

BookletChart™

Straits of Mackinac

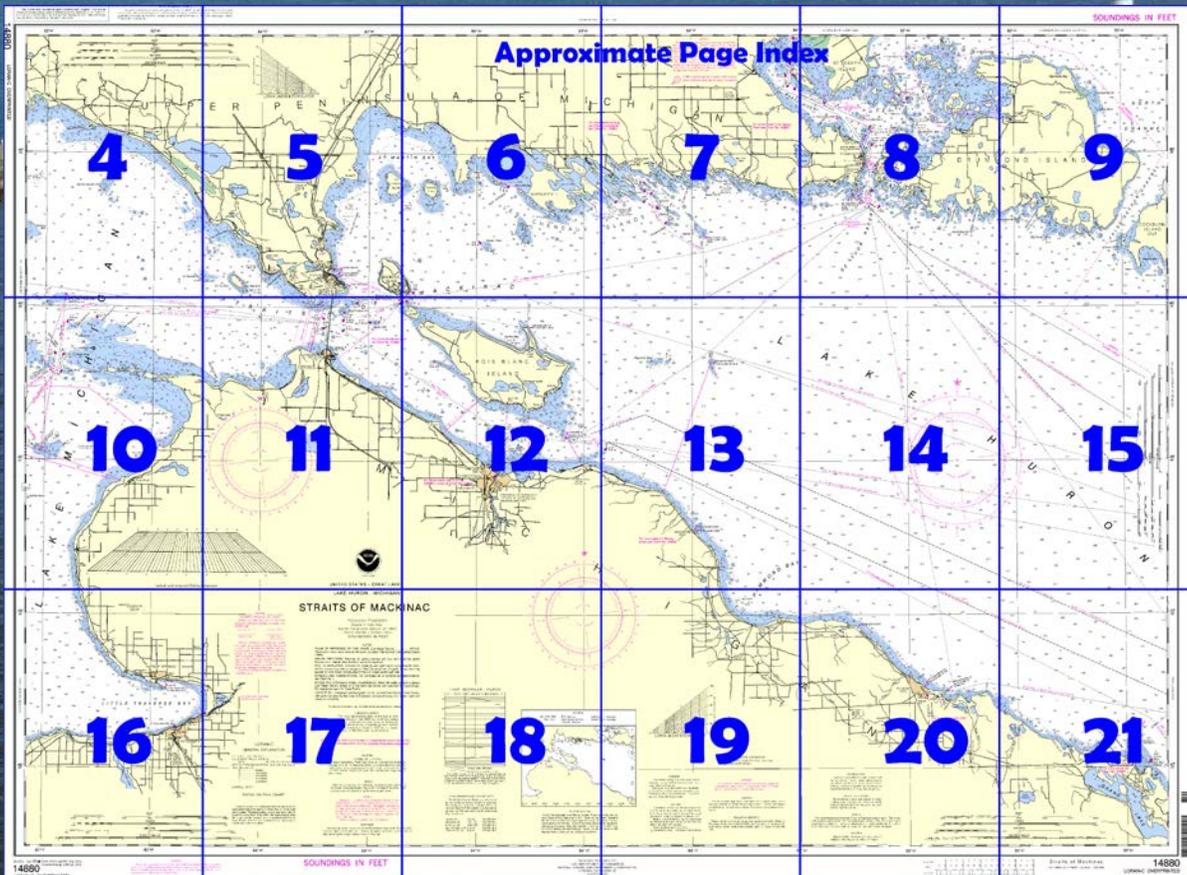
NOAA Chart 14880



*A reduced-scale NOAA nautical chart for small boaters
When possible, use the full-size NOAA chart for navigation.*



- Complete, reduced-scale nautical chart
- Print at home for free
- Convenient size
- Up-to-date with Notices to Mariners
- Compiled by NOAA's Office of Coast Survey, the nation's chartmaker



**Published by the
National Oceanic and Atmospheric Administration
National Ocean Service
Office of Coast Survey
www.NauticalCharts.NOAA.gov
888-990-NOAA**

What are Nautical Charts?

Nautical charts are a fundamental tool of marine navigation. They show water depths, obstructions, buoys, other aids to navigation, and much more. The information is shown in a way that promotes safe and efficient navigation. Chart carriage is mandatory on the commercial ships that carry America's commerce. They are also used on every Navy and Coast Guard ship, fishing and passenger vessels, and are widely carried by recreational boaters.

What is a BookletChart™?

This BookletChart is made to help recreational boaters locate themselves on the water. It has been reduced in scale for convenience, but otherwise contains all the information of the full-scale nautical chart. The bar scales have also been reduced, and are accurate when used to measure distances in this BookletChart. See the Note at the bottom of page 5 for the reduction in scale applied to this chart.

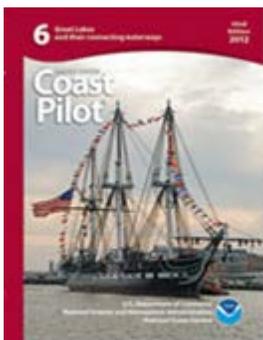
Whenever possible, use the official, full scale NOAA nautical chart for navigation. Nautical chart sales agents are listed on the Internet at <http://www.NauticalCharts.NOAA.gov>.

This BookletChart does NOT fulfill chart carriage requirements for regulated commercial vessels under Titles 33 and 44 of the Code of Federal Regulations.

Notice to Mariners Correction Status

This BookletChart has been updated for chart corrections published in the U.S. Coast Guard Local Notice to Mariners, the National Geospatial Intelligence Agency Weekly Notice to Mariners, and, where applicable, the Canadian Coast Guard Notice to Mariners. Additional chart corrections have been made by NOAA in advance of their publication in a Notice to Mariners. The last Notices to Mariners applied to this chart are listed in the Note at the bottom of page 7. Coast Pilot excerpts are not being corrected.

For latest Coast Pilot excerpt visit the Office of Coast Survey website at <http://www.nauticalcharts.noaa.gov/nsd/searchbychart.php?chart=14880>.



(Selected Excerpts from Coast Pilot)

The trend of the shoreline from Presque Isle is west-northwest for 12 miles to **Adams Point** (45°24.9'N., 83°43.0'W.), thence W for 4.7 miles to Rogers City, and thence northwest for 6.6 miles to Forty Mile Point (45°29.2'N., 83°54.8'W.).

Black Point, 2 miles west of Presque Isle, has deep water within 0.25 mile. About 2 miles east-southeast of Adams Point, a detached 17-foot shoal is 1.2 miles offshore. As foul ground extends from

shore to within 0.4 mile of this shoal, coasting vessels should take care to pass outside the detached shoal. From Adams Point to **Forty Mile Point**, deep water is generally within 0.5 mile of shore.

Calcite, MI, 3.3 miles west of Adams Point, is a private harbor owned and operated by Carmeuse Lime and Stone for shipping limestone. The harbor is protected on the northwest and north by a point and breakwater and to the southeast by **Quarry Point**. The harbor affords no shelter from north to east winds except for small craft, which can enter the tug basin on an emergency only basis.

Calcite Light, a private 8-foot-diameter neon light at the inner end of the loading slip in Calcite, is prominent.

Channels.—A privately dredged entrance channel leads from deep water in Lake Huron southwest for 0.3 mile. At the inner end of the channel, a loading slip extends southwest and a dredged area along the dock face extends southeast. A dredged tug basin protected by a breakwater arm is on the northwest side of the entrance channel. The harbor approach is marked by a private light on the outer end of the breakwater which protects the harbor; a private sound signal is at the light. The channel is marked by two private lighted ranges. A **236°** range of red lights for incoming vessels marks an alinement along the south side of the channel. A range of green lights for outbound vessels leads **056°** at about midchannel. In 2002, the reported controlling depth was 24 feet in the entrance channel and loading slip except for shoaling to 16 feet at the southwest end of the slip, thence depths of 10 to 20 feet in the dredged area along the southeast dock face except for shoaling to 6 feet at the southeast end of the area. In 2002, reported depths of 11 to 22 feet were available in the tug basin with shoaling to 7 feet along the extreme northwest edge.

Fluctuations of water level.—The harbor is subject to fluctuations of water level, and vessels drawing over 17 feet should obtain information from the harbor tugs before entering the harbor. Depth information and harbor blueprints can be obtained at the dock office on the south side of the loading slip. A water gauge on the southwest corner of the tug basin, lighted at night, shows the maximum depth to which vessels may be loaded and should be checked by vessel masters.

Towage.—Tugs are available from the Great Lakes Towing Co. docks in Sault Ste. Marie, at 800-321-3663.

Wharves.—The wharves on the north and south sides of the loading slip have lengths of 938 and 866 feet, respectively, with deck heights of 8 feet. There is open storage for over 200,000 tons of limestone. Conveyor systems can load vessels at 5,000 and 3,000 tons per hour at the north and south wharves, respectively.

Rogers City, MI, is 4.6 miles west of Adams Point and 6.6 miles southeast of Forty Mile Point. It is a center for the mining, processing, and transportation of limestone. The port is an open roadstead with no natural harbor, but two artificial basins provide protection for small craft. A blue water tank about 0.6 mile southwest of the municipal basin is prominent.

An entrance channel marked by private, seasonal buoys leads southwest from deep water in Lake Huron to the municipal small-craft basin, which is formed by breakwaters and entered at the southeast corner. The basin entrance is marked on either side by private lights. In 2001, the entrance channel and basin had a reported depth of 8 feet. On the northwest side of the municipal basin, commercial fishermen use a small basin formed by breakwaters. The entrance to the basin, from northeast, has depths of 3 feet and is difficult in severe storms. Rogers City is a **customs station**.

**U.S. Coast Guard Rescue Coordination Center
24 hour Regional Contact for Emergencies**

RCC Cleveland Commander
9th CG District (216) 902-6117
Cleveland, OH

Table of Selected Chart Notes

Corrected through NM Sep. 24/05
Corrected through LNM Sep. 20/05

RADAR REFLECTORS
Radar reflectors have been placed on many floating aids to navigation. Individual radar reflector identification on these aids has been omitted from this chart.

CAUTION
Improved channels shown by broken lines are subject to shoaling, particularly at the edges.

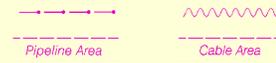
CAUTION
Temporary changes or defects in aids to navigation are not indicated on this chart. See Local Notice to Mariners.
During some winter months or when endangered by ice, certain aids to navigation are replaced by other types or removed. For details see U.S. Coast Guard Light List.

RACING BUOYS
Racing buoys within the limits of this chart are not shown hereon. Information may be obtained from the U.S. Coast Guard District Offices as racing and other private buoys are not all listed in the U.S. Coast Guard Light List.

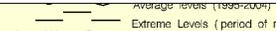
CAUTION
Limitations on the use of radio signals as aids to marine navigation can be found in the U.S. Coast Guard Light Lists and National Geospatial-Intelligence Agency Publication 117.
Radio direction-finder bearings to commercial broadcasting stations are subject to error and should be used with caution.
Station positions are shown thus:
○ (Accurate location) ○ (Approximate location)

NOAA WEATHER RADIO BROADCASTS
The NOAA Weather Radio stations listed below provide continuous weather broadcasts. The reception range is typically 20 to 40 nautical miles from the antenna site, but can be as much as 100 nautical miles for stations at high elevations.

Alpena, MI	KIG-83	162.550 MHz
Gaylord, MI	WWF-70	162.500 MHz
Newberry, MI	WNG-576	162.450 MHz
Sault Ste Marie, MI	KIG-74	162.550 MHz
Traverse City, MI	KIH-22	162.400 MHz

CAUTION
SUBMARINE PIPELINES AND CABLES
Charted submarine pipelines and submarine cables and submarine pipeline and cable areas are shown as:

Additional uncharted submarine pipelines and submarine cables may exist within the area of this chart. Not all submarine pipelines and submarine cables are required to be buried, and those that were originally buried may have become exposed. Mariners should use extreme caution when operating vessels in depths of water comparable to their draft in areas where pipelines and cables may exist, and when anchoring, dragging, or trawling.
Covered wells may be marked by lighted or unlighted buoys.

NOTE C
The U.S. Coast Guard operates a mandatory Vessel Traffic Services (VTS) system in the St. Mary's River. Vessel operating procedures and designated radiotelephone frequencies are published in 33 CFR 161, the U.S. Coast Pilot, and/or the VTS User's Manual. Mariners should consult these sources for applicable rules and reporting requirements. Although mandatory VTS participation is limited to the navigable waters of the United States, certain vessels are encouraged or may be required, as a condition of port entry, to report beyond this area to facilitate traffic management within the VTS area.


Low Water Datum, which is the plane of reference for the levels shown on the above hydrograph, is also the plane of reference for the charted depths. If the lake level is above or below Low Water Datum, the existing depths are correspondingly greater or lesser than the charted depths.

NOTE A
Navigation regulations are published in Chapter 2, U.S. Coast Pilot 6. Additions or revisions to Chapter 2 are published in the Notice to Mariners. Information concerning the regulations may be obtained at the Office of the Commander, 9th Coast Guard District in Cleveland, Ohio or at the Office of the District Engineer, Corps of Engineers in Detroit, Michigan.
Refer to charted regulation section numbers.

HORIZONTAL DATUM
The horizontal reference datum of this chart is North American Datum of 1983 (NAD 83), which for charting purposes is considered equivalent to the World Geodetic System of 1984 (WGS 84). Geographic positions referred to the North American Datum of 1927 do not require conversion to NAD 83 for plotting on this chart.

 **Traffic Control calling-in point with number; arrow indicates direction of vessel movement.**

LORAN-C
GENERAL EXPLANATION
LORAN-C FREQUENCY 100kHz
PULSE REPETITION INTERVAL
8970 89,700 Microseconds
STATION TYPE DESIGNATORS: (Not individual station letter designators).
M Master
W Secondary
X Secondary
Y Secondary
Z Secondary
EXAMPLE: 8970-Y

RATES ON THIS CHART
8970-X 8970-Y

Loran-C correction tables published by the National Geospatial-Intelligence Agency or others should not be used with this chart. The lines of position shown have been adjusted based on survey data. Every effort has been made to meet the 1/4 nautical mile accuracy criteria established by the U.S. Coast Guard. Mariners are cautioned not to rely solely on the lattices in inshore waters.

WARNING
The prudent mariner will not rely solely on any single aid to navigation, particularly on floating aids. See U.S. Coast Guard Light List and U.S. Coast Pilot for details.

SOURCE DIAGRAM
Most of the hydrography identified by the letter "J" was surveyed by the U.S. Army Corps of Engineers prior to 1974. Other outlined areas represent the limits of the most recent hydrographic survey information that has been evaluated for charting. Surveys have been banded in this diagram by date and type of survey. Channels currently maintained by the U.S. Army Corps of Engineers are periodically resurveyed and are not shown on this diagram. Refer to Chapter 1, United States Coast Pilot.

CAUTION
POTABLE WATER INTAKE
Vessels operating in fresh water lakes or rivers shall not discharge sewage, or ballast, or bilge water within such areas adjacent to domestic water intakes as are designated by the Commissioner of Food and Drugs (21 CFR 1250.93). Consult U.S. Coast Pilot 6 for important supplemental information.

CAUTION
Due to periodic high water conditions in the Great Lakes, some features charted as visible at Low Water Datum may be submerged, particularly in the near shore areas. Mariners should proceed with caution.

Sailing courses and limits indicated in magenta are recommended by the Lake Carriers Association and the Canadian Shipowners Association.

SAILING DIRECTIONS. Bearings of sailing courses are true and distances given thereon are in statute miles between points of departure.

PLANE OF REFERENCE OF THIS CHART (Low Water Datum) 577.5 ft. Referred to mean water level at Rimouski, Quebec, International Great Lakes Datum (1985).

AUTHORITIES: Hydrography and topography by the National Ocean Service, Coast Survey, with additional data from the Corps of Engineers, Geological Survey, U.S. Coast Guard, and Canadian authorities.

BRIDGE AND OVERHEAD CABLE CLEARANCES. When the water surface is above Low Water Datum, bridge and overhead clearances are reduced correspondingly. For clearances see U.S. Coast Pilot 6.

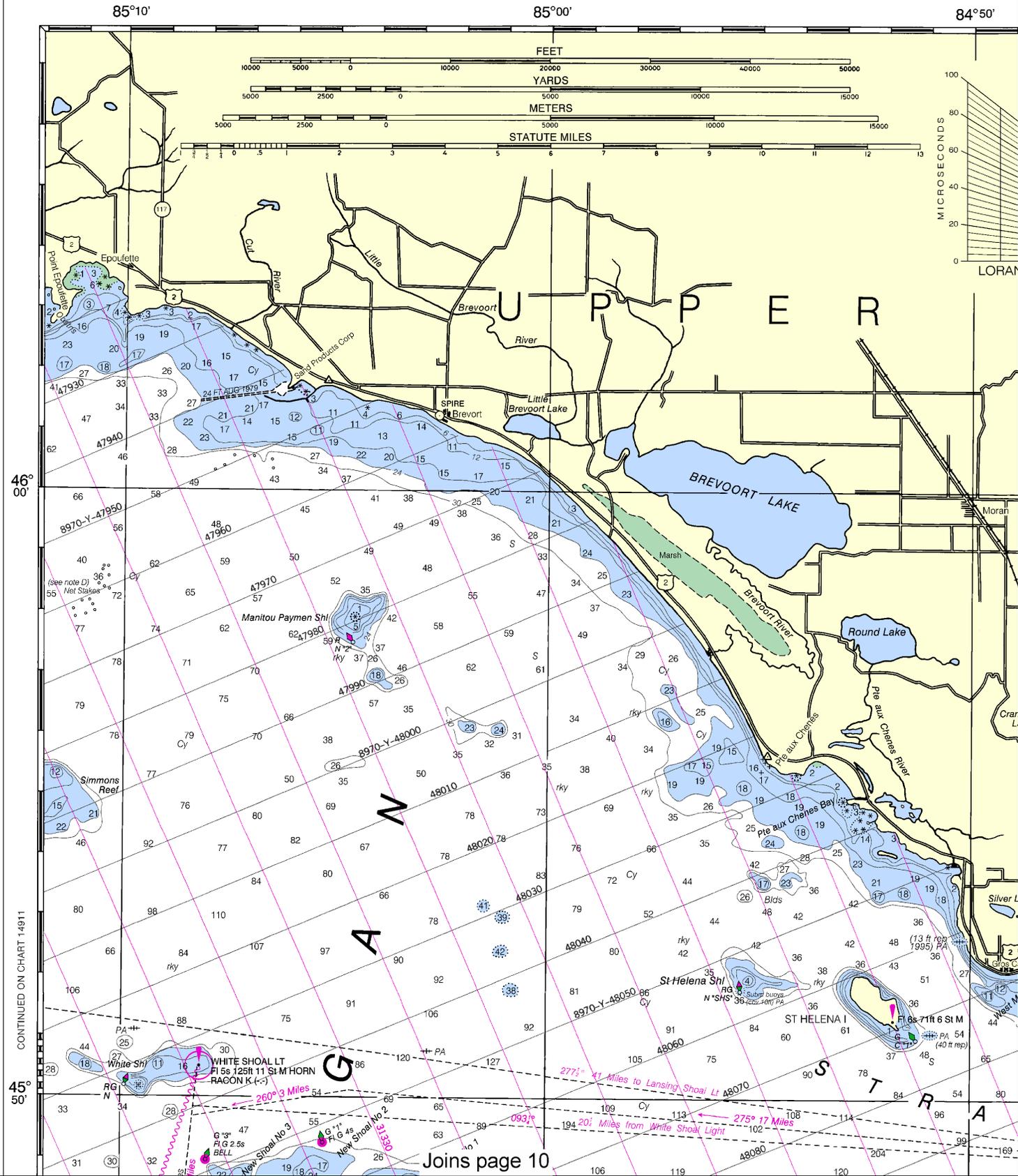
This nautical chart has been designed to promote safe navigation. The National Ocean Service encourages users to submit corrections, additions, or comments for improving this chart to the Chief, Marine Chart Division (N/C52), National Ocean Service, NOAA, Silver Spring, Maryland 20910-3282.

PRINT-ON-DEMAND CHARTS

This chart is available in a version updated weekly by NOAA for Notices to Mariners and critical corrections. Charts are printed when ordered using Print-on-Demand technology. New Editions are available 5-8 weeks before their release as traditional NOAA charts. Ask your chart agent about Print-on-Demand charts.

14880

LO-RAN-C OVERPRINTED



4

Note: Chart grid lines are aligned with true north.

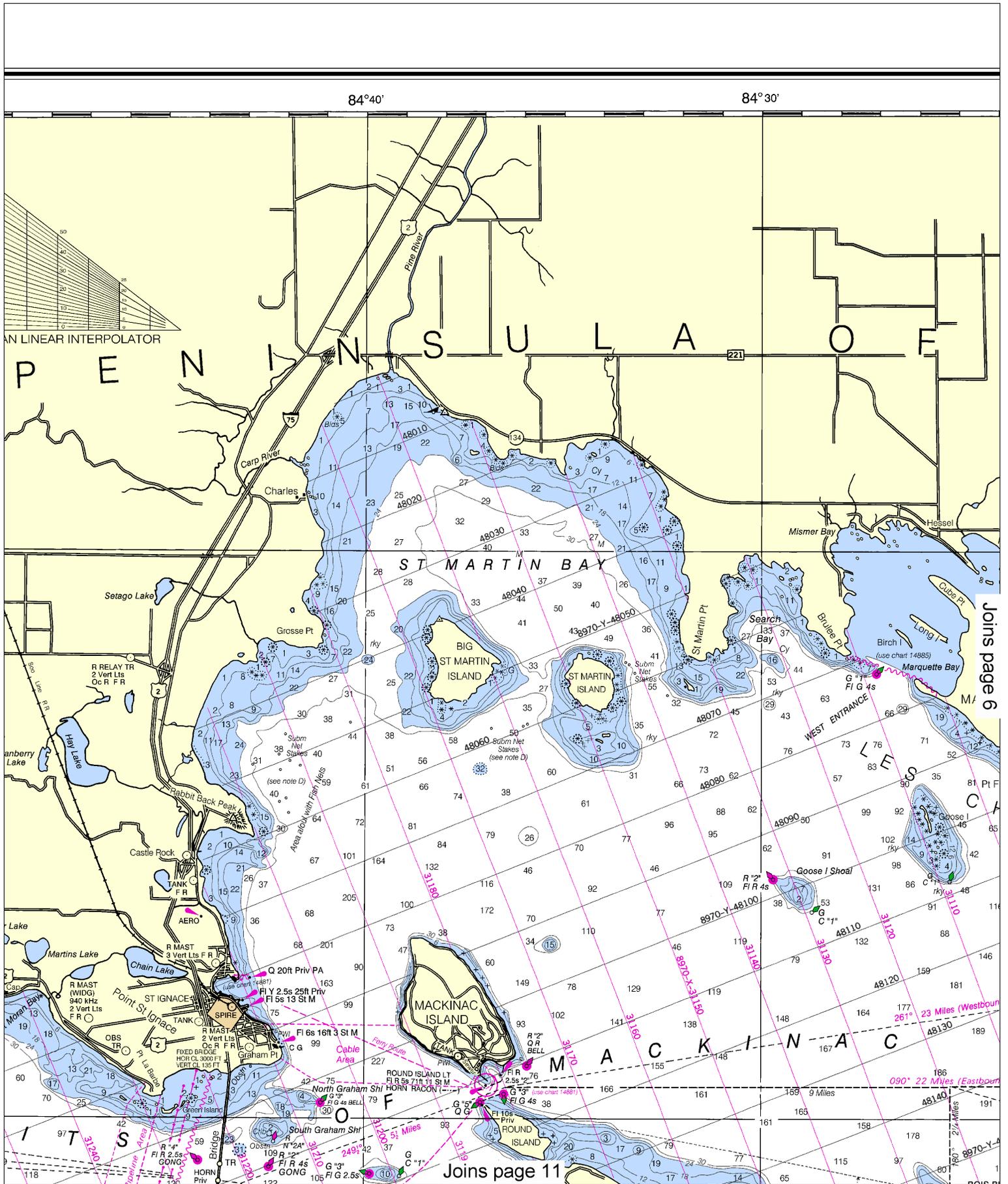
Printed at reduced scale.

YARDS

See Note on page 5.

STATUTE MILES





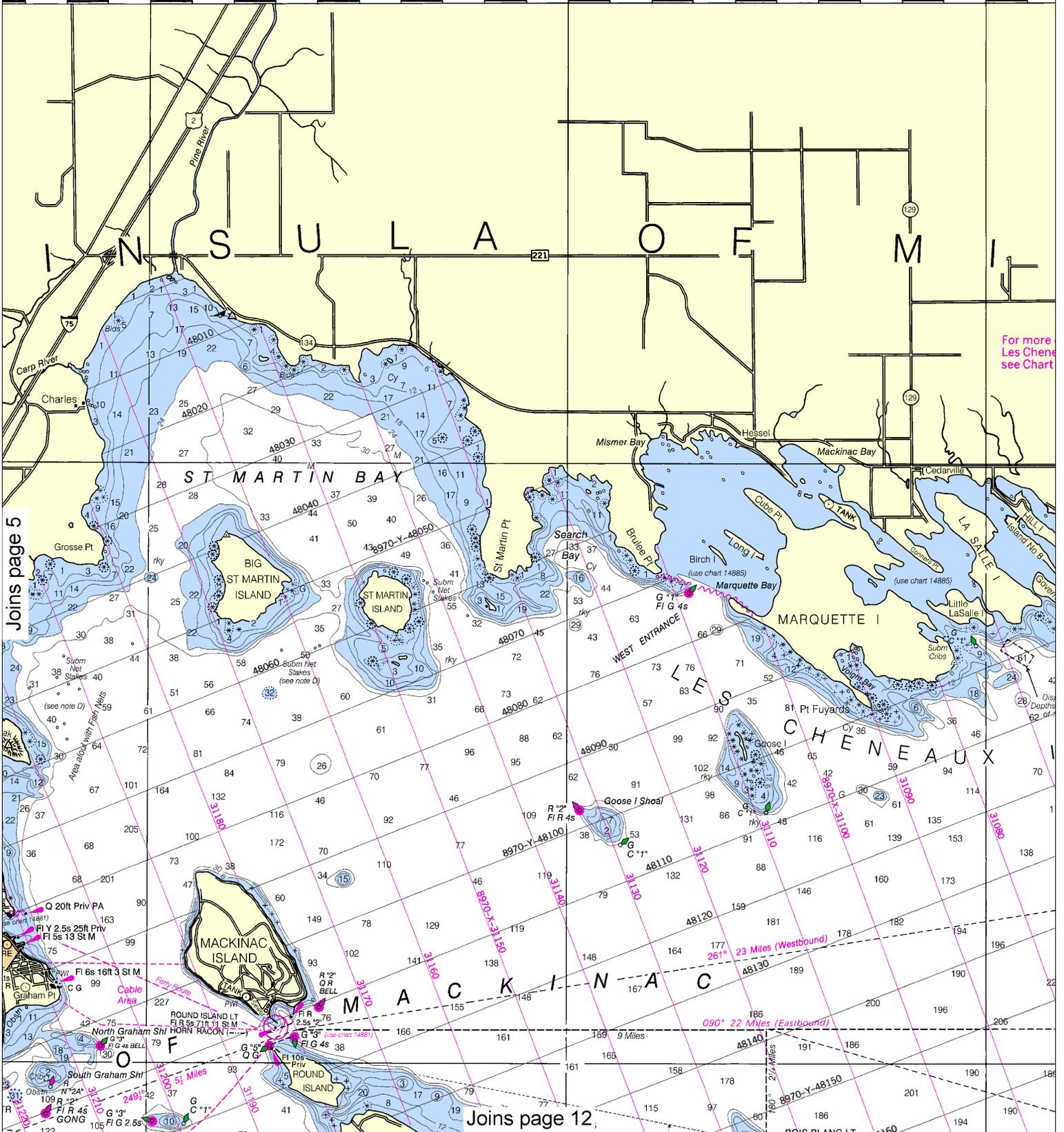
This BookletChart was reduced to 75% of the original chart scale. The new scale is 1:160000. Barscales have also been reduced and are accurate when used to measure distances in this BookletChart.



84°40'

84°30'

84°20'



For more Les Chenees see Chart

Joins page 5

Joins page 12

6

Note: Chart grid lines are aligned with true north.

Printed at reduced scale.

YARDS

See Note on page 5.

STATUTE MILES



84°10'

84°00'

CONTINUED ON CHART 14882

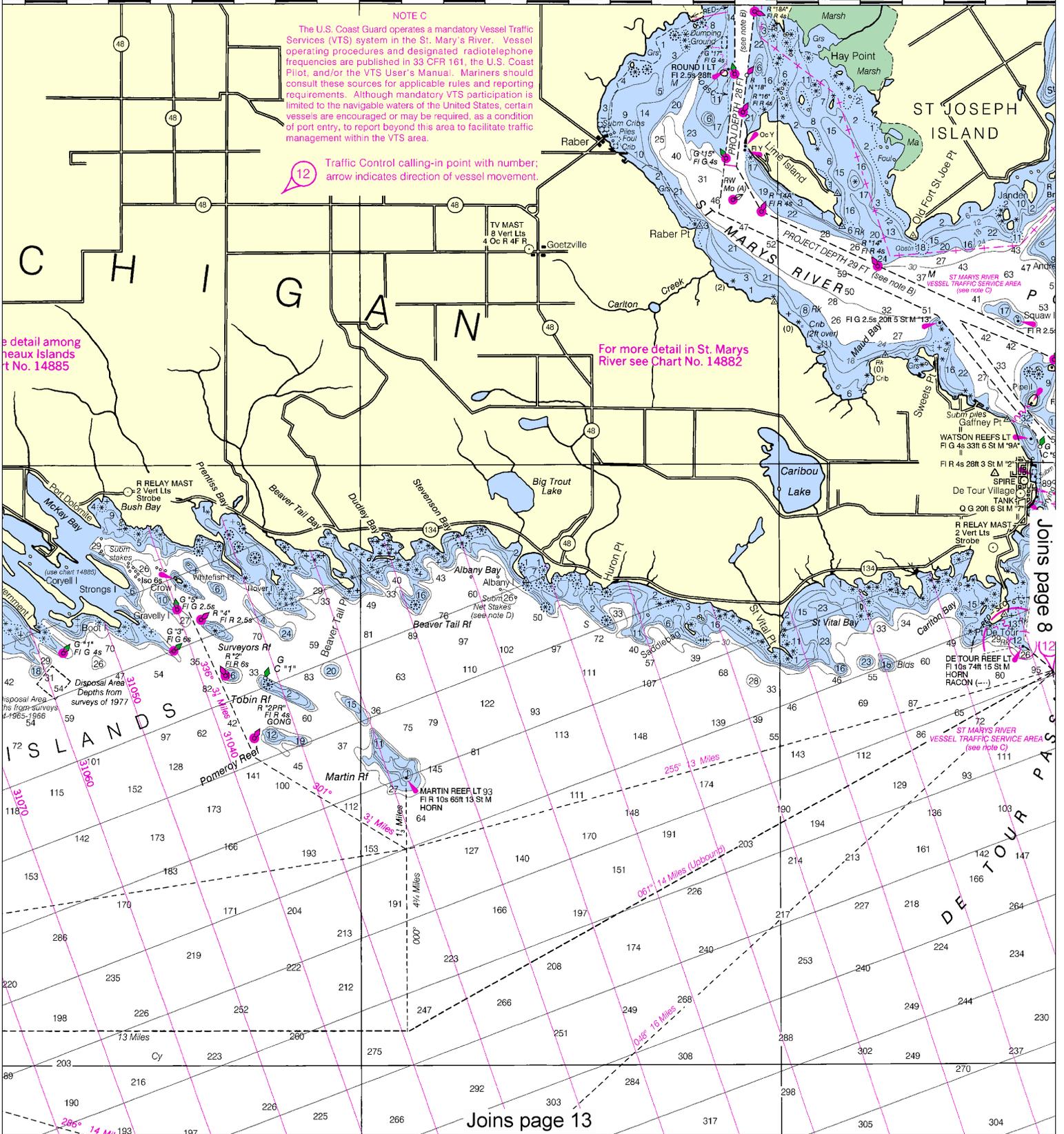
NOTE C

The U.S. Coast Guard operates a mandatory Vessel Traffic Services (VTS) system in the St. Mary's River. Vessel operating procedures and designated radiotelephone frequencies are published in 33 CFR 161, the U.S. Coast Pilot, and/or the VTS User's Manual. Mariners should consult these sources for applicable rules and reporting requirements. Although mandatory VTS participation is limited to the navigable waters of the United States, certain vessels are encouraged or may be required, as a condition of port entry, to report beyond this area to facilitate traffic management within the VTS area.

12 Traffic Control calling-in point with number; arrow indicates direction of vessel movement.

For more detail among the main islands see Chart No. 14885

For more detail in St. Mary's River see Chart No. 14882



Joins page 13

Joins page 8



84°10'

84°00'

CONTINUED ON CHART 14882

83°50'

NOTE C

The U.S. Coast Guard operates a mandatory Vessel Traffic Services (VTS) system in the St. Mary's River. Vessel operating procedures and designated radiotelephone frequencies are published in 33 CFR 161, the U.S. Coast Pilot, and/or the VTS User's Manual. Mariners should consult these sources for applicable rules and reporting requirements. Although mandatory VTS participation is limited to the navigable waters of the United States, certain vessels are encouraged or may be required, as a condition of port entry, to report beyond this area to facilitate traffic management within the VTS area.

12 Traffic Control calling-in point with number; arrow indicates direction of vessel movement.

For more detail in St. Marys River see Chart No. 14882

Joins page 7

Joins page 14



Note: Chart grid lines are aligned with true north.

Printed at reduced scale.

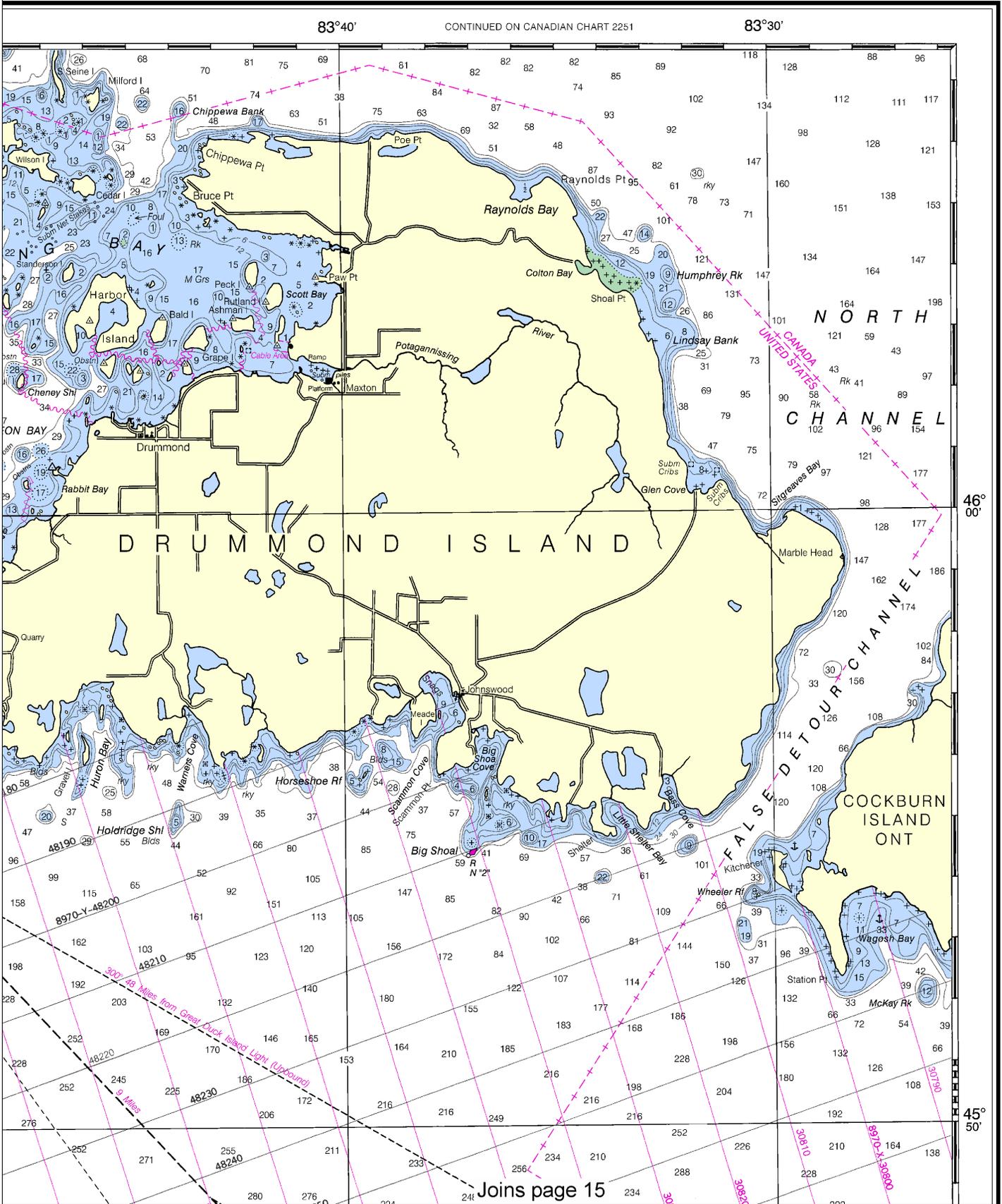
YARDS

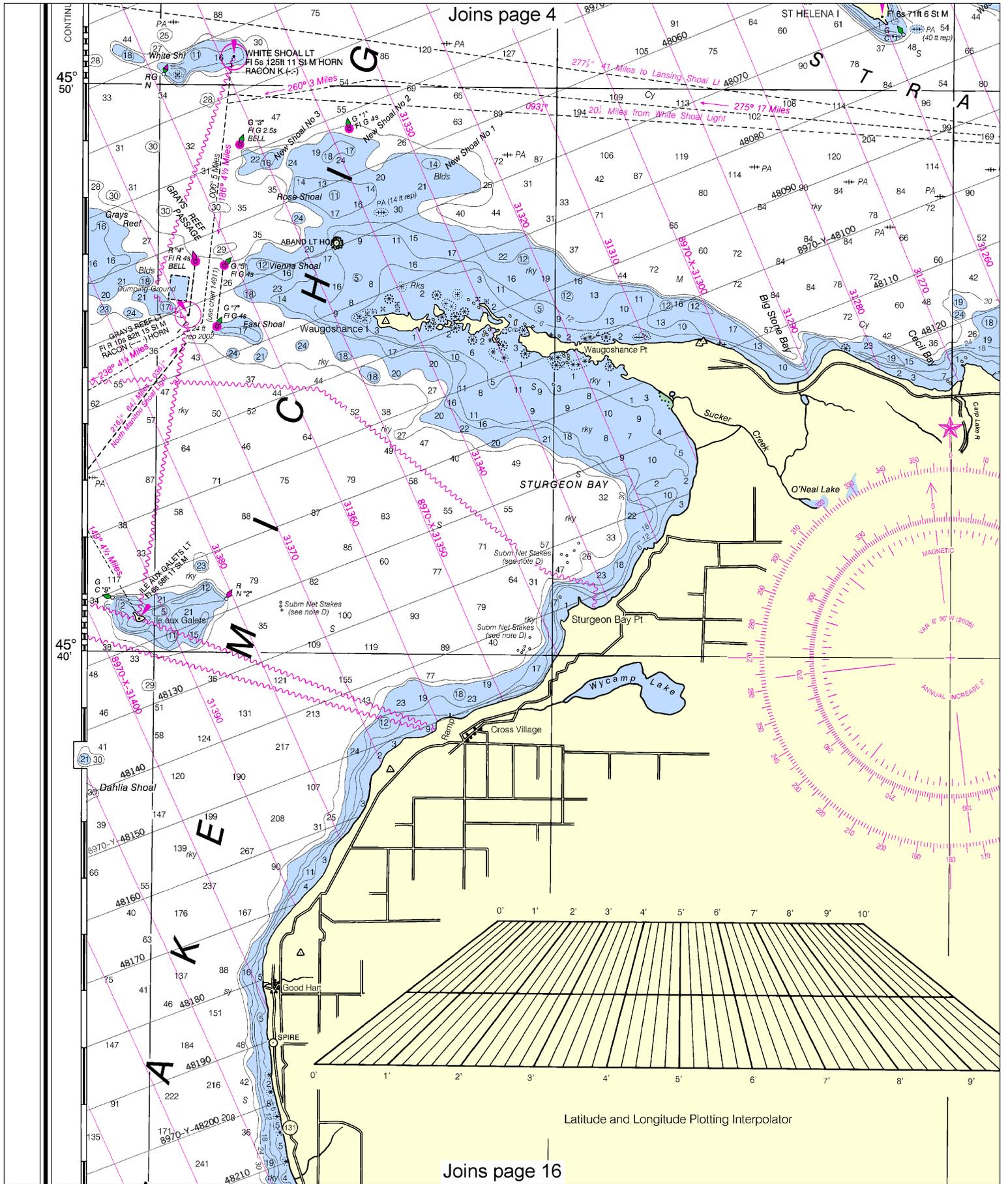
See Note on page 5.

STATUTE MILES



SOUNDINGS IN FEET





Joins page 4

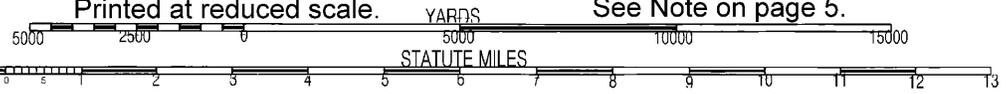
Joins page 16

10

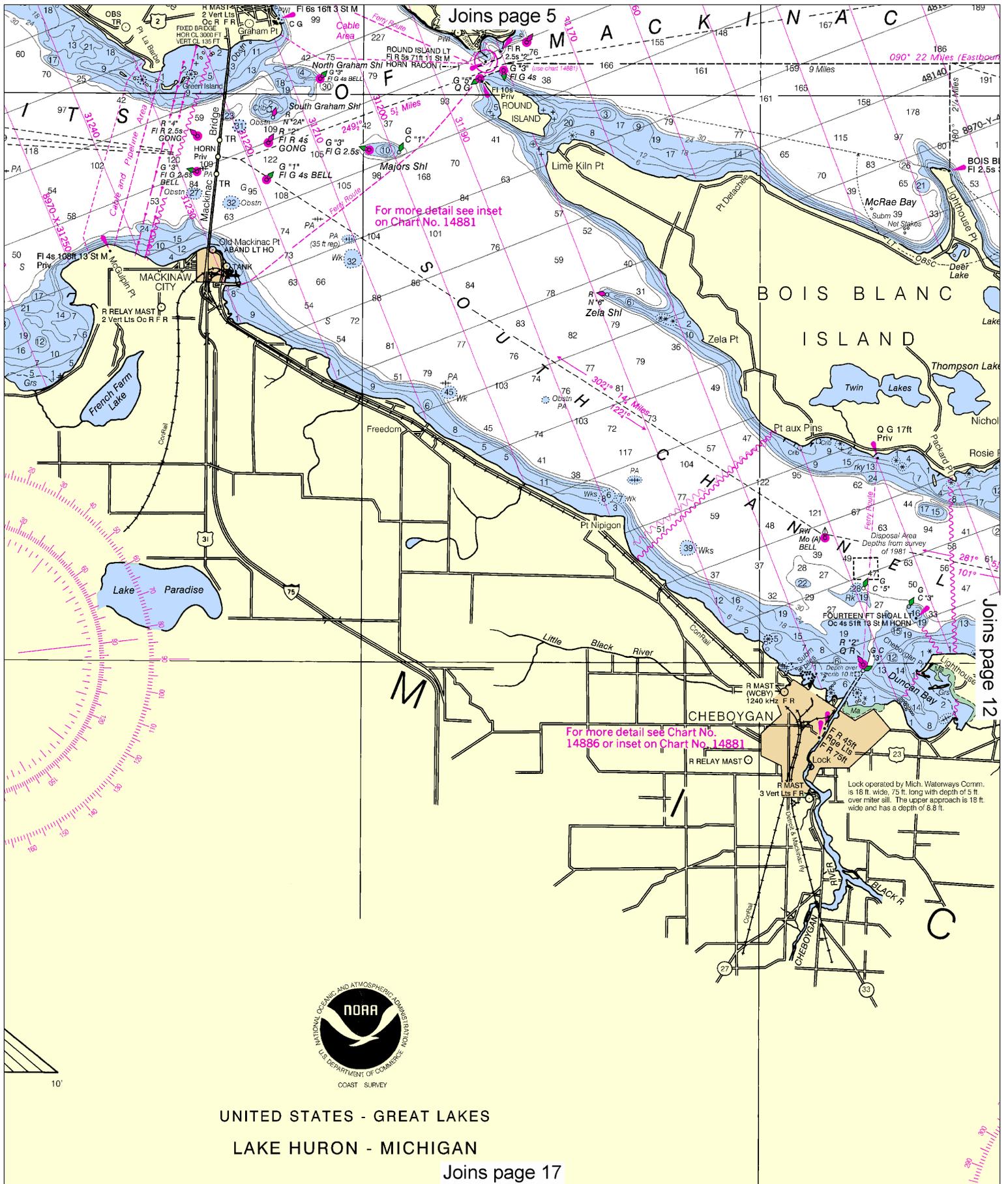
Note: Chart grid lines are aligned with true north.

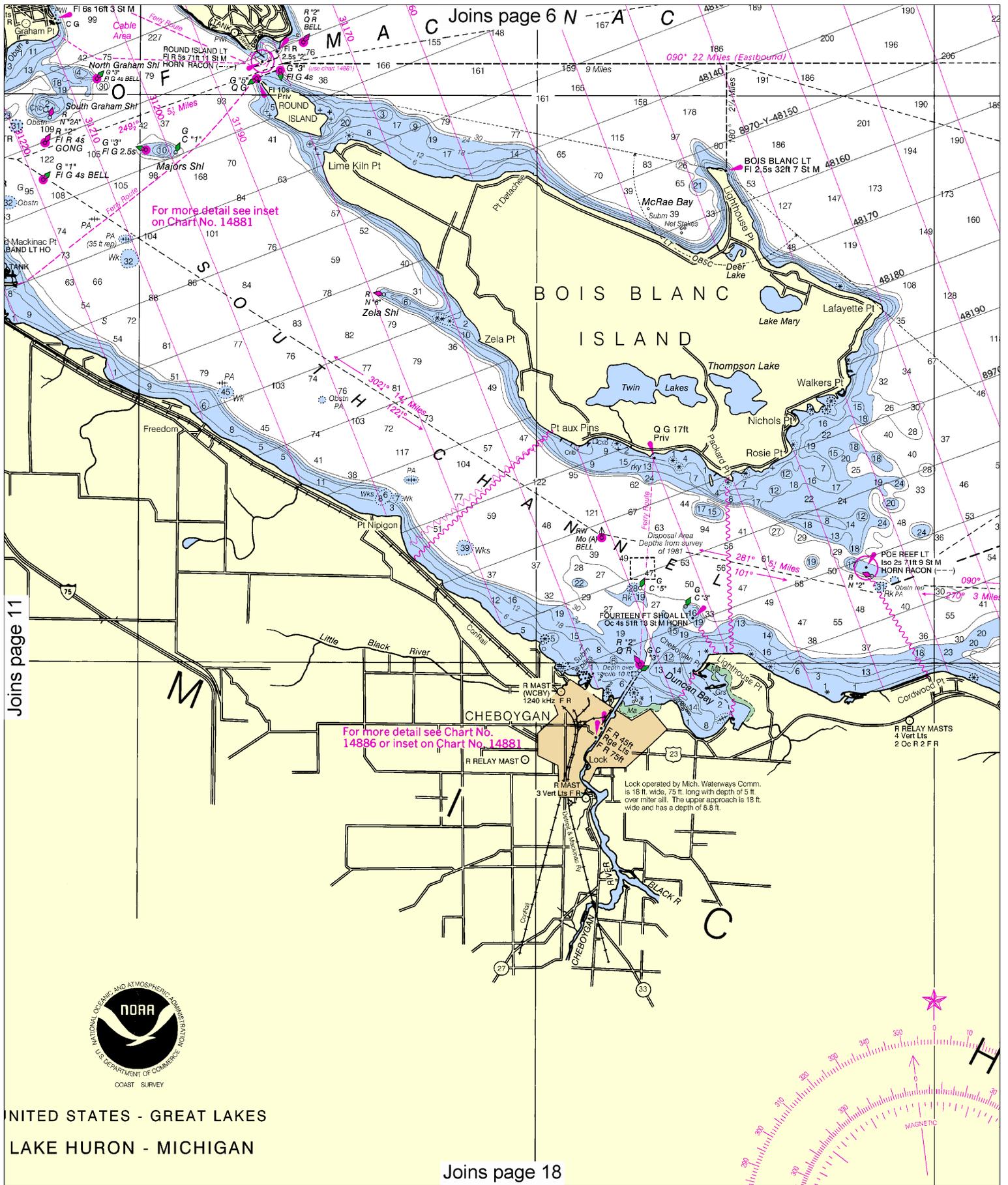
Printed at reduced scale.

See Note on page 5.



Latitude and Longitude Plotting Interpolator





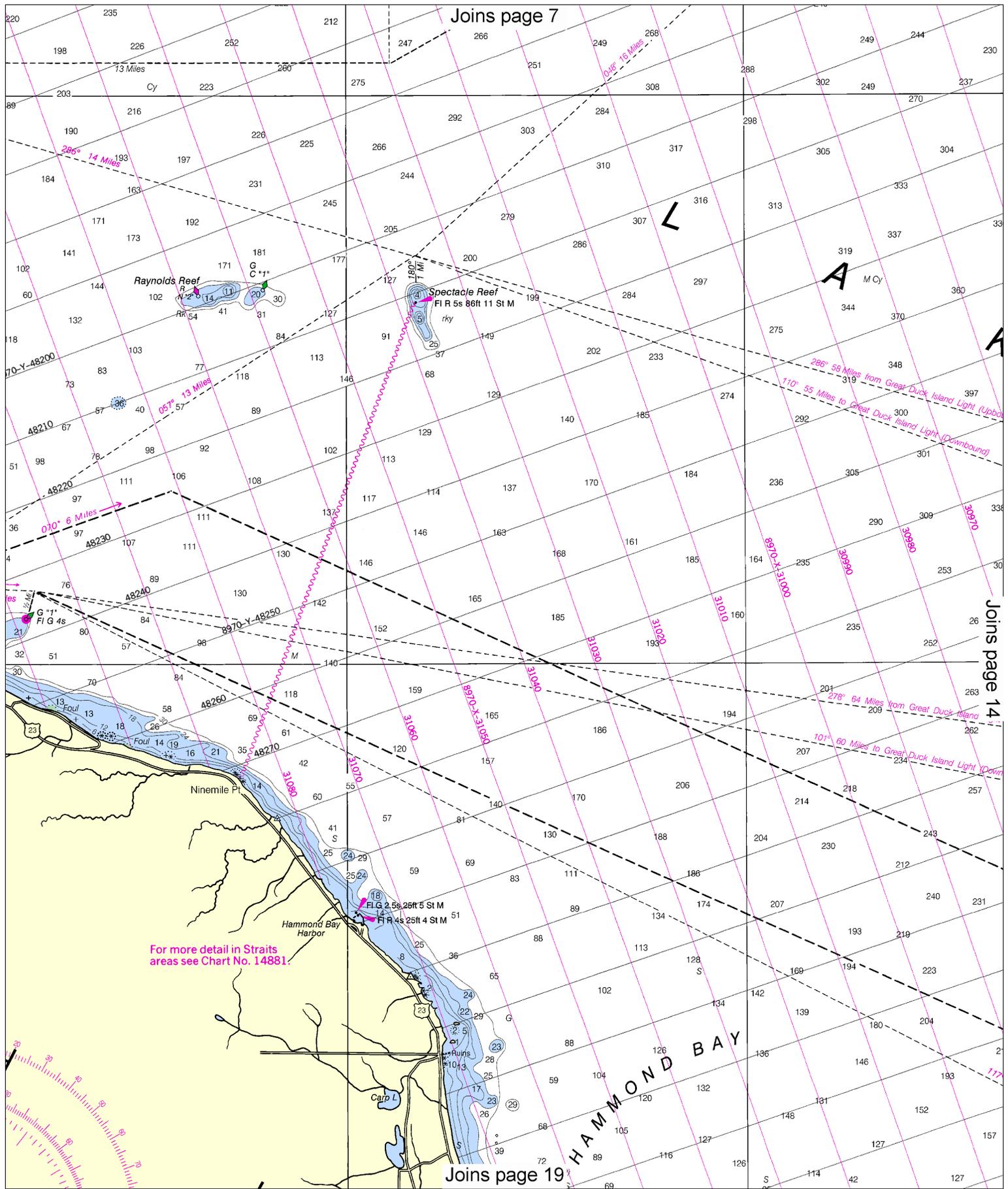
12

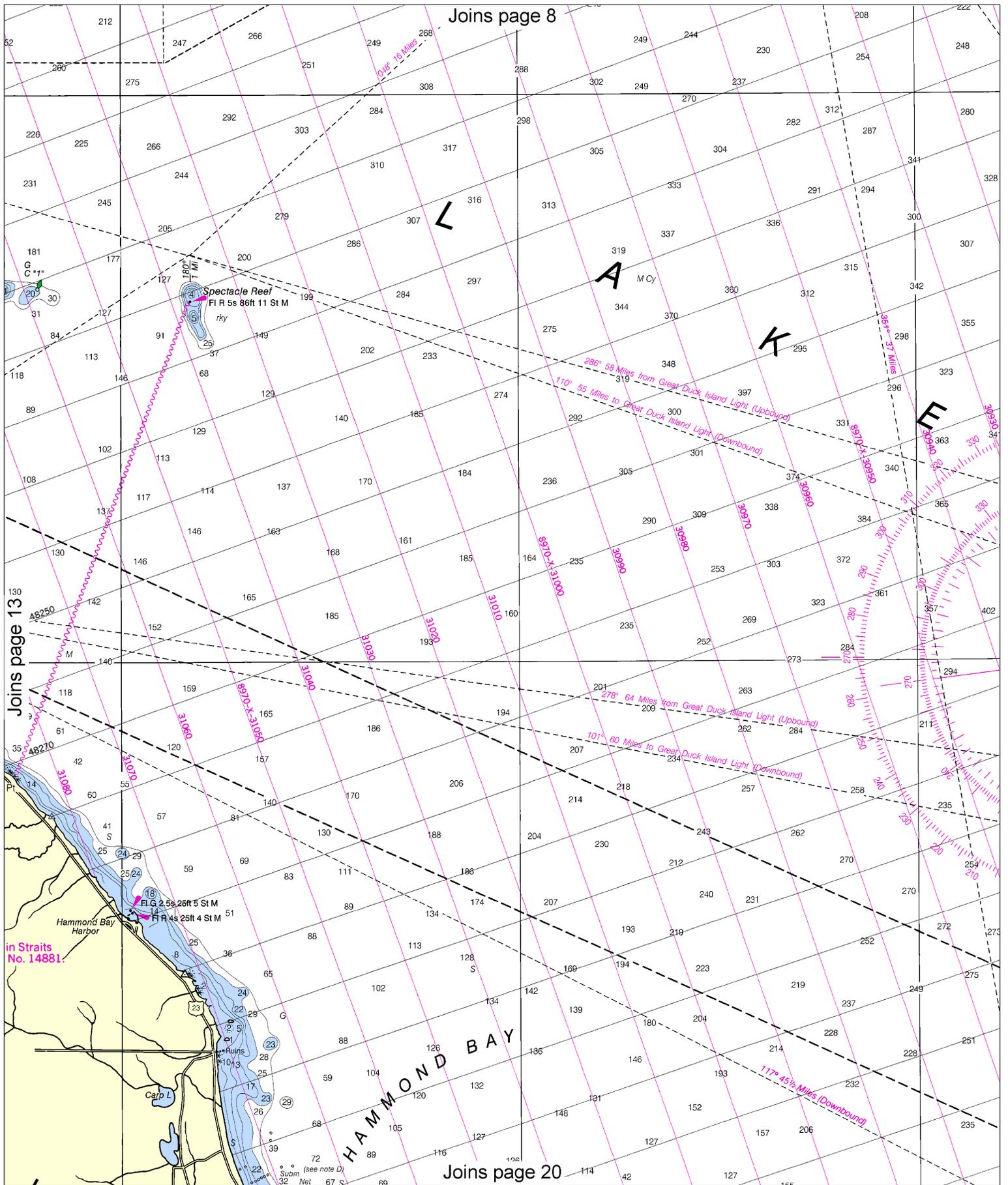
Note: Chart grid lines are aligned with true north.

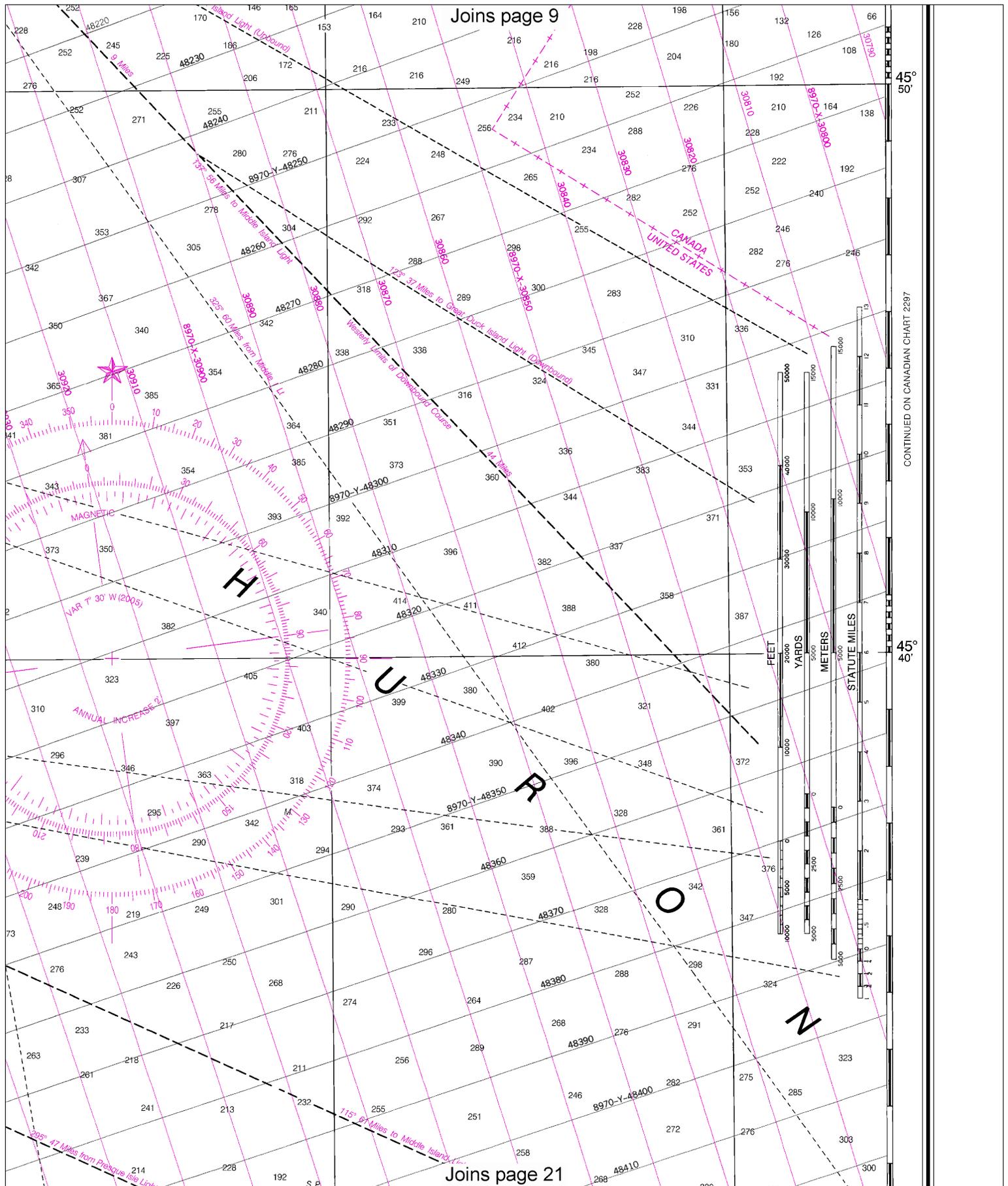
Printed at reduced scale.



See Note on page 5.





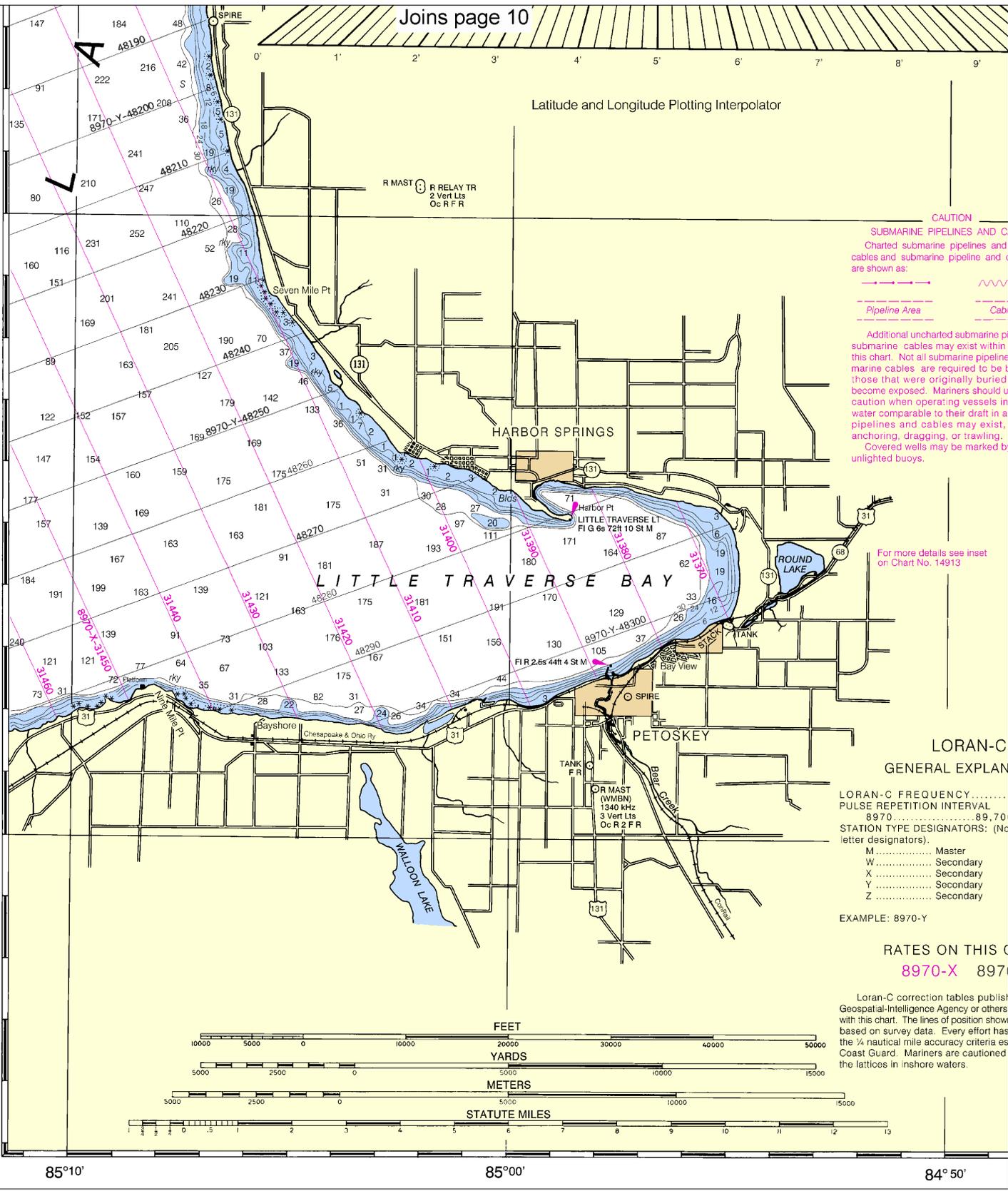


CONTINUED ON CANADIAN CHART 2297

Latitude and Longitude Plotting Interpolator

45° 30' 45° 20'

CONTINUED ON CHART 14913



CAUTION
SUBMARINE PIPELINES AND C
 Charted submarine pipelines and cables and submarine pipelines and cables are shown as:

----- Pipeline Area ----- Cable

Additional uncharted submarine pipelines and cables may exist within this chart. Not all submarine pipelines and cables are required to be those that were originally buried and become exposed. Mariners should exercise caution when operating vessels in shallow water comparable to their draft in areas where pipelines and cables may exist, including dragging, or trawling. Covered wells may be marked by unlighted buoys.

For more details see inset on Chart No. 14913

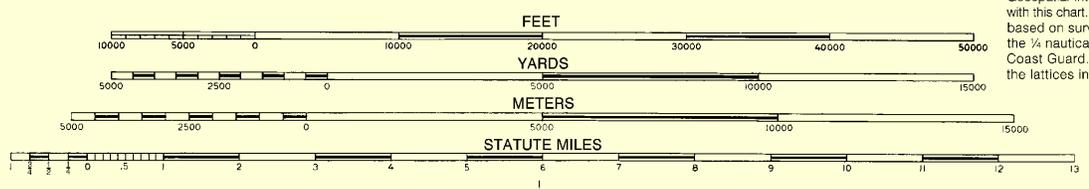
LORAN-C GENERAL EXPLANATION

LORAN-C FREQUENCY.....
 PULSE REPETITION INTERVAL.....
 8970.....89,70
 STATION TYPE DESIGNATORS: (No letter designators).
 M.....Master
 W.....Secondary
 X.....Secondary
 Y.....Secondary
 Z.....Secondary

EXAMPLE: 8970-Y

RATES ON THIS CHART
8970-X 8970-Y

Loran-C correction tables published by the Geospatial-Intelligence Agency or others with this chart. The lines of position shown are based on survey data. Every effort has been made to meet the 1/4 nautical mile accuracy criteria established by the U.S. Coast Guard. Mariners are cautioned to use the lattices in inshore waters.



85°10' 85°00' 84°50'

32nd Ed., Sep./05 Corrected through NM Sep. 24/05 Corrected through LNM Sep. 20/05

14880
LORAN-C OVERPRINTED

CAUTION
 This chart has been corrected from the Notice to Mariners (NM) published weekly by the National Geospatial-Intelligence Agency and the Local Notice to Mariners (LNM) issued periodically by each U.S. Coast Guard district to the dates shown in the lower left hand corner.

16

Note: Chart grid lines are aligned with true north.

Printed at reduced scale.



See Note on page 5.



UNITED STATES - GREAT LAKES
LAKE HURON - MICHIGAN

STRAITS OF MACKINAC

Polyconic Projection
Scale 1:120,000
North American Datum of 1983
(World Geodetic System 1984)
SOUNDINGS IN FEET

NOTES

PLANE OF REFERENCE OF THIS CHART (Low Water Datum) 577.5 ft. Referred to mean water level at Rimouski, Quebec, International Great Lakes Datum (1985).

SAILING DIRECTIONS. Bearings of sailing courses are true and distances given thereon are in statute miles between points of departure.

AIDS TO NAVIGATION. Consult U.S. Coast Guard Light List for supplemental information concerning aids to navigation. See Canadian List of Lights, Buoys and Fog Signals for information not included in the U.S. Coast Guard Light List.

SYMBOLS AND ABBREVIATIONS. For complete list of symbols and abbreviations see Chart No. 1.

BRIDGE AND OVERHEAD CABLE CLEARANCES. When the water surface is above Low Water Datum, bridge and overhead clearances are reduced correspondingly. For clearances see U.S. Coast Pilot 6.

AUTHORITIES. Hydrography and topography by the National Ocean Service, Coast Survey, with additional data from the Corps of Engineers, Geological Survey, U.S. Coast Guard, and Canadian authorities.

Additional information can be obtained at nauticalcharts.noaa.gov.

HORIZONTAL DATUM

The horizontal reference datum of this chart is North American Datum of 1983 (NAD 83), which for charting purposes is considered equivalent to the World Geodetic System of 1984 (WGS 84). Geographic positions referred to the North American Datum of 1927 do not require conversion to NAD 83 for plotting on this chart.

Sailing courses and limits indicated in magenta are recommended by the Lake Carriers Association and the Canadian Shipowners Association.

CAUTION

POTABLE WATER INTAKE

Vessels operating in fresh water lakes or rivers shall not discharge sewage, or ballast, or bilge water within such areas adjacent to domestic water intakes as are designated by the Commissioner of Food and Drugs (21 CFR 1250.93). Consult U.S. Coast Pilot 6 for important supplemental information.

NOTE D

Mariners are warned that numerous uncharted stakes and fishing structures, some submerged, may exist in the area of this chart. Such structures are not charted unless known to be permanent.

NOTE A

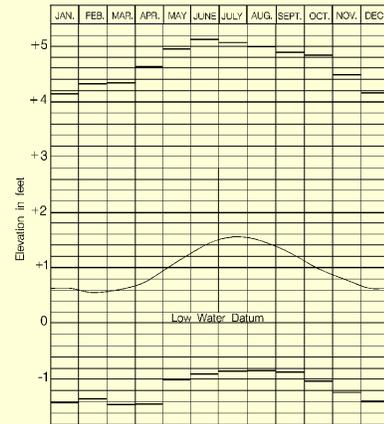
Navigation regulations are published in Chapter 2, U.S. Coast Pilot 6. Additions or revisions to Chapter 2 are published in the Notice to Mariners. Information concerning the regulations may be obtained at the Office of the Commander, 9th Coast Guard District in Cleveland, Ohio or at the Office of the District Engineer, Corps of Engineers in Detroit, Michigan.

Refer to charted regulation section numbers.

COPYRIGHT

No copyright is claimed by the United States Government under Title 17 U.S.C. However, other nations may claim intellectual property rights on the compilation of data depicting the foreign waters shown on this chart.

LAKE MICHIGAN - HURON



Average levels (1995-2004)
Extreme Levels (period of record)
Low Water Datum, which is the plane of reference for the levels shown on the above hydrograph, is also the plane of reference for the charted depths. If the lake level is above or below Low Water Datum, the existing depths are correspondingly greater or lesser than the charted depths.

NOAA WEATHER RADIO BROADCASTS

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Gaylaord, MI	WWF-70	162.500 MHz
Newberry, MI	WNG-576	162.450 MHz
Sault Ste Marie, MI	KIG-74	162.550 MHz
Traverse City, MI	KIH-22	162.400 MHz

CABLES
and submarine
cable areas

pipelines and
in the area of
buried, and
may have
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in depths of
areas where
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by lighted or

NATION
.....100kHz
00 Microseconds
Not individual station

CHART
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rs should not be used
wn have been adjusted
as been made to meet
established by the U.S.
d not to rely solely on

84° 40'

84° 30'

SOUNDINGS IN FEET

Joins page 18



UNITED STATES - GREAT LAKES LAKE HURON - MICHIGAN SOUNDINGS OF MACKINAC

Polyconic Projection
Scale 1:120,000
North American Datum of 1983
(World Geodetic System 1984)
SOUNDINGS IN FEET

NOTES
REFERENCE OF THIS CHART (Low Water Datum) 577.5 ft.
mean water level at Rimouski, Quebec, International Great Lakes Datum

SECTION. Bearings of sailing courses are true and distances given
statute miles between points of departure.

IGATION. Consult U.S. Coast Guard Light List for supplemental infor-
mation aids to navigation. See Canadian List of Lights, Buoys and Fog
signals not included in the U.S. Coast Guard Light List.

AD ABBREVIATIONS. For complete list of symbols and abbreviations
see U.S. Coast Pilot 6.

OVERHEAD CABLE CLEARANCES. When the water surface is above
Low Water Datum, bridge and overhead clearances are reduced correspondingly.
See U.S. Coast Pilot 6.

Hydrography and topography by the National Ocean Service, Coast Survey,
and data from the Corps of Engineers, Geological Survey, U.S. Coast Guard, and
other sources.

Additional information can be obtained at nauticalcharts.noaa.gov.

HORIZONTAL DATUM

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Joins page 17

Soundings and limits indicated in magenta are recommended by the International Hydrographic Association and the Canadian Shipowners Association.

CAUTION

POTABLE WATER INTAKE

Vessels operating in fresh water lakes or rivers shall not discharge sewage, or ballast, or bilge water within such areas adjacent to domestic water intakes as are designated by the Commissioner of Food and Drugs (CFR 1250.93). Consult U.S. Coast Pilot 6 for important supplemental information.

NOTE D

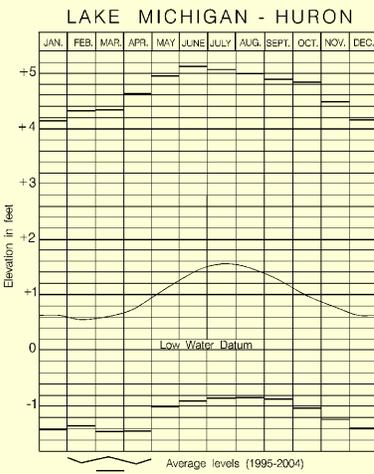
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Refer to charted regulation section numbers.

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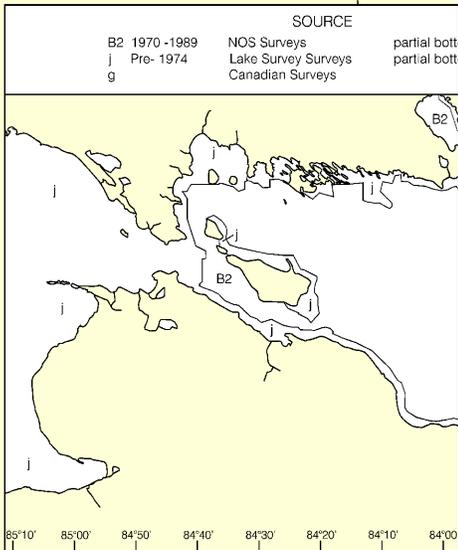


Low Water Datum, which is the plane of reference for the levels shown on the above hydrograph, is also the plane of reference for the charted depths. If the lake level is above or below Low Water Datum, the existing depths are correspondingly greater or lesser than the charted depths.

NOAA WEATHER RADIO BROADCASTS

The NOAA Weather Radio stations listed below provide continuous weather broadcasts. The reception range is typically 20 to 40 nautical miles from the antenna site, but can be as much as 100 nautical miles for stations at high elevations.

Alpena, MI	KIG-83	162.550 MHz
Gaylaord, MI	WWF-70	162.500 MHz
Newberry, MI	WNG-576	162.450 MHz
Sault Ste Marie, MI	KIG-74	162.550 MHz
Traverse City, MI	KIH-22	162.400 MHz



Most of the hydrography identified by the letter "j" was surveyed by the Army Corps of Engineers prior to 1974. Other outlined areas are within the limits of the most recent hydrographic survey information. Surveys have been banded in date and type of survey. Channels currently maintained by the Corps of Engineers are periodically resurveyed and are not shown. Refer to Chapter 1, United States Coast Pilot.

84° 40'

84° 30'

84° 20'

SOUNDINGS IN FEET

Published at Washington, D.C.
U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL OCEANIC SURVEY
COAST SURVEY

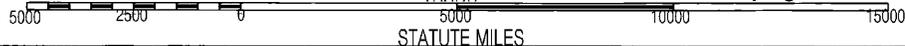
18

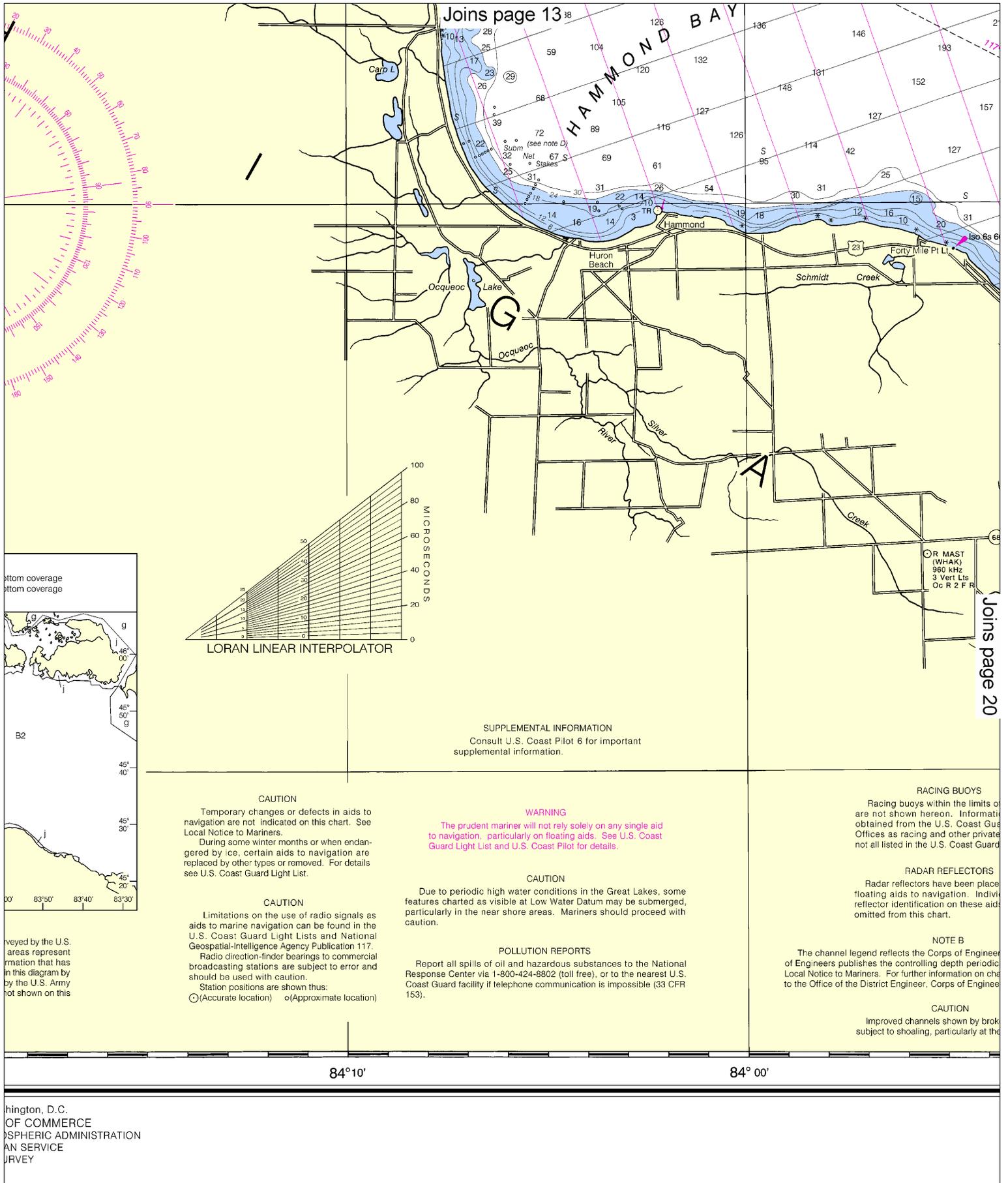
Note: Chart grid lines are aligned with true north.

Printed at reduced scale.

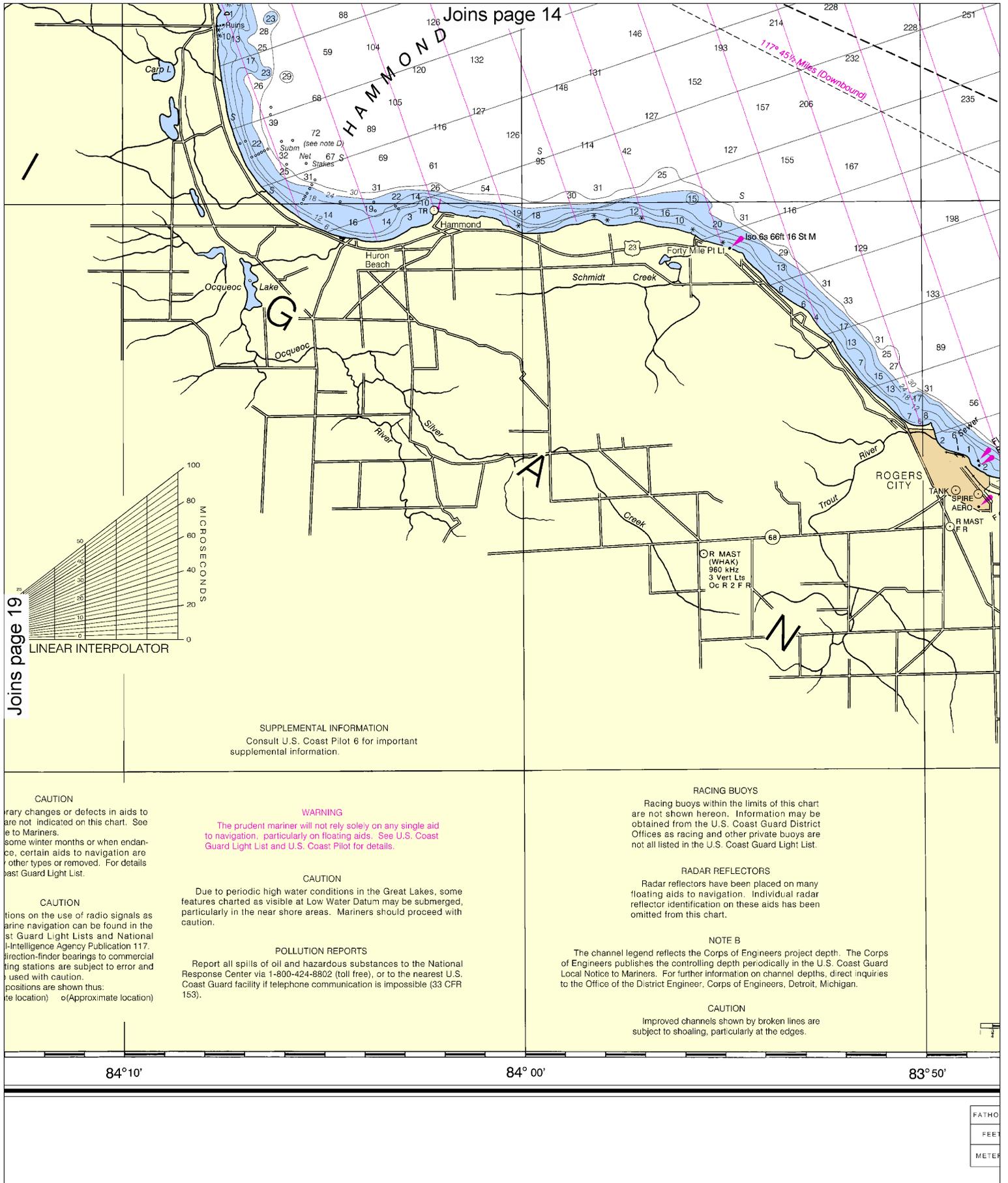
YARDS

See Note on page 5.





Washington, D.C.
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NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
COAST AND GEODETIC SURVEY



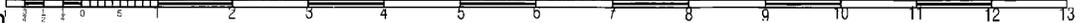
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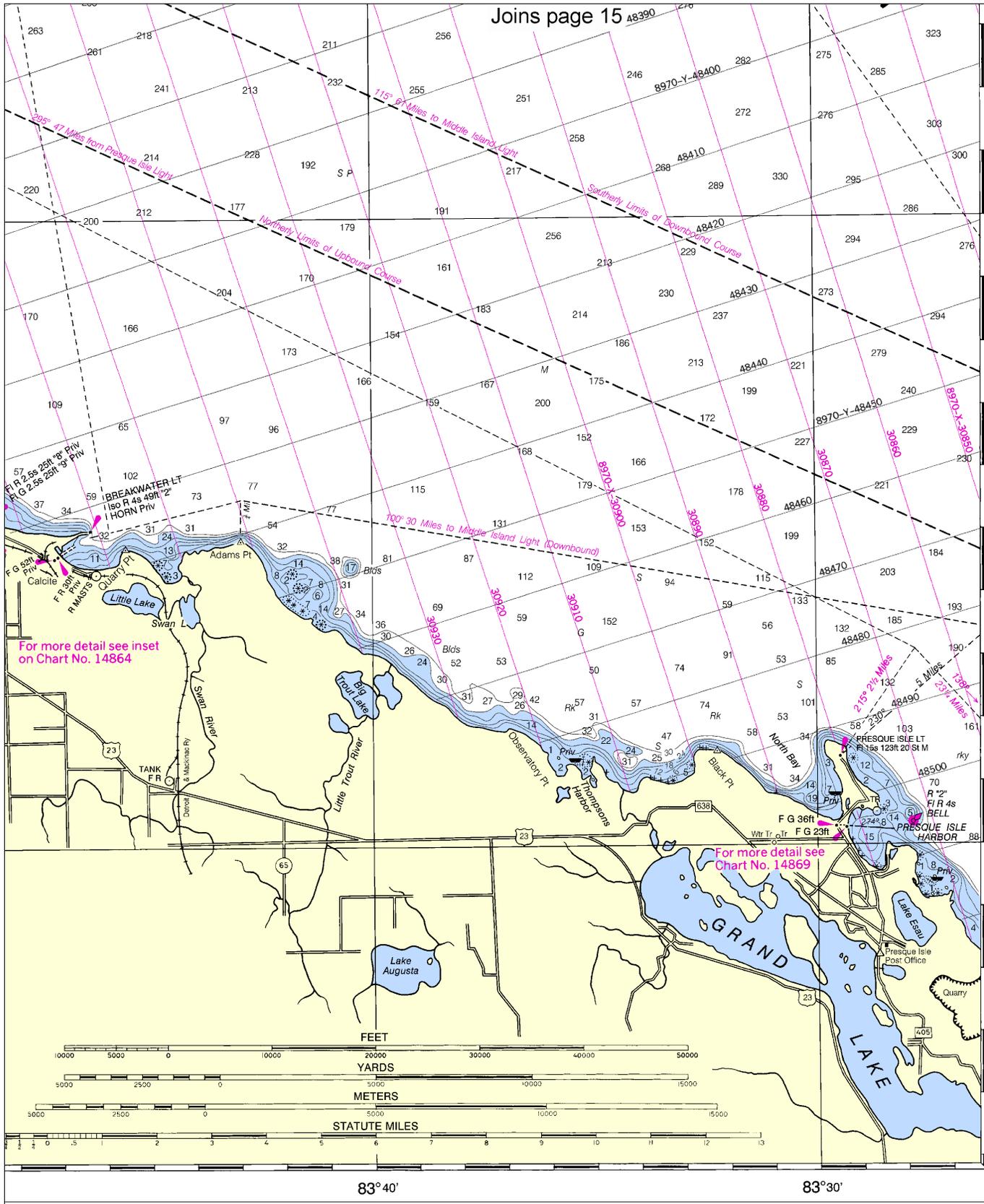
Note: Chart grid lines are aligned with true north.

Printed at reduced scale.

YARDS

See Note on page 5.





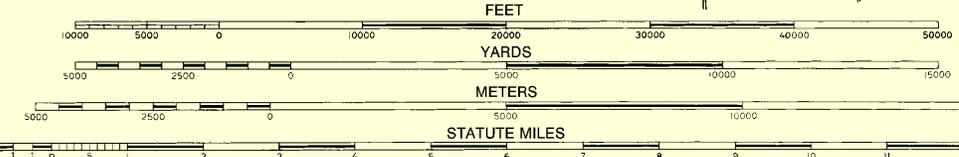
45° 30'

45° 20'

JOINS CHART 14864

For more detail see inset on Chart No. 14864

For more detail see Chart No. 14869



83° 40'

83° 30'

OMS	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
ET	6	12	18	24	30	36	42	48	54	60	66	72	78	84	90	96	102
ERS	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17

Straits of Mackinac
SOUNDINGS IN FEET - SCALE 1:120,000

14880
LORAN-C OVERPRINTED





EMERGENCY INFORMATION

VHF Marine Radio channels for use on the waterways:

Channel 6 – Inter-ship safety communications.

Channel 9 – Communications between boats and ship-to-coast.

Channel 13 – Navigation purposes at bridges, locks, and harbors.

Channel 16 – Emergency, distress and safety calls to Coast Guard and others, and to initiate calls to other vessels. Contact the other vessel, agree to another channel, and then switch.

Channel 22A – Calls between the Coast Guard and the public. Severe weather warnings, hazards to navigation and safety warnings are broadcast here.

Channels 68, 69, 71, 72 and 78A – Recreational boat channels.

Getting and Giving Help — Signal other boaters using visual distress signals (flares, orange flag, lights, arm signals); whistles; horns; and on your VHF radio. You are required by law to help boaters in trouble. Respond to distress signals, but do not endanger yourself.

Distress Call Procedures

- Make sure radio is on.
- Select Channel 16.
- Press/Hold the transmit button.
- Clearly say: "MAYDAY, MAYDAY, MAYDAY."
- Also give: Vessel Name and/or Description; Position and/or Location; Nature of Emergency; Number of People on Board.
- Release transmit button.
- Wait for 10 seconds — If no response Repeat MAYDAY call.

HAVE ALL PERSONS PUT ON LIFE JACKETS!



NOAA Weather Radio All Hazards (NWR) is a nationwide network of radio stations broadcasting continuous weather information directly from the nearest National Weather Service office. NWR broadcasts official Weather Service warnings, watches, forecasts and other hazard information 24 hours a day, 7 days a week.

<http://www.nws.noaa.gov/nwr/>

Quick References

- Nautical chart related products and information — <http://www.nauticalcharts.noaa.gov>
- Online chart viewer — <http://www.nauticalcharts.noaa.gov/mcd/NOAChartViewer.html>
- Report a chart discrepancy — <http://ocsddata.ncd.noaa.gov/idrs/discrepancy.aspx>
- Chart and chart related inquiries and comments — <http://ocsddata.ncd.noaa.gov/idrs/inquiry.aspx?frompage=ContactUs>
- Chart updates (LNM and NM corrections) — http://www.nauticalcharts.noaa.gov/mcd/updates/LNM_NM.html
- Coast Pilot online — <http://www.nauticalcharts.noaa.gov/nsd/cpdownload.htm>
- Tides and Currents — <http://tidesandcurrents.noaa.gov>
- Marine Forecasts — <http://www.nws.noaa.gov/om/marine/home.htm>
- National Data Buoy Center — <http://www.ndbc.noaa.gov/>
- NowCoast web portal for coastal conditions — <http://www.nowcoast.noaa.gov/>
- National Weather Service — <http://www.weather.gov/>
- National Hurricane Center — <http://www.nhc.noaa.gov/>
- Pacific Tsunami Warning Center — <http://ptwc.weather.gov/>
- Contact Us — <http://www.nauticalcharts.noaa.gov/staff/contact.htm>



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This Booklet chart has been designed for duplex printing (printed on front and back of one sheet). If a duplex option is not available on your printer, you may print each sheet and arrange them back-to-back to allow for the proper layout when viewing.

