, 1.6 miles SE of McRae Point is also prominent.

163 A **boulder**-strewn **bank** extends 0.3 mile offshore from McRae Point north for 1.7 miles to **Gunn Point**. Gunn Point is low and skirted with beaches.

164 **Anchorage** can be found in **Inverhuron Bay** south of Gunn Point but there is no shelter from westerly winds.

165 **Caution**. — A **rock** 0.3 mile offshore 0.4 mile south of Gunn Point, on the south side of the anchorage, has a depth of 0.3 m.

166 *Inverhuron Provincial Park* is on Gunn Point. This is a day-use park with picnic areas and a **launching ramp** but no other small-craft facilities.

167 A **submerged water pipeline** 1 mile north of Gunn Point extends 0.5 mile offshore; the intake **crib** at the outer end has a depth of 11.3 m.

Chart 2291

168 The **Bruce Nuclear Power Development** is on **Douglas Point** and **Macpherson Point** *(44°20'N, 81°35'W)*. The white **dome** of the reactor building and the **towers** of the heavy water plant are **conspicuous** from offshore. The tallest of the towers has an elevation of 145 m. The buildings can be seen for more than 30 miles on a clear day. The towers are illuminated and the complex is prominent at night.

169 *Bruce Generating Station A* is on Macpherson Point and *Bruce Generating Station B* is on Douglas Point. Each has a cooling water discharge channel to the lake. There are private **wharves** for inspection vessels. The plant grounds are restricted and no trespassing is allowed.

170 **Submerged water intake** and **discharge pipelines** extend WNW and NW from Douglas Point and Macpherson Point. There is a small **spoil area** 2 miles west of Point Douglas.

171 **Baie du Doré** lies between Macpherson Point and **Scott Point**, a low rocky point 1.5 miles to the NE. The bay is shallow and mostly **foul** with low stony shores. There is a small private **wharf** on the west side of Baie du Doré.

172 **Loscombe Bank** lies off Baie du Doré. The outer edge of the bank extends 2 miles west of Scott Point.

173 McRae Point open west of Douglas Point clears Loscombe Bank.

174 A shallow **bank** extends up to 1 mile offshore between Scott Point and **MacGregor Point**, 4.8 miles to the NE. The widest sections of this are **Welsh Bank**, 1 mile north of Scott Point, and **Scougall Bank**, 1 mile farther NE.

175 *MacGregor Point Provincial Park* has picnic areas and campsites. There are no small-craft facilities.

176 There are sandy beaches between MacGregor Point and Port Elgin, 3.6 miles to the ENE, but most of this coast is obstructed by **shoals**. These include **Belcher Reef**, **Boyer Reef**, **Malcolm Reef** and **Dack Spit**.

177 **Logie Rock**, marked by *Logie Rock light buoy VC2 (785)*, lies 2 miles WNW of Port Elgin.

Port Elgin

178 The harbour at **Port Elgin** *(44°27'N, 81°24'W)* is an artificial basin enclosed by **breakwaters** and **moles** that give protection from all winds.

DOUGLAS POINT (1998)

179 **Caution**. — Moderate or strong **west and NW winds** may cause **surging**. Both entrance breakwaters are Y-shaped to reduce the surge effect in the basin.

180 The harbour at Port Elgin is a recreational harbour administered by the *Department of Fisheries and Oceans* and managed by the municipality.

181 A dredged entrance channel leads from deep water through the gap between the breakwaters. The channel is marked by **buoys**.

182 The preferred approach to the entrance channel passes north and east of Logie Rock.

183 *Port Elgin range lights (786, 787)* lead into the harbour entrance.

184 *Port Elgin North Breakwater light (787.5)* and *Port Elgin South Breakwater light (787.7)* are at the outer ends of the breakwaters.

185 Port Elgin, population 7,041 (1996), is a busy resort town 1.5 km east of the harbour. There is a small municipal airfield with charter services. Port Elgin has a medical centre but the nearest hospital is at Southampton.

186 Port Elgin **water tower**, elevation 75 m, and the sand beach south of the harbour make good **landmarks**. There is an **aeronautical beacon** 1.7 miles south of the harbour.

187 *Port Elgin Harbour Centre* is a municipal facility in the south part of the harbour. *Port Elgin Yacht Club* is a private facility in the north part of the harbour. *Redline Marine* and *Aqua Manufacturing & Marine* are in Port Elgin.

188 Several private orange **buoys** are moored up to 1.5 miles west and SW of Port Elgin during the boating season. These buoys are used for regattas.

189 The shore is sandy but the waters are **foul** up to 0.4 mile offshore between Port Elgin and **McNab Point**, 1.8 miles to the NNE. **Boulders** lie close offshore north of McNab Point.

190 The **tower** of a discontinued light stands on McNab Point.

191 **Microwave towers** 1.1 and 2.5 miles ESE of McNab Point are prominent. Both towers have air obstruction **lights**.

192 **Chantry Island**, low, wooded and surrounded by boulders, lies 1 mile NNW of McNab Point. The **ruins** of a pier extend from its SE side. The island is a bird sanctuary.

193 *Chantry Island light (788)*, on the east side of the island, is shown from a **conspicuous** white **tower**.

194 A **boulder**-strewn **rock bank** extends 1 mile SW of Chantry Island. The outer end is marked by a **buoy** moored 1 mile west of McNab Point.

PORT ELGIN (1998)

Chart 2292

Approaches to Southampton

195 Chantry Island is joined to the mainland by a **shoal**. Depths of 11 feet (3.4 m) can be found over the shoal but local knowledge is required. This area has a **rock** bottom with many **boulders** and is not suitable for anchorage.

196 **Breakwaters** were built from the NE part of Chantry Island and the mainland shore to provide a harbour of refuge.

197 **Caution**. — These breakwaters are in **ruins** and offer no protection. They are not visible at normal water levels and are a hazard to navigation. There is a passage 450 feet (137 m) wide with depths of 13 feet (4 m) between the two structures; it is marked by two **buoys**.

198 **Anchorage** for small vessels can be found in depths of 20 feet (6.1 m) close south of the west breakwater.

199 The **ruins** of a former railway pier extend from the mainland shore 0.1 mile south of the east breakwater.

200 **Chantry Shoal** extends 1 mile SW, 0.5 mile west and 1 mile north of Chantry Island. **Lambert Shoal** is east of the northern part of Chantry Shoal and 0.6 mile WNW of Saugeen River entrance. **Lee Bank** *(44°31'N, 81°22'W)* is 0.4 mile NNE of Lambert Shoal.

201 The NE end of Chantry Shoal is marked by *Southampton light buoy VJ2 (793)*; the southern end of Lambert Shoal is marked by *Saugeen River Turning light buoy VJ3 (792)*; and the south end of Lee Bank is marked by bifurcation buoy *VJ*.

202 The usual entrance route to Southampton, approaching from south or west, passes around the north end of Chantry Shoal with *Southampton light buoy* to starboard. The route continues southward to pass close west of *Saugeen River Turning light buoy* and then makes a sharp turn onto the line of the range.

Southampton

203 The town of **Southampton** *(44°30'N, 81°22'W)*, population 3,151 (1996), is 1 mile ENE of Chantry Island on the south side of the mouth of the **Saugeen River**. Southampton has churches, stores, bank, hospital, doctors, dentists, veterinarian, motels, hotels, liquor and beer store, post office, restaurants, laundromats, golf, tennis and *Bruce County Museum*.

204 The town has a **conspicuous** blue **water tank** with a dome-shaped top, 58 m high. There is a prominent flagpole in a lakefront park south of the harbour.

205 The north side of the harbour entrance, at the mouth of Saugeen River, is protected by a concrete **pier**. There is a

SOUTHAMPTON (1998)

rubble **breakwater**, marked with a privately maintained **light**, protecting the south side. The structures extend 400 feet (122 m) offshore.

206 An entrance channel 200 feet (61 m) wide, marked by **buoys** and a **lighted range**, leads into the river mouth.

207 **Caution**. — Strong **west or NW winds** make the entrance channel unsafe.

208 *Saugeen range lights (790, 791)* lead south of Lambert Shoal and through the western part of the buoyed channel. There is a user-activated **foghorn** at the front light structure and an all-round **light** above the front light.

209 The **pier** and most of the **wharf** on the south side of the harbour have depths greater than 9 feet (2.7 m) (1995). The easternmost 100 feet (30 m) of the wharf is shallow. The pier has an elevation of4 feet (1.2 m). Facilities include public washrooms and a pay phone. Fishing vessels and pleasure craft use the wharf.

210 A **bridge** across the river 0.2 mile from the entrance has a vertical clearance of 29 feet (8.8 m). An **overhead power cable** 0.1 mile east of the bridge has a clearance of 44.9 feet (13.7 m). An **overhead power cable** 0.2 mile above the bridge has a clearance of 45.9 feet (14 m).

211 **Caution**. — **Westerly winds** cause strong **surging** in the river entrance. Craft whose draught and overhead dimensions so permit are advised to berth upstream of the bridge.

214 The shore is mostly boulder beach with small patches of sand from Southampton to **Frenchman Point**, low and boulder-covered, 6.5 miles to the NE. There is a shallow **bank** up to 0.5 mile wide from Southampton to south of **Frenchman Bay**. A boulder beach extends 0.5 mile NE of Frenchman Point. **Sauble Beach**, a clean sand beach that contrasts distinctly with the coast to the north and south, forms the shore from here to the mouth of the Sauble River, 4 miles farther north. There is a **sandbank** 0.5 mile wide with depths of less than 18 feet (5.5 m) off Sauble Beach.

Sauble River

215 **Sauble River** *(44°40'N, 81°17'W)* entrance is protected on its north side by a **rock spit** and on its south side by a substantial **boulder breakwater**. With local knowledge, Sauble River can be navigated as far as **Sauble Falls** 1 mile upstream.

216 The entrance channel is subject to **silting** but is dredged periodically. Depths of less than 3 feet (0.9 m) were reported in 1999.

217 There is a **speed limit** on Sauble River from Lake Huron to Sauble Falls *(see Vessel Operation Restriction Regulations for details)*.

SAUBLE RIVER (1991)

218 The community of **Sauble Beach** extends southwards along the shore from the river mouth and is a popular summer resort with a magnificent sand beach. Sauble Beach has churches, several stores, banking, motels, hotels, medical clinic, doctors, post office, veterinarian, restaurants, service stations, liquor and beer store, golf and tennis.

219 Sauble Beach is a **Customs** vessel reporting station for pleasure craft.

220 *Kit-Wat Motel Marina Restaurant* is on the south shore of Sauble River 0.5 mile from the river entrance. There is a Municipal **launching ramp** near by. *Sauble River Marina* is 0.1 mile farther east.

Fishing Islands

221 **Chiefs Point** *(44°42'N, 81°18'W)* is a low shelving point 2 miles NNW of Sauble River. **Fishing Islands** is a group of low wooded islands extending 10 miles NNW from Chiefs Point. Fishing Islands were part of a First Nations Reserve but many of the islands are now privately owned.

222 **Main Station Island**, 3 miles north of Chiefs Point, was the most important fishing station on Lake Huron more than 100 years ago. The remains of the first stone house built in this area can still be seen on the island.

223 Fishing Islands lie on a shallow **reef-filled bank** with depths less than 18 feet (5.5 m). The bank extends 3 miles from the mainland shore. Narrow channels suitable only for small craft lead through the islands and reefs to anchorages and to the communities of Oliphant, Red Bay, Howdenvale and Pike Bay.

224 **Caution**. — Vessels between Chiefs Point and Cape Hurd, 37 miles to the NW, should stay outside the 20-m contour unless sure of their position.

225 **Caution**. — **Fishing nets** are frequently set in this area.

Approaches to Oliphant

226 The small farming community and summer resort of **Oliphant** *(44°44'N, 81°17'W)* is 2.5 miles NNE of Chiefs Point.

227 **Lonely Island**, also known as **Lonely Point**, is 1 mile south of Oliphant. It is connected to the shore by a sandy beach that is submerged at high water levels. **Chiefs Point Bay** is shallow and **foul**.

228 **Cranberry Island**, west of Oliphant, is the largest of a group of low wooded islands separated from the mainland by water only 1 foot (0.3 m) deep. This group includes **Whisky Island**, **Smokehouse Island**, **Indian Island**, **Bowes**

OLIPHANT (1998)

Island and Main Station Island. Indian Island is connected to Cranberry Island at low water levels.

229 **Cigar Island** is west of Lonely Island. **Vimy Island** and **Whitefish Island** lie west of Cigar Island.

230 A **submerged power cable** crosses between **Hawks Nest Point** and Whisky Island. Another **submerged power cable** crosses from Whiskey Island to Lonely Island. A **submerged power cable** crosses from the mainland shore to the NE point of Cranberry Island and then on to Indian Island. Other **cables** are laid from there to Bowes Island and the small islands to the south.

231 The **approach channel** to Oliphant is entered between Whitefish Island and a **shoal** to the south, marked by a **buoy**.

232 **Caution**. — The sea breaks with great force over this shoal in strong **westerly winds**.

233 The approach channel has depths of 10 feet (3 m) to a position east of Whitefish Island, where **anchorage** can be found in depths of 14 to 16 feet (4.3 to 4.9 m), mud and sand bottom.

234 **Caution**. — The shelter at Whitefish Island anchorage is good but **westerly winds** can cause **surging**.

235 The bottom is mostly sand from the anchorage to Oliphant. The channel from Smokehouse Island to the wharf at Oliphant is reported to be dredged periodically and has depths of 3 feet (0.9 m) (1994).

236 *Oliphant range lights (794, 795)* lead through the dredged channel. The *Oliphant range lights* are reported to be visible only on the range.

237 The harbour at Oliphant is a recreational harbour administered by the *Department of Fisheries and Oceans* and managed by the municipality.

238 The **Public wharf** at Oliphant is at the outer end of a **causeway**. The wharf is L-shaped with an outer face 84 feet (26 m) long and has depths of 4 to 8 feet (1.1 to 2.3 m) (1994). Commercial fishing boats use the wharf.

239 *Murdoch McKenzie Marine Service* is in a protected area on the north side of the causeway leading to the Public wharf. This marina also provides barge service to the islands.

240 The nearest medical and other facilities are at Wiarton, 12 km to the east by paved road.

Oliphant to Red Bay and Pike Bay

241 The shore is low and bordered by sand, boulders and rushes between Oliphant and **Indian Point**, 3 miles to the north.

242 **Burke Island** *(44°46'N, 81°19'W)* lies 2 miles NNW of Oliphant. **Scout Reef**, 1.2 miles SW of Burke Island, is a bare **rock** 5 feet (1.5 m) high. An extensive area of **shoals** lies south and east of Scout Reef. **Deadman's Island** is near the NE end of an extensive **boulder shoal** between Burke Island and Scout Reef. **Scotch Bonnet Island** is 0.7 mile SE of Scout Reef.

243 **Anchorage** can be found SE of Burke Island. A channel with depths of 9 feet (2.7 m) leads to the anchorage. The channel passes well south of the **shoals** around Scout Reef and north of the **shoal** area around Scotch Bonnet Island.

244 **Caution**. — A detached **rock** close east of the channel 0.2 mile west of Main Station Island has a depth of 6 feet (1.8 m).

245 **Little Red Bay** is 2.5 miles north of Oliphant.

246 *Little Red Bay Marina*, at *Evergreen Lodge*, is on the SE shore of Little Red Bay.

247 **Red Bay** is 4.5 miles north of Oliphant. Red Bay has a church, a small store, and a fine sandy beach. There is a concrete **pier** 9 feet (2.7 m) wide and 450 feet (137 m) long with an elevation of 5 feet (1.5 m) at Red Bay. This pier offers no shelter or berthing and the area around the pier is dry at chart datum (1996).

248 **Howdenvale**, 1 mile NNW of Red Bay, has an L-shaped **Public wharf** 168 feet (51 m) long and 16 feet (4.9 m) wide with depths of 1 to 5 feet (0.3 to 1.5 m) (1995) was in ruins in 2019. There is a concrete **launching ramp** on each side of this wharf and there are several private **wharves** around the shores of the bay.

249 **Caution**. — **SW winds** cause **surging** at the Howdenvale Public wharf.

Approach channels

250 There are three routes to Red Bay and Howdenvale: from Burke Island anchorage; from the lake through Beament Island passage; and from the lake through Drake Shoal passage.

251 The 6-foot (1.8-m) deep channel from Burke Island anchorage leads north between Indian Point and **Corsdu Reef**, then west of **Reid Point** into Red Bay. **McCallum Island**, 1 mile west of Reid Point, is at the end of a **rock reef** that extends 1.1 miles to the NNE. Depths of 9 feet (2.7 m) are found from Red Bay to Howdenvale and SW and west of **Tyson Island**, and 7 feet (2.1 m) around the north side of Tyson Island to the wharf.

252 **Caution**. — Three dangerous **rocks** in the east half of the channel near Indian Point have depths of less than 6 feet (1.8 m).

253 **Anchorage** can be found west of Tyson Island but the bay east of the island is **shoal** and filled with **rocks**.

255 A narrow passage between **Beament Island** and **Cavalier Island**, known locally as **Beament Island Passage**, is marked at the lake end by a **buoy**. There are depths of 7.3 m from the lake to a position north of Beament Island and depths of 7 feet (2.1 m) from NE of Beament Island to Howdenvale but **rocks** submerged less than 6 feet (1.8 m) lie close to the track on both sides. Local knowledge is required.

256 **Drake Shoal** is 2.5 miles west of Howdenvale at the southern end of a large area of **reefs** which include **Chimney Reefs**, **Harrison Shoal** and **Hattie Rock**. **Ghegheto Island**, known locally as **Round Island**, lies 0.8 mile SE of Drake Shoal.

257 Beament Island open west of Cavalier Island leads clear of the dangers described above.

258 A passage 450 feet (137 m) wide, known locally as **Drake Shoal Passage**, leads between Drake Shoal and the **reefs** extending from Ghegheto Island. The route to Howdenvale preferred by local fishermen leads through Drake Shoal passage then through the **reefs** between Ghegheto Island and St. Jean Point. This route is reported to be better than Beament Island passage in bad weather but local knowledge is necessary.

259 An extensive **anchorage** area inside Ghegheto Island and Chimney Reefs offers some shelter. Depths are generally more than 18 feet (5.5 m) but there are many **rock shoals** with depths of 10 to 15 feet (3 to 4.6 m).

260 **Pike Point** *(44°52'N, 81°20'W)* is 4.4 miles NNW of Red Bay and 8.5 miles NNW of Oliphant.

261 **Barrett Reef**, **awash** and marked by a **buoy**, is 1.3 miles west of Pike Point. **Kolfage Island** is0.5 mile south of Pike Point. Both are joined to Pike Point by impassable **reefs**.

262 **Pike Bay** is a sheltered inlet east of Pike Point.

263 Pike Bay can be approached from the lake either through Drake Shoal passage, described above, or by a passage with depths of 6 feet (1.8 m) entered south of Barrett Reef.

264 The outer part of the latter passage is marked by a **buoy** and by a **daymark range** on Kolfage Island. The red and white triangular-shaped daymarks in line bearing 097° lead close west of Kolfage Island. The passage around the west and south sides of Kolfage Island is not recommended without local knowledge.

265 There is a **daymark range** at the head of Pike Bay. The red and white daymarks in line bearing 018° lead into the bay.

HOWDENVALE BAY (1998)

266 **Caution**. — **Rocks** with depths of 2 and 4 feet (0.6 and 1.3 m) lie on the range line into Pike Bay; other **rocks** lie near the range line.

267 The community of Pike Bay has a motel, snack bar, general store and a gasoline station.

268 *Anchor's Landing Marina* is on the SE shore of Pike Bay.

269 *By the Bay Pike Bay Resort*, NE of *Anchor's Landing Marina*, is a campground open all year.

Fishing Islands to Cape Hurd

270 **Caution**. — **Reefs** extend offshore for up to 2 miles from Pike Bay past Lyal Island to Bradley Harbour, 11 miles to the NNW. Mariners should stay outside the 10-fathom (18-m) contour.

271 **Milton Bank** *(44°52'N, 81°23'W)* is 2 miles west of Pike Point. **Wells Shoal** and **Lincoln Shoal** lie west of **Purgatory Cove**. **Murton Reef** and **Lyal Reef** are NW of Lincoln Shoal.

272 **Caution**. — A **submerged power cable** crosses the mouth of Purgatory Cove.

273 **Lyal Island** *(44°57'N, 81°24'W)* is wooded. **Greenough Point** is on the mainland NNW of Lyal Island. **Wanderer Shoal**, **Ripple Reef**, **Saturn Rock**, **Seashell Rock** and **Cornet Ground** are SW and west of Lyal Island.

274 *Lyal Island light (796)* is on the west side of the island.

275 There is a **microwave tower** *(not shown on the chart)*, elevation 300 feet (91 m), 5 miles NE of *Lyal Island light*. This tower has air obstruction **lights**.

276 **Little Pike Bay** is entered, with local knowledge, through a passage between Lincoln Shoal and Murton Reef. The entrance channel, with depths of 11 feet (3.4 m), is narrow and crooked with a sharp turn past the narrow point on the south side of the entrance. There is a white **skeleton tower** near the end of this point but it is lower than the surrounding trees (1988).

277 A **submerged power cable** crosses the bay.

278 **Little Pike Point** is the SE entrance to the large bay SE of Lyal Island. The bay is shallow and **foul** except for a central lane of deep water.

279 **Parker Landing** is in the shelter of **Parker Island** in the NE part of this bay. Parker Landing has a municipal **launching ramp** and a **Public wharf** 40 feet (12 m) long and 6 feet (1.8 m) wide with an elevation of 4 feet (1.2 m). There are depths of 1 to 2 feet (0.3 to 0.6 m) (1992).

STOKES BAY (1998)

280 *Lakeside Park* is a family campground near the Parker Landing wharf.

281 **Shute Point**, 1 mile NE of Lyal Island, is prominent because of its dark colour.

282 **Old Woman's River**, 40 feet (12 m) wide at its mouth, is east of Shute Point. The river offers sheltered **anchorage** for small boats but local knowledge is required.

283 **Myles Bay**, between Shute Point and Old Woman's River, has a municipal park with **floating wharves** and a swimming area.

Stokes Bay

284 **Stokes Bay** *(44°59'N, 81°23'W)*, entered between Lyal Island and Greenough Point, offers sheltered **anchorage** for small vessels in the outer part and for small craft further up the bay.

285 **Caution**. — Certain wind conditions can cause the **water level** to vary as much as 3 feet(0.9 m) in 3 hours.

286 The entrance channel, with depths of 16 feet (4.9 m), passes north of Saturn Rock, Seashell Rock and Ripple Reef, and south of Cornet Ground and **Mad Reef**, which is bare, to an **anchorage** area north of Lyal Island. The channel is marked by *Stokes Bay Entrance light buoy VK2 (796.3)* and by other **buoys**. The channel south of Mad Reef is 900 feet (274 m) wide.

287 *Stokes Bay range lights (797, 798)* lead to within 0.4 mile of the most westerly of the **Knife Islands**. The rear light is on Shute Point.

288 Offshore **reefs** shelter areas north of Lyal Island and east of Mad Reef. With care, **anchorage** in 3.7 to 11 m can be found with protection from any particular wind.

289 The usual route to the anchorage begins on the *Stokes Bay range* outside the 20-m contour. The route follows the range until Mad Reef bears less than 320°, then turns northward to the deepest anchorage.

290 Small craft can find **anchorage** between **McMaster Point** on Lyal Island and **Dane Island** to the SSE. There are depths of 6 feet (1.8 m) in the approaches. Small craft can also find **anchorage** between Garden and Tamarack Islands in depths of 12 feet (3.7 m).

291 The **Public wharf** at Stokes Bay is on the NW shore of the bay at the outer end of a **causeway**. The wharf is 155 feet (47 m) long and 24 feet (7.3 m) wide with an elevation of 5 feet (1.5 m). The outer part of the wharf is 44 feet (13.4 m) wide. There are depths of 5 to 7 feet (1.5 to 2.1 m) around the outer part of the wharf, 4 to 6 feet (1.2 to

1.8 m) along the SW face, and 4 to 5 feet (1.2 to 1.5 m) along the NE face (1992). There is a Harbour Manager.

292 A channel leads from west of Knife Islands between **Garden Island** and **Tamarack Island** to the Public wharf. The channel has depths of 7 to 9 feet (2.1 to 2.7 m) in its northern part and is marked by **buoys**.

293 **Caution**. — The channel to the Public wharf is hazardous at night.

294 The community of Stokes Bay, at the mouth of the **Stokes River**, has a church, community centre, restaurant, general store and post office.

295 *Stokes Bay Camp and Marina*, a cottage resort and marina on the NE shore of Stokes Bay, has a post office.

296 **Irish Harbour**, 0.5 mile north of Shute Point, is reported to offer secluded **anchorage** for small craft. The harbour, approached around the south and east sides of Knife Islands, has a blue clay bottom that rises gently from 11 feet (3.4 m) in the entrance to weedy shallows at the head of the bay.

297 **Gauley Bay**, west of **Ferguson Point**, is **foul**.

298 An **overhead telephone cable** and a **submerged power line** cross the mouth of Gauley Bay.

Stokes Bay to Cape Hurd

299 **Greenough Bank**, 2.4 miles NW of Lyal Island, has **rocks awash** up to 1 mile offshore. There is a narrow channel with depths of 20 feet (6.1 m) between Greenough Bank and the shore. Local knowledge is required to transit this channel.

300 **Greenough Harbour** *(44°59'N, 81°26'W)* offers excellent sheltered **anchorage** for small craft. The entrance has depths of 6 feet (1.8 m) along the NW side of **Simon Point**. The preferred approach is from the south, following *Stokes Bay range* to a position abreast of Ripple Reef, then steering north until past Simon Point.

301 **Anchorage** can be found in the inner part of Greenough Harbour in 2 to 4 feet (0.6 to 1.2 m), mud bottom. Shoal **rocks** have been reported in the entrance to the inner harbour.

302 **Scotch Thistle Point** is not prominent.

303 **Bradley Harbour**, 2.3 miles NNW of Greenough Harbour, is **foul** and suitable only for small boats. Depths of 24 feet (7.3 m) and less are found up to 2.4 miles offshore between Bradley Harbour and **Pleasant Point**, 1.6 miles to the NW.

304 The entrance to the inner part of **Pleasant Harbour** is very shallow. Pleasant Harbour is suitable only for small boats.

305 **Little Pine Tree Harbour** *(45°03'N, 81°29'W)* is the best protected of the small harbours in the area. It offers limited **anchorage** with depths of 5 feet (1.5 m). The entrance is 200 feet (61 m) wide with a depth of 6 feet (1.8 m). There is a **rock** submerged less than 6 feet (1.8 m) in the middle of the harbour.

306 **Juno Point** and **Sibert Point** are between Little Pine Tree Harbour and Pine Tree Harbour.

307 **Pine Tree Harbour** *(45°04'N, 81°30'W)* offers **anchorage** for small craft in depths of 10 feet (3 m).

308 *Pine Tree Harbour range lights (798.5, 798.6)* lead towards the harbour.

309 **Caution**. — **Gilphie Reef** lies 0.5 mile offshore on the line of *Pine Tree Harbour range*.

310 The entrance into Pine Tree Harbour, between **Zinkan Island** and **Pine Tree Point**, is marked by **buoys**.

311 The harbour should not be attempted in bad weather because waves will probably break on Gilphie Reef. It is possible with local knowledge to pass around the reef and into the entrance.

312 Three submerged **cribs** on the NW side of Pine Tree Harbour are reported to be marked by private **buoys** (1988). Other submerged **cribs** in the harbour are not marked.

313 A **submerged cable** *(not marked on the chart)* crosses the inner end of Pine Tree Harbour close east of an islet near the north shore.

314 **Johnston's (Johnston) Harbour** *(45°07'N, 81°33'W)* is 3.5 miles NNW of Pine Tree Harbour. There is an outer bay, entered between **Terry Point** and **Johnston's (Johnston) Point**, and a small inner cove, well sheltered but shallow, lying NW of the head of the outer bay. The peninsula lying parallel to the NW side of the harbour is an island at high water levels. **Shoals** on the SE side of Johnston's Point extend 0.1 mile offshore.

315 The usual approach to Johnston's Harbour is from the SW and passes south of **Huntress Reef**, staying in mid-channel until near the head of the bay. The inner cove is entered through a narrow channel that is reported to lead between five **cribs**, some of which are marked by private **buoys** (1988).

316 **Anchorage** can be found in the outer part of Johnston's Harbour but this is exposed to south and SW winds. It is reported that **anchorage** can be found in the inner cove in 2 feet (0.6 m) of water over weed and mud bottom.

317 **Porcupine Point**, 1.7 miles NW of Johnston's Point, is low. The SW end is a spit of dry boulders. The small peninsula at the outer end of Porcupine Point is wooded with bushes and low trees and is an island at high water levels.

318 **Corisande Bay**, SE of Porcupine Point, is **foul**. **Porcupine Reef** extends almost to **Cataract Rock**, 0.8 mile WSW of Porcupine Point. **Eagle Point** is 1 mile NNW of Porcupine Point. The outer part of **Campbell Reef** lies 1.4 miles WSW of Eagle Point.

319 There is a Canadian Coast Guard **radio tower** 4.2 miles east of Eagle Point.

PINE TREE HARBOUR (1998)

320 **Little Eagle Harbour** *(45°09'N, 81°35'W)*, on the NW side of **Coal Oil Point**, offers sheltered **anchorage** for small craft but there is no protection from SW winds. There are depths of 18 feet (5.5 m) in the entrance. A **rock** 0.4 mile SW of Coal Oil Point has a depth of less than 6 feet (1.8 m). The usual entrance follows a course of 060° with Coal Oil Point as a lead mark, then passes close NW of the point.

321 **Dorcas Bay**, 1.5 miles north of Eagle Point on the east side of **Pendall (Penaall) Point**, is **foul**. **Eagle Harbour**, to the west, is very shallow and **foul**.

322 **Warner Point**, 1 mile west of Pendall Point, consists of limestone gravel and stones piled nearly 10 feet (3 m) high.

323 **Warner Bay** offers **anchorage** in 3 to 5.5 to 7.3 m, sand and mud. **Youell Island** is on the north side of the approach to the anchorage.

324 **Hopkins Point** *(45°11'N, 81°40'W)* lies on the south side of **Hopkins Bay**; a **shoal spit** extends 1 mile SSW of the point. Isolated **shoals** 1 mile west and 2.1 miles WSW of Hopkins Point have depths of 5.8 and 7.3 m.

325 There is an **anchorage** in the NE part of Hopkins Bay but a 13-foot (4-m) bar obstructs the approach. There are **shoal rocks** in the SW part of the bay.

Chart 2274

326 **Baptist Island** *(45°12'N, 81°42'W)*, off the north entrance point to Hopkins Bay, is prominent from the north. **Baptist Rock**, **Arbutus Rock** and several unnamed **rocks** lie south and west of Baptist Island.

327 **Baptist Harbour**, entered 0.7 mile north of Baptist Island, offers small craft **anchorage** with good shelter except from SW winds. The narrow entrance has depths of 6 feet (1.8 m) and anchorage in the harbour can be found in depths of 2 to 5 feet (0.6 to 1.5 m).

328 **Cape Hurd** *(45°13'N, 81°44'W)*, the west point of Bruce Peninsula, is low and flat and covered with tall poplars and pine trees.

329 *Cape Hurd light (799)* is on the outer part of the point. The light is visible on bearings of 357° through north, east and south to 222°.

330 *(The entrance to Georgian Bay and the areas NE of Cape Hurd are described in Sailing Directions booklet CEN 306 — Georgian Bay.)*

Lake Huron — North Shore

General

Chart 2200

1 This chapter covers the south coasts of Manitoulin Island, Cockburn Island and Drummond Island. These three large islands form the north shore of the main part of Lake Huron. Also included is a brief description of the islands in the entrance to Georgian Bay.

2 *(The islands, channels and dangers in the entrance to Georgian Bay are described in Sailing Directions booklet CEN 306 — Georgian Bay.)*

[From U.S. Coast Pilot 6, Chapter 10, partial]

2.1 ***Caution***. *— A special use airspace, bounded by the following coordinates,*

2.2 *45°17'00"N., 83°00'00"W.;*

2.3 *45°20'24"N., 82°31'18"W.;*

2.4 *44°31'00"N., 82°19'54"W.;*

2.5 *44°27'42"N., 82°47'08"W.;*

2.6 *is used periodically for air to air gunnery practice from the surface to an altitude of 45,000 feet [13,720 m] from sunrise to sunset. The using agency is the Commander, Permanent Field Training Site Detachment, Phelps-Collins ANGB, Alpena, MI, and the controlling agency is Minneapolis ARTC Center, Federal Aviation Administration.*

3 Most of the Canadian charts referred to in this chapter are based on modern surveys carried out between 1953 and 1981. *Charts 2297* and *2298*, however, are based largely on lead line surveys carried out much earlier but incorporate any dangers discovered during more recent echo-sounder surveys.

4 Depths and elevations quoted in this chapter refer to chart datum *(see Sailing Directions booklet CEN 300 — General Information, Great Lakes)* and thus agree with charted values. Because*Charts 2297* and *2298* are based on an older water level datum, depths and elevations on these charts must be corrected to refer them to the presently adopted datum for Lake Huron. The required correction is noted on the chart. *(More information on the older water level datums is given in Sailing Directions booklet CEN 300 — General Information, Great Lakes.)*

5 *Sarnia Vessel Traffic Services (VTS)* Zone covers Canadian waters from *Long Point light* in Lake Erie to the

south end of Detour Passage, in Lake Huron. Information on this system is given in *Radio Aids to Marine Navigation (Atlantic, St. Lawrence, Great Lakes, Lake Winnipeg and Eastern Arctic)*; visit http://www.ccg-gcc.gc.ca/eng/CCG/MCTS_Radio_Aids.

6 Upbound and downbound sailing courses and limits recommended by the *Lake Carriers Association* and the *Canadian Shipowners Association (see Sailing Directions booklet CEN 300 — General Information, Great Lakes)* are shown on the charts.

6.1 **Light buoy**. — An *Ocean Data Acquisition System (ODAS)* meteorological light buoy, marked *45003*, is moored in mid-lake 45 miles west of Tobermory.

Entrance channels

Chart 2235

7 The principal islands in the entrance to Georgian Bay are Fitzwilliam Island, Yeo Island, Lucas Island, Cove Island and Russel Island.

8 *(These islands and other dangers in the entrance to Georgian Bay are described more fully in Sailing Directions booklet CEN 306 — Georgian Bay.)*

9 **Fitzwilliam Island** *(45°30'N, 81°45'W)*, lying on the north side of the entrance to Georgian Bay, rises to a height of 160 feet (49 m) near its NE end.

10 **Yeo Island**, 2 miles south of Fitzwilliam Island, has two summits, each 100 feet (30 m) high. The NE summit, which is known as **Black Summit**, has steep slopes descending to the water. The north shore of the island is steep-to and has sea caves at lake level. The west shore is indented by two coves offering some shelter for small craft.

11 **Lucas Island**, 0.7 mile SE of Yeo Island, is 100 feet (30 m) high.

12 *Lucas Island light (804)* is on the north side of the island. It is visible on bearings of 040° through east and south to 229°.

13 **Cove Island** *(45°18'N, 81°44'W)* lies on the south side of the entrance to Georgian Bay. **Russel Island**, 1 mile SE of Cove Island, is a high island with a steep rocky coastline; it is thickly wooded with the tree line extending down to the shore.

14 **Gig Point** *(45°20'N, 81°44'W)* is the north end of Cove Island.

15 *Cove Island light (805)* is on Gig Point. There are two red and white **radio towers** near the light.

17 *West Sister Shoal light buoy J2 (802.5)* marks the north side of the shoal.

Manitoulin Island

18 **Manitoulin Island** extends from Georgian Bay across two-thirds of the northern end of Lake Huron. North Channel separates what is said to be the largest "fresh water" island in the world from the north mainland shore. The island is mostly limestone tablelands tilted towards the SW or south. The southern or Lake Huron coast extends from Owen Channel entrance on Georgian Bay WNW for 62 miles to Mississagi Strait. Nearly all of this coast is low, rocky and boulder-strewn.

19 *(North Channel is described in Sailing Directions booklet CEN 307 — North Channel of Lake Huron.)*

20 The principal towns and ports on Manitoulin Island are Little Current and Gore Bay, both on North Channel. South Baymouth and Providence Bay are the only settlements on the Lake Huron coast with any facilities for small craft.

Charts 2235, 2298

Hungerford Point to Providence Bay

21 **Hungerford Point** *(45°31'N, 81°51'W)*, the south end of Manitoulin Island and the NW entrance point of Owen Channel, can be identified by its small white stony beaches. Scattered stones and shallow water west of the point extend 0.4 mile offshore.

22 *(The coast of Manitoulin Island NE of Hungerford Point is described in Sailing Directions booklet CEN 306 — Georgian Bay.)*

23 The shore is low from Hungerford Point to **Thomas Bay**, 4 miles to the NW. **Boulders** and **shoals** lie close in; **Vigilant Rock** and **Grantham Shoal** extend 1 mile offshore.

24 The entrance to Thomas Bay is obstructed by **Todman Reef** and **shoal spits** extending WSW from **Mayflower Island** and by a **shoal spit** extending from the west entrance point of the bay. A detached **rock** lies 0.3 mile SSW of Todman Reef.

25 **Caution**. — A **shoal spit** reaching 0.4 mile south of **Thomas Point** is a **danger** to vessels approaching from SW.

26 **Anchorage** with excellent shelter from all but southerly winds can be found in Thomas Bay. The preferred entrance is west of Todman Reef.

27 **McGaw Point**, 2.5 miles WNW of Thomas Point, is the south side of the entrance to South Bay.

Chart 2273

28 The community of **South Baymouth** *(45°33'N, 82°01'W)* is north of McGaw Point on the NW side of the entrance to South Bay. The community has a general store, post office, restaurant, motel, liquor store, pay phone and gasoline. There is a **ferry terminal**, a **Public**

SOUTH BAYMOUTH (1998)

wharf and a small **launching ramp**. Manitowaning, 22 km to the NE, is the nearest business centre. There is a hospital in Mindemoya, 33 km to the NW.

29 The entrance channel, marked by **buoys**, passes between shallow water extending from McGaw Point to the east and **Inkster Rock** and **Scotchie Reef** to the west.

30 **Wallace Rock** is the outermost **danger** in the approach to South Baymouth.

31 *South Baymouth light buoy JS2 (806)* is SW of Wallace Rock on the line of *South Baymouth range*. *Inkster Rock light buoy JS5 (806.5)* lies ESE of Inkster Rock and *McGaw Point light buoy JS8 (806.7)* is NW of McGaw Point.

32 *South Baymouth range lights (807, 808)* lead part way through the entrance channel. There is a user-activated **foghorn** at the front range light.

33 A **current** sets out of South Bay except during strong onshore winds.

34 During the summer months a passenger and vehicle **ferry** runs between South Baymouth and Tobermory. *(Further information on the ferry is given in the description of Tobermory in Sailing Directions booklet CEN 306 — Georgian Bay.)*

35 Two privately maintained **lights** indicate the NE and SW ends of the ferry terminal.

36 *South Bay Marina* is at the head of a small-craft basin, entered SW of the ferry terminal.

South Bay

37 **South Bay** extends 13 miles NE from South Baymouth. The bay consists of two parts joined by **The Narrows**. **McKim Bay**, **Frood's Harbour (Froude Bay)** and **Leason Bay** are on the NW shore of the southern part.

38 The **wharf** and buildings of an *Ontario Ministry of Natural Resources* base are at McKim Bay. The wharf is marked by a private white **light** and has depths of 2 feet (0.6 m) (1987). The base has red and white **radio towers** that are visible from South Bay.

39 The SW part of South Bay offers excellent **anchorage** in depths of 5 to 7 fathoms (9.1 to12.8 m), mud bottom. It is reported that small craft can find good shelter in Frood's Harbour.

40 **Caution**. — A **submerged power cable** crosses the middle of Frood's Harbour.

41 A high, well wooded limestone cliff forms the east shore of the NE part of South Bay from **Roberts Bay** to the site of a First Nations village 5 miles to the NE.

42 A **church spire** at the First Nations village is prominent.

43 **Glycerine Rock** is a detached **boulder shoal** 0.6 mile off the First Nations village.

44 The land beyond the west shore of South Bay rises gradually to a bare limestone cliff, 300 feet (91 m) high in places, one mile inland. Named features on the west shore of the NE part of South Bay are **Sims Bay**, **Sims Island**, **Leask Point**, **Leask Bay** and **Charlton Bay**.

South Baymouth to Providence Bay

45 The outlying **dangers** between South Baymouth and **Walker Point**, 2.5 miles to the west, are **Volunteer Spit**, which extends 0.7 mile offshore, and **Red Dan Rock**.

46 **Birch Point** is not prominent. Many dry **rocks** and **rocks awash** extend south and SW from Walker Point. A prominent small island is west of the point.

47 **Genesta Bank** lies 1 mile WNW of Walker Point in the mouth of a bay that is filled with **reefs** and **shoals**. There are several detached **shoal** patches in this area. The outermost is a 28-foot (8.5-m) patch 0.8 mile south of Genesta Bank.

Charts 2266, 2298

48 **Michael's Point (Michael Point)** *(45°35'N, 82°08'W)* is 2.6 miles WNW of Walker Point. A thickly wooded **islet** and groups of dry **rocks** lie west of Michael's Point and a **rock spit** extends 0.7 mile to the west. **Advance Reef**, an extensive **rock shoal** just separated from the spit, has a spot that is dry 0.8 m.

49 **Michael's Bay (Michael Bay)**, which lies between Michael's Point and **Hammond Point**, has a clean sand beach at its head. **Chisholm Shoal** is the main **danger** in this bay.

50 Two **cribs awash** lie close to the north shore of Michael's Bay.

51 The best **anchorage** is found east and SE of Chisholm Shoal, clay or sand bottom. There is no shelter from westerly winds.

52 The coast is low and wooded from Hammond Point to **Jenkins Point** *(45°37'N, 82°12'W)*, 3 miles to the NW. A shallow **bank** up to 0.5 mile wide and isolated **shoal** patches lie offshore. The outermost shoal is 2.2 miles SSW of Jenkins Point. **Carter Bay** has a mostly **sandy shore** that is **conspicuous** from offshore. **Rathbun Bay** is shallow and **foul**. **Hughson Bay** is north of Jenkins Point.

53 **Buckeye Shoal** and **Timber Bay Shoal** lie 0.8 mile south and 1.5 miles WNW of Jenkins Point.

54 **Timber Bay**, 1.5 miles NW of Jenkins Point, has two **islets** close off its east shore; two dry **rocks** lie west of the northern islet. Small craft can find **anchorage** in Timber Bay SE of **Dewar's Creek**.

55 **Providence Point** *(45°39'N, 82°17'W)* is 6 m high and bluff. **Providence Bay** is entered NW of the point.

56 A shallow bank up to 0.6 mile wide lies along the shore between Timber Bay and Providence Point. **Everett Reefs** are dry rocks 0.3 mile offshore west of Timber Bay.

57 *Providence Bay light (810)* is on the outer end of Providence Point.

58 The community of **Providence Bay** is at the head of the bay. There is a post office, telephone, grocery store, hardware store, restaurant and motel. Fresh water and gasoline are available (1999).

59 **Simcoe Bank**, on the west side of the entrance to Providence Bay, extends 0.6 mile southwards from **Black Rock (Simcoe Point)**.

60 *Providence Bay light buoy JH1 (809)* lies south of Simcoe Bank.

61 The west side of the bay NE of Black Rock is lined with large **boulders**. The head of Providence Bay has a sand beach.

62 **Anchorage** can be found in Providence Bay but it is open to south and SW winds and seas. The bay has a bottom of sand over clay.

63 The **Public wharf** is 0.5 mile NE of Providence Point. The wharf, elevation 1.5 m, is a concrete and timber crib structure 90 m long and 6 m wide with depths along the east face of 1.5 to 2.1 m. Two timber crib piers extend from the east side of the wharf. Depths are 1.8 to 2.7 m (2000). Fishing vessels berth at this wharf. There is a **launching ramp** close east of the wharf.

64 *Providence Bay Marina* is at the Public wharf.

65 **Submerged ruins** with a reported depth of 0.6 m extend 26 m NW from the outer end of the Public wharf.

66 *Providence Bay wharf light (811)* is on the outer end of the ruins.

Providence Bay to Duck Islands

67 Shallow **boulders** line the shore between Black Rock and **Mutchmor Point** *(45°40'N, 82°19'W)*, 1.3 miles to the WNW.

68 The shore is irregular between Mutchmor Point and **Dominion Point**, 5 miles farther WNW. Shallow **spits** and **reefs**, including **Dean Spit**, **Milton Reef** and **Lougheed Reef**, extend up to 0.7 mile offshore.

69 **Deans Bay** is north of Mutchmor Point. **Lonely Bay**, west of Deans Bay, has a stream that empties through a sand beach. **Lonely (Milton) Point** is stony. **Lougheeds Point** and **Square Bay** are farther west.

70 **Melville Point** *(name incorrectly positioned on Chart 2298)* forms the west side of Square Bay. **Melville Bay** *(not named on Chart 2298)*, **Dominion Bay** and Dominion Point are farther west.

71 **Anchorage** with good holding and protection from westerly winds can be found in Dominion Bay.

PROVIDENCE BAY (1998)

72 The cape west of Dominion Point is low and formed of limestone. The unnamed west point of the cape *(shown as Melville Point on Chart 2298)* is a little higher than the adjoining coast and is composed of larger broken stones.

73 **Shrigley (Srigly) Bay** is close NW of the west point of the cape. A stream empties into the bay through a sand bank.

74 **Portage Bay**, 2 miles NW of Shrigley Bay, is shallow and **foul**. **Thistle Reef** extends almost2 miles south from Portage Bay.

75 **Caution**. — **Fishing nets** and **stakes** are reported in Portage Bay.

76 Shallow **boulders** line the shore from **Portage Point** halfway to **Gatacre Point**, 3.5 miles to the west. **Shamrock Bank** extends 0.9 mile offshore.

77 **Murphy Harbour** *(45°47'N, 82°41'W)* is a shallow bay 2 miles NW of Gatacre Point. The bay is partly sheltered by an **islet** in the middle of the entrance. Small craft can find **anchorage** midway between the islet and the NW corner of the bay in 2.7 m. A depth of 2.1 m can be found by entering midway between the islet and the SE entrance point. A private T-shaped **wharf** on the west side of Murphy Harbour is used by fishermen. **Murphy Point** forms the west side of the harbour.

78 The shore is low and shelving in the area of **Mac's Bay (Frechette Bay)** and from there to **Misery Bay**, 1.5 miles to the WNW. **Frechette Bank** extends 1 mile south from **Fréchette Point**.

79 **Saunders Reef** ends 1 mile SSE of the entrance to Misery Bay. The outer end of **Taylor Reef** is 1.5 miles south of the bay.

80 **Anchorage** can be found in the outer part of Misery Bay in depths of 3 to 4 m, sand and mud bottom.

81 **Methuen Reef** is the outer end of a **rock** and **boulder** spit extending 0.6 mile SW of **Misery Point**.

82 **Sand (Hensley) Bay**, 2 miles NW of Misery Point, has a sand beach at its head. A shallow **bank** 0.6 mile wide extends from shore between Sand Bay and **Goose Point**, a low rocky point 1 mile to the west. **Buller Reef**, a small cluster of drying stones, is on this bank.

Charts 2266, 2297

83 **Carroll Wood Bay** *(45°48'N, 82°50'W)*, which is shallow, has **Morrell Reef** and **Seaman Reef** in the entrance. **Deadman's Point** lies on the NE side of the bay.

84 **Walkhouse Point**, at the SW entrance to Carroll Wood Bay, is dark coloured. **Gaspesia Shoal** and other

MURPHY POINT (1998)

shallow patches lie up to 0.6 mile ESE and SSE of Walkhouse Point.

85 **Queens Point** separates **Walkhouse Bay** and **Fisher Bay**. **Skin Island** lies between Walkhouse Point and Queens Point. A small rocky area named **Rudyard Reef** is 0.5 mile WNW of Queens Point. The shore is **foul** between Queens Point and **Black (Green) Point**, 1.3 miles to the WNW.

Duck Islands

86 **Duck Islands** are five islands in an area 2 to 10 miles south of Manitoulin Island. The islands are low and wooded except for Great Duck Island.

87 **Thibault (Inner Duck) Island** *(45°46'N, 82°56'W)*, elevation 3.5 m, is connected to Black Point on Manitoulin Island by a shallow **sand** and **boulder** bar. **Thibault Shoal** lies on this bar. The north end of the island is a gravel bank.

88 **Macauley Spit** projects 0.8 mile SSE from Thibault Island.

89 **Middle Duck Island** has shallow spits extending from its north and SE points. **Hogs Back Reef** is at the end of the north spit. **Kipling Reef** lies 0.5 mile WSW of the island.

90 **Great Duck Island** *(45°40'N, 82°57'W)*, thickly wooded, rises to an elevation of 50 m. The shore is low and fringed with **boulders** that make landing difficult.

91 *Great Duck Island light (812)* is on the SW side of the island.

92 A red and white **radio tower**, elevation 129 m, is close south of *Great Duck Island light*.

93 A small cove near the lighthouse offers fair landing for boats.

94 A **submerged power cable** is laid from a position on shore near Great Duck Island light in a north and NNE direction to Burnt Island.

95 A **magnetic anomaly** 8 miles SW of Great Duck Island causes reported differences of up to 8° from normal variation.

96 **Desert Point**, the NE corner of Great Duck Island, consists of **conspicuous** bare **sand dunes** and a sandy **beach**. There is no passage between the north coast of the island and **Manitoba Reef** or **Gull Rock**.

97 **Gravel Point**, on the east side of Great Duck Island, is at the north end of a slight bay. This bay has the silted-in **ruins** of a small wharf at the site of a former fishing station.

98 A **wreck**, elevation 0.7 m, lies near the wharf and gives some shelter from southerly seas. A **submerged wreck**, depth 1.9 m, is 250 m offshore.

99 A private **daymark range** bearing 219° has been reported close north of Gravel Point.

GREAT DUCK ISLAND (1998)

100 **Outer Duck Island** *(45°38'N, 82°55'W)* is joined to Great Duck Island by a sand bar 0.3 mile wide. **Bain Rock** lies on this bar. A private **daymark** is reported near the north end of Outer Duck Island.

101 Larger vessels can find **anchorage** on the bank north of Outer Duck Island. There is good holding in depths of 5 to 18 m, sand and clay bottom, with shelter from westerly winds but the swell can be high.

102 **Anchorage** can be found on the bar south of Gravel Point but with no protection from southerly winds.

103 **Jennie Graham Shoal** *(Chart 2297)* is the outermost of several **reefs** lying up to 2 miles south of Great Duck Island, the others being **Larry Rock**, **Kitty Shoal** and **Mary Shoal**. These reefs are separated by deep water from a shallow spit that extends 1.3 miles south of Outer Duck Island.

104 **Horseshoe Bay**, on the west side of the island, is shallow and strewn with large **boulders** and suitable only for small boats. The prominent NW tip of Great Duck Island is named **Big Bluff Point** because of its appearance.

105 **Western Duck Island** *(45°45'N, 83°00'W)* has **boulder** shores except for its sandy NE point, which is the only suitable landing place for boats. **Blake Point**, the SE end of the island, is composed of boulders.

106 **Western Duck Reef** is a boulder-strewn shoal 1.2 miles NW of Western Duck Island.

107 The south end of Thibault Island closed behind the NE point of Western Duck Island, bearing 102°, leads south of Western Duck Reef.

108 **Stafford Rock** and another detached **shoal** lie midway between Western Duck Island and Manitoulin Island.

Chart 2200

109 There is a *Sarnia Vessel Traffic Services Zone* calling-in point for upbound and downbound vessels SW of *Great Duck Island light*. *(Consult Radio Aids to Marine Navigation (Atlantic, St. Lawrence, Great Lakes, Lake Winnipeg and Eastern Arctic) for more information.)*

Charts 2267, 2297

Duck Islands to Mississagi Strait

110 The bay between **Black (Green) Point** *(45°48'N, 82°55'W)*, previously described, and **Ivan Point**, 0.7 mile to the NW, and the northern half of the bay between Ivan Point and **Edna Point** are **foul**. **Christina Bay**, west of Ivan Point, is shallow.

111 **Anchorage** can be found in Christina Bay. **Anchorage** can also be found west of Edna Point.

BURNT ISLAND HARBOUR (1998)

112 **Caution**. — Local knowledge is required to anchor west of Edna Point because of the **submerged power cable** to Great Duck Island.

113 **Burnt Island** *(45°49'N, 82°57'W)* has low limestone cliffs on its west and north sides. There is a small **wharf** on the north side of the island. The private **wharves** and buildings of a fishing station are nearby.

114 **Caution**. — The **ruins** of a wharf, consisting of above-water and submerged piles, extend from the NNW corner of the main wharf.

115 **Burnt Island Harbour**, NW of Burnt Island, offers excellent **anchorage** in depths of 4 to 10 m, mud bottom, with shelter from most winds.

116 The boiler and frames of a **wreck** near the east shore of the harbour are visible; the boiler has an elevation of 2 m (2000).

117 **Rickley Harbour** is **foul** and suitable only for small boats. **Girouard Point**, 0.9 mile WNW of Rickley Harbour, is low and bluff. **Ainslie Shoal** lies 0.3 mile south of Girouard Point.

118 Black Point in sight south of Burnt Island, bearing 103°, leads south of Ainslie Shoal.

119 **East Belanger Bay**, NE of Girouard Point, is shallow. **West Belanger Bay**, 1 mile to the WNW, is deep but has little shelter.

120 **Rocks** and **shoal** water lie between **Belanger Point**, on the SW side of West Belanger Bay, and **Quarry Point**, 1.1 miles farther WNW. The outermost dangers are **Jones Shoal** and **Labrador Reef**. **Pearson Island** and **Dunn Island** lie among the reefs and rocks between the two points.

121 **Quarry Bay (Greene Island Harbour)** *(45°51'N, 83°06'W)*, entered between Quarry Point and Greene Island, 0.9 mile to the west, offers well-sheltered **anchorages** in depths of 5 to 15 m.

122 **Greene Island**, although only 3.5 m high, is **conspicuous** because of its thick growth of trees and distance from the shore. There is a cove suitable for boats on the south side of the island. A depth of 1.5 m is reported in the centre of the channel just inside the entrance (1978). There are **rocks** 100 m inside the entrance.

123 **Caution**. — Local knowledge is required to navigate to the deeper inner part of the cove.

124 The passage between Greene Island and **Steevens Island**, 0.3 mile to the north, is **foul** and suitable only for small boats. **Mink Reef** lies between Steevens Island and Manitoulin Island.

MISSISSAGI STRAIT, EAST SHORE (1998)

125 The **submerged ruins** of wharf cribs extend 274 m from shore in the NE part of the harbour.

126 The coast is lined with **reefs** and shallow water from Quarry Bay to Mississagi Strait, 4 miles to the west. **Lynn Point**, 2 miles NW of Greene Island, is low. The outermost **dangers** along this shore are **Purvis Bank**, 0.7 mile ESE of Lynn Point, and **Carter Rock**, 1 mile WSW of Lynn Point.

Mississagi Strait

127 **Mississagi Strait** separates Manitoulin Island from Cockburn Island and connects the main part of Lake Huron with North Channel.

128 *(The northern approaches to Mississagi Strait are described in Sailing Directions booklet CEN 307 — North Channel of Lake Huron.)*

129 **Cockburn Island** is mostly thickly wooded. Its highest point is **McCaigs (McQuaigs) Hill**. The NE, east and south ends of the island are named, respectively, **Devils Horn (Channel Point)**, **Cinder Point** and **Boom Point**.

130 *Mississagi Strait light (813)* is on the east side of the strait 0.5 mile NNW of **Boathouse Bay** *(45°53'N, 83°13'W)*. An older light structure, near the light, is a white square **tower** with a red upper part and has a dwelling attached.

131 Deep water is found along most of the west shore of Manitoulin Island north of the light.

132 A **submerged power cable** crosses from near *Mississagi Strait light* NW to Cinder Point.

133 The *Manitoulin Dolomite Quarry* **wharf** is on the east side of Mississagi Strait 1.4 miles north of *Mississagi Strait light*. Limestone is loaded at this facility. Three fendered **dolphins** are connected to the shore by **causeways** and timber decking. The NE and SW dolphins are 91 and 79 m from the central dolphin, which is equipped with a **shiploader**. Bollards for bow and stern lines are on the shore. A depth of 11.4 m is reported along the berth 5 m off the alignment of the dolphins (1987).

134 **Magnetic Reefs** *(45°50'N, 83°20'W)* are the outermost **dangers** in the southern approaches to Mississagi Strait. They are named **South Reef**, **East Reef**, **West Reef**, **Middle Reef** and **North Reef**. A south cardinal **buoy** is moored 0.6 mile SSE of South Reef.

135 **Caution**. — A **magnetic anomaly** exists south of Boom Point; disturbances of 7° have been reported.

136 A detached **shoal** patch 2.6 miles east of Magnetic Reefs has a depth of 12 m.

137 **Castilian Shoal** *(45°52'N, 83°17'W)* and a **shoal** patch 0.5 mile to the NE, marked by a **buoy**, are on the west side of the south end of the strait. Another **shoal** patch lies south of Cinder Point.

138 Devils Horn in sight east of Cinder Point, bearing 358°, leads east of the two unnamed shoals.

139 **Magnetic Island** is a small wooded island 3 miles NE of Boom Point.

140 **Anchorage** can be found north of Magnetic Island in depths of 6 to 8 m, mud bottom, but shelter from southerly winds is poor. **Ricketts Harbour**, 1 mile NNE of Magnetic Island, has depths of 1.5 m in the entrance and offers **anchorage** for small craft in depths of 2 m. **Shoal** water extends south from the east entrance point of the harbour.

141 **Sand Bay**, **Doc Hewson Bay**, **Smith Point** and **Mud Bay** are north of Magnetic Reefs.

South Shore of Cockburn Island

142 **Boulders** and shallow water lie close offshore between Boom Point and **Hyndman Bay**, 4 miles to the NW.

143 **Wagosh Bay**, with a sand beach at its head, lies west of Hyndman Bay between **Pulpwood Point** and **Station (Smith) Point** *(45°53'N, 83°29'W)*. **Wagosh Reef** extends 1 mile south into the middle of the bay. **McKay Rock** is 0.8 mile SSW of Pulpwood Point.

144 **Anchorage** with excellent shelter from westerly winds in depths of 5 to 8 m, sand and mud bottom, can be found between Wagosh Reef and the **shoal** water bordering the west side of the bay.

False Detour Channel

145 **False Detour Channel**, between Cockburn Island and **Drummond Island**, leads from the main part of Lake Huron to North Channel. The **International Boundary** follows False Detour Channel.

East side of channel

146 **Wheeler Reef** *(45°54'N, 83°31'W)* and another **shoal** patch to the south are the outermost **dangers** on the east side of the south entrance to False Detour Channel. **Kitchener Island**, wooded, is surrounded by **shoals** up to 0.2 mile wide.

147 **Anchorage** can be found NE of Kitchener Island, sand and mud bottom.

148 **Herschel Island** is 0.8 mile NE of Kitchener Island. The east side of the channel north of Herschel Island is clear of dangers beyond 0.2 mile from the shore except for a shoal bay 2.5 miles NE of Herschel Island.

149 **Monk Point** *(45°59'N, 83°25'W) (Chart 2297)* is the north end of the east side of the channel.

150 *(The northern approaches to False Detour Channel are described in Sailing Directions booklet CEN 307 — North Channel of Lake Huron.)*

South Shore of Drummond Island

ENC US5MI61M Chart 14882

[from U.S. Coast Pilot 6, Chapter 10, partial]

151 *From Marble Head SSW for 5.5 [4.8] miles, the shore of Drummond Island fronting False Detour Channel is generally deep-to. The S shore of the island is broken, with numerous indentations and many off-lying shoals and islands. The largest bays, from W to E, are Whitney Bay, Island Harbor, Huron Bay, and Big Shoal Cove. These natural harbors have depths of 24 to 40 feet [7.3 to 12.2 m], but because of numerous obstructions, they should not be entered in foggy weather or without local knowledge.*

152 ***Whitney Bay**, on the E side of Barbed Point, is separated from the lake by several islands with two deep channels, marked by private buoys, leading into the bay. Outside the islands in the approach to the bay, several shoals rise abruptly from deep water. The outermost is a rock, covered 7 feet [2.1 m], 0.9[0.8] mile S of **Bellevue Island** and marked on the SW side by a buoy. From the buoy a shoal bank extends 0.6 [0.5] mile E. A 12-foot [3.7-m] and a 14-foot [4.3-m] spot are 0.5 and 0.8 [0.4 and 0.7] mile NW of the buoy, respectively. A reef with rocks awash and a reef with rocks just below the surface are 0.4 [0.35] mile S and SE of Bellevue Island, respectively.*

153 *A marina, about 1.2 [1] miles N of Bellevue Island on the N side of Whitney Bay, had reported depths of 8 feet [2.4 m] in the entrance and 6 feet [1.8 m] alongside the berths in 2001. The marina provides transient berths, gasoline, diesel fuel, water, electricity, marine supplies, a launching ramp, a 5-ton [4.5-tonne] hoist, and hull and engine repairs.*

154 ***Island Harbor**, 3 [2.6] miles SE of Barbed Point, is separated from Whitney Bay by **Point Anderson**. **Espanore Island**, 0.8 [0.7] mile SE of Point Anderson, encloses Island Harbor on the SW. A 1-foot [0.3-m] reef with scattered boulders is 0.8 [0.7] mile NW of the SW end of Espanore Island with a 13-foot [4-m] shoal between. A rocky ledge extends 0.7 [0.6] mile S from the island, and a ledge with rocks awash that extends 0.4 [0.35] mile E from the island narrows the entrance to Island Harbor to about 0.25 [0.22] mile.*

155 ***Huron Bay**, 2.5 [2.2] miles E of Island Harbor, has a deep entrance about 0.4 [0.35] mile wide on the E side of **Gravel Island**. A ledge with rocks awash extends 0.7 [0.6] mile S from the E side of the bay. A rocky ledge with depths of 1 to 4 feet [0.3 to 1.2 m] extends 0.7 [0.6] mile S from Gravel Island.*

156 *From Huron Bay E for 7 [6.1] miles to Big Shoal Cove, the shore is bordered by shoals extending about 0.5 [0.4] mile off. **Holdridge Shoal**, a detached shoal with*

a least depth of 5 feet [1.5 m], is 2 [1.7] miles SE of Gravel Island.

157 ***Scammon Cove**, just NW of Big Shoal Cove, is enclosed between **Meade Island** on the W and **Scammon Point** on the SE. **Horseshoe Reef**, awash, is 1.3 [1.1] miles SW of Meade Island. A large shoal with a least depth of 8 feet [2.4 m] is between Meade Island and Horseshoe Reef.*

158 ***Big Shoal Cove**, on the E side of Scammon Point, provides good anchorage in 24 to 30 feet [7.3 to 9.1 m], clay bottom. Detached 4-foot [1.2-m] and 6-foot [1.8-m] shoals, 0.4 [0.35] mile SE and 0.65 [0.56] mile ESE of Scammon Point, respectively, are dangerous obstructions in the entrance to the cove. A rocky ledge, with some rocks uncovered, extends 1.5 [1.3] miles SSW from the E side of the cove entrance. **Big Shoal**, the outer end of the ledge, expands to a width of 1.2 [1] miles. The SW end of the ledge is marked by a buoy.*

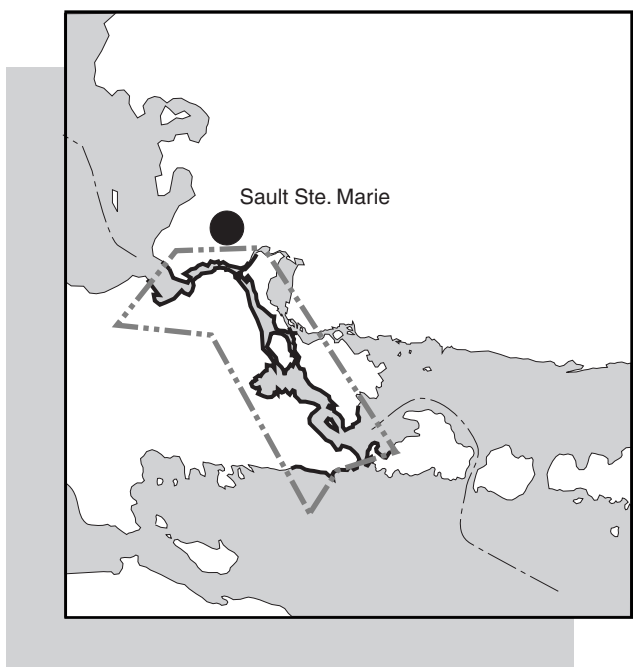
159 *From Big Shoal Cove E for 4 [3.5] miles to False Detour Channel, the shore of Drummond Island should be given a berth of 1.5 [1.3] miles.*

160 *(De Tour Passage and approaches are described in Chapter 3.)*

St. Marys River

General

ENCs US5MI61M, US5MI62M, US5MI63M Charts 14882, 14883, 14884



1 **St. Marys River** connects Lake Superior and Lake Huron. The river flows in a general SE direction from Gros Cap Reefs in Whitefish Bay to Point De Tour in Lake Huron. The distance between these points is 55 to 65 miles, depending on the route taken. The river is bounded to the north and east by the Province of Ontario, and to the south and west by the State of Michigan.

2 St. Marys Falls is bypassed by St. Marys Falls Canal on the United States side of the falls and by Sault Ste. Marie (Canada) Canal to the north of the falls. The lift is from 21 to 23 feet (6.4 to 7 m), depending on water levels.

3 A small craft route passes north of Sugar Island, south through Lake George and through the St. Joseph Channel into the North Channel of Lake Huron. *(This route is described in Sailing Directions booklet CEN 307 — North Channel of Lake Huron.)*

4 Water depths on St. Marys River and vertical clearances under overhead cables and bridges refer to a sloping river surface. *(See information on chart datum in Sailing Directions booklet CEN 300 — General Information, Great Lakes.)*

5 Changes in water level are of concern to vessels navigating in the area because much of the present route in St. Marys River has been made navigable by dredging.

6 **Caution**. — The improved channels throughout the length of St. Marys River are subject to shoaling. The United States Corps of Engineers publishes the controlling depth periodically in United States Coast Guard Local Notices to Mariners.

7 In a typical year, St. Marys River rises and falls 1.3 feet (0.4 m) as measured by monthly mean levels. Since 1900, the difference between the highest and lowest monthly mean levels above the locks has been 4 feet (1.2 m), and below the locks 6 feet (1.8 m).

8 Water levels fluctuate from day to day due to wind and atmospheric pressure; such changes frequently amount to 0.3 to 1.6 feet (0.1 to 0.5 m).

9 Exceptional wind and pressure combinations can cause a dramatic oscillation, with a period of two or three hours, in addition to these water level changes. This phenomenon is

known as a *seiche* and has caused water level changes of over 5 feet (1.5 m) in a period of three hours. East and south winds cause high water below the locks and low water above the locks, while west and north winds have the opposite effect.

9.1 Real-time water level information for St. Marys River below the locks at Sault Ste. Marie is available from the *Canadian Hydrographic Service Automated Water Level Gauge*, telephone number 705-254-7989 and for St. Marys River above the locks from the *Canadian Hydrographic Service Automated Water Level Gauge*, telephone number 705-949-2066. *(More information on water levels is given in Sailing Directions booklet CEN 300 — General Information, Great Lakes.)*

10 **Caution**. — A large vessel passing in the narrow channels of St. Marys River can cause a sudden drop of 1.3 feet (0.4 m) in the water level and a pronounced change in the **current**. This effect can be particularly hazardous to small craft in shallow waters.

11 **Caution**. — Speed limits established for St. Marys River by the *St. Marys River Vessel Traffic Service Rules* refer to speed over the bottom. Masters are cautioned to regulate the speed of their vessels by reference to points ashore.

12 The rate of the **current** depends largely on the discharge of the river and on the water level at the mouth of the river. The discharge of the river is controlled and varies according to water level requirements. The current is strong when the water level on Lake Superior is high and is further increased if the level of Lake Huron is low.

13 The swiftest **currents** in the navigable channels of St. Marys River are at the Middle Neebish Channel dike (Course 6); the West Neebish Channel rock cut (Course 6); and the Little Rapids cut (Course 2).

14 **Caution**. — The **current** over the rapids at Sault Ste. Marie is slight at times but there is often a very strong set at the inlets of the Michigan power canal, SW of the American locks, and the Ontario power canal, NW of the Canadian lock. It may be difficult to judge the effect of these currents.

Current rates in knots

Location	usual	probable low	probable high
Middle Neebish Channel dike (Course 6)	1.3	0.9	2.6
West Neebish Channel rock cut (Course 6)	1.7	1.1	3
Michigan power canal	2.1	1.7	2.6
Ontario power canal	1.7	0.9	2.6

15 **Ice** reaches an average maximum thickness of 46 and 50 cm on the upper and lower parts ofSt. Marys River, respectively. A record maximum thickness of 81 cm was measured in 1972. The river is not much affected by wind and the channel track remains well defined, with a stable ice sheet outside the channel. Broken pieces of ice accumulate in the channels and in some bottleneck areas. Brash ice may be up to 1.2 m thick by mid-January.

16 The opening and closing dates for the St. Marys River depend on ice conditions. Between 1974 and 1988, the earliest opening was March 22 and the latest opening April 1. The earliest closing was December 15 and the latest closing February 7.

17 There are additional **lights** in St. Marys River during the ice navigation season. *(Details are given in United States Coast Guard Light List, Volume VII.)*

18 For vessel traffic service on St. Marys River, contact the Captain of the Port, United States Coast Guard, call sign *Soo Traffic*, on VHF Channels 16 (156.8 MHz) and 12 (156.6 MHz).

19 For transit of St. Marys Falls Canal, contact the Lockmaster, United States Corps of Engineers, call sign *WUE-21* or *Soo Locks*, on VHF Channels 16 (156.8 MHz) and 14 (156.7 MHz).

20 For transit of the Sault Ste. Marie (Canada) Canal, contact the Lockmaster, call sign *VDX 23* or *Canadian Canal*, on VHF Channel 14 (156.7 MHz).

21 For scheduled marine information broadcasts, contact the United States Coast Guard Base, Sault Ste. Marie, Michigan, call sign *Coast Guard Sector Sault Ste. Marie*. *(Details are given in United States Coast Guard Light List, Volume VII.)*

22 Sault Ste. Marie, Ontario, has a remotely controlled Canadian Coast Guard marine radio station. For scheduled marine information broadcasts, contact *Thunder Bay MCTS Centre*, call sign *VBA*. Direct all calls to *Thunder Bay Radio*. *(Consult Radio Aids to Marine Navigation (Atlantic, St. Lawrence, Great Lakes, Lake Winnipeg and Eastern Arctic) for more information.)*

23 Pilotage is compulsory in the waters of St. Marys River north of *latitude 45°59'N*, at the southern approach, and east of *longitude 84°33'W*, at the northern approach, for all vessels of foreign registry and any other vessel which does not qualify for exemption as prescribed in the *Great Lakes Pilotage Regulations*. *(See Sailing Directions*

Western Great Lakes Pilotage Association

Dispatch office	Telephone
De Tour, MI	(906) 297-2112

booklet CEN 300 — General Information, Great Lakes.) There are pilot exchange points at the lower entrance of the river off De Tour Reef and at the upper entrance to the river 3 miles SE of Point Iroquois.

24 St. Marys River is in *Great Lakes Pilotage District No. 3* and is serviced by the *Western Great Lakes Pilotage Association*.

St. Marys River Vessel Traffic Service

25 The Captain of the Port, United States Coast Guard, in Sault Ste. Marie, Michigan, has jurisdiction in the United States waters of St. Marys River between Point De Tour and Point Iroquois, except the waters of St. Marys Falls Canal. *St. Marys River Vessel Traffic Service (VTS)*, operated by the United States Coast Guard, covers St. Marys River and lower Whitefish Bay from *De Tour Reef light* to *Ile Parisienne light*, except for the waters of St. Marys Falls Canal. Participation in this service is mandatory for certain vessels. The service is designed to prevent collisions and groundings, to protect improvements to the waterways, and to protect the navigable waters of the VTS area from environmental harm.

26 St. Marys Falls Canal is under the direction of the District Engineer, United States Corps of Engineers. Separate regulations cover their use, administration and navigation.

27 Sault Ste. Marie (Canada) Canal Lock is operated and maintained as part of the *Sault Ste. Marie Canal National Historic Site* by the City of Sault Ste. Marie (Canada) under an agreement with the *Canadian Parks Agency, Department of Canadian Heritage*.

28 **Caution. —** There have been many complaints about wake damage along St. Marys River caused by **excessive speed**. Speed limits in St. Marys River are maximum allowable speeds. Masters are directly responsible for damage caused by their wakes.

29 The master of a vessel in the VTS area shall continuously monitor VHF Channel 16 (156.8 MHz) and be prepared to communicate with *Soo Traffic* on VHF Channel 12 (156.6 MHz).

30 The Captain of the Port may order the closing of a channel, designate additional no-overtaking zones or areas of one-way traffic, or establish other temporary traffic rules, if channel obstructions or other conditions of unusual hazard so require. Should a channel be closed, vessels transiting in the direction of the closed channel shall make preparations to be able to immediately anchor.

De Tour Passage

Chart 14882

31 Sailing courses recommended by the *Canadian Shipowners Association* and the *Lake Carriers Association* converge 0.7 mile SE of *De Tour Reef light*.

32 There is a *Sarnia Vessel Traffic Services Zone* calling-in point for upbound and downbound vessels near *De Tour Reef light*. *(Consult Radio Aids to Marine Navigation (Atlantic, St. Lawrence, Great Lakes, Lake Winnipeg and Eastern Arctic) for more information.)* There is a United States Coast Guard*St. Marys River VTS* reporting point for upbound and downbound vessels near *De Tour Reef light*.

33 **Caution**. — The *Canadian Shipowners Association* and *Lake Carriers Association* recommend that no vessel should anchor east of a bearing on *De Tour Reef light* of 340°, or closer than 0.75 mile to the light, or north of the De Tour-Martin Reef course, so that the entrance to De Tour Passage is not obstructed in times of congestion due to fog or other conditions.

34 **Old Fort St. Joe Point**, 7 miles NNW of *De Tour Reef light*, is the south end of St. Joseph Island. The **buoyed channel**, entered 1.8 miles east of the point, leads NE through Potagannissing Bay into North Channel *(and is described in Sailing Directions booklet CEN 307 — North Channel of Lake Huron)*. Fort St. Joseph, on the point, was built in 1796 and was at that time the most westerly British fort. It is now a national historic site.

[from U.S. Coast Pilot 6, Chapter 12, partial]

35 ***ENC US5MI61M Chart 14882.–De Tour Passage*** *forms the mouth, or S end, of St. Marys River. The passage has deep water for a width of over 2,500 feet [762 m] between the E end of the upper peninsula of Michigan on the W and the W end of Drummond Island on the E. The shoals that border the passage are well marked.*

36 ***De Tour Reef****, a rocky ledge covered 12 feet [3.7 m], is 0.7 [0.6] mile SE of* ***Point De Tour*** *on the W side of the entrance to De Tour Passage.* ***De Tour Reef Light*** *(45°56'57"N., 83°54'11"W.), 74 feet [22.6 m] above the water, is on the SE end of the reef; a seasonal sound signal and racon are at the light.*

37 ***De Tour Shoal****, 0.8 [0.7] mile N of De Tour Reef, is marked on the E side by a buoy that marks the W edge of the deep water through the passage.*

38 ***Crab Island Shoal****, with boulders just below the surface, is on the E side of the passage, 1.3 [1.1] miles E of Point De Tour. A lighted bell buoy marks the W edge of the*

DE TOUR PASSAGE (1998)

shoal. Adjacent W of the buoy, De Tour Passage has been dredged to a depth of 30 feet [9.1 m].

39 ***Frying Pan Shoal**, boulders covered 19 feet [5.8 m], extends about 0.25 [0.22] mile from shore on the W side of the passage 2.2 [1.9] miles N of De Tour Reef Light. **Frying Pan Island**, 0.3 [0.26] mile N of Frying Pan Shoal, is marked on the E side by a light. An abandoned fueling dock on the SE side of the island has a depth of about 21 feet [6.4 m] alongside.*

40 ***De Tour Village, MI**, is on the west side of De Tour Passage northwest of Frying Pan Island. A ferry for passengers, autos, and limited freight operates year round from the village across the passage to Drummond Island. Small craft landing at De Tour Village must take care to avoid submerged cribs and dock ruins. A Michigan State Waterways Commission small-craft harbor protected by a breakwater marked by a light on the south end, is about 400 yards [366 m] north of the ferry pier. Transient berths, gasoline, diesel fuel, water, electricity, sewage pump-out facility, marine supplies, a launching ramp, a 25-ton [22.7-tonne] lift for hull and engine repair, and harbormaster services are available. The harbormaster monitors VHF-FM channels 16 and 9.*

42 *The W shore of Drummond Island fronts De Tour Passage from **Barbed Point** N for 3 [2.6] miles to **Black Rock Point**. Dolomite is shipped from an 800-foot [244-m] dock of Osborne Materials Co., 1.3 [1.1] miles N of Barbed Point. The dock has a deck height of 10 feet [3 m] and reported depths of 23 feet [7 m] alongside. A conveyor system can load vessels at 4,000 tons [3,600 tonnes] per hour. Buoys mark shoals N and S of the dock.*

43 ***Gaffney Point** (46°00'42"N., 83°54'30"W.) is on the W side of De Tour Passage 1.4 [1.2] miles N of De Tour Village. **Watson Reefs** is a narrow shoal about 0.2 [0.17] mile offshore between Gaffney Point and the village. Buoys mark the NE and SE sides of the shoal, and a light is near the center. **Pipe Island**, marked on the SW side by a light, is 0.6 [0.5] mile NE of Gaffney Point. A buoy marks the extent of shoals SW of the island. **Pipe Island Twins** is a pair of small islands about 0.5 [0.4] mile NE of Pipe Island with shoals between. The E island is marked at the N end by a light, and shoals that extend N from the light are marked by a lighted buoy. **Pipe Island Shoal**, with a least depth of 11 feet [3.4 m], is 0.5 [0.4] mile SE of Pipe Island. A lighted buoy marks the SE side of the shoal.*

44 ***Squaw Island**, marked at the S end by a light, is 1.4 [1.2] miles N of Pipe Island. Detached 17- and 21-foot [5.2- and 6.4-m] spots are 0.3 [0.26] and 0.6 [0.5] mile WNW of Squaw Island, respectively.*

45 *A 1,000-foot [305-m] wharf, used for vessel storage and owned by the Interlake Steamship Company, is 0.6 [0.5] mile NW of Gaffney Point. The reported controlling depth is 26 feet [7.9 m] along the lower 700 feet [213 m] of the wharf face. A shoal with a least depth of 23 feet [7 m] is about 400 feet [122 m] NE of the face.*

46 ***Sweets Point** is about 2 [1.7] miles NW of Gaffney Point. Shoals extend about 0.6 [0.5] mile N from the point and are marked near the outer end by a light.*

47 ***Raber Point** (46°03'57"N., 84°01'57"W.), 7 [6.1] miles northwest of Gaffney Point, is the south entrance point to **Raber Bay**. **Lime Island** is in the middle of the river, 1.7 [1.5] miles northeast of Raber Point. An 800-foot [244-m] wharf is on the west side of Lime Island and is used by recreational boaters. The wharf, marked by lights on the north and south ends, has a least depth of about 17 feet [5.2 m] along the upper 300 feet [91 m] and 25 feet [7.6 m] along the lower 500 feet [152 m].*

48 *At the N end of De Tour Passage, the upbound and downbound vessel channels are divided by the Pipe Island group. The upbound channel leads N on the E side of Pipe Island Shoal. Abreast Pipe Island Twins Light, the channel turns NW, leads S of Squaw Island, and rejoins the downbound channel N of Sweets Point. **Pipe Island Course**, downbound, leads SE from Sweets Point between Gaffney Point and Pipe Island to the N end of De Tour Passage. These channels have a depth of 29 feet [8.8 m].*

49 ***Lime Island Channel**, upbound and downbound, leads NW from Sweets Point to the turn between Raber Point and Lime Island and has a depth of 29 feet [8.8 m]. At the turn, a lighted midchannel buoy separates the two-way traffic.*

50 ***Round Island Course**, upbound and downbound, leads N from the turn at the upper end of Lime Island Channel for 3.5 [3] miles to the turn between Point aux Frenes and Hay Point. The depth in the channel is 28 feet [8.5 m]. **Round Island**, marked by a light, is on the W side of the channel near its midlength.*

51 ***Point aux Frenes** (46°07'54"N., 84°01'42"W.) is on the W side of the river at the turn from Round Island Course into Munuscong Lake. Lights mark the course changes in the turn.*

52 ***ENCs US5MI61M, US5MI62M Charts 14882, 14883**.–**Munuscong Lake** is a widening in St. Marys River from Point aux Frenes upstream to Neebish Island. **Lower Course 8**, upbound and downbound, leads from the turn at Point aux Frenes NW for 4.6 [4] miles through Munuscong Lake. The depth in the channel is 28 feet [8.5 m]. The channel is marked at the lower end by a **128°** lighted range on **Hay Point**.*

53 ***ENCs US5MI62M, US5MI50M Chart 14883, 14887**.–Near the middle of Munuscong Lake, at the upper end of Lower Course 8, the dredged channel of the St. Marys River divides to lead around either side of **Neebish Island**. The upbound channel leads generally N between the E side of Neebish Island and St. Joseph Island, thence WNW between the N side of Neebish Island and the S end of **Sugar Island**, thence N again in Lake Nicolet to the junction with the downbound channel. The channel is about 17.5 [15.2] miles long between the junctions with the downbound channel. The courses through this stretch are well marked by lighted and unlighted buoys and ranges.*

54 ***Course 10**, marked by a **322.1°** lighted range on the S end of Neebish Island, leads NW for 2.1[1.8] miles from the junction with the downbound channel at the upper end of Lower Course 8. The channel has a depth of 27 feet [8.2 m] for a least width of 500 feet [152 m].*

Munuscong Lake to Lake Nicolet

ENC US5MI62M Chart 14883

55 **Course 9** leads 3.1 miles NNE to **Johnson Point**. **Everens Point** *(46°14'N, 84°06'W)* is onSt. Joseph Island, east of the route. The eastern side of the channel has a project depth of 21 feet (6.4 m) for a width of 200 feet (61 m). The western side has a project depth of 27 feet (8.2 m) for a width of 300 feet (91 m).

56 *Sailors Encampment Upbound range lights (1060, 1061)*, at the north end of Course 9, indicate the deeper-draught western side of the channel.

57 Two white **daymarks** close east of *Sailors Encampment Upbound range lights* in line indicate the shallower eastern side of Course 9.

58 An L-shaped Public **wharf**, known locally as **C Line Dock**, is NW of the *Sailors Encampment Upbound range* front light-structure. The west face is 45 feet (14 m) long and has a least depth of 4 feet(1.2 m). The north face is 16 feet (4.9 m) long and has a least depth of 5 feet (1.5 m). The south face is 46 feet (14 m) long and has a least depth of 2 feet (0.6 m) at the shore end. The deck elevation is 5 feet (1.5 m). There is a launching **ramp** suitable for small craft.

59 **Sailor's Encampment** *(46°16'N, 84°06'W)* is a **Customs** vessel reporting station for pleasure craft.

60 **Course 8** leads for 1 mile from Johnson Point to a position between **Mirre Point** and **Coyle Point**. The NE side of the channel has a project depth of 21 feet (6.4 m) for a width of 400 feet (122 m), and the SW side has a project depth of 28 feet (8.5 m) for a least width of 600 feet (183 m).

61 The deeper side of the channel is marked by *Rains Wharf range (1062, 1063)* and *Point of Woods range (U.S. 13145, 13155)*. *Rains Wharf range* is on St. Joseph

Island east of Johnson Point; *Point of Woods range* is on Neebish Island north of Mirre Point.

62 **Course 7** leads for 2.8 miles through **Munuscong Channel** from Mirre Point to **Stribling Point** *(46°19'N, 84°07'W)*, which is the NW point of St. Joseph Island. The east side of the channel has a project depth of 21 feet (6.4 m) for a width of 200 feet (61 m) and the west side a project depth of 27 feet(8.2 m) for a least width of 300 feet (91 m). The channels are marked by *Dark Hole range beacons and lights (U.S. 13170 to 13185)* and by *Harwood Point range beacons and lights (U.S. 13190 to 13205)*.

63 There is a small-craft launching **ramp**, with two small wharves, on the west side of St. Joseph Island 0.5 mile south of Stribling Point.

64 *(The passage between St. Joseph Island and Sugar Island leading into St. Joseph Channel and Lake George is described in Sailing Directions booklet CEN 307 — North Channel of Lake Huron.)*

65 **Course 6** leads from Stribling Point through **Middle Neebish Channel** to the lower end of **Lake Nicolet**. The north side of the channel has a project depth of 21 feet (6.4 m) for a least width of 200 feet (61 m). The south side of the channel has a project depth of 27 feet (8.2 m) for a least width of 300 feet (91 m).

66 The channels are marked by *Stribling Point ranges* and *Middle Neebish South range lights(U.S. 13275, 13280)*. *Stribling Point Upbound range lights (1064, 1065)* are at the north end of St. Joseph Island. The lighted ranges indicate the deeper-draught southern side of the channel.

67 Two white **daymarks** close north of *Stribling Point Upbound range lights* in line indicate the shallower northern side of Course 6.

68 **Caution**. — The range structures at the upper end of the course are in the open water of Lake Nicolet. They are protected by rip-rap.

69 Three **lights**, numbered 50, 54 and 58, are shown on a **dike** that borders the north side of Middle Neebish Channel. *Lights 50* and *58* are each shown from a red skeleton tower with a red triangular **daymark**. *Light 54* is shown from a red column with a similar **daymark**.

[from U.S. Coast Pilot 6, Chapter 12, partial]

70 ***Course 5*** *leads northwest from the lower end of Lake Nicolet for about 4.5 [3.9] miles to the junction with the downbound channel near midlake. The east side of the channel has a depth of 21 feet [6.4 m] for a width of 200 feet [61 m] and the west side of the channel has a depth of 27 feet [8.2 m] for a least width of 300 feet [91 m]. The east and west sides of the channel are marked at the lower end by a* ***150.5°*** *lighted range.*

71 ***West Neebish Channel****, downbound, diverges from the upbound channel near the middle of Lake Nicolet and leads generally S for about 16.5 [14.3] miles between the W side of Neebish Island and the mainland to the lower junction with the upbound channel S of Neebish Island in Munuscong Lake. The courses through this stretch are well marked by lighted and unlighted buoys, lights, and lighted ranges.*

72 ***Course 4*** *is a continuation of the downbound portion of Course 4, upbound and downbound, which leads through the middle of Lake Nicolet. From the junction with the upbound channel, Course 4 leads SSE for 2.5 [2.2] miles to the lower part of the lake. The channel has a depth of 27½ feet [8.4 m] and is marked by a* ***159.6°*** *lighted range.*

73 ***Course 5*** *leads S from the lower part of Lake Nicolet for 4.4 [3.8] miles to the rock cut on the W side of Neebish Island. The channel has a depth of 27½ feet [8.4 m] and is marked by a* ***181°30'*** *lighted range.*

74 ***Course 6*** *leads SE from the head of the rock cut for 2.7 [2.3] miles to a point about 0.5 [0.4] mile N of* ***Sawmill Point****. The upper part of this course, through the cut, is bordered on either side by a vertical rock masonry wall marked by lights. The channel has a depth of 28½ feet [8.7 m] and is marked at the lower end by a leading light.*

75 *A well-protected small-craft anchorage with mud bottom and 3 to 15 feet [0.9 to 4.6 m] of water is reported on the NE side of Course 6 about 1.2 [1] miles above Rock Cut Lower Leading Light between a spoil island and a dike.*

76 ***Course 7*** *leads S from the turn 0.5 [0.4] mile N of Sawmill Point for 2.4 [2.1] miles to* ***Moon Island****. The channel has a depth of 28½ feet [8.7 m] and is marked by a leading light on the N end of Moon Island.*

77 ***Course 8*** *leads SE from Moon Island for 4.6 [4] miles through the upper part of Munuscong Lake to the junction with the upbound channel S of Neebish Island. The channel has a depth of 27½ feet [8.4 m].*

78 ***Course 4****, upbound and downbound, leads through the middle part of Lake Nicolet from the vicinity of* ***Ninemile Point*** *(46°23'36"N., 84°13'42"W.) north-northwest for 3.5 [3] miles to* ***Six Mile Point****. The channel has a depth of 29 feet [8.8 m] for a width of 1,500 feet [457 m]. The upbound (east) side of the channel is marked by a* ***339.5°*** *lighted range.*

79 *An* ***anchorage****, with a depth of 28 feet [8.5 m] and marked by buoys, is adjacent to the downbound side of Course 4 opposite Ninemile Point.*

80 ***ENCs US5MI62M, US5MI63M Charts 14883, 14884****.–****Course 3*** *and* ***Course 2****,* ***Little Rapids Cut****, lead NNW from Six Mile Point for about 4.5 [3.9] miles to the turn above Mission Point. The channel has a depth of 27 feet [8.2 m] for a least width of 600 feet [183 m]. A leading light on the W side of Sugar Island marks Course 3 downbound, and a* ***323.4°*** *lighted range at* ***Frechette Point*** *(46°27'30"N., 84°17'00"W.)*

*marks Course 3 upbound. A **153.1°** lighted range at Six Mile Point marks Course 2 downbound.*

81 ***Small-craft facilities**.–A small-craft channel marked by buoys leads northwest from Course 2 on the north side of Frechette Point between the mainland and **Island No. 3**. There is no access from this channel at its upper end to the main channel. A marina developed by Michigan State Waterways Commission is on the mainland side of the channel, opposite the lower end of Island No. 2. The marina can provide water, electricity, pump-out facility, a launching ramp and harbormaster services.*

82 ***Mission Point** (46°29'12"N., 84°18'12"W.), marked by a light, is on the W side of the river just below the turn at the upper end of Course 2. A ferry operates across the river from Mission Point to **Island No. 1**.*

83 *Three ice stabilization islands marked by lights are on the SW side of the river about 0.1 [0.09], 0.3 [0.26] and 0.45 [0.40] mile above Light 99.*

85 ***ENC US5MI63M Chart 14884**.–At the upper end of Course 2, Course 1, **Bayfield Channel**, turns WNW in the approach to St. Marys Falls Canal. The channel has a depth of 28 feet [8.5 m] W to the outer end of East Center Pier of the canal and is marked at the lower end by a **109.2°** lighted range.*

86 **Bayfield Dike** is on the north edge of the channel 0.9 mile NW of Mission Point. The north edge of the channel west of the dike is marked by lighted **buoys**.

86.1 *(A passage joining the route from the east between Mission Point and Bayfield Dike is a small-craft route that leads between Sugar Island and the mainland and into Lake George and St. Joseph Channel. This route is described in Sailing Directions booklet CEN 307 — North Channel of Lake Huron.)*

87 *Bayfield Dyke light (1066)* is at the centre of Bayfield Dike. The daymarks face upstream and downstream.

88 Facilities for small craft are offered by two **marinas** and a sailing club on the Canadian side of the river.

89 *Bellevue Marina* is a municipal facility close south of a pair of prominent tall apartment buildings 0.4 mile NE of *Bayfield Dyke light*.

90 *Bellevue Marina breakwater light (1065.9)* is at the east end of an L-shaped **breakwater** that forms the west and south sides of the marina basin.

91 A **buoyed channel** 100 feet (30 m) wide and 0.3 mile long leads to the marina basin entrance. This channel is not suitable for vessels drawing more than 6 feet (1.8 m) (1984). The entrance to the basin has depths of 8 to 13 feet (2.4 to 4 m) (1984) with lesser depths in the basin, and depths of 4 to 10 feet (1.2 to 3 m) at the floating wharves. Boaters are cautioned to avoid a drying area in the basin 150 feet (46 m) east of the floating wharves.

92 *Bellevue Park*, a municipal day-use facility close east of the marina, has picnic tables, walking trails, and a bandshell with special summer concerts.

93 *Roberta Bondar Marina* is a municipal facility 1.3 miles WNW of *Bellevue Marina*, near the Sault Ste. Marie (Canada) Civic Centre.

94 *Algoma Sailing Club*, at the SE corner of *Bellevue Park*, is private and most facilities are available only to yacht club members.

95 Facilities of downtown Sault Ste. Marie are within easy reach of both marinas, using scheduled city bus services.

St. Marys Falls

ENC US5MI63M Chart 14884

96 Three power canals and five navigation locks bypass **St. Marys Falls**. The rapids are less than1 mile long with a fall of 18 to 24 feet (5.5 to 7.3 m), depending on the water level.

97 **St. Marys Falls Canal** is in United States territory south of St. Marys Falls. It consists of North Canal, with the Davis Lock, and South Canal, with the Poe and MacArthur Locks.

98 **Sault Ste. Marie (Canada) Canal** passes north of St. Marys Falls and has one lock. This route is available only to recreational traffic.

99 **Historical note**. — The first canal through St. Marys Falls was built on the north side of the rapids in 1797 and 1798. It was built by the *North West Company* for the fur-trade canoes, and was 2,580 feet (787 m) long with a lock 38 feet (12 m) long and 8 feet 9 inches (2.6 m) wide. This canal was destroyed in July 1814 by American troops. It has been reconstructed and is now a *National Historic Site* on the *St. Marys Paper Ltd.* grounds on Huron Street.

100 The original United States Canal and lock opened in 1855. The Canadian lock was first built in the late 19th century to complete a national policy of establishing an all-Canadian trade route to the west. The "Chiroa Incident" of 1870, where use of the United States locks was denied to Canadian forces sent to control the Riel Rebellion, also contributed to the decision to build a lock on the Canadian side of the St. Marys River.

101 **Caution**. — There is a slight **current** above the rapids at St. Marys Falls. There is often a very strong set near the inlets of both the Michigan and Ontario power canals.

102 *(More information on currents is given at the beginning of this chapter.)*

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[from U.S. Coast Pilot 6, Chapter 12, partial]

103 ***St. Marys Falls Canal**, 1.9 [1.7] miles long between the upper and lower entrances, is along the S side of St. Marys River abreast the falls. The canal comprises North Canal and South Canal, separated by a center pier and each having two locks. The canals are faced with revetment walls and piers of timber, steel, and concrete. The outer ends of the N, S, and center piers at the canal entrances are marked by lights. The downbound approach to the canal is marked by a **076.2°** lighted range.*

Lock Dimensions at St. Marys Falls

Lock Name	Width (feet) [metres]	Length (feet) [metres]	Depth (feet) [metres]
MacArthur	(80) [24.3]	(800) [243.8]	(31) [9.4]
Poe	(110) [33.5]	(1200) [365.7]	(32) [9.7]
Davis	(80) [24.3]	(1350) [411.4]	(23) [7.0]
Sabine (closed)	(80) [24.3]	(1350) [411.4]	(23) [7.0]
Canadian	(49) [14.9]	(225) [68.5]	(9½) [2.8]

104 *South Canal has a minimum width of 293 feet [89 m] and a depth of 27.5 feet [8.4 m] in the E entrance and 28 feet [8.5 m] in the W entrance. North Canal, has a minimum width of 280 feet [85.3 m] and is limited by the locks to a depth of 23.1 feet [7.0 m].*

105 *All salt water vessels transiting the lock systems along the St. Marys River which are not equipped with either bow or stern thrusters, are required to be assisted by one or more tugs to ensure that full control of the vessel is maintained at all times. Tugs are also required for all power vessels which experience control problems at low speeds, or in close quarters.*

106 ***Communications**.–The chief lockmaster operates a vessel dispatch station from the administration building on the pier between Poe and MacArthur Locks. The station operates on VHF-FM channels 14 and 16; call sign, WUE-21. The voice call for the station is WUE-21 or Soo Locks.*

106.1 *Upbound vessels intending to transit the locks shall initially contact the lockmaster immediately before the turn at Mission Point, at the intersection of Course 1, Bayfield Channel and Course 2, Little Rapids Cut for lock assignment.*

106.2 *Downbound vessels shall make initial contact at Ile Parisienne, then at Big Point for lock assignment. In order that the dispatch made will cause the least delay to the vessel*

SAULT STE. MARIE FROM WEST (1998)

involved, vessel masters are requested to refrain from making their dispatch calls prior to reaching the above locations. This station is considered to have an effective operating range of about 50 [43] miles. Operation is limited to communication with vessels on matters related to canal operation, traffic movement through the locks, and for emergency purposes. Masters are urged to provide supervision of the vessel's radiotelephone when approaching and transiting the canals so as to be promptly advised of changes in lock dispatch, impending bridge closures, etc.

106.3 *Vessels requiring special services while in the locks should contact the station in advance to expedite necessary arrangements by canal authorities.*

107 ***Lock signals**.–Upbound signals consisting of two lights, one red and one green, facing E, are on the SE wall ends of each lock to indicate to upbound vessels when it is safe to proceed into lock chambers. These signals are normally set to show red and are changed to green only when it is safe and permissible for each individual vessel to enter the lock. Vessel masters are cautioned not to enter a lock chamber upbound except on a green light signal, even though the lock gates may be open.*

108 *In order that masters of downbound vessels approaching the NW pier may know when either the Davis or the Sabin Lock is filling, three signals have been established. These consist of flashing yellow lights, one placed on top of a light pole at the end of the upper nose pier between these two locks, the second at a point about 100 feet [30 m] upstream of the railroad bridge on the NW pier, and the third on top of a light pole about midway between the railroad bridge and the end of the NW pier. The lights flash during the first 8 minutes of each lock filling, which is the period when flow toward the lock is increasing. In order that masters of downbound vessels approaching the SW or W center piers may know when either the MacArthur or Poe Lock is filling, a signal consisting of a flashing yellow light is mounted on the top of a light pole at the end of the nose pier between the MacArthur and Poe Locks. The light flashes during the period when either lock is filling.*

109 *Upbound vessels approaching the E center pier are cautioned against landing too close to its outer end because of eddy currents. When the N locks are being emptied, an eddy moving upstream is formed along the SE pier. When the S locks are being emptied, the current at the end of the center pier*

flows N. When the N locks are emptying, this latter current is usually reversed. Wind conditions alter the situation.

110 *A current sets across the end of the W center pier during the filling of the locks. The current can set in either direction depending on conditions. Vessels bound for Davis Lock should not attempt to make the pier near its end.*

111 *Downbound vessels dispatched to MacArthur Lock are cautioned to hold on Vidal Shoals Channel Range until N of the light on SW pierhead. Due to the strong current that sets into the power company canal adjacent to the end of the SW pier, such vessels should pass at least 200 feet [61 m] N of the end of the pier. A light is about 1,000 feet [305 m] E of the outer end of SW pier; vessels should land E of the light.*

112 ***Caution**.–Downbound vessels approaching MacArthur and Poe Locks may encounter a northerly current, especially near the end of W center pier. Downbound vessels approaching Poe Lock should land downstream of the end of W center pier.*

113 *Before entering a lock, all vessels shall put heaving lines, attached to forward and aft cables, out onto the approach pier, and either line or cable shall be continuously carried by the vessel deckhands or canal linesmen until the vessel is moored in the lock chamber in all cases where the mooring is made on the east side of the lock adjacent to the approach pier used. Vessels intending to moor on the side of the lock opposite that adjacent to the approach pier shall, in the same manner, put out heaving lines and have the line or cable continuously carried along the approach pier, shall take them in just as the lock is entered, and put them out again on the mooring side of the lock as soon as possible.*

114 *Mariners are advised that often times adverse local condition, i.e. high winds, current conditions, and inclement weather exist as vessels approach, enter and/or depart the Soo Locks. These conditions combined with close quarters slow speed maneuvering, particularly with large vessels not equipped with bow or stern thrusters, may cause control difficulties for certain classes of vessels.*

114.1 *Therefore, any vessel requesting lockage which in the opinion of the Master in consultation with the Pilot on board, where applicable, may experience severe control problems due to the above conditions must request assistance by one or more tugs to ensure full control over the vessel at all times. Vessel Masters and Pilots must consult with the Lockmaster concerning local conditions well in advance of arrival at the lock to allow tug assistance to be arranged if necessary. These guidelines apply to all vessels.*

115 *Bow and / or stern thruster use shall be kept to a minimum while transiting the Locks. Thrusters shall not be used while the thrusters are opposite lock gates. They may be used sparingly for short duration within the lock to maintain the ship position near the mooring wall or in an emergency. Thrusters shall be at zero thrust during the period the ship is stopped and moored to the wall with all lines out, and during raising and lowering of pool levels within the chamber.*

116 *Vessels leaving the MacArthur Lock and Poe Lock at approximately the same time, the following policy will apply:*

117 *1. The first vessel to leave will be the vessel in the lock which is ready for vessel release first. The vessel in the other lock will be restrained by the gates remaining closed and the wire rope fender remaining in the down position.*

118 *2. On downbound passages, the vessel retained shall not leave the lock until such time as the bow of the vessel leaving first reaches the end of E center pier.*

119 *3. On upbound passages, the vessel retained shall not leave the lock until such time as the bow of the vessel leaving first reaches the railroad bridge.*

120 *4. When a 1,000-foot (305-m) vessel is ready to depart the Poe Lock and a vessel in the MacArthur Lock leaves first, the 1,000-foot (305-m) vessel may start to leave once the bow of the other vessel reaches the end of the respective nose pier.*

121 *5. The above policy may be varied on a case by case basis at the direction of the Chief Lockmaster on duty.*

122 *6. Vessels will remain in radio contact with each other and the Chief Lockmaster at all times until clear of the lock area.*

123 ***Regulations**.–The use, administration, and navigation of St. Marys Falls Canal and locks are under the direction of the District Engineer, U.S. Army Corps of Engineers, Detroit District. (See **33CFR 207.440 and 207.441**, chapter 2 [of U.S. Coast Pilot 6], for regulations.) Copies of the regulations and the vessel transit forms required in **207.440(k)** are available at the U.S. Canal Office in the operations building adjacent to Davis Lock. A notary public and a **marine post office**, designated Canal Station, are in the operations building.*

124 *Upbound recreational small craft desiring lockage shall report to the small-craft dispatch station near the outer end of E center pier. Downbound recreational craft shall report to the dispatch station on SW pier. Rowboats and canoes are prohibited. All craft must have power and an auxiliary movement source such as oars, a life jacket for each person on board, 75 feet [22.9 m] of line to reach the top of the lock wall, and lock report forms available at the dispatch station.*

125 *Whenever, in the opinion of the Detroit District Engineer or his authorized representatives at St. Marys Falls Canal, the safety of lock structures or vessels in the canal area might be jeopardized by the continuance of vessel movements during periods of low visibility, all vessel movements in the canal area, and in approaching and entering the canal area, may be stopped. Whenever the stopping of vessel movements becomes advisable, the U.S. Coast Guard will be informed and will take such usual action as is necessary to advise vessels approaching St. Marys Falls Canal and to direct their anchor-*

ing. The chief lockmaster in the control tower at St. Marys Falls will personally direct, by radiotelephone, all movements of vessels in the locks area at the time the stop order is issued, and may approve continued movement or order mooring at specified locations.

126 If a person disembarking for medical attention is a stretcher case, the lock-master must be given enough notice to route the vessel to the MacArthur Lock to avoid the long carry across the lock gates.

127 The *International Railway Bridge*, 0.3 mile west of the locks, has a lift **bridge** span across the South Canal, with a clear height of 123 feet (37.5 m) in the raised position and 16 feet (4.9 m) in the lowered position. There is a double-leaf bascule **bridge** across the North Canal, with a clear opening between canal walls of 282 feet (86 m) and a closed height of 13 feet (4 m).

128 Signal lights on the vertical lift and bascule spans show green when the span is completely open and red at other times. The signal to open either span is *one short and one long blast*. The bridge operator will answer by giving *one long and one short blast* and will then open the bridge.

129 If the bridge cannot be opened for any reason, the bridge operator will answer by giving *five short blasts* and the vessel must stop. When the bridge is ready to open, the bridge operator will give *one long and one short blast* and will then open the bridge.

130 The *International Highway Bridge*, a girder **bridge** 125 feet (38 m) east of the railway bridge, has a horizontal clearance of 410 feet (125 m) and a vertical clearance of 124 feet (37.8 m).

131 *Vidal Shoals Channel range lights (described later in this chapter)* in line bearing 076° lead to the approaches of the United States and the Canadian canals.

Sault Ste. Marie (Canada) Canal

132 The **Sault Ste. Marie (Canada) Canal** cuts through red Jacobsville sandstone. It is 1.2 miles long between the outer ends of the upper and lower entrance piers and 150 feet (46 m) wide. The east and west approach channels are dredged through **boulder** shoals.

133 The original lock was over 900 feet (274 m) long. The new lock is 254 feet (77.4 m) long and50 feet (15.2 m) wide and has a depth at the sills of 9.8 feet (3 m). Maximum vessel dimensions are 225 feet (68.6 m) long and 49 feet (14.9 m) wide.

134 The lock operates from mid-May to mid-October under the *Historic Canals Regulations.* Copies of these regulations and information on hours of operation are available at the *Visitors Centre* on the north side of the lock or by contacting the Superintendent, *Sault Ste. Marie Lock National Historic Site*, 1 Canal Drive, Sault Ste. Marie, Ontario P6A 6W4; telephone: (705) 941-6262, fax: (705) 941-6206.

135 Lock traffic signal **lights** are as follows: *red* – wait; *flashing red* – the lock is being prepared, prepare to cast off; *green* – the lock is ready, proceed.

136 A railway swing **bridge**, owned by *Wisconsin Central Railway*, crosses the upper canal. The central pier is on the north side of the canal. Railway traffic has precedence over vessel traffic. A **light** in the centre of the bridge span that crosses the canal shows red when the bridge is closed. A **light** on the north side of the canal shows green when the bridge is open. These lights are shown at an elevation of 14 feet (4.3 m).

137 There is an emergency swing dam, resembling a swing bridge, on the north side of the canal close east of the railway bridge.


138 Temporary and short-term **dockage** for pleasure craft visiting the *Sault Ste. Marie Canal National Historic Site* is available at both the east and west piers. Contact the lockmaster, call sign *VDX 23* or *Canadian Canal*, on VHF Channel 14 for permission and for instructions.


139 **Caution**. — Downbound vessels approaching the Sault Canal may encounter strong northward **currents** in the area of the caissons that run from the NW pier of the canal to the *Algoma Steel Corporation* shoreline. Upbound vessels approaching the entrance to the Sault Canal may encounter strong southward **currents** and choppy water due to the confluence of the Great Lakes Power Canal tailrace with theSt. Marys River rapids.

Sault Ste. Marie

140 The city of **Sault Ste. Marie**, **Ontario**, had a population of 81,000 in 1998. It has several manufacturing industries. Principal imports are coal, iron ore, iron ore concentrates, limestone and petroleum products. Exports are plate and sheet steel, pig iron, primary iron, steel, paper and forest products.

141 Sault Ste. Marie is a **Customs** vessel clearing station for commercial vessels and a vessel reporting station for pleasure craft.

142 A Canadian Coast Guard marine radio station at Sault Ste. Marie is remotely controlled from Thunder Bay MCTS Centre, call sign *VBA*. Direct all calls to Thunder Bay radio. *(Consult Radio Aids to Marine Navigation (Atlantic, St. Lawrence, Great Lakes, Lake Winnipeg and Eastern Arctic) for more information).*

143 Tugs are available.

144 The city has passenger, freight and express service and transcontinental bus service. *Sault Ste. Marie Airport*, 20 km west of the city, is operated by the *Department of Transport*.

145 The harbour is a Public Harbour administered by the *Department of Transport*. The **harbour limits** are defined as all the waters of the St. Marys River north of the International Boundary, west of a line drawn due south from the extremity of **Partridge Point** *(46°31'N, 84°14'W)*, and east of a line drawn south from Pointe aux Pins lighthouse, at Pointe Louise.

146 The former Public **wharf**, now owned by *Purvis Marine Ltd.*, is 0.8 mile SE of the SE entrance pier to the Sault Ste. Marie (Canada) Canal. It is a concrete structure extending 600 feet (183 m) SW from shore with an L-end extending 310 feet (94 m) NW. There are freight sheds and an oil pipeline on the wharf. In 1984, there were depths of 15 to 20 feet (4.6 to 6.1 m) along the east face of the wharf and depths of 20 to 24 feet (6.1 to 7.3 m) along the outer face of the L-end.

147 The west side of the wharf encloses a triangular basin. The basin entrance is 70 feet (21 m) wide with depths of 13 to 17 feet (4 to 5.2 m). The inner face of the L-end had depths of 12 to 14 feet (3.7 to 4.3 m) and the west face of the main wharf 5 to 14 feet (1.5 to 4.3 m). The basin had depths of 12 to 17 feet (3.7 to 5.2 m) but the north end is shallow.

148 A three-sided **wharf** area faced with steel sheeting, close NW of the west entrance to the Canadian canal, forms part of the wharves and slip of the *Algoma Steel Corporation Ltd*. The SE face of this wharf is 490 feet (149 m) long, the SW face is 355 feet (108 m) long, and the NW face is 200 feet (61 m) long. The wharf has an elevation of 6 feet (1.8 m). Steel is loaded here.

149 A **slip** 1,800 feet (549 m) long and narrowing from 240 to 150 feet (73 to 46 m) wide extends NW from the above-mentioned wharf. The NE side of the slip has a continuous concrete wharf face with an elevation of 6 feet (1.8 m). Two mobile ore cranes unload coal and iron ore.

150 The SW side of the slip has a **wharf** face 400 feet (122 m) long with a deck elevation of 7 feet (2.1 m), close inside the entrance to the slip. Self-unloading vessels discharge limestone and gypsum at this berth.

151 An overhead coal conveyor with a vertical clearance of 125 feet (38 m) spans the *Algoma Steel Corporation* slip 0.2 mile from the entrance.

[from U.S. Coast Pilot 6, Chapter 12, partial]

152 ***Sault Ste. Marie, MI**, a city on the S side of St. Marys River adjacent to St. Marys Falls Canal, is a **customs port of entry**.*

153 ***Towage**.–Tugs to 2,250 hp are available at Sault Ste. Marie and operate throughout the river. Arrangements are made through Great Lakes Towing Company's dispatch office in Cleveland at 800-321-3663 or via remote VHF-FM antenna; at least 4 hours advance notice is requested.*

154 ***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.)*

155 ***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].)*

156 ***Coast Guard**.–Sault Ste. Marie Coast Guard Station, Sector Office, and Base are close S of the lower entrance to South Canal. A **Captain of the Port** office is at the base. (See Appendix A [of U.S. CoastPilot 6] for address.)*

157 *Communications to the Coast Guard relating to distress and/or communications other than vessel traffic movement are made on VHF-FM channels 16 and 22; voice call, Coast Guard Sector Sault Ste. Marie.*

158 ***Repairs**.–An 800-ton [720-tonne] floating drydock with a length of 110 feet [33.5 m], width of40 feet [12.2 m], and 14½ feet [4.5 m] over the sills is 2,000 feet [610 m] SSW of Bayfield Dike Light. The yard is equipped with a 25-ton [23-tonne] floating crane and a 40-ton [36-tonne] shore crane. Hull and engine repairs are available. Above-the-waterline repairs are available at another yard 2,000 feet[610 m] NW. A 100-ton [90-tonne] crane is available.*

St. Marys Falls to Gros Cap Reefs

159 The route from St. Marys Falls to Gros Cap Reefs is divided into four courses marked by range lights and buoys. Pointe Louise Turn is marked by buoys and side lights.

160 There are United States Coast Guard *St. Marys River VTS* reporting points for upbound and downbound vessels opposite Brush Point and Birch Point.

161 There is an aeronautical rotating **light** on a water **tower** at Sault Ste. Marie airport *(46°29'N, 84°30'W)*, 1.5 miles NW of Pointe aux Pins.

162 **Vidal Shoals** are in the western approaches to the United States and Canadian canals. Channels to the respective canals have been dredged through the shoals.

163 *Canadian Canal Upper Entrance range lights (1070, 1071)* are on the mainland north of the canal. The route is also marked by **light buoys**.

164 **Caution**. — **Currents** near the Vidal Shoals can be very strong, depending on water flow over the falls and the number of sluice gates open in the power canals. Mariners are cautioned to guard against being set onto the shoals.

[from U.S. Coast Pilot 6, Chapter 12, partial]

165 ***Vidal Shoals Channel**, the approach to St. Marys Falls Canal, with a depth of 28 feet [8.5 m], leads ENE from **Big Point** for 2.2 [1.9] miles to the canal entrance. The channel is marked by **076.2°** Vidal Shoals Channel Range.*

POINTE LOUISE (1998)

167 ***Pointe aux Pins Course**, with a depth of 28 feet [8.5 m], extends from Big Point SW for 2.5 [2.2] miles to the turn between **Brush Point, MI**, and **Pointe aux Pins, ON**, (46°28'30"N., 84°27'54"W.). The channel is marked at the upper end by a **233.1°** lighted range.*

168 **Leigh Bay** and **Pointe aux Pins Bay** are on the north side of the St. Marys River, 2 and 4 miles, respectively, above the locks.

169 A submerged sewer **pipeline** extends 0.5 mile south from the NE side of Leigh Bay.

170 *Pointe aux Pins range lights (1077, 1078)* are on Pointe Louise. The lights lead from their intersection with the *Vidal Shoals Channel range* to the Pointe Louise Channel.

171 **Pointe Louise Channel** leads SSW for 0.7 mile from Pointe aux Pins to **Pointe Louise**, and then **Pointe Louise Turn** leads SW for 0.4 mile to connect with Brush Point Course. These channels have a project depth of 28 feet (8.5 m). They are marked by *Pointe aux Pins main light (1079)*, on the south end of Pointe Louise, and by other lighted aids.

172 **Caution**. — Submerged **natural gas pipelines** cross St. Marys River between Brush Point and Pointe aux Pins.

173 **Brush Point Course** extends from the Pointe Louise Turn to the turn SW of **Pointe aux Chenes**. The channel has a project depth of 28 feet (8.5 m). It is marked by *Brush Point range (U.S. 14390, 14395)* and by **light buoys**.

Birch Point to Whitefish Bay

174 The channel leading NW from opposite **Birch Point** *(46°26'N, 84°31'W)* through Point Iroquois Shoals, then west of Gros Cap Reefs into Whitefish Bay, is marked by a *light range*, a **racon**, **buoys** and **light buoys**.

175 *(Gros Cap Reefs and the area north of them are described in Chapter 4.)*

[from U.S. Coast Pilot 6, Chapter 12, partial]

176 *At the turn at the upper end of Brush Point Course the dredged channel flares broadly to the west. **Birch Point Course** leads northwest from the turn for about 4 [3.6] miles to the deep water in Whitefish Bay and includes dredged cuts through Point Iroquois Shoals and Gros Cap Reefs, ON. The channel has a depth of 30 feet [9.1 m] and is marked at the lower end by a **138.6°** lighted range on **Birch Point** (46°26'00"N., 84°31'24"W.).*

177 ***Waiska Bay, MI**, 3 [2.6] miles W of Birch Point, has depths of 4 to 12 feet [1.2 to 3.7 m] and is used mainly by local*

fishermen. Submerged and partially submerged piles extend in a line across the mouth of the bay, and extreme caution is advised when entering the bay.

178 ***Small-craft facility**.–A small-craft facility is at the north end of Waiska Bay and can provide transient slips, gasoline, diesel fuel, electricity and water. In 1987, a reported controlling depth of 2 feet [0.6 m] was available in the approaches to the facility.*

179 ***Point Iroquois Shoals**, with a depth of 17 feet [5.2 m] at the outer edge, extend from the shoreline SE of **Point Iroquois, MI** (46°29'06"N., 84°37'48"W.) NE to the edge of the dredged channel through Birch Point Course. Buoys at the outer edge of the shoal mark the limit of the dredged channel.*

Lake Superior — East Shore

General

Chart 2300

1 This chapter covers the NW approaches to St. Marys River and the east end of Lake Superior from Whitefish Bay to Michipicoten Bay.

2 The east coast of Lake Superior is generally rugged and bold with deep water close to shore and few outlying shoals. There are few anchorages for large vessels but small harbours with good shelter for small craft can be found every 10 to 20 miles along the coast.

3 Most of the charts of Canadian waters described in this chapter are based on lead-line surveys carried out between 1902 and 1920. These charts include any dangers discovered by echo-sounder surveys of the entire area to within 3 miles of the shore, carried out by the United States in 1957 and 1958, but the sounding lines in the latter survey were spaced too far apart (1 mile) to ensure that every danger in areas of uneven bottom would have been detected.

4 Mamainse Harbour and approaches, Agawa and Ganley Islands, Sinclair Cove and the Michipicoten River and approaches were surveyed in 1970.

5 **Caution**. — Mariners are advised to use utmost caution in the vicinity of the banks offshore between Coppermine Point and Leach Island because of the uneven bottom topography and possible uncharted shoals.

6 The United States charts referred to in this chapter are based on surveys carried out between 1917 and 1966.

7 Depths and elevations quoted in this chapter refer to chart datum and thus agree with charted values. Because *Charts 2307 and 2309* are based on older water level datums, depths and elevations on these charts must be corrected to refer them to the presently adopted datum for Lake Superior. The required correction is noted on the chart. More information on chart datums is given in Sailing Directions Booklet *CEN 300 — General Information, Great Lakes*.

7.1 Real-time water level information for Lake Superior at Gros Cap is available from the *Canadian Hydrographic Service Automated Water Level Gauge*, telephone number 705-779-2052 and for Lake Superior at Michipicoten from the *Canadian Hydrographic Service Automated Water Level Gauge*, telephone number 705-856-0077. *(More information*

on water levels is given in Sailing Directions booklet CEN 300 — General Information, Great Lakes.)

Approaches to St. Marys River from NW

ENCs US4MI77M, US5MI77M, US5MI63M Charts 14884, 14962

8 St. Marys River is approached from NW through **Whitefish Bay**, entered between Coppermine Point and Whitefish Point. Ile Parisienne lies near the centre of the bay.

9 Upbound and downbound sailing courses recommended by the *Canadian Shipowners Association* and the *Lake Carriers Association* to provide traffic separation are shown on the charts. These courses converge NE of Point Iroquois.

10 The *Canadian Shipowners Association* and *Lake Carriers Association* recommend an **anchorage** with limits as follows: From a position on the Birch Point range 0.5 mile above Gros Cap, 340° for 2.2 miles, then 314° to a position 1.7 miles off *Ile Parisienne light*. From a position on the Birch Point range 0.5 mile above Gros Cap, 229° for 0.5 mile, then 300° for 2.3 miles, then to a position 3.1 miles off *Ile Parisienne light*. No downbound vessel is to proceed from this anchorage unless authorized to do so by the United States Coast Guard.

South and west sides of Whitefish Bay

[from U.S. Coast Pilot 6, Chapter 13, partial]

11 ***Point Iroquois*** *(46°29'06"N., 84°37'48"W.), marked by an abandoned lighthouse, is on the SE side of the bay on the W side of the entrance to St. Marys River.* ***Nodoway Point*** *is 2.2 [1.9] miles W of Point Iroquois.* ***Mission Hill*** *is a prominent 400-foot [122-m] hill between the points. A rocky ledge extends about 2 [1.7] miles north from Nodoway Point.*

11.1 *There are several submerged buoys located around the outer edges of Whitefish Bay, specifically near Pendills Bay, north of Tahquamenon Bay and near Whitefish Point. These buoys float about 5 feet [1.5 m] from the lake bottom and are tethered to hydroacoustic receivers and concrete blocks. A line of floating rope is also attached to the concrete block in order to facilitate the recovery of the buoy and receiver. Mariners are urged to use caution in the vicinity of these buoys shown on chart 14962.*

12 *From Nodoway Point, the S shore of Whitefish Bay extends 7.5 [6.5] miles SW to the mouth of* ***Pendills Creek****, thence NW for 2.7 [2.3] miles to* ***Salt Point****.* ***Pendills Bay*** *is the bight formed between the points. Shoals extend about 0.4 [0.35] mile offshore in the E part of the bay and increase to 1 [0.9] mile offshore NW of Pendills Creek.*

13 ***ENCS US4MI77M, US5MI77M Chart 14962****.–From Salt Point W for 3.8 [3.3] miles to Naomikong Point, shoals extend 2[1.7] miles from shore, and thence the shoal limit extends NW across the mouth of Tahquamenon Bay.* ***Naomikong Point****, and* ***Menekaunee Point*** *close W, form the S entrance point of* ***Tahquamenon Bay****, the SW part of Whitefish Bay. A rocky ledge extends 1 [0.9] mile N from Naomikong Point and a 6-foot [1.8-m] spot is 0.5 [0.4] mile E of the point. A rocky ledge with a least depth of 4 feet [1.2 m] is 2.8 [2.4] miles N of Naomikong Point.*

14 ***Tahquamenon River*** *flows into the W side of Whitefish Bay just N of the N entrance point to Tahquamenon Bay. A shoal which bares extends from the mouth of the river S for about 3.5 [3] miles into Tahquamenon Bay. The entrance to the river is shoal and should be approached with care. In 1981, the channel across the bar had a controlling depth of 2 feet [0.6 m]. The river is navigable by small boats for about 16 [13.9] miles. In 1963, the least depth in this stretch was 3 feet [0.9 m]. A launching ramp is on the S side of the river mouth. Fuel is available nearby.*

15 *From the Tahquamenon River N for 15.5 [13.5] miles to Whitefish Point, the shoal border decreases in width from 2.7 [2.3] miles to about 0.2 mile. Ruins of two abandoned docks extend offshore at the mouth of* ***Shelldrake River****, 8.5 [7.4] miles N of Tahquamenon River.*

16 ***Whitefish Point Harbor****, entirely artificial, is on the NW side of Whitefish Bay about 1 [0.9] mile SW of the tip of Whitefish Point. The harbor, protected by breakwaters on the N, S, and E sides, serves as a harbor of refuge for shallow-draft vessels.*

17 ***Channels.****–The harbor is entered from Whitefish Bay through a dredged channel leading N, then W, between the breakwaters to the S end of the basin. The outer ends of the breakwaters are marked by lights.*

18 ***Small-craft facilities.****–Transient berths for craft to 60 feet [18.3 m], and a launching ramp are available at a facility developed by the Michigan State Waterways Commission at the N end of the basin.*

19 ***Whitefish Point****, on the W side of the entrance to Whitefish Bay, has sandhills and some trees. In 1978, it was reported that the point was a poor radar target.* ***Whitefish Point Light*** *(46°46'16"N., 84°57'26"W.), 80 feet [24.4 m] above the water, is shown from a white cylindrical tower on the point; a radar beacon (Racon) is at the light.*

20 *From Whitefish Point WSW for 20 [17.4] miles to Little Lake Harbor, the shore is sandy, wooded inshore, and generally bold. Shoals extend about 0.5 [0.4] mile from shore. None of the rivers which empty into the lake in this stretch are navigable.*

21 *A lighthouse at* ***Crisp Point*** *and the buildings at the abandoned Coast Guard station at Vermilion Point, 4.5 [3.9] miles east of Crisp Point, are good landmarks.*

22 *(The coast west of Crisp Point is described in United States Coast Pilot 6.)*

ENCs US4MI77M, US5MI77M, US5MI63M Charts 14884, 14962

23 **Gros Cap** *(46°32'N, 84°35'W)* is the NE entrance point to St. Marys River. Radio masts with air obstruction **lights** are near by. A ridge over 400 feet (122 m) high behind Gros Cap extends 3 miles north along the coast. **North Gros Cap** is near the NW corner of this ridge.

24 **Gros Cap Reefs**, a detached group of rocks with a least depth of 17 feet (5.2 m), lie 1.5 miles SW of Gros Cap, at the NW end of the buoyed channel to Sault Ste. Marie.

25 *Gros Cap Reefs light (1081)* is on a crib at the SW end of the reef. The crib has a landing pad for helicopters.

26 A **wreck** with a depth of 38 feet (11.6 m) lies 0.8 mile NW of *Gros Cap Reefs light*.

27 A **submarine power cable** is laid between Gros Cap and the *Gros Cap Reefs light*. A **submerged water pipeline** extends 0.5 mile SW from a position on shore near Gros Cap.

ENCs US4MI77M, US5MI77M Chart 14962

28 **Ile Parisienne** *(46°40'N, 84°43'W)* lies 8.5 miles NW of Gros Cap.

29 *Île Parisienne light (1082)* is on the SW end of the island.

30 **Parisienne Shoal**, 2 miles north of Ile Parisienne, has a least depth of 5 feet (1.5 m) and is marked on its east side by a **buoy**.

31 **South Sandy Island** and **North Sandy Island**, 2 miles NNE of Parisienne Shoal, are low and wooded and do not give a good radar return. **Steamboat Island** is a small islet on a **reef** that extends 1.8 miles north of North Sandy Island. There are many **boulders** around and between these islands.

32 The north and south limits of **shoal** water around **Sandy Islands** are marked by **buoys**.

33 **Outer Pancake Shoal** and **Pancake Shoal**, detached shoals with least depths of 13 and 4 feet (4 and 1.2 m) 8 miles NW of the Sandy Islands, are marked to the north and to the NW by **buoys**.

34 **Coppermine Point** *(46°59'N, 84°47'W)* is the NE entrance point of Whitefish Bay. It is not prominent but **Whiskey Point**, 0.8 mile to the SE, shows well on radar.

35 *Coppermine Point light (1087)* is at the end of the point.

36 A radio **tower** 777 feet (237 m) high 3.7 miles east of Coppermine Point has air obstruction **lights** and is **conspicuous** when bearing between 070° and 105°.

ENCs US4MI77M, US5MI77M, US5MI63M Charts 14884, 14962

East side of Whitefish Bay

37 A rocky **reef** with a least depth of 4 feet (1.2 m) lies 0.1 mile west of Gros Cap.

38 A **breakwater-wharf** close SE of Gros Cap is 236 feet (72 m) long. Timber wharves and floating fingers extending east from the wharf have depths of 5 to 6 feet (1.5 to 1.8 m). There is a launching **ramp** close east of the wharf. An offshore boulder **breakwater** 154 feet (47 m) long, 33 feet (10 m) wide and6 feet (1.8 m) high offers some shelter. The channel between the breakwater and the breakwater-wharf is marked by buoys and daymarks. This wharf is used by a commercial fishery and by pleasure craft. There is a Harbour Manager.

39 Gros Cap is a **Customs** vessel reporting station for pleasure craft.

40 **Jackson Island**, 1 mile NNW of Gros Cap close to the mainland, has deep water on the offshore side.

ENCs US4MI77M, US5MI77M Chart 14962

41 **Goulais Point**, 9 miles north of Gros Cap on the west side of the entrance to **Goulais Bay**, is prominent. There are many cottages around the shore of the bay. **Goulais River** empties through a delta on the east side of the bay. **Fishing nets** may be encountered between Goulais Point and Ile Parisienne to the west.

42 *Goulais Bay light (1083)* is on the east side of Goulais Point.

Chart 2315

43 There is an L-shaped Public **wharf** at **Goulais Mission** on the SW side of the bay. This wharf was badly damaged and in poor condition in 1999. The main section of the wharf, 86 feet (26 m) long, has exposed rocks on its east side. There are depths of 2 to 4 feet (0.6 to 1.2 m) on its west side and 3 feet (0.9 m) at its outer end. There is a launching **ramp** close north of the wharf. A **crib** submerged 1 foot (0.3 m) lies 300 feet (91 m) NW of the outer end of the wharf.

44 Goulais Mission is part of the Batchewana First Nation of Ojibways Goulais Bay Reserve 15A.

45 **Anchorage** can be found 1 mile off the wharf, with good shelter in 42 to 60 feet (12.8 to 18.3 m), mud. The best approach is in mid-channel until the wharf is well open. Small craft can find anchorage just north of the wharf in shallower water, mud, but may experience an uncomfortable swell.

ENCs US4MI77M, US5MI77M Chart 14962

46 **Maple Island**, a low, densely wooded island 5 miles north of Goulais Point, is connected to the mainland by a

shallow **boulder reef**. A channel 9 feet (2.7 m) deep 0.1 mile east of the island leads through this reef.

47 *Maple Island light (1084)* is visible bearing north through east to south.

48 *(Sandy Islands and Pancake Shoals, NW of Maple Island, are described earlier in this section.)*

49 **Batchawana Bay**, entered between **Rudderhead Point** and **Corbeil Point** *(46°53'N, 84°37'W)*, is divided into inner and outer sections by **Batchawana Island**. There are many cottages around the shores of the bay but none on the island (1986). There is a provincial park at the head of the outer bay.

50 A **buoy** marks the limit of **shoal** water south of Corbeil Point.

51 There is a Public **wharf** just inside the point 1.4 miles NE of Corbeil Point. The wharf, 15 feet(4.6 m) wide, extends 115 feet (35 m) north from the shore to an L-section 95 feet (29 m) long. In 1999, there were depths of 8 to 12 feet (2.4 to 3.7 m) along the north face. There is a launching **ramp** near by. Gasoline in drums can be obtained at the Public wharf by arrangement with *Buckeye Resort* (1999).

52 The submerged **cribs** of old logging piers lie east and west of the Public wharf at Corbeil Point. A **buoy** lies NE of the wharf.

53 A church 0.5 mile NW of the wharf is prominent.

54 **Anchorage** can be found at the head of the outer part of Batchawana Bay NE of the Public wharf. There is good shelter from all except south winds in 30 to 90 feet (9.1 to 27.4 m), sand. Small craft can find protected **anchorage** behind the Public wharf.

55 The settlement of **Batchawana Bay** is on the west shore of Batchawana Bay, SW of **Stony Point**. There is a post office, a grocery store and a laundromat. There are several motels and restaurants in the area (1999).

56 *Batchawana Bay Air Services*, next to *Buckeye Resort*, operates charter floatplanes from their wharf and can provide transportation to Sault Ste. Marie. The business also provides aviation gasoline for sale to visiting aircraft.

57 **Batchawana River**, flowing into the NE part of the outer bay, is navigable by shallow-draught craft for several miles. Sandbars, submerged 1 foot (0.3 m) (1986), lie in the entrance channel. A shifting sandbar obstructs the mouth. *Highway 17* bridge, 0.3 mile upstream, has a vertical clearance of 7 feet (2.1 m). Resorts near the bridge offer some facilities for small craft. There is a grocery store near the bridge (1999).

58 The deep channel north of Batchawana Island leading to **Harmony Bay** is 0.2 mile wide. There are depths of up to 9 feet (2.7 m) across the flat south of Batchawana Island into the inner bay.

59 **Chippewa (Harmony) River** had depths of 1 foot (0.3 m) (1986) over a sand bar at its mouth, and depths of 5 to 10 feet (1.5 to 3 m) for 1 mile upstream to **Chippewa Falls**. The *Highway 17* bridge over the river has a clearance of 21 feet (6.4 m).

60 Small craft can find protected **anchorage** in Harmony Bay in 36 to 84 feet (11 to 25.6 m), mud, and in **Havilland Bay**, the south end of the inner bay. Stay 0.1 mile offshore of the reeds and grass which line the bay.

61 *Patty's Gitchee Gumee Marina Restaurant*, on the south shore of Havilland Bay, has a very snug well-sheltered small-craft harbour. The entrance to the marina is marked by **buoys** and by a red **light** on shore; these aids are privately maintained.

62 *Patty's Gitchee Gumee Marina Restaurant* is a **Customs** vessel reporting station for pleasure craft.

63 There is a concrete launching **ramp**, 15 feet (4.5 m) wide, 2.5 miles NE of Havilland Bay. This ramp is protected by an armour-stone **breakwater**, elevation 3 feet (0.9 m), and has a small wharf alongside.

64 The area has interprovincial bus services. Buses may be flagged down on *Highway 17*. Notify the carrier in advance if possible.

65 **Pancake Point**, 5.5 miles NW of Corbeil Point on the west side of **Pancake Bay**, is prominent from the west. There is a provincial park at its head.

66 **Whiskey Rock**, with a depth of 3 feet (0.9 m), lies 0.3 mile offshore west of Pancake Point.

Coppermine Point to Montreal River

Chart 2307

67 *(Coppermine Point light and the radio tower east of the point are described earlier in this chapter.)*

68 **Coppermine Rock**, 27 feet (8.2 m) high, is clear on the north and east sides. There is **shoal** water and a small **rock** 1 foot (0.3 m) high to the SSE, and a **shoal** patch to the NNW. **Rousseau Island**, 0.3 mile NNW of Coppermine Point, is 20 feet (6.1 m) high.

69 **Hibbard Bay** lies 2 miles NNE of Coppermine Point. A mine headframe *(not shown on the chart)* 0.7 mile east of Hibbard Bay is prominent from SW.

70 **Hibbard Rock**, off the mouth of Hibbard Bay, is 12 feet (3.7 m) high.

71 **Rousseau Bank**, 5 miles NW of Coppermine Point, has depths of 5 fathoms (9.1 m).

Chart 2315

72 **Mamainse Island** *(47°02'N, 84°47'W)* is the largest of a group of islands NW of **Mamainse Point**.

MAMAINSE HARBOUR (1998)

73 *Mamainse Harbour light (1088)* is near the north end of Mamainse Island. There is a **racon** at the light.

74 **Mamainse Harbour**, a safe refuge, is sheltered on the west and south by the islands mentioned above. It is sheltered to the NE by a rock **breakwater** that connects the north end of a low sparsely wooded island to the mainland on the east. The harbour is entered from the north between Mamainse Island and this low island.

75 An entrance channel 40 feet (12.2 m) wide has been dredged to a depth of 5 feet (1.5 m) through rock. A depth of 3 feet (0.9 m) lies NE of the island forming the south end of the harbour. The area south of the harbour is **foul**. The harbour is used regularly by fishing tugs of 50 to 70 feet (15 to 21 m) length, drawing up to 5 feet (1.5 m).

76 **Overhead cables** with clearances of 20 to 31 feet (6.1 to 9.4 m) extend along the east side of Mamainse Island and across the south end of the harbour.

77 The Public **wharf** at Mamainse is 300 feet (91 m) long with depths of 6 to 8 feet (1.8 to 2.4 m). The deck elevation is 3 feet (0.9 m). South of the Public wharf there are private fishery **wharves**.

78 **Caution**. — There is a **rock and gravel shoal** alongside the wharf 75 feet (22.6 m) from the south end. The shoal has a least depth of 2 feet (0.6 m), 2 feet (0.6 m) off the wharf, and is 30 feet (9.1 m) in diameter.

79 Diesel fuel and gasoline in drums, and ice, can be obtained by arrangement with the local fish-processing plant. The nearest grocery store is in the settlement of Pancake Bay, 11 km SE by highway.

Chart 2307

80 **Mica Shoal**, 4 miles NNW of Mamainse Point, has **boulders** with a depth of 15 feet (4.6 m) and is marked by a **buoy**. **Siesta Shoal**, with a depth of 25 feet (7.6 m), lies 3 miles farther NNW.

81 *Coppermine Point light* in line with the west side of Rousseau Island, bearing 156½°, leads west of Mica and Siesta Shoals.

82 **Mica Bay**, 5 miles NNE of Mamainse Point, is quite open. There are rock paintings 20 feet (6.1 m) above the water on a rock face here.

83 **Pointe aux Mines**, 2 miles NNW of Mica Bay, and **Theano Point**, 2.5 miles farther NNE, have noticeable pink rock bases.

84 **Ossifrage Island**, quite bare, lies SW of Theano Point. There is a channel between but it is obstructed by a **shoal** with depths of 9 feet (2.7 m).

85 **Anchorage**, limited along this shore, can be found in **Alona Bay** off the south side of Theano Point in 12 to 15 fathoms (21.9 to 27.4 m), mud.

86 A light-coloured cliff 2.5 miles NE of Theano Point is **conspicuous**.

87 **Montreal Shoal**, 3 miles NNW of Theano Point, has a depth of 7 feet (2.1 m).

88 The NE point of Montreal Island in line with the west side of Barrett Island, bearing 001°, leads close east of Montreal Shoal.

89 **Montreal River** *(47°15'N, 84°39'W)*, 4.5 miles NE of Theano Point, is the site of a large hydro-electric dam. The river is obstructed by rapids and the power-station dam 0.1 mile upstream. The river empties into the head of a small bay which lies between two rocks 100 feet (30 m) high. The south point is prominent.

90 *Montréal Point light (1089)* is on the south point.

91 There are two radio **towers** with air obstruction **lights** 2 miles ENE of *Montréal Point light*.

92 There are two shingle beaches separated by an entrance channel 100 feet (30 m) wide at the mouth of Montreal River. There is a boat basin on the south side just inside the entrance. Winter ice, westerly storms and river currents sometimes alter the shoreline considerably here. A bar in the channel has a reported depth of 5 feet (1.5 m) (1999) but **winds** and **currents** *(see below)* cause shifting of the bar and variations in the depths. Safe passage through the channel requires local knowledge. Guidance can be obtained from *Trails End Lodge*.

93 **Caution**. — The channel is impassable in **westerly winds** due to breaking seas caused by the wind interacting with the current.

94 **Caution**. — Strong **currents** can make passage through the entrance channel hazardous. These currents vary in strength according to power dam operations. Water levels inside the mouth of the river and in the boat basin are affected by the tailrace as well. The tailrace is least on weekends when the power dam conducts ponding operations. Contact *Trails End Lodge* for more information.

95 **Caution**. — There are reported to be several large boulders just offshore in the entrance.

96 *Trails End Lodge* is at the SE end of the boat basin.

97 There are submerged **cribs** of a ruined wharf outside the river entrance on the south side. There is a **rock** 7 feet (2.1 m) high at the north end of the ruins. A Public **wharf** on the south side of the basin is also in ruins (1999). There are three **crib** structures remaining, each 10 feet (3 m) wide and extending40 feet (12 m) from the shore, with depths

MONTREAL RIVER (1998)

of 6 feet (1.8 m) at the outer ends. These cribs are usually submerged.

Montreal River to Cape Gargantua

98 Unsheltered **anchorage** can be found 1 mile NE of the mouth of the Montreal River in 7 fathoms (12.8 m) on the bank extending 0.2 mile offshore. **MacGregor Cove**, 3 miles farther NE, offers **anchorage** in 10 to 12 fathoms (18.3 to 21.9 m), sand bottom. Fair **anchorage** can be found in the channel between **Vrooman Islands** and the mainland.

99 **Montreal Island** *(47°19'N, 84°44'W)* is surrounded by a narrow shallow bank. The island looks like a low flat box from the south.

100 **Griffon Reef** lies 1.5 miles north of the NW point of Montreal Island.

101 The SW point of Montreal Island in line with Theano Point, bearing 166°, leads west of Griffon Reef.

102 **Agawa Bay**, on the mainland NE of Montreal Island, has clean sandy shores. The bay offers **anchorage** with fair shelter.

103 *Lake Superior Provincial Park* extends from Agawa Bay to just south of Michipicoten River.

104 There are no marine facilities in the park. Mariners may anchor without charge in any of the harbours within the park boundaries; park fees must be paid to go ashore.

105 **Agawa River** is 50 feet (15 m) wide at its mouth. Depths of 4 feet (1.2 m) can be found as far as the rapids 0.1 mile upstream.

106 **Agawa Islands**, west of **Agawa Point** *(47°21'N, 84°40'W)*, have many small **rocks** around them. Some of these rocks are submerged.

107 **Ganley Island** lies close to shore NE of Agawa Islands.

108 Small craft can find good **anchorage** in the channel between Ganley Island and the mainland, with excellent shelter from westerly winds, in depths of 15 to 20 feet (4.6 to 6.1 m). The north entrance is recommended. The anchorage is north of the southern part of Ganley Island.

109 There is an Indian pictograph 8 feet (2.4 m) above the water on the face of a rock on the mainland shore north of the north Ganley Island. The rock is known as **Agawa Rock**.

Chart 2315

110 **Sinclair Island** *(47°23'N, 84°43'W)*, 1 mile NNW of the largest Agawa Island, is mostly bare rock.

111 *Sinclair Island light (1089.5)* is on the SW part of the island.

112 **Sinclair Cove**, entered south of Sinclair Island, has little shelter from west or SW seas and should be used only in settled weather.

113 There is a concrete launching **ramp**, protected by a small **breakwater**, on the south shore of the cove.

114 Sinclair Cove is in *Lake Superior Provincial Park.* Fuel and supplies are not available.

Chart 2307

115 **Barrett Island**, 0.5 mile north of Sinclair Island, has deep water on its west side but is **shoal** on its north, east and south sides.

116 **Ganley Rock**, depth 19 feet (5.8 m), is the NE of three **shoals** midway between Barrett Island and Lizard Islands.

117 **Lizard Islands**, a group of seven low islands on a shallow bank, includes **South Lizard Island** and **Rowe Island**. **Minnie Reef** and **Barr Reef** are dangers on the west side of the bank. Passage should not be attempted between the islands.

118 *Rowe Island light (1090)* is on the NNE tip of the island.

119 The NE side of Leach Island in line with the west side of Hursley Island, bearing 327°, leads west of Minnie Reef.

120 **Sand River**, east of Lizard Islands, is unnavigable because of rapids near its mouth. A prominent light-coloured sand beach 1 mile long extends NW from Sand River.

121 **Bald Head** *(47°29'N, 84°49'W)*, an easily identified promontory 5 miles NW of Sand River, is densely wooded despite its name.

122 Bald Head has a remotely controlled Canadian Coast Guard marine radio station. For scheduled marine information broadcasts, contact the *Thunder Bay MCTS Centre*, call sign *VBA*. Direct all calls to Thunder Bay radio. *(Consult Radio Aids to Marine Navigation (Atlantic, St. Lawrence, Great Lakes, Lake Winnipeg and Eastern Arctic) for more information.)*

123 The mouth of **Baldhead River** is obstructed by a sand bar with a limiting depth of 2 feet (0.6 m) (1974).

124 **Leach Island**, 4.5 miles WNW of Lizard Islands, is surrounded by **shoal** water. A **reef** extends 0.5 mile south of the island. **Miron Bank**, SSW of Leach Island, has a depth of 5 fathoms (9.1 m). **Sparrow Shoal**, a detached shoal 1 mile west of Leach Island, has a depth of 13 feet (4 m).

125 The north point of Leach Island in line with the summit of Bald Head, bearing 083°, leads0.3 mile north of Sparrow Shoal.

126 The south point of Leach Island in line with the NE point of Montreal Island, bearing 127°, leads close SW of Sparrow Shoal.

127 **Ella Islet**, 1.1 miles north of Leach Island, is small and wooded and surrounded by an extensive area of **rocks** and **shoal** water.

128 **Beatty Cove**, on the mainland ENE of Ella Islet, is small and suitable only for small craft. **Telegraph Rock**, west of Beatty Cove, is 7 feet (2.1 m) high and surrounded by deep water.

Chart 2315

129 **Gargantua Island**, 50 feet (15 m) high, lies in **Gargantua Bay** in the entrance to **Gargantua Harbour**. The island has deep water on its south side but a **rock** submerged 4 feet (1.2 m) lies 250 feet(76 m) off its west side.

130 *Gargantua light (1091)* is on the summit of the island.

131 A **rock** with a depth of 4 feet (1.2 m) lies 0.1 mile SW of the point on the SW side of the harbour.

132 Gargantua Harbour has a sandy beach and cottages at its head. A **wreck** at the north end of the harbour is partly exposed, showing 1 foot (0.3 m) above the water (1974). **Wharves**, a float, and buildings on the SW side of the harbour are in ruins. Fuel and supplies are not available.

133 Gargantua Harbour can be entered north or south of Gargantua Island. The south entrance is free of shoals.

134 **Anchorage** can be found NE of the island, with fair shelter, in 42 to 60 feet (12.8 to 18.3 m), sand. Small craft can anchor farther into the harbour, with good shelter in all weathers, in 30 to 48 feet (9.1 to 14.6 m), mud.

Chart 2307

135 Many small islands, **reefs** and **shoals** lie close offshore between Gargantua Harbour and Cape Gargantua, 3.5 miles to the NW. There is a good channel between the islands and the mainland but dangers are not marked and local knowledge is required.

136 **Devil's Warehouse Island**, the largest of the islands, is easily identified by its high and steep eastern side. A large cave, mentioned in Indian legends, is on the north side of the island. **Wilde Island**, **Dixon Island**, **Fawcett Island**, **Peerless Island**, **Alexander Reef**, **Pearson Island** and **Wadena Shoal** are islands and shoals near Devil's Warehouse Island.

137 **Anchorage** can be found in **Warp Bay** *(47°35'N, 85°00'W)*, with good shelter but limited room to swing, in 7 fathoms (12.8 m), mud. The bold point on the SW side of the bay bearing 040° leads between Pearson Island and Alexander Reef. The preferred route passes close to the SW entrance point to avoid Wadena Shoal.

138 **Jordan Island** lies 0.5 mile NW of Pearson Island. **Pannikin Shoal**, 0.2 mile WSW of Jordan Island, is the only detached shoal outside the islands.

139 **Hursley Island** *(47°36'N, 85°03'W)*, close west of Cape Gargantua, has two summits and from a distance appears to be two islands.

140 *Hursley Island light (1092)* is at the northern end of the island.

Cape Gargantua to Michipicoten Bay

Chart 2309

141 Cap Chaillon and Brulé Point are the only major features between Cape Gargantua and Michipicoten Harbour, 22 miles to the north. There are no off-lying dangers along this part of the coast. The bays, with the exception of Brulé Harbour, are open and offer little protection. Depths of 30 to 60 fathoms (55 to 110 m) are found close inshore from Brulé Point north to Michipicoten Bay. There is no anchorage.

142 **Cape Gargantua** *(47°36'N, 85°02'W)* is prominent only from the south. A group of dry **rocks** 0.2 mile west of the north part of the cape are surrounded by deep water.

143 **Cape Rock**, 0.3 mile north of Cape Gargantua, is a small submerged **rock** with two summits.

144 **Anchorage** can be found in the cove SSE of Cape Rock, with shelter from west and south winds, in 6½ fathoms (11.9 m), sand bottom.

145 **Indian Harbour** is in the SE corner of the bay between the north tip of Cape Gargantua and **Ryan Point**. **Chalfant Island** is the southernmost of the islands in this bay.

146 **Anchorage** can be found in Indian Harbour in 5 fathoms (9.1 m), mud. Although restricted in area, there is perfect shelter from all winds.

147 Indian Harbour can be approached on a SE course, heading for the bluff point to the south of Chalfant Island. There is deep water close to the point; a **rock**, almost awash, lies 450 feet (137 m) to the east. The anchorage is in the west bay, entered between the point and the rock and then between a small group of islands and the point.

148 **Squaw Island**, 1.5 miles north of Cape Gargantua, lies off Ryan Point. **MacKinnon Bank** lies NW of Squaw Island.

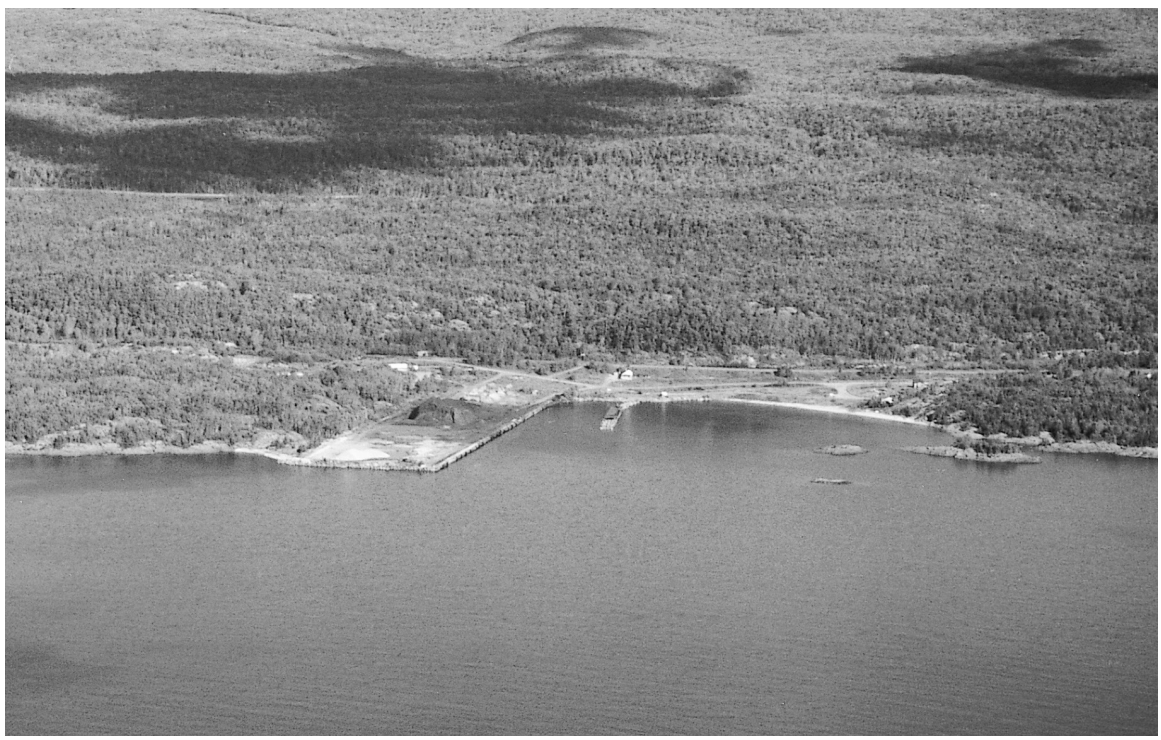
149 A weak local **magnetic anomaly** has been noted on MacKinnon Bank.

150 **Cap Chaillon**, 6 miles north of Cape Gargantua, is easily identified from the south by its bold well-defined bluff rising in a series of short steps from the lake. From the west its definition is lost against the higher hills in the background.

151 **Red Rock River**, 2 miles SE of Cap Chaillon, gets its name from a red rock, 100 feet (30 m) high, jutting into the lake. A sand beach extends 1 mile south of the river mouth.

152 **Grindstone Point**, 2 miles NE of Cap Chaillon, is low and gravelly and is fringed by a shallow **boulder** bank

MICHIPICOTEN HARBOUR (1998)



0.2 mile wide. Between Grindstone Point and **Old Woman Bay**, 4 miles to the NNE, the coast is lined with steep cliffs 300 to 400 feet (91 to 122 m) high, rising sheer from the water. The water is deep close in. These cliffs show conspicuous patches of red-coloured rock. A waterfall 2 miles NE of Grindstone Point is prominent.

153 Old Woman Bay, the site of provincial camping and picnic grounds, is free of shoals, deep and completely open to westward. A small **rock**, 1 foot (0.3 m) high, lies 0.1 mile south of the NW entrance point of the bay. **Old Woman River** empties into the head of the bay through a gravel beach.

154 **Brulé Point** *(47°49'N, 84°57'W)*, 7 miles NNE of Cap Chaillon, is not very prominent. **Brulé Hill**, 2 miles ENE of the point, is **conspicuous** because of its elevation.

155 **Brulé Harbour**, 1 mile SSE of Brulé Point, offers good shelter. **Entrance Island** has deep water close to its west and north shores but shoal water off its south point. The harbour is entered north of Entrance Island through a channel 0.1 mile wide. A vessel approaching from the NW must steer towards the high cliffs south of Old Woman Bay until the entrance to Brulé Harbour becomes visible.

156 The harbour has two arms, the northern one being larger and easier to enter. The south arm is a small bay entered through a narrows 50 feet (15 m) wide with a least depth of 4 fathoms (7.3 m). There is a **rock**, submerged 5 feet (1.5 m), just inside the narrows, close NE of the SE entrance point. Sunken **pilings** extend from the south and east shores of the south arm.

157 **Anchorage** can be found near the north end of the north arm, with good shelter, in 13 fathoms (23.8 m), and in the south arm, with excellent shelter, in the same depth. **Anchorage** in the south arm is suitable only for small craft because of the narrow entrance and limited swinging room. Holding is reported to be poor in some parts of the south arm. The usual route to the southern anchorage leads 300 feet (91.4 m) beyond the SE entrance, because of the submerged rock, and then eastward to the middle of the bay.

158 **Beauvier Point**, 1.6 miles NNE of Brulé Point, is low and shelving. The water is deep close to shore. Cliffs rise to 300 feet (91 m) behind the point. **Noisy River**, not navigable, enters the lake 1 mile to the ENE.

Michipicoten Bay

Charts 2315, 2309

159 **Michipicoten Bay**, 6 miles NNE of Beauvier Point, has no outlying dangers but is exposed. Michipicoten Harbour is in the NW corner of the bay and the mouth of the Michipicoten River is at the SE end.

MICHIPICOTEN RIVER (1998)

160 **Caution**. — There is no shelter from southerly gales for large vessels anywhere in Michipicoten Bay.

Chart 2315

161 **Perkwakwia Point** *(47°56'N, 84°55'W)* is high and bold with deep water close to shore. The point is prominent from westward.

162 *Michipicoten Harbour light (1093)* is on the SW corner of Perkwakwia Point. The tower is difficult to see.

163 **Oakes Cove** is 0.6 mile north of Perkwakwia Point.

164 **Caution**. — A **submerged telephone cable** crosses Oakes Cove from a position close west of the south entrance point NNW to the north shore.

165 Shallow-draught craft can find **anchorage** in Oakes Cove with good shelter and holding, sand bottom, but care is necessary to avoid the submerged cable.

166 *Anderson Fisheries* **wharves**, in the north part of the cove, are 45 feet (14 m) long and 15 feet (4.6 m) apart. Depths of 4 feet (1.2 m) lie between the wharves.

167 **Caution**. — There are submerged **cribs** near the wharves.

168 **Michipicoten Harbour**, in the NW corner of the bay, was formerly an important port for shipping ore and receiving limestone and coal.

169 **Caution**. — South and SW gales cause heavy seas in the harbour. It is dangerous for even large vessels to approach the wharves under these conditions.

170 **Clergue Island** is the larger of two small islands in the NE part of the harbour.

171 *Michipicoten Harbour range (1094, 1095)* is at the head of the harbour. The lights are operated as required. There are no daymarks.

172 The ore-handling **wharf** is 1,500 feet (457 m) long with a depth of 20 feet (6.1 m) at the outer 1,300 feet (396 m). Ore piles near the wharf are **prominent** (1999).

173 There is a privately maintained **light** at the outer end of the wharf. This light is in disrepair (1999).

174 The commercial **wharf** east of the ore wharf is in ruins. Only rows of pilings remain (2010).

176 The settlement of **Michipicoten** is on the east side of the harbour. The nearest post office, express office, bank and hospital are at **Wawa**, 8 km to the NE.

177 Wawa is on the *Trans-Canada Highway* and on bus routes linking Sault Ste. Marie and Thunder Bay. There is an airfield at Wawa.

178 **Michipicoten River** is navigable by small craft as far as the settlement 1 mile above the entrance.

179 The entrance to the river has strong **currents** and a shifting sand **spit**. A **reef** extends south of the peninsula on the NW side of the river entrance. There is a concrete **crib** 5 feet (1.5 m) high on this reef. There is a **buoyed channel** to the settlement but due to **silting** these buoys may not always mark the best channel. Minimum depth in this channel is reported to be 5 feet (1.5 m) (1999). The tailrace of a small power dam enters Michipicoten River, from the north, 0.4 mile inside the entrance. *Buck's Marina* monitors VHF Channel 68 and is available to assist mariners.

180 *Michipicoten River Entrance light (1092.5)* is on the crib on the NW side of the entrance.

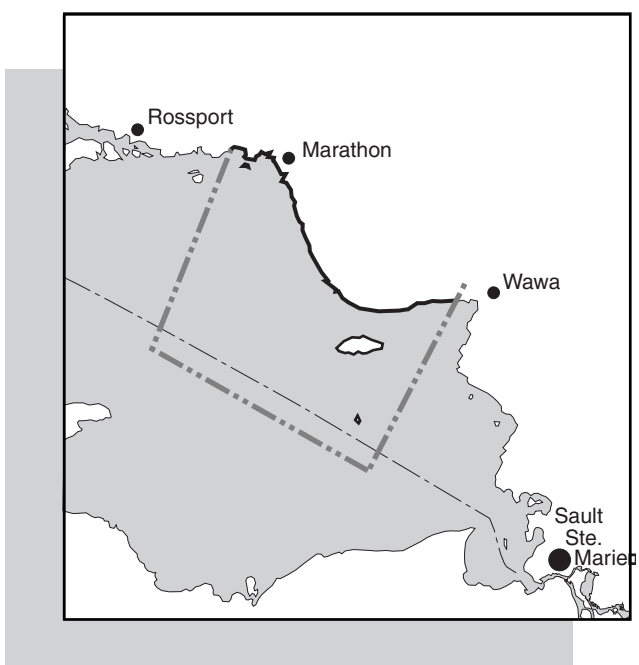
181 The settlement of **Michipicoten River** is 1 mile from the river entrance. Wawa is 8 km away by paved road.

182 **Historical note**. — The site of an abandoned *Hudson's Bay Company* fur trading post is1 mile farther up the river. This post was the starting point for the "fur brigades" who followed the canoe route to the tidal waters of James Bay.

183 The Public **wharf** at the settlement is a timber pile structure 160 feet (49 m) long. In 1997, this wharf had reported depths of 1 to 3 feet (0.3 to 0.9 m).

184 *Buck's Marina* operates the services at the *Harry McCluske Municipal Marina*, 0.1 mile west of the Public wharf. The facility is enclosed by **breakwaters** on the SE shore of the river. There is a children's playground at the marina and camping is available near by.

Lake Superior — NE Shore



General

Chart 2300

1 This chapter covers the NE section of Lake Superior from Perkwakwia Point *(47°56'N, 84°55'W)* to Bottle Point *(48°45'N, 86°52'W)*, including Caribou and Michipicoten Islands.

2 The NE coast of Lake Superior is generally rugged and bold with deep water close to shore and few outlying shoals. There are few anchorages for large vessels but small harbours with good shelter for small craft can be found every 10 to 20 miles along the coast.

2.1 **Light buoy**. — An *Ocean Data Acquisition System (ODAS)* meteorological light buoy, marked *45004*, is moored in mid-lake 32 miles NW of Caribou Island.

3 **Caution**. — There are no facilities for small craft between Michipicoten River and Rossport. The only commercial shipping facilities are at Marathon and Heron Bay. Small craft planning a passage along this shoreline must be sturdy and well equipped and have sufficient provisions.

4 Most of the charts of Canadian waters described in this chapter are based on lead-line surveys carried out between 1902 and 1920. These charts include any dangers discovered by echo-sounder surveys of the entire area to within 3 miles of the shore, carried out by the United States in 1957 and 1958. The sounding lines in the latter survey were spaced too far apart (1 mile) to ensure that every danger in areas of uneven bottom would have been detected.

5 Depths and elevations quoted in this chapter refer to chart datum and thus agree with charted values. Because *Charts 2304, 2306, 2308, 2309, 2310 and 2318* are based on older water level datums, depths and elevations on these charts must be corrected to refer them to the presently adopted datum for Lake Superior. The required correction is noted on the chart. More information on chart datums is given in Sailing Directions Booklet *CEN 300 — General Information, Great Lakes*.

6 A survey of the area of shoals that extends from Southwest Bank northward past Caribou Island to Michipicoten Island was carried out in 1976.

7 **Caution**. — Mariners are advised to use utmost caution in the area between Michipicoten and

Caribou Islands because of the uneven bottom topography and possible uncharted shoals.

Offshore dangers

Superior Shoal

8 **Superior Shoal** *(48°06'N, 87°10'W)*, in the middle of Lake Superior, was found in 1930. The shallowest spot of 6.2 m, rock, is 30 m in diameter and can be seen from above. A spot submerged 8.9 m lies 0.6 mile SSW of this danger. The water is deep right up to the shoal; soundings give no warning. Superior Shoal should be given a wide berth at all times.

Michipicoten Bay to Pilot Harbour

Chart 2309

9 This stretch of coast is broken only by slight indentations and is free of outlying dangers. The bottom drops off steeply. A **spit** with less than 20 fathoms (37 m) projects 1.5 miles south of Dog Harbour. The land rises less abruptly than on the neighbouring east coast of Lake Superior. The hills are rounded in appearance and more uniform in height.

10 **Doré Bay**, between Perkwakwia Point and **Doré Point**, has a long sand beach near its NE corner. The **Doré River** falls, high in the hills several miles from the river's mouth, are visible from the south.

11 **Mountain Ash Hill**, 8 miles WNW of Doré Point, is a good **landmark** but is not easily identified except from due south.

12 **Dog (University) River** *(47°58'N, 85°12'W)*, 2 miles SW of Mountain Ash Hill, is in a steep valley and has a sand and gravel beach at its mouth. The river is not navigable because of a shifting bar at its mouth and rapids 0.5 mile upstream.

13 **Dog Harbour**, entered 1 mile SW of the mouth of Dog River, is reported to offer **anchorage** with good protection in 8 feet (2.4 m), sand, for craft under 35 feet (11 m) long. Vessels anchor here with their sterns secured to shore.

14 **False Dog Harbour**, the small bay close west of Dog Harbour, offers **anchorage** for small craft in 12 feet (3.7 m), sand, gradually shoaling to the west. This anchorage is open to the SE and east.

15 A white pyramidal **daymark** on the south entrance point of False Dog Harbour is not visible north of a bearing of 055°.

16 A cluster of small **rocks**, just above water, lies 0.1 mile south of the south entrance point of the harbour. A **rock** submerged less than 6 feet (1.8 m) lies close SE of the same point. A small **rock** just above water lies inside the harbour close to the south shore.

17 A course of 304° from eastward, heading for the middle of the entrance of the harbour, will avoid the above-mentioned dangers.

18 **Point Isacor**, 7 miles WSW of Dog Harbour, is most prominent from eastward. Conspicuous sheer cliffs, dark-coloured and wooded, line the coast NE of the point. North of Point Isacor there is a high range of hills. The highest point is **Bare Summit** but it is not prominent.

19 **Pilot Harbour**, 8 miles west of Point Isacor, offers **anchorage** for small craft, with perfect shelter, in 8 to 11 feet (2.4 to 3.4 m), sand. Craft up to 40 feet (12.2 m) long can lie alongside a rock face on the south side of the harbour near the ruins of a cabin (1982). **Shoal** water extends 0.1 mile south and SSW of the island sheltering the harbour.

20 There is a stone **cairn** on the west entrance point to the harbour. It is not visible west of a bearing of 025°.

Michipicoten Island, North Side

Charts 2309, 2310

21 **Michipicoten Island** *(47°45'N, 85°45'W)*, heavily wooded, is 30 miles WSW of Michipicoten Harbour and 8 miles south of the mainland shore.

22 *Michipicoten Island light (1097)* is shown on **Point Maurepas**. The light is known locally as **East End light**.

Charts 2308, 2309, 2310

23 **Bonner Head**, near the centre of the north side of Michipicoten Island, rises abruptly to700 feet (213 m). It is conspicuous and is easily identified on radar.

24 **Anchorage** can be found in the bay west of Bonner Head, with good holding and good shelter from south or SE gales. **Anchorage** can also be found in the bight east of the same headland, with good shelter in SW winds, in 5 to 10 fathoms (9.1 to 18.3 m), sand.

25 **Quebec Mines**, on the NW side of the island, once produced large amounts of copper ore but is now abandoned.

26 A **shoal** patch lies 0.8 mile offshore near Quebec Mines. The least depth is 22 feet (6.7 m).

27 A bare outcrop of rock 936 feet (285 m) high, 1 mile ESE of Quebec Mines, is the highest point of Michipicoten Island.

28 **Quebec Rocks** consist of scattered groups of submerged and dry rocks up to 0.5 mile offshore at Quebec

Mines. Vessels should keep at least 1.5 miles offshore from here to the SW point of the island. A fine gravel beach on the shore south of the northeasternmost group of Quebec Rocks can be approached but local knowledge is advised.

29 **Schafer Bay** *(47°44'N, 85°57'W)*, 2 miles SW of Quebec Mines, has low **rocks** up to 0.5 mile offshore west and NW of its north entrance point.

30 **Anchorage** for small craft can be found in Schafer Bay in 5 to 10 fathoms (9.1 to 18.3 m), good holding ground, but it is exposed to westerly winds. In easterly winds, small craft can find anchorage in **Cotton Cove**, 1 mile to the south.

Caribou Island

Chart 2310

31 **Caribou Island** *(47°22'N, 85°49'W)*, 49 miles NW of Whitefish Point and 19 miles south of Michipicoten Island, is mostly sand and gravel. It is wooded along its eastern part with birch, spruce and balsam. The north and south points of the island are low and sandy; the north point is difficult to distinguish at any distance.

32 Depths of 4 fathoms (7.3 m) or less are found up to 1.5 miles off Caribou Island. There are least depths of 5¼ fathoms (9.6 m) on **North Bank**, 4 miles north of the island.

33 **Lighthouse Island** lies 0.6 mile SW of Caribou Island and is composed of granite boulders6 feet (1.8 m) high.

34 *Caribou Island light (1096)* is on Lighthouse Island.

Off-lying banks

35 Five off-lying banks, named according to their direction from the island, have depths of 6 to12 fathoms (11 to 21.9 m). These five banks are **Southeast Bank**, **Southwest Bank**, **West Banks**, **West Patch** and **Northwest Banks**. **McMillan Bank**, **Chummy Bank**, **The Hummock** and **Butch Bank**, with depths of 8 to 20 fathoms (14.6 to 37 m), lie between Caribou and Michipicoten Islands.

36 **Caution**. — Extreme care is necessary in the area between Michipicoten Island and Caribou Island due to possible uncharted shoals.

Michipicoten Island, South Side

Charts 2309, 2310

37 **Cozens Cove (Cozens Harbour)**, 1.7 miles SW of Point Maurepas, previously described, offers shelter for small craft but is quite open to the south.

38 **East Sand Bay** *(47°43'N, 85°40'W)* has an islet and a **shoal** off its south entrance point and a group of dry rocks near its centre.

39 Small vessels can find **anchorage** between the above-mentioned rocks and the west head of East Sand Bay, with good shelter from NW and west winds, in 6½ fathoms (11.9 m), sand.

Charts 2308, 2309, 2310, 2315

Approaches to Quebec Harbour

40 **False Harbour** lies 3.5 miles west of East Sand Bay and 1 mile east of the entrance to Quebec Harbour; it is shallow. **West Sand Bay** lies west of Quebec Harbour.

41 **Black Rock** is 0.4 mile offshore midway between West Sand Bay and the west end of Michipicoten Island. Black Rock consists of two dry rocks; the eastern rock is 4 feet (1.2 m) high, bare, round, smooth and dark in colour. **Andesite Island** is west of Black Rock.

42 **Hope Island**, **Davieaux Island** and **Stack Island** lie south of Quebec Harbour, 0.7 mile offshore. A **rock** submerged 23 feet (7 m) lies midway between Hope and Davieaux Islands.

43 *Davieaux Island light (1098)* is on the north side of the island.

44 **Ship Island**, **Green Island**, **The Breeders** and **Antelope Rock** form a string of islands and rocks west of Stack Island. A deep channel runs close to the south coast of Michipicoten Island between this string of islands and a group of near-shore rocks and shoals that includes Andesite Island and Black Rock.

45 *Davieaux Island light* open north of The Breeders, bearing 095°, leads into the channel from the west.

46 *Michipicoten Island, West End light (1101)* is on **West End Island**, close off the SW end of Michipicoten Island.

Chart 2315

48 Large vessels can find **anchorage** north of Davieaux Island with fair shelter from all winds in 25 to 30 fathoms (46 to 55 m), mud. The best approach is through the channel between Stack and Ship Islands.

QUEBEC HARBOUR (1998)

Quebec Harbour

49 **Quebec Harbour** *(47°43'N, 85°48'W)* offers good shelter in all winds. There is no settlement and no supplies or facilities. There is a sharp turn at the inner end of the entrance channel that limits vessel length to less than 300 feet (91 m).

50 The entrance channel is marked by **buoys**. A **rock** submerged 9 feet (2.7 m) lies near the middle of the south end of the channel.

51 **Caution**. — Strong NW winds cause a strong easterly **current** in the harbour entrance. This current sometimes drags the buoys under the surface.

52 **Caution**. — There is a **magnetic anomaly** at the entrance to Quebec Harbour. Variations of 14° west and 7° east were observed at the west and east entrance points of the harbour, respectively (1973).

53 *Quebec Harbour range lights (1099, 1100)* are on the north shore of the harbour. The lights in line lead through the passage between Hope and Davieaux Islands and through the entrance channel.

54 A white daymark **range** on the east side of the entrance channel, in line bearing 050°, leads to the intersection with the light range.

55 The **anchorage** area in the harbour is restricted in width but offers good shelter in 36 to48 feet (11 to 14.6 m), mud.

56 The buildings and **wharf** of *Ferroclad Fisheries* are on the NE side of the harbour. The wharf is decayed and depths of 8 to 10 feet (2.4 to 3.0 m) are reported alongside (1998). There are two private **wharves** on the north shore of the harbour, one west and one east of the front range light. The former is 180 feet (55 m) long, the latter is 60 feet (18 m) long with a 30-foot (9.1-m) L-end, 6 feet (1.8 m) wide. The east wharf is reported to be in ruins (1998). A private **wharf**, on the south side of the harbour 0.6 mile SE of the front range light, has an L-shaped end section 45 feet (14 m) long with a depth of 8 feet (2.4 m) alongside this face.

57 There are three **wrecks** in the SE end of the harbour.

Pilot Harbour to Otter Island

Chart 2309

58 The coast between Pilot Harbour *(47°55'N, 85°35'W)*, previously described, and Otter Head,21 miles to the WNW, is bold with no outlying shoals and may be approached to

0.5 mile. The land is wooded with second growth poplar, birch and spruce. The hills reach a height of over 800 feet (244 m) but there are no prominent peaks.

59 There is a small **anchorage** between the large central island and the mainland at the mouth of **Pipe River**, 4 miles west of Pilot Harbour. The anchorage is shallow and open to the SE. It is approached from the east, keeping north of the easternmost islands. There is a small-craft **anchorage** off the **wharf** ruins on the NE side of the SW arm of **Redsucker Cove**, 0.7 mile WNW of Pipe River, in 1 to 6 fathoms (1.8 to 11 m), mud. This anchorage is open to the SE.

60 **Ganley Harbour** *(47°56'N, 85°43'W)*, 1.3 miles west of Pipe River, offers good protection from all winds for small craft.

61 A bare **rock** 10 feet (3 m) high 0.3 mile to the SW and a privately maintained starboard hand **daybeacon** on a small island in the entrance are useful in identifying Ganley Harbour. The rock is visible from east or west. The daybeacon is visible only from southward between the bearings of 335° and 050° and can be seen for 4 miles. The daybeacon has a **radar reflector**.

62 The **anchorage** is in the NE corner of Ganley Harbour in 10 feet (3 m), fine sand. The usual approach, from SE, passes to the north of two small islands and the adjoining rock patch in the entrance, then turns quickly to starboard around the island marked with the daybeacon. A **shoal rock** lies just off the point on the south side of the anchorage. Depths of 12 feet (3.7 m) are found in the approaches to this anchorage.

Charts 2308, 2309

63 **False Ganley Harbour**, 0.5 mile west of Ganley Harbour, and 2 coves 1 and 1.5 miles farther west offer **anchorage** for small craft in 2 fathoms (3.7 m), sand, but are open to the SE. A **rock** submerged less than 6 feet (1.8 m) lies 0.3 mile SSE of the western cove.

64 **Crane Island**, 2.7 miles west of Ganley Harbour, is 40 feet (12 m) high with dry **rocks** at each end. Small craft can find **anchorage**, open to the east and SE, behind this island. The anchorage should be approached from SE. A rocky **shoal** submerged less than 6 feet (1.8 m) lies 0.2 mile WSW of Crane Island.

65 **The Wheat Bin** is a **conspicuous** light-coloured beach 5.5 miles WNW of Ganley Harbour.

66 The **Pukaskwa River**, 8 miles NW of Ganley Harbour, can be navigated by small craft as far as the falls 0.2 mile from its mouth, and offers **anchorage** in 3 fathoms (5.5 m). There is a gravel bar at the entrance that is shifted by yearly floods and by storms from the west. A depth of 6 feet (1.8 m) over the bar was reported in 1997.

67 *Pukaskwa National Park* extends from Pukaskwa River north to just south of Pic River. There are no marine facilities in the park. Mariners may anchor without charge in any of the harbours within the park boundaries; park fees must be paid to go ashore.

68 **Davis Island**, 100 feet (30 m) high, lies 1.3 miles NW of the Pukaskwa River mouth in the entrance to an unnamed bay. The bay was the site of a former logging depot known as **Pukaskwa Depot**.

69 **Pointe La Canadienne** *(48°01'N, 85°57'W)* is bold and shows up well from a distance. **Rocks**, dry and awash, lie close to the west.

70 **Richardson Harbour** is sheltered by **Richardson Island**, 1.3 miles NNW of Pointe La Canadienne, and a group of islets NW of Richardson Island. The harbour offers **anchorage** for small craft with perfect protection in 3 fathoms (5.5 m), mud and sand. The water close off the NW and SE points of Richardson Island and the NW part of Pointe La Canadienne is deep. The anchorage can be entered from either end but the SE entrance is less difficult. **Bonamie Cove**, 0.7 mile SE of Richardson Harbour, offers poor shelter in west to NW winds.

71 **Otter Head**, 4 miles NW of Richardson Harbour, is 400 feet (122 m) high and is **conspicuous**. The NW tip of Otter Head has **shoal** water extending 0.3 mile NW; a **rock**, 2 feet (0.6 m) high, lies 0.4 mile west.

72 **Otter Island** *(48°07'N, 86°04'W)* is 250 feet (76 m) high and wooded.

73 *Otter Island light (1102)* is at the NW corner of Otter Island.

74 A **shoal** spot with a depth of 7 feet (2.1 m) lies off the end of a string of dry **rocks** extending NW of the island. A **buoy** marks **shoal** water extending from the mainland east of Otter Island. A **shoal** with 19 feet (5.8 m) off the SE point of the island and the edge of a **shoal** extending from the mainland are both marked by **buoys**. An unmarked 4-fathom (7.3-m) **shoal** spot lies 0.1 mile east of the SE point of Otter Island.

75 A short string of islets 0.2 mile SW of Otter Island marks the NE edge of a triangular **shoal** that extends 0.3 mile to the SW. There is a deep channel between the islets and Otter Island.

76 **Old Daves Harbour**, between the north side of Otter Island and the small island to the north, offers good **anchorage** for small craft in 12 feet (3.7 m). The SE and preferred entrance is narrow and S-shaped. There are fishery **wharves** and a light-keeper's dwelling here. Depths in the entrance are reported to be9 feet (2.7 m), with depths of 6 to 9 feet (1.8 to 2.7 m) at the wharves.

77 **Anchorage** for larger vessels can be found 0.4 mile north of the SE point of Otter Island, with fair shelter, in 15 to 20 fathoms (27 to 37 m), sand. The usual

OTTER ISLAND (1998)

approach is from the north and favours Otter Island to avoid the **shoal** water extending from the mainland.

78 **Otter Cove** offers small craft **anchorage** with perfect shelter from all winds. The channel passes south of **Wiedman's Island**, narrowing to a width of 150 feet (46 m). Vessels with draughts of up to 24 feet (7.3 m) can find passage. The anchorage area, 0.2 mile SE of the island, has depths of 5 fathoms (9.1 m), sandy clay, shoaling rapidly at the SE end. A narrow channel with a reported depth of 9 feet (2.7 m) leads to the head of the cove. Anchorage may be found in 3 fathoms (5.5 m), mud. Many deadheads are reported in the narrow channel and in the east end of Otter Cove (1973).

79 Otter Cove can be entered by passing either north or south of Otter Island but the north route, having fewer hazards, is preferred. A mariner using the channel between Otter Island and Otter Head should favour the island to avoid the **shoal** water off Otter Head.

Otter Island to Peninsula Harbour

Chart 2308

80 **Cascade Falls** *(48°08'N, 86°03'W)*, on the mainland NNE of Otter Island, are **conspicuous**.

81 **Triangle Harbour**, 2 miles NW of Cascade Falls, offers **anchorage** for small craft in 6 feet(1.8 m), boulder and sand bottom, but is open to NW and has poor holding.

82 There is a small white slatwork pyramid **daymark**, elevation 41 feet (12 m), on the south point of the entrance. It is not visible from the south until the entrance opens.

83 **Swallow River**, 0.7 mile NNW of Triangle Harbour, has rapids at its mouth.

84 **Trapper Harbour**, a small bay 0.2 mile NNW of Swallow River, offers **anchorage** for small craft with good shelter in 6 to 10 feet (1.8 to 3 m), sand and clay. There is room for a vessel up to 35 feet (11 m) long to swing at a single anchor. A vessel up to 55 feet (17 m) can anchor with its stern secured to the shore. The entrance to the anchorage passes north of the island that shelters the harbour. There is a **shoal** lying to the NW of the island.

85 Many small bays lie between Swallow River and Simons Harbour, 6 miles to the NNW, but these do not offer shelter for anything but small boats. The land is high and the shore bold with only a few shoals. There is a 9-foot (2.7-m) **shoal** patch 0.4 mile off a bluff point 2.5 miles NNW of Swallow River. **Tip Top Mountain**, 5 miles east of Simons Harbour, is 1,520 feet (463 m) high.

86 **Simons Harbour** *(48°16'N, 86°08'W)*, 9 miles NNW of Otter Island, offers **anchorage** for small vessels, with fair shelter from most winds, in 15 fathoms (27.4 m), clay. Small craft can find anchorage with good shelter in the coves at the south end of the harbour.

87 The usual entrance is from SW, passing between the point which forms the west side of the harbour and the islands to the west. The channel is 900 feet (274 m) wide with depths of 15 fathoms (27.4 m).

88 A privately maintained white pyramid **daymark** with a red top, elevation 25 feet (7.6 m), is on the point described above.

89 A **shoal** spot submerged 3½ fathoms (6.4 m) lies 0.7 mile west of the daymark, and a patch of dry and submerged **rocks** lies 0.5 mile WNW of the daymark.

90 **Stench Rock**, covered less than 6 feet (1.8 m), 1 mile NW of Simons Harbour, is the outermost detached submerged **rock** between Simons Harbour and Oiseau Bay, 7 miles to the north. There is a deep channel between the shore and a mile-long string of dry and submerged **rocks**, 0.3 mile north of Stench Rock.

Chart 2304

91 **Oiseau Bay**, 8 miles NNW of Simons Harbour, is shallow with many **rocks** and **reefs** and offers shelter only for small craft.

92 The principal **anchorages** are in the north end of the bay, either behind the island just inside the NW entrance point in 5 fathoms (9.1 m), or behind the island 0.5 mile east of the same point in 2 fathoms (3.7 m), sand bottom. **Dampier Cove**, which lies behind the two islands in the SE corner of Oiseau Bay, is reported to offer **anchorage** with complete shelter but has only 6 feet (1.8 m) of water in the entrance. Excellent shelter is also reported in **Nichols Cove**, the north arm of the three-armed bay just south of Oiseau Bay.

93 The land behind **Sewell Point**, 2 miles NNW of Oiseau Bay, is high and thinly wooded.

94 **Caution**. — A **magnetic anomaly** has been reported off Sewell Point.

95 Several **anchorages** are available to small craft east and north of Sewell Point. **Cave Harbour**, the bay 0.5 mile east of Sewell Point, is reported to offer excellent shelter but has less than 5 feet (1.5 m) of water. The bay 0.7 mile NNE of Sewell Point, known as **Fish Harbour**, is reported to offer **anchorage** in 2 fathoms (3.7 m), sand, and to have a fine sand beach, but it is open to the NW. **Morrison Harbour**, between the island 1.4 miles north of Sewell Point and the shore, offers good shelter in depths of up to6 fathoms (11 m). The preferred approach to Morrison Harbour is from the south.

96 The shore from Morrison Harbour to Playter Harbour, 8 miles to the north, is fringed by scattered **rocks** close to the shore. **Playter Harbour**, 9 miles north of Sewell Point, is quite open to the west and offers only limited shelter for small craft. **Shoal rocks** extend from the south side of the harbour entrance but the north side is deep.

97 **Pulpwood Harbour**, the southern and smaller of the two narrow bays between Playter Harbour and Pic River, is reported to offer well-sheltered **anchorage** for small craft in 3 to 4 fathoms (5.5 to 7.3 m). There are dry **rocks** in the middle of the entrance channel. These should be left to port when entering.

98 A patch of dry and submerged **rocks** lies SE of the islet 0.9 mile west of the entrance to Pulpwood Harbour.

99 The entrance to **Mud Bay**, just north of Pulpwood Harbour, is reported to be obstructed by a **shoal**. The bay is suitable only for small boats.

100 There is a **conspicuous** sandy shore on the north side of the mouth of **Pic River**, 0.5 mile north of Mud Bay, on an otherwise dark-coloured coast.

101 The Pic River is very muddy. In a south wind, which frequently brings fog, it is reported that the lake waters are discoloured for many miles to the north of the mouth of Pic River but are clear to the south.

102 A narrow sand bar extends 0.3 mile offshore from the north side of the river mouth, then south over halfway across the river entrance.

103 **Caution**. — Old logging piles and cribs and deadheads in the river make navigation hazardous. The muddy water makes underwater dangers impossible to see.

104 There is a considerable **current** in Pic River.

105 *Highway 627* bridge crosses the Pic River 1 mile from the entrance. This highway leads to the main entrance of *Puckaskwa National Park*.

106 There is a small **wharf** on the south side of the river at the foot of the bridge.

107 Ojibways of the *Pic River First Nation* have a reserve on both sides of the river. There is a settlement with a convenience store and a restaurant on the north bank of the river.

Chart 2318

108 **Ogilvy Point** *(48°37'N, 86°21'W)* is the most prominent point in this area. It is formed by several islands which taper off to the SW, ending at dry rocks. The rocks are on a shoal bank that extends0.2 mile further SW.

109 **Heron Bay**, 2 miles NNE of Ogilvy Point, offers **anchorage** in 7 fathoms (12.8 m), sand, but with no shelter from westerly winds. **Boulton Reef** lies on the south side of the entrance to the bay. **Randle Point** is the NW entrance point of Heron Bay. **C.P.R. Island** lies close

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to shore in the SE corner of Heron Bay. **Keating Rock** is an isolated danger 0.2 mile WNW of C.P.R. Island.

110 There is a **wharf**, used by *Lafarge Canada Inc.* to import cement, on the north side of the harbour. The wharf is 322 feet (98 m) long and has a depth of 21 feet (6.4 m) alongside (1998). There are two groups of silos at the head of the jetty.

111 A private **lighted range**, in line bearing 058°, leads into Heron Bay clear of Keating Rock. The lights are operated on request for vessels using the wharf.

112 The settlement of **Heron Bay**, 1.3 miles east of the wharf, is on a railway line. There is a post office and a general store (1999).

Chart 2304

Approaches to Peninsula Harbour

113 The usual route for approaching Peninsula Harbour begins at a point 5 miles west of Randle Point and leads from there to *Hawkins Island light*, 4 miles to the NNE.

114 **Craigs Pit**, a gravel pit 2 miles north of Randle Point, is **conspicuous** and can be seen for more than 25 miles. Four white storage tanks *(not shown on the chart)* 1.8 miles ESE of *Hawkins Island light* are prominent from the south.

115 **Pic Island**, 5 miles west of the approach course, is high and thickly wooded. It can be seen for a considerable distance, especially from the west. Hawkins Island is reported to be **radar conspicuous**.

116 **Caution**. — **Magnetic anomalies** have been experienced in the vicinity of Pic Island and near Peninsula Harbour.

117 **Uncle Bobs Bank**, with a least depth of 15 fathoms (27.4 m), lies 3 miles west of Craigs Pit. **Hale Rock**, 3 miles farther west, is 3 feet (0.9 m) high and small. **Fred Shoal**, submerged 9 fathoms (16.5 m), lies 1 mile SSE of Hale Rock.

118 There is a mast, elevation 27 feet (8.2 m) with a red and white diamond-shaped **daymark** and a **radar reflector**, on Hale Rock.

Chart 2306

119 **The Peninsula** *(48°43'N, 86°24'W)*, rounded, symmetrical and densely wooded, is the SE entrance point of **Peninsula Harbour**. **Ypres Point** is the NW entrance point. **Hawkins Island** lies between the entrance points. The main entrance channel leads between Hawkins Island and The Peninsula. **Senlis Shoal**, with less than 6 feet (1.8 m), lies 0.1 mile east of Hawkins Island. The north entrance channel,

between Hawkins Island and Ypres Point, is obstructed by **Manitoba Shoal**, submerged less than 6 feet(1.8 m). **Blondin Island** and **Skin Island** are the principal islands inside the harbour. **Meaux Shoal**, least depth 7 feet (2.1 m), lies NW of Skin Island.

120 *Hawkins Island light (1106)* is at the south tip of the island.

121 *Skin Island light (1107)* is on the SW side of Skin Island.

122 A **conspicuous** chimney, with red and white horizontal bands, stands near the paper mill buildings 0.15 mile south of the wharf.

123 The harbour is quite open to the SW, as Hawkins Island offers little shelter. The only **anchorage** with protection from all winds is in **Jellicoe Cove** in 7 fathoms (12.8 m), sand, with fair holding.

124 A **submerged water intake** in Jellicoe Cove is marked by privately maintained **buoys**.

125 There is a former booming area with several **dolphins** in the east end of Jellicoe Cove. The dolphins are now used to moor pleasure craft and small workboats.

126 The town of **Marathon** (population 5,500 in 1999) is named after the *Marathon Paper Corporation* of Wisconsin which established a pulpwood operation here in 1944. The mills were owned by *Fort James Marathon Ltd*.

127 The *Fort James Marathon Ltd.* **wharf** is 460 feet (140 m) long with a deck elevation of 7 feet (2.1 m). Depths range from 17 feet (5.1 m) to 24 feet (7.2 m) from the inner to the outer end, respectively (1998).

128 There are two privately maintained fixed red **lights** on the NE part of the *Fort James Marathon Ltd.* wharf. They are shown at an elevation of 19 feet (5.8 m) from masts 12 feet (3.7 m) high.

129 The town has banks, a post office, hotels, a hospital, and grocery and hardware stores. A marina is planned (1999).

130 There is railway freight service and an interprovincial bus service. The *Trans-Canada Highway* passes near by. A small private airport is nearby.

131 **Port Munro**, 2 miles NNE of Ypres Point, is well sheltered and free from shoals. **Monmouth Island** is on the west side of the entrance to Port Munro.

132 **Caution**. — The cove at the head of Port Munroe was formerly used to store log rafts. The cove north of 48°45'54"N is **foul** and dangerous to surface navigation.

Peninsula Harbour to Bottle Point

Chart 2304

133 A microwave **tower** 3 miles north of Monmouth Island is 327 feet (100 m) high and has air obstruction **lights**.

134 **Red Sucker Cove**, 2 miles west of Monmouth Island, is deep and free from shoals but is quite open to the south.

135 **Detention Island** lies 4 miles west of Peninsula Harbour. A bank with dry **rocks** and a **rock** submerged less than 6 feet (1.8 m) extends 0.5 mile north of the island.

136 The inlet of **Port Coldwell** *(48°45'N, 86°32'W)* lies 1 mile NNW of Detention Island. The preferred route passes close to the east entrance point of the inlet to avoid the **dangers** north of Detention Island.

137 Small craft can find **anchorage** in 3 fathoms (5.5 m), with good shelter and holding, near the head of the inlet.

138 There is a white daymark on the east entrance point of the inlet.

139 A partially exposed **wreck**, elevation 10 feet (3 m), lies in the cove in the NW part of the inlet.

140 A gravel road leads from the NE corner of the cove up to the *Trans-Canada Highway*, at the abandoned community of **Coldwell**. There are no supplies or facilities nearby.

141 **Premier Mountain (Mount Premier)** has two microwave **towers** with air obstruction **lights**,1 mile WNW and 2 miles north of the summit.

142 **Thompson Channel** passes between Pic Island, previously described, and the mainland. **Foster Island** and **Sullivan Island** lie in the NE part of the channel. **Slyboots Rock**, with unnamed **shoals** north and south; **McKay Rocks**, awash, east and SE of Sullivan Island; and **Black Rock**, 1 mile south of Foster Island, are **dangers** in the east end of Thompson Channel. Hale Rock and Fred Shoal, previously described, lie 2 and 3 miles SE of Sullivan Island.

143 **McDonald Islands** are NE of Pic Island. **Guse Point**, with deep water close to shore, and **Moss Point** flank the west entrance to Thompson Channel. **Nicoll Shoal**, submerged 2 fathoms (3.7 m), lies in the middle of the entrance. The usual route is between Nicoll Shoal and Guse Point.

144 **Anchorage** can be found in the bight east of Moss Point in 10 to 20 fathoms (18.3 to 37 m), mud bottom.

145 The basin between the two parts of **Allouez Island**, south of Pic Island, is reported to offer a pleasant and safe **anchorage** for small craft. Vessels can enter from the east but must pass south of a large partly dry **rock** which blocks two-thirds of the entrance.

146 **Ashburton Bay** is deep and quite open to the lake. It is surrounded by thickly wooded hills. **McKellar Harbour** *(48°48'N, 86°43'W)* is in the northern part of the bay.

147 **Barclay Islands** lie in the south approach to McKellar Harbour. **Fitzsimmons Rocks**, mostly surrounded by deep water, lie in the SW approach. A passage 0.1 mile wide separates the latter from shoal water extending from the mainland.

148 There is sheltered **anchorage** for small craft in McKellar Harbour, off the middle of the north side of the large island, in 4 fathoms (7.3 m), clay bottom. The harbour can be entered either side of the island. The preferred entrance is on the west side where the water is deep close to the island. A **rock** islet, 4 feet (1.2 m) high, lies close north of the NW corner of the island.

149 An **overhead power cable** with a clearance of 110 feet (33.5 m) crosses the mouth of the cove in the NE part of McKellar Harbour.

150 **Bottle Point**, 6 miles WSW of McKellar Harbour, is a narrow neck of rock. **Bottle Cove (L'anse à la Bouteille)**, on the west side of the point, is reported to offer poor shelter.

Lake Superior
Nipigon Bay and Approaches

General

Chart 2300

1 This chapter covers the north end of Lake Superior, including Nipigon Bay, its outer approaches and the channels into the bay.

2 The waters described in this chapter were surveyed by lead line between 1906 and 1916, except for the Nipigon River which was surveyed by modern methods in 1974.

3 Depths and elevations quoted in this chapter refer to chart datum *(see Sailing Directions booklet CEN 300 — General Information, Great Lakes)* and thus agree with charted values. Because *Charts 2302, 2303, 2304 and 2305* are based on older water level datums, depths and elevations on these charts must be corrected to refer them to the presently adopted datum for Lake Superior. The required correction is noted on the chart. *(More information on the older water level datums is given in Sailing Directions booklet CEN 300 — General Information, Great Lakes.)*

3.01 Real-time water level information for Lake Superior at Rossport is available from the *Canadian Hydrographic Service Automated Water Level Gauge*, telephone number 807-824-2250. *(More information on water levels is given in Sailing Directions booklet CEN 300 — General Information, Great Lakes.)*

3.1 **Light buoy**. — An *Ocean Data Acquisition System (ODAS)* meteorological light buoy, marked *45001*, is moored in mid-lake 48 miles SSW of Rossport.

Charts 2303, 2304

Slate Islands

4 **Slate Islands** *(48°39'N, 87°01'W)* lie in the east outer approach to Nipigon Bay. **Jackfish Channel**, 5 miles wide, separates the islands from the mainland shore. The east, west and south sides of **Patterson Island** are free of outlying dangers. **Frank Rock**, small and 4 feet (1.2 m) high; **Dahl Shoal**, submerged less than 6 feet (1.8 m); and a **shoal** patch with a least depth of 3 fathoms (5.5 m) lie off the north shore of **Mortimer Island**. **Shoal** water extends 0.3 mile north from the northernmost of the **Leadman Islands**.

5 *Slate Islands light (1111)* is on a hill near the south point of Patterson Island. The keeper's dwelling is at the foot of the hill.

6 **McGreevy Harbour**, sheltered by **Edmonds Island**, **McColl Island** and **Bowes Island**, offers anchorage in deep water but holding is poor and deadheads are reported inshore. It is possible for small craft to moor to a cliff in the inner part of the harbour. The shallow water east of Bowes Island is reported to have adequate **anchorage** for small craft. **Copper Harbour (Lambton Cove)**, on the south side of Mortimer Island, offers **anchorage** with good shelter in 14 fathoms (25.6 m) and it is possible to moor to a cliff.

7 The preferred approach to the areas described above is from the west, because of the **shoals** south of **Dupuis Island**, east of Mortimer Island. **Kate Rock** is 0.2 mile north of Edmonds Island. A **log buoy** is moored 0.2 mile north of Kate Rock.

8 A **daymark range** on Bowes Island and two **daymark ranges** on the SE shore of Mortimer Island lead in from the SW, clear of Kate Rock, north of McColl Island and between McColl and Bowes Islands.

9 **Sunday Harbour** is on the south side of Patterson Island. The holding ground is poor and a heavy sea can build up in south and SW winds.

10 A **submerged power cable** crosses Jackfish Channel, west from the south shore of Sunday Harbour and then NNW to the head of Terrace Bay.

11 A yellow *Ocean Data Acquisition System* meteorological **buoy** is moored 5.3 miles SSE of Patterson Island.

Bottle Point to Schreiber Point

Chart 2304

12 *(Bottle Point and the coast to the east are described in Chapter 5.)*

13 The land is bold between **Bottle Point** *(48°45'N, 86°52'W)* and Jackfish Bay, 5 miles to the NW. **Steel Mountain**, 1 mile inland midway between these features, rises to a height of 760 feet (232 m).

14 **Lawson Island** lies south of Santoy Bay 2 miles WNW of Bottle Point. **Jack Rock**, **awash**, lies close NE of Lawson Island. **Haiste Rocks**, submerged less than 6 feet (1.8 m), lie midway between the island and the shore. A sand cliff 0.5 mile west of Santoy settlement and a white shed 0.7 mile farther west are prominent (1974). **Santoy Bay** is open and offers little shelter.

Chart 2305

15 **Jackfish Bay** is a good harbour of refuge on the north side of Jackfish Channel. It is entered between **Cape Victoria**, bold with deep water close to shore, and an unnamed point 2.6 miles to the east.**St**. **Patrick Island** *(48°47'N, 86°59'W)* is in the mouth of the bay, with **Teed Shoal** lying close SW. Dangers extend up to 0.2 mile off the island. A narrow channel of deep water east of the island is difficult to navigate.

16 *Jackfish Bay light (1110)* is on the SW part of St. Patrick Island.

17 **Little Nick Rock**, 0.4 mile off the north shore of the main bay, is 3 feet (0.9 m) high. A shallow bank extends 150 feet (46 m) to the south.

18 The **ruins** of the abandoned settlement of *Jackfish* are on the east side of the bay. There were reported to be two cottages here in 1978. The wharves, shown in ruins, have been removed.

19 **Anchorage** can be found in **Tunnel Bay**, the NE arm of Jackfish Bay, in 10 fathoms (18.3 m), mud. Holding is reported to be poor and precautions are necessary if strong winds are expected. **Moberly Bay** offers **anchorage** but the islets in its mouth give little protection.

20 **Overhead cables**, with clearances of 97 feet (29.6 m) and 45 feet (13.7 m), cross Tunnel Bay near its head, and another, with a clearance of 60 feet (18.3 m), crosses the upper end of Moberly Bay.

Chart 2303

21 The mainland shore from Jackfish Bay to Schreiber Point, 12 miles to the west, is broken by many small indentations and fronted by **shoal** water and dry **rocks** extending 0.1 to 0.3 mile offshore. **Victoria Bay** lies close west of Cape Victoria.

22 **Almos Shoal**, with a least depth of 2 fathoms (3.7 m), is the outermost danger between Cape Victoria and **Terrace Bay**, 5 miles to the west. There is a prominent grey building near the shore 1 mile west of Almos Shoal.

23 *Terrace Bay light* (*1111.1)* is on a small island at the entrance of **Aguasabon River**, 2.2 miles west of Almos Shoal.

24 There is a small boat channel into Aguasabon River marked by the light mentioned above and by **daybeacons**. There are floating small-craft **wharves** and a concrete **launching ramp** inside the river at the NE corner of the sand spit, near the shoreline. Entry into the river requires local knowledge.

25 **Chase Rock**, well above water, and **Keith Rocks**, submerged less than 6 feet (1.8 m), lie off the east and west entrance points to Terrace Bay.

26 A **conspicuous water tank** and a large power-house are at the head of Terrace Bay. A **submerged power cable** crosses from the head of the bay in a SE direction to a position on the south coast of Patterson Island.

27 **Anchorage** is possible for small craft, in calm winds, behind the islets in the NE part of the bay. Terrace Bay is quite open to the south.

28 The settlement of **Terrace Bay** (population 2,200 in 1999) is 2 miles east of the head of the bay. Terrace Bay has a bank, a hospital, medical and dental offices and a shopping centre (1999).

29 There is a *Kimberly Clark of Canada* pulp and paper mill at Terrace Bay. There are chimneys, prominent buildings and a red and white **tower** with air obstruction **lights** at the mill.

30 **Les Petits Ecrits** *(48°45'N, 87°13'W)*, five small islands close offshore 2 miles west of Terrace Bay, are separated from the shore by a narrow channel of deep water. **Anchorage** for small craft can be found behind the islands, but this location is unsafe in strong winds.

31 **Worthington Bay** lies 1 mile west of Les Petits Ecrits.

32 **Schreiber Point** *(48°46'N, 87°18'W)*, on the east side of the entrance to Schreiber Channel, is the most prominent feature in this locality. The point is rugged and backed by the high land of **Mount Gwynne**.

Approaches to Nipigon Bay

Charts 2303, 2312

33 **Nipigon Bay** is the northernmost part of Lake Superior. The bay lies between Schreiber Point and Agate Point, 38 miles to the WSW, and is separated from the lake by a string of large islands. The north and east sides of the bay are backed by high, thickly wooded hills. The west side is mostly flat and swampy.

34 Schreiber, Wilson and Simpson Channels and the Moffat and Nipigon Straits, named from east to west, lead into the bay. Simpson Channel, wide and free from shoals, is the best and safest for newcomers. There is a light and a prominent point at its south entrance. Nipigon Strait is the shortest route for vessels approaching from the west but it is very narrow at Fluor Island and local knowledge is advised. The other three passages are suitable only for small vessels.

35 **Caution**. — There is a local **magnetic anomaly** of 1° to 7° in the area between Wilson and Fluor Islands. Mariners using magnetic compasses should exercise particular caution at night or in reduced visibility.

Chart 2303

36 **Copper Island** *(48°46'N, 87°23'W)*, the easternmost of the string of islands across the mouth of Nipigon Bay, has three distinct high points. The summit is near the middle of the island. A reddish-white cliff on the NE side of Copper Island north of the summit is **conspicuous** from 7 miles offshore.

37 **Wilson Island** lies 0.2 mile west of Copper Island. The water between Copper and Wilson Islands is not navigable.

38 **Barr Island** lies close SE of Wilson Island. **Barr Island Harbour**, on the north side of Barr Island, offers **anchorage** with good shelter. A **wharf** on Wilson Island is reported suitable for shallow-draught boats under 30 feet (9.1 m) in length.

39 **Small Lake Harbour**, on the south shore of Wilson Island, is open to the south.

Chart 2312

40 **Wilson Island Harbour**, at the SW corner of Wilson Island, offers **anchorage** with good shelter in 4 fathoms (7.3 m). The usual entrance to the harbour favours the deep water on the south side to avoid the **shoal** water and dry **rocks** on the north.

41 **Cobinosh Island** *(48°45'N, 87°29'W)* lies 0.3 mile south of Wilson Island on the east side of the south entrance to Wilson Channel.

42 **Wilson Channel**, leading between Wilson Island and the islands to the west, is seldom used except by small craft bound for Rossport. The channel is unmarked and is reduced in width to 0.2 mile at its north end by **Tracy Shoal**. This **boulder** shoal has a depth of 16 feet (4.9 m) and has deep water on its NW side.

43 **Caution**. — Although a route with a least depth of 6 fathoms (11 m) can be followed through Wilson Channel in good visibility, the channel is hazardous at night or in reduced visibility for craft with draughts more than 14 feet (4.3 m).

44 **Vein Island** lies 0.7 mile west of Wilson Island.

45 **Battle Island** *(48°45'N, 87°33'W)* lies 1.4 miles SW of Wilson Island.

46 *Battle Island light (1117)* is near the SW end of the island.

47 **Simpson Island** is a large island 1.5 miles west of Vein and Battle Islands.

48 **Morn Point**, the SE tip of Simpson Island, is quite bare. The high land near the middle of the point is prominent. The water is deep close to shore.

49 *(Simpson Channel, leading between Vein Island and Simpson Island, is described later in this chapter.)*

50 **Dunmore Island** *(48°45'N, 87°43'W)* is close SW of Simpson Island in the SE approach to Moffat Strait. There is a small **rock**, 5 feet (1.5 m) high, with deep water on its south side, close off the SE point of the island. **Mooley Island** *(not named on the chart)* is 0.2 mile NE of Dunmore Island in the mouth of **Woodbine Harbour**.

BATTLE ISLAND (1998)

51 Small craft can find **anchorage** in Woodbine Harbour, with perfect shelter but limited in area, in 5 fathoms (9.1 m), mud. The usual route into the harbour leads close to the east shore to avoid the **shoal** spit projecting from Mooley Island. There is an 8-foot (2.4-m) **shoal** spot off **Grebe Point**.

52 **Grotto Point**, the SE entrance point to Moffat Strait, is rocky and comparatively low. **Shoals** and an islet lie west and NW of the point. **Quigley Island** lies 0.2 mile to the north.

53 **St**. **Ignace Island**, 13 miles wide, close west of Simpson Island, is the largest island in the approach to Nipigon Bay.

54 **McNab Peninsula** *(48°44'N, 87°49'W)* is the SE point of St. Ignace Island. **Bullers (Giraoud) Island** lies close ESE of McNab Peninsula.

55 **Bignell Point**, 1 mile NE of Bullers Island, has **shoals** extending SE and east for 0.4 mile. **St. Joe Islands** and several **rocks** lie on this shoal. **Fisher Rock**, the easternmost, is only 2 feet (0.6 m) high but can usually be seen.

56 The east side of Bead Island in line with the east side of St. Ignace Island, bearing 023°, lead 0.3 mile east of the dangers off Bignell Point.

57 **Moffat Strait** lies between Simpson Island and St. Ignace Island. The south part of the strait is wide, deep, free of outlying shoals and can be entered safely in bad weather. The channel through Moffat Strait is not buoyed. There is a **shoal** bank in the north part of the strait. Vessels with draughts up to14 feet (4.3 m) may find passage but local knowledge is required.

58 **Bead Island**, on the west side of the entrance to Moffat Strait, is the east side of the entrance to St. Ignace Harbour. The north end is separated from St. Ignace Island by **Bead Island Channel**. The channel is obstructed by a **rock** submerged 1 foot (0.3 m) and is suitable only for small craft. The **ruins** of a wharf are on the north side of the channel.

59 **Leon Island** and **Cebina Island** lie in the shallow part of the strait 3 miles NNE of Bead Island. **Finch Head** is on the west side of the northern entrance to Moffat Strait.

60 **Anchorage** can be found at the head of **St**. **Ignace Harbour** in 4½ fathoms (8.2 m), sand, but the harbour is open to the SE. **Anchorage** with perfect shelter can be found in the north part of Moffat Strait. Good **anchorage** can be found NE of Quigley Island and also in **Wickham Bay**, SW of an islet 5 feet (1.5 m) high, in 10 fathoms (18.3 m),

mud. Wharves 0.5 mile SSE of the islet are in **ruins**. The **cribs** of these wharves are submerged 3 feet (0.9 m).

South Sides of St. Ignace and Fluor Islands

61 The south side of St. Ignace Island, from McNab Peninsula to Newash Point 8 miles to the WSW, is bordered by a large wide-open bay with many islands and shoals.

62 **Caution**. — There are three isolated dangers in the approaches to the bay. **Thorne Shoal**, submerged 3 feet (0.9 m), is 1 mile WSW of McNab Peninsula. **Reid Island** lies 0.6 mile farther west. **Whelan Shoal**, with a least depth of 11 feet (3.4 m) and deep water all around, lies 2 miles west of Reid Island.

63 Small boats can use **McNab Harbour**, on the west side of McNab Peninsula, but it is quite open to the south.

64 **Armour Island** *(48°45'N, 87°52'W)*, **Burnet Island** and **Hope Island** lie in the approaches to **Armour Harbour**. The harbour is surrounded by hills. **Anchorage** can be found in 5 fathoms (9.1 m), mud, with protection from all winds. Vessels with draughts up to 20 feet (6.1 m) can navigate the narrow passage east of Armour Island and there is a deep channel between Armour and Burnet Islands. The preferred entrance to the harbour leads between **Fraser Point** and Hope Island. There are submerged **rocks** SE of Fraser Point and NW of Hope Island.

65 **Nest Island** lies 1 mile SW of Fraser Point. **Rocks** and **shoal** water extend SSE from Nest Island. An islet lies 0.2 mile to the NW.

66 **Duncan Cove**, 1.5 miles WNW of Nest Island, between **Pope Point** and **Dupuis Point** *(not named on the chart)*, is open and fringed by **shoal** water.

67 **Bowman Island**, **Owl Island** and **Paradise Island** are almost surrounded by extensive **shoal** areas. The narrow passage between Bowman and St. Ignace Islands has depths of 18 feet (5.5 m) but there is a sharp bend and the passage is suitable only for small craft. A small **wharf** is at the SE end of Bowman Island.

68 **Newash Point** *(48°41'N, 88°01'W)* is the most southerly part of St. Ignace Island. Dry **rocks** and **shoal** water extend 0.6 mile to the SE and east. The passage between Newash Point and **Agate Island** has many submerged **rocks** and **shoals**. A detached **rock**, awash, lies 0.3 mile north of the NW point of Agate Island.

69 Agate Island and **Raven Island**, 1.2 miles to the NE, are separated from **Talbot Island**, **Angelica Island**, **Longcroft Island** and **Josephine Shoal** by a deep narrow passage.

70 **Anchorage** with perfect shelter can be found between Owl Island and the **rock** awash north of Agate Island in 8 fathoms (14.6 m), mud. Vessels can enter the anchorage between Angelica and Longcroft Islands. There is a 14-foot (4.3-m) **shoal** spot in the middle of the gap, with a deep passage between this shoal and Angelica Island. Agate Island has **shoals** and shallow water to the east, up to 0.2 mile off. The anchorage can also be entered north of Talbot Island. **Shoal** water extends 0.4 mile south from Owl Island.

71 **Anchorage** with good shelter can be found between Bowman and Owl Islands. Small craft can find best protection in the west end of the passage between Bowman and Paradise Islands. The passage is entered from north of Owl Island.

72 **Blind Channel**, least depth 2 feet (0.6 m), between St. Ignace and Fluor Islands, is not navigable. **Mystery Island** *(48°40'N, 88°01'W)* and **Birch Island** lie in the mouth of Blind Channel.

73 **Fluor Island** has several islands off its SE shore, including **Tisdall Island**, **Irvine Island** and **Willard Island**. This group is separated from a string of islands and **rocks** which includes **Puff Island**, **Tremblay Island**, **Provost Island** and **Cedar Island** by a deep channel. **Rocks** and **shoal** water fill the area between Puff and Tremblay Islands, and **shoal** water extends 0.2 mile SW of Provost Island.

74 Provost Island is the southwesternmost of the five **Bill and Jim Islands**. Local knowledge is required to transit the channel between this group and Tremblay Island.

75 **Caution**. — **Schank Rock**, 0.3 mile SW of Willard Island, has a least depth of 2 feet (0.6 m). This rock is dark in colour and cannot be seen. There is a small **rock**, 2 feet (0.6 m) high, lying 0.1 mile to the north which can sometimes help locate Schank Rock. **Dacres Rock**, 2 feet (0.6 m) high, is joined by **shoal** water to **Starke Point**.

76 **Anchorage** in 12 fathoms (21.9 m), mud, can be found behind Puff Island but it is exposed to the south.

Channels to Nipigon Bay

Charts 2303, 2312

Schreiber Channel to Rossport

77 **Schreiber Channel** *(48°46'N, 87°20'W)* is the shortest route from the east for small vessels bound for Rossport or Nipigon Bay. It has few aids to navigation and should not be used at night or in reduced visibility. Simpson Channel is more suitable at such times.

78 Schreiber Channel is bordered to the north by the mainland and to the south by Copper Island and Wilson Island. The west end of the channel is divided into narrow passages by a group of smaller islands, including Channel Island, Healey Island and Quarry Island.

79 The southernmost route through Schreiber Channel to Rossport leads through Steamboat Channel between Wilson and Channel Islands. An alternative route leads through the passage between Channel and Healey

Islands, then around the south and west sides of Quarry Island. A small-craft route leads through the passage between Healey and Quarry Islands, then NW between Nicol Island and Whiskey Island.

Chart 2303

80 **Schreiber Beach** *(48°48'N, 87°18'W)* lies 1.5 miles NNE of Schreiber Point at the head of **Collingwood Bay**. The settlement of **Schreiber** (population 1,700 in 1999) lies 1 mile to the NE. Schreiber is on the railway and *Trans-Canada Highway* and has a post office, a bank, a doctor and shopping facilities.

81 A microwave **tower** with air obstruction **lights** is close NE of Schreiber. **Winston Point** is 4 miles WNW of Schreiber Beach. A second microwave **tower** is 1.7 miles ENE of this point. There is a **conspicuous** sand cliff 1 mile north of Winston Point.

82 Collingwood Bay is deep and open to the south; there is no good anchorage here. **Anchorage** is possible in good weather at the head of the bay, 0.2 mile offshore in 15 fathoms (27.4 m).

83 The two **Cat Islands** lie 1 mile WNW of Winston Point. The larger island has an elevation, to the treetops, of 117 feet (36 m). A small dry **rock** lies 0.2 mile ESE, and a **shoal** spit with a least depth of 16 feet (4.9 m) extends 0.5 mile SE of the islands.

84 **Bread Rock**, submerged 5 feet (1.5 m), is in the mouth of Schreiber Channel 1.7 miles SSW of Schreiber Point. The rock is very small and surrounded by deep water except to the east, where 19 feet (5.8 m) is found 0.2 mile off. Bread Rock is marked by a **buoy**.

85 **McGarvey Shoal**, consisting of large **boulders** submerged 4 feet (1.2 m), lies 0.4 mile off the north shore of Copper Island. It is the only obstruction in the approach to Steamboat Channel and is marked by a **buoy**.

86 **Anchorage** can be found in the bight between Wilson and Copper Islands in 12 to 15 fathoms (21.9 to 27.4 m), mud.

87 **Steamboat Channel** *(48°48'N, 87°29'W)* leads between **Wilson Island** and **Channel Island**. A mid-channel course has minimum depths of 6 fathoms (11 m). However, the channel is not buoyed and there is **shoal** water on both sides.

88 **Steamboat (Confiance) Island**, in the middle of the east entrance to Steamboat Channel, is small with deep water all around and 40 feet (12 m) high to the treetops (1974). **Kingcome Island** is just separated from Channel Island.

89 The north side of Wilson Island in line with the north side of Steamboat Island, bearing 281°, and the SW point of Channel Island in line with the south side of Steamboat Island, bearing 285°, clear McGarvey Shoal.

Chart 2312

90 **Little Lake Harbour** *(48°48'N, 87°30'W)*, 0.7 mile east of **Daylight Point** *(not named on the chart)*, near the NW point of Wilson Island, offers **anchorage** with complete protection. The entrance passage is 75 feet (23 m) wide with a least depth of 3 feet (0.9 m). It is reported that a channel 25 feet (7.6 m) wide with depths of 8 feet (2.4 m) can be found close to the west entrance point.

91 **Quarry Island** lies NW of Channel Island. The west side of Quarry Island is a **conspicuous** cliff over 200 feet (61 m) high, with deep water close to the base. **Whiskey Island**, close north, has a **rocky** flat extending north to **Blanket Island** *(not named on the chart)*, which is a small wooded island with deep water on the north side. The passage between Quarry Island and Whiskey Island is mostly **foul** with shoal water and several unnamed islands extending 0.15 mile westward.

92 The main route to Rossport leads from the west end of Steamboat Channel along the west sides of Quarry Island and Whiskey Island. The entrance channel to Rossport Harbour passes close north of Blanket Island. The channel is 150 feet (46 m) wide and has a depth of 5 fathoms (9.1 m).

93 *Rossport Point light (1114)* is on **Rossport Point** *(48°50'N, 87°33'W)*.

94 *Rossport Harbour Entrance light (1113)* is on the NW end of Whiskey Island.

95 *Rossport light (1112)* is on the Public wharf.

Routes north of Channel Island

96 The passage that leads between **Channel Island**, on the south side, and Healey and Quarry Islands on the north side is an alternative to Steamboat Channel. This passage has a minimum width of0.1 mile between the 10-fathom (18.3-m) lines. **Shoal** water and **Spider Reef**, a small rock 2 feet (0.6 m) high marked by a **buoy**, lie north of Channel Island. **Rocks** extend south from **Healey Island** and **shoal** water extends south from Quarry Island.

97 There is a small-craft passage to Rossport, least depth 21 feet (6.4 m), between Healey and Quarry Islands. The route continues through the passage between Whiskey Island and **Nicol Island**, to the NE, avoiding **shoal** water off the south side of Nicol Island. An old **marine railway**, submerged 4 feet (1.2 m), extends 40 feet (12 m) from the SW point of Nicol Island.

98 Nicol Island is joined to the mainland by a **causeway**, with **submerged cables** to the west and a **water intake** to the east of this structure.

99 **Boone Island** lies north of the west end of Healey Island. A **shoal** spit extends from the north shore of Healey Island. An unmarked winding channel with a depth of 21 feet (6.4 m) lies between these islands.

ROSSPORT (1998)

100 **Rossport Harbour** is an excellent well-sheltered harbour for small craft and small vessels. There is a Harbour Manager. The facilities are managed by *Halcyon Haven*.

101 A **submerged power cable** crosses from Rossport Harbour in a SSW direction to Battle Island.

102 The **anchorage** area is limited but offers perfect shelter in depths of 6 to 15 fathoms (11 to 27.4 m), mud.

103 The Public **wharf** at Rossport extends 65 feet (20 m) south from the shore to an L-end 107 feet (33 m) long. In 1999, depths along the south face were 13 to 16¸ feet (4 to 4.9 m), the north face 10 to 14 feet (3 to 4.3 m), the east face 6 to 13 feet (1.8 to 4 m), and at the outer end of the west face 10 feet (3 m). A **rock** submerged less than 6 feet (1.8 m) lies 300 feet (91 m) east of the outer end of the wharf.

104 The **piles** of an old fishing wharf and several submerged **cribs** and **piles** are in the western part of the harbour. Two exposed **cribs** are NW of the Public wharf.

105 The hamlet of **Rossport** (population 130 in 1999) has restaurants and a hotel. The *Trans-Canada Highway* passes near by. The nearest bank, doctor, and scheduled rail and bus facilities are in Schreiber. Some supplies are available from *Halcyon Haven*, a restaurant near the wharf.

106 **Powder Islands**, consisting of **Anguros Island** and **West Anguros Island**, lie 2 miles NW of Rossport Point in the entrance to **Pays Plat Bay**. A **shoal bank** lines the head of the bay.

107 **Anchorage** can be found behind Powder Islands in 7 fathoms (12.8 m), clay. Small craft can find well-protected **anchorage** between Anguros and West Anguros Islands in 15 feet (4.6 m).

108 **Pays Plat** is a village on the banks of the **Pays Plat River** on the north side of the bay. This is part of *Pays Plat First Nation Reservation 51*. *Cavers Cove Resort* owns a small private **wharf** in the NW part of the bay. The **ruins** of a provincial seaplane wharf are on the west side of the bay.

Simpson Channel

109 **Simpson Channel** *(48°45'N, 87°35'W)*, leading between **Simpson Island** and Vein Island, is free of dangers and the entrance is marked by *Battle Island light*. This is the safest channel into Nipigon Bay.

110 **Morn Harbour**, west of Morn Point and protected by **Raymond Island**, is limited in area but offers **anchorage**, with perfect shelter from all winds, in 3 to 5 fathoms (5.5 to 9.1 m), mud. It is entered east of Raymond Island.

111 **Beetle Point** is on the south shore of Simpson Island, 2 miles west of Morn Point. **Grebe Point** is2 miles further west. An 8-foot (2.4-m) **shoal** spot is found 0.1 mile off Grebe Point. Two **shoals** with least depths of 10 and 28 feet (3 and

8.5 m) lie south of **McKay Cove**, close west of Beetle Point. **Legault's Rock (Legault Island)** is 0.6 mile east of Beetle Point.

112 There are two islets in the entrance to a shallow bay on the north side of Battle Island *(described earlier)*. A passage between the islets has a depth of 12 feet (3.7 m).

113 **Caution**. — An isolated **shoal** spot lies 0.2 mile NNW of *Battle Island light*. Two points on the north side of Battle Island in line bearing 100° clear this danger to the north; two points on the west side of Vein Island in line bearing 325° clear it to the west.

114 **Chummy's Harbour**, on the south side of Vein Island, offers **anchorage** with perfect shelter and good holding in 6 to 20 fathoms (11 to 37 m). Small craft can find **anchorage** in shallower water between **Harry Island** and **Minnie Island** and in the bay NNW of Harry Island.

115 The west entrance to Chummy's Harbour is preferred. There are two small islands *(not named on the chart)* between Vein Island and Harry Island, with a least depth of 4 fathoms (7.3 m) in between. The southern of these islands is **Chummy's Island**, the other **Larson Island**. The entrance follows a mid-channel route between Harry Island and the SW point of Vein Island on a course of 080°, then passes midway between the two small islands until the harbour opens up. The south entrance to Chummy's Harbour, between Harry and Minnie Islands, is almost blocked by an islet. A **shoal** submerged less than 6 feet (1.8 m) lies 0.1 mile to the SW. The east entrance to Chummy's Harbour is a very narrow channel with depths of 12 feet (3.7 m).

116 The east side of Simpson Channel north of Vein Island is bordered by two shoals: **Rolette Shoal**, formed of **boulders**, has a least depth of 3 feet (0.9 m) and is surrounded by deeper water; **Powder Shoal (Barwis Rock**), awash, is small and detached.

117 Powder Shoal is marked by a **buoy**.

118 *Battle Island light*, in sight west of Vein Island, leads west of Rolette Shoal.

119 There is a port hand **daybeacon** on the NE part of Simpson Island.

120 **Crow Point**, on the mainland, is the NE entrance point of Simpson Channel. It has a **conspicuous** gravel cliff on its south side and rocky hills to the north.

Nipigon Bay

Crow Point to Vert Island

121 **Oldman Shoal** *(48°53'N, 87°41'W)*, in the west part of **Cavers Bay**, is the only outlying danger between Crow Point and **Nuttal Point**. A **water tower** on the shore of **Gravel Bay** is visible from the south over an arc of 15°.

122 The mouth of **Dead River**, on the west side of **Gravel Point**, is completely blocked by a **sand bar**. **Gravel River**, 1 mile to the NNE, is not navigable because of weeds.

123 The outermost dangers between Nuttal and MacInnes Points are **Druid Rock**, 12 feet (3.7 m) high, and **Lakeside Shoal**, awash. These dangers lie off **Grant Point**, at the west entrance to **Mountain Bay**.

124 **Anchorage** can be found in the east part of Mountain Bay in 6 fathoms (11 m), clay.

125 **MacInnes Point** *(48°56'N, 87°56'W)* is backed by a steep bluff. The point has **shoal** water extending 1 mile to the SE, marked at its south edge by a **buoy**.

126 There is a starboard hand **daybeacon** on MacInnes Point.

127 The south shore of Nipigon Bay is free of off-lying dangers from NE of Simpson Island for 9 miles west to Burnt Point on St. Ignace Island. A quarry 1.6 miles west of the port hand daybeacon on the NE part of Simpson Island is prominent. **Burnt Point** is low but the land directly behind it rises to a considerable height, with cliffs showing to east and west. **Cape Nano**, 2 miles west of Burnt Point, is very abrupt, rising almost vertically to 340 feet (104 m) above the water.

128 Three detached **shoal** spots lie midway between Burnt Point and Cape Nano. The first, with a least depth of 9 feet (2.7 m), is 0.3 mile offshore. The others, with 21 and 17 feet (6.4 and 5.2 m) over them, lie 0.4 and 1.2 miles NNE of the first shoal.

129 **Vert Island**, 2.5 miles NNW of Cape Nano, has a bold point 555 feet (169 m) high on the NE coast and a rocky cliff 495 feet (151 m) high near the west point. An abandoned quarry and wharf **ruins** are near the cliff.

Vert Island to Nipigon River

130 **Brûlé Shoal** *(48°53'N, 87°59'W)*, with a depth of 3 feet (0.9 m), lies 1.3 miles east of **MacKinnon Point**, the SE end of Vert Island.

131 Vert Island and the islands to the west lie on a shallow bank which extends southward to St. Ignace Island. The bank has depths of 14 feet (4.3 m). Two unmarked dangers lie on the bank, SSE of **Outan Island**. **Piledriver Shoal**, awash, lies 0.5 mile SSE of the island; a **rock** with a depth of 4 feet (1.2 m) lies 1.2 miles farther SSE.

132 The entrance channel to **Kama Bay**, 2 miles north of Vert Island, is restricted by **shoal** water and **rocks** extending from **Kama Point** and **Cooper Point**. A gravel pit 1.8 miles ESE of Kama Point is **conspicuous**, especially in the afternoon sun.

133 **Anchorage** with perfect shelter can be found in the SE part of Kama Bay in 7 fathoms (12.8 m), clay.

134 **Condon Island** lies in **Fire Hill Bay**, WNW of Cooper Point. A shallow bank extends up to1.6 miles offshore

RED ROCK (1998)

from Cooper Point SW to **Hughes Point** and west to the Nipigon River.

135 **Crichton Island** *(48°57'N, 88°06'W)*, 1 mile NW of Vert Island, has **shoal** water extending to the south and SW.

136 *Crichton Island light (1120)* is on the SE tip of Crichton Island.

137 **Holden Shoal**, submerged 5 feet (1.5 m), lies 1.5 miles WSW of Crichton Island. The south side of the **shoal** area 0.4 mile SE of Holden Shoal is marked by a **buoy**. **La Grange Island**, on the south side of the channel, rises gradually from the south to a high cliff on its NW point.

138 **Clay Shoal**, submerged 17 feet (5.2 m), lies on the south side of the channel 0.8 mile west of La Grange Island and is marked by a **buoy**. The edge of **shoal** water south of Hughes Point is also marked by a **buoy**.

139 **Jossie Island** and **Beckie Island** are two islets off Hughes Point.

140 **Five Mile Point**, on the west shore of Nipigon Bay 2.5 miles west of La Grange Island, is backed by rocky hills. These rise abruptly to 565 feet (172 m) close to the west, and to 855 feet (261 m)1 mile to the WNW.

141 **Anchorage** can be found between La Grange Island and Vert Island in 5 fathoms (9.1 m), clay. The anchorage is east of the south edge of La Grange Island, with *Crichton Island light* in line with the west edge of Vert Island. The anchorage is quite open to the south.

142 **Anchorage** with good holding can be found midway between Five Mile Point and Clay Shoal in 11 fathoms (20.1 m), clay.

143 The community of **Red Rock** (population 2,000 in 1999), 1.2 miles NW of Five Mile Point, is the site of a *Domtar* newsprint and linerboard plant with a **conspicuous water tank** and oil tank.

144 Red Rock has a bank, a doctor, a grocery store, a liquor store and a convenience store (1999). The *Trans-Canada Highway* is 8 km to the west. There is an interprovincial bus service at the highway and a railway freight service.

145 Up until 1988 *Domtar* used a wharf near the NE end of the plant grounds for shipping and receiving; the wharf has since been dismantled. A causeway *(48°56'29"N, 88°14'43"W)*, that connected the former wharf to the shoreline, remains.

146 **Caution**. — There is evidence of **underwater piles**, remnants from the wharf, in the area SE of the causeway. Mariners should keep 0.1 mile offshore near the *Domtar* plant.

147 A **submerged water intake** extends from shore close west of the causeway. A **submerged crib**, with a depth of 34 feet (10.4 m), is 0.2 mile NE at the end of the intake.

148 *Red Rock Marina* is NW of the causeway. Two **breakwaters** enclose a rectangular basin. The entrance, at the NW corner, is marked by privately maintained **lights**. There are no repair facilities here.

148.1 **North Trout Creek** enters Nipigon Bay 0.1 mile west of the marina. A **potable water intake** extends 0.4 mile NNE from the north entrance to the creek.

149 **Nipigon River** has a deep channel leading from its mouth to a position 1 mile above **Cook Point** *(48°58'N, 88°15'W)* where good **anchorage** can be found in 10 fathoms (18.3 m), clay. The edge of **shoal** water extending from Cook Point is marked by a **buoy**.

150 The channel is narrow above the anchorage and **obstructed** by the remnants of log booms. There are depths of 6 feet (1.8 m) as far as the Public wharf but local knowledge is required. Privately maintained **buoys** mark the best channel.

151 An **overhead power cable** with a mid-point clearance of 76 feet (23.2 m) crosses the river 1 mile below the Public wharf. The channel is near the eastern bank of the river. It is reported that 350 feet(107 m) off the eastern shore the overhead clearance is 102 feet (31 m).

152 There is a strong **current** in the river. In strong southerly winds the current causes rips in the area NE of **Stillwater Bay**.

153 The Public **wharf** at Nipigon has an elevation of 3 feet (0.9 m) and is 334 feet (102 m) long. In 1999, there were depths of 8 to 12 feet (2.4 to 3.7 m) along the outer face. There are several floating finger **wharves**, three launching **ramps** and a small **marine railway** (1999). There is little current at the wharf. The wharf area is separated from the main river by a long **breakwater**.

154 The community of **Nipigon** (population 2,315 in 1988) has churches, a bank, post office, hospital, doctors, dentist, supermarkets and good shopping facilities, motels, hotels, liquor and beer stores, licensed restaurants, laundromat, golf and tennis. The *Trans-Canada Highway* passes through Nipigon and there is an interprovincial bus service.

155 *Nipigon Marina* is a municipal facility at the Public wharf. There is a mechanical and hull repair business nearby, with a small marine railway.

Nipigon Strait to Nipigon River

156 **Nipigon Strait** *(48°45'N, 88°05'W)* is the shortest route between Thunder Bay and Red Rock. The strait is very narrow west of Fluor Island; local knowledge is required.

157 **Lamb Island** *(48°36'N, 88°09'W)* lies in the south entrance to Nipigon Strait.

158 *Lamb Island light (1126)* is in the centre of Lamb Island.

159 **Sovereign Rock**, submerged 13 feet (4 m), is the outermost of the **shoal** rocks extending SW from Lamb Island.

160 The usual entrance to Nipigon Strait is east of Lamb Island. The passage west of Lamb Island is **obstructed** by a group of **shoals** which includes **Newcombe Rock**, least depth 1 foot (0.3 m), and by **shoals** SE and east of **Spar Island**. The NE point of Spar Island is a cliff with deep water close to shore. The small-craft passage between Spar Island and the mainland is narrow and shallow with a sharp bend.

161 **Fluor Island** forms the east side of the southern part of Nipigon Strait. Rocky cliffs, with deep water beneath in places, line the SW side of the island. **Dacres Rock** and **Cedar Island** lie SSE of **Starke Point**, the south point of Fluor Island. Depths of 26 and 30 feet (7.9 and 9.1 m) are found in mid-channel SW of Cedar Island and Starke Point, respectively.

162 **Moss Island**, on the west side of the strait, is separated from the mainland by a narrow channel made hazardous by several dry and submerged **rocks**. This channel has a depth of 6 feet (1.8 m).

163 Nipigon Strait is reduced in width to 0.1 mile abreast of the bay between the north and south parts of Fluor Island by **rocks**, islets and **shoal** water. Named features are **Ford Island** and **McGhie Rock**. **Sarrat Island** *(unnamed on the chart)* is a small islet 6 feet (1.8 m) high lying 0.9 mile NE of the north end of Moss Island. This islet, one of a group of islets and submerged **rocks** lying SW of the narrow part of the channel, makes a good approach mark.

164 *Nipigon Strait range lights (1124, 1125)* are on the mainland west of **Beeton Point**, the north point of Fluor Island. The lights in line lead through the narrow section of the channel. The lights and **daymarks** are reported to be easy to identify.

165 The section of the strait described above is marked by **buoys**.

166 **Stowe Point**, 0.7 mile east of Beeton Point, marks the east side of the north end of **Blind Channel**. The channel is not navigable.

167 The strait, bounded to the east by **St**. **Ignace Island**, widens and is clear of mid-channel dangers above Fluor Island. There are **obstructions** up to 0.3 mile from shore on the east side within 3 miles of Beeton Point. The **ruins** of a wharf are on the east side of the strait 4.6 miles north of Beeton Point.

168 **Anchorage**, but with poor shelter, can be found south of Sarrat Island in 10 fathoms (18.3 m), mud. **Anchorage** with better shelter is available 0.6 mile NE of Beeton Point, with Blind Channel just closed, in 7 fathoms (12.8 m), mud. Small craft can find very snug **anchorage**

inside the north end of Moss Island, and less-sheltered **anchorage** SW of Moss Island in **Moss Harbour**.

169 **Pointe à la Gourganne** *(48°48'N, 88°07'W)*, on the west side of the head of Nipigon Strait, is bold and the bottom drops away quickly on its NE side. The land behind rises to nearly 400 feet (122 m).

170 **Caribou Point** is on the NW side of St. Ignace Island.

171 The channel to Red Rock from the head of Nipigon Strait passes south of **Frog Island** and then between **Burnt Island** and Five Mile Point, previously described. The north end of Burnt Island rises to 300 feet (91 m). The mainland shore west of the channel between Frog and Burnt Islands is low and swampy.

172 *Burnt Island light (1121)* is on the north tip of Burnt Island.

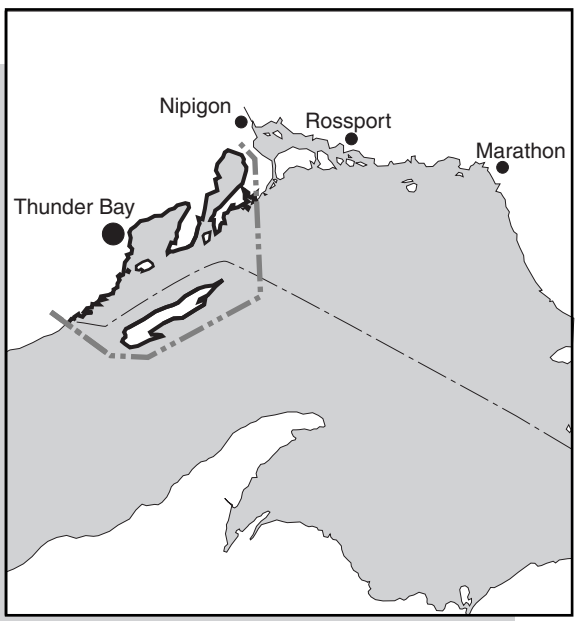
173 **Outan Island**, NE of Frog Island, lies near the centre of the large shallow bank which almost fills the west part of Nipigon Bay.

174 A **shoal** with a depth of 4 feet (1.2 m) lies 1.7 miles SSE of Outan Island.

175 The west edge of the channel south of Frog Island, and the east edge of the channel west of Frog Island, are marked by **buoys**.

176 The west side of Frog Island in line with the east side of Burnt Island, bearing 331°, leads from abreast of Pointe à la Gourganne to a position SSE of Frog Island.

Lake Superior
Black Bay and Approaches
Thunder Bay



General

Chart 2300

1 This chapter covers the north shore of Lake Superior from Agate Point, close west of Nipigon Strait, to Pigeon Point 63 miles to the SW, near the boundary between the United States of America and Canada. It also includes a description of Isle Royale. The Port of Thunder Bay is the main harbour in this area.

2 Sailing courses recommended by the *Canadian Shipowners Association* and the *Lake Carriers Association* for approaching and leaving the Port of Thunder Bay are shown on *Charts 2300, 2301 and 2302*.

3 The Canadian charts of this area are based on Canadian surveys carried out between 1903 and 1905, with the exception of Black Bay which is based on a 1918 Canadian survey, and the Port of Thunder Bay which is based on a 1959 survey. The whole of Thunder Bay north of Pie Island was re-surveyed in 1974 and 1975 and any dangers to navigation discovered during this survey have been added to the charts.

4 United States surveys in the vicinity of Passage Island were carried out in 1925 and 1926. The area north of and close around Isle Royale was surveyed in 1938. Offshore areas south of Isle Royale were surveyed in 1956 and 1957.

5 Depths and elevations quoted in this chapter refer to chart datum *(see Sailing Directions booklet CEN 300 — General Information, Great Lakes)* and thus agree with charted values. Because *Charts 2301, 2302, 2311 and 2313* are based on older water level datums, depths and elevations on these charts must be corrected to refer them to the presently adopted datum for Lake Superior. The required correction is noted on the chart. (More information on the older water level datums is given in Sailing Directions booklet *CEN 300 — General Information, Great Lakes*.)

5.1 Real-time water level information for the Port of Thunder Bay is available from the *Canadian Hydrographic Service Automated Water Level Gauge*, telephone number 807-344-3141. *(More information on water levels is given in Sailing Directions booklet CEN 300 — General Information, Great Lakes.)*

6 **Caution**. — Magnetic observations by the United States Lake Survey in 1928 showed magnetic irregularities around Isle Royale. Large magnetic disturbances

have also been reported near Pigeon Point, Pie Island, Welcome Islands, Thunder Cape, Point Porphyry and Magnet Island. Mariners using magnetic compasses should exercise particular caution at night or in reduced visibility.

Nipigon Strait to Black Bay

Chart 2302

7 The coast between **Agate Point** *(48°36'N, 88°12'W)*, close west of the entrance to Nipigon Strait, and **Magnet Point**, 18.5 miles to the SW, is fronted by a chain of islands and shoals with a deep inside passage.

8 The main inside passage is marked near its SW end by a light north of Shaganash Island. The narrowest part of the passage, NE of Lasher Island, is only 0.1 mile wide.

9 **Caution**. — There are magnetic anomalies near Magnet Point at the west end of the above-mentioned passage. Vessels using magnetic compasses should exercise great caution near the west end of this passage. Navigating with the aid of a magnetic compass is dangerous here, especially when leading marks are not clearly visible.

10 The Paps, twin cone-shaped hills north of Magnet Point, and the high land 1 mile NW of Agate Point are the most prominent features from a distance. The Sleeping Giant, 15 miles WSW of Magnet Point, is **conspicuous** and makes a good reference point.

11 The best sheltered **anchorages** for ships are in Otter Cove, with easy access 2.5 miles west of Agate Point, and in the approaches to Black Bay north of Edward Island. Loon Harbour, close SSW of Lasher Island, offers perfect shelter for smaller vessels. The anchorage at Loon Harbour is 0.2 mile wide and is entered from the main inside passage.

12 *(Spar and Lamb Islands, east of Agate Point, lie in the approaches to Nipigon Strait and are described in Chapter 6.)*

13 There is a steep cliff on the west side of Agate Point, 1.5 miles SW of Spar Island. A small **rock** 0.1 mile east of the point is 4 feet (1.2 m) high and surrounded by shoal water. **Agate Cove**, west of Agate Point, is deep and open to the south.

14 **Hawk Island**, 1 mile SSW of Agate Point, is 60 feet (18 m) high. **Roche Debout Point** lies1.2 miles WNW of Hawk Island. **Boulders** extend 0.2 mile south from Roche Debout Point. **Herron Point** is 0.7 mile west of Roche Debout Point and has bold cliffs and deep water close to shore on the west side.

15 **Pleasant Harbour**, between Herron Point and Roche Debout Point, is **foul**. A patch with a depth of 26 feet (7.9 m) lies 0.5 mile SSW of Herron Point.

16 There is a deep-water passage between Herron Point and **Otter Island**. Both entrance points are **conspicuous**.

17 **Anchorage** with good shelter can be found 2 miles NNE of Otter Island near the head of **Otter Cove** in 5 to 9 fathoms (9.1 to 16.5 m), mud. Small craft with draughts up to 11 feet (3.4 m) can navigate the narrows at the north end of Otter Cove. There is shelter from all winds in the basin beyond the narrows, with good holding ground, mud bottom.

18 **Marcil Bay** is on the east side of the entrance to **Shesheeb Bay**, an inlet on the mainland shore NW of Herron Point. **Roche Debout Channel**, between Otter Island and **Shesheeb Point**, is the entrance to Shesheeb Bay. A 12-foot (3.7-m) **shoal** lies 0.2 mile off the NE part of Shesheeb Point. Shesheeb Bay is open to the SE and too deep to make a good anchorage. **Manuel Rock**, 0.4 mile west of Otter Island, has a depth of 10 feet (3 m).

19 Hawk Island just visible south of Herron Point bearing 097°, and two points at the SE entrance of Marcil Bay in line bearing 349°, will clear Manuel Rock.

20 **Lowrey Island**, 1.5 miles WSW of Herron Point, is 34 feet (10 m) high. A **shoal** ledge extends to the south and east.

21 **Brodeur Island** *(48°33'N, 88°18'W)*, separated from Lowrey Island by the main inside channel, is the largest of the islands off this section of the coast. It is thickly wooded and 300 feet (91 m) high to the top of the trees. **Montgomery Island**, south of Brodeur Island, is 60 feet (18 m) high. Several **shoals** and **rocks** with depths of less than 6 feet (1.8 m) lie up to 0.5 mile east of Brodeur and Montgomery Islands.

22 **Anchorage** for small craft with protection from all except NE winds can be found in the cove on the NE side of Brodeur Island. The shores of this cove are steep and the bottom is rock and mud offering good holding ground, but sunken logs may be encountered.

23 **Arthur Island**, 20 feet (6.1 m) high, lies north of the main inside passage 0.5 mile west of the north end of Brodeur Island. A **shoal spit** extends 0.15 mile NE from its north point.

24 **Coutlee Island** is south of Arthur Island, south of the passage. A **shoal spit** extending northward 0.1 mile from Coutlee Island narrows the channel to a width of 0.15 mile. The deepest water is on the Arthur Island side of the channel.

25 **Pugsley Island**, **Newton Island** and **Bachand Island** extend southward from Coutlee Island. Deep channels lie on both sides of this chain of islands. A **rock** patch with less than 6 feet (1.8 m) of water extends 0.1 mile east of the south end of Coutlee Island in the east channel. There is deep water close to the west shore of Brodeur Island.

26 The long thickly wooded point west of Arthur Island rises to a height of 200 to 300 feet (61 to 91 m).

A small **wharf** at the SW end of this point is known as **Black's Wharf**.

27 The main inside channel is only 0.1 mile wide between a small island 28 feet (8.5 m) high, close south of Black's Wharf, and **Gordon Island** lying 0.3 mile west of Coutlee Island. There is deep water close south of the small island. **Shoal rocks** extend 300 feet (91 m) north from the east point of Gordon Island.

28 **Helen Island**, west of Black's Wharf, together with **Jobin Island** and **Davies Island** to the north, forms the west side of a snug small-craft harbour. The passage between Helen and Jobin Islands is known as **Clark Bay**. A **rock** submerged less than 6 feet (1.8 m) lies close off the NE side of Helen Island.

29 **Sarah Island** *(48°33'N, 88°22'W)* lies NW of the main inside route. There is a small **rock**300 feet (91 m) off its NE end.

30 **Lasher Island**, south of Helen Island, is surrounded by deep water except on its SE side. **Spain Island** *(48°31'N, 88°22'W)*, with cliffs on its north and NW sides, is on a shallow bank on the east side of the main inside route together with **Borden Island** and **Chapleau Island**.

31 **Loon Harbour** separates Lasher Island from Spain and Borden Islands to the south. The ruins of a logging operation are on the north end of Spain Island.

32 An **anchorage** 0.3 mile from the west entrance of Loon Harbour offers perfect shelter from all winds in 7 to 8 fathoms (12.8 to 14.6 m), mud and clay. A small island sits on a **shoal spit** that extends north from Borden Island. The spit divides the harbour into two parts. Loon Harbour can be entered from east or west but the east entrance is narrow and difficult. The deep west entrance is 0.1 mile wide, between steep shorelines.

33 **Swede Island** is on the SE side of the main inside route, SW of Spain Island. The island has deep water along its NW side but has a **shoal ledge** 300 feet (91 m) wide along its west side.

34 A **shoal spit** with a depth of 8 feet (2.4 m) at its outer end extends 0.2 mile NNE from the north point of Swede Island. **Rex Island**, 0.4 mile NNE of Swede Island, is 15 feet (4.6 m) high.

35 **Cartwright Island** *(48°29'N, 88°23'W)* and **Sweetland Island**, close south of Cartwright Island, are separated from Swede Island by a deep channel 300 feet (91 m) wide. **Boardman Rock**, 0.1 mile south of Swede Island and 9 feet (2.7 m) high, is on a **shoal** that lies in the SW entrance to this channel. A **rock** 0.3 mile south of Boardman Rock is 15 feet (4.6 m) high. The rock is surrounded by a very abrupt **shoal ledge** 0.1 mile wide, in the south entrance to the channel.

36 There is a deep passage NE of these islands, with Chapleau, Spain and Borden Islands on its NE side. The passage is 0.2 mile wide, but the north entrance is restricted to half that width by Rex Island. The four **Evelyn Rocks**, 0.6 mile east of Sweetland Island, are in the southern approaches to the passage. All but the easternmost of the rocks are wooded, and the tallest is 30 feet (9.1 m) high. The channel between Sweetland Island and Evelyn Rocks has many **shoals**. **Grenfell Rock** lies 0.4 mile NNW of the easternmost Evelyn Rock. Grenfell Rock is small and has **shoal** water extending 0.2 mile to the south.

37 **Gourdeau Island**, 0.4 mile NW of Swede Island, is 125 feet (38 m) high near its north end. Shoal water extends 300 feet (91 m) off its south point. A **shoal** submerged 8 feet (2.4 m) lies 0.1 mile NE of the island. The main inside route passes between Gourdeau Island and Swede Island.

38 **Blaisdell Island**, 0.4 mile NNE of Gourdeau Island, has deep water on its east side. The island is fringed by a **shoal ledge** on its north and west sides. Two small **rocks** lie 0.2 mile SW of the island.

39 **Zeolite Bay** and **Sturgeon Bay**, both shallow, are separated by **Zeolite Point**. The bays are west and NW of Gourdeau Island. **Bourbonnais Island**, in the mouth of Sturgeon Bay, has a **shoal ledge** on its north, west and south sides. **Girard Rock** lies 0.8 mile west of Gourdeau Island and has a depth of 7 feet (2.1 m), dropping suddenly to deep water. **Mood Island** lies 0.7 mile WNW of Girard Rock. **Hanbury Island** lies 1 mile WSW of Mood Island.

40 Hanbury Island and **Stanton Island** lie on a shallow bank which is separated from **Jean Pierre Point** by a deep passage 0.2 mile wide. A **shoal spit** extends 0.3 mile SSW from Jean Pierre Point.

41 **Anchorage** can be found west of Hanbury Island in 8 fathoms (14.6 m), clay. This anchorage can be entered from either end. There is deep water close to the mainland shore if approaching from the north; a **shoal** extends off the north end of Hanbury Island.

42 **Hughes Island**, 1.2 miles SSW of Stanton Island, is 20 feet (6.1 m) high and surrounded by **shoal** water.

43 **Perley Island**, south of the main inside passage, has deep water close to shore except at the bold south point. Detached **shoals** lie to the NE and east. The island is separated from Sweetland Island to the north by a deep passage 0.1 mile wide.

44 **Paterson Rocks** is a detached shoal 0.2 mile south of Perley Island. **Burpee Rock**, another detached shoal, lies 0.3 mile west of the island. **Irwin Rock**, 0.8 mile SW of Perley Island, is small.

45 **Coates Island**, 1 mile west of Perley Island, is 35 feet (10.7 m) high and has **shoal** water to the south and east. **Schaffner Rock**, 0.3 mile north of Coates Island, has a depth of 8 feet (2.4 m).

46 **Macoun Island**, on a shoal ledge 1.7 miles west of Perley Island, is 35 feet (11 m) high. **Blair Rock**, 0.3 mile

north of Macoun Island, is 7 feet (2.1 m) high and has deep water close to its north side.

47 **Nest Island**, 0.6 mile SSW of Macoun Island, is 16 feet (4.9 m) high. A **shoal** 0.3 mile to the SW has less than 6 feet (1.8 m). **Ayre Shoal**, 1.1 miles east of Nest Island, is submerged 6 feet (1.8 m).

48 The east side of Perley Island in line with Irwin Rock, bearing 039°, leads 0.2 mile SE of Ayre Shoal. The SW side of Gourdeau Island touching the east side of Coates Island, bearing 357°, leads0.1 mile east of Ayre Shoal. The summit of the east Pap in line with the north side of Nest Island, bearing 298°, leads 0.2 mile SW of Ayre Shoal.

Chart 2301

49 **The Paps** *(48°28'N, 88°31'W)*, on the mainland 2.6 miles SW of Jean Pierre Point, are two cone-shaped summits 0.2 mile apart. They are the most **conspicuous** features on this part of the shore. A flat-topped summit, 654 feet (199 m) high, 1 mile to the WNW does not show up well from offshore.

50 The two **Barclay Islands**, 1.4 miles west of Macoun Island, lie in line ESE of **Bruneau Point**. There is a deep passage between the NW Barclay Island and Bruneau Point. The width of this passage is restricted to 450 feet (137 m) by a 10-foot (3-m) **shoal** close NW of the NW Barclay Island. The preferred route passes close to Bruneau Point.

51 A **shoal spit**, with two small islands 4 and 5 feet (1.2 and 1.5 m) high, extends 0.2 mile east of the SE Barclay Island. A 7-foot (2.1-m) **shoal** lies 0.3 mile ESE of the island.

52 **Shaganash Island** is 1 mile south of the Barclay Islands. It is surrounded, with the exception of its SE side, by small islands and **reefs**. **Number 10 Island**, 0.2 mile west of the NW end of Shaganash Island, is 20 feet (6.1 m) high with deep water close to its west side.

53 *Shaganash light (1127)* is on the west end of Number 10 Island.

54 **Magee Rock** lies 0.5 mile NE of Shaganash Island and marks the NE end of **shoal** water extending off the island. The rock is small and has deep water close to its north side.

55 **Elson Rock**, 0.6 mile NW of *Shaganash light* on the NW side of the main inside passage, is submerged less than 6 feet (1.8 m). **Bennett Island**, 0.8 mile north of *Shaganash light*, is obstructed on all but its NW side.

56 **Anchorage** with fair shelter can be found west of **Kemp Shoal**, which lies 0.3 mile NW of Bennett Island.

57 *Shaganash light* astern and the eastern Pap summit ahead bearing 327° leads to this anchorage from the SSE. Magee Rock astern and the western Pap summit trees bearing 306° lead in from the SE. The SE side of Hughes Island in line with the end of Bruneau Point, bearing 029°, leads 0.15 mile NW of Kemp Shoal. There are many dangers in the area.

58 **Cargill Island** is separated from the SE side of Shaganash Island by a deep passage 0.1 mile wide. **Harty Rock**, 0.3 mile SW of Cargill Island, is submerged less than 6 feet (1.8 m).

59 The west side of the east Barclay Island in line with *Shaganash light*, bearing 022°, leads0.1 mile west of Harty Rock.

60 **St**. **Andrew Island**, 0.4 mile SE of Cargill Island, and **Tyrwhitt Island**, 0.4 mile SE of Shaganash Island, are surrounded by numerous **shoals** up to 0.5 mile offshore. A narrow **reef** extends 0.5 mile NNE from a small **rock**, 2 feet (0.6 m) high, 0.4 mile north of Tyrwhitt Island. A deep channel 0.5 mile wide lies between this reef and Nest Island, 0.8 mile to the ENE. **Poynter Rock**, 0.7 mile SSW of Cargill Island and quite small, marks the end of **foul** water south of Cargill Island and Shaganash Island.

61 **Tunnel Island**, 1.4 miles WSW of Shaganash Island, is 30 feet (9.1 m) high. The south side of the island is a steep slope and makes a good mark for picking up the channel.

62 **Caution**. — A 9-foot (2.7-m) **shoal** lies 0.5 mile ENE of Tunnel Island. This danger is close NW of the channel leading through the main inside passage.

63 Tunnel Island touching *Shaganash light*, bearing 230°, leads 0.2 mile SE of the shoal off Barclay Islands and 0.1 mile NW of Blair Rock.

64 **Caution**. — It is unsafe to rely on magnetic compass bearings in this area.

65 **Directions for the main inside channel**, **eastbound**. — The usual route begins from a position 1 mile off Point Porphyry with the light bearing 320°. The first leg leads toward the NW coast of Shaganash Island, with *Point Porphyry light* kept visible. Magnet Point in line with the south side of Tunnel Island, with *Point Porphyry light* just disappearing, marks the first course alteration point. The second leg of the route passes 0.1 mile west of *Shaganash light*.

66 The second alteration point is past *Shaganash light*, clear of the shoal area NE of Number 10 Island. The course is gradually altered to starboard on the third leg of the route, until *Shaganash light* touches Tunnel Island, bearing 230° astern. This course leads clear of the shoal water extending ESE of Barclay Islands. A third alteration is then made to pass midway between Gourdeau and Swede Islands.

Approaches to Black Bay

Charts 2301, 2313

67 The approach to Black Bay, between Magnet Point at the tip of Black Bay Peninsula and **Middlebrun Point** on Sibley Peninsula, is divided into three channels by islands, rocks and shoals. **Magnet Channel** passes between Magnet and Edward Islands. **Montreal Channel** lies between Edward

Island and a group of islands and shoals to the west. This channel is the safest, being wide and nearly free of obstructions and with *Point Porphyry light* as a guide. **Middlebrun Channel**, with Copp Rock near its north end, passes east of Middlebrun Point.

68 **Caution**. — Local **magnetic anomalies** have been recorded in the vicinity of Magnet Island and Point Porphyry. Mariners using magnetic compasses should exercise particular caution at night or in reduced visibility in Magnet Channel, Montreal Channel and Middlebrun Channel.

69 The entrance to Black Bay is 9 miles north of *Point Porphyry light*, between George Point and Kidd Point.

70 **Magnet Point** *(48°25'N, 88°34'W)* is low and difficult to see. It is named after the **magnetic anomalies** of the area. **Magnet Island**, 0.1 mile SW, is joined to the point by a very shallow ledge which surrounds the island. A small **rock**, 10 feet (3 m) high, is near the southern edge of this ledge 0.3 mile south of the island.

71 **Porphyry Island** *(48°21'N, 88°38'W)*, 3 miles SW of Magnet Island, is surrounded by a **shoal ledge** which joins its NW side to **Edward Island**. Both islands are high and wooded. **Point Porphyry** is the SW point of the island.

72 *Point Porphyry light (1128)* is on the SW end of the point.

73 Small craft with draughts up to 7 feet (2.1 m) can enter the cove on the west side of the island,0.7 mile NE of *Point Porphyry light*, in calm seas and with local knowledge.

74 **Caution**. — The channel between Edward and Porphyry Islands is shallow and has many **rocks** but is sometimes used by small craft. There are strong **currents** which frequently change direction in this channel.

75 **Porphyry Reef** lies 0.2 mile SE of Point Porphyry and has depths less than 6 feet (1.8 m). A **shoal spit** extends 0.1 mile SW from Point Porphyry.

76 **Caution**. — Magnet Channel, which passes east of Edward Island, has local **magnetic anomalies**. Navigating with the aid of a magnetic compass is dangerous, especially when the leading marks are not clearly visible.

77 **Sybil Island** lies 300 feet (91 m) inside the NW edge of the ledge that extends west of Magnet Island. The island is 20 feet (6.1 m) high and makes a good mark for Magnet Channel. A **rock** 8 feet (2.4 m) high and another **rock** submerged less than 6 feet (1.8 m) lie close to the edge of the ledge 0.2 mile SW of Sybil Island.

78 **Lennox Rock**, 0.7 mile south of Magnet Island, has a depth of 6 feet (1.8 m) and is the outermost danger south of Magnet Island. A **shoal** with least depths of 14 feet (4.3 m) lies 0.4 mile NW of Lennox Rock. **Sloan Bank**, submerged 28 feet (8.5 m), lies 1.1 miles east of Lennox Rock.

79 *Shaganash light* open to the SE of Tunnel Island by the width of the latter, bearing 047°, will pass 0.2 mile SE of Lennox Rock. The magnetic compass is useless in this area.

80 **Dreadnought Island**, 0.8 mile east of *Point Porphyry light* and 0.5 mile ENE of Porphyry Reef, is 36 feet (11 m) high. The central part of the island is wooded.

81 **Monk Island**, 1.4 miles NNE of Dreadnought Island, is 20 feet (6.1 m) high. This island is on a **shoal ledge** which extends out from the NE end of Porphyry Island. A small **rock** 0.3 mile NE of Monk Island is submerged less than 6 feet (1.8 m).

82 Small islands and **foul** water extend 0.4 mile off the middle of the SE side of Edward Island,0.6 mile NE of Monk Island. A **shoal** 0.2 mile east of this foul area has 15 feet (4.6 m) of water. This shoal is only 0.1 mile west of the leading line for entering Magnet Channel.

83 The bottom falls away quickly off the north end of the NE point of Edward Island, but depths of 14 feet (4.3 m) extend 0.15 mile to the east.

84 The coast is fringed by a **shoal ledge** with several **boulders** between Magnet Point and **Cowie Point**, 2.7 miles to the NNW. **Seagram Rock**, 1.1 miles NNW of Magnet Point, is submerged 4 feet (1.2 m). A **rock** 0.2 mile west of Seagram Rock has a depth of 18 feet (5.5 m).

85 Two **rocks**, one submerged less than 6 feet (1.8 m) and the other submerged 18 feet (5.5 m), lie 0.4 mile SSW and 0.3 mile SW of Cowie Point, respectively.

86 **George Point**, 1.7 miles NNW of Cowie Point, is the east entrance point to Black Bay. A depth of 13 feet (4 m) is found 0.3 mile SW of the point, but 0.1 mile beyond this the water is deep.

87 **Miles Bay**, 1.5 miles north of Cowie Point and east of George Point, offers **anchorage** with shelter from northerly winds in 21 feet (6.4 m), mud.

88 The west side of Cowie Point touching the NE end of Edward Island, bearing 008°, leads into Magnet Channel from the south. This leading line clears the shoals lying off the east side of Edward Island by 0.1 mile and passes 0.2 mile west of the shoal ledge extending from Magnet Island.

89 **Hardscrabble Island**, 0.5 mile west of Porphyry Island, is 50 feet (15 m) high.

90 **Clark Island**, 3 miles west of *Point Porphyry light*, is the southern island of the group which separates Montreal and Middlebrun Channels. Small **rocks** lie close to the NE end of the island. **Carney Rock**, 0.4 mile east of Clark Island, is 12 feet (3.7 m) high. Two small drying **rocks** lie 0.1 mile east and a small drying **rock** lies 0.3 mile NE of Carney Rock. **Gravel Island**, 0.9 mile NE of Clark Island, is on a wide **shoal ledge**. **Cranberry Island** is on a smaller ledge 1 mile to the NNE.

91 **Montreal Channel** has Porphyry, Hardscrabble, and Edward Islands on its east side and Clark, Gravel and

Cranberry Islands on its west side. It has a least width of 1.5 miles and is free from shoals. A mid-channel course may be taken. In poor visibility the land on the Edward Island side of the channel shows up much better than the low islands to the west.

92 **Horseshoe Cove**, 0.3 mile NNE of Hardscrabble Island, offers sheltered **anchorage** for small craft. A mid-channel route is favoured when entering.

93 **Edward Harbour**, entered 0.8 mile north of Hardscrabble Island, offers **anchorage** for small craft in its SE corner, south of a small island. **Little Gibraltar Rock**, 15 feet (4.6 m) high, is easily identifiable in the entrance to the harbour, close south of the NW entrance point.

94 **Osler Bay**, 1 mile north of Edward Harbour, is quite open to the SW.

95 **Grey Island** and **Arno Island**, north of Edward Island, are surrounded by a **shoal ledge**. The SE side of the ledge narrows the channel between Grey and Ariel Islands to a width of 0.1 mile.

96 **Anchorage** with perfect shelter from southerly winds can be found 0.2 mile east of **Ariel Island** off the north shore of Edward Island in 19 feet (5.8 m), clay.

97 **Middlebrun Channel** is entered between Middlebrun Point and Clark Island. **Copp Rock**,0.3 mile WNW of Cranberry Island, has a depth of 16 feet (4.9 m). A **shoal** with 19 feet (5.8 m) lies 0.6 mile west of Cranberry Island.

98 **Finlay Bay**, 4 miles west of *Point Porphyry light*, is entered between Middlebrun Point and **Finlay Point**. The bay has a depth of 17 feet (5.2 m) but there is 10 feet (3 m) or less in the entrance. **Foster Point** lies 1.6 miles NNE of Finlay Point.

99 **Kidd Point** lies 2.7 miles west of George Point. **Squaw Bay**, west of Kidd Point, is shallow and has **rocks** in its centre. A **wharf** on the SW shore of the bay is reported to be in disrepair (1980). Good **anchorage** with shelter from westerly winds can be found off the entrance to Squaw Bay. **Squaw Island**, 1.5 miles NE of Kidd Point, is joined to the mainland by **shoal** water.

100 The usual approach to Middlebrun Channel from the west stays 0.3 mile clear of Sand Islands and leads towards the gap between Arno and Grey Islands, bearing 040°. This gap is kept well open; a course with the islands touching leads over Copp Rock. Larger vessels alter course to the north when they reach a position east of the north side of Finlay Point. A course of 012° with Foster Point ahead for a distance of 0.7 mile or until the north side of Cranberry Island bears 099° avoids the 19-foot (5.8-m) shoal.

Black Bay

Chart 2313

101 **Black Bay** *(48°40'N, 88°25'W)*, entered between George and Kidd Points, is 23 miles long and 9.5 miles wide near its north end. The east coast is steep and 150 to 200 feet (46 to 61 m) high for14 miles. The coast is low farther north, fronted by sand beaches with swampy land behind. A hill9 miles NE of Copper Point is 446 feet (136 m) high and prominent.

102 The north and west sides of the bay are low but a hill on the west coast 14.5 miles ENE of Kidd Point is 250 feet (76 m) high and **prominent**. The shores are fronted by a shallow ledge. There is a deep-water passage up the middle of the bay, extending for 14 miles to Green Island. Small islands and **shoals** obstruct the head of the bay beyond Green Island.

103 The east side of Black Bay from George Point to **Copper Point** *(48°32'N, 88°33'W)* is fringed by a shallow ledge 0.5 mile wide. **Louise Bay**, close east of Copper Point, is a small cove formerly used to assemble timber for shipping. Vessels with draughts up to 13 feet (4 m) can enter. The entrance is narrowed by a 9-foot (2.7-m) **shoal** 0.3 mile ENE of the tip of Copper Point. There are **cribs** at the south end of this cove and there are many deadheads stuck in the sand bottom.

104 **Caution**. — A narrow rocky **reef** with depths of 9 to 10 feet (2.7 to 3 m) begins 2.3 miles NE of Copper Point and continues for a distance of 2.7 miles. The reef runs parallel to the shore, 0.6 mile off.

105 George Point in line with Copper Point, bearing 206°, leads well west of the above-mentioned reef.

106 **Pearl River** enters the west side of Black Bay 8.2 miles NNE of Kidd Point. **Cribs** at the mouth of the river were used for collecting logs floated down Pearl River.

107 **Bent Island** *(48°37'N, 88°32'W)* is the SE end of a gravel and **boulder** bar that extends SE from the west shore. **Nuttall Island**, 2.7 miles NNE of Bent Island, is joined to the shore by a gravel and **boulder** bar.

108 **Green Island**, 2 miles NNE of Nuttall Island, is 67 feet (20 m) high.

109 **Enterprise Bay** is a slight indentation in the face of a headland 1 mile NW of Green Island. A hill 250 feet (76 m) high stands just north of this bay, forming the most **prominent** feature on the west side of Black Bay. **McEachan Island**, 52 feet (16 m) high, is separated by **shoal** water from the point on the south side of Enterprise Bay.

110 **Historical note**. — The area off Enterprise Bay was once an **anchorage** for barges used in the pulpwood trade in Black Bay.

111 **Granite Island**, 2 miles NE of Green Island, is 115 feet (35 m) high. Two **rocks** 8 and 9 feet (2.4 and 2.7 m)

high lie 0.2 and 0.4 mile east of Granite Island. Ships with draughts up to 18 feet (5.5 m) can pass west of Granite Island but except for small tugs, vessels seldom proceed farther north.

112 **Ham (Mary Ellen) Point** *(48°47'N, 88°20'W)*, low, is the only point on the NE side of Black Bay. **Scimming Island** lies 1.5 miles SW and **Delaney Island** lies 1.7 miles NW of Ham Point. **Old John Rock**, 1 mile east of Delaney Island, has a depth of less than 6 feet (1.8 m).

113 **Caution**. — **Foxhound Rock**, 2.1 miles east of Granite Island, is a **boulder shoal** submerged less than 6 feet (1.8 m). It is the most dangerous shoal in Black Bay.

114 Ham Point touching the SE side of Scimming Island, bearing 035°, leads close NW of Foxhound Rock.

115 **Dorion Landing** is a community on the west side of the bay 5 miles NW of Granite Island. A private **wharf** at Dorion Landing is in ruins (1999). The township of **Dorion**, 3 km inland, has a post office. The land rises to a small hill 120 feet (37 m) high 0.5 mile north of the landing.

116 **Cold Water Creek**, 1.2 miles NNE of Dorion Landing, is shallow and filled with deadheads. The mouth of **Wolf River** is 1.5 miles NE of Cold Water Creek.

117 **Hurkett Cove**, at the NNW end of Black Bay, is entered through a narrow unmarked dredged channel with depths of 7 feet (2.1 m) (1980). The community of **Hurkett** is close north of the cove. The main railway lines pass through the community and the *Trans-Canada Highway* is a short distance to the north.

118 The Public **wharf** at Hurkett Cove is close inside the north entrance point of the cove. The structure extends 213 feet (65 m) from shore and the outer usable part, 59 feet (18 m) long, is of wooden construction. There is a depth of 7 feet (2.1 m) (1999) at the outer end and 3 to 7 feet (0.9 to 2.1 m) along the east and west faces. This wharf is used by commercial fisheries.

119 *Nuttall's Air Service* operates floatplanes from a facility west of the Public wharf.

120 **Black Sturgeon River** enters Black Bay 2 miles NW of Delaney Island. **Piles** are positioned in a straight line across the bar at the entrance to the river. Logs were once rafted in the mouth of this river.

Approaches to Thunder Bay

Chart 2301, 2302

121 **Bateau Rock** *(48°16'N, 88°06'W)* is a dangerous dry **rock**, surrounded by **shoals**, 13 miles ENE of Isle Royale. The areas surrounding Bateau Rock and Gull Islands, 6 miles to the west, should be avoided because of off-lying **shoals**.

Isle Royale

ENCs US4MN22M, US5MI78M Charts 14968, 14976

[from U.S. Coast Pilot 6, Chapter 13, partial]

122 ***ENCs US4MN22M, US5MI78M Charts 14968, 14976.***–***Isle Royale*** *is 44 [38] miles long NE and SW and has a maximum width near its SW end of 8.5 [7.4] miles.* ***Mount Desor****, 794 feet [242 m] above the lake and the highest point on the island, is 12.5 [10.9] miles from the SW end. The shores of the island have numerous indentations and many detached islets and reefs, almost all with a NE and SW trend. Good lees can be found in many bays and channels.*

123 ***Local magnetic disturbance.***–*Magnetic disturbances have been observed around Isle Royale.*

124 *Isle Royale and its surrounding islands form* ***Isle Royale National Park****. The park is retained as much as possible in its natural state. There are no roads, only trails for hikers.*

125 *Recreational docks operated by concessions for the National Park Service at Rock Harbor, and at Windigo Ranger Station at Washington Harbor, offer groceries, gasoline, and water for the convenience of visitors. Small docks, generally in good repair and in sheltered areas, are maintained at the many campsites around the island. Most of them have from 5 to 10 feet [1.5 to 3 m] at their outer ends. Lights are operated on the docks at Windigo, Rock Harbor, and the Park Service Headquarters dock on Mott Island on the SW side of Rock Harbor. Complete details regarding the island and its use are available from the Superintendent, Isle Royale National Park, 87 N. Ripley Street, Houghton, MI 49931.*

126 ***Caution.***–*Designated aircraft landing areas are in Washington Harbor, Rock Harbor, and Tobin Harbor. (See* ***36 CFR 2.2 and 7.38****, chapter 2 [of Coast Pilot 6], for limits and regulations.)*

127 ***Blake Point****, the northeasternmost point of Isle Royale, forms the south entrance point to Duncan Bay.* ***Blake Point Light*** *(48°11'28"N., 88°25'20W.), 40 feet [12.2 m] above the water, is shown from a skeleton tower and a red and white diamond-shaped daymark on the point. An 11-foot [3.4-m] shoal is 0.3 [0.26] mile east of the light.* ***Five Foot Reef****, 0.9 [0.8] mile east of the light, has a least depth of 4 feet [1.2 m] and is marked on the south side by a buoy. A 13-foot [4-m] shoal is 1.2 [1] miles east of the light.*

128 ***Passage Island Light*** *(48°13'25"N., 88°21'56"W.), 78 feet [23.8 m] above the water, is shown from an octagonal tower on the southwest end of* ***Passage Island, MI****, 3.5 [3] miles northeast of Blake Point. A mariner radio activated sound signal and racon are at the light. The sound signal is initiated by keying the microphone five times on VHF-FM channel 83A.*

129 ***Gull Islands*** *are 3.5 [3] miles NE of Passage Island. A shoal covered 2 feet [0.6 m] is 0.5 [0.4] mile S of the islands, and a group of detached rocky spots, covered 7 to 12 feet [2.1 to 3.7 m], is 0.7 to 2.5 [0.6 to 2.2] miles NW of the islands.*

130 ***Todd Harbor****, about midlength of the N shore of the island, is about 5 [4.3] miles long and indents the shore 0.75 [0.65] mile. The harbor affords good protection from all but N winds. Care must be taken to avoid the many detached shoals and rocks in the harbor.*

131 *From Todd Harbor to McCargoe Cove, the shore should be given a berth of 1 [0.9] mile.* ***Hawk Island*** *parallels the shore in this stretch. An islet and rocks awash are 0.8 [0.7] mile SW of Hawk Island. A 3-foot [0.9-m] shoal is 0.15 [0.13] mile N and rocks awash are 0.75 [0.65] mile NNE of the island.*

132 ***McCargoe Cove****, about 4.5 [3.9] miles NE of Todd Harbor, is a narrow inlet that extends over 2 [1.7] miles SSW into the shore of Isle Royale. A rocky ledge extends NE from the W side of the entrance and is marked at the outer end by a private buoy. The cove is entered between this and another private buoy close NNW. Coming around the ledge, vessels must turn through 090° on a radius of about 200 feet[61 m] to keep in depths of 18 feet [5.5 m] or more. The channel into the cove has a least depth of 15 feet[4.6 m], but inside depths are 30 to 40 feet [9.1 to 12.2 m]. Small docks are on* ***Birch Island*** *on the E side of the cove entrance and near the head of the cove.*

133 *The NE end of Isle Royale, quite rugged and broken, consists of many peninsulas, islands, and ridges separated by narrow channels and bays of deep water, all with a NE trend. The area is obstructed by numerous shoals and reefs which render navigation dangerous.* ***Amygdaloid Island***, ***Canoe Rocks****, and the line of islands and reefs between them form the N limit of this area from McCargoe Cove NE for 10 [8.7] miles. Amygdaloid Ranger Station is on the SW end of Amygdaloid Island.* ***Amygdaloid Channel*** *parallels the S side of Amygdaloid Island and is separated from* ***Robinson Bay*** *by a narrow peninsula,* ***Belle Island***, ***Green Island****, and a series of small islands and reefs. A small-craft dock is on the S side near the E end of Belle Isle.* ***Hill Point****, the SE entrance point to Robinson Bay, separates it from* ***Five Finger Bay****. A peninsula that terminates in* ***Locke Point*** *separates the S side of Five Finger Bay from Duncan Bay. A reef that extends 0.3 [0.26] mile NE from Locke Point is marked at the outer end by a buoy.*

134 ***Duncan Bay****, entered at the NE end of Isle Royale between Locke Point and Blake Point, extends about 4.5 [3.9] miles SW. A point about 1 [0.9] mile above the entrance divides the bay. The main body of the bay leads S of the point, through a narrow passage to a large bay. A rock awash is in midchannel of the narrowest part of the passage S of the point. The channel, S of the rock, has depths less than 12 feet [3.7 m]. A 17-foot [5.2-m] shoal is near midchannel S of the point that divides the bay. A small dock is on the S side of the narrow passage.*

135 ***Tobin Harbor*** *parallels Duncan Bay on the S side of Blake Point.* ***Scoville Point*** *is on the NE end of the peninsula that encloses the S side of the harbor. The harbor has good holding ground with protection from all winds, but is available only to small craft because of the narrow entrance. A dock is on the N side of the harbor about 1.1 [1] miles SW of Scoville Point.*

136 ***Rock Harbor****, S of Tobin Harbor, is about 13 [11.3] miles long NE and SW. The outer 9.5 [8.3] miles of the harbor is enclosed on the S side by a chain of islands and shoals. The harbor has good holding ground with protection from all winds. The fully enclosed W 3.5 [3] miles of the harbor is obstructed near its midlength by shoals through which an 11-foot [3.4-m] channel is marked by buoys.*

137 *Rock Harbor can be entered at the NE end between* ***North Government Island*** *and* ***South Government Island****. Another wide, deep passage enters the harbor from S opposite Scoville Point.* ***Middle Islands Passage*** *enters the harbor from S at the inner end of the island chain. The channel has an available depth of 26 feet [7.9 m] and is marked by a lighted bell buoy and two unlighted buoys. A 14-foot [4.3 m] shoal was reported in the entrance to Middle Island Passage at about 48°05'22"N., 88°34'20"W.; mariners should transit the area with caution.* ***Caribou Island*** *is on the E side of the passage.*

138 ***Rock Harbor Lodge*** *is in a bight on the N side of Rock Harbor, 2 [1.7] miles SW of Scoville Point. A 12-foot [3.7-m] spot off the E entrance point to the bight is marked by a buoy. A wharf marked by a private light on the N side of the bight provides gasoline, diesel fuel, water, sewage pump-out, and electricity. Transient berths are available at several piers in the bight.*

139 *The National Park Headquarters is in a bight on the NW side of* ***Mott Island****, 1.6 [1.4] miles NE of Middle Islands Passage. The wharf at the headquarters has depths of 20 feet [6.1 m] at the outer end, decreasing to 13 feet [4 m] at its midlength, and with the inner end available for small boats. Gasoline, sewage pump-out facilities, and a hoist that can handle 60-foot [18.3-m] craft for emergency repairs are available.*

140 ***Ferries****.–A ferry service operates between Copper Harbor on the Keweenaw Peninsula and Rock Harbor in the summer. The schedule is available from Superintendent, Isle Royale National Park,87 N. Ripley Street, Houghton, MI 49931.*

141 *From Middle Islands Passage, the shore of Isle Royale extends S for 2 [1.7] miles and thence SW for 23 [20] miles to the head of Siskiwit Bay. This bay parallels the shore in the SW 12 [10.4] miles of this reach and is enclosed*

on the S by a chain of islands and reefs. From Middle Islands Passage to Chippewa Harbor, shoals extend no more than 0.2 [0.17] mile from shore.

142 ***Conglomerate Bay**, 0.8 [0.7] mile S of Middle Islands Passage, has deep water and good protection from all but E winds.*

143 ***Chippewa Harbor**, 5.4 [4.7] miles SW of Middle Islands Passage, extends 2 [1.7] miles W and SW into the shoreline of Isle Royale. The harbor is divided into deepwater areas by two narrows. Depths are about 14 feet [4.3 m] through the first narrows and about 10 feet [3 m] through the second. A dock is on the N side of the harbor just inside the first narrows.*

144 *From Chippewa Harbor, the shore is free of outlying obstructions for about 6 [5.2] miles to **Schooner Island** where shoals and submerged rocks extend 0.4 [0.35] mile from shore.*

145 ***Malone Bay**, just W of Schooner Island, is an indentation 3.5 [3] miles wide, open to S except for protection behind **Hat Island**, **Ross Island**, **Malone Island**, and **Wright Island**. Shoals around these and other small islands, as well as numerous detached shoals, render navigation of Malone Bay hazardous.*

146 *A channel with a depth of about 18 feet [5.5 m] extends into Malone Bay between Malone Island and Wright Island. The channel is marked by buoys that mark dangerous shoals on either side of the channel. The bay has protection from all winds in depths of 36 to 48 feet [11 to 14.6 m], mud and clay bottom. Malone Bay Ranger Station is on the NE side of the bay.*

147 ***Hopkins Harbor** is a sheltered inlet in the W side of Wright Island. A wharf on the S side of the inlet has depths of 15 feet [4.6 m] alongside. Caution is advised when entering the inlet, because submerged boulders extend from the N side of the entrance.*

148 ***Siskiwit Bay**, 12 [10.4] miles long and 1.5 to 3 [1.3 to 2.6] miles wide, is the largest indentation on the island. The bay has protection from all but NE to E winds. Good holding ground is 1.5 [1.3] miles S of Wright Island. A dock on the S side near the head of the bay has a depth of 6 feet [1.8 m] at the outer end. The bay is enclosed on the S side by a peninsula that terminates in **Point Houghton** (47°54'06"N., 88°54'00"W.) and by a double line of islets and reefs that extends 8 [7] miles NE from the point, parallel to the S shore of Isle Royale. **Houghton Point Passage**, the only passage through the chain, is 0.5 [0.4] mile E of Point Houghton. The passage, marked by buoys, has a depth of about 17 feet [5.2 m]. In 2005, depths of 12 feet [3.7 m] were reported in the passage. **Harlem Reef**, with a least depth of 2 feet [0.6 m], is on the S side of the islet chain, 2.8 [2.4] miles E of Point Houghton. A buoy marks the S side of the reef.*

149 ***Isle Royale Light** (47°56'53"N., 88°45'40"W.), 72 feet [21.9 m] above the water, is shown from a white octagonal tower with an attached dwelling on **Menagerie Island**, near the outer end of the islet chain on the S side of Siskiwit Bay. **Glenlyon Shoal**, with a least depth of 4 feet [1.2 m], is 0.7 [0.6] mile NE of the light, and an 18-foot [5.5-m] spot is 1.3 [1.1] miles NE of the light.*

150 *From Point Houghton, the shore of Isle Royale extends about 13 [11.3] miles SW to **The Head**, the southernmost point of the island. Numerous ledges and rocky spots obstruct this stretch, and it should be given a berth of at least 1 [0.9] mile. **Fishermans Home**, a small cove 0.9 [0.8] mile SW of Point Houghton, has a commercial fishing operation with two docks. A narrow channel with a depth of 5 feet [1.5 m] leads along the N side of the entrance into the cove. The entrance is deceptive and must be navigated with caution.*

151 *From The Head, the shore extends NW for 4 [3.5] miles to Cumberland Point on the S side of Grace Harbor.*

152 ***Rock of Ages Light** (47°51'59"N., 89°18'53"W.), 130 feet [39.6 m] above the water, is shown from a white conical tower on a small islet 3.8 [3.3] miles W of Cumberland Point, the southwesternmost point of Isle Royale.*

153 *A reef extends 0.4 [0.35] mile SW and 0.1 [0.09] mile NE from Rock of Ages. **Fisherman Reef**, 5.5 [4.8] miles SW of Rock of Ages Light, has a least depth of 23 feet [7 m]. Five shoal spots with depths of 7 to 16 feet [2.1 to 4.9 m] are from 0.7 to 1.4 [0.6 to 1.2] miles NE of the light. Several shoals with depths of 3 to 14 feet [0.9 to 4.3 m] are within 1.2 [1] miles S and SW of the light. The southernmost spot, covered 12 feet [3.7 m], is marked on the W side by a buoy. An 11-foot [3.4-m] spot is 0.3 [0.26] mile SE of the light.*

154 ***Grace Harbor** and **Washington Harbor**, at the SW end of Isle Royale, have good holding ground and provide protection from all winds except SW winds in Grace Harbor. Grace Harbor is enclosed on the S by **Cumberland Point** and on the N by a line of islands, of which **Washington Island** is the largest and **Grace Island** the easternmost. The islands separate Grace Harbor from the outer part of Washington Harbor. A rock, covered 2 feet [0.6 m] and marked by a buoy, is on the outer edge of the shoals off Cumberland Point. Several shoals and small islands extend W from Washington Island. The outermost are a 2-foot [0.6-m] spot 0.7 [0.6] mile SW and an 18-foot [5.5-m] spot 1.1 [1] miles WSW. A narrow 20-foot [6.1-m] channel marked by buoys leads between the E end of Washington Island and **Booth Island** N to Washington Harbor. The N side of the outer part of Washington Harbor is enclosed by **Johns Island** and **Thompson Island**. Shoal spots of 3 to 11 feet [0.9 to 3.4 m] extend 0.5 [0.4] mile SW from Johns Island, the westernmost, and a detached 13-foot [4-m] shoal is 0.2 [0.17] mile SE of the island. The entrance to Washington Harbor is 0.3 [0.26] mile wide between Washington Island and the shoals SW of Johns Island. A narrow deep channel leads between Thompson Island and Isle Royale into the harbor. A*

private daybeacon marks the NE side of Thompson Island, and a private buoy marks a sunken wreck on the E side of the channel. A small islet and a 3-foot [0.9-m] shoal are 0.2 [0.17] mile N of Grace Island.

155 *The inner part of Washington Harbor extends 3.3 [2.7] miles into the shoreline of Isle Royale.* ***Beaver Island*** *is near the E end of the harbor and may be passed by small craft on either side. A rock awash is off the N shore of the harbor, 0.25 [0.22] mile W of the SW end of Beaver Island. A wharf is at Windigo Ranger Station at the head of the harbor. Gasoline, diesel fuel, water, and sewage pump-out facilities are available. A small store is nearby.*

156 ***Ferries.****–A ferry service operates between Grand Portage and Windigo in Washington Harbor in the summer. The schedule is available from Superintendent, Isle Royale National Park, 87 N. Ripley Street, Houghton, MI 49931.*

157 *From Washington Harbor, the shore of Isle Royale trends N for 1.2 [1] miles to the NW corner of the island. A small island and a detached 7-foot [2.1-m] shoal are 0.25 [0.22] mile offshore about 0.6 [0.5] mile N of Thompson Island.*

158 ***McGinty Cove*** *is a small indentation 1 [0.9] mile NE of the NW corner of the island. From the cove NE for about 19 [16.5] miles to Todd Harbor, the shore is bold, clear, and deep-to except for several small detached shoals.* ***Finlander Reef****, comprising 6-foot [1.8-m] and 7-foot [2.1-m] spots, is 0.25 [0.22] mile from shore 6.3 [5.5] miles NE of McGinty Cove. A 3-foot [0.9-m] spot is close to shore 5.3 [4.6] miles NE of Finlander Reef.* ***Gull Rocks****, marked by a private marker, are 0.5 [0.4] mile from shore about 6 [5.2] miles SW of Todd Harbor. A 3-foot [0.9-m] and a 14-foot [4.3-m] spot are close inshore adjacent to Gull Rocks.*

Passage Island to Port of Thunder Bay

Charts 2301, 2302

159 Upbound and downbound sailing courses recommended by the *Canadian Shipowners Association* and the *Lake Carriers Association* to provide traffic separation are shown on the charts. The courses for vessels approaching or leaving the Port of Thunder Bay pass between Blake Point and Passage Island.

Charts 2301, 2326

Passage Island to Thunder Cape

160 *(The features and dangers around Porphyry and Edward Islands are described earlier in this chapter under "Approaches to Black Bay".)*

161 The three **Sand Islands** *(48°20'N, 88°46'W)*, 4.8 miles west of Point Porphyry, are surrounded by a shallow ledge. **Skinaway Island** is the NE island of the group. The west island is 11 feet (3.4 m) high. A **shoal spit** extends 0.3 mile to the SW.

162 A chain of islands and **shoals** extends 5 miles SW from Sand Islands to Trowbridge Island. It is advisable to keep well south of these dangers in reduced visibility or at night.

163 **Silver Islet**, 1.5 miles WSW of Sand Islands and 0.6 mile from the mainland, is 1 m high. A **shoal spit** extends to the SW. A **rock** 6 m high lies 0.2 mile ENE of the islet, and a **shoal spit** extends 0.1 mile farther ENE.

164 **Historical note**. — A silver mine operated on Silver Islet between 1868 and 1884. The now-flooded mine shafts are a danger to trespassers.

165 **Maloney Shoal**, 0.9 mile east of Silver Islet, has a depth of 5.1 m.

166 **Shangoina Island**, 0.7 mile SW of Silver Islet, is 107 feet (33 m) high. Two detached **rocks** lie near the NE end of the island.

167 **Pyritic Island**, 0.2 mile NW of Shangoina Island, is surrounded by a **shoal ledge**.

168 **Ship Island** lies 0.4 mile west of Shangoina Island. A **shoal spit** extends 0.2 mile SW of Ship Island and a small **rock** 1.1 m high lies 0.1 mile to the NE.

169 **Majestic Rock**, 0.6 mile WSW of Shangoina Island, is 4 m high. **Marvin Island**,0.2 mile farther SW, is surrounded by deep water except at its NE point.

170 **Trowbridge Island** *(48°18'N, 88°52'W)*, 0.4 mile WSW of Marvin Island, is 93 feet (28 m) high. The south side of the island has deep water close in, but the other shores are fringed by a **shoal ledge**. A **shoal** with a depth of 1.7 m lies midway between Trowbridge and Marvin Islands.

171 *Trowbridge Island light (1129)* is near the summit of the island.

172 There are four bays and one point along the mainland between Sand Islands and Thunder Cape.

173 **Middlebrun Bay** *(48°20'N, 88°46'W)*, entered 0.5 mile north of Sand Islands, is shallow. **Middlebrun Island**, off the east point of the bay, is 34 feet (11 m) high and joined to the mainland shore by **shoal** water.

174 A **shoal** submerged 5.2 m lies 0.3 mile north of Skinaway Island, south of Middlebrun Bay. The end of Thunder Cape touching the mainland shore NW of Sand Islands, bearing 252½°, leads south of this shoal.

175 **Sibley Cove** lies 1.5 miles WSW of Middlebrun Bay and has many cottages lining its shores. The beach around the cove is sand and gravel.

176 **Burnt Island**, on the west side of Sibley Cove, is 40 feet (12 m) high and gives some shelter. More protection is given by a shallow spit extending 0.3 mile ENE from the island. The spit ends in two small **rocks**, 4 and 6 feet (1.2 and 1.8 m) high, with deep water on their NE and SE sides.

SILVER ISLET (1998)

177 **Cross Rocks** are half way along the above-mentioned spit. The largest **rock** is 5 m high. A **shoal** with depths of 1.5 m lies 0.15 mile SW of Burnt Island.

178 A **shoal ledge** extends 0.15 mile south and SW from **Church Point**, on the mainland close NW of Burnt Island.

179 The community of **Silver Islet** is on the mainland north of Burnt Island. Gasoline and supplies can be obtained in the community, and it is connected by road to the city of Thunder Bay.

180 The Silver Islet Public **wharf**, 0.2 mile east of Church Point, is U-shaped and has a south face132 feet (40 m) long with a depth of 10 feet (3 m) and an east face with a depth of 8 feet (2.4 m) at its north end (1999). The west face is unsheltered and has depths of 10 feet (3 m) at the south end to dry near the boulder riprap at the shore end. There is a mooring basin between the wharf and an L-shaped boulder **breakwater** to the east. A small-craft launching **ramp** near the wharf is in disrepair. Wharf is in disrepair (2017).

181 A considerable sea is felt at the wharf in strong SW winds.

182 **Caution**. — Several **shoal** areas have been reported to lie 30 feet (9.1 m) off the east face of the wharf.

183 There are two **daymark beacons** *(not shown on Chart 2326)* 132 feet (40 m) apart on the Public wharf. These beacons in line bearing 055° lead between the shoal ledge off Church Point and the 4-foot (1.2-m) shoal SW of Burnt Island.

184 The approach to the wharf from the east passes 0.1 mile ENE of the two small rocks on the shoal spit extending ENE of Burnt Island, then passes north of the other rocks of this group.

185 **Anchorage** with shelter from SW winds can be found near the NE end of Burnt Island.

186 **Perry Bay** lies west of Church Point with **Anorthite Islet** off its west shore. **Shoals** and **rocks** extend 0.15 mile offshore between Perry Bay and Tee Harbour, 1.5 miles to the west.

187 **Tee Harbour** *(48°19'N, 88°53'W)*, on the east side of a T-shaped point, offers **anchorage** for small craft, sand and mud bottom. It is sheltered from all except east and SE winds. There is a shoal patch with a **rock**, 2 feet (0.6 m) high, near the middle of the harbour. The usual approach stays 0.1 mile clear east of the point when approaching Tee Harbour. The bay on the west side of the T-shaped point offers sheltered **anchorage** from all except west and SW winds, sand and mud bottom. The preferred approach leads 0.2 mile clear off the west point to enter the bay.

188 **Thunder Cape** *(48°18'N, 88°56'W)* is quite low near its SW end and rises gradually for 1 mile. It then rises steeply to a **conspicuous** hill named **The Sleeping Giant**.

The hill is 1,200 feet (366 m) high near the north end. There is a perpendicular cliff 600 feet (183 m) high on the SE side near the south end of The Sleeping Giant.

189 *Thunder Cape light (1131)* is on the south tip of the cape.

Thunder Bay — East Entrance

190 **Thunder Bay** is a relatively deep body of water mostly surrounded by bold shorelines, rising in places to heights of 500 to 1,200 feet (152 to 366 m). The city of Thunder Bay is on the low-lying west shore. There are few islands and shoals in the bay.

191 The bay is entered between Thunder Cape on the east side and Flatland Island 12.5 miles to the WSW. The entrance is divided into two passages by Pie Island.

192 The main entrance is between Thunder Cape and Pie Island. The west entrance between Pie Island and Flatland Island can be used in clear weather and is described later in this chapter.

193 **Hare Island**, 1.5 miles NW of *Thunder Cape light*, is 20 feet (6.1 m) high and surrounded by **Hare Island Reef**. The SW edge of the shoal area is marked by *Hare Island light buoy A2 (1132)*.

194 **Pie Island** *(48°15'N, 89°05'W)* is 860 feet (262 m) high at **Le Pâté** near its west end. **Turtle Head** is its east end.

195 *(Pie Island is described more fully later in this chapter under "Victoria Island to Port of Thunder Bay".)*

196 **Caution**. — Large magnetic disturbances have been reported near Thunder Cape, Pie Island and Welcome Islands, 6 miles to the NW. Mariners using magnetic compasses should exercise particular caution at night or in reduced visibility.

197 **Angus Islands**, 1.1 miles SE of Turtle Head, consist of a string of small islands and **shoals**. The largest island of the group is 48 feet (14.6 m) high.

198 *Angus Island light (1130)* is near the north end of the largest island.

199 A small **rock** 12 feet (3.7 m) high lies 0.1 mile NE of the largest Angus Island, and a **rock** awash lies 0.1 mile farther east.

200 The chimney of the *Ontario Hydro Thunder Bay Generating Station*, on the north entrance point of the Mission River, in line with the NE end of Pie Island, bearing 309°, clears the above-mentioned rocks.

201 **Hamilton Islands** lies 1 mile SW of *Angus Island light*. **Cone Island** is 0.4 mile south of Hamilton Islands. **Craig Rock**, 1 mile to the WNW, has a depth of 0.1 m. A **rock** 1.5 miles WSW of Cone Island has a depth of less than 1.2 m. **Baker Rock**, 0.7 mile farther SW, is submerged 0.9 m. **Lord Stanley Rock**, 0.8 mile farther SW, has a depth of 1.4 m.

202 *(Welcome Islands, 6 miles north of Pie Island, are described later in this chapter under "Approaches to Port of Thunder Bay".)*

Pigeon Bay to Port of Thunder Bay

Chart 2326

203 **Pigeon Bay** *(48°01'N, 89°32'W)* is bounded on its south side by **Pigeon Point, Minnesota**. **Finger Point**, with deep water on its north side, divides Pigeon Bay into two arms. A **shoal** ledge extends 0.15 mile off the north shore of the bay with **Owen Island** near its outer edge. **Marin Island** lies close east of Finger Point. A small **rock** lies close east of Marin Island.

204 **Caution**. — Large magnetic disturbances have been reported near Pigeon Point. Mariners using magnetic compasses should exercise particular caution at night or in reduced visibility.

205 Pigeon Bay is bordered by high hills offering protection from all except east winds but the holding ground is poor in both the north and south arms of the bay. The nearest good **anchorage** is in Little Trout Bay, 5 miles to the NE.

206 The **International Boundary** between Canada and the United States passes through the south arm of Pigeon Bay and through **Pigeon River**.

207 The two **Boundary Islands** lie near the middle of the south arm of Pigeon Bay. They are on a narrow **reef** that extends 0.5 mile east and west. **Acadia Rock**, 0.8 mile WSW of Boundary Islands, has 2 m of water. **Laura Grace Rock**, 0.3 mile farther WSW, is submerged 2.4 m.

208 **Pine Bay**, 1.5 miles north of Pigeon Point, offers sheltered **anchorage** with good holding ground for small craft but is shallow and difficult to enter. Pine Bay is entered between the east end of **Naomi Island** and a **rock** 0.1 m deep 0.1 mile to the north. **Pine River** is on the north side of the bay.

209 **Big Trout Bay**, 2 miles ENE of Pine Bay, is deep close to shore on all sides. **Anchorage** in 27.4 m can be found near the head of the bay with shelter from all except easterly winds.

210 **Pinnacle Rock**, 25 feet (7.6 m) high, and the three **Cloud Islands** lie 0.3 mile offshore in the entrance to Big Trout Bay. The two southern islands are separated from the north island by a deep-water passage. A **rock** 0.15 mile SW of the SW island has a depth of 0.7 m. A **shoal** 0.8 mile WSW of Cloud Islands has a least depth of 3.5 m.

211 **Anchorage** with shelter from all winds can be found in **Little Trout Bay** or in **Cloud Bay**, which opens off the north side of Little Trout Bay. Little Trout

Bay has no offshore dangers and offers anchorage in 9.1 to 12.8 m, stiff mud. Cloud Bay offers anchorage in the middle of the bay in 5.5 to 9.1 m, mud. Both bays are entered north of **McKellar Point**. There are small-craft launching **ramps** at the *Little Trout Bay Conservation Area*, on the north side of Little Trout Bay.

212 A decayed and overgrown **wharf** lies parallel to the stream inside the mouth of **Cloud River**, on the NW side of Cloud Bay. The wharf is 127 feet (39 m) long with depths of 5 feet (1.5 m) (1999). There are wire-rope rings along the wharf for mooring. The **ruins** of a launching ramp are close south of the wharf. A gravel track connects the wharf to the *International Highway*, which runs from the city of Thunder Bay to Duluth.

Off-lying islands and shoals

213 **Iroquois Rock** *(48°05'N, 89°22'W)*, 1.3 miles ENE of McKellar Point, has a depth of 1.6 m; it is marked by a **buoy**.

214 A chain of islands and **shoals** extends from Iroquois Rock to Angus Islands, 17.5 miles to the NE. Two marked passages, one west of Victoria Island and the other through Spar Channel, lead through this chain of islands into the more sheltered west entrance to the Port of Thunder Bay. This route is used by small craft but is suitable for use by larger vessels only in clear weather.

215 **Victoria Island** *(48°05'N, 89°20'W)* has bold shorelines with mostly deep water fringing the coast. The island is 284 feet (87 m) high near the west entrance point to **Victoria Cove**. **Rolland Rock** lies 0.1 mile SE of this point, with **rocks** submerged less than 0.6 m lying 0.2 mile NE and 0.1 mile south of Rolland Rock. Another **shoal rock**, 1 m deep, lies in the mouth of the cove 0.2 mile off its east entrance point. **Anchorage** in Victoria Cove is reported to be difficult because of deep water and poor holding ground. **Albert Islands** lie off the south shore of Victoria Island. A small-craft passage leads between the Albert Islands and Victoria Island.

216 *Victoria Island light (1161)* is on the west tip of the island. The light is visible from 022° through east and south to 241°.

217 A **rock** 0.1 mile WSW of the light has a depth of 0.8 m; it is marked by a **buoy**.

218 The Sugarloaf, on the west end of Spar Island, touching Victoria Island, bearing 066°, just clears the north side of Iroquois Rock. The NW end of Spar Island in line with the NW end of Victoria Island, bearing 059°, leads close south of Iroquois Rock.

219 **Tiger Island** is separated from the SW point of Victoria Island by a narrow channel with a least depth of 8 feet (2.4 m). **Tiger Rock**, close west of Tiger Island, is 14 feet (4.3 m) high and has deep water all around.

220 **Cosgrave Bay**, entered between *Victoria Island light* and Tiger Island, is deep and open to the SW. **Anchorage** for small craft can be found near the head of the bay in depths of 15 to 25 feet (4.6 to7.6 m), good holding ground.

221 **Devil Island** lies 0.1 mile NE of Victoria Island. The islands are separated by a channel with a least depth of 5 feet (1.5 m). A rock named **Foote Island** lies in the centre of the channel.

222 **Jarvis Island**, actually two islands 0.1 mile NE of Devil Island, has deep water all around. **Jarvis Rock** is separated from the NE end of the eastern island. The narrow gap is not navigable.

223 *Jarvis Rock light (1160)* is on Jarvis Rock.

224 **Spar Channel**, between Jarvis Rock and **Bradshaw Island** to the east, is 0.15 mile wide. A **shoal spit** extends SSW from Bradshaw Island into the channel. Spar Channel is the passage generally used from the Port of Thunder Bay to Washington Harbor on Isle Royale. There is deeper water from mid-channel to the west side through Spar Channel.

225 **Spar Island**, close NE of Bradshaw Island, is 281 feet (86 m) high at its bold north point. **The Sugarloaf** is a bluff 225 feet (69 m) high at the SW end of Spar Island. Depths of 128 to 137 m are found close to shore along the south and SE coasts of the island. **Spar Reef**, 0.1 mile offshore on the west side of the island, is **awash**.

226 **Anchorage** for small craft may be found in the cove on the NW side of Spar Island in depths of 1.8 to 4.6 m.

227 A chain of small islands and **reefs** extends from the NE end of Spar Island 1.8 miles NE to Thompson Island. The named islands and reefs in this chain are: **Swan Rock**, **Arabian Rock**, **Harty Island**, **Robertson Islands**, **Moonshine Island**, **Prefontaine Island**, **Eva Islands**, **Slipper Island** and **Cohen Rock**. There are many other reefs.

228 **Thompson Island**, 3.5 miles long, rises steeply from the lake bottom to 276 feet (84 m) high in its SW part. **Anderson Island** is separated from the NE end of Thompson Island by a deep passage 300 feet (91 m) wide.

229 A string of islands and reefs, including **Magee Island** and **Hawken Island**, lie between Anderson Island and **South McKellar (McKellar) Island**, 0.5 mile to the NE.

230 *(The off-lying reefs and islands south of Pie Island are described earlier in this chapter under "Thunder Bay – East Entrance".)*

Victoria Island to Port of Thunder Bay

231 **Caldwell Point** *(48°06'N, 89°21'W)*, 1 mile NE of *Victoria Island light*, is a low gravel point covered with grass.

Caldwell Shoal, 0.2 mile SSW of the point, has a depth of 1.7 m and is marked by a **buoy**.

232 **Crystal Bay** is close west of Caldwell Point. **Caldwell Island** and **Sucker Island**, in the entrance to Crystal Bay, offer little protection from the south.

233 The coast is bold between Caldwell Point and **Jarvis Point**, 1.3 miles to the NE.

234 **Jarvis Bay**, north of Jarvis Point, is free from obstructions but is open to the east. **Jarvis River** enters the west end of the bay. **Prince Bay**, on the north side of Jarvis Bay, is shallow. **Beaver Island** lies in the entrance to Prince Bay.

235 **Mink Point** *(48°08'N, 89°18'W)*, 1.9 miles NNE of Jarvis Point, rises to a height of 480 feet(146 m) 0.4 mile west from the end of the point.

236 *Mink Point light (1159)* is at the east tip of the point.

237 **Mink Island** is separated from Mink Point by a passage 0.3 mile wide. The deepest water is found near the point. The island is 1.4 miles long and is divided in two by a passage 100 feet (30 m) wide and 3 feet (0.9 m) deep (1980), 0.5 mile NE of the SW end of the island. The north part of the island is266 feet (81 m) high. A **rock** 0.3 mile NE of Mink Island is **awash**.

238 **Sister Islands**, 0.7 mile NE of Mink Island, are separated by shallow water. A **rock** submerged less than 6 feet (1.8 m) lies close to the NE. **Sly Rock**, 0.3 mile NE of Sister Islands, has a depth of 0.3 m.

239 **Mink Bay** lies north of Mink Point. **Nisbet Island** is in the NW corner of the bay and **Muskrat Island** is in the south part.

240 **Sturgeon Point**, 2.3 miles NNE of Mink Point, is 505 feet (154 m) high and bold. **Sturgeon Island** is 0.1 mile NE of the point and is small.

241 Small craft can find **anchorage** with good protection from all winds in **Sturgeon Bay**, mud. The entrance to the bay is 0.1 mile wide and has depths of 7 feet (2.1 m) (1980). Larger vessels can anchor off the entrance to Sturgeon Bay in 9.1 to 11 m.

242 **Zealand Spit**, has a depth of 1.2 m and extends 0.3 mile offshore on the north side of the entrance to Sturgeon Bay.

243 A **shoal spit** with several **rocks**, two of them being 9 and 2 feet (2.7 and 0.6 m) high, extends0.5 mile ENE of the SE point of **Flatland Island**. **Campbell Island** lies on the end of this spit.

244 **Alexander Reef**, 0.4 mile SE of Flatland Island, is marked by a **buoy**.

245 **Pie Island** is 860 feet (262 m) high at **Le Pâté** near its west end. An old light-structure, almost obscured by trees (1980), is on the west point 0.2 mile north of the present light.

246 *Pie Island light (1158)* is on the west end of the island.

247 **Steamboat Island**, 1.3 miles SSW of *Pie Island light*, is 16 feet (4.9 m) high. A **rock**, *(not shown on Chart 2326)* submerged 5 feet (1.5 m), is close SW of the island. **Deadman Island**, 0.3 mile WSW of Steamboat Island, is 11 feet (3.4 m) high. It is surrounded by a **shoal ledge** on all but its north side.

248 **Dawson Bay** is on the south side of Pie Island between **Keefer Point** and **Greenstone Point**. **Anchorage** in 11 m, sand, can be found near the head of the bay. **Anchorage** can be found 0.7 mile off the north shore of Pie Island, with fair shelter from south winds in 9.1 to 11 m, clay.

249 **Caution**. — Large magnetic disturbances have been reported near Pie Island and Welcome Islands, 6 miles to the north. Mariners using magnetic compasses should exercise particular caution at night or in reduced visibility.

250 The main passage, east of Flatland Island between Campbell and Deadman Islands, is 0.8 mile wide.

251 **Flatland Reef** extends 1 mile NNE of Flatland Island and has a depth of 1.3 m.

252 The south shoulder of The Sleeping Giant touching Pie Island, bearing 071°, leads north of Flatland Reef.

253 **Flatland Harbour**, west of Flatland Island, is protected on its south side by **Singleton Island**. The entrance between **Wiley Point** and Singleton Island is shallow but possible for small craft. There are **shoals** on both sides of the passage between Singleton Island and Flatland Island. **Rowan Reef**, 0.2 mile north of the east end of Singleton Island, makes this passage even more difficult to navigate. The best entrance to Flatland Harbour is from the north between **Russell Point** and **Birch Island**.

254 **Anchorage** with good shelter can be found in Flatland Harbour south of Birch Island in 7.3 m, mud. Two **wharves** on the mainland shore on the NW side of Flatland Harbour are in ruins and mostly submerged. Five wrecked barges protrude above the water around the north wharf and there are three sunken barges near the south wharf (1980).

Charts 2301, 2326

257 **Grand Point** lies 0.7 mile NE of **McNab Point**. **Grand Reef**, 0.3 mile east of Grand Point, has a depth of 0.9 m and is marked by a **buoy**.

Chart 2301

Approaches to Port of Thunder Bay

258 **Welcome Islands** *(48°22'N, 89°08'W)* lie in the approach to the Port of Thunder Bay. A **shoal spit** extends 0.7 mile south of the west island. Two small islands lie midway along this spit and **Welcome Shoal** is near the south end.

259 *Welcome Island light (1133)* is near the north end of the east island.

260 **Schwitzer Shoal**, 3 miles ENE of *Welcome Island light*, has a depth of 5.4 m.

261 Sailing courses recommended by the *Canadian Shipowners Association* and the *Lake Carriers Association* for approaching and leaving the Port of Thunder Bay are shown on the charts. Vessels bound for the north part of the harbour or the Kaministiquia River pass north of Welcome Islands, those bound for the Mission River entrance pass south of Welcome Islands.

262 The route *(described in the previous section)* leading south from the Port of Thunder Bay and through the channel west of Pie Island is used by small craft. It is a shorter and more sheltered passage for craft bound for Duluth but is suitable only in clear weather.

263 Thunder Bay Airport is SW of Thunder Bay. An aeronautical rotating **light** here may be obscured from the lake by city lights. An aeromarine **radiobeacon** *(48°20'48"N, 89°26'01"W)* broadcasts on 332 kHz, identification Morse "QT" (— — • — —).

264 The following features are prominent **landmarks**.

265 South of Kaministiquia River, **Mount McKay** *(48°21'N, 89°17'W)* has radio and microwave **towers** near its summit. These towers have air obstruction **lights**.

266 All the **grain elevators** in the north part of the harbour are prominent.

267 A microwave **tower** 2.5 miles north of **Melancon Point** *(48°29'N, 89°06'W)* is 1,704 feet (519 m) high and has air obstruction **lights**.

Charts 2314, 2326

268 **Sugarloaf Hill**, 0.5 mile NE of Melancon Point, is a prominent hill 254 feet (77 m) high.

269 *Ontario Hydro Thunder Bay Generating Station*, on the north entrance point of Mission River, has a **conspicuous chimney**. The chimney is 198 m high and is marked by air obstruction **lights**. It is illuminated by **floodlights**.

270 There are several **shoals** west of Welcome Islands in the approaches to Kaministiquia, McKellar and Mission Rivers. These are best seen on the chart. Some are marked by **buoys**. The named shoals in this group are **Burke Shoal**, south of Mission River entrance; **Mutton Shoal**, south of McKellar River entrance; and **Old Dumping Ground Shoal**, north of McKellar River entrance.

Port of Thunder Bay

271 The harbour at Thunder Bay is defined by the *Canada Marine Act* as the *Port of Thunder Bay*; its limits are shown on the chart. The harbour is administered by the *Thunder Bay Port Authority*.

272 Vessels manoeuvring or otherwise under way in the Port of Thunder Bay, and also while berthed alongside or at anchor, are subject to the *Thunder Bay Port Authority Standard Operating Procedures*. A copy can be obtained from the *Thunder Bay Port Authority*, P.O. Box 2266, Thunder Bay, Ontario P7B 5E8.

273 Commercial vessels entering the **Port of Thunder Bay** must contact the *Thunder Bay Marine Communications and Traffic Services* (MCTS) Centre, call sign *VBA*, when abeam of Welcome Islands and also when shifting berths in the harbour or departing. This MCTS Centre provides a complete information service to mariners *(Consult Radio Aids to Marine Navigation (Atlantic, St. Lawrence, Great Lakes, Lake Winnipeg and Eastern Arctic) for more information)*.

274 A marine emergency plan is in effect for the Port of Thunder Bay. Details are available from the harbour master.

275 There are specific regulations for the carriage and handling of explosives and dangerous goods, as well as rules to be observed in the prevention of fire. In the event of fire occurring at a dock or on board a vessel, other than a vessel that is under way, the vessel shall give *five blasts of from four to six seconds duration* with its whistle or siren as an alarm to indicate the fire. This signal shall be repeated at intervals and shall be used in addition to, but not instead of, other means of reporting a fire.

276 **Caution**. — *Thunder Bay Port Authority* advises mariners to exercise caution in the use of bow thrusters when entering, leaving, or when alongside any elevator slip or dock in the Port of Thunder Bay. Such thrusters cause water turbulence that can damage sheet piling. The churning action can also reduce berms at the toe of sheet piling and cause fill to be washed from between piles. It also shifts lake bottom material in the slips resulting in high spots that can be the subject of vessel complaints. Masters are requested not to use bow thrusters in the elevator slips except in an emergency. Certain berths prohibit the use of bow thrusters entirely.

277 Navigation opens about April 1 and icebreakers enable navigation to late December or early January. The average maximum thickness of winter shore-fast **ice** at Thunder Bay is 74 cm, with a record thickness of 100 cm (1963).

278 Large vessels generally employ tugs in the rivers, and in the main north section of the harbour when wind conditions make it advisable.

279 There are **anchorage areas** within the limits of the harbour, outside the breakwalls. They are indicated on the chart. Vessels are instructed to anchor well clear of approaches to the harbour entrances. The holding ground is reported to be good.

PORT OF THUNDER BAY (1998)

280 A submerged water intake **pipeline** extends 0.4 mile in an ESE direction from Bare Point. Another water intake **pipeline** extends 0.4 mile in a SE direction from a position on shore 1.3 miles NNE of Bare Point.

281 A **submarine cable** crosses from the McKellar River entrance to *Welcome Island light*.

282 *(General information on the city and harbour facilities is given later in this chapter.)*

283 The buildings of *Provincial Paper Inc.* are on **Bare Point** *(48°27'N, 89°10'W)*. The most prominent building on the property is a silver-coloured **water tower**.

284 The buildings of *Thunder Bay Packaging Inc*., 1.1 miles NNE of Bare Point, are **conspicuous**. The mill has a wharf but this is seldom used. There was only one vessel in 1998.

285 **Caution**. — The bottom of the inshore area west of the mill is **foul** with sunken logs and other **obstructions**.

286 The northern part of the Port of Thunder Bay extends from Bare Point to the north side of the mouth of Kaministiquia River *(described in the next section)*. This area is protected by rubble-mound **breakwaters**. There are three entrances through these breakwaters: **North Entrance**, 0.8 mile SW of Bare Point; **Main Entrance**, 1.9 miles SW of Bare Point; and **South Entrance**, 3.1 miles SSW of Bare Point.

287 *Thunder Bay North Entrance North light (1157)* is at the SW end of the north breakwater. *Thunder Bay North Entrance South light (1156)* is on a building near the NE end of the south breakwater; the light-structure is **floodlit**.

288 *Thunder Bay Main light (1152)* is on a building at the SW end of the breakwater on the north side of the Main Entrance; the light-structure is **floodlit**. There is a user-activated **foghorn** at the light.

289 *Thunder Bay Central Entrance South light (1151)* is on the breakwater at the south side of the main entrance.

290 The South Entrance is marked by two lights: *Thunder Bay South Entrance North light (1150)* and *Thunder Bay South Entrance South light (1150.3)*. The latter light is on a small building; the structure is **floodlit**.

291 **Buoys** and **light buoys** in the area are best seen on the chart.

292 **Caution**. — Small craft in the section of the harbour north of *Thunder Bay Main light* should be particularly alert for float-equipped aircraft landing and taking off, generally in NE and SW directions. Seaplane operating areas are marked on the chart.

293 **Caution**. — A line of pilings extends offshore from the abandoned *Pool 2* facility, 0.3 mile east of McVicar Creek. The piles are marked by a private buoy. These piles are submerged at higher water levels and are especially dangerous at night.

294 **Caution**. — Dredging was discontinued in 1991. Silting is occurring along the edges of dredged areas in the northern part of the harbour (1999). Particular care is necessary at low water levels.

295 Real-time water level information for the Port of Thunder Bay is available from the *Canadian Hydrographic Service Automated Water Level Gauge*, telephone number (807) 344-3141. *(More information on water levels is given in Sailing Directions booklet CEN 300 — General information, Great Lakes.)*

296 A **submarine power cable** is laid from the *North Entrance South light* close to and parallel with the west face of the breakwater to the *Main Entrance North light* and thence NW to the mainland 0.1 mile east of McVicar Creek, at the north side of the *Department of National Defence* property. Another **submarine power cable** runs from the *South Entrance South light* close to and parallel with the west face of the breakwater to its south end and thence WSW to the mainland.

297 The major **facilities** in the Port of Thunder Bay are listed on the chart.

298 **Caution**. — There is a concrete and steel cylindrical **knuckle** at the SE corner of the wharf at *The United Grain Growers Elevator "A"*. The structure projects beyond the face of the wharf and makes berthing difficult. East winds can make berthing hazardous.

299 **Current River**, with its mouth 0.8 mile WSW of Bare Point, and **McVicar Creek**, 1.4 miles farther SW, are swift flowing and unnavigable.

300 A Public **wharf** and launching **ramp** on the north shore at the mouth of Current River are operated by a wharfinger. A private **unlit range**, in line bearing 003°, leads to this wharf.

301 **Caution**. — The entrance channel to the Current River wharf is very narrow and surrounded by **rocky shoals**. Considerable **current** flows across the channel and makes steering on the line of the range difficult.

302 An L-shaped boulder **breakwater** south of the mouth of McVicar Creek is 2 m high. This structure is for wildlife habitat protection.

303 The **piers** and **dolphins** 0.7 mile SSW of McVicar Creek are used by a commercial towing operation.

304 The mouths of **McIntyre River** and **Neebing River** have been filled in as part of the Neebing-McIntyre floodway system. A single outlet for the two rivers was constructed 0.3 mile north of the mouth of Kaministiquia River. Power-driven vessels are prohibited on the floodway system.

Southern part of Port of Thunder Bay

305 The southern part of the Port of Thunder Bay includes Kaministiquia River and McKellar and Mission Rivers. The area between McKellar River and Mission River is known as **Mission Marshes**.

306 **Kaministiquia River** is navigable as far as **Westfort Turning Basin**, 5 miles from the entrance. The area 2 miles from the entrance, at the junction with Mission River, is known as **Kam Turning Basin**. The river entrance is known locally as **Kam Entrance**.

307 **Caution**. — This area is subject to silting; Westfort Turning Basin and Mission River are especially affected.

308 **Caution**. — The **current** in the navigable section of the Kaministiquia River is controlled by a hydro-electric dam farther upstream. The current is variable and at times it reverses.

309 *Kaministiquia River Entrance light (1144)* is on a small building on the south end of the offshore breakwater close north of the river entrance. The structure is **floodlit**.

310 *Kaministiquia River Entrance Inner light (1144.3)* is on the north side of the river on an old elevator wharf.

311 *Kaministiquia River Entrance South light (1144.4)* is on the north end of Wharf No. 25. This light is privately maintained.

312 *Kaministiquia River light (1145)* is on the south bank of the river 2.5 miles from the river entrance.

313 *Kaministiquia River Water Mains Crossing North light (1146)*, on the north bank of the river0.1 mile farther NW, is visible from 285° through north and east to 105°.

314 *Kaministiquia River Water Mains Crossing South light (1147)* is on the south bank of the river 0.1 mile SW of the north light.

314.1 There is a road **bridge** across the river 0.4 mile from the entrance. The clearance south of the centre abutment is 8.4 m; north of the abutment, the clearance is 5.3 m.

315 *Jacknife Bridge*, a bascule **bridge** 1.9 miles from the river entrance, connects the west end of **Mission Island** to the mainland. The channel through the bridge is marked on each side by white **lights**. The clearance under the bridge when closed is 3.5 m. **Lights** on the bridge show green when the bridge is open and red when closed. The signal for opening the bridge is *two long and two short blasts*. A flashing red light signifies that the bridge is being closed to road traffic.

316 **Radio calls**. — Vessels requiring opening of *Jacknife Bridge* must contact *Thunder Bay MCTS Centre*, call sign *VBA*, at least two hours in advance and then contact the bridge personnel directly, call sign *Jacknife Bridge*,

KAMINISTIQUIA RIVER (1998)

at least 30 minutes before arrival at the bridge. *Jacknife Bridge* guards VHF Channel 16 and works on Channel 14.

317 The *Canadian National Railway Swing Bridge* 3.8 miles from the river entrance, known locally as *James Street Swing Bridge*, has a channel width of 30 m. The dredged channel through the bridge passes south of the central abutment and is marked on each side by white **lights**. The clearance under the bridge when closed is 8.6 m. **Lights** on the bridge show green when the bridge is open and red when closed. The signal for opening the bridge is *two long and two short blasts*. If a railway train is approaching and the bridge cannot be opened to a vessel, the *Thunder Bay MCTS Centre* is notified and the **red light** flashes five times as a warning signal.

318 **Radio call**. — Vessels requiring opening of the *Canadian National Railway Swing Bridge* must contact *Thunder Bay MCTS Centre*, call sign *VBA*, at least two hours in advance.

319 **Caution**. — Both **bridges** normally close in the second half of December for maintenance. Vessels that need a late-season passage through either bridge should contact the Harbourmaster.

320 An **overhead power cable** that crosses the Kaministiquia River 0.4 mile from the entrance has a clearance of 41 m. The supporting **towers** have white strobe **lights**. An **overhead power cable** that crosses the river 0.2 mile SW of Kam Turning Basin has a clearance of 41 m. An **overhead power cable** that crosses Kaministiquia River 0.1 mile west of the swing bridge has a clearance of 49 m.

321 A **submarine power cable** crosses the Kaministiquia River 0.6 mile downstream of the *Jacknife Bridge*, just downstream of *Heritage Waterfront Park*. **Submarine cables** also cross the river on both sides of the *Jacknife Bridge*.

322 Two **water mains** cross the river at the turn 0.7 mile SW of the *Jacknife Bridge*. They are marked on the north and south shores by **lights**.

323 Power and telephone **submarine cables** and **water mains** cross the river on both sides of the railway swing bridge and a **submerged gas pipeline** crosses the river close west of this bridge.

324 The *Thunder Bay Port Authority Standard Operating Procedures* prescribe that no vessel shall turn under its own power in the immediate vicinity of any bridge crossing Kaministiquia River. No vessel exceeding 200 gross tons shall turn in Kaministiquia River except at Westfort Turning Basin or at Kam Turning Basin. Permission is required from the harbour master for turning in other locations on the river.

325 The major **facilities** in the Port of Thunder Bay are listed on the chart. Other wharves and features along the north side of the Kaministiquia River are listed below.

326 The **wharf** on the north side at the entrance to the river is 189 m long; it is in poor condition (1999).

327 There are several derelict **berths** west of the entrance, extending a distance of 1.2 miles. These berths are in ruins and have no facilities (1999).

328 A **wharf** and shed 0.3 mile SSW of *Jacknife Bridge* are in poor condition (1999).

329 The **wharf** 0.4 mile SSW of *Jacknife Bridge* is 283 m long; it is used for lay-up of ships.

330 **McKellar River** is 1.3 miles long and separates **McKellar Island** from Mission Island. Due to silting, the *Thunder Bay Port Authority* considers McKellar River to be suitable only for small craft.

331 **Caution**. — The **current** in the McKellar River is controlled by a hydro-electric dam on the Kaministiquia River. The current varies and its direction frequently reverses.

332 **Caution**. — The entrance channel and river are subject to silting. There is significant silting and shoaling near the mouth of the river.

333 A bascule **bridge** at the west end of McKellar River connects McKellar Island to Mission Island. The channel through the bridge is marked on each side by white **lights**. The clearance under the bridge when closed is 4.1 m. **Lights** on the bridge show green when the bridge is open and red when closed. This bridge is manned on 24 hours notice.

334 **Radio call**. — Vessels requiring opening of this bridge must contact *Thunder Bay MCTS Centre*, call sign *VBA*, at least 24 hours in advance.

335 **Caution**. — This bridge has not been opened in several years (1999).

336 An **overhead power cable** with a clearance of 42 m crosses McKellar River 0.65 mile east of the bascule bridge.

337 A **submerged pipeline** crosses the river 0.67 mile east of the bascule bridge. Two **submarine power cables** cross the river near the bascule bridge, and a third **submerged power cable** runs parallel to the south bank and along the south side of the entrance channel.

338 **Mission River** *(48°21'N, 89°12'W)* can be used as an access channel to Kaministiquia River. The river is 1.7 miles long and the entrance channel to the river is 1.2 miles long. The entrance is known as **Mission River Entrance**. A **breakwater** 0.7 mile long protects the south side of the entrance channel. **Mission River Turning Basin** is inside the mouth of the river.

339 **Caution**. — The entrance channel and river are subject to silting.

340 **Caution**. — The **current** in Mission River is controlled by a hydro-electric dam on Kaministiquia River. The current varies and its direction frequently reverses.

341 **Caution**. — Reverse currents and siltation can make **berthing** at the *Petro-Canada* wharf hazardous.

342 No vessel exceeding 200 gross tons shall turn in Mission River except at Mission River Turning Basin or at Kam Turning Basin.

343 *Mission Channel Entrance light (1136)* is on top of a small white building at the east corner of the breakwater; the structure is **floodlit**.

344 *Mission River Entrance Breakwater light (1138)* is on the north corner of the breakwater.

345 There are two privately maintained **lights**, with elevations of 9 feet (2.7 m), one on the east side and one on the west side of the *Ontario Hydro Thunder Bay Generating Station* wharf.

346 *Mission Channel range lights (1139, 1140)* are on the west side of the mouth of Mission River. The lights in line lead through the dredged entrance channel.

347 **Caution**. — East or NE winds create a confused sea near the breakwater. Small craft should use the Kaministiquia River entrance at such times.

348 An **overhead power cable** with a clearance of 44 m and a telephone **submarine cable** cross the Mission River 0.7 mile WNW of the inner end of the breakwater. Two **submerged water mains** and a telephone **submarine cable** cross the river 0.25 mile farther NW. There are lighted warning signs near the crossings.

Facilities in Thunder Bay

349 Prior to 1970 this urban area was two cities: the city of **Port Arthur** was the northern part and the city of **Fort William** the southern part. The two cities amalgamated and the **City of Thunder Bay** was incorporated in 1970. The population in 1996 was 113,662.

350 In 1999 there were nine grain elevators operating in the city. One more was being refurbished. Other industries include newsprint paper mills, shipbuilding, marine and general engineering shops, a foundry, sawmills and woodworking factories, bus and aircraft factories, a brewery, and brick and clay works.

351 A *Canadian Coast Guard* **search and rescue** lifeboat is based at Thunder Bay from the end of April to the beginning of 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)*.

352 There is a medical evacuation helicopter operated by the *Ontario Ministry of Health* at *Thunder Bay Airport*.

353 Thunder Bay is a **Customs** vessel reporting station for pleasure craft and a vessel clearing station for commercial vessels.

MISSION RIVER (1998)

354 Towing services are available.

355 Many of the berths in the Port of Thunder Bay have a variety of cargo-handling gear and storage facilities. Floating and mobile land cranes with capacities of 9 to 126 tonnes are available from *Thunder Bay Improvements*.

356 There are scheduled freight, express and intermodal rail services. *Thunder Bay Airport* is operated by the *Thunder Bay Airport Authority*. *Air Canada*, *Bearskin Airlines* and *Messabi Airlines* operate scheduled air services. *Messabi Airlines* is a feeder for *Northwest Airlines*. Scheduled bus services connect Thunder Bay to other major cities.

357 Firms in Thunder Bay offer a full range of ship repairs, with land and water transportation.

358 The *PASCOL Engineering* fitting-out berth is 0.5 mile west of Bare Point. It has several mobile cranes with lifting capacities of 9 to 72 tonnes.

359 *Thunder Bay Marine Services* has divers for underwater inspection and repair. The company offers land and water transportation and lighterage services.

360 Servicing and spare parts for most pleasure craft are available from firms in the city.

361 *PASCOL Engineering* dry dock, close west of the fitting-out berth, is 228 m long with a floor width of 23.8 m and a depth over the sill of 4.9 m. A channel to the dry dock has depths of 5.5 m; a channel to the fitting-out berth has depths of 6.4 m.

362 Vessel inspection and surveying services are available. Navigation electronics repair and compass adjusting are carried out. Garbage is removed either by truck or barge. Oily waste is removed either by tank truck or in barrels. There is no barging of oily waste.

363 Fumigation services are available; inspection is by the *Canadian Food Inspection Agency*.

364 Oil companies supply bunker fuel by tanker truck. Fresh water is available from shore connections at *Keefer Terminal*. There is no barging of fuels or water in the harbour. Fresh provisions and all kinds of marine supplies are available in the city.

365 *Prince Arthur's Landing Marina* is a municipal facility. There is a restaurant nearby. Vessels 20 m in length can be accommodated; larger vessels are requested to contact *Prince Arthur's Landing Marina* 48 hours in advance to make arrangements.

366 *McKellar Marine Centre*, on the south side of McKellar River 1 mile inside the entrance, is a small-craft repair facility offering hull repairs and hoist or crane haul out.

367 *Thunder Bay Yacht Club*, on the north side of Mission River 0.6 mile from the entrance, has no public facilities.

368 There is a **breakwater** and boardwalk at **Chippewa Park** on the north side of **Whiskyjack Point** *(48°20'N, 89°12'W)*.

369 **Caution**. — The outer tip of the 236-m long dog-leg breakwater-boardwalk structure has depths of less than 1.2 m. There are no mooring cleats and the lagoon to the west is very shallow. The east side of the shore end of the breakwater-boardwalk is lined with **boulders**; the west side of the shore end is dry.

370 Retaining walls close north of Chippewa Park enclose a hazardous-waste reclamation area.

North and east shores of Thunder Bay

Charts 2301, 2326

371 There is deep water close south of **Wild Goose Point** *(48°29'N, 89°04'W)* and a shallow bay to the NE. **Papoose Islands** lie 0.9 mile east of Wild Goose Point. The larger SE island is 10 feet (3 m) high.

372 **Mary Harbour**, 2.5 miles ENE of Wild Goose Point, offers good **anchorage** in 7.7 m, clay. **Mary Island** is 25 feet (7.6 m) high and gives protection from SE winds. **Silver Harbour** is on the mainland shore inside the NE part of Mary Island. *Silver Harbour Conservation Area* has a small harbour with three **wharves** and a launching **ramp**, protected by a lightly-wooded **breakwater**.

373 **Lefebvre Island** and **Bacon Island** lie in the entrance to **Mackenzie Bay**, 1.4 miles ENE of Mary Island. **Mackenzie River**, which is unnavigable, enters the head of the bay over a shallow ledge. A railway **bridge** with an overhead clearance of 12 feet (3.7 m) crosses the mouth of the river. **Conmee Point** is the bold eastern entrance point to Mackenzie Bay.

374 A **submarine power cable** crosses from the south side of Bacon Island in a NE direction to the NW side of Conmee Point.

375 **Buck Islands** lies 0.4 mile east of Conmee Point. There is a **rock** dry 0.4 m close west of the island and a **shoal spit**, with a small islet and a **rock** dry 0.7 m, extends 0.3 mile ENE.

376 **Amethyst Bay**, east of Conmee Point, is an open bight with several islands and **shoals**. Cliffs form the coast north of Conmee Point and a high ridge parallels the shore, passing close to the head of the bay. The two **Kent Islands** lie in the NE part of Amethyst Bay. Kent Island is 11 feet (3.4 m) high. **Palette Island** is 0.2 mile to the north.

377 A **submarine power cable** crosses from the NE end of Palette Island to the mainland.

378 **Amethyst Harbour** is on the NE side of Amethyst Bay. It is protected to the south by **Lambert Island**, which is connected to **Perry Point** by a bridge *(not shown on Chart 2326)* with an overhead clearance of 7 feet (2.1 m). The entrance to the harbour is between Lambert Island and the Kent Islands. The harbour is 4.2 m deep and has 3.6 m of water in the entrance. This harbour offers small vessels perfect sheltered **anchorage** from all winds, but local knowledge is required.

379 A Public **wharf** at the head of the harbour is 267 feet (81 m) long and 12 feet (3.7 m) wide, with depths alongside of 5 feet (1.5 m). This wharf is leased to *Amethyst Harbour Campers Association*.

380 **Caribou Island** *(48°31'N, 88°51'W)* is bold at its west end. **Temple Rock**, 0.4 mile west of the island, has a depth of 0.5 m and is marked by a **buoy**.

381 **Anchorage** with fair protection can be found off the north side of the east part of Caribou Island in 8.1 m, clay.

382 There is a small private **wharf** at **Knobel Point**, 2 miles north of the east end of Caribou Island. **Honeymoon Island** is 0.4 mile WSW of Knobel Point. **Chipman Rock**, 0.4 mile farther SW, has a depth of 2.2 m.

383 The head of the bay east of Knobel Point is comparatively low and fronted by a **shoal ledge** 0.2 mile wide. **Anchorage** can be found 0.5 mile offshore near the head of the bay in 12.6 m, mud.

384 The east shore of Thunder Bay is bold with unobstructed shorelines.

385 **Anchorages** along the east shore with shelter from east winds can be found off **Clavet Bay** SSE of **Clavet Point** in 11 m, sand, and in **Hoorigan Bay** behind **Hoorigan Point** in 11 m, clay.

386 There is reported to be a **daymark** with black and white horizontal bands on the islet close off Hoorigan Point.

387 **Sawyer Bay**, NE of The Sleeping Giant, is fringed by a shallow ledge 0.1 mile wide; the land at the head of the bay is low. **Anchorage** with protection from south and east winds can be found in the bay in 5.2 m, clay.

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: _____ Length: _____ Type: _____

Colour Hull: _____ Deck: _____ Cabin: _____

Engine Type: _____ Distinguishing Features: _____

Communications

Radio Channels Monitored: HF: ☐ VHF: ☐ MF: ☐

MMSI (Maritime Mobile Service Identity) Number: _____

Satellite or Cellular Telephone Number: _____

Safety Equipment on Board

Lifejackets and PFD's *(include number)*: _____

Liferafts (include type and colour): _____ Dinghy or Small Boat *(include colour)*: _____

Flares (include number and type): _____

Other Safety Equipment: _____

Trip Details — Update These Details Every Trip

Date of Departure: _____ Time of Departure: _____

Leaving From: _____ Heading To: _____

Proposed Route: _____ Estimated Date and

Stopover Points (include date and time): _____ Time of Arrival: _____

_____ Number of People on Board: _____

Search and Rescue Telephone Number: _____

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)
mrscqbc@dfo-mpo.gc.ca (Email)

JRCC Halifax (Maritimes Region) 1-800-565-1582
+1-902-427-8200 (Satellite, Local or out of area)
+1-902-427-2114 (fax)
jrcchalifax@sarnet.dnd.ca (Email)

MRSC St. John's (Newfoundland and Labrador Region) 1-800-563-2444
+1-709-772-5151 (Satellite, Local or out of area)
+1-709-772-2224 (fax)
mrscsj@sarnet.dnd.ca (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.*

Table of marine facilities *

Name and location	Telephone	Depths in feet	Berths • total	Berths • visitors	Electricity, water	Gasoline, diesel, propane	Sewage pump out, ramp	Motor/hull repairs	Hoist/crane/marine railway	Mast stepper	Boat/motor rentals	Garbage disposal	Toilets, showers, laundry	Groceries, ice, snack bar	Restaurant, dining room	Marine supplies, bait, tackle	Water taxi	Pay phone	Picnic area, camping	VHF channels	Authorized chart dealer
CHAPTER 1																					
Sarnia Yacht Club Point Edward	519-332-6779	8	350		EW	GD	SR		1.3t	•		•	TS	I				•	P		
Lake Huron Yachts Point Edward	519-336-5576	8	53	4	EW		S		4.4t	•		•	TS						P	68	
Orchard View Park Cedar Point	519-786-4700																	•	PC		
Cedar Cove Marina Cedar Point	519-786-6841	4	60		W	G	R					•	T	IS		B		•	P	68	
Rivermouth Marina Port Franks	519-243-3636	6	54	8	EW	G	SR	M	17.5t	•	B	•	TSL	IS	RD	B		•	P	68	
Huron Shores Marine Port Franks	519-243-3900	4	2					MH	9t	•											
Lighthouse Marina Port Franks	519-243-2701	5	30	6	EW		R	MH				•	TS	I		M		•	P	68	
Burnett Great Lakes Marine Port Franks	519-243-2322	5	52	8	EW		SR	MH	14t			•	TS			M				68	
Seven Winds Marina Port Franks	519-243-3433	4	60	5	EW	G	SR				B	•	TS	IS			•		P		
Port Franks Conservation Area Port Franks	519-243-2354	5-9	96	5	EW	G	R						TS	I				•	P	68	
Grand Bend Harbour Grand Bend	519-238-2000	7	70	54	EW	GD	SR					•	TSL	I			•	•	P	68	
Manore Marine Grand Bend	519-238-2421	4	44		EW							•	TS	I					P	68	
Southwest Marine Services Grand Bend	519-238-2887							MH	9t							M					
Roszell-Warner Marine Grand Bend	519-238-2391	6	12	12	EW			MH	45t	•		•				M	•			68	•
Saga Bound Bookstore Grand Bend	519-238-2508																				•
Harbour Lights Marina Bayfield	519-565-2149	8	250	75	EW	GD	SR					•	TSL	GIS	R		•	•	P	68	
Bayfield Marine Services Bayfield	519-565-2411							MH	18t	•						M					•
South Shore Marina Bayfield	519-565-2110	7-8	100	15	EW		R	M		•	BM	•	TS	I		M			P	68	
Bayfield Village Marina Bayfield	519-565-2233	8	65	10	EW	GD	SR	MH	9t	•		•	TSL	I		M		•	PC	68	
Maitland Inlet Marina Goderich	519-524-4409	8	124	30	EW		R	MH	13t	•		•	TSL	GI		BT	•	•	P	68	
Maitland Valley Marina Goderich	519-524-4409	10	160	50	EW	GD	SR	MH	22t	•		•	TSL	GI			•	•	PC	68	
Snug Harbour Goderich	519-524-8813	8	28	8	EW		SR					•	TS	IS	RD	B		•	P	14	
Argyle Marine and Small Engines Goderich	519-524-5361							M													•
Kincardine Yacht Club Marina Kincardine	519-396-4336	7	154	30	EW	GD	SR			•	M	•	TS	I		M		•	P	68	•
Port Elgin Harbour Centre Port Elgin	519-832-6535	8-12	234	30	EW	GD	SR			•		•	TS	GI	R			•	P	68	•
Redline Marine Port Elgin	519-389-4232							MH								M					

* The information was reported in 1999 by the individual marina operators.

Table of marine facilities *

Name and location	Telephone	Depths in feet	Berths • total	Berths • visitors	Electricity, water	Gasoline, diesel, propane	Sewage pump out, ramp	Motor/hull repairs	Hoist/crane/marine railway	Mast stepper	Boat/motor rentals	Garbage disposal	Toilets, showers, laundry	Groceries, ice, snack bar	Restaurant, dining room	Marine supplies, bait, tackle	Water taxi	Pay phone	Picnic area, camping	VHF channels	Authorized chart dealer
CHAPTER 1 (continued)																					
Aqua Manufacturing & Marine Port Elgin	519-832-2840								M								M				
Saugeen Marina Motel Lodge Southampton	519-797-2817	6	16	2	W	G	R	MH			BM	•	T			M			P	68	
Southampton Yacht Club Southampton	519-797-3744	4-12	8		EW		SR	MH		•	BM	•	TS					•	P		
Kit-Wat Marina Motel Restaurant Sauble Beach	519-422-1282	2-3	14	2		G	R				B	•		GIS	RD	BT		•			
Sauble River Marina Sauble Beach	519-422-1762	2-3	26	5	E						BM		T	S		MBT		•	P		
Murdoch McKenzie Marine Services Oliphant	519-534-1017	4	50		W	G	R							I		BT	•	•			
Little Red Bay Marina Little Red Bay	519-534-3806	4				G					B			IS	D	MBT			P		
Anchor's Landing Marina Pike Bay	519-793-4309	3			W		R				B		S			BT		•			
By the Bay Pike Bay Resort Pike Bay	519-793-3317	3-5	20	5	EW		SR				BM		TSL	GIS		MBT		•	PC		
Stokes Bay Camp and Marina Stokes Bay	519-592-5648	4	45	10	EW	G	SR				BM	•	TS	GIS	R	BT		•	PC	68	
CHAPTER 2																					
South Bay Marina South Baymouth	705-859-3656	3-9	75	6	EW	G	SR					•	TSL	S	RD			•	P	68	
Providence Bay Marina Providence Bay	705-377-7225	10	30	5			R						TS	I					PC	68	
CHAPTER 3																					
Bellevue Marina Sault Ste. Marie	705-759-5312	8-10	175	30	EW	GD	SR					•	TS	IS				•	P	68	•
Roberta Bondar Marina Sault Ste. Marie	705-759-5430	8	36	36	EW	GD	S					•	TSL	GIS				•	P	68	•
Sault Ste. Marie Canal National Historic Site Sault Ste. Marie	705-941-6206	10											T					•	P	14	
Lakeside Marine Sault Ste. Marie	705-949-4545																				•
CHAPTER 4																					
Patty's Gitchee Gumee Marina & Restaurant Havilland Bay	705-649-2101	6	40	8	EW	G	S	M						I	RD			•	PC		
Montreal River Harbour (Trail's End Lodge) Montreal River	705-882-2033	5	15	5	EW	GDP	SR	MH			BM	•	TSL	I	RD	BT	•	•	PC	68	
Buck's (Harry McCluske Municipal) Marina Michipicoten River	705-856-4488	5-8	128	50	EW	GD	SR	MH	4.5t	•	BM	•	TSL	GIS		MT	•	•	PC	68	

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Table of marine facilities *

Name and location	Telephone	Depths in feet	Berths • total	Berths • visitors	Electricity, water	Gasoline, diesel, propane	Sewage pump out, ramp	Motor/hull repairs	Hoist/crane/marine railway	Mast stepper	Boat/motor rentals	Garbage disposal	Toilets, showers, laundry	Groceries, ice, snack bar	Restaurant, dining room	Marine supplies, bait, tackle	Water taxi	Pay phone	Picnic area, camping	VHF channels	Authorized chart dealer
CHAPTER 5																					
No facilities were reported in this area in 1999.																					
CHAPTER 6																					
Public Wharf (managed by Halcyon Haven) Rossport	807-824-2561	6-18	12	6	EW	GD	SR	M			BM	•	TSL	IS	RD	T	•	•		16	•
Red Rock Marina Red Rock	807-886-2126	8	67	22	EW	GD	SR					•	TSL	GIS	D			•	P	68	•
Nipigon Marina Nipigon	807-887-3824	7-11	45	15	EW	G	SR					•	TS	I				•	P	68	
CHAPTER 7																					
Prince Arthur's Landing Marina Thunder Bay	807-345-2741	9-10	210	5	EW	GD	SR		1t			•	TSL	I	RD			•	P	68	
McKellar Marine Centre Thunder Bay	807-622-3864	11	20	3			R	MH	40.5t	•		•	TS								

* The information was reported in 1999 by the individual marina operators.

List of Lights, Buoys and Fog Signals *

LAKE HURON

No.	Name	Position Latitude N. Longitude W.	Light Characteristics			Focal Height in m. above water	Nominal Range	Description Height in meters above ground	Remarks Fog Signals
768	Point Edward range	On beach, E. from head of St. Clair River. 43 00 09 82 24 59.5	F	R		12.7	.....	White cylindrical tower, red band at top, fluorescent orange triangular daymark, black vertical stripe. 9.5	Visible in line of range. Year round.
769	**Racon - - (M) X & S Band**	180°25' 652.3m from front.	F	R		36.6	.....	On bridge, fluorescent orange triangular daymark, black vertical stripe.	Visible in line of range. Year round. **Chart:2260**
770	*Lake Huron Cut light buoy 2*	*43 00 33* *82 24 54*	*Q*	*R*	*1s*	.....	.....	*Red, marked "2".*	*Winter spar.* *Year round.* **Chart:2260**
771	*Kettle Point Reef light buoy V4*	*NW. of point.* *43 14 23* *82 03 04*	*Fl*	*R*	*4s*	.....	.....	*Red, marked "V4".*	*Seasonal.* **Chart:2260**
774	Grand Bend	On outer end of pier. 43 18 49.7 81 46 05.2	Iso	G	4s	10.7	.....	White cylindrical tower, green upper portion. 7.6	Year round. **Horn -** Blast 3s; sil. 27s Operated by the Village of Grand Bend. **Chart:2260**
775.5	Bayfield range	43 34 13 81 42 27	F	G		7.6	.....	Cylindrical mast, white daymark, fluorescent orange vertical stripe. 4.9	Visible in line of range. Seasonal.
775.6		076°45' 61.5m from front.	F	G		10.0	.....	Cylindrical mast, white daymark, fluorescent orange vertical stripe. 6.1	Visible in line of range. Seasonal. **Chart:2260**
776	Bayfield wharf	On S. breakwater. 43 34 10.1 81 42 33	F	R		10.2	.....	White square skeleton mast, red and white rectangular daymark. 6.1	Seasonal. **Horn -** Blast 3s; sil. 27s Horn points 270°. Mariners requiring horn to be turned on can activate it clicking radio mike five times within a five (5) second window on channel 19 - 156.95 VHF. Horn can be activated with 1 watt power at 3 NM range. Horn will stay activated for 30 minutes and can be reactivated as required. **Chart:2260**
Goderich									
777	**Goderich Main**	On high bank, S. of harbour entrance. 43 44 31.6 81 43 28.7	Fl(2)	W	25 s	42.7	**16**	White square tower, red upper portion. 10.1	Flash 0.5 s; eclipse 5.5 s; flash 0.5 s; eclipse 18.5 s Seasonal. **Chart:2291**
778	North Breakwater	On W. end of N. breakwater off entrance to harbour. 43 44 47.8 81 44 15.4	Fl	G	4s	7.8	5	White structure. 6.1	Seasonal. **Chart:2291**

* From CCG *List of Lights, Buoys and Fog Signals* corrected to Notices to Mariners Monthly Edition 7 of 2000.

List of Lights, Buoys and Fog Signals *

LAKE HURON

No.	Name	Position Latitude N. Longitude W.	Light Characteristics			Focal Height in m. above water	Nominal Range	Description Height in meters above ground	Remarks Fog Signals
Goderich (Cont'd)									
778.5	Maitland River	43 44 56.9 81 43 58.7	Fl	W	4s	9.1	5	Cylindrical mast. 4.1	Seasonal. **Chart:2291**
779	South Breakwater	On W. end of S. breakwater. 43 44 43 81 44 10.9	Oc	R	6s	10.3	.....	Tower on white square building.	Emergency light. Seasonal. **Chart:2291** **1929/99**
780	North Pier range	On N. pier. 43 44 46.5 81 43 49.9	F	R		13.8	.....	Triangular skeleton tower, white daymark, orange vertical stripe. 10.8	Visible 015° on either side of line of range. Seasonal
781		086°30' 181.4m from front.	F	R		19.8	.....	Skeleton tower, white daymark, orange vertical stripe. 15.2	Seasonal **Chart:2291** **1929/99**
782	Point Clark	On extremity of low point. 44 04 22.1 81 45 25.6	Fl	W	3.5 s	28.3	14	White cylindrical tower. 21.0	Flash every 3.5 s Seasonal. **Chart:2261**
783	Kincardine Sector	44 10 40 81 38 07	Oc	R W G	10s	9.8	.....	Cylindrical mast, white daymark, orange vertical stripe. 6.1	Flash 5 s; eclipse 1 s; flash 1 s; eclipse 1 s; flash 1 s; eclipse 1 s Seasonal. Red from 034° to 099°, white from 099° to 103°; green from 103° to 168°. **Horn -** Blast 3 s; sil. 27 s Horn points 330°. Seasonal. **Chart:2261** **Edn 06/00**
784	Kincardine	44 10 38 81 38 18	Fl	R	5s	24.4	.....	White octagonal tower, orange vertical stripe. 19.2	Seasonal. **Chart:2261** **Edn 06/00**
785	*Logie Rock light buoy VC2*	*N. of rock.* *44 27 41* *81 27 01*	*Fl*	*R*	*4s*	.....	.....	*Red, marked "VC2".*	*Seasonal.* **Chart:2291**
786	Port Elgin range	Near outer end of wharf. 44 26 39.7 81 24 13.1	F F	G G		8.6 10.1	....	Cylindrical mast, white daymark, orange vertical stripe. 7.5	Visible in line of range. Seasonal. Visible 360°.
787		109°11' 146.1m from front.	F	G		15.9	.....	Cylindrical mast, white daymark, orange vertical stripe. 12.4	Seasonal. **Chart:2291**
787.5	Port Elgin North breakwater	On end of N. breakwater. 44 26 42.8 81 24 21	Fl	G	4s	8.3	.....	Cylindrical mast, red and white rectangular daymark. 6.0	Privately operated. Seasonal. **Chart:2291**

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List of Lights, Buoys and Fog Signals *

LAKE HURON

No.	Name	Position Latitude N. Longitude W.	Light Characteristics			Focal Height in m. above water	Nominal Range	Description Height in meters above ground	Remarks Fog Signals
787.7	Port Elgin South breakwater	On end of S. breakwater. 44 26 41.2 81 24 21.9	Fl	R	4s	8.1	.....	Cylindrical mast, red and white rectangular daymark. 6.5	Privately operated. Seasonal. **Chart:2291**
788	Chantry Island	On E. side of island W. from Saugeen. 44 29 24 81 24 09	Fl	W	4s	31.4	6	White cylindrical tower. 26.2	Seasonal. **Chart:2292**
790	Saugeen range	On cribwork block on breakwater, near outer end. 44 30 06 81 22 33	F F	G W		11.0 11.9	....	White tower, orange vertical stripe. 9.1	Visible in line of range. Seasonal. **Horn -** Blast 3s; sil. 17s. Mariners requiring horn to be turned on can activate it clicking radio mike five times within a five (5) second window on channel 19 - 156.95 VHF. Horn can be activated with 1 watt power at 3 NM range. Horn will stay activated for 30 minutes and can be reactivated as required.
791		095°15' 722.7m from front.	F	G		18.6	.....	White tower, orange vertical stripe. 9.4	Visible in line of range and over a small arc on each side of range. **Chart:2292**
792	*Saugeen River Turning light buoy VJ3*	*S. of Lambert Shoal.* *44 30 12* *81 23 27*	*Q*	*G*	*1s*	.....	.....	*Green, marked "VJ3".*	*Seasonal.* **Chart:2292**
793	*Southampton light buoy VJ2*	*Off NE. end of Chantry Shoal.* *44 30 39* *81 23 41*	*Fl*	*R*	*4s*	.....	.....	*Red, marked "VJ2".*	*Seasonal.* **Chart:2292**
794	Oliphant range	On crib. 44 43 49.3 81 16 53.3	F	R		4.9	.....	Cylindrical mast, white daymark, orange vertical stripe. 4.8	Seasonal.
795		058°12' 221m from front.	F	R		9.4	.....	Cylindrical tower, white daymark, orange vertical stripe. 8.8	Seasonal. **Chart:2292**
796	Lyal Island	On W. side of island. 44 57 03 81 25 07	Fl	W	4s	14.9	6	Square skeleton tower, red and white rectangular daymark. 12.0	Seasonal. **Chart:2292**
796.3	*Stokes Bay Entrance light buoy VK2*	*44 56 50* *81 27 36*	*Fl*	*R*	*4s*	.....	.....	*Red, marked "VK2".*	*Seasonal.* **Chart:2292** **1713/99**
797	Stokes Bay range	On NW. extremity of most westerly Knife Island. 44 58 01.3 81 23 25.6	Fl	R	4s	9.4	.....	White tower, orange vertical stripe. 12.6	Seasonal.
798		068°55' 1,219.1m from front.	F	R		19.0	.....	Skeleton tower, white enclosed upper portion, orange vertical stripe. 22.6	Visible in line of range. Seasonal. **Chart:2292**

* From CCG *List of Lights, Buoys and Fog Signals* corrected to Notices to Mariners Monthly Edition 7 of 2000.

List of Lights, Buoys and Fog Signals *

LAKE HURON

No.	Name	Position Latitude N. Longitude W.	Light Characteristics			Focal Height in m. above water	Nominal Range	Description Height in meters above ground	Remarks Fog Signals
798.5	Pine Tree Harbour range	45 04 18.4 81 29 54	Iso	R	4s	8.0	.....	Cylindrical mast, white daymark, orange vertical stripe. 7.3	Visible in line of range. Seasonal.
798.6		035° 85.6m from front.	F	R		10.6	.....	Cylindrical mast, white daymark, orange vertical stripe. 9.6	Visible in line of range. Seasonal **Chart:2292 1908/99**
799	Cape Hurd	On outer point of cape. 45 13 15.6 81 43 44.9	Fl	R	4s	8.9	.....	Cylindrical mast, red and white rectangular daymark. 7.7	Seasonal. **Chart:2274**
800	*Southwest Bank light buoy TA1*	*S. extremity of bank.* *45 14 02* *81 45 26.8*	*Fl*	*G*	*4s*	.....	.....	*Green, marked "TA1".*	*Seasonal.* **Chart:2274**
801	*Cove Island light and bell buoy T*	*W. of island.* *45 19 54* *81 50 56*	*Mo(A)*	*W*		.....	.....	*Red and white vertical stripes, marked "T".*	*Seasonal.* **Chart:2235**
802.5	*West Sister Shoal light buoy J2*	*N. side of shoal.* *45 22 05* *81 47 52*	*Fl*	*R*	*4s*	.....	.....	*Red, marked "J2".*	*Seasonal.* **Chart:2235**
803	*Lucas Island light buoy J3*	*W. of island.* *45 23 30* *81 46 31*	*Fl*	*G*	*4s*	.....	.....	*Green, marked "J3".*	*Winter spar.* *Seasonal.* **Chart:2235**
804	Lucas Island	N. side of island. 45 23 36 81 45 59	Fl	R	4s	14.6	.....	Cylindrical mast, red and white rectangular daymark, red triangle in centre. 8.7	Seasonal. **Chart:2235**
805	**Cove Island**	On Gig Point Entrance to Georgian Bay. 45 19 37 81 44 07	Fl	W	5s	30.8	**16**	White cylindrical structure.	Flash every 5 s Emergency light. Seasonal. **Chart:2235**
806	*South Baymouth light buoy JS2*	*SW. of Wallace Rock.* *45 32 14* *82 01 36.5*	*Fl*	*R*	*4s*	.....	.....	*Red, marked "JS2".*	*Seasonal.* **Chart:2273**
806.5	*Inkster Rock light buoy JS5*	*SE. of rock.* *45 33 07.5* *82 01 05.5*	*Fl*	*G*	*4s*	.....	.....	*Green, marked "JS5".*	*Seasonal.* **Chart:2273**
806.7	*McGaw Point light buoy JS8*	*45 33 19.5* *82 00 51*	*Q*	*R*	*1s*	.....	.....	*Red, marked "JS8".*	*Seasonal.* **Chart:2273**

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List of Lights, Buoys and Fog Signals *

LAKE HURON

No.	Name	Position ----- Latitude N. Longitude W.	Light Characteristics			Focal Height in m. above water	Nominal Range	Description ----- Height in meters above ground	Remarks ----- Fog Signals
807	South Baymouth range	On SE. end of small island. 45 33 28 82 00 48.2	F	G		8.5	.....	White square structure, orange vertical stripe. 5.2	Visible in line of range. Seasonal. **Horn -** Blast 2.5s; sil. 27.5s Mariners requiring horn to be turned on can activate it clicking radio mike five times within a five (5) second window on channel 19 · 156.95 VHF. Horn can be activate with 1 watt power at 3 NM range. Horn will stay activated for 30 minutes and can be reactivated as required.
808		024°50' 238.6m from front.	F	G		14.0	.....	White square structure, orange vertical stripe. 8.1	Seasonal. **Chart:2273**
809	*Providence Bay light buoy JH1*	*45 38 56* *82 17 30*	*Fl*	*G*	*4s*	.....	.....	*Green, marked "JH1".*	*Seasonal.* **Chart:2298**
810	Providence Bay	On extremity of Providence Point, Manitoulin Island. 45 39 05 82 16 32	F	W		14.3	12	Skeleton tower, daymarks, red and white horizontal stripes on 3 seaward faces.	Seasonal. **Chart:2266**
811	Providence Bay wharf	On outer end of wharf. 45 39 30 82 16 06	Fl	R	4s	7.6	10	Cylindrical mast. 6.1	Seasonal. **Chart:2266**
812	Great Duck Island	On SW. point of island. 45 38 30 82 57 48	Fl(3)	W	15s	32.9	.....	White octagonal tower. 25.9	Flash; eclipse 2.5 s; flash; eclipse 2.5 s; flash; eclipse 10 s Emergency light. Seasonal. **Chart:2266**
813	Mississagi Strait	On W. side of Manitoulin Island. 45 53 36 83 13 30	Iso	W	4s	19.6	10	Square skeleton tower, red and white rectangular daymark. 12.2	Seasonal. **Chart:2267**

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List of Lights, Buoys and Fog Signals *

ST. MARYS RIVER

No.	Name	Position Latitude N. Longitude W.	Light Characteristics			Focal Height in m. above water	Nominal Range	Description Height in meters above ground	Remarks Fog Signals
1059.6	Hay Point range	On the point, St. Joseph Island. 46 07 39 84 00 00	F	W		11.6	.....	Square tower, white daymark, orange vertical stripe. 8.7	Seasonal.
1059.7		128° 335.3m from front.	F	W		18.3	.....	Square tower, white daymark, orange vertical stripe. 15.5	Seasonal.
									Chart:14882(U.S.)
1059.8	*Everens Point light buoy Q16*	*NE. of point.* *46 14 47* *84 06 12*	*Fl*	*R*	*4s*	.....	.....	*Red, marked "Q16".*	*Winter spar.* *Seasonal.*
									Chart:14883(U.S.)
1060	Sailors Encampment	46 15 40.5 84 05 53.8	F	W		23.1	.....	Square skeleton tower, white daymark, orange vertical stripe. 15.0	Seasonal.
1061	Upbound range	016°55' 665.4m from front.	F	W		31.7	.....	Square skeleton tower, white daymark, orange vertical stripe. 17.8	Seasonal.
									Chart:2250
1061.5	*Sailors Encampment light buoy Q22*	*46 15 37* *84 06 02.5*	*Fl*	*R*	*4s*	.....	.....	*Red, marked "Q22".*	*Winter spar.* *Seasonal.*
									Chart:2250
1062	Rains Wharf range	46 15 15 84 05 43.2	F	W		9.8	.....	Cylindrical mast, white daymark, orange vertical stripe. 7.8	Visible in line of range. Emergency light.
			F	W		10.1	.....		Seasonal.
1063		134°56' 268.1m from front.	F	W		16.2	.....	Square skeleton tower, white daymark, orange vertical stripe. 13.3	Seasonal.
									Chart:2250
1063.5	*Coyle Point light buoy Q28*	*46 16 17* *84 06 55*	*Q*	*R*	*1s*	.....	.....	*Red, marked "Q28".*	*Winter spar.* *Seasonal.*
									Chart:2250
1063.6	*Coyle Point North light buoy Q30*	*46 16 52.3* *84 06 57.6*	*Fl*	*R*	*4s*	.....	.....	*Red, marked "Q30".*	*Winter spar.* *Seasonal.*
									Chart:2250
1063.8	*Green Point light buoy Q34*	*46 17 26.8* *84 07 01*	*Fl*	*R*	*4s*	.....	.....	*Red, marked "Q34".*	*Winter spar.* *Seasonal.*
									Chart:2250
1063.9	*Munuscong Channel light buoy Q36*	*46 18 01.3* *84 07 03.5*	*Fl*	*R*	*4s*	.....	.....	*Red, marked "Q36".*	
									Chart:2250
1064	Stribling Point Upbound range	46 18 46.8 84 06 55.5	F	W		19.4	.....	Square skeleton tower, white daymark, orange vertical stripe. 13.1	Seasonal.
1065		111°55' 961.4m from front.	F	W		30.4	.....	Square skeleton tower, white daymark, orange vertical stripe. 13.1	Year round.
									Chart:14883(U.S.)

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List of Lights, Buoys and Fog Signals *

ST. MARYS RIVER

No.	Name	Position Latitude N. Longitude W.	Light Characteristics			Focal Height in m. above water	Nominal Range	Description Height in meters above ground	Remarks Fog Signals
1065.5	*Birch Point light buoy QV18*	*S. entrance to Lake George.* *46 22 15* *84 08 12.5*	*Fl*	*R*	*4s*	.....	.....	*Red spar, marked "QV18".*	*Seasonal.* **Chart:14883(U.S.)**
1065.7	*Pumpkin Point light buoy QX2*	*SW. of point.* *46 23 28* *84 08 27*	*Fl*	*R*	*4s*	.....	.....	*Red spar, marked "QX2".*	*Seasonal.* **Chart:14883(U.S.)**
1065.8	*Bellevue Marine light buoy QC1*	*46 29 45.5* *84 18 08.5*	*Q*	*G*	*1s*	.....	.....	*Green spar, marked "QC1".*	*Seasonal.* **Chart:14884(U.S.)**
1065.9	Bellevue Marine breakwater	On E. end of breakwater. 46 30 02 84 18 23.7	Iso	G	2s	8.0	.....	Cylindrical mast, red and white rectangular daymark. 5.3	Seasonal. **Chart:14884(U.S.)**
1066	Bayfield Dyke	On N. side of channel. 46 29 54 84 18 58	Iso	R	4s	7.6	.....	Cylindrical mast, red and white rectangular daymark, red triangle in centre on both sides. 4.9	Seasonal. **Chart:14884(U.S.)**
1066.2	*Bayfield light buoy 108 (U.S.)*	*46 30 03* *84 19 38*	*Fl*	*R*	*4s*	.....	.....	*Red, marked "108".*	*Seasonal.* **Chart:14884(U.S.)**
1066.4	*Bayfield Channel light buoy 110 (U.S.)*	*Off Can. Soo wharf.* *46 30 12* *84 19 57*	*Fl*	*R*	*4s*	.....	.....	*Red, marked "110".*	*Seasonal.* **Chart:14884(U.S.)**

The Canadian canal and approaches are illuminated by two rows, one on each side of the canal. The most easterly and the most westerly lights in each row are yellow lights.

Sault Ste. Marie

1070	Canadian Canal, Upper Entrance range	On pier. 46 30 53.1 84 22 17.5	F	R		12.3	.....	Square skeleton structure, red daymark, white vertical stripe. 9.2	Seasonal.
1071		On point, 050°48' 247.2m from front.	F	R		19.1	.....	Square skeleton structure, red daymark, white vertical stripe. 15.2	Seasonal. **Chart:14884(U.S.)**
1072	*Upper Turning light buoy QM11*	*E. side of channel.* *46 30 43* *84 22 31*	*Q*	*G*	*1s*	.....	.....	*Green, marked "QM11".*	*Winter spar.* *Seasonal.* **Chart:14884(U.S.)**
1073	*Vidal Shoals North light buoy QM14*	*W. side of channel.* *46 30 25* *84 23 14*	*Fl*	*R*	*4s*	.....	.....	*Red, marked "QM14".*	*Winter spar.* *Seasonal.* **Chart:14884(U.S.)**
1074	*Vidal Shoals Northeast light buoy QM13*	*E. side of channel.* *46 30 29.5* *84 22 55.5*	*Fl*	*G*	*4s*	.....	.....	*Green, marked "QM13".*	*Winter spar.* *Seasonal.* **Chart:14884(U.S.)**
1075	*Vidal Shoals West light buoy QM24*	*W. side of channel.* *46 30 02* *84 23 53*	*Fl*	*R*	*4s*	.....	.....	*Red, marked "QM24".*	*Winter spar.* *Seasonal.* **Chart:14884(U.S.)**

* From CCG *List of Lights, Buoys and Fog Signals* corrected to Notices to Mariners Monthly Edition 7 of 2000.

List of Lights, Buoys and Fog Signals *

ST. MARYS RIVER

No.	Name	Position Latitude N. Longitude W.	Light Characteristics			Focal Height in m. above water	Nominal Range	Description Height in meters above ground	Remarks Fog Signals
1076	*Vidal Shoals West Cardinal light buoy P*	*E. side of channel.* *46 30 06* *84 23 35*	*Q(9)*	*W*	*15s*	.....	.....	*Yellow, black and yellow, marked "P".*	*Winter spar.* *Seasonal.* **Chart:14884(U.S.)**
1076.5	*Pointe aux Pins light buoy 10 (U.S.)*	*46 29 41* *84 25 31*	*Fl*	*R*	*4s*	.....	.....	*Red, marked "10".*	*Seasonal.* **Chart:14884(U.S.)**
1076.6	*Pointe aux Pins Bay light buoy P12*	*46 28 45* *84 27 16*	*Fl*	*R*	*4s*	.....	.....	*Red, marked "P12".*	*Winter spar.* *Seasonal.* **Chart:14884(U.S.)**
1076.7	*Pointe aux Pins Bay light buoy P14*	*46 28 22* *84 27 52*	*Fl*	*R*	*4s*	.....	.....	*Red, marked "P14".*	*Winter spar.* *Seasonal.* **Chart:14884(U.S.)**
1077	Pointe aux Pins range	On extremity of Point Louise. 46 28 04 84 28 20	F	G		9.1	.....	Tower, white daymark, orange vertical stripe. 7.9	Visible in line of range. Seasonal.
1078		233°06' 280.9m from front.	F	G		19.0	.....	Tripod skeleton tower, white daymark, orange vertical stripe. 16.8	Seasonal. **Chart:14884(U.S.)**
1078.5	*Pointe des Chênes light buoy P34*	*46 27 55* *84 33 31*	*Fl*	*R*	*4s*	.....	.....	*Red, marked "P34".*	*Seasonal.* **Chart:14884(U.S.)**
1079	Pointe aux Pins Main	On outer end of low sand point. 46 27 50.8 84 28 22.3	F	R		8.2	6	Cylindrical tower, red and white horizontal bands. 6.1	Seasonal. **Chart:14884(U.S.)**
1079.5	*Point Louise light buoy P20*	*46 27 40* *84 28 44*	*Fl*	*R*	*4s*	.....	.....	*Red, marked "P20".*	*Winter spar.* *Seasonal.* **Chart:14884(U.S.)**
1079.6	*Brush Point light buoy P19*	*SW. of point.* *46 27 27* *84 28 40*	*Fl*	*G*	*4s*	.....	.....	*Green, marked "P19".*	*Winter spar.* *Seasonal.* **Chart:14884(U.S.)**
1079.7	*Cedar Point light buoy P22*	*N. of point.* *46 27 27* *84 29 48*	*Fl*	*R*	*4s*	.....	.....	*Red, marked "P22".*	*Winter spar.* *Seasonal.* **Chart:14884(U.S.)**
1080	Sault Ste. Marie Airport Beacon	NE. Pointe aux Chênes. 46 29 11 84 29 32	Fl	W	10s	.....	.....	On top of water tank.	Flash every 10 s Privatly operated. Seasonal. **Chart:14884(U.S.)**
1080.5	*Point Iroquois light buoy P38*	*46 29 10* *84 35 06*	*Fl*	*R*	*4s*	.....	.....	*Red, marked "P38".*	*Winter spar.* *Seasonal.* **Chart:14884(U.S.)**
1081	Gros Cap Reefs **Racon - . - (K)** **X & S Band**	On crib, SW. extremity of reefs. 46 30 43.7 84 36 55	Fl	R	5s	18.1	12	White square block.	Flash every 5 s Emergency light. Seasonal. **Chart:14884(U.S.)**

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List of Lights, Buoys and Fog Signals *

LAKE SUPERIOR

No.	Name	Position Latitude N. Longitude W.	Light Characteristics			Focal Height in m. above water	Nominal Range	Description Height in meters above ground	Remarks Fog Signals
1082	Île Parisienne	On SW. extremity of island. 46 38 42.8 84 43 26.5	Fl	W	10s	16.1	14	White hexagonal tower. 5.8	Flash 1 s; eclipse 9 s Operational at night only. Emergency light. Seasonal. **Chart:2300**
1083	Goulais Bay	On point. 46 41 46.3 84 31 22.9	Fl	W	4s	11.7	.....	Cylindrical mast, red and white rectangular daymark. 5.8	Seasonal. **Chart:2315**
1084	Maple Island	On W. side of island. 46 46 07.7 84 34 51.9	Fl	W	4s	9.5	.....	Square skeleton mast, red and white rectangular daymark.	Seasonal. **Chart:14962(U.S.)**
1087	Coppermine Point	On extremity of point. 46 59 05 84 47 12	Iso	W	4s	14.8	12	Square skeleton tower, red and white rectangular daymark. 6.1	Seasonal. **Chart:2307**
1088	Mamainse Harbour **Racon -- (M)** **X Band**	On N. point of largest island off Mamainse Point. 47 02 15 84 47 11.6	F	R		10.9	6	Cylindrical mast, red and white rectangular daymark, red triangle in centre. 6.7	Seasonal. **Chart:2315** **2115/99**
1089	Montréal Point	On high bluff on point at Montréal River entrance. 47 14 30 84 39 00	F	W		40.5	8	Cylindrical mast, red and white rectangular daymark. 8.2	Seasonal. **Chart:2307**
1089.5	Sinclair Island	SW. side of island. 47 22 29.9 84 42 33.2	Fl	W	4s	17.4	10	Cylindrical mast, red and white rectangular daymark. 6.1	Seasonal. **Chart:2315**
1090	Rowe Island	At NE. tip of island. 47 26 25 84 47 36	Fl	W	4s	8.5	.....	Cylindrical mast, red and white rectangular daymark. 6.1	Seasonal. **Chart:2307**
1091	Gargantua	On summit of Gargantua Island. 47 33 29.7 84 57 47.9	Fl	W	4s	24.0	.....	Cylindrical mast, red and white rectangular daymark. 4.9	Seasonal. **Chart:2315**
1092	Hursley Island	47 35 46 85 02 33	Fl	W	4s	13.6	.....	Cylindrical mast, red and white rectangular daymark. 4.9	Seasonal. **Chart:2307**
1092.5	Michipicoten River Entrance	47 55 59.7 84 51 06.9	Iso	R	4s	4.3	.....	Cylindrical mast.	Seasonal. **Chart:2315**

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List of Lights, Buoys and Fog Signals *

LAKE SUPERIOR

No.	Name	Position Latitude N. Longitude W.	Light Characteristics			Focal Height in m. above water	Nominal Range	Description Height in meters above ground	Remarks Fog Signals
1093	**Michipicoten Harbour**	On SE. extremity of Perkwakwia Point. 47 56 33 84 54 27	Fl	W	30 s	26.8	**16**	Square skeleton tower. 12.2	Flash every 30 s. Emergency light. Seasonal. **Horn -** Blast 3s; sil. 3s; blast 3s; sil. 51s Horn points 210°. Mariners requiring horn to be turned on can activate it clicking radio mike five times within a five (5) second window on channel 19 - 156.95 VHF. Horn can be activated with 1 watt power at 3 NM range. Horn will stay activated for 30 minutes and can be reactivated as required. **Chart:2315**
1094		On shore, N. of inner end of wharf. 47 57 41.5 84 54 05	F	R		15.8	.....	Mast.	Privately operated. Lights in line lead to Commercial pier. Operated by Algoma Central Railway. Seasonal.
1095	Michipicoten Harbour range	355° 106.7m from front.	F	R		29.3	.....	Mast.	Privately operated. Lights in line lead to Commercial pier. Operated by Algoma Central Railway. Seasonal. **Chart:2315**
1096	**Caribou Island** **Racon - . - . (C)** **X & S Band**	On small island SW. of Caribou Island. 47 20 23 85 49 32	Fl	W	15s	30.2	**17**	Hexagonal tower. 24.4	Flash 1 s; eclipse 14 s Emergency light. Seasonal. **Chart:2310**
Michipicoten Island									
1097	Michipicoten Island	On NE. extremity of island. 47 45 15 85 35 45	Fl	W	10s	25.6	14	White hexagonal tower. 21.6	Flash 0.5s; eclipse 9.5s Emergency light. Seasonal. **Chart:2309** **712/99**
1098	**Davieaux Island**	On summit of island, S. of Québec Harbour, Michipicoten. 47 41 41.5 85 48 39.7	Fl	W	20s	39.3	**20**	White hexagonal tower. 13.4	Flash 0.5 s; eclipse 19.5 s Emergency light. Seasonal. **Horn –** Blast 3s; sil. 3s; blast 3s; sil. 51s Mariners requiring horn to be turned on can activate it clicking radio mike five times within a five (5) second window on channel 19 - 156.95 VHF. Horn can be activated with 1 watt power at 3 NM range. Horn will stay activated for 30 minutes and can be reactivated as required. **Chart:2315** **Edn. 11/99**

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List of Lights, Buoys and Fog Signals *

LAKE SUPERIOR

No.	Name	Position Latitude N. Longitude W.	Light Characteristics			Focal Height in m. above water	Nominal Range	Description Height in meters above ground	Remarks Fog Signals
Michipicoten Island (Cont'd)									
1099	Québec Harbour range	On N. shore of harbour. 47 43 01.5 85 47 54	F	W		6.4	.....	White rectangular house, fluorescent orange vertical stripe. 3.1	Visible in line of range. Seasonal.
1100		000°45' 129.5m from front.	F	W		20.1	.....	Square skeleton tower, white daymark, fluorescent orange vertical stripe. 12.8	Seasonal. **Chart:2315**
1101	Michipicoten Island, West End	On small island, SW. of Cotton Cove. 47 43 05 85 57 21	Fl	W	4s	9.1	5	Cylindrical mast, red and white rectangular daymark. 8.5	Seasonal. **Chart:2308**
1102	**Otter Island**	On NW. extremity of island. 48 06 43.5 86 04 00	Fl	W	8s	29.6	**18**	White tower. 6.3	Flash every 8 s Emergency light. Seasonal. **Chart:2308** **712/99**
1106	Hawkins Island	SW. end of island. 48 43 12 86 25 52	Fl	W	4s	27.1	5	Skeleton tower, white slatwork daymark. 12.5	Year round. **Chart:2306**
1107	Skin Island	On SW. corner of island. 48 43 41 86 23 39	Fl	W	4s	14.9	5	Cylindrical mast, red and white rectangular daymark. 6.4	Year round. **Chart:2304**
1110	Jackfish Bay	On SW. extremity of St. Patrick Island. 48 47 22 86 58 54	Fl	W	4s	12.5	5	Cylindrical mast. 4.9	Light should be given a berth of at least a cable when passing. Year round. **Chart:2305**
1111	**Slate Islands**	On S. extremity of Patterson Island. 48 37 16 86 59 45	Fl(2)	W	15 s	68.3	**20**	White tower. 6.7	Flash; eclipse 3.5 s; flash; eclipse 11.5 s Emergency light. Year round. **Chart:2303**
1111.1	Terrace Bay	48 46 08 87 07 14	Fl	W	4s	4.9	.....	White cylindrical mast. 4.8	Privately operated by the Township of Terrace Bay. Seasonal. **Chart:2303** **Edn. 11/99**
1112	Rossport	On wharf. 48 50 01 87 31 12	F	R		4.9	6	Cylindrical mast. 3.6	Year round. **Chart:2312**
1113	Rossport Harbour Entrance	On small island at entrance to harbour. 48 49 32 87 31 22	Fl	W	4s	11.3	5	Cylindrical mast, red and white rectangular daymark. 4.9	Year round. **Chart:2312**

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LAKE SUPERIOR

No.	Name	Position Latitude N. Longitude W.	Light Characteristics			Focal Height in m. above water	Nominal Range	Description Height in meters above ground	Remarks Fog Signals
1114	Rossport Point	On point. 48 49 32 87 32 54	Fl	W	4s	7.6	5	Cylindrical mast, red and white rectangular daymark. 6.0	Year round. **Chart:2312**
Nipigon Bay									
1117	Battle Island	On W. end of island. 48 45 06 87 33 24	Fl(3)	W	24 s	36.0	13	Tower. 13.1	Flash; eclipse 4 s; flash; eclipse 4 s; flash; eclipse 16 s Emergency light. Radar reflector. Year round. **Chart:2312** **712/99**
1120	Crichton Island	At SE. end of island. 48 57 07 88 06 19	Fl	W	4s	10.7	5	Square skeleton tower, red and white rectangular daymark. 6.0	Year round. **Chart:2312**
1121	Burnt Island	48 54 58 88 11 45	Fl	W	4s	19.0	.....	Grey cylindrical mast, red and white rectangular daymark. 6.1	Seasonal. **Chart:2312** **Edn 06/00**
1124	Nipigon Strait range	48 42 02 88 06 00	Fl	R	4s	8.8	.....	Cylindrical mast, white daymark, red vertical stripe. 6.3	Year round.
1125		014°30' 80.2m from front.	Fl	R	4s	12.2	.....	Square skeleton tower, white daymark, red vertical stripe. 7.6	Year round. **Chart:2312**
1126	**Lamb Island**	Centre of island. 48 36 14 88 08 34	Fl	W	5s	30.2	**15**	Tower. 12.2	Flash every 5 s. Emergency light. Year round. **Chart:2312** **712/99**
1127	Shaganash	On W. end of island No. 10, W. of Shaganash Island. 48 26 10 88 28 50	Fl	W	4s	11.0	5	Square tower. 7.3	Year round. **Chart:2302**
1128	**Point Porphyry**	On SW. extremity of island, entrance to Black Bay. 48 20 24 88 38 54	Fl	W	10s	25.0	**15**	Tower, white slatwork daymark. 14.6	Flash 1 s; eclipse 9 s Fixed white between flashes. Emergency light. Year round. **Chart:2301** **712/99**

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LAKE SUPERIOR

No.	Name	Position Latitude N. Longitude W.	Light Characteristics			Focal Height in m. above water	Nominal Range	Description Height in meters above ground	Remarks Fog Signals
1129	**Trowbridge Island**	On summit of island. 48 17 34 88 52 25	Fl	W	5s	34.7	**16**	White octagonal tower. 7.0	Flash every 5 s Emergency light. Year round. **Chart:2311** **712/99**
1130	**Angus Island**	Near N. end of island. 48 14 09 89 00 26	Fl	W	20s	24.7	**16**	Square skeleton tower.	Flash 1 s; eclipse 19 s Emergency light. Year round. **Chart:2311**
1131	Thunder Cape	W. side of cape. 48 18 07 88 56 19	Fl	W	4s	10.7	5	Skeleton tower, red and white rectangular daymark. 7.6	Year round. **Chart:2311**
1133	**Welcome Island**	On NE. extremity of the eastern island. 48 22 10 89 07 14	Fl	W	5s	42.1	**16**	Square skeleton tower.	Flash every 5 s Emergency light. Year round. **Chart:2314** **712/99**
Thunder Bay									
1135	*Mission Channel Approach light buoy AA2*	*48 20 45* *89 09 54*	*Fl*	*R*	*4s*	.....	.....	*Red, marked "AA2".*	*Seasonal.* **Chart:2314**
1136	Mission Channel Entrance	At outer corner of breakwater. 48 21 00 89 12 04	Fl	G	2s	13.4	8	White square tower, red upper portion. 7.6	Flash 0.5 s; eclipse 1.5 s Year round. **Chart:2314** **712/99**
1137	*Mission Channel light buoy A8*	*On N. side of channel at entrance.* *48 21 05* *89 12 01*	*Fl*	*R*	*4s*	.....	.....	*Red, marked "A8".*	*Seasonal.* **Chart:2314**
1138	Mission River Entrance Breakwater	On inner end of breakwater. 48 21 14 89 13 01	F	G		6.4	.....	Cylindrical mast, red and white rectangular daymark, black square in centre. 4.8	Year round. **Chart:2314**
1139	Mission Channel range	At mouth of Mission River. 48 21 25 89 13 33	F	R		11.3	.....	Cylindrical mast, white daymark, red vertical stripe. 9.1	Year round.
1140		289°05' 259.1m from front.	F	R		17.1	.....	Square skeleton tower, white daymark, red vertical stripe. 13.7	Year round. **Chart:2314**
1141	*Old Dumping Ground Shoal light buoy P2*	*E. of shoal.* *48 23 08* *89 10 41.5*	*Fl*	*R*	*4s*	.....	.....	*Red, marked "P2".*	*Seasonal.* **Chart:2314**

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LAKE SUPERIOR

No.	Name	Position Latitude N. Longitude W.	Light Characteristics		Focal Height in m. above water	Nominal Range	Description Height in meters above ground	Remarks Fog Signals
Thunder Bay (Cont'd)								
1143.3	*Kaministiquia River Entrance light buoy D1*	*E. side river entrance.* *48 23 45.5* *89 11 56.5*	*Fl*	*G*	*4s*	.....	.....	*Green, marked "D1".*	*Seasonal.* **Chart:2314**
1144	Kaministiquia River Entrance	On breakwater at N. side of river entrance. 48 23 53 89 12 00	Fl	R	10 s	6.7	5	Tower on a building.	Flash 4 s; eclipse 6 s Floodlit. Year round. **Chart:2314 712/99**
1144.1	*Kaministiquia River Terminal Entrance light buoy D7*	*48 23 34.5* *89 12 40*	*Q*	*G*	*1s*	.....	.....	*Green, marked "D7".*	*Seasonal.* **Chart:2314**
1144.3	Kaministiquia River Entrance Inner	N. side of Old Elevator wharf. 48 23 38 89 12 54	F	R		7.9	5	Cylindrical mast, red and white rectangular daymark. 6.0	Year round. **Chart:2314**
1144.4	Kaministiquia River Entrance South	48 23 32 89 12 50	F	G		4.5	.....	Mast.	Privately operated. Year round. **Chart:2314**
1145	Kaministiquia River	On S. bank of river. 48 21 43 89 15 21	F	G		12.5	.....	Cylindrical mast. 6.0	Year round. **Chart:2314**
1146	Kaministiquia River Water Mains Crossing North	On N. side of river. 48 21 48 89 15 32	F	R		9.8	.....	Cylindrical mast. 6.7	Visible from 285° through N. and E. to 105°. Year round. **Chart:2314**
1147	Kaministiquia River Water Mains Crossing South	On S. side of river. 48 21 43 89 15 36.5	F	Y		8.5	5	Cylindrical mast. 6.4	Year round. **Chart:2314**
1150	Thunder Bay South Entrance, North	On N. side of S. entrance to harbour. 48 24 43.5 89 12 21	Fl	R	4s	9.4	.....	Cylindrical mast, red and white rectangular daymark, red triangle in centre. 6.0	Year round. **Chart:2314**
1150.3	Thunder Bay South Entrance, South	On breakwater, S. side of S. entrance. 48 24 38 89 12 18	Fl	G	5s	8.2	8	Mast on building. 3.0	Flash 1 s; eclipse 4 s Floodlit. Year round. **Chart:2314 712/99**
1151	Thunder Bay Central Entrance, South	On breakwater, S. side of main entrance. 48 25 54 89 11 52	Fl	G	4s	7.0	.....	Cylindrical mast, red and white rectangular daymark, black square in centre. 6.0	Floodlit. Year round. **Chart:2314**

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List of Lights, Buoys and Fog Signals *

LAKE SUPERIOR

No.	Name	Position Latitude N. Longitude W.	Light Characteristics			Focal Height in m. above water	Nominal Range	Description Height in meters above ground	Remarks Fog Signals
Thunder Bay (Cont'd)									
1152	Thunder Bay Main	On end of breakwater, N. side of Central entrance. 48 25 58 89 11 45	Fl	R	5s	14.9	12	White square tower. 9.4	Flash every 5 s Floodlit. Emergency light. Year round. **Horn -** Blast 2s; sil. 3s; blast 2s; sil. 3s; blast 2s; sil. 48s Mariners requiring horn to be turned on can activate it clicking radio mike five times within a five (5) second window on channel 19 - 156.95 VHF. Horn can be activated with 1 watt power at 3 NM range. Horn will stay activated for 30 minutes and can be reactivated as required. **Chart:2314**
1153	*Thunder Bay light buoy E3*	*48 25 55* *89 12 12.5*	*Q*	*G*	*1s*	.....	.....	*Green, marked "E3".*	*Seasonal.* **Chart:2314**
1156	Thunder Bay North Entrance South	Near N. end of S. breakwater. 48 26 38 89 10 38	Fl	G	4s	9.4	13	Mast on a building. 3.6	Floodlit. Year round. **Chart:2314** **712/99**
1157	Thunder Bay North Entrance North	Near SW. end of N. breakwater. 48 26 42 89 10 32	Fl	R	4s	8.5	.....	Cylindrical mast, red and white rectangular daymark, red triangle in centre. 6.0	Floodlit. Year round. **Chart:2314**
1158	Pie Island	On point of island. 48 13 45 89 10 30	Fl	W	4s	9.8	5	Square skeleton tower, red and white rectangular daymark. 7.6	Year round. **Chart:2311**
1159	Mink Point	On point. 48 08 22 89 18 09	Fl	W	4s	9.1	5	Square skeleton tower, red and white rectangular daymark. 7.6	Year round. **Chart:2311**
1160	Jarvis Rock	W. side of Spar Channel. 48 06 10 89 17 35	Fl	W	4s	12.2	5	Cylindrical mast, red and white rectangular daymark. 6.0	Year round. **Chart:2311**
1161	Victoria Island	Extremity of point at NW. end of island. 48 04 52 89 21 38	Fl	W	4s	18.0	6	Square skeleton tower, two red and white rectangular daymarks. 9.1	Visible from 022° through E. and S. to 241°. Year round. **Chart:2311**

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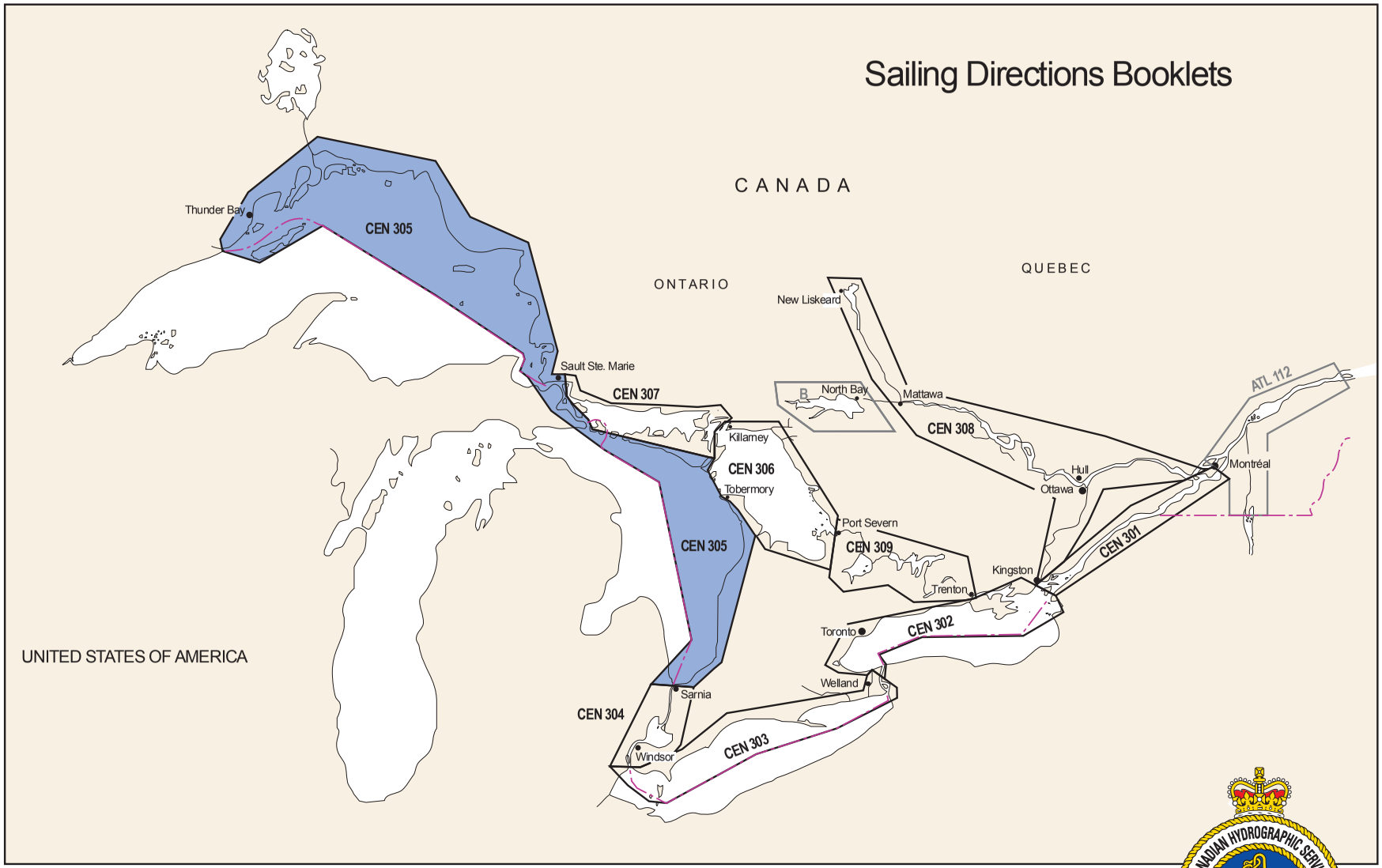
Sailing Directions Booklets



CEN 300	General Information, Great Lakes	CEN 302	Lake Ontario	CEN 306	Georgian Bay
B	Small Craft Guide, Lake Nipissing	CEN 303	Welland Canal and Lake Erie	CEN 307	North Channel of Lake Huron
ATL 112	St. Lawrence River, Cap-Rouge to Montréal and Rivière Richelieu	CEN 304	Detroit River, Lake St. Clair, St. Clair River	CEN 308	Rideau Canal and Ottawa River
CEN 301	St. Lawrence River, Montréal to Kingston	CEN 305	Lake Huron, St. Marys River, Lake Superior	CEN 309	Trent-Severn Waterway

CANADIAN HYDROGRAPHIC SERVICE
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