

BookletChart™

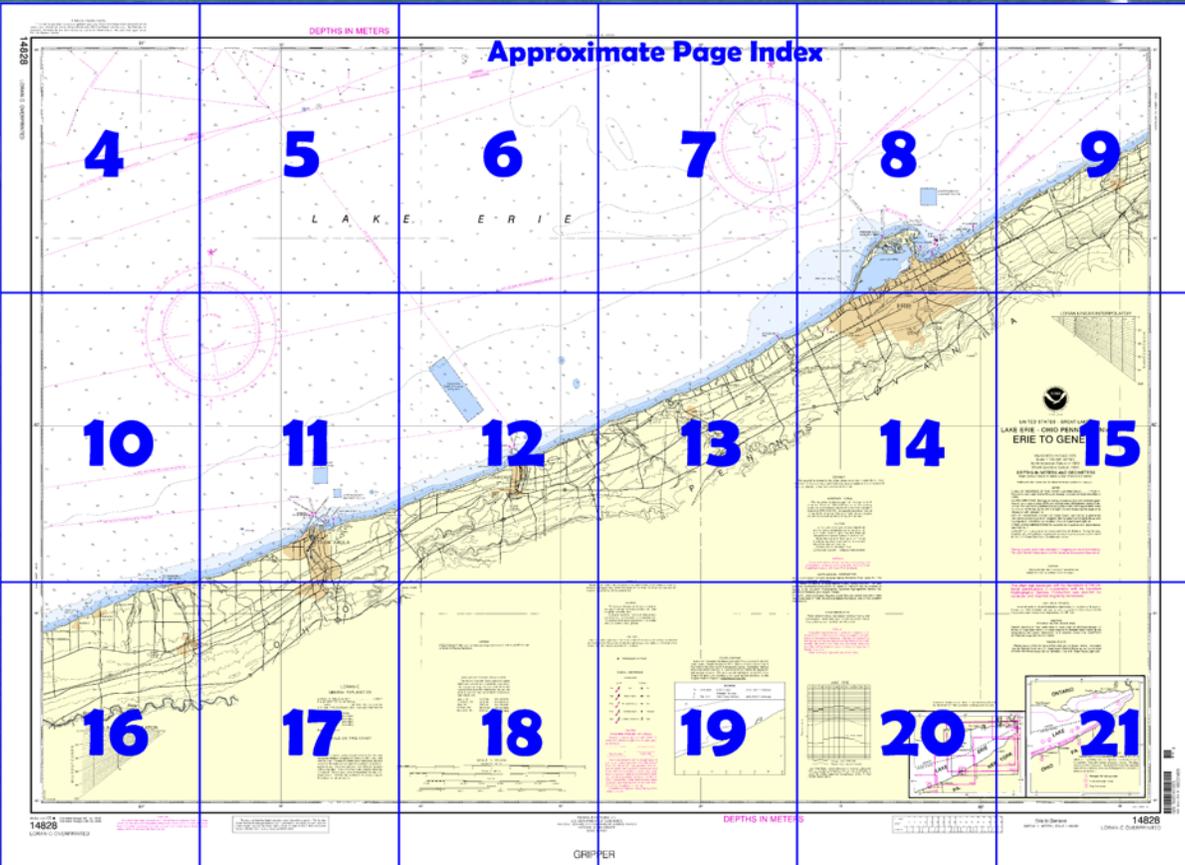


Erie to Geneva NOAA Chart 14828

*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.

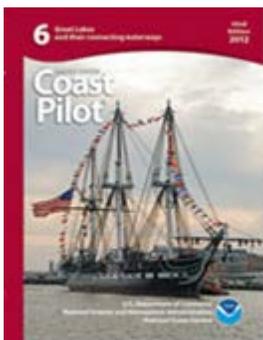
Whenever possible, use the official, full scale NOAA nautical chart for navigation. Nautical chart sales agents are listed on the Internet at <http://www.NauticalCharts.NOAA.gov>.

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=14828>.



(Selected Excerpts from Coast Pilot)

Erie Harbor is about 28 miles southwest of Barcelona. The intermediate shore has no shoals beyond a distance of about 0.7 mile. The **State boundary** between New York and Pennsylvania is about 10 miles southwest of Barcelona.

Presque Isle (42°10.4'N., 80°04.8'W.) is an irregularly shaped peninsula forming nearly landlocked Erie Harbor. The peninsula is connected to the mainland by a narrow neck at the west end and

broadens as it curves around to the northeast and east. The entrance to Erie Harbor is on the south side of the east end of the peninsula. Presque Isle State Park is on the peninsula. **Presque Isle Light**

(42°09'57"N., 80°06'55"W.), 73 feet above the water, is shown from a square tower on the northwest shore of the peninsula. Numerous shore protection structures extend lakeward from the lakeside of the peninsula. Small-craft operators are cautioned to keep 500 feet offshore in the vicinity of these structures.

Erie Harbor, about 78 miles southwest of Buffalo, is in **Presque Isle Bay**, enclosed from the lake by Presque Isle. The bay opens to the east and is about 4.5 miles long and 1.5 miles wide. Erie Harbor, serving the city of **Erie, PA** is in the southeast part of the bay.

Erie Harbor Pierhead Light (42°09'24"N., 80°04'18"W.), 42 feet above the water, is shown from a black and white horizontally banded square tower on the outer end of the north entrance pier.

Channels.—A Federal project provides for a dredged entrance channel leading southwest from deep water in Lake Erie between two parallel piers to a harbor basin and three adjacent turning basins in Presque Isle Bay. The north pier is marked by lights on the outer and inner ends and the south pier is marked by a light on the outer end and by two lights near its midlength which form a **235°** range. The channel limits are marked by lighted and unlighted buoys. The Federal project depths are 29 feet in the entrance channel, 28 feet in Harbor Basin, 27 feet in Approach Turning Basin, 21 feet in Erie Turning Basin, and 18 feet in Harbor Turning Basin. (See Notice to Mariners and latest edition of charts for controlling depths.)

Misery Bay is an indentation in the south side of Presque Isle north of Erie Harbor Entrance Channel. The bay has depths of 5 to 10 feet except for shoaling along the edges.

Anchorage.—Good anchorage is in the center of Presque Isle Bay in depths of 12 to 22 feet, mud bottom. Local regulations prohibit vessels from anchoring in any channel or mooring to channel markers and buoys. Vessels over 100 feet long or over 50 tons are prohibited from anchoring within 500 feet of the city water intake or sewer pipelines. The city water intake extends northwest across Presque Isle Bay and is marked by buoys.

Dangers.—An unmarked submerged pier, covered 1 to 2 feet, extends about 2,000 feet from shore 0.8 mile south-southeast of Erie Harbor Pierhead Light.

Quarantine, customs, immigration, and agricultural quarantine.—(See chapter 3, Vessel Arrival Inspections, and appendix for addresses.)

Quarantine is enforced in accordance with the regulations of the U.S. Public Health Service. (See Public Health Service, chapter 1.)

Erie is a **customs port of entry**.

Harbor Regulations are established by the Erie-Western Penn. Port Authority and enforced by the **harbormaster**. A **speed limit** of 3 mph (2.6 knots) is enforced in the East and West Canal Basins and within 300 feet of the shoreline, and 5 mph (4.4 knots) elsewhere in the harbor. Copies of the regulations may be obtained from the Port Authority Office, 17 W. Dobins Landing, Erie, PA 16501, telephone 814-455-7557. The **State boundary** between Pennsylvania and Ohio is about 1.5 miles east of Conneaut.

Conneaut Harbor, serving **Conneaut, OH**, is about 107 miles southwest of Buffalo and about 73 miles northeast of Cleveland. It comprises an outer harbor sheltered by breakwaters and an inner harbor in the lower part of the **Conneaut River**.

**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

◆ Submerged well head

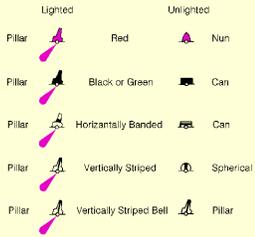
CAUTION
SUBMARINE PIPELINES AND CABLES
 Charted submarine pipelines and submarine cables and submarine pipeline and cable areas are shown as:



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.

SYMBOL REFERENCE

Floating Aids



CAUTION

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

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.

Akron, OH	KDO-94	162.400 MHz
Cleveland, OH	KHB-59	162.550 MHz
Erie, PA	KEC-58	162.400 MHz
Grafton, OH	WNG-698	162.500 MHz
Meadville, PA	KZZ-32	162.475 MHz

LAKE ERIE FISH NETTING AREAS

Various types of nets are employed in Lake Erie of which gill nets, impounding nets and trap nets may create a hazard to mariners. These are marked by buoys or stakes. This diagram shows the areas most intensively fished and the principal type of nets employed. However, fishing gear may be encountered at any location.

- ① Principal Gill Netting Areas
- ② Impounding Net Areas
- ③ Trap Net Areas

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.

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.

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.

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 Buffalo, New York. 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.

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.

SAILING DIRECTIONS. Bearings on sailing courses are true and distances given thereon are in statute miles (St M) and nautical miles (NM) between points of departure. The true bearing between any two points on this chart may be determined by connecting the two points with a straight line and measuring the angle of its intersection with meridian line.

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.

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

PLANE OF REFERENCE OF THIS CHART (Low Water Datum) 173.50 m. Referred to mean water level at Rimouski, Quebec, International Great Lakes Datum (1985).

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 privately maintained buoys are not all listed in the U.S. Coast Guard Light List.

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

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 (PWI)

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 Surgeon General (21 CFR 1250.93). Consult U.S. Coast Pilot 6 for important supplemental information.

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

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.

This chart was developed with the framework of international specifications in cooperation with the Canadian Hydrographic Service. Production was assisted by computer and machine engraving techniques.

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

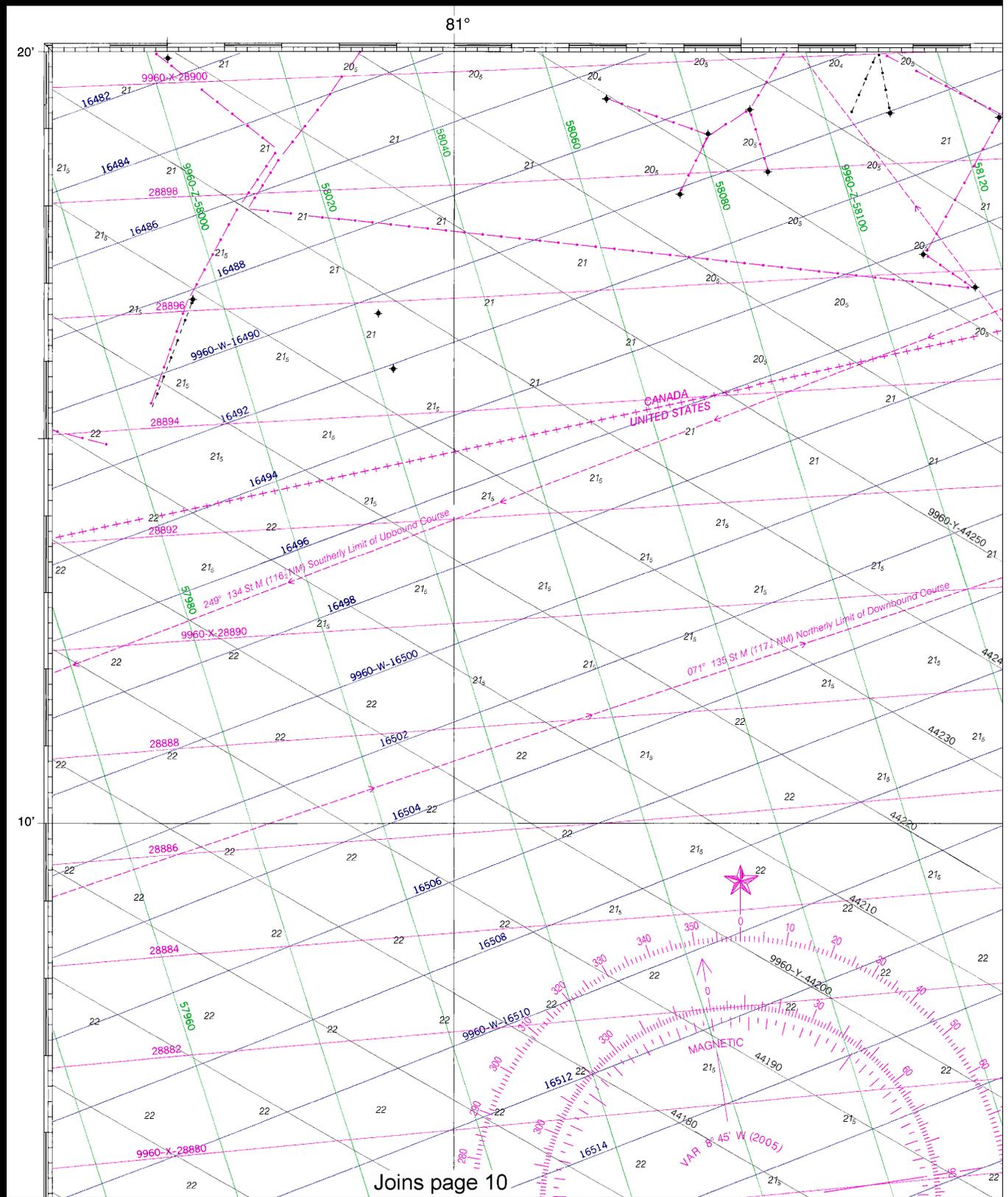
SPEED REGULATIONS. See U.S. Rules and Regulations for U.S. waters, 33 CFR Part 401 carried in the Seaway Handbook.

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.

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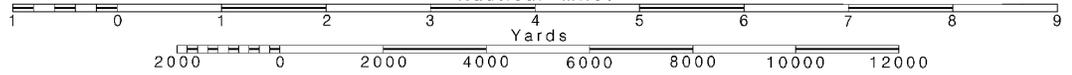
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Note: Chart grid lines are aligned with true north.

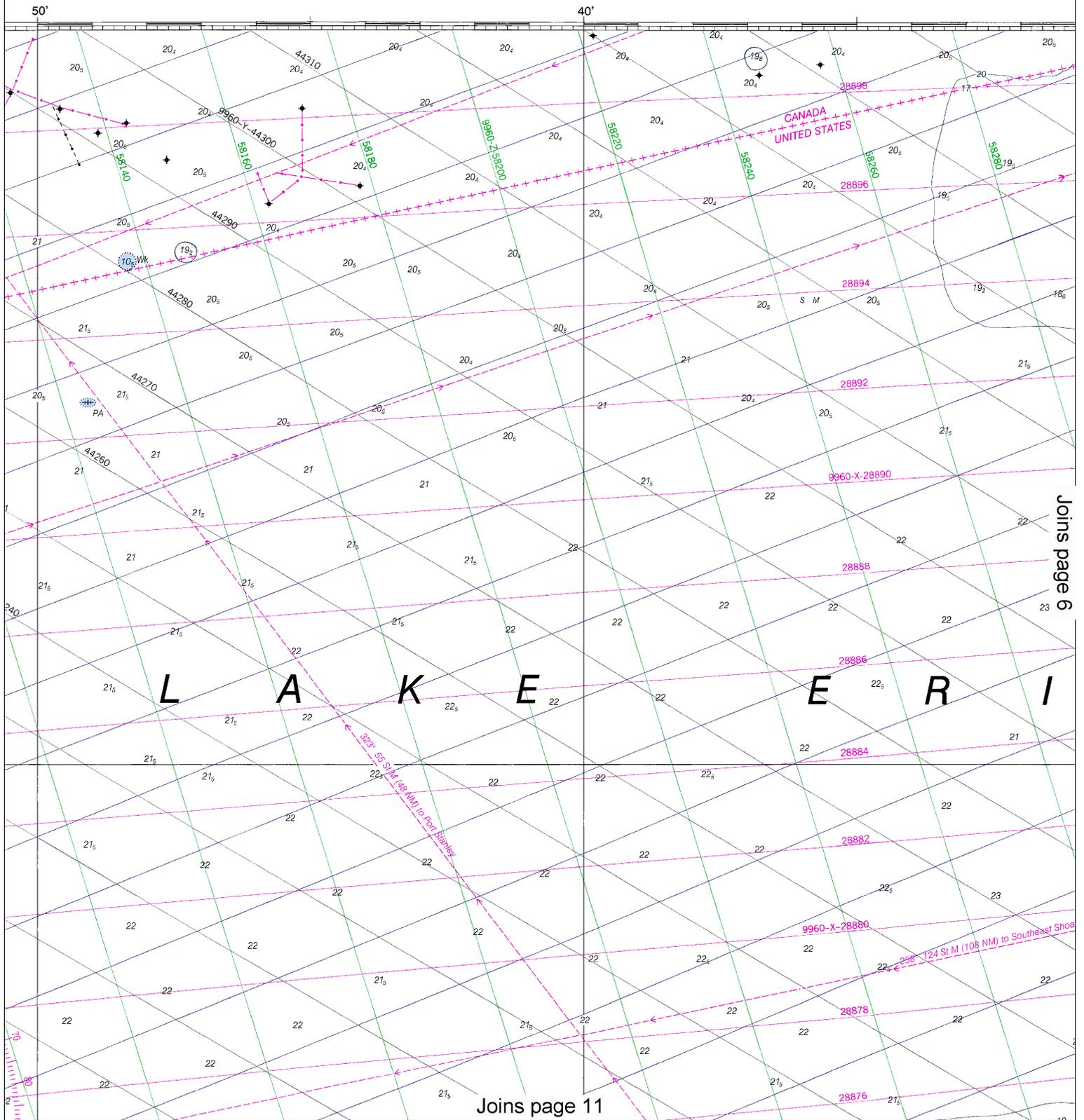
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SCALE 1:100,000

See Note on page 5.



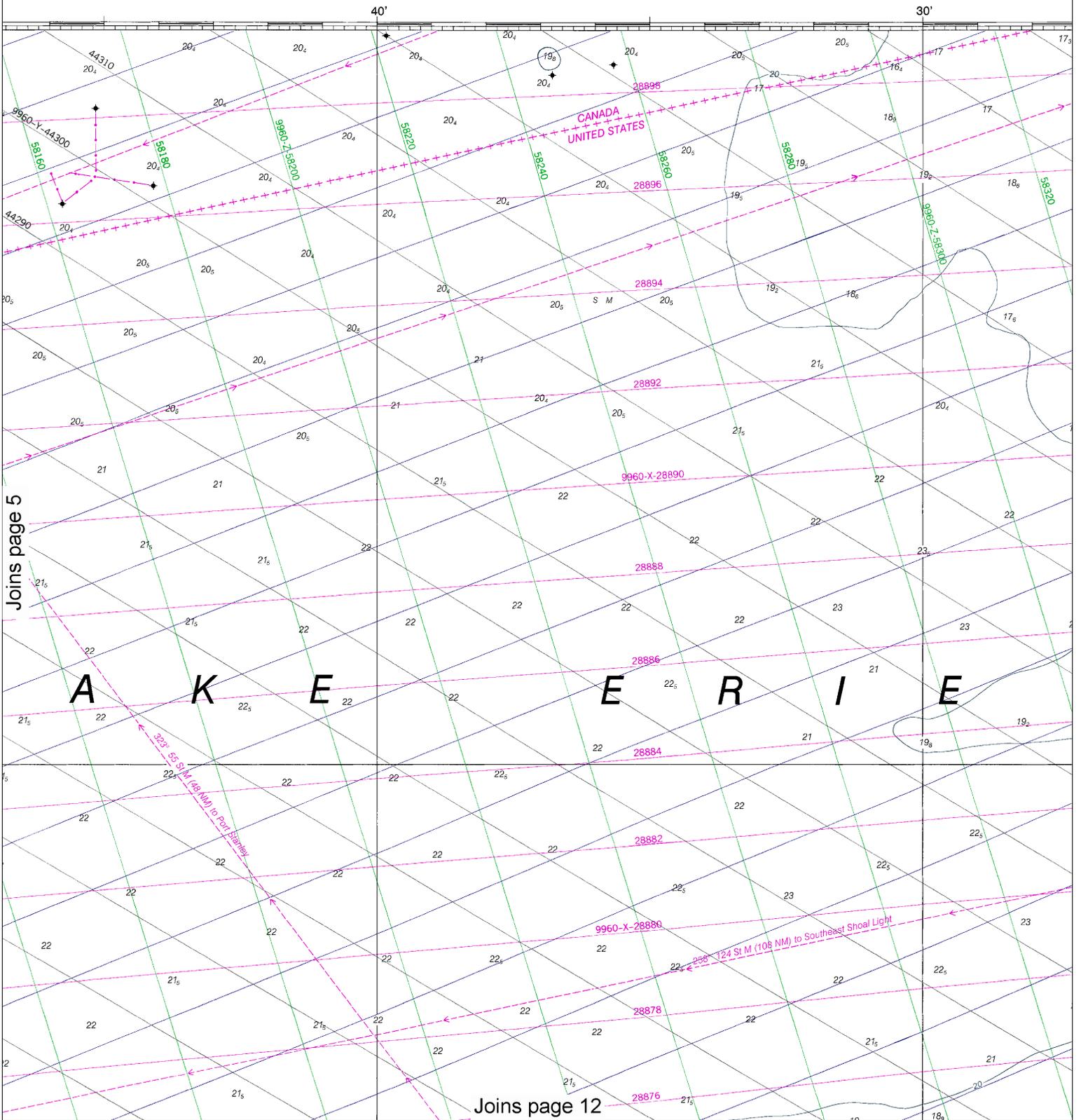
DEPTHS IN METERS



This BookletChart was reduced to 75% of the original chart scale.
The new scale is 1:133333. Barscales have also been reduced and
are accurate when used to measure distances in this BookletChart.

DEPTH IN METERS

1st Ed., Jan.

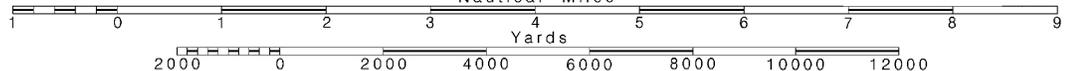


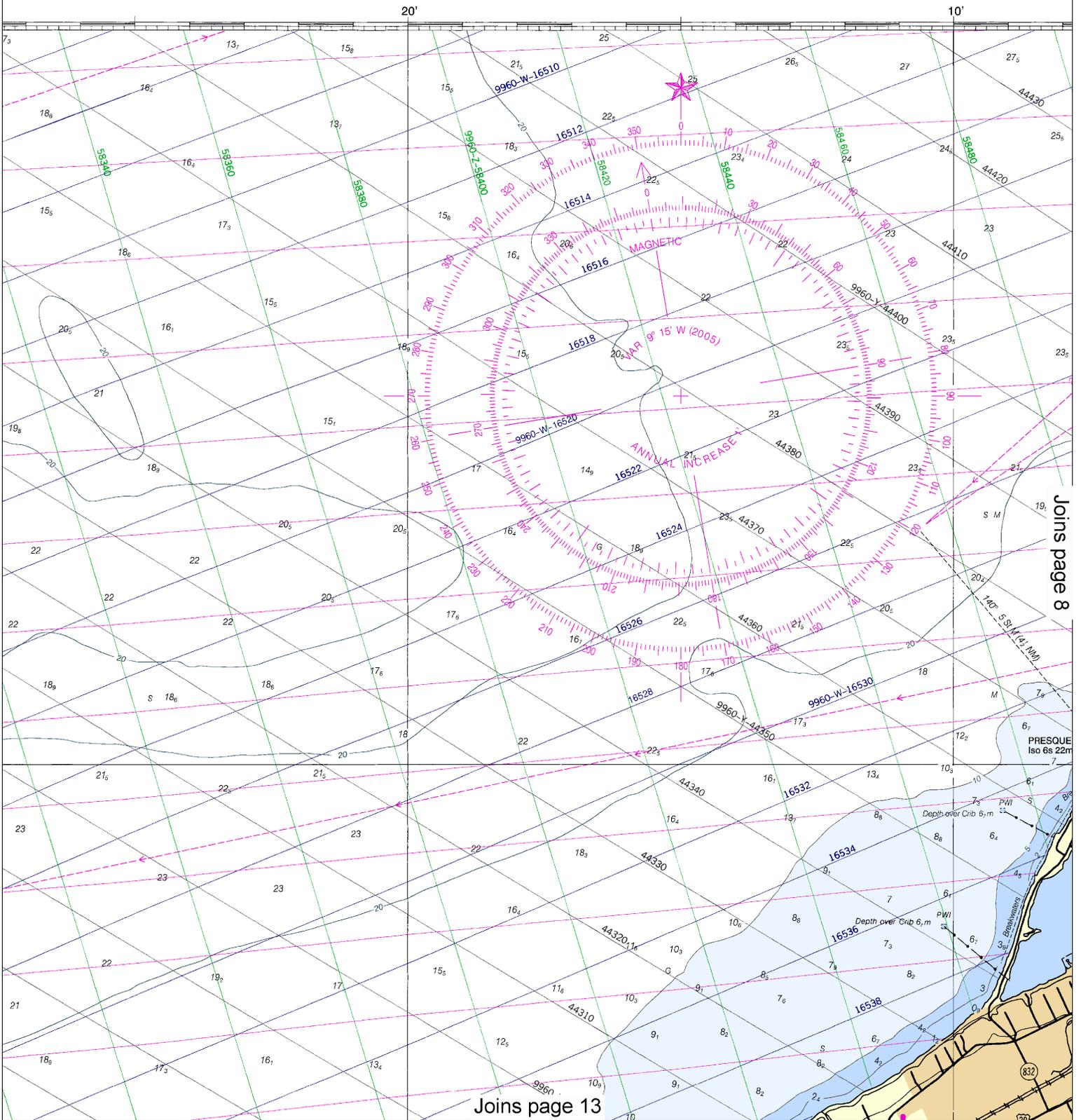
Note: Chart grid lines are aligned with true north.

Printed at reduced scale.

SCALE 1:100,000
Nautical Miles

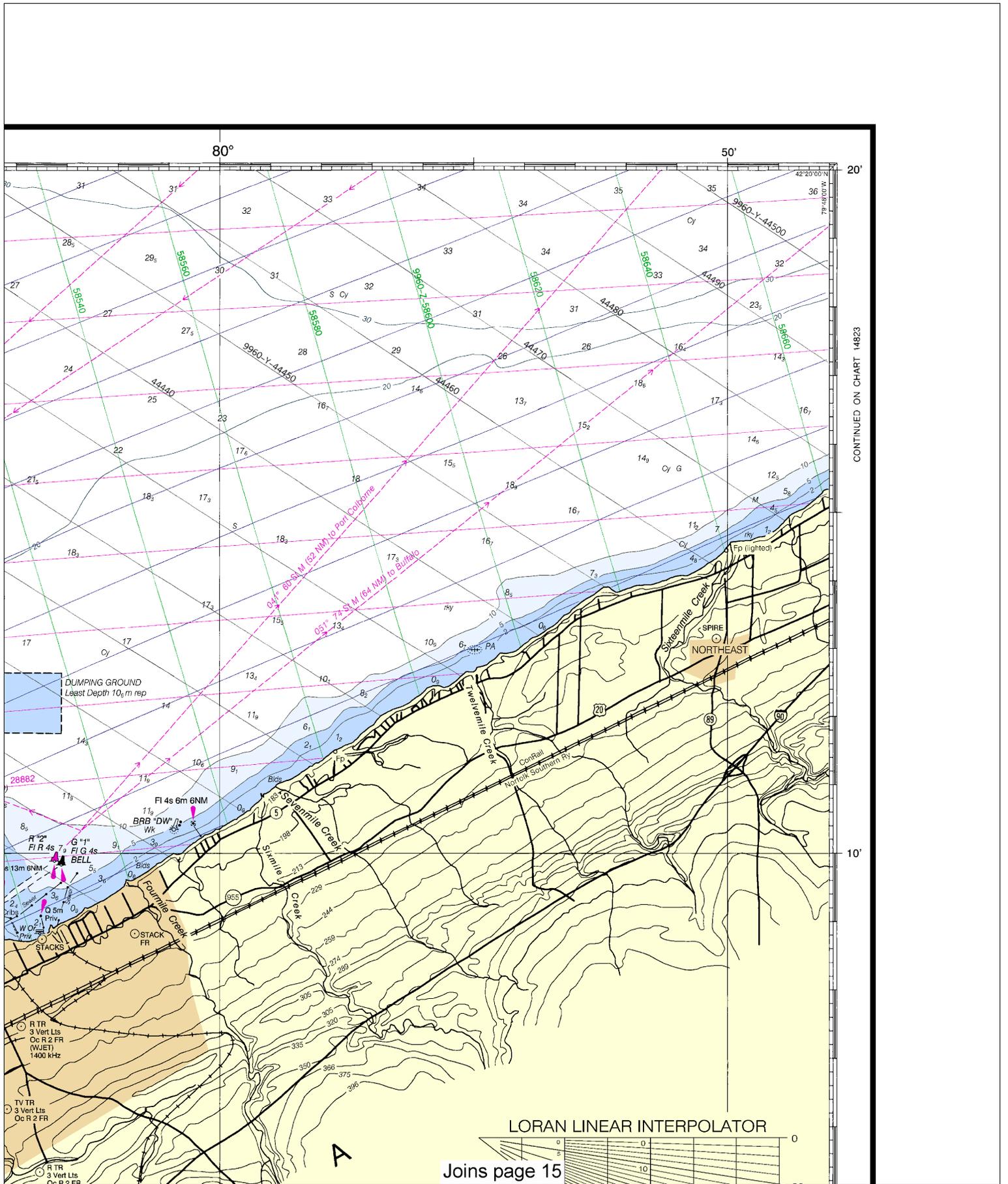
See Note on page 5.





This BookletChart has been updated through: Coast Guard Local Notice To Mariners: 4712 11/20/2012,
NGA Weekly Notice to Mariners: 4812 12/1/2012,
Canadian Coast Guard Notice to Mariners: 1012 10/26/2012.

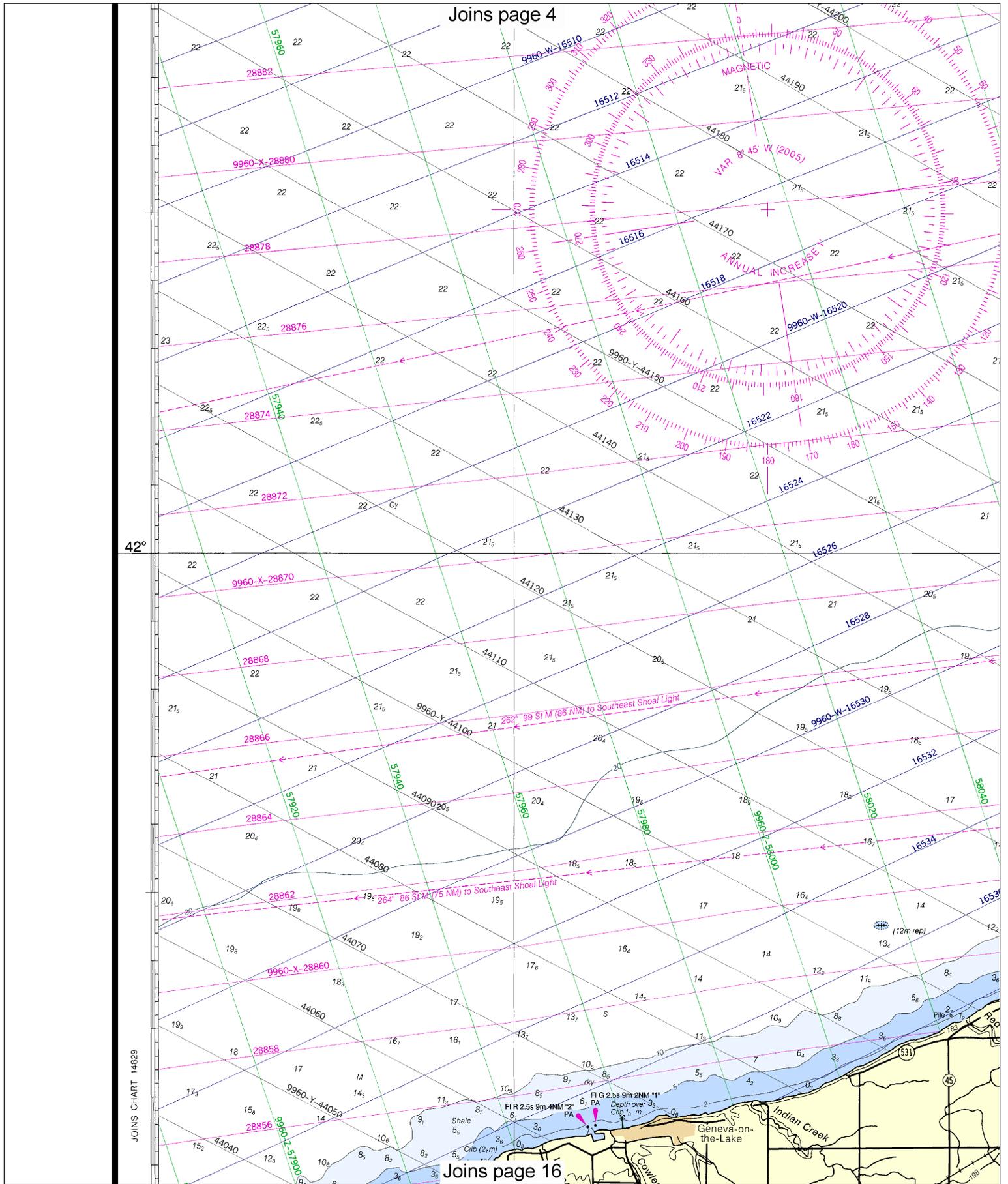




CONTINUED ON CHART 14823

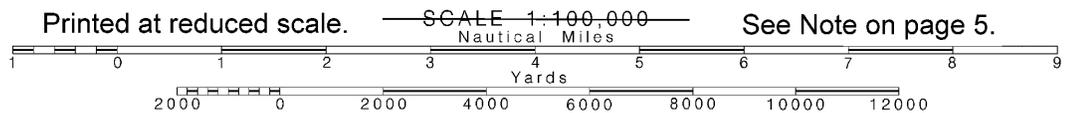
LORAN LINEAR INTERPOLATOR

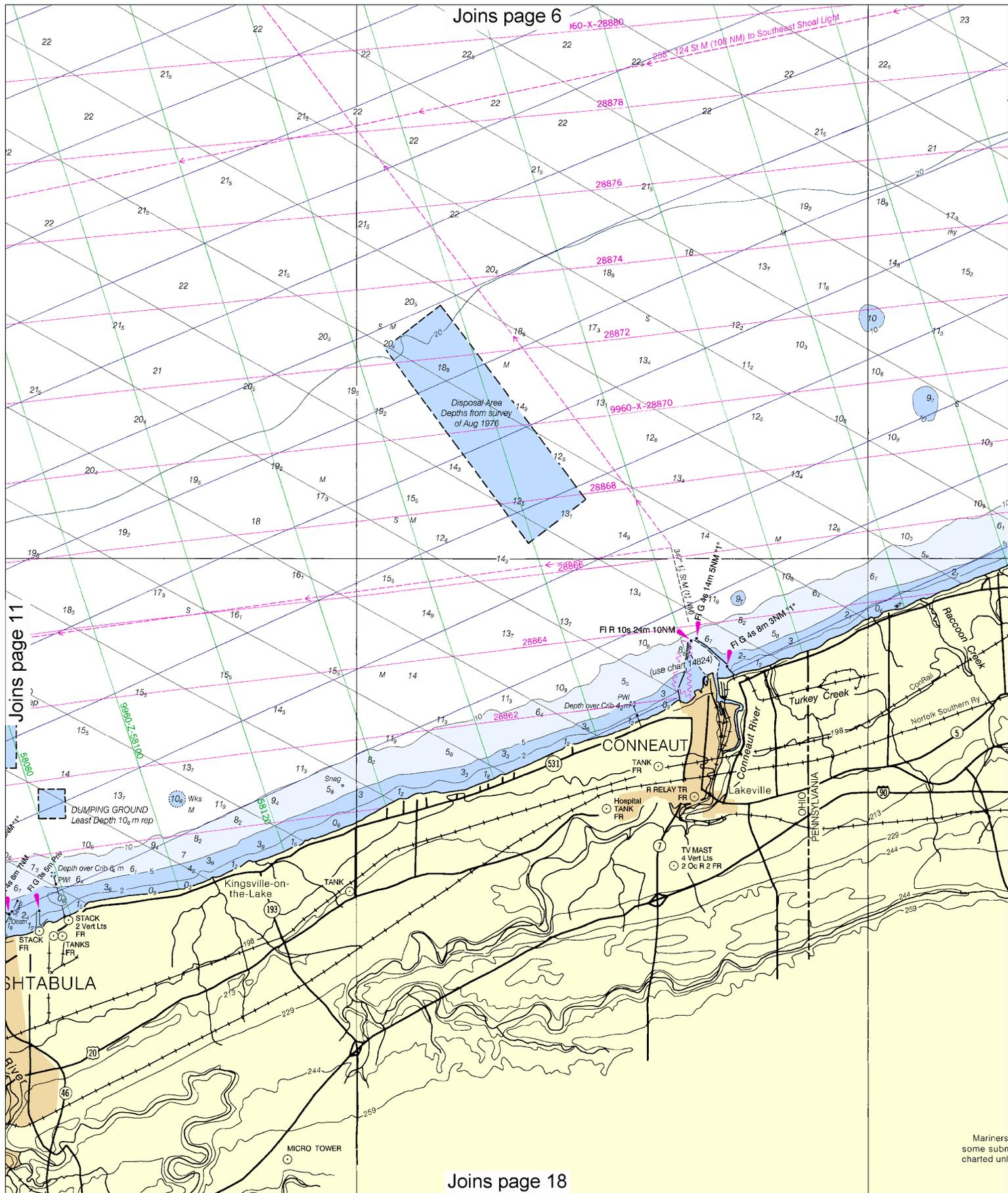
Joins page 15



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Note: Chart grid lines are aligned with true north.





Joins page 6

Joins page 11

Joins page 18

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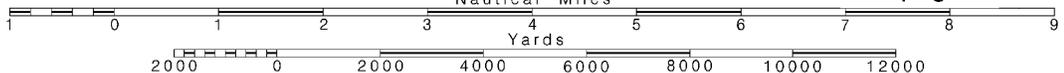
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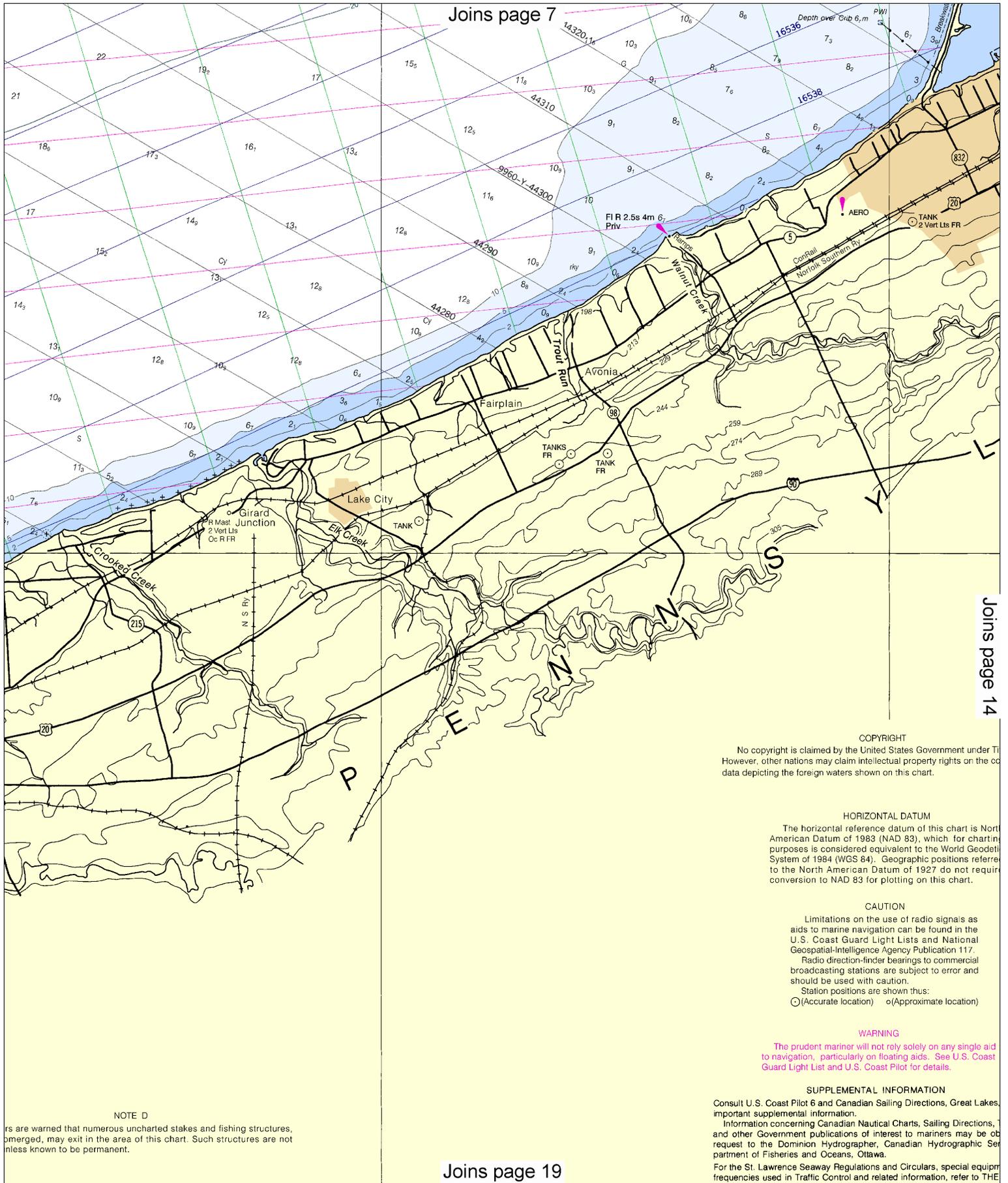
Note: Chart grid lines are aligned with true north.

Printed at reduced scale.

SCALE 1:100,000
Nautical Miles

See Note on page 5.





Joins page 7

Joins page 14

Joins page 19

NOTE D
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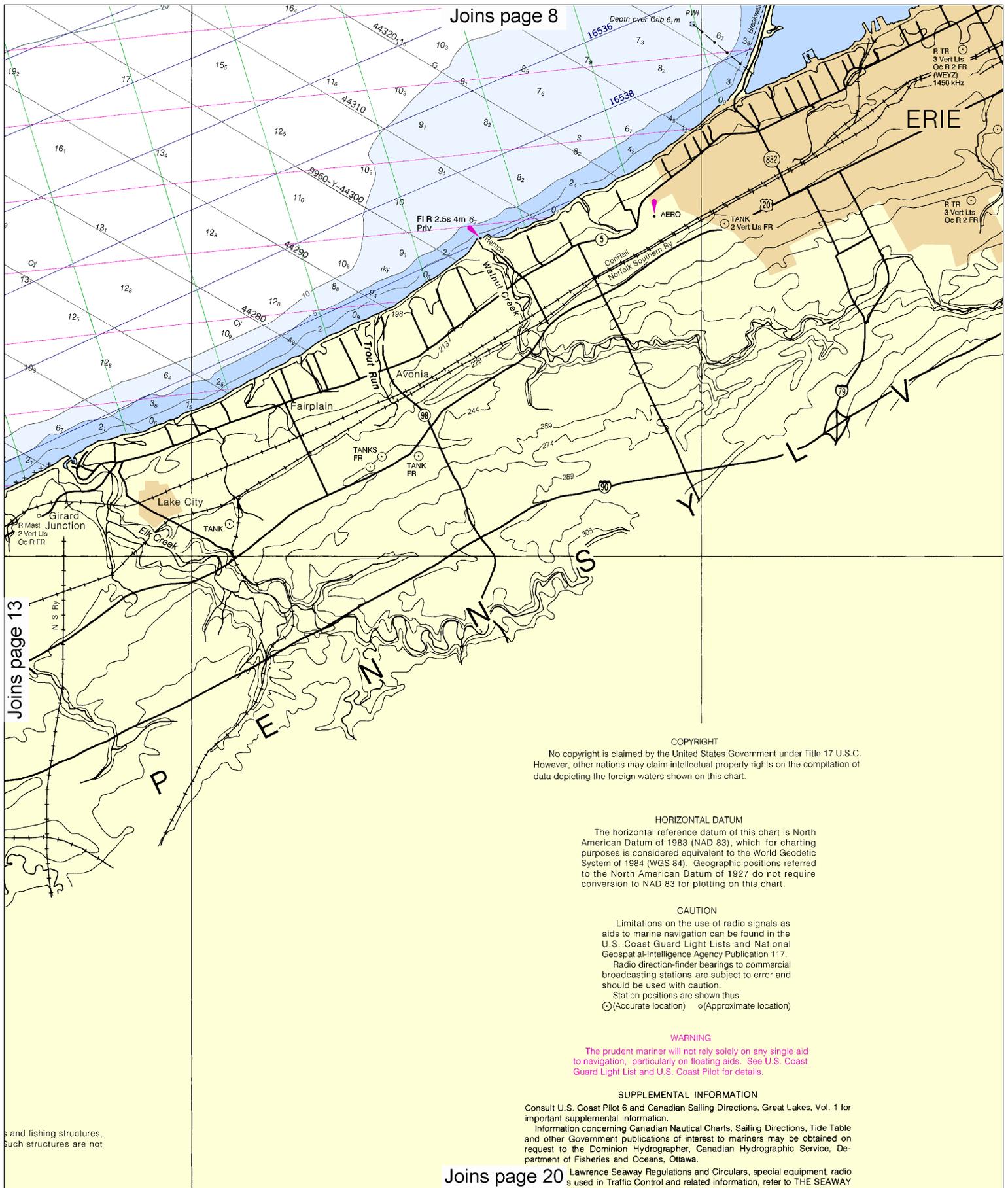
COPYRIGHT
 No copyright is claimed by the United States Government under Title 16, U.S.C. However, other nations may claim intellectual property rights on the data depicting the foreign waters shown on this chart.

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 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.

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)

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.

SUPPLEMENTAL INFORMATION
 Consult U.S. Coast Pilot 6 and Canadian Sailing Directions, Great Lakes, important supplemental information. Information concerning Canadian Nautical Charts, Sailing Directions, and other Government publications of interest to mariners may be obtained by request to the Dominion Hydrographer, Canadian Hydrographic Service, Department of Fisheries and Oceans, Ottawa. For the St. Lawrence Seaway Regulations and Circulars, special equipment frequencies used in Traffic Control and related information, refer to THE



Joins page 8

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Joins page 13

Joins page 20

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Lawrence Seaway Regulations and Circulars, special equipment, radio s used in Traffic Control and related information, refer to THE SEAWAY

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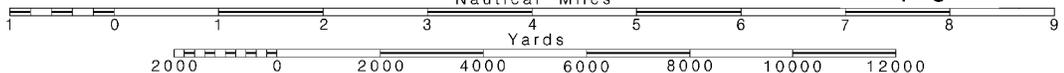
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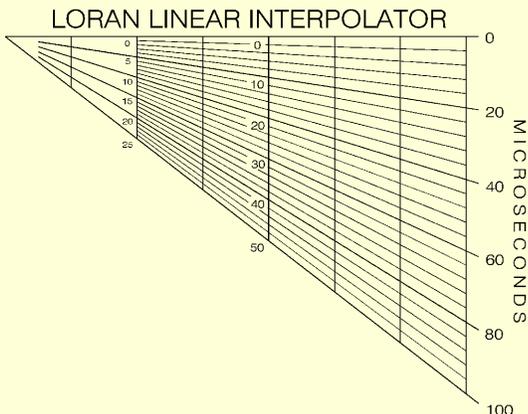
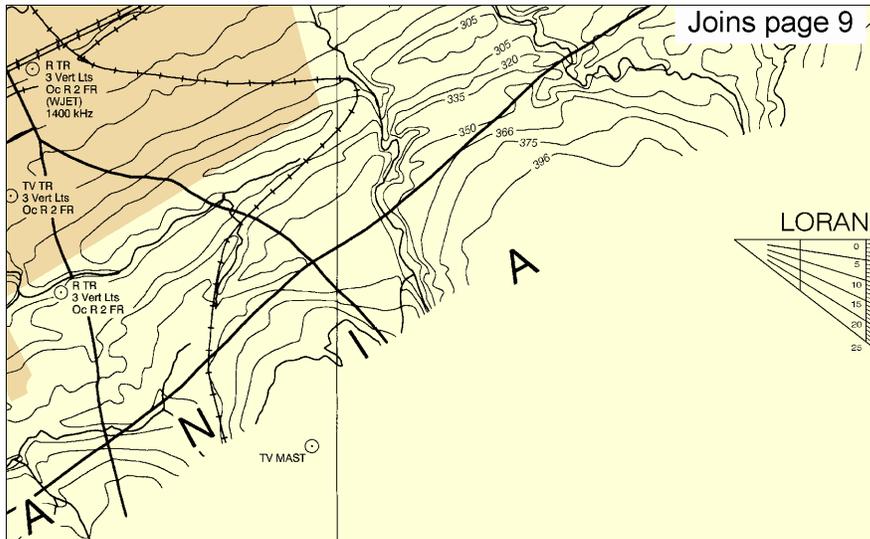
Note: Chart grid lines are aligned with true north.

Printed at reduced scale.

SCALE 1:100,000
 Nautical Miles

See Note on page 5.





UNITED STATES - GREAT LAKES
LAKE ERIE - OHIO PENNSYLVANIA
ERIE TO GENEVA

42°

MERCATOR PROJECTION
Scale 1:100,000 (42°00')
North American Datum of 1983
(World Geodetic System 1984)

DEPTHS IN METERS AND DECIMETERS
Depth contour interval 10 meters (Under 10 at 2 and 5 meters)

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

NOTES

PLANE OF REFERENCE OF THIS CHART (Low Water Datum) 173.50 m.
Referred to mean water level at Rimouski, Quebec, International Great Lakes Datum (1985).

SAILING DIRECTIONS. Bearings on sailing courses are true and distances given thereon are in statute miles (St M) and nautical miles (NM) between points of departure. The true bearing between any two points on this chart may be determined by connecting the two points with a straight line and measuring the angle of its intersection with meridian line.

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.

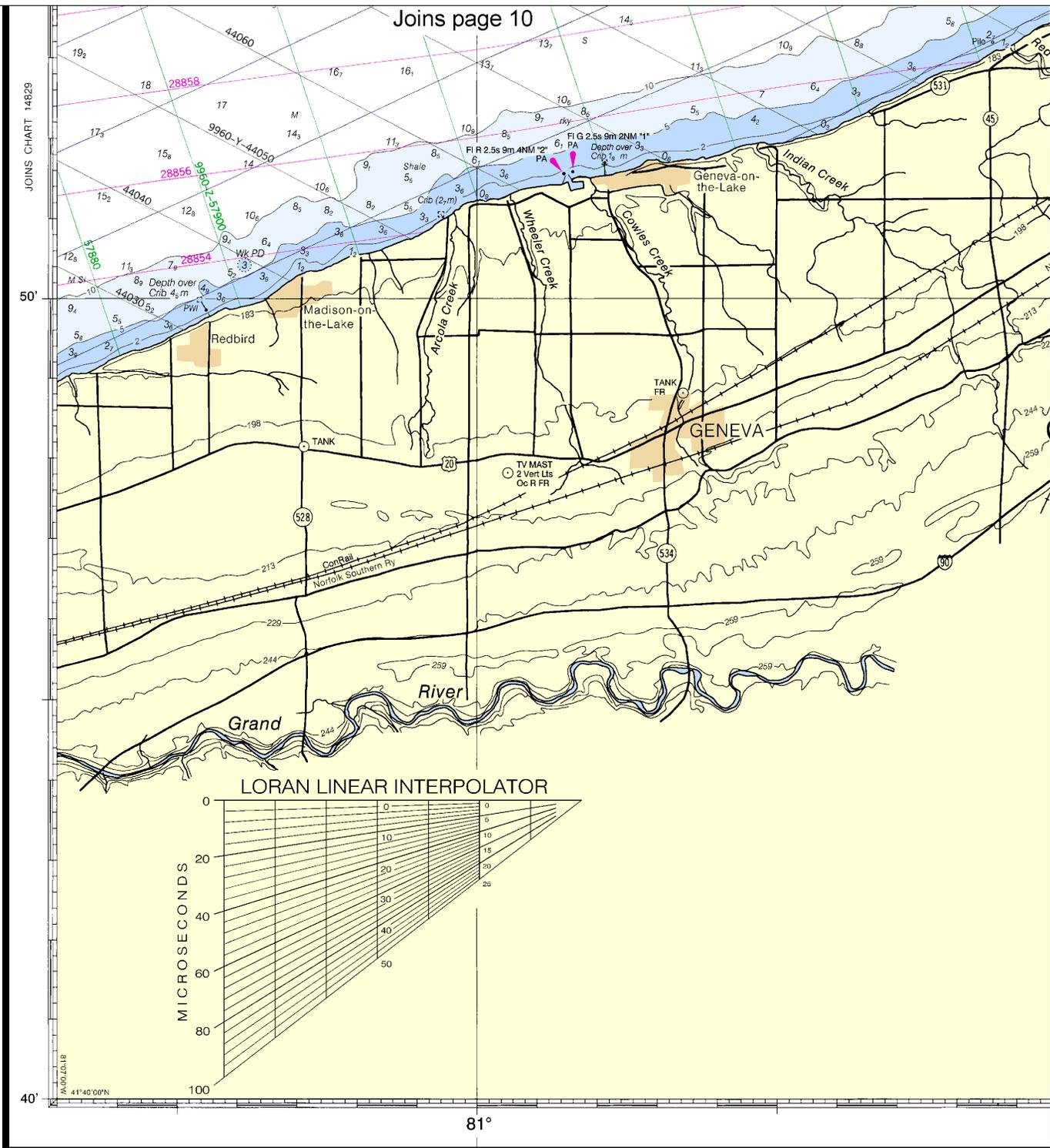
AUTHORITIES. Hydrography and topography by the National Ocean Service, Coast Survey, with additional information from the Corps of Engineers, Geological Survey, U.S. Coast Guard, and Canadian authorities.

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

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

This chart was developed with the framework of international specifications in cooperation with the Canadian Hydrographic Service. Production was assisted by computer and **mac** Joins page 21 ques.



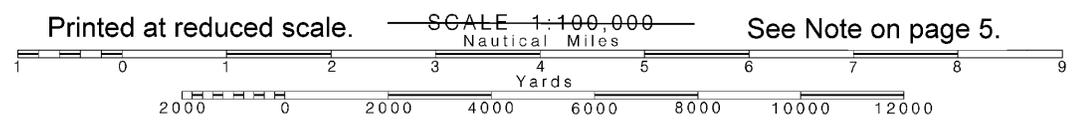
6th Ed., Apr./05 ■ Corrected through NM Apr. 30/05
 Corrected through LNM Apr. 26/05
14828
 LORAN-C OVERPRINTED

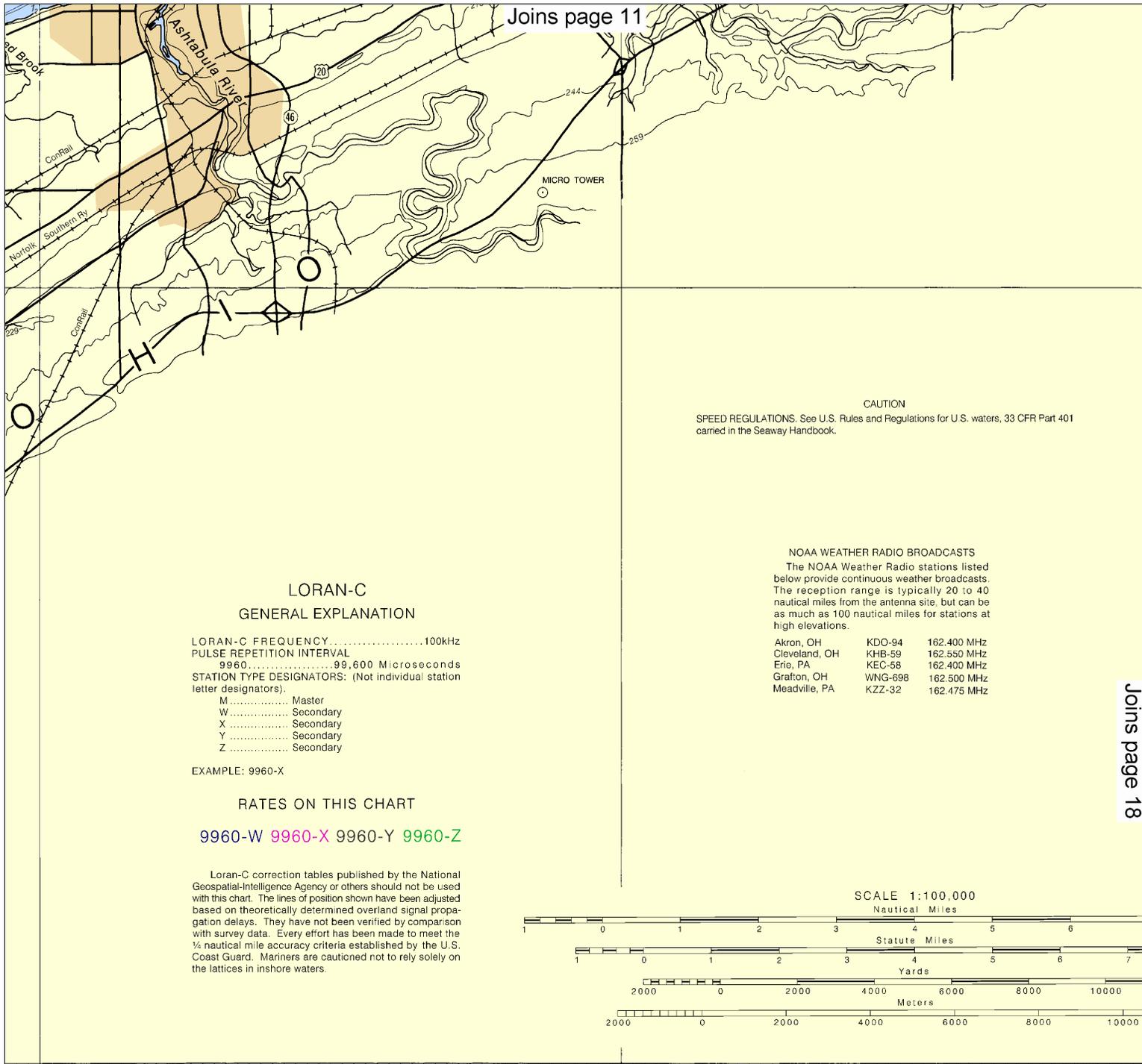
CAUTION
 This chart has been corrected from the Notice to Mariners (NM) published weekly by the National Geospatial-Intelligence Agency and the Local Notice to Mariners (LNM) issued periodically by each U.S. Coast Guard district to the dates shown in the lower left hand corner.

This nautical chart has been developed by the National Ocean Service. The National Ocean Service encourages users to improve this chart to the Chief, Maritime Service, NOAA, Silver Spring, Maryland.

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Note: Chart grid lines are aligned with true north.





**LORAN-C
GENERAL EXPLANATION**

LORAN-C FREQUENCY 100kHz
 PULSE REPETITION INTERVAL
 9960 99,600 Microseconds
 STATION TYPE DESIGNATORS: (Not individual station
 letter designators).
 M Master
 W Secondary
 X Secondary
 Y Secondary
 Z Secondary

EXAMPLE: 9960-X

RATES ON THIS CHART

9960-W 9960-X 9960-Y 9960-Z

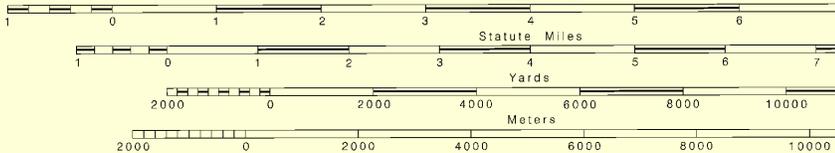
Loran-C correction tables published by the National Geospatial-Intelligence Agency or others should not be used with this chart. The lines of position shown have been adjusted based on theoretically determined overland signal propagation delays. They have not been verified by comparison with survey data. 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.

CAUTION
 SPEED REGULATIONS. See U.S. Rules and Regulations for U.S. waters, 33 CFR Part 401 carried in the Seaway Handbook.

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.

Akron, OH	KDO-94	162.400 MHz
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Grafton, OH	WNG-698	162.500 MHz
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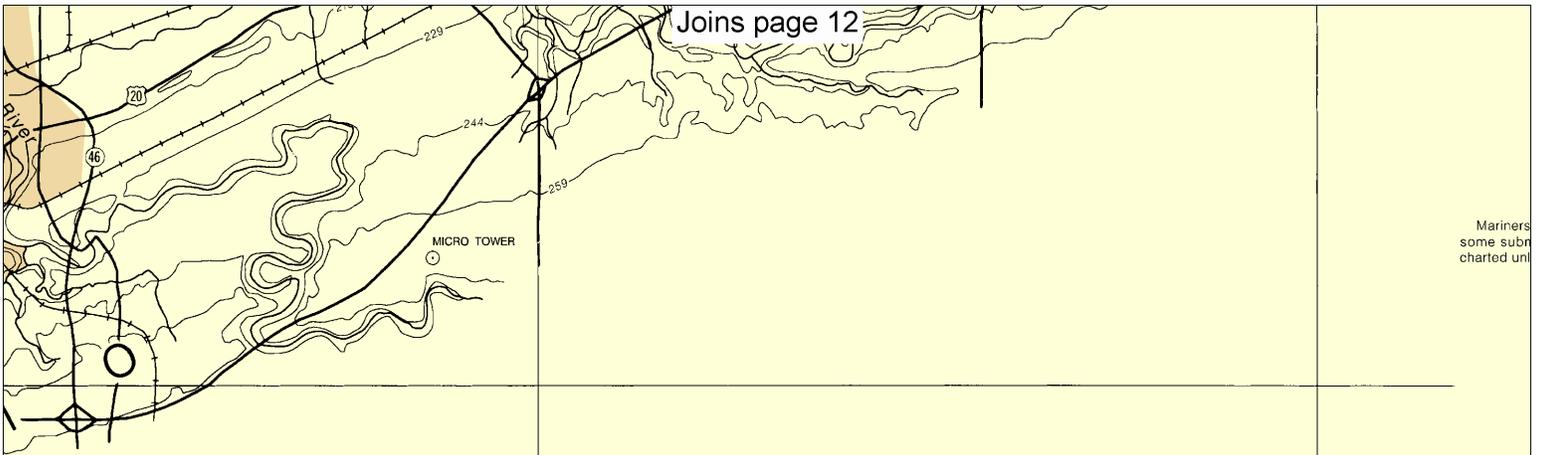
SCALE 1:100,000
 Nautical Miles



50'

40'

designed to promote safe navigation. The National Oceanic and Atmospheric Administration (NOAA) invites the public to submit corrections, additions, or comments for this chart to the Marine Chart Division (N/CS2), National Oceanic and Atmospheric Administration, 1215 Jefferson Davis Highway, Alexandria, Virginia 22304-2992, or by telephone at 202-761-3282.



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SPEED REGULATIONS. See U.S. Rules and Regulations for U.S. waters, 33 CFR Part 401
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LORAN-C GENERAL EXPLANATION

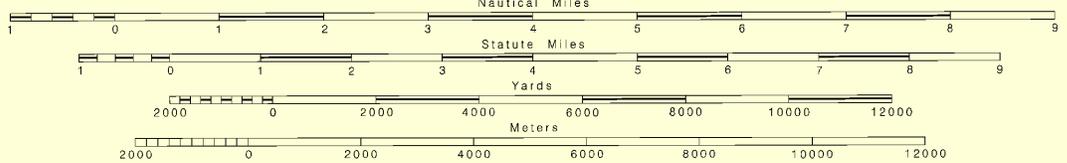
N-C FREQUENCY.....100kHz
 REPETITION INTERVAL
 9960.....99,600 Microseconds
 ON TYPE DESIGNATORS: (Not individual station
 ators).
 Master
 Secondary
 Secondary
 Secondary
 Secondary
 9960-X

NOTES ON THIS CHART

9960-W 9960-X 9960-Y 9960-Z

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 lices in inshore waters.

SCALE 1:100,000



40'

Published at Was
 U.S. DEPARTMENT
 NATIONAL OCEANIC AND ATMOC
 NATIONAL OCE
 COAST SU

GRIP

Note: Chart grid
 lines are aligned
 with true north.

Printed at reduced scale.

SCALE 1:100,000

See Note on page 5.



Station positions are shown thus:
 ○ (Accurate location) ○ (Approximate location)

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.

SUPPLEMENTAL INFORMATION

Consult U.S. Coast Pilot 6 and Canadian Sailing Directions, Great Lakes, for important supplemental information.

Information concerning Canadian Nautical Charts, Sailing Directions, and other Government publications of interest to mariners may be obtained on request to the Dominion Hydrographer, Canadian Hydrographic Service, Department of Fisheries and Oceans, Ottawa.

For the St. Lawrence Seaway Regulations and Circulars, special equipment frequencies used in Traffic Control and related information, refer to THE HANDBOOK.

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.

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 Buffalo, New York.
 Refer to charted regulation section numbers.

NOTE D

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

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.

CAUTION

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

◆ Submerged well head

SYMBOL REFERENCE

Floating Aids

Lighted		Unlighted	
Pillar	Red	Nun	
Pillar	Black or Green	Can	
Pillar	Horizontally Banded	Can	
Pillar	Vertically Striped	Spherical	
Pillar	Vertically Striped Bell	Pillar	

CAUTION

SUBMARINE PIPELINES AND CABLES

Charted submarine pipelines and submarine cables and submarine pipeline and cable areas are shown as:



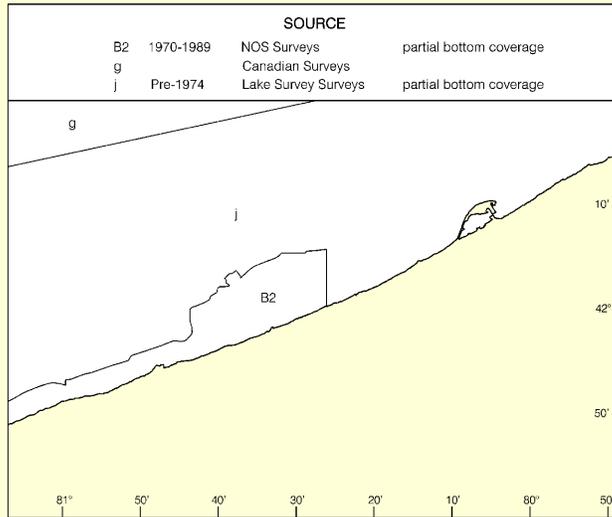
Additional uncharted submarine pipelines and submarine cables may exist within the area of this chart. Not all submarine pipelines and submarine cables are required to be buried, and those that were originally buried may have become exposed. Mariners should use extreme caution when operating vessels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

SOURCE DIAGRAM

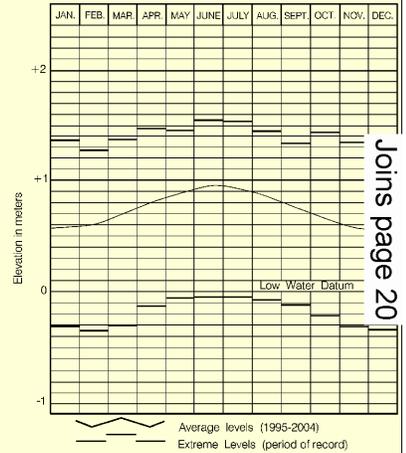
Most of the hydrography identified by the letter "I" was surveyed by the U.S. Army Corps of Engineers prior to 1974. Other outlined areas represent the limits of the most recent hydrographic survey information that has been evaluated for charting. Surveys have been banded in this diagram by date and 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.

SOURCE

B2	1970-1989	NOS Surveys	partial bottom coverage
g		Canadian Surveys	
j	Pre-1974	Lake Survey Surveys	partial bottom coverage



LAKE ERIE



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.

Joins page 20

Washington, D.C.
 DEPARTMENT OF COMMERCE
 NATIONAL OCEANOGRAPHIC ADMINISTRATION
 COAST AND GEODETIC SURVEY

DEPTHS IN METERS

PER

Station positions are shown thus:
 ○ (Accurate location) ○ (Approximate location)

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.

SUPPLEMENTAL INFORMATION

Consult U.S. Coast Pilot 6 and Canadian Sailing Directions, Great Lakes, Vol. 1 for important supplemental information.

Information concerning Canadian Nautical Charts, Sailing Directions, Tide Table and other Government publications of interest to mariners may be obtained on request to the Dominion Hydrographer, Canadian Hydrographic Service, Department of Fisheries and Oceans, Ottawa.

For the St. Lawrence Seaway Regulations and Circulars, special equipment, radio frequencies used in Traffic Control and related information, refer to THE SEAWAY HANDBOOK.

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.

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 Buffalo, New York.
 Refer to charted regulation section numbers.

and fishing structures. Such structures are not

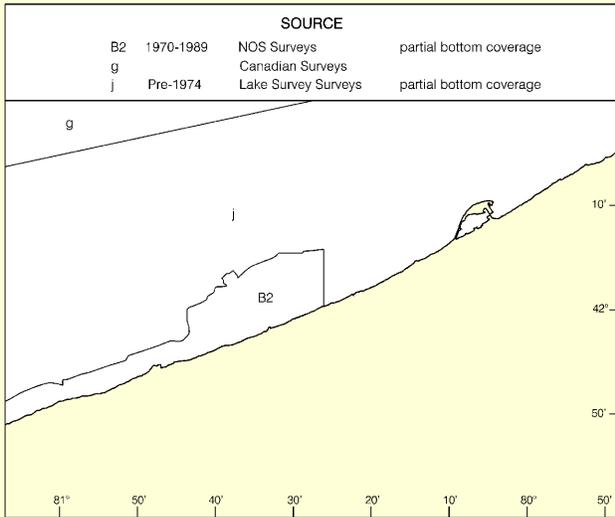
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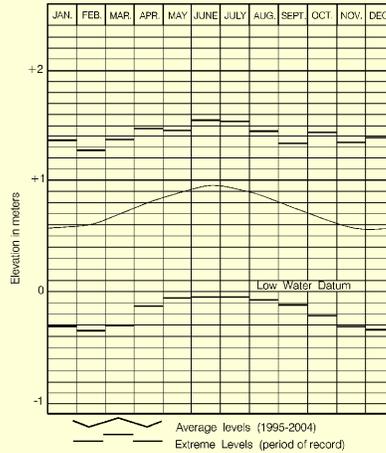
s, some features charted icularly in the near shore

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.



LAKE ERIE



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.

Joins page 19

nes and area of d sub- d, and y have xtreme ths of where i when tted or



DEPTHS IN METERS

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

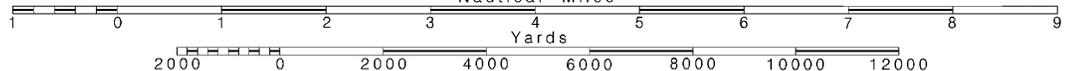


Note: Chart grid lines are aligned with true north.

Printed at reduced scale.

SCALE 1:100,000
Nautical Miles

See Note on page 5.



Sailing courses and limits recommended by the Lake Carriers Association and the Canadian Shipowners Association.

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

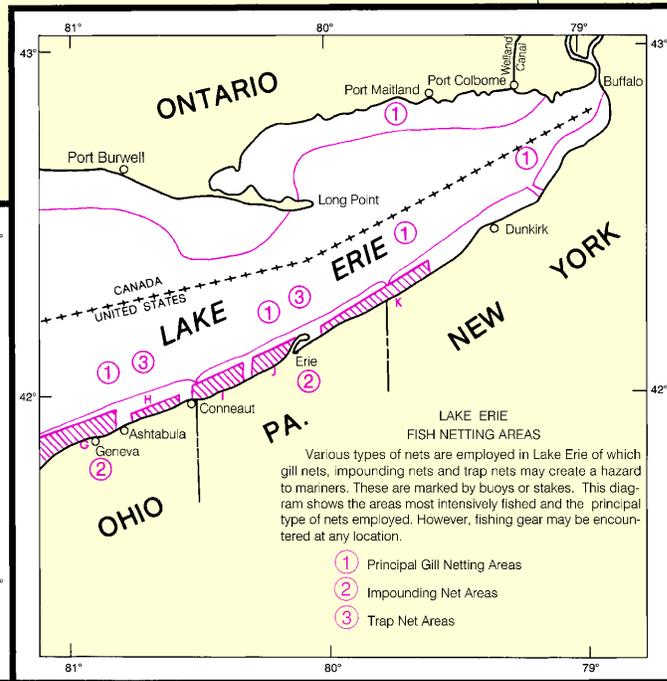
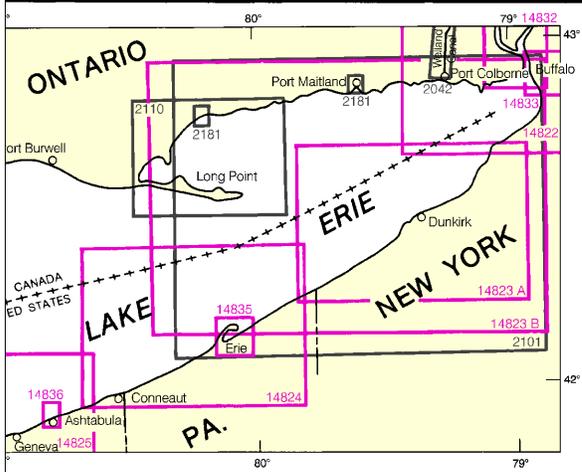
This chart was developed with the framework of international specifications in cooperation with the Canadian Hydrographic Service. Production was assisted by computer and machine engraving techniques.

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
POTABLE WATER INTAKE (PWI)
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 Surgeon General (21 CFR 1250.93). Consult U.S. Coast Pilot 6 for important supplemental information.

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 privately maintained buoys are not all listed in the U.S. Coast Guard Light List.

Canadian charts are outlined in screened black and be obtained from the Canadian Hydrographic Service.



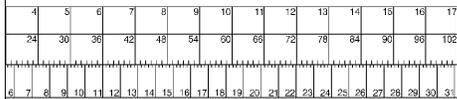
50'

40'

80°

50'

740.5 x 1090.9 mm



Erie to Geneva
DEPTHS IN METERS - SCALE 1:100,000

14828
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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>



— For the latest news from Coast Survey, follow @nauticalcharts



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.

