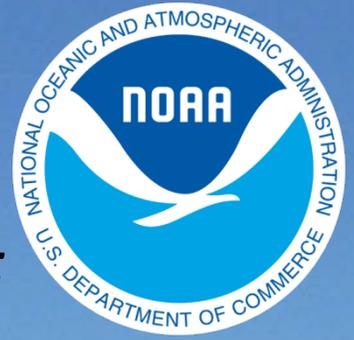


BookletChart™

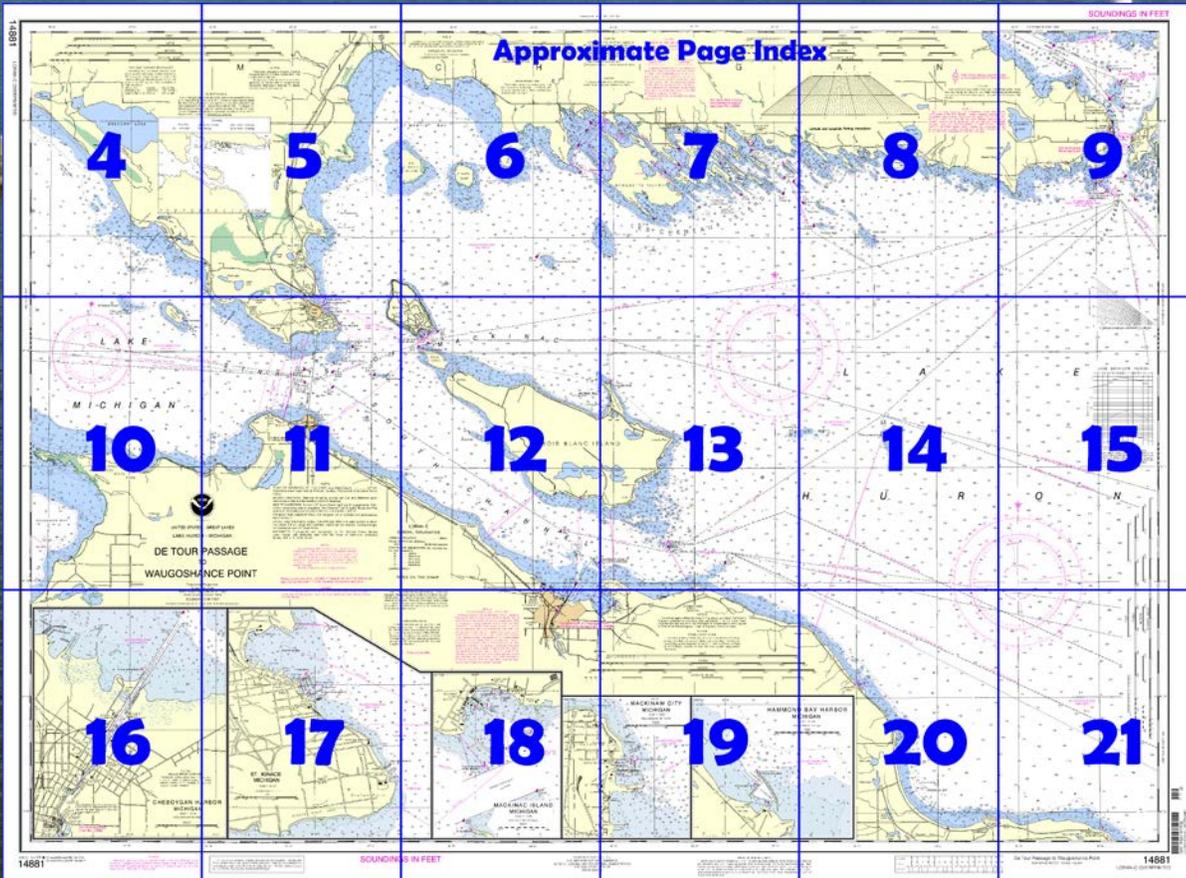
DeTour Passage to Waugoshance Point NOAA Chart 14881



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



- Complete, reduced-scale nautical chart
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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.

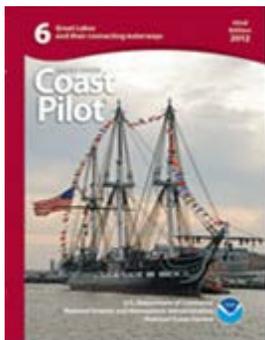
Whenever possible, use the official, full scale NOAA nautical chart for navigation. Nautical chart sales agents are listed on the Internet at <http://www.NauticalCharts.NOAA.gov>.

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=14881>



(Selected Excerpts from Coast Pilot)

Forty Mile Point is a rounding projection 6.6 miles northwest of Rogers City and about 29 miles east-southeast of Cheboygan. **Forty Mile Point Light** (45°29.2'N., 83°54.8'W.), 66 feet above the water, is shown from a square white brick tower on a dwelling on the point. The NW part of Lake Huron forms the approach to, and the E part of, the **Straits of Mackinac**. At its extreme NW end, the lake narrows abruptly to a width

of 4 miles between **Old Mackinac Point** and **Point St. Ignace**, the narrowest part of the Straits of Mackinac. The NW end of the lake is

obstructed by shoals, Reynolds Reef and Spectacle Reef near midlake and Martin Reef off the N shore, and by several islands, Bois Blanc Island the largest. The two main shipping channels through this area lead N and S of Bois Blanc Island.

Hammond Bay, an open bight 8.5 miles W of Forty Mile Point, provides shelter in winds from SE through S to NW. Shoals and numerous submerged net stakes extend 1 mile offshore around the bay. Fair anchorage is in the S part of the bay off the mouth of **Ocqueoc River**.

Hammond Bay Harbor is a harbor of refuge about 3 miles NW of Hammond Bay and 4 miles SE of Ninemile Point. The harbor basin, protected by two detached breakwaters, is entered through a dredged channel from the NW. (280) At **Cordwood Point** (45°39.8'N., 84°20.0'W.), a lighted buoy marks the outer end of a reef with depths of 20 to 24 feet that extends 1.8 miles NE. During stormy weather with heavy seas, the reef is a danger to vessels transiting South Channel of the Straits of Mackinac.

Between Cordwood Point and **Cheboygan Point**, 4.5 miles W, the shore is low except that a high bluff is within 1 mile of the shoreline in the E part of the reach. A lighted mast on the bluff, 1.2 miles SW of Cordwood Point, is prominent.

Poe Reef, with a least depth of 8 feet, is a detached shoal on the N side of South Channel, 2.7 miles SE of Bois Blanc Island with shoals between.

Poe Reef Light (45°41.7'N., 84°21.7'W.), 71 feet above the water, is shown from a white and black horizontally banded square tower on a concrete crib on Poe Reef. A fog signal and racon are at the light.

Zela Shoal, with depths of 6 feet near its outer end and rocks awash near its midpoint, extends about 2 miles WNW from **Zela Point**, on the SW side of Bois Blanc Island 3 miles NW of Points aux Pins. The outer end of the shoal is marked by a buoy. The remainder of the SW shore of Bois Blanc Island between Points aux Pins and **Lime Kiln Point** has deep water within 0.4 mile.

Cheboygan Harbor, serving the city of **Cheboygan, Mich.**, is 2.5 miles SW of Cheboygan Point in the lower part of the **Cheboygan River**. The harbor is a base for commercial fishermen and pleasure craft.

Spectacle Reef, with a least depth of 5 feet, is in the approach to the Straits of Mackinac, 10.5 miles E of Bois Blanc Island. **Spectacle Reef Light** (45°46.4'N., 84°08.2'W.), 86 feet above the water, is shown from a gray conical tower on a square concrete pier on the NW side of the shoal.

Raynolds Reef, with a least depth of 11 feet, is 6 miles E of Bois Blanc Island. A buoy marks each end of the reef, 1.5 miles long E and W. Coast Guard icebreakers assigned to the Straits of Mackinac are based in St. Ignace and Cheboygan. Their services can be requested through Commander, Coast Guard Group Sault Ste. Marie; VHF-FM channel 16. (See Winter Navigation, chapter 3.)

Routes.—The Lake Carriers' Association and the Canadian Shipowners Association have recommended, for vessels enrolled in the associations, the following separation of routes for upbound and downbound traffic in Lake Huron: (see Coast Pilot for details).

It is recommended that the following limit of anchorage be observed in Lake Huron off De Tour Light so that vessels may enter or leave De Tour Passage in time of congestion due to fog or other conditions: No vessel to anchor E of a bearing on De Tour Light of **340°**, or closer than 0.75 mile to the light or N of the De Tour Martin Reef course. The Coast Guard station is marked by a light.

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

Scale 1:15,000
SOUNDINGS IN FEET
Feet

Scale 1:10,000
SOUNDINGS IN FEET

Scale 1:10,000
SOUNDINGS IN FEET

Scale 1:15,000
SOUNDINGS IN FEET
FEET

Scale 1:15,000
SOUNDINGS IN FEET

 Pump-out facilities

Lock operated by Dept. of Natural Resources is 18 ft. wide, 75 ft. long with depth of 5 ft. over miter sill. The upper approach is 18 ft. wide and has a depth of 8.8 ft.

Polyconic Projection
Scale 1:80,000
North American Datum of 1983
(World Geodetic System 1984)
SOUNDINGS IN FEET

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

CAUTION
BASCULE BRIDGE CLEARANCES
For bascule bridges, whose spans do not open to a full upright or vertical position, unlimited vertical clearance is not available for the entire charted horizontal clearance.

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)

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.

POLLUTION REPORTS
Report all spills of oil and hazardous substances to the National Response Center via 1-800-424-8802 (toll free), or to the nearest U.S. Coast Guard facility if telephone communication is impossible (33 CFR 153).

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.

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-83 162.55 MHz
Newberry, MI WNG-576 162.450 MHz
Sault St. Marie, MI KIG-74 162.55 MHz

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.

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 1984 (WGS 84). Geographic positions referred to the North American Datum of 1927 must be corrected an average of 0.045" northward and 0.131" westward to agree with this chart.

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

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.

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.

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.

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.

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.

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

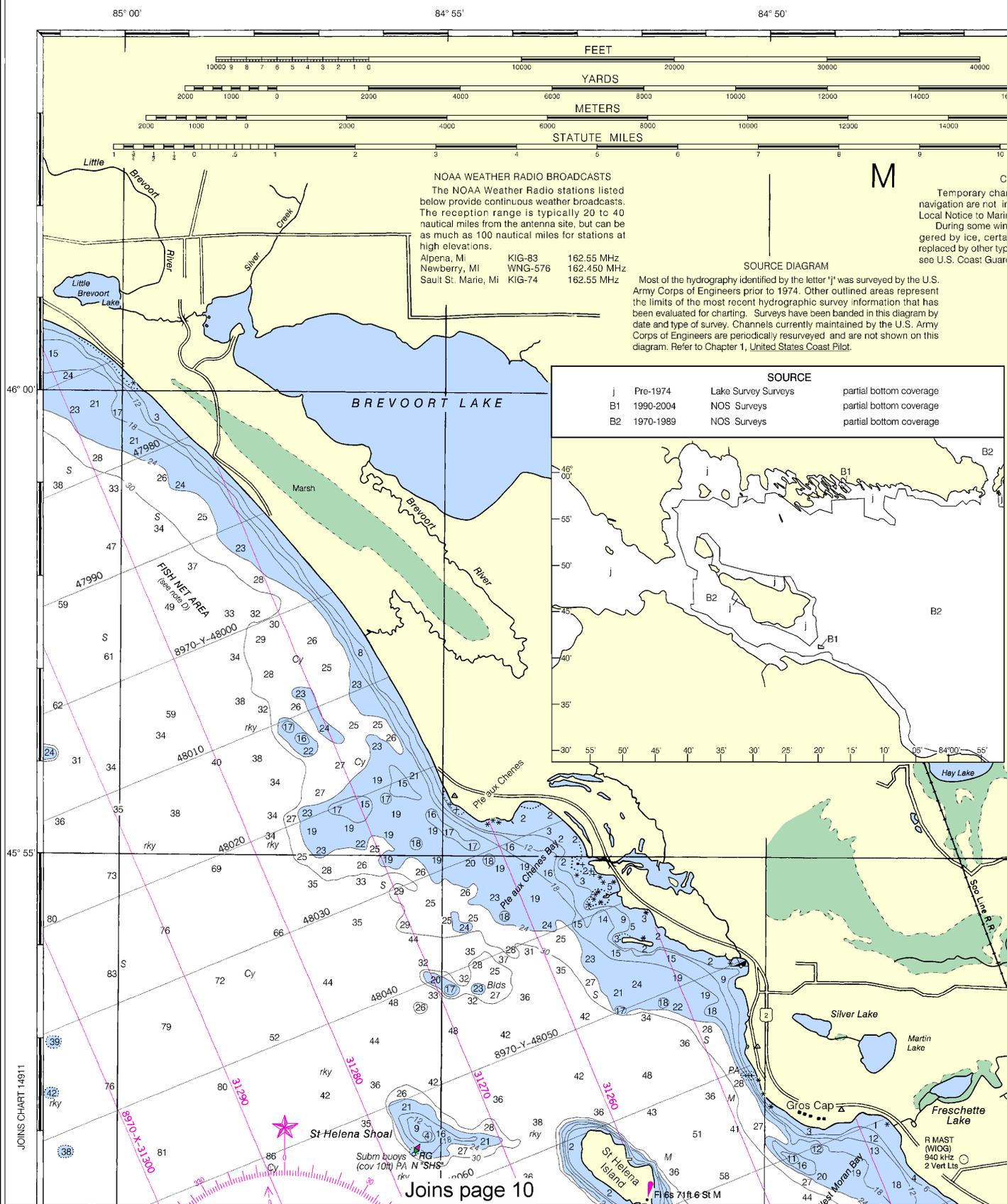
NOTES
PLANE OF REFERENCE OF THIS CHART (Low Water Datum) 577.5 ft. Referred to mean water level at Rimouski, Quebec, International Great Lakes Datum (1985).

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

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, and U. S. Coast Guard.

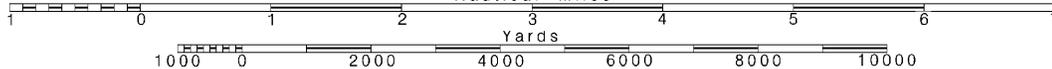


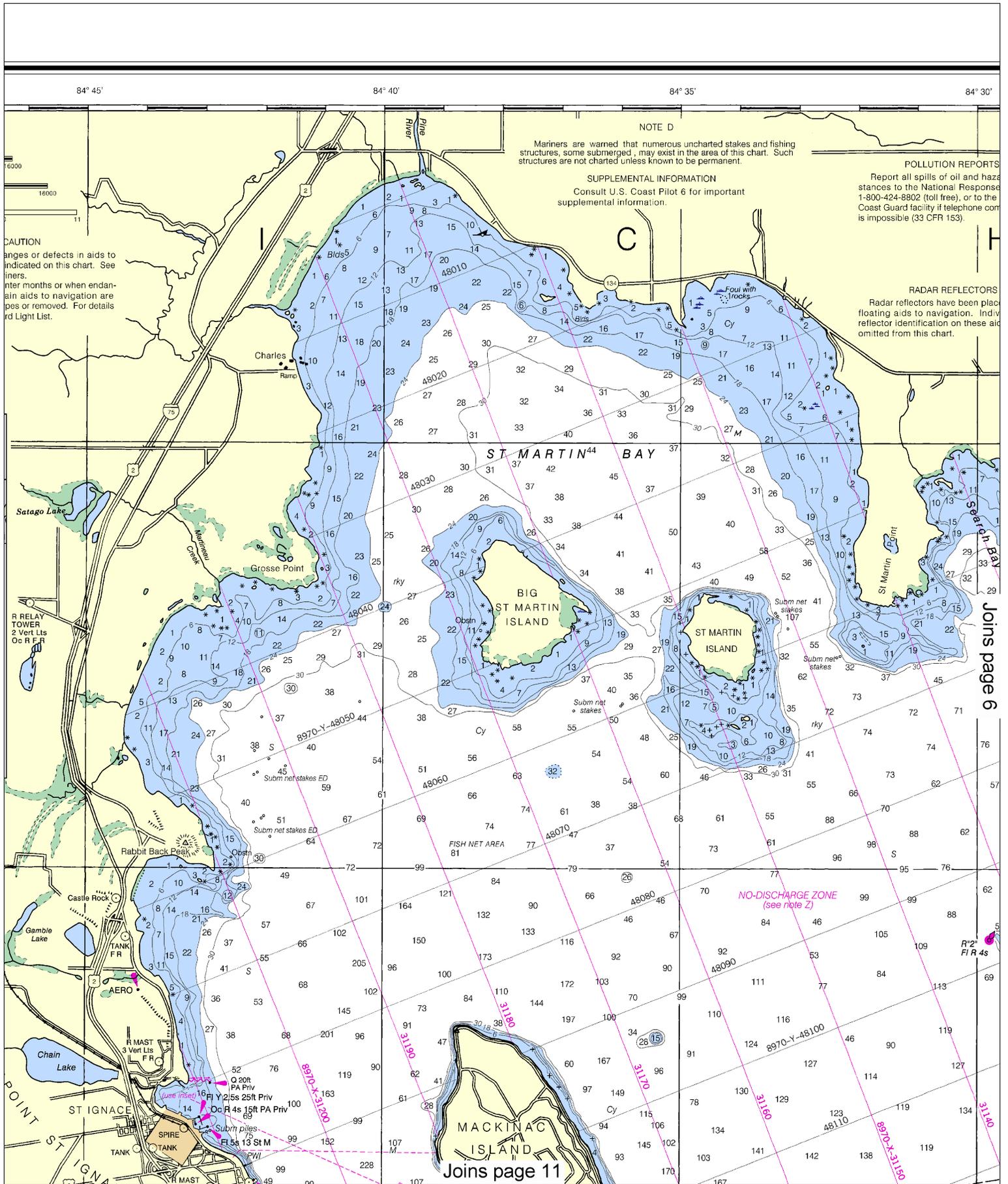
Note: Chart grid lines are aligned with true north.

Printed at reduced scale.

SCALE 1:80,000
Nautical Miles

See Note on page 5.





This BookletChart was reduced to 75% of the original chart scale. The new scale is 1:106667. Barscales have also been reduced and are accurate when used to measure distances in this BookletChart.



84° 40'

84° 35'

84° 30'

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.

SUPPLEMENTAL INFORMATION
Consult U.S. Coast Pilot 6 for important supplemental information.

POLLUTION REPORTS

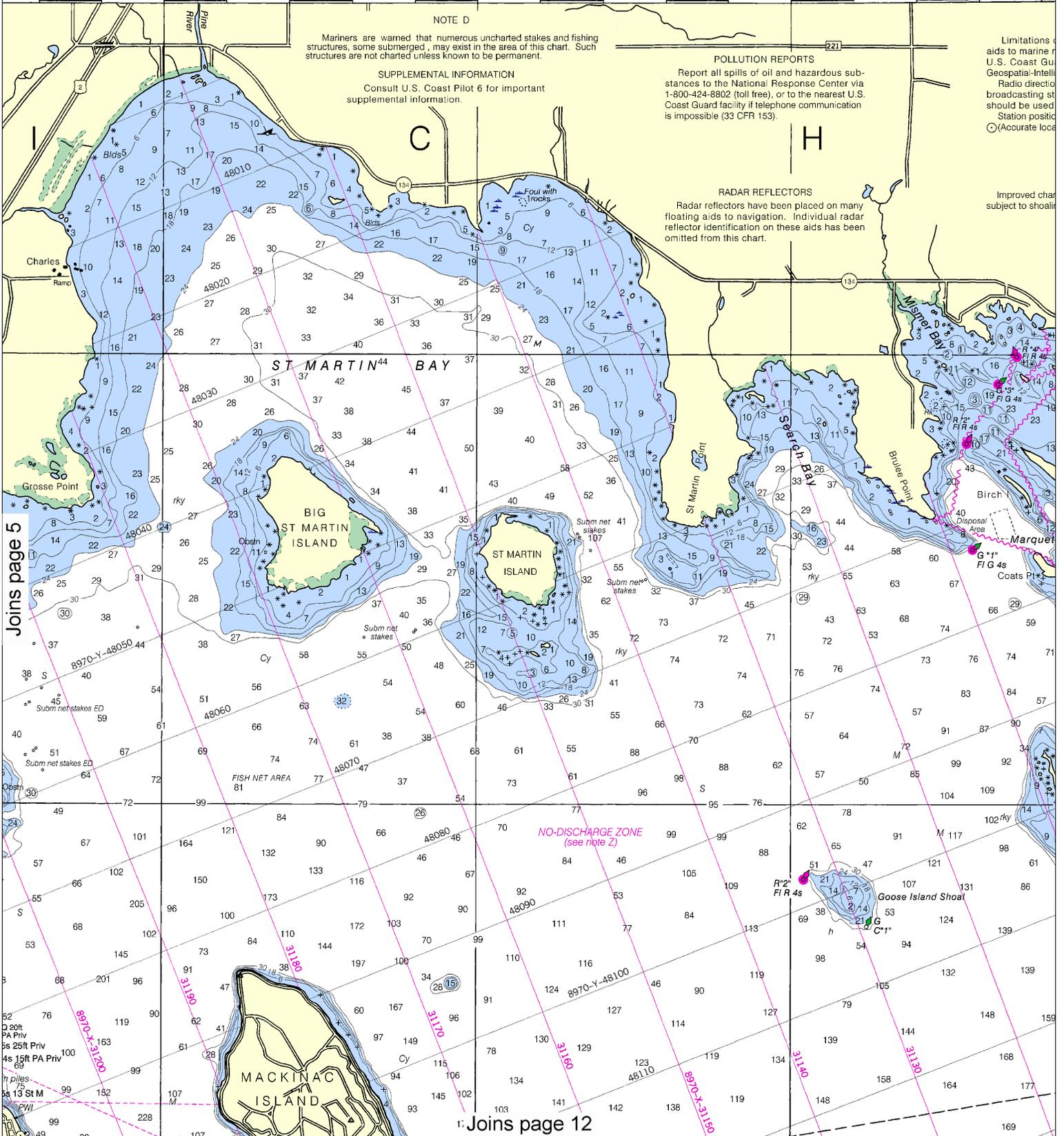
Report all spills of oil and hazardous substances to the National Response Center via 1-800-424-8902 (toll free), or to the nearest U.S. Coast Guard facility if telephone communication is impossible (33 CFR 153).

Limitations of aids to marine navigation. U.S. Coast Guard Geospatial-Intelligence Radio direction broadcasting station should be used. Station position (Accurate location)

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.

Improved chart subject to shoaling



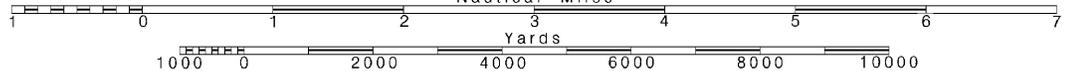
Joins page 5

Joins page 12

Printed at reduced scale.

SCALE 1:80,000
Nautical Miles

See Note on page 5.



6

Note: Chart grid lines are aligned with true north.

84° 25' 84° 20' 84° 15' 84° 10'

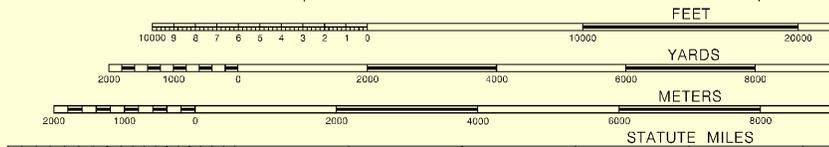
CAUTION
 on the use of radio signals as navigation can be found in the **Harbor Light Lists** and **National Intelligence Agency Publication 117**. (non-finder bearings to commercial stations are subject to error and used with caution.)
 tions are shown thus:
 (caution) o (Approximate location)

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

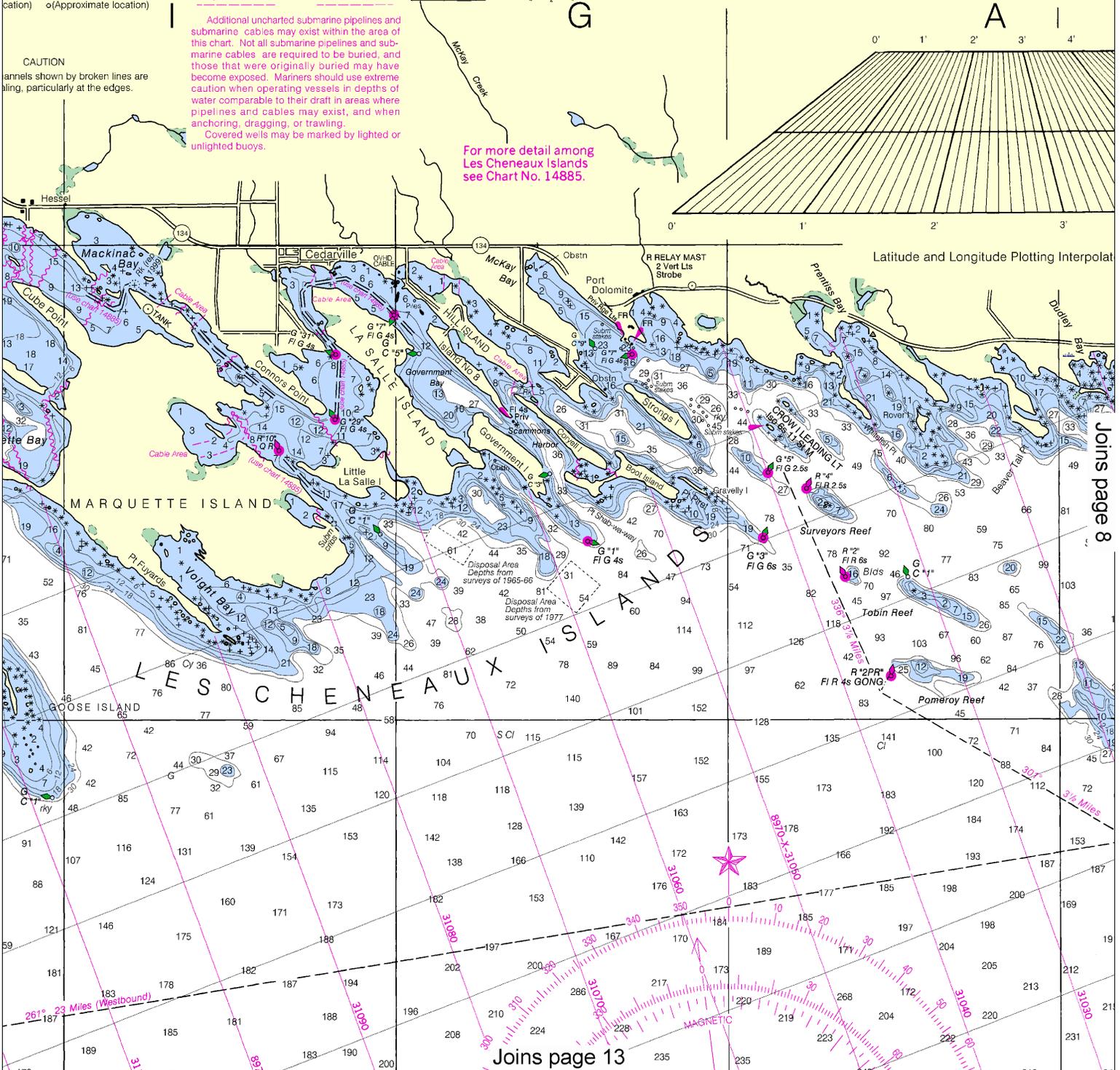


Additional uncharted submarine pipelines and submarine cables may exist within the area of this chart. Not all submarine pipelines and submarine cables are required to be buried, and those that were originally buried may have become exposed. Mariners should use extreme caution when operating vessels 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.

CAUTION
 Channels shown by broken lines are shoaling, particularly at the edges.



For more detail among Les Cheneaux Islands see Chart No. 14885.



84° 20'

84° 15'

84° 10'

FEET

YARDS

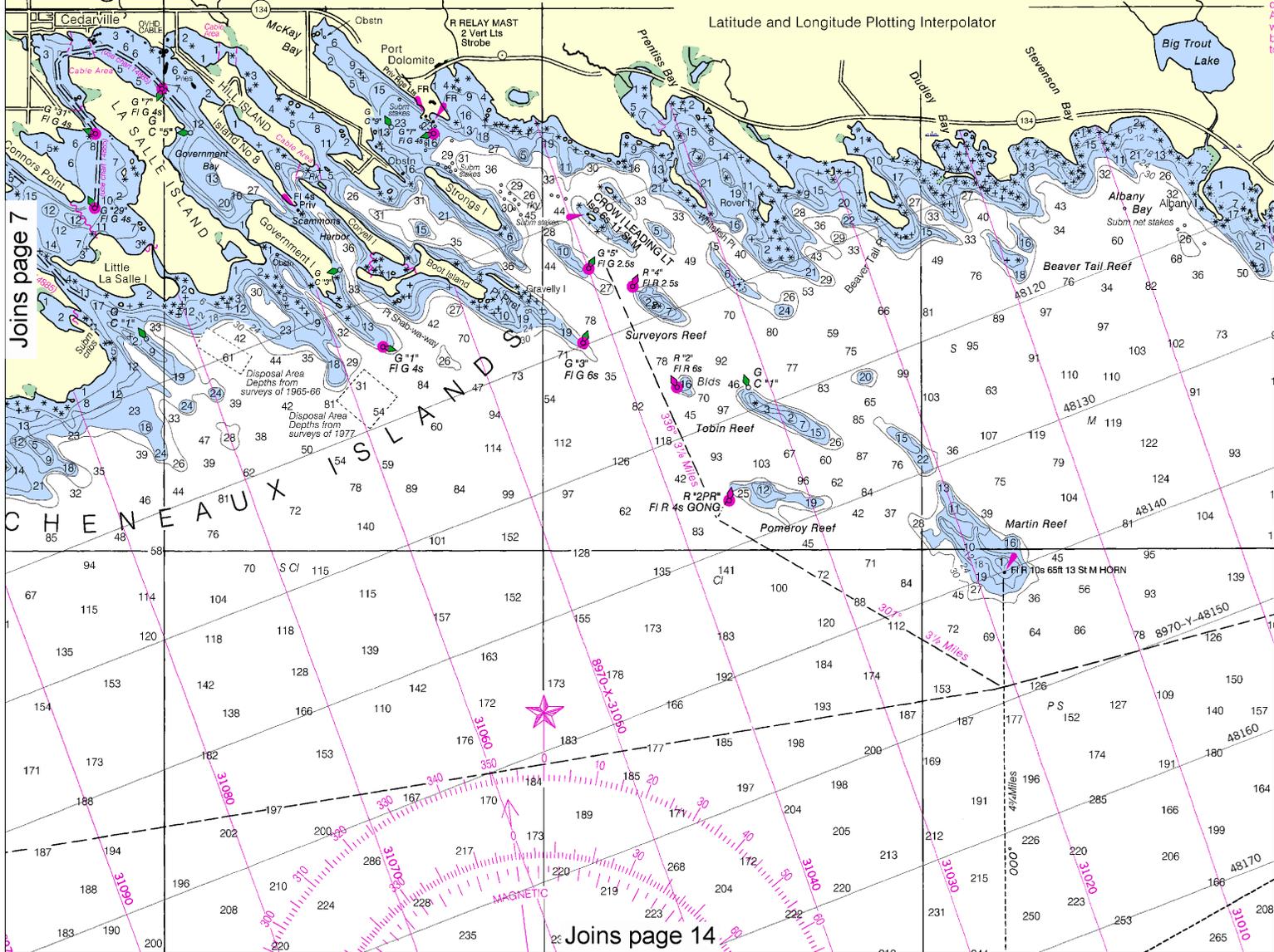
METERS

STATUTE MILES

CAUTION
PIPELINES AND CABLES
marine pipelines and submarine
marine pipeline and cable areas

Uncharted submarine pipelines and cables may exist within the area of all submarine pipelines and cables required to be buried, and are originally buried may have. Mariners should use extreme operating vessels in depths of cable to their draft in areas where cables may exist, and when digging, or trawling. Risks may be marked by lighted or

For more detail among
Les Cheneaux Islands
see Chart No. 14885.



Joins page 7

Joins page 14

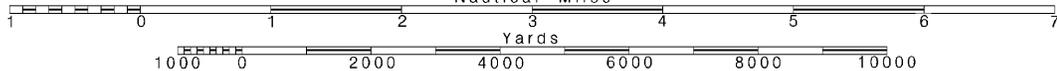


Note: Chart grid lines are aligned with true north.

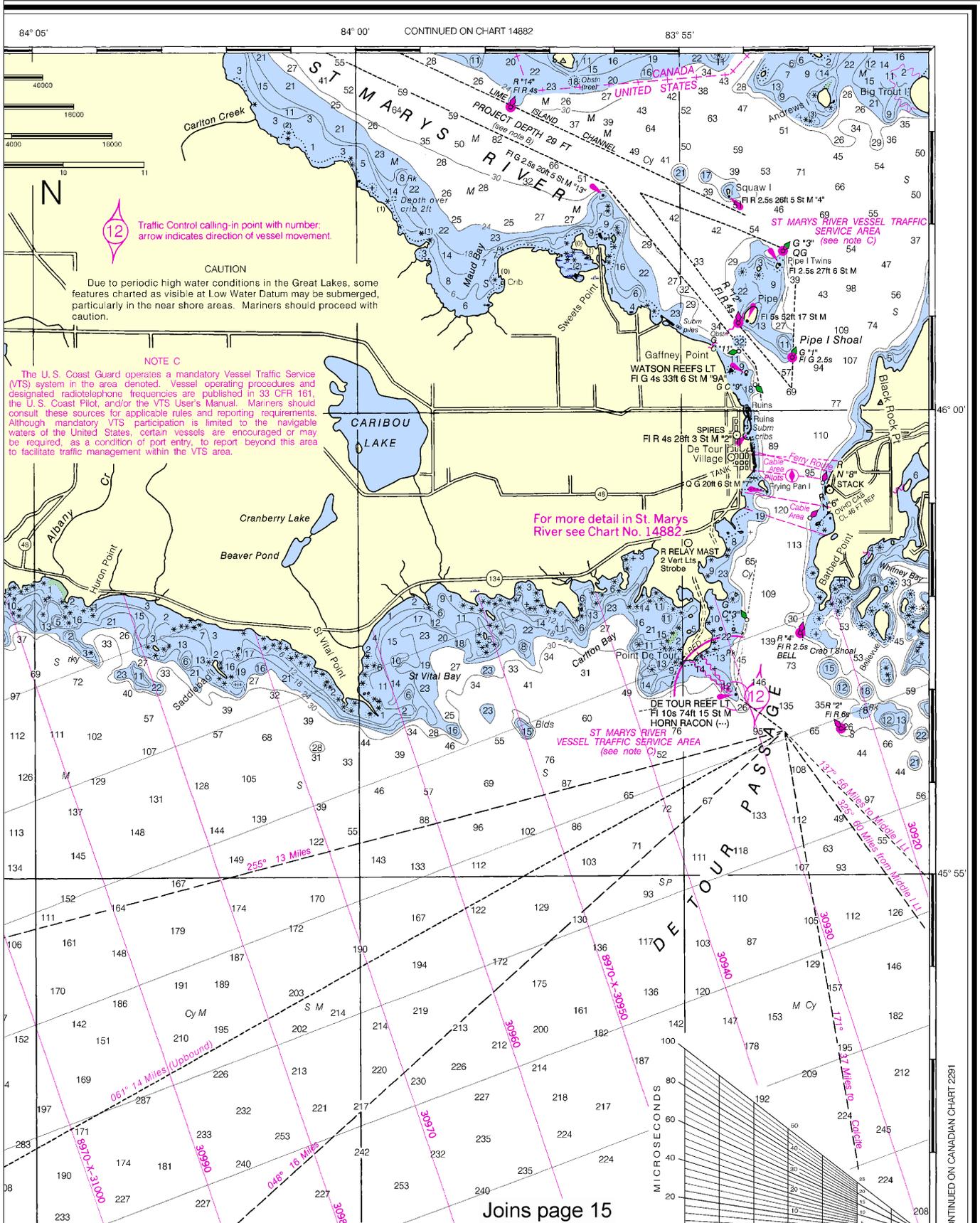
Printed at reduced scale.

SCALE 1:80,000
Nautical Miles

See Note on page 5.



SOUNDINGS IN FEET



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

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.

NOTE C
The U.S. Coast Guard operates a mandatory Vessel Traffic Service (VTS) system in the area denoted. 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.

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

ST MARYS RIVER VESSEL TRAFFIC SERVICE AREA (see note C)

Joins page 15

CONTINUED ON CANADIAN CHART 2291



THE NATION'S CHARTMAKER SINCE 1807

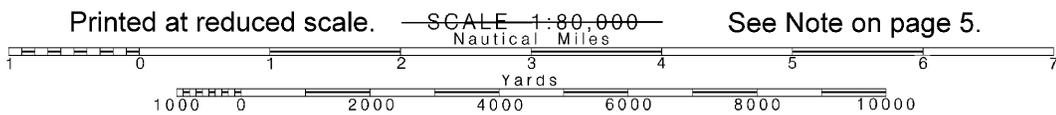
UNITED STATES - GREAT LAKES
LAKE HURON - MICHIGAN

DE TOUR PASSAGE TO WAUGOSHANCE POINT

Polyconic Projection
Scale 1:80,000
North American Datum of 1983
(World Geodetic System 1984)
SOUNDINGS IN FEET

10

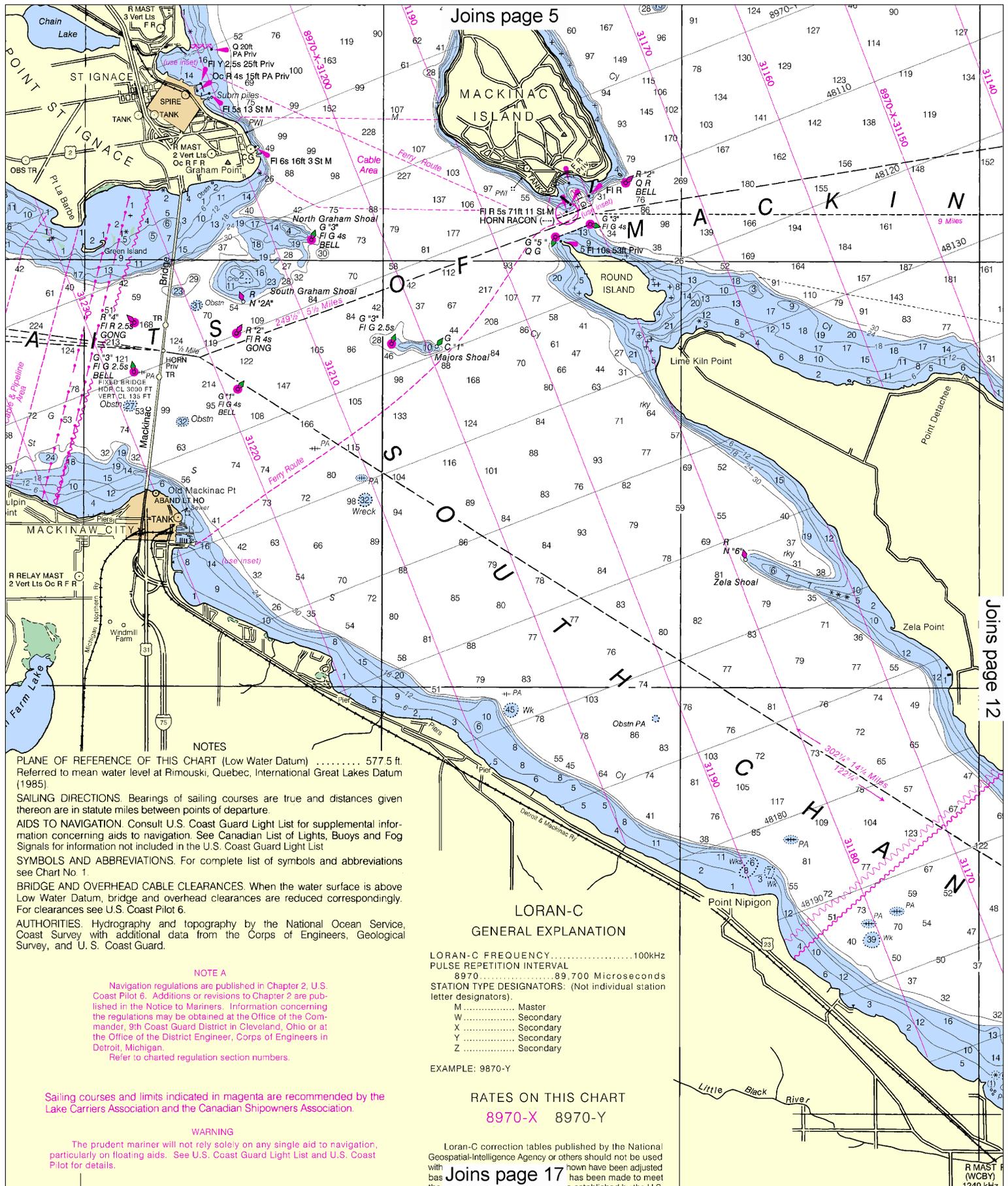
Note: Chart grid lines are aligned with true north.



Printed at reduced scale.

SCALE 1:80,000
Nautical Miles

See Note on page 5.



Joins page 5

Joins page 12

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, and U.S. Coast Guard.

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.

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

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.

LORAN-C GENERAL EXPLANATION

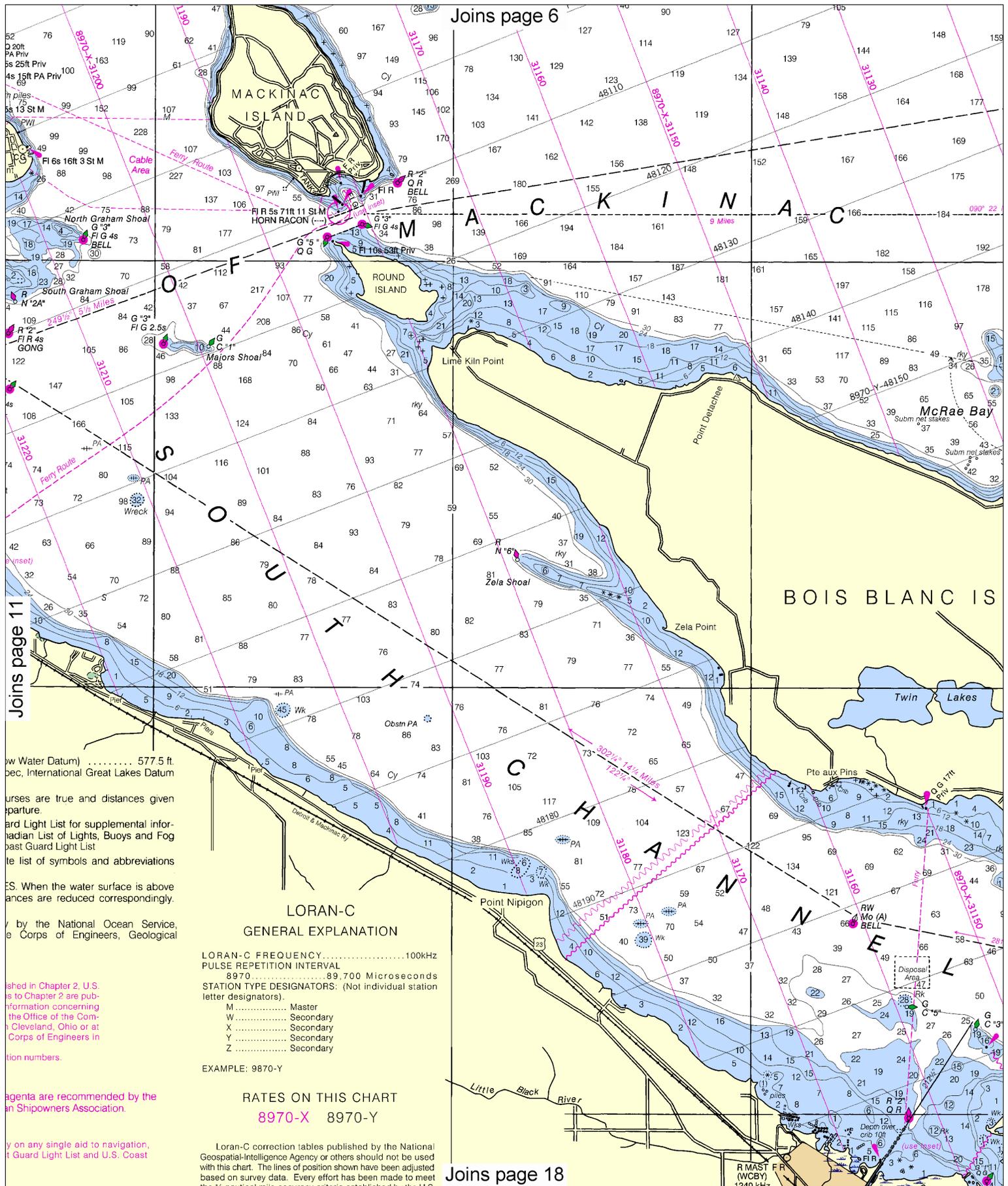
LORAN-C FREQUENCY.....100kHz
 PULSE REPETITION INTERVAL
 897089,700 Microseconds
 STATION TYPE DESIGNATORS: (Not individual station letter designators).
 M Master
 W Secondary
 X Secondary
 Y Secondary
 Z Secondary

EXAMPLE: 9870-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 unless they have been adjusted to meet the requirements of the International Great Lakes Datum (1985). This chart has been made to meet the requirements of the International Great Lakes Datum (1985).
 Joins page 17

R MAST (WCBY) 1240 kHz



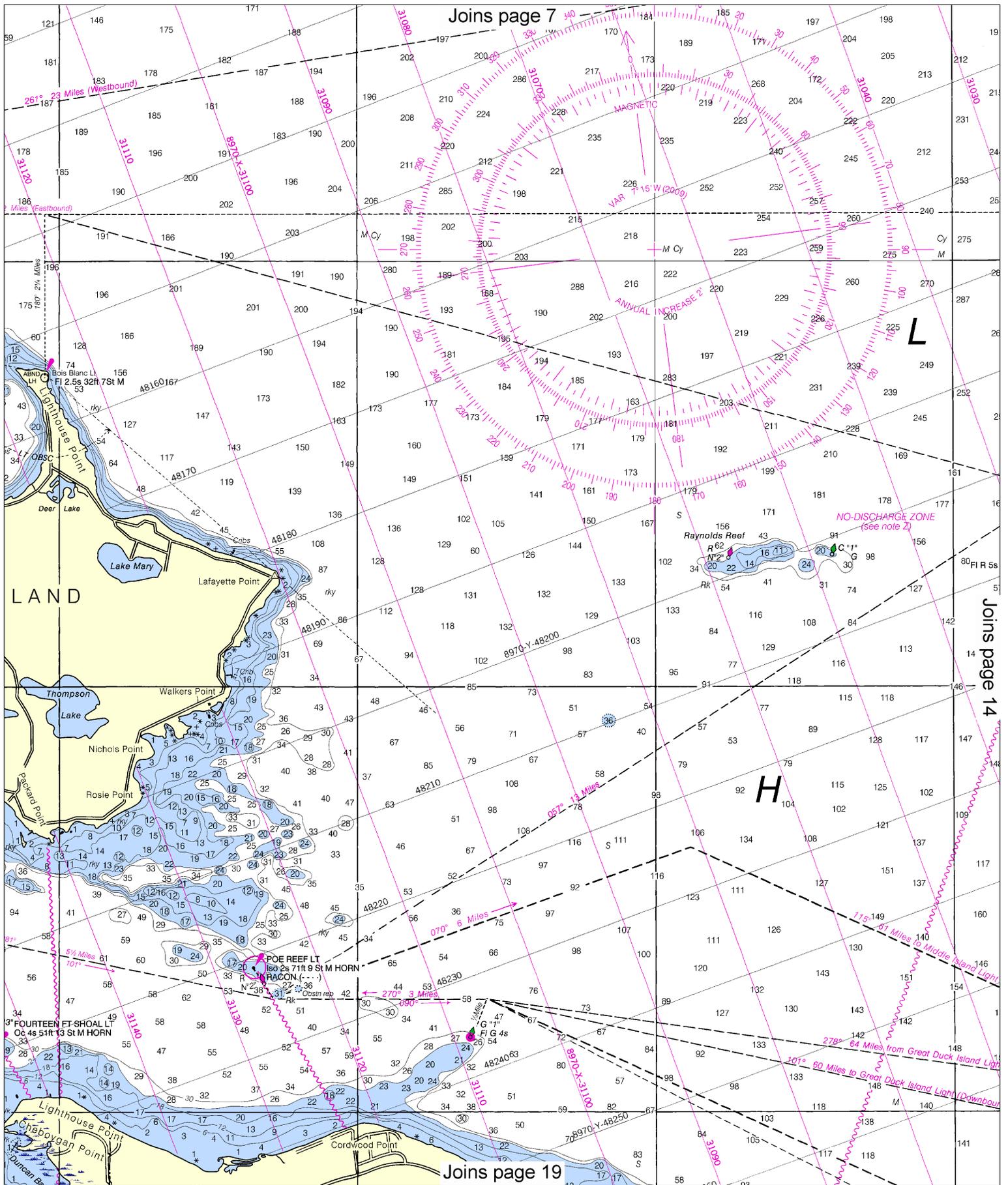
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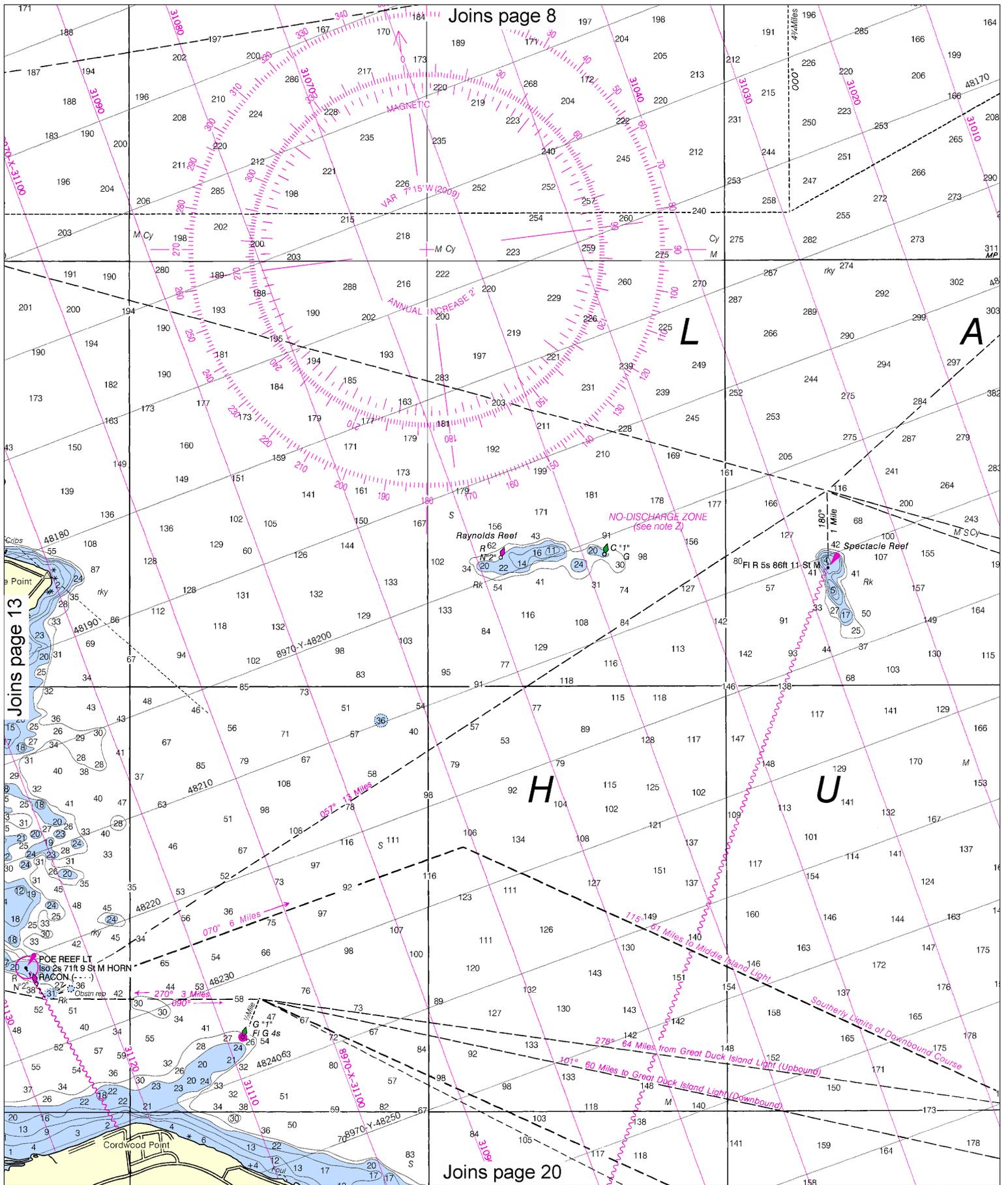
Note: Chart grid lines are aligned with true north.

Printed at reduced scale.

SCALE 1:80,000
 Nautical Miles

See Note on page 5.



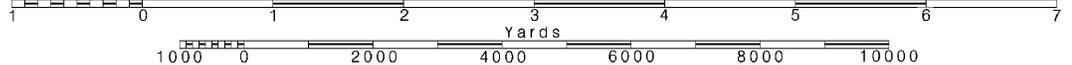


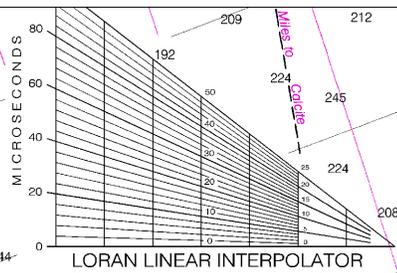
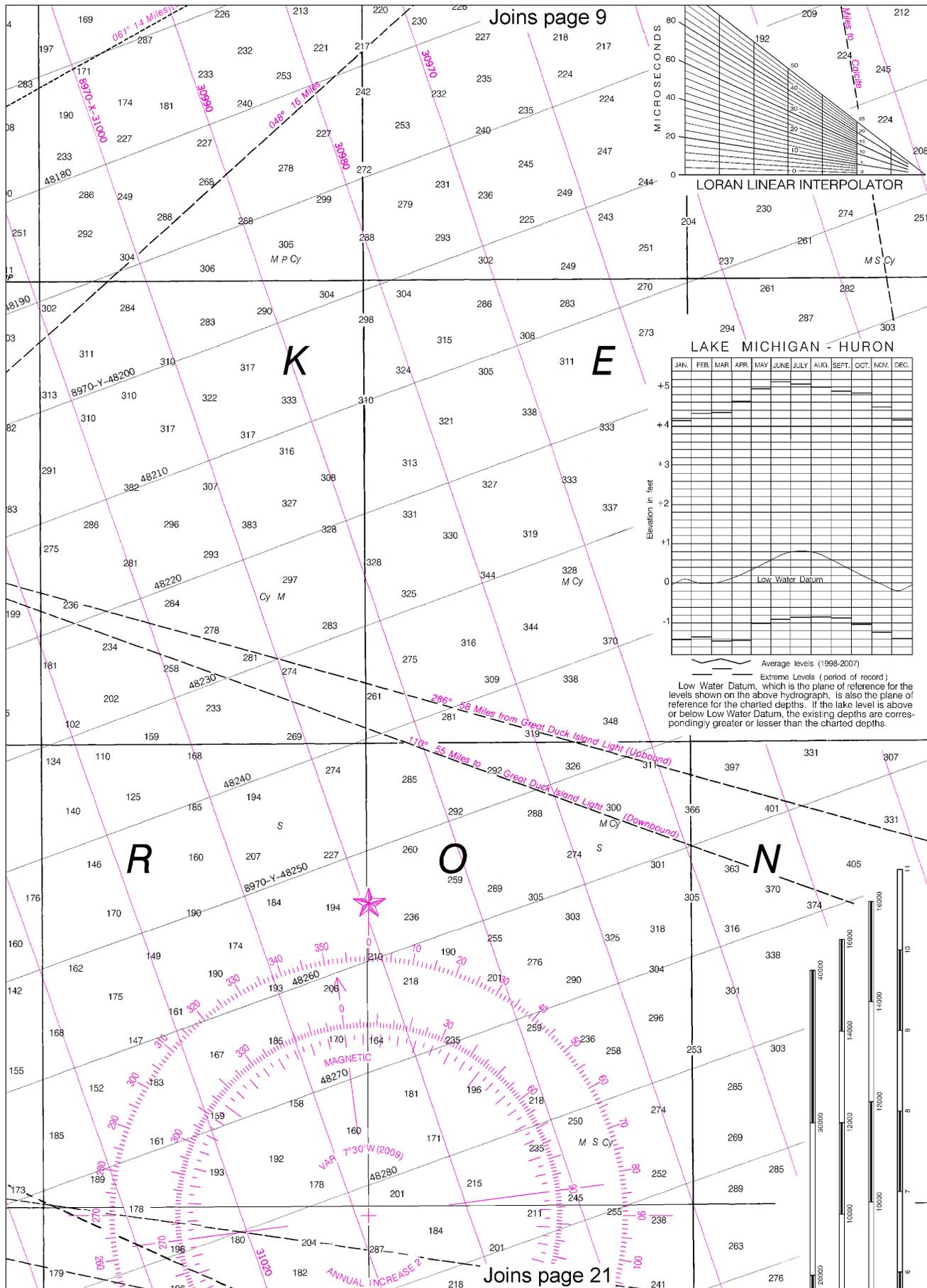
Note: Chart grid lines are aligned with true north.

Printed at reduced scale.

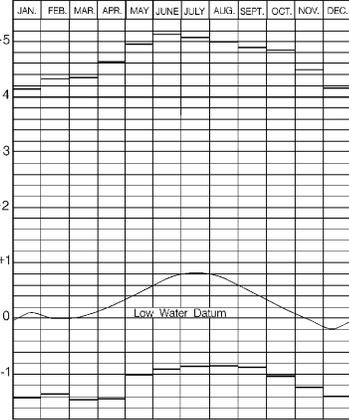
SCALE 1:80,000
Nautical Miles

See Note on page 5.





LAKE MICHIGAN - HURON

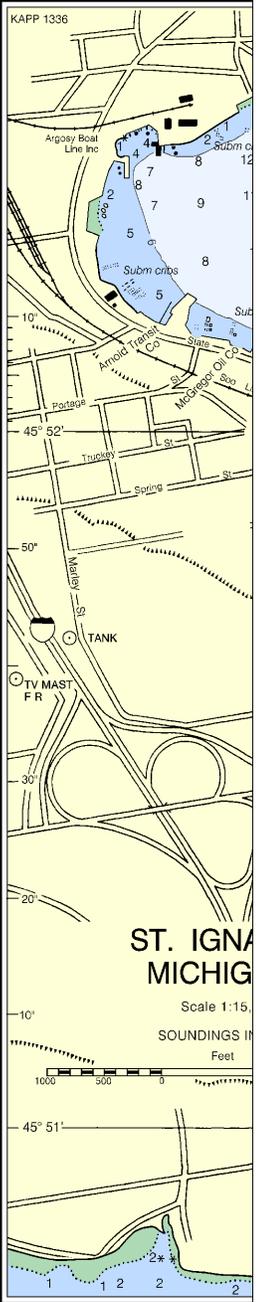
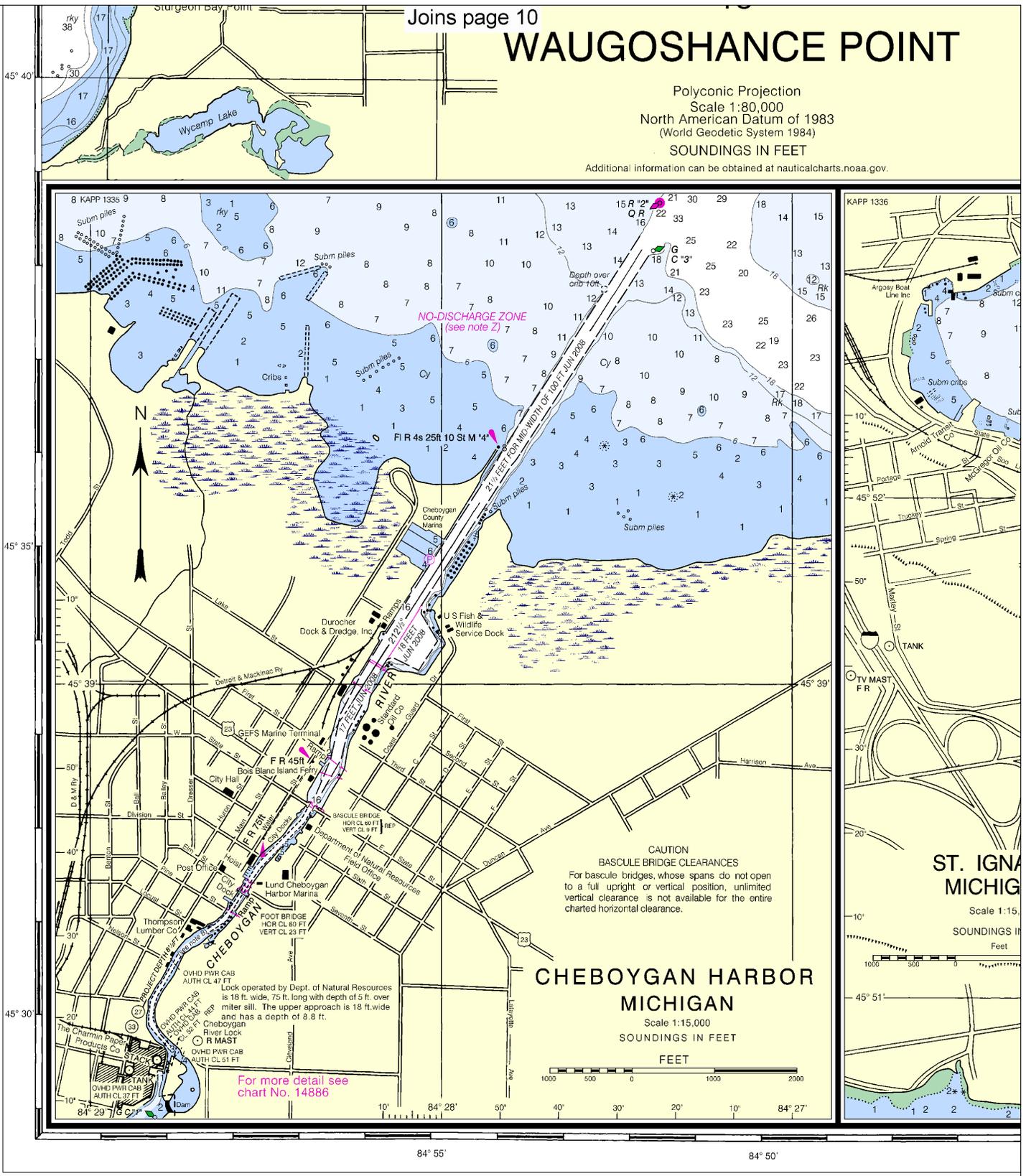


Low Water Datum, which is the plane of reference for the levels shown on the above graph, is also the plane of reference for the charted depths. If the lake level is above or below Low Water Datum, the existing depths are correspondingly greater or lesser than the charted depths.

WAUGOSHANCE POINT

Polygonic Projection
Scale 1:80,000
North American Datum of 1983
(World Geodetic System 1984)
SOUNDINGS IN FEET

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



33rd Ed., May/09
14881
Corrected through NM May 09/09
Corrected through LNM May 05/09

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. Chart updates corrected from Notice to Mariners published after the dates shown in the lower left hand corner are available at nauticalcharts.noaa.gov.

This nautical chart has been designed to promote safe navigation. The U.S. Coast and Geodetic Survey encourages users to submit corrections, and improving this chart to the Chief, Marine Chart Division, U.S. Coast and Geodetic Survey, NOAA, Silver Spring, Maryland 20910-3282.

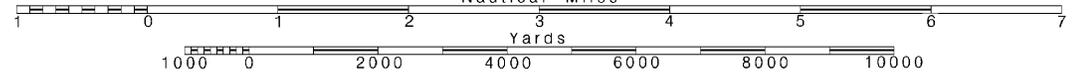
16

Note: Chart grid lines are aligned with true north.

Printed at reduced scale.

SCALE 1:80,000
Nautical Miles

See Note on page 5.



Detroit, Michigan.
Refer to charted regulation section numbers.

Joins page 11

EXAMPLE: 9870-Y

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

RATES ON THIS CHART
8970-X 8970-Y

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.

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.

HORIZONTAL DATUM

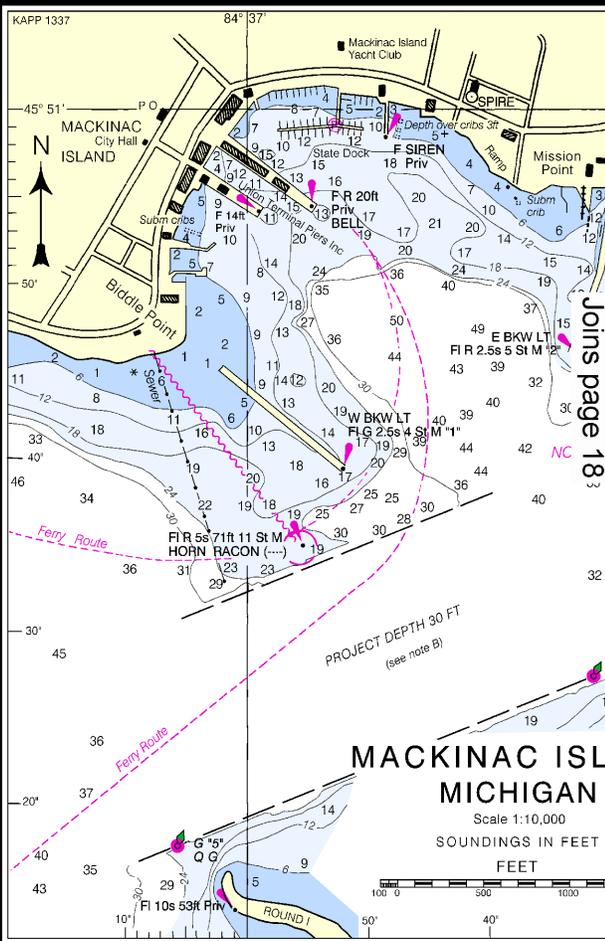
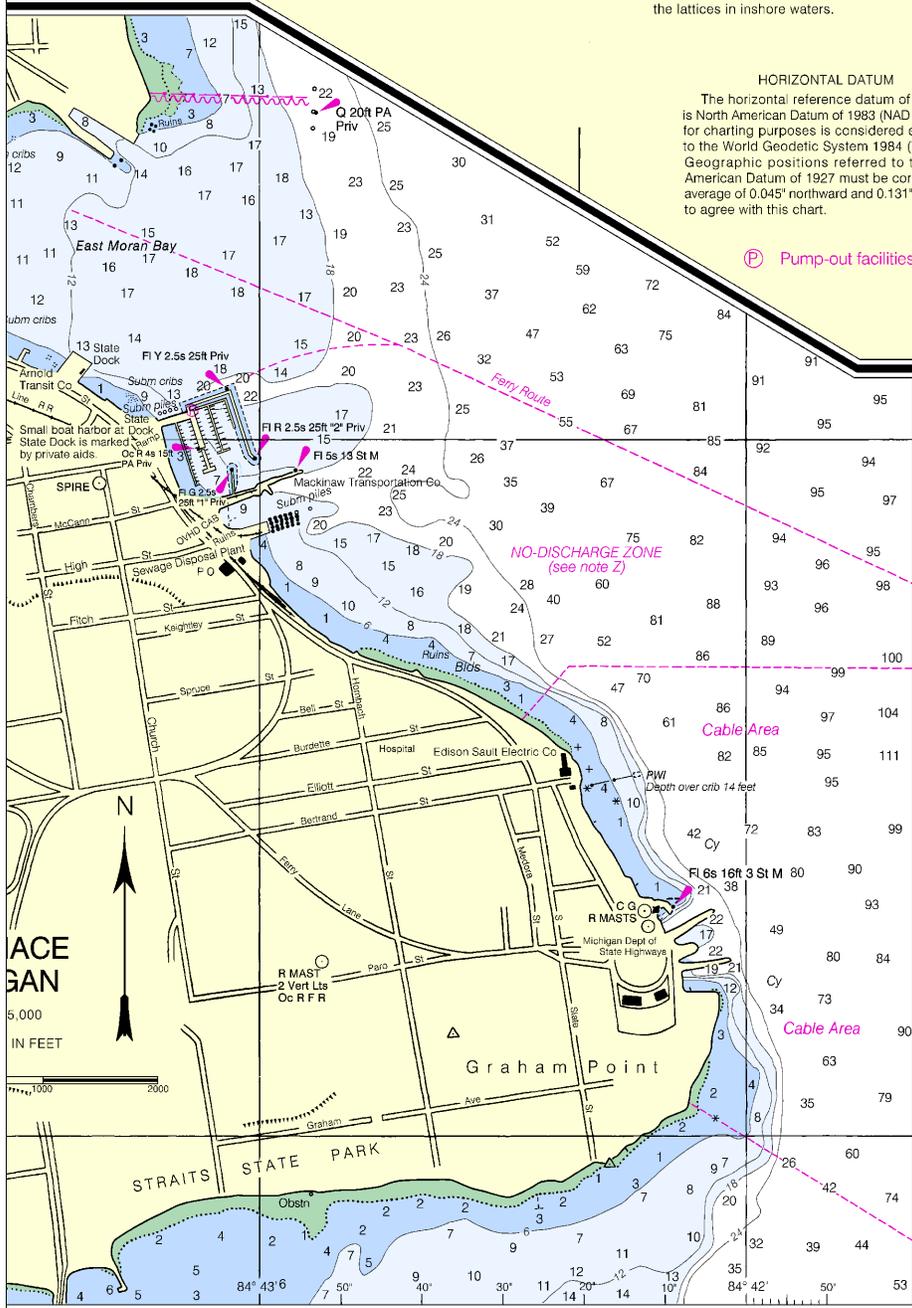
The horizontal reference datum of this chart is North American Datum of 1983 (NAD 83), which for charting purposes is considered equivalent to the World Geodetic System 1984 (WGS 84). Geographic positions referred to the North American Datum of 1927 must be corrected an average of 0.045' northward and 0.131' westward to agree with this chart.

Pump-out facilities

NOTE Z

NO-DISCHARGE ZONE, 40 CFR 140

Michigan waters of Lakes Michigan, Huron, Superior, Erie and St. Clair, all waterways connected thereto, and all inland lakes are designated as a No-Discharge Zone (NDZ). Under the Clean Water Act, Section 312, all vessels operating within a No-Discharge Zone (NDZ) are completely prohibited from discharging any sewage, treated or untreated, into the waters. Commercial vessel sewage shall include graywater. All vessels with an installed marine sanitation device (MSD) that are navigating, moored, anchored, or docked within a NDZ must have the MSD disabled to prevent the overboard discharge of sewage (treated or untreated) or install a holding tank. Regulations for the NDZ are contained in the U.S. Coast Pilot. Additional information concerning the regulations and requirements may be obtained from the Environmental Protection Agency (EPA) web site: http://www.epa.gov/owow/oceans/regulatory/vessel_sewage/.



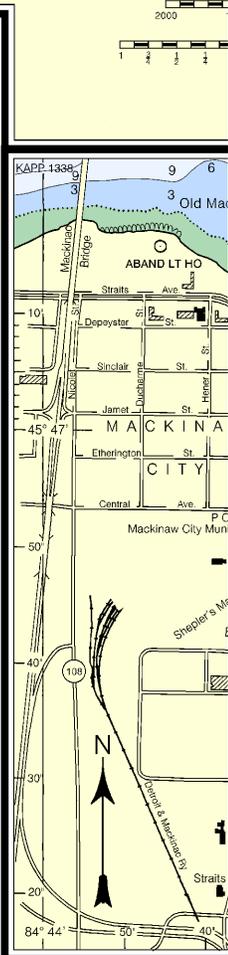
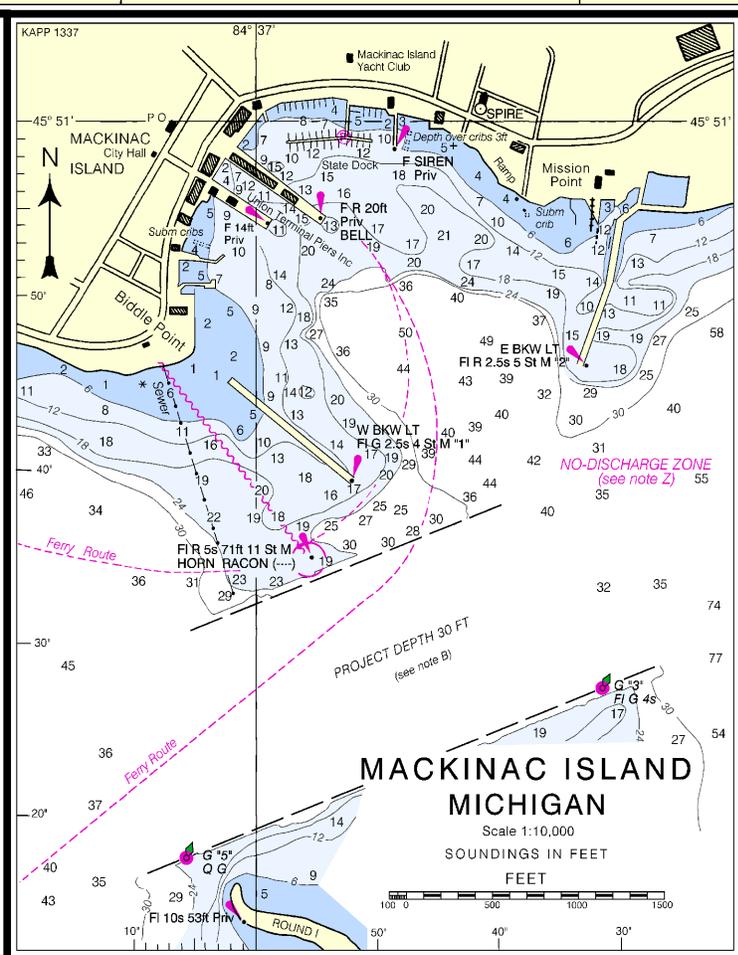
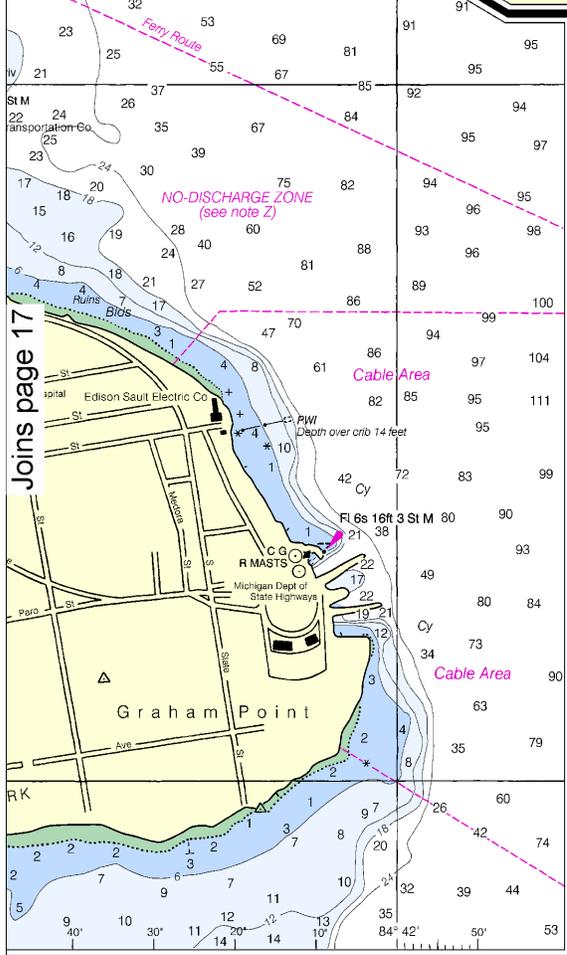
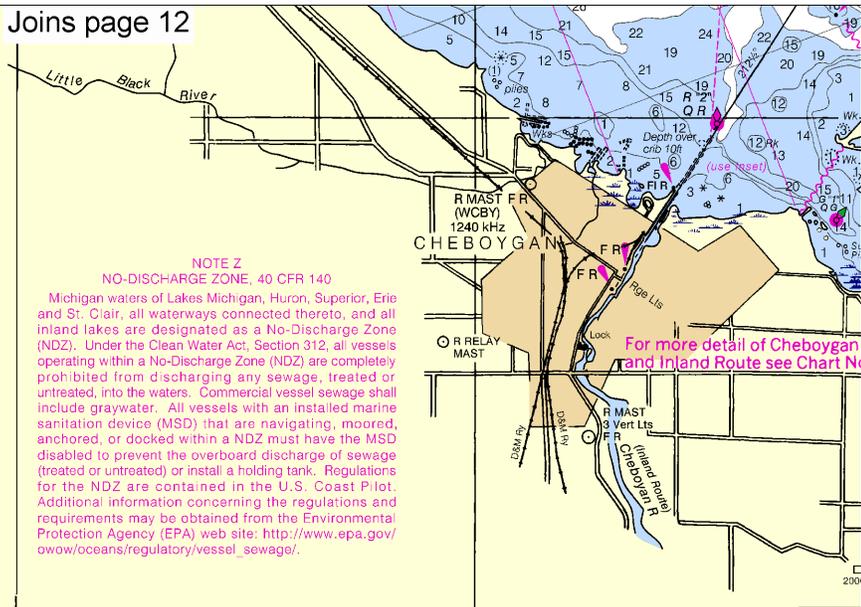
safe navigation. The National Oceanic and Atmospheric Administration, or comments for on (N/C/S2), National Ocean

SOUNDINGS IN FEET

ion numbers.
 EXAMPLE: 9870-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.

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 1984 (WGS 84). Geographic positions referred to the North American Datum of 1927 must be corrected an average of 0.045' northward and 0.131' westward to agree with this chart.

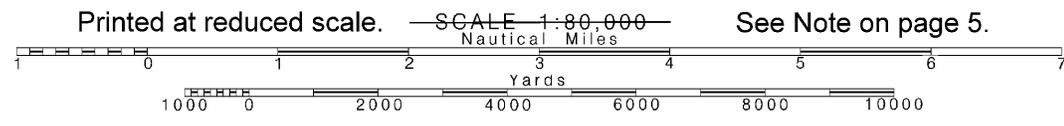
Pump-out facilities

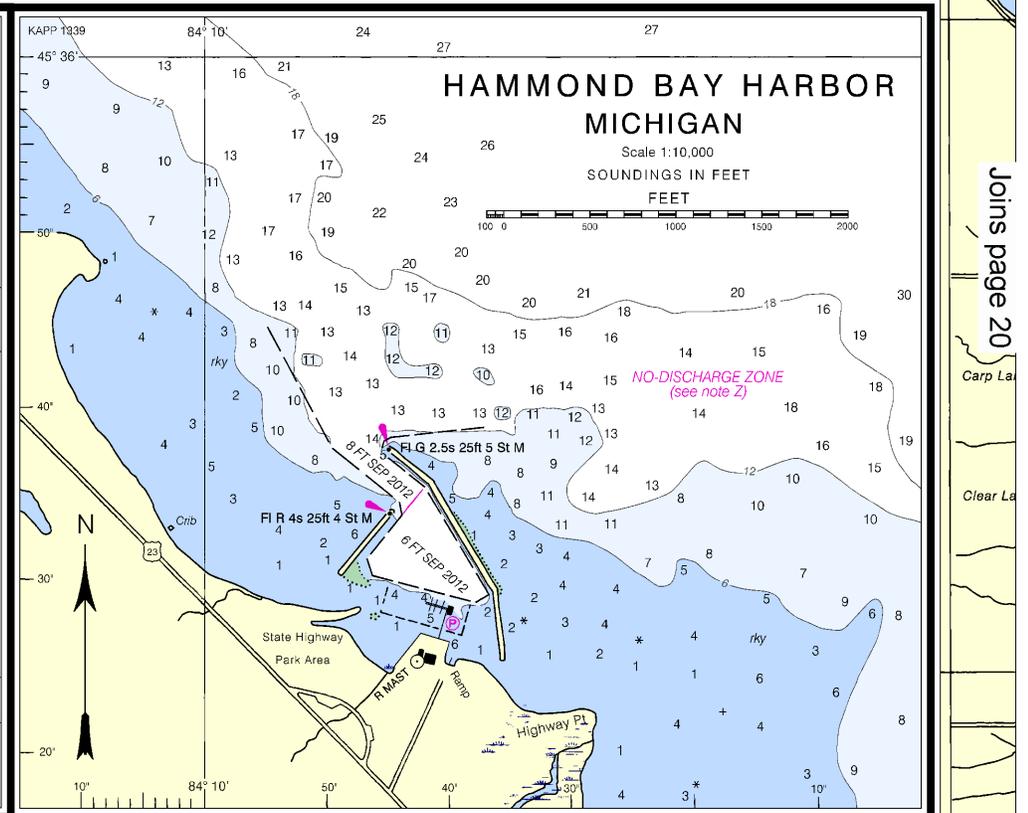
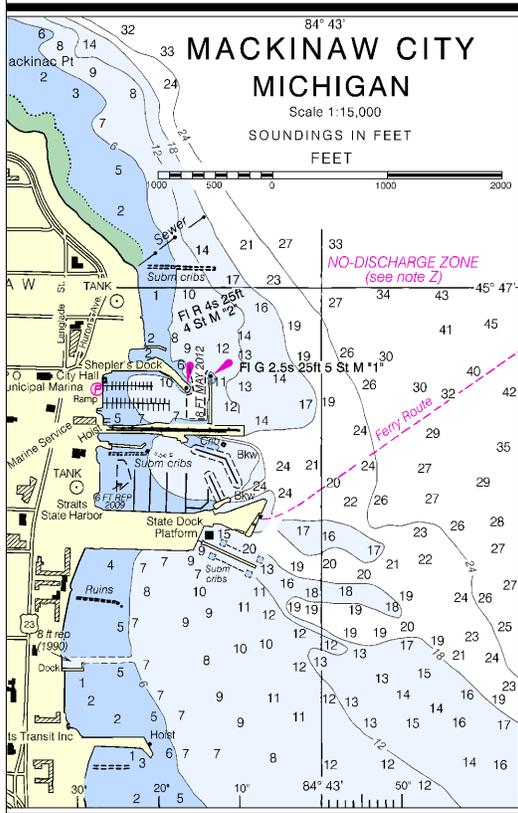
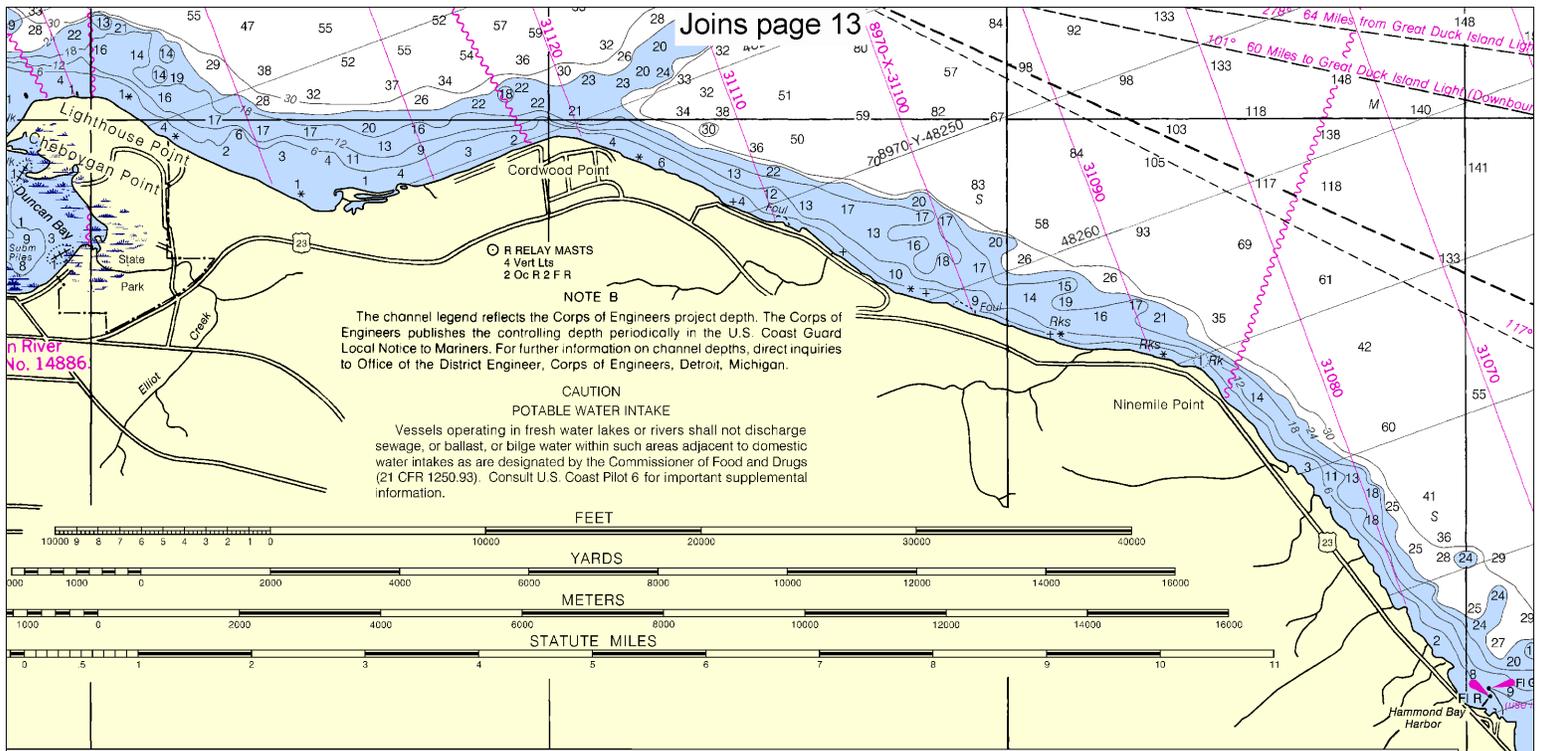


SOUNDINGS IN FEET

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 NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
 NATIONAL COAST SURVEY

Note: Chart grid lines are aligned with true north.



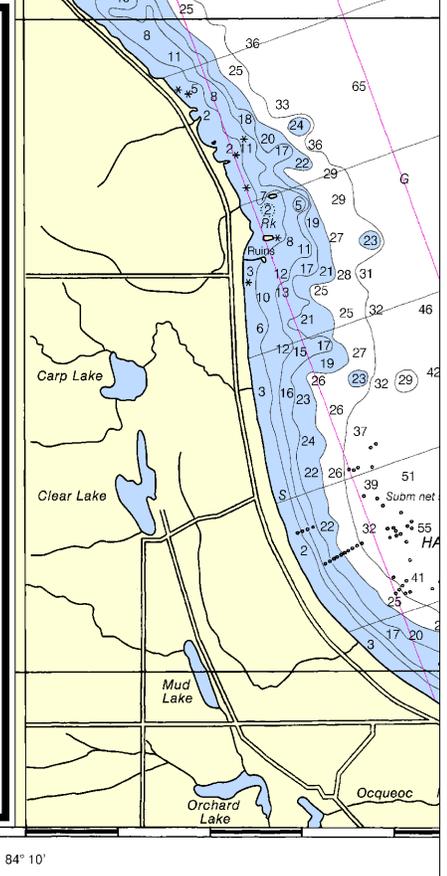
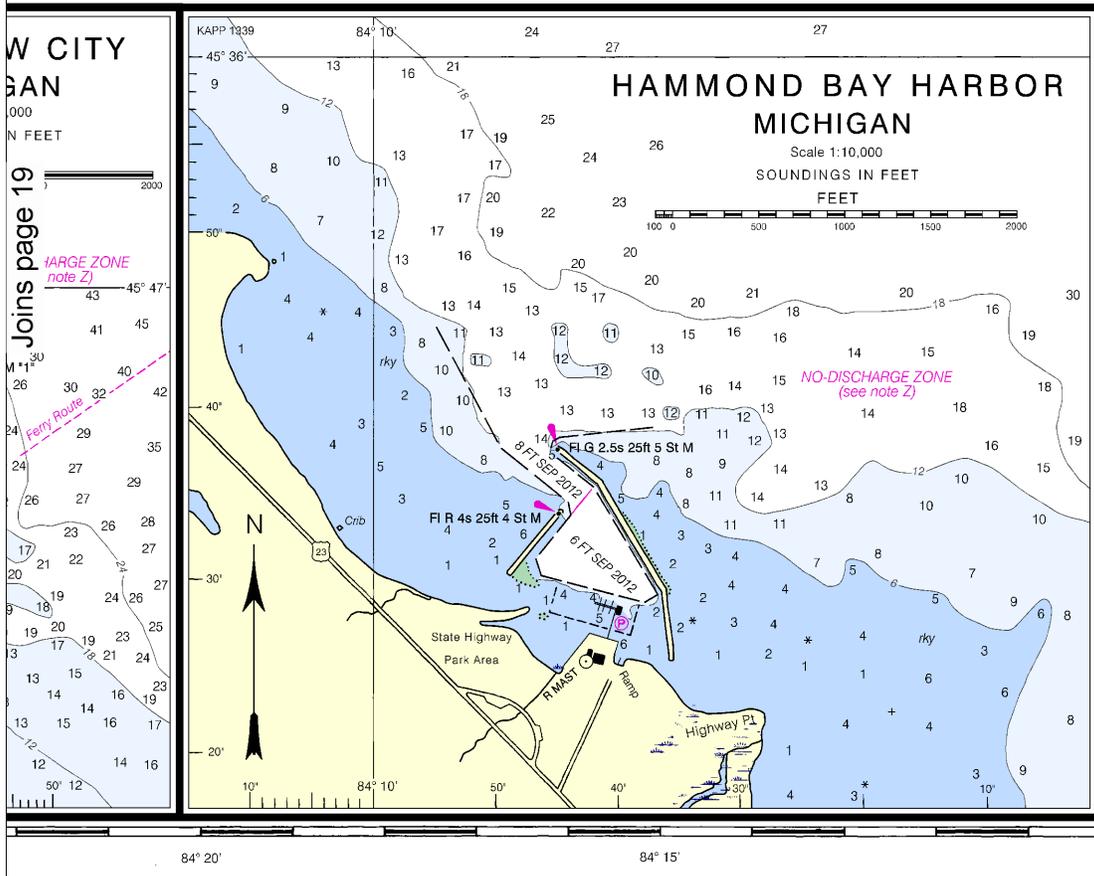
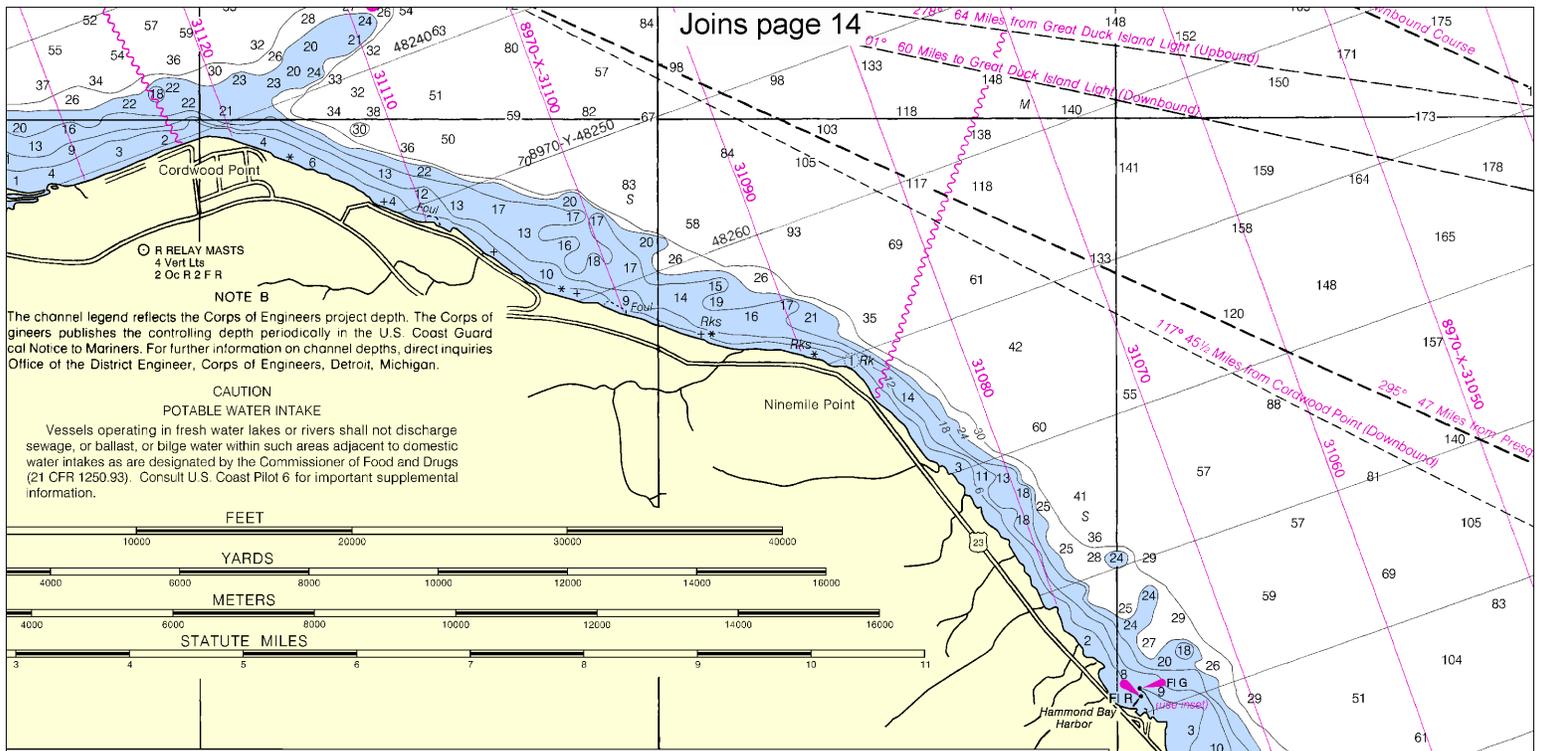


84° 25' 84° 20' 84° 15' 84° 10'

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U.S. DEPARTMENT OF
COMMERCE
NATIONAL OCEANIC AND
ATMOSPHERIC ADMINISTRATION
CHARTER SERVICE
NOAA

PRINT-ON-DEMAND CHARTS

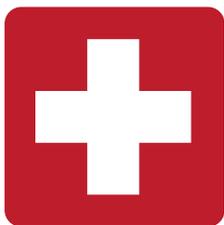
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FATHOMS	1	2	3	4
FEET	6	12	18	24
METERS	1	2	3	4



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.

