

# BookletChart™

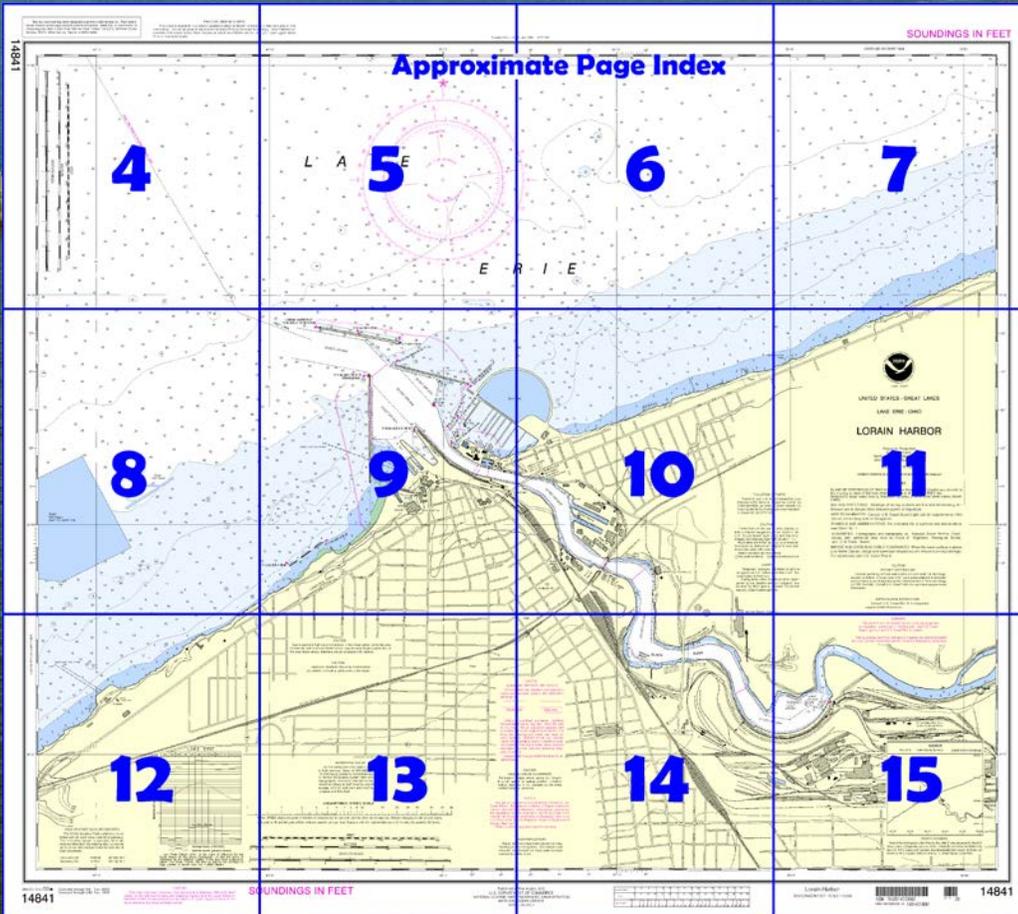


## Lorain Harbor NOAA Chart 14841

*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](http://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.

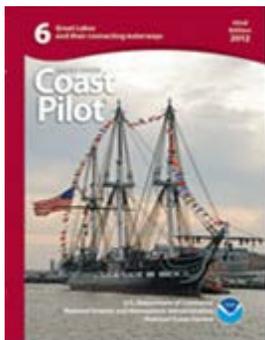
Whenever possible, use the official, full scale NOAA nautical chart for navigation. Nautical chart sales agents are listed on the Internet at <http://www.NauticalCharts.NOAA.gov>.

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=14841>



**(Selected Excerpts from Coast Pilot)**  
**Lorain Harbor**, serving the city of **Lorain, Ohio**, is about 25 miles W of Cleveland Harbor. It comprises the lower 3 miles of the **Black River** and an outer harbor. An unmarked **dumping ground** with a least reported depth of 35 feet is centered about 3.5 miles N of the harbor entrance. **Prominent features.**—The ore docks on the W side of the mouth of Black River and the stacks of the powerplant 0.3 mile SW of the mouth are prominent.

**Lorain Harbor Light** (41°28.9'N., 82°11.7'W.), 60 feet above the water, is shown from a white tower on the W end of the detached breakwater on

the N side of the entrance channel. A fog signal is at the light. The harbor is entered through a dredged entrance channel that leads ESE from the deep water in Lake Erie on the S side of a detached breakwater, and then leads SE between converging breakwaters to the mouth of Black River. The mouth of the river is entered between parallel piers, and the dredged channel leads upstream for about 2.8 miles. A turning basin is on the SW side of the channel, 1.6 miles above the mouth and two turning basins are at the head of the project. In the outer harbor, basins are on either side of the entrance channel. From the S side of the outer harbor W basin, an approach channel leads SE to the municipal pier 0.2 mile W of the mouth of the river. Lights mark the ends of the breakwaters and the piers at the river mouth. Buoys mark the E limit of the dredged basin in the outer harbor.

In April 2004, the controlling depths were 25.1 feet (26.7 feet at midchannel) to the Lorain Yacht Basin, thence 23.9 feet (except for lesser depths to 19.5 feet along the channel edges) to the 21st Street bridge, thence 19.2 feet to the head of the project (except for lesser depths to 17 feet at the head of the project.) The turning basin on the SW side of the channel, 1.6 miles above the mouth, had depths of 16 to 20 feet. The two turning basins at the head of the project, one on the N side and the other at the head, had depths of 14 to 18 feet and 6 to 10 feet, respectively. The depths in both the E and W basins of the outer harbor were 20 to 23 feet with lesser depths along the edges.

A semicircular diked disposal area is on the NE side of the E breakwater. A floating breakwater extends about 750 feet at right angles from the SW side of the same breakwater.

Several detached shoals are in the approach to Lorain Harbor. A shoal with least depths of 22 feet extends 1.4 miles from shore within 2 miles E of the harbor entrance. Several shoal spots with depths of 24 to 28 feet are from 1.4 to 2.4 miles N of Lorain Harbor Light.

Marinas in Lorain Harbor are in the outer harbor E of the river mouth, on the NE side of the river just inside the mouth, on the E side of the river just upstream of the Erie Avenue bridge and further upstream on the N side, just past the railroad bridge. Gasoline, diesel fuel, water, ice, sewage pump-out facilities, and some marine supplies are available. A 50-ton travel lift is available at the Marina on the E side of the river, just upstream of the Erie Avenue bridge. Engine repairs are made at a boatyard on the NE side of the river just upstream of the Erie Avenue bridge, a 30-ton hoist is also available.

**Dangers.**—Several detached shoals are in the approach to Lorain Harbor. A shoal with least depths of 22 feet extends 1.4 miles from shore within 2 miles E of the harbor entrance. Several shoal spots with depths of 24 to 28 feet are from 1.4 to 2.4 miles N of Lorain Harbor Light.

Lorain is a **customs station**.

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

**Harbor regulations.**—A **speed limit** of 6 mph (5.2 knots) is enforced in the harbor except in the outer harbor where it is 10 mph (8.7 knots). (See **33 CFR 162.160 and 207.570**, chapter 2, for regulations.)

**Small-craft facilities.**—Marinas in Lorain Harbor are in the outer harbor east of the river mouth, on the northeast side of the river just inside the mouth, on the east side of the river just upstream of the Erie Avenue bridge and further upstream on the north side, just past the railroad bridge. Gasoline, diesel fuel, water, ice, sewage pump-out facilities, and some marine supplies are available. A 50-ton travel lift is available at the Marina on the east side of the river, just upstream of the Erie Avenue bridge.

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

RCC Cleveland

Commander

9th CG District

(216) 902-6117

Cleveland, OH

# Navigation Managers Area of Responsibility



**NOAA's navigation managers** serve as ambassadors to the maritime community. They help identify navigational challenges facing professional and recreational mariners, and provide NOAA resources and information for safe navigation. For additional information, please visit [nauticalcharts.noaa.gov/service/navmanagers](http://nauticalcharts.noaa.gov/service/navmanagers)

To make suggestions or ask questions online, go to [nauticalcharts.noaa.gov/inquiry](http://nauticalcharts.noaa.gov/inquiry).  
To report a chart discrepancy, please use [ocsdata.ncd.noaa.gov/idrs/discrepancy.aspx](http://ocsdata.ncd.noaa.gov/idrs/discrepancy.aspx).

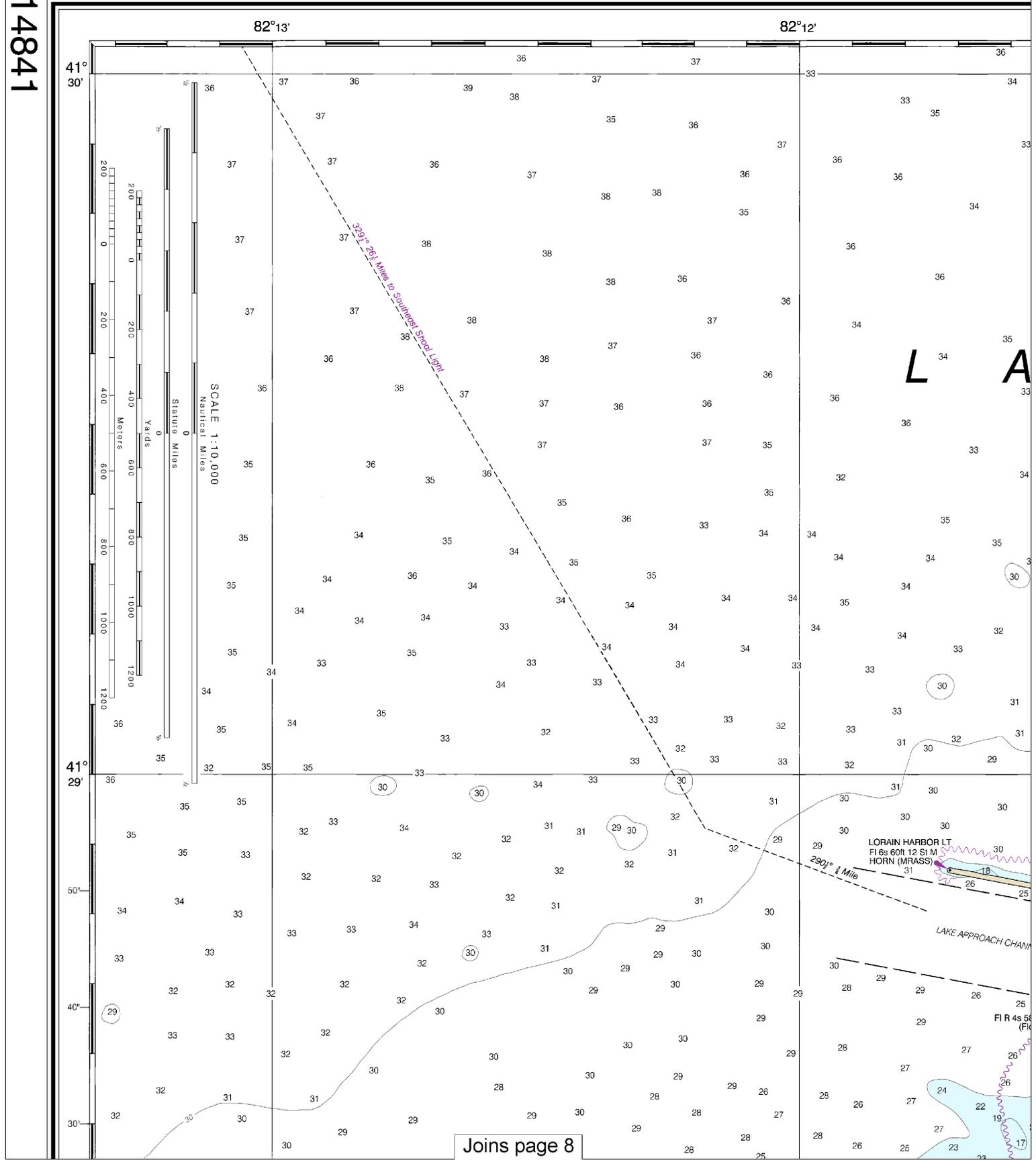
## Lateral System As Seen Entering From Seaward

on navigable waters except Western Rivers



For more information on aids to navigation, including those on Western Rivers, please consult the latest USCG Light List for your area. These volumes are available online at <http://www.navcen.uscg.gov>

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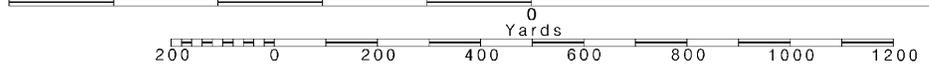


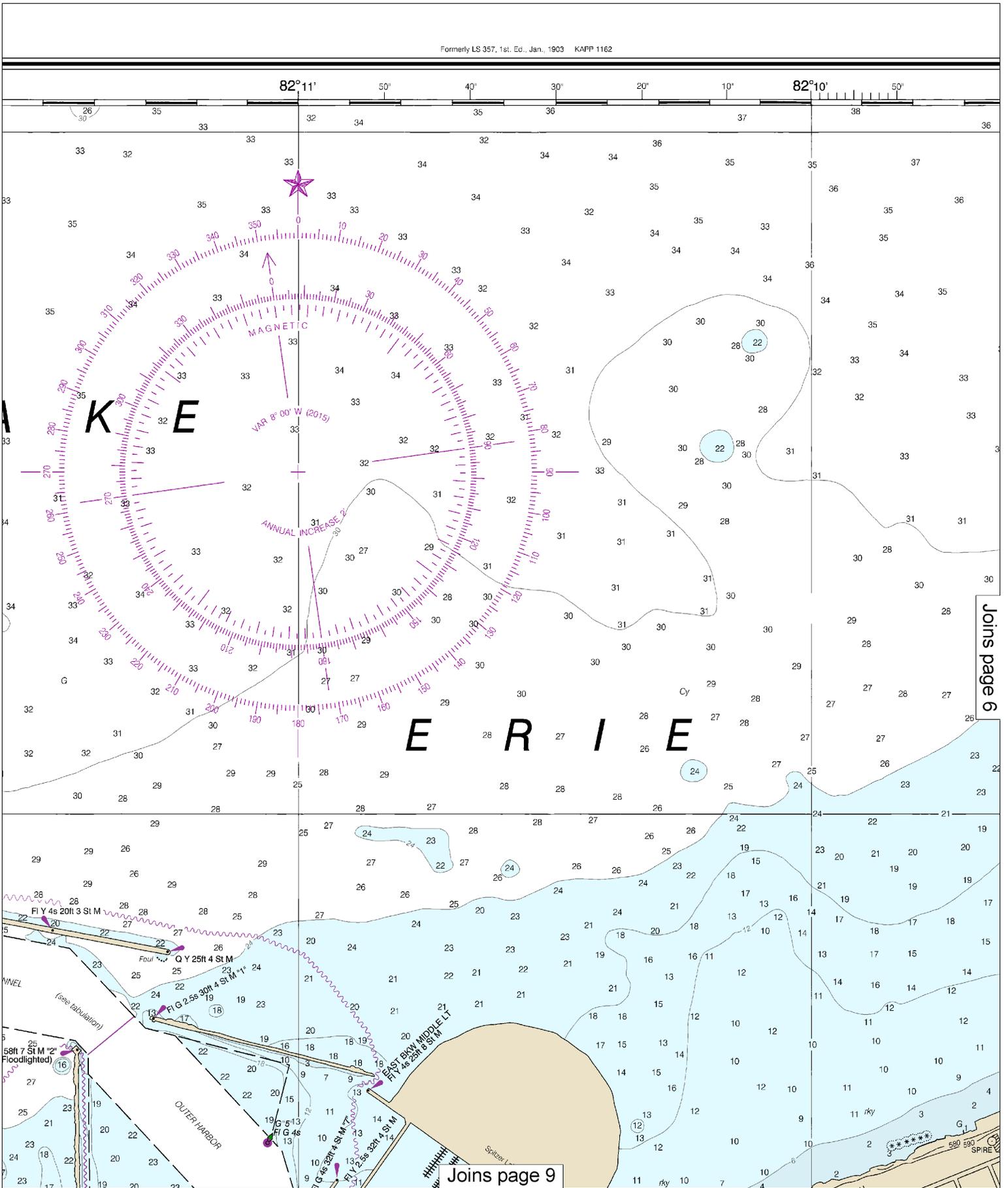
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Note: Chart grid lines are aligned with true north.

Printed at reduced scale. — SCALE 1:10,000 —  
Nautical Miles

See Note on page 5.



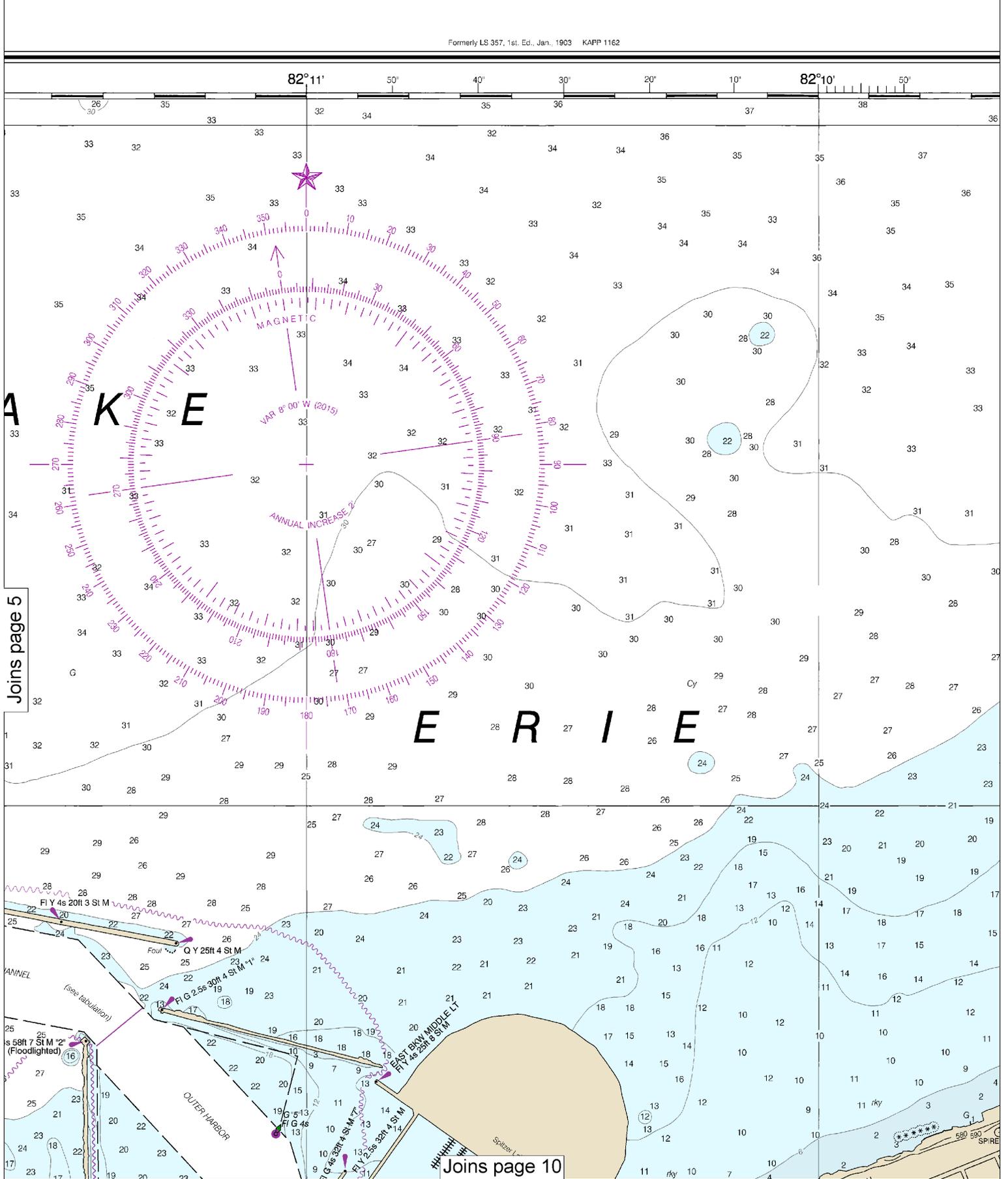


This BookletChart was reduced to 75% of the original chart scale. The new scale is 1:13333. Barscales have also been reduced and are accurate when used to measure distances in this BookletChart.

82°11'

82°10'

Joins page 5



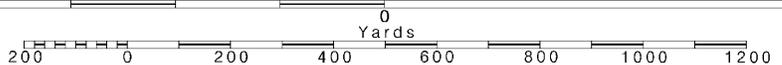
Joins page 10



Note: Chart grid lines are aligned with true north.

Printed at reduced scale. — SCALE 1:10,000 —

See Note on page 5.

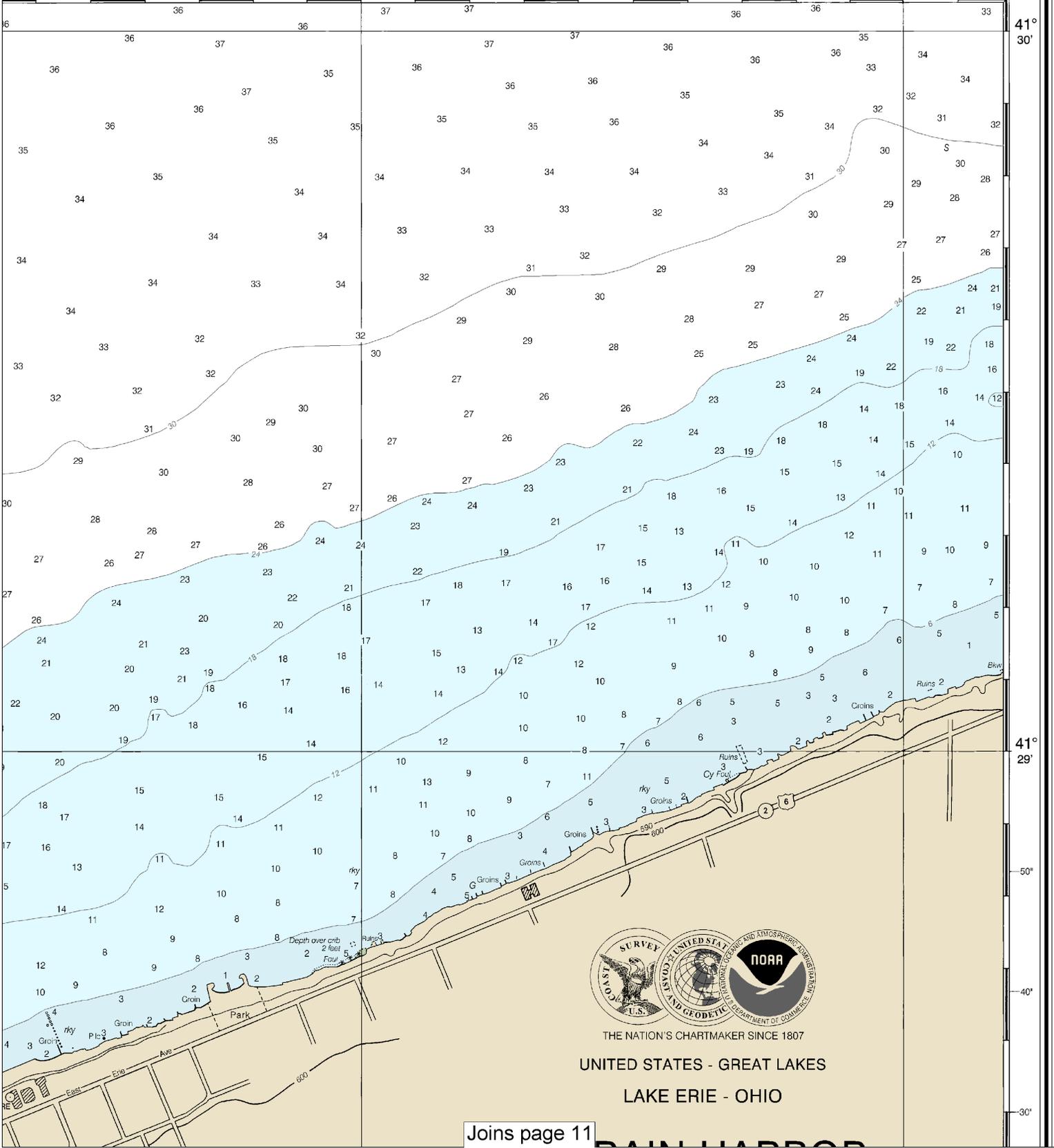


SOUNDINGS IN FEET

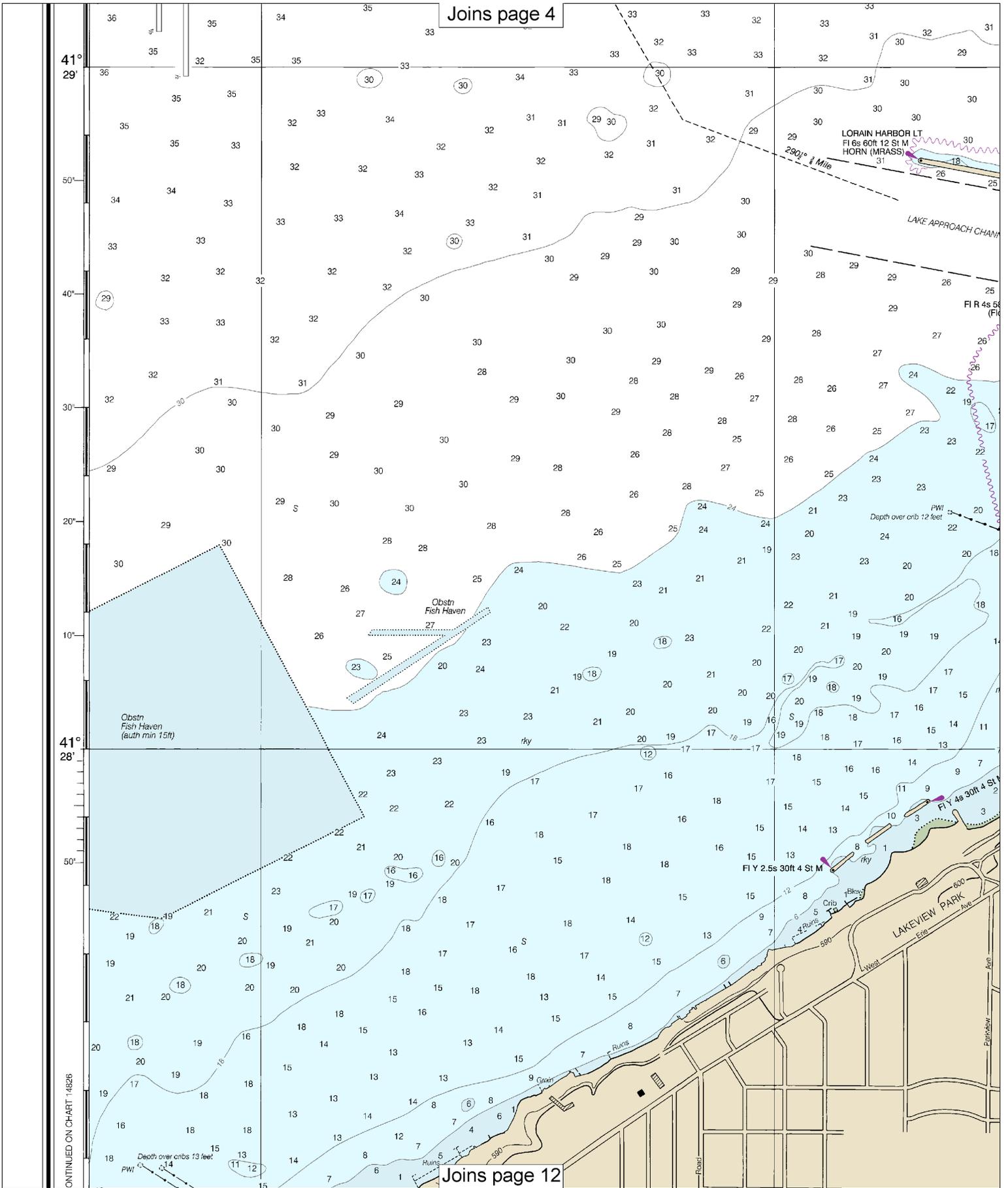
82° 09'

CONTINUED ON CHART 14826

82° 08'



30th Ed., May 2015. Last Correction: 5/23/2016. Cleared through:  
 LNM: 4816 (11/29/2016), NM: 4916 (12/3/2016), CHS: 1116 (11/25/2016)



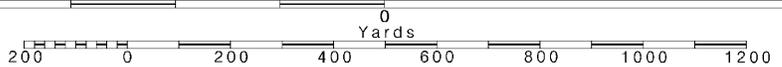
CONTINUED ON CHART 14826



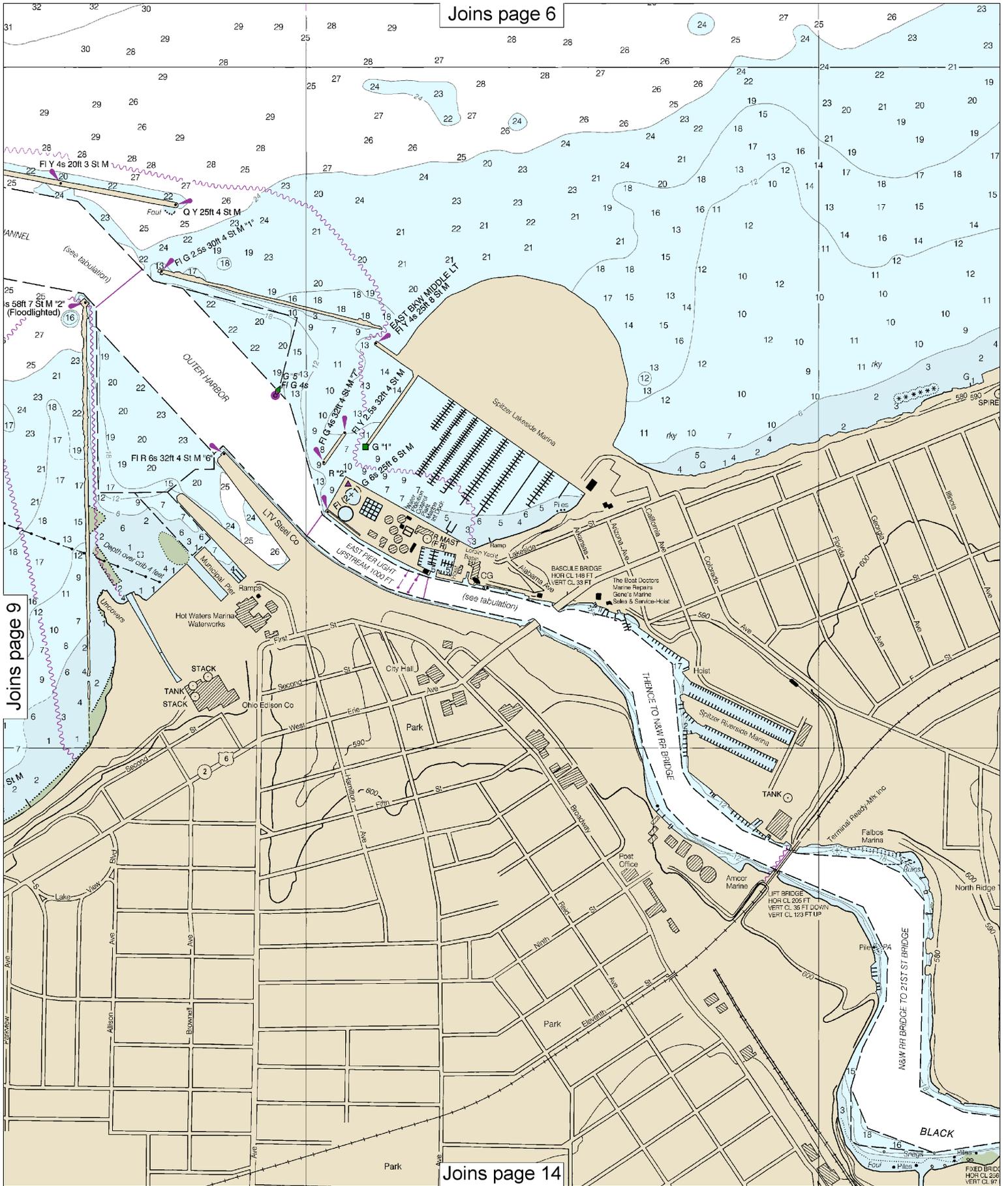
Note: Chart grid lines are aligned with true north.

Printed at reduced scale. SCALE 1:10,000 Nautical Miles

See Note on page 5.







Joins page 9

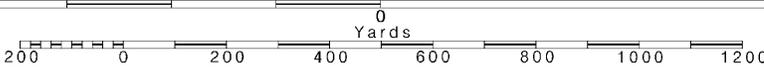
Joins page 14

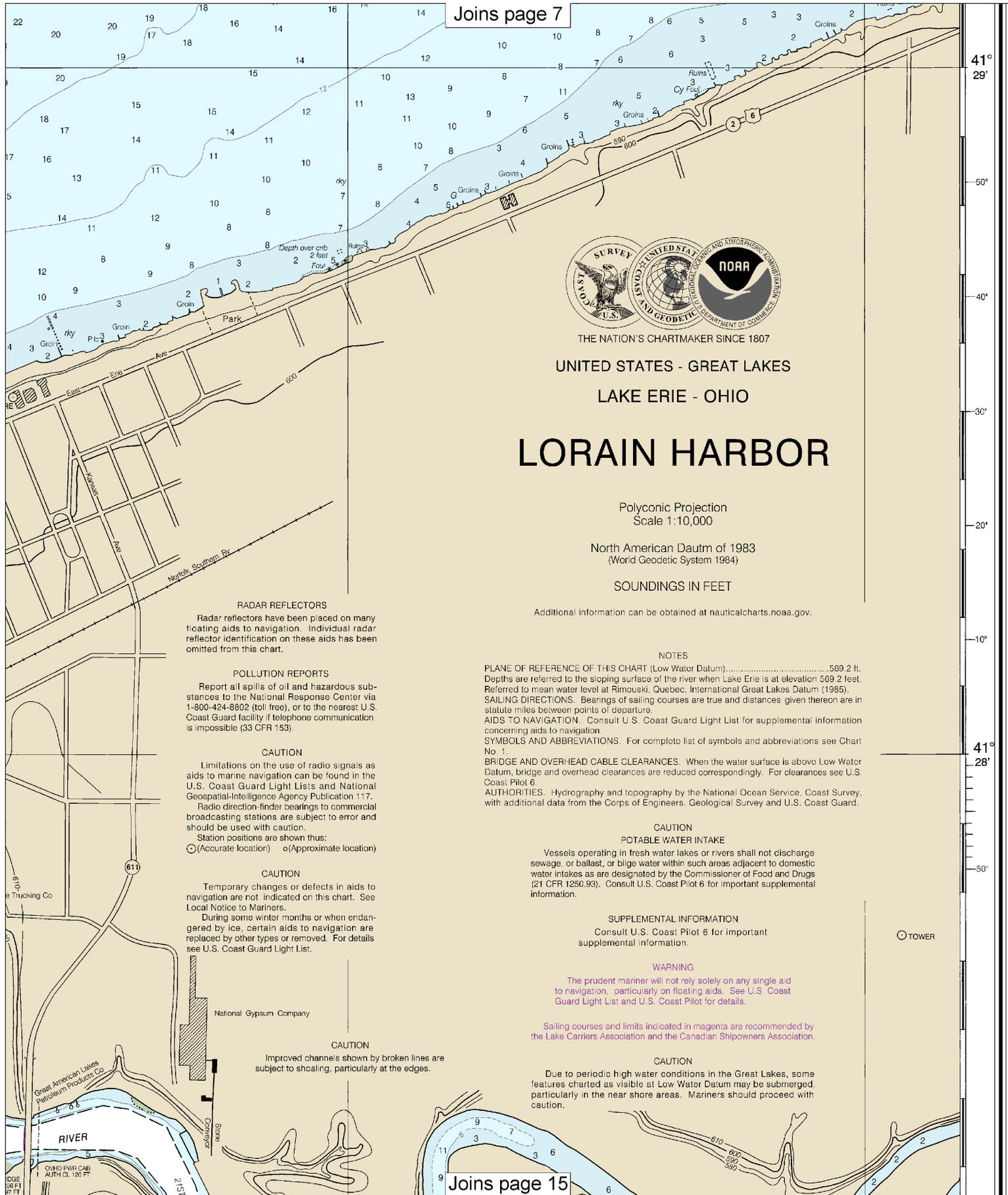
10

Note: Chart grid lines are aligned with true north.

Printed at reduced scale. SCALE 1:10,000

See Note on page 5.





UNITED STATES - GREAT LAKES  
LAKE ERIE - OHIO

# LORAIN HARBOR

Polyconic Projection  
Scale 1:10,000

North American Datum of 1983  
(World Geodetic System 1984)

SOUNDINGS IN FEET

Additional information can be obtained at [nauticalcharts.noaa.gov](http://nauticalcharts.noaa.gov).

NOTES

PLANE OF REFERENCE OF THIS CHART (Low Water Datum).....569.2 ft.  
Depths are referred to the sloping surface of the river when Lake Erie is at elevation 569.2 feet. 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.  
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.

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.

SUPPLEMENTAL INFORMATION

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

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.

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.

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.

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

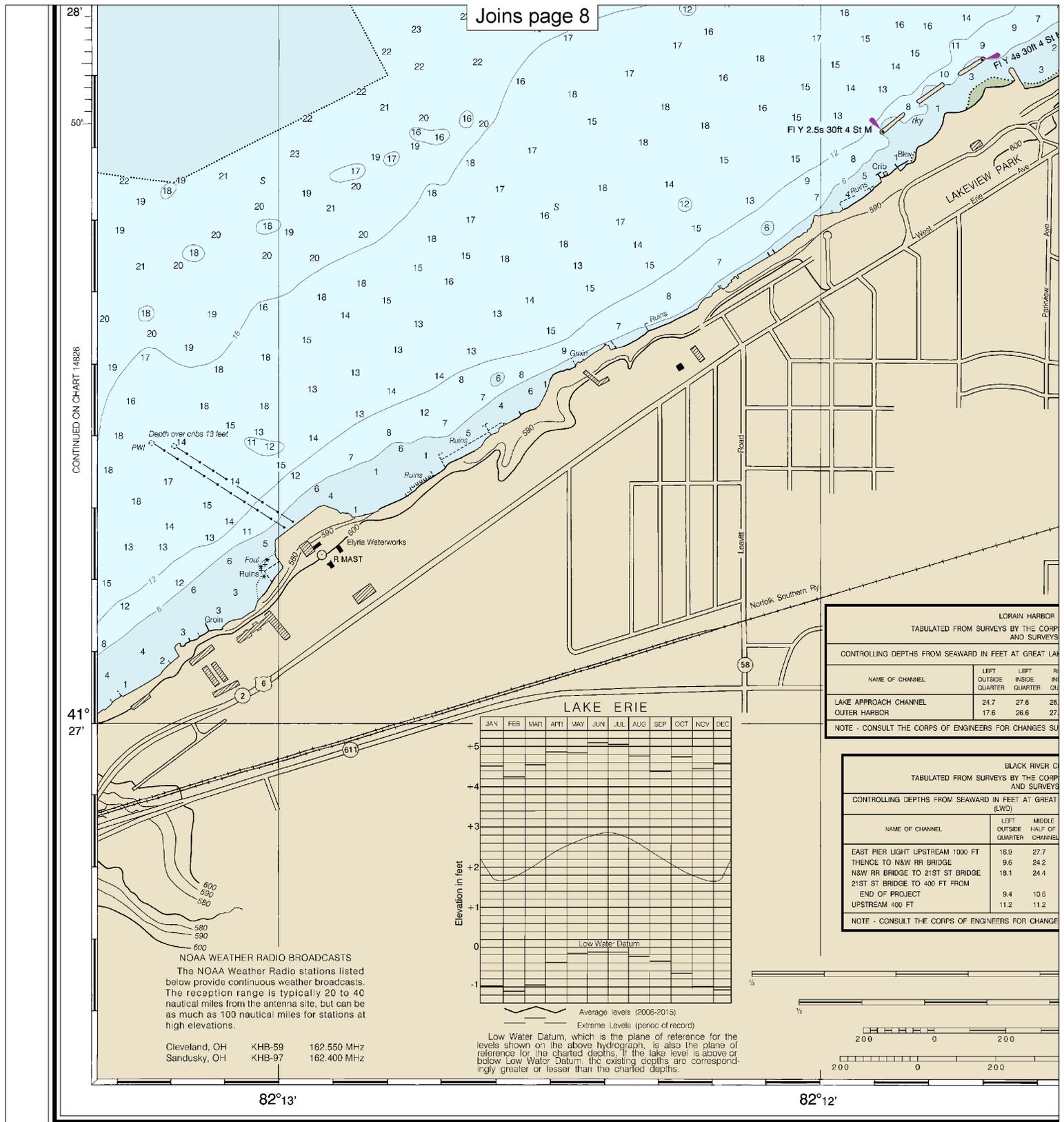
Limitations on the use of radio signals as aids to marine navigation can be found in the U.S. Coast Guard Light Lists and National Geospatial-Intelligence Agency Publication 117.  
Radio direction-finder bearings to commercial broadcasting stations are subject to error and should be used with caution.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

CAUTION

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

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



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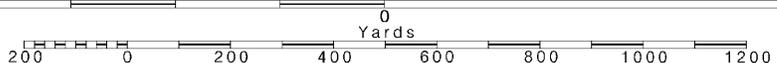
30th Ed., May 2015. Last Correction: 5/23/2016. Cleared through:  
 LNM: 4816 (11/29/2016), NM: 4916 (12/3/2016), CHS: 1116 (11/25/2016)

12

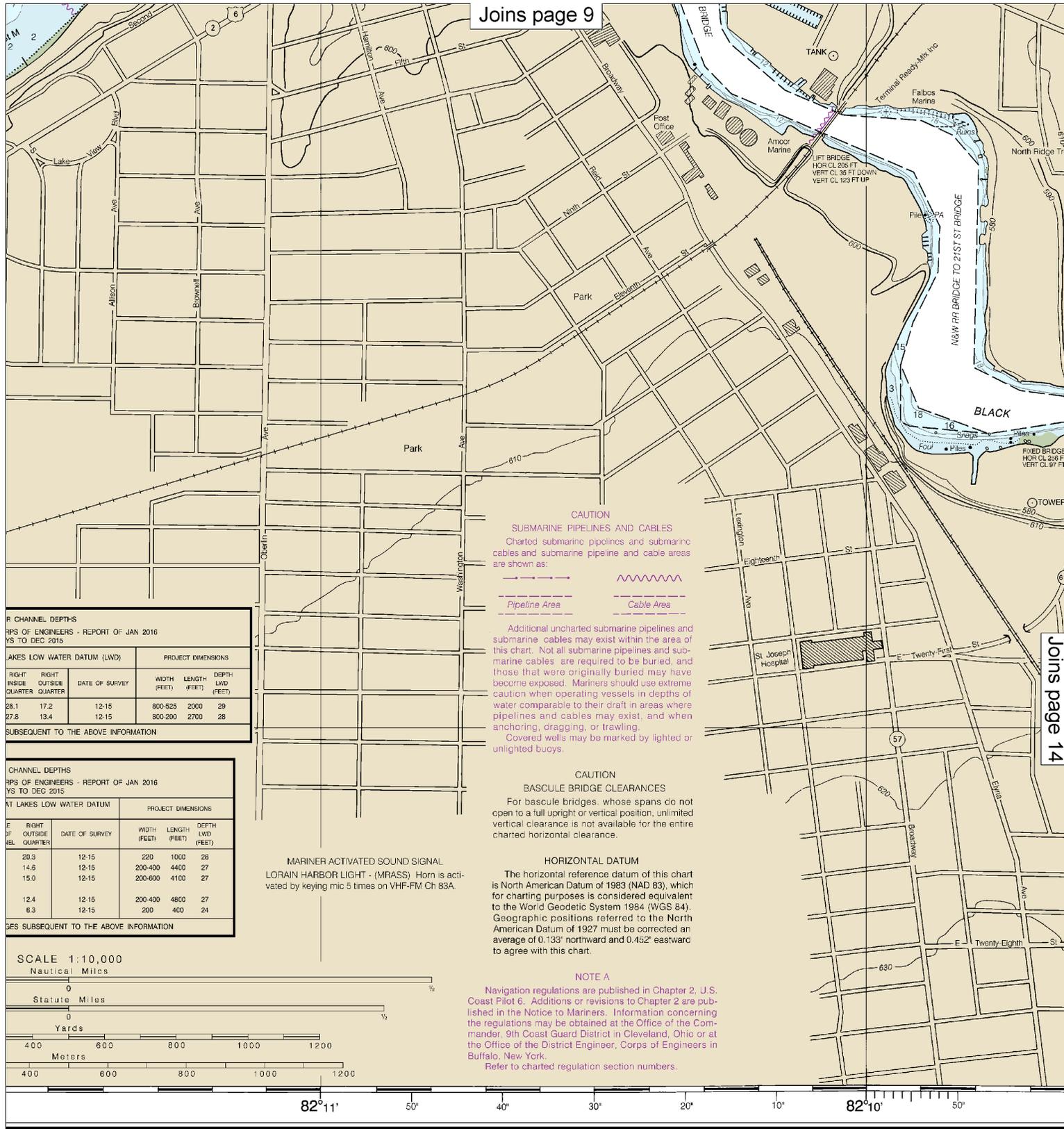
Note: Chart grid lines are aligned with true north.

Printed at reduced scale. SCALE 1:10,000 Nautical Miles

See Note on page 5.



SOUNDING



CHANNEL DEPTHS  
IPS OF ENGINEERS - REPORT OF JAN 2016  
YS TO DEC 2015

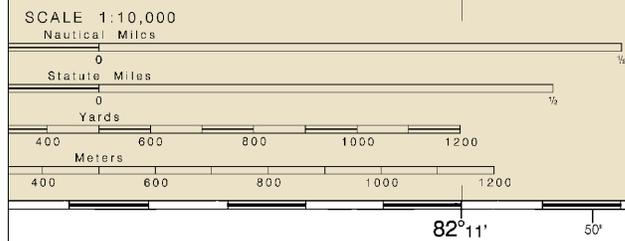
AT LAKES LOW WATER DATUM (LWD)			PROJECT DIMENSIONS		
RIGHT INSIDE QUARTER	RIGHT OUTSIDE QUARTER	DATE OF SURVEY	WIDTH (FEET)	LENGTH (FEET)	DEPTH LWD (FEET)
26.1	17.2	12-15	800-525	2000	29
27.8	13.4	12-15	800-200	2700	28

SUBSEQUENT TO THE ABOVE INFORMATION

CHANNEL DEPTHS  
IPS OF ENGINEERS - REPORT OF JAN 2016  
YS TO DEC 2015

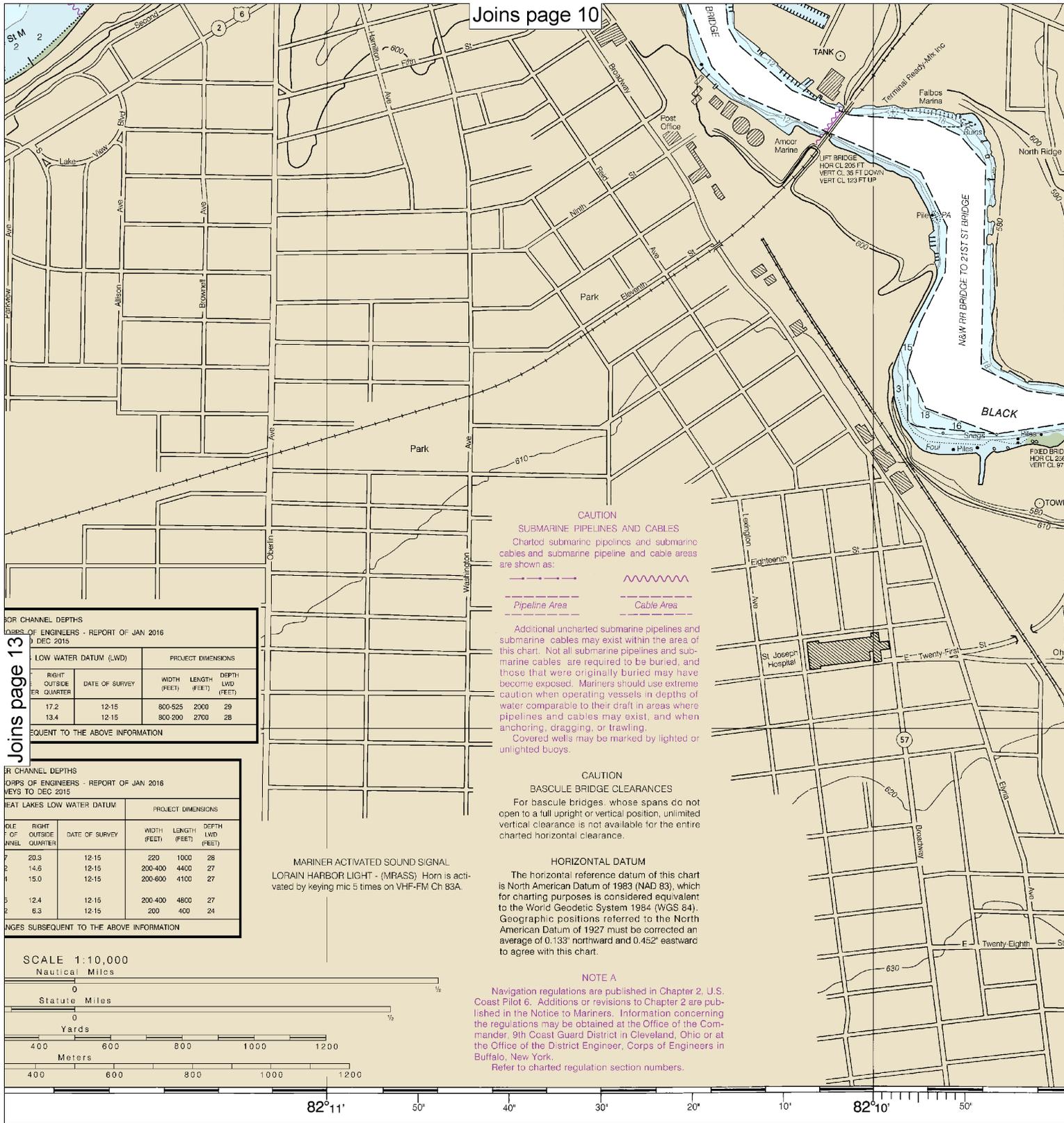
AT LAKES LOW WATER DATUM			PROJECT DIMENSIONS		
RIGHT INSIDE QUARTER	RIGHT OUTSIDE QUARTER	DATE OF SURVEY	WIDTH (FEET)	LENGTH (FEET)	DEPTH LWD (FEET)
20.3	12.15	12-15	220	1000	28
14.6	12-15	12-15	200-400	4400	27
15.0	12-15	12-15	200-600	4100	27
12.4	12-15	12-15	200-400	4600	27
6.3	12-15	12-15	200	400	24

SUBSEQUENT TO THE ABOVE INFORMATION



INGS IN FEET

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



FOR CHANNEL DEPTHS  
CORPS OF ENGINEERS - REPORT OF JAN 2016  
REVISED DEC 2015

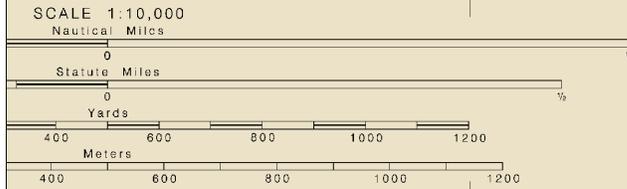
LOW WATER DATUM (LWD)		PROJECT DIMENSIONS		
RIGHT OF QUARTER	DATE OF SURVEY	WIDTH (FEET)	LENGTH (FEET)	DEPTH (FEET)
17.2	12-15	800-525	2000	29
13.4	12-15	800-200	2700	28

EQUivalent TO THE ABOVE INFORMATION

FOR CHANNEL DEPTHS  
CORPS OF ENGINEERS - REPORT OF JAN 2016  
REVISED DEC 2015

BEAT LAKES LOW WATER DATUM		PROJECT DIMENSIONS		
RIGHT OF QUARTER	DATE OF SURVEY	WIDTH (FEET)	LENGTH (FEET)	DEPTH (FEET)
20.3	12-15	220	1000	28
14.6	12-15	200-400	4400	27
15.0	12-15	200-600	4100	27
12.4	12-15	200-400	4800	27
6.3	12-15	200	400	24

CHANGES SUBSEQUENT TO THE ABOVE INFORMATION

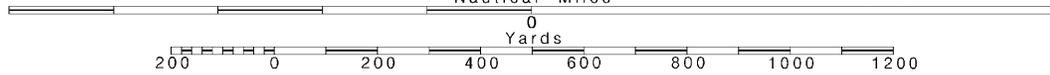


CHANGES IN FEET

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

Note: Chart grid lines are aligned with true north.

Printed at reduced scale. SCALE 1:10,000



See Note on page 5.

**HEAD CABLE CLEARANCES.** When the water surface is above Low Water 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.

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**

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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**

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

**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.

**SUPPLEMENTAL INFORMATION**

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

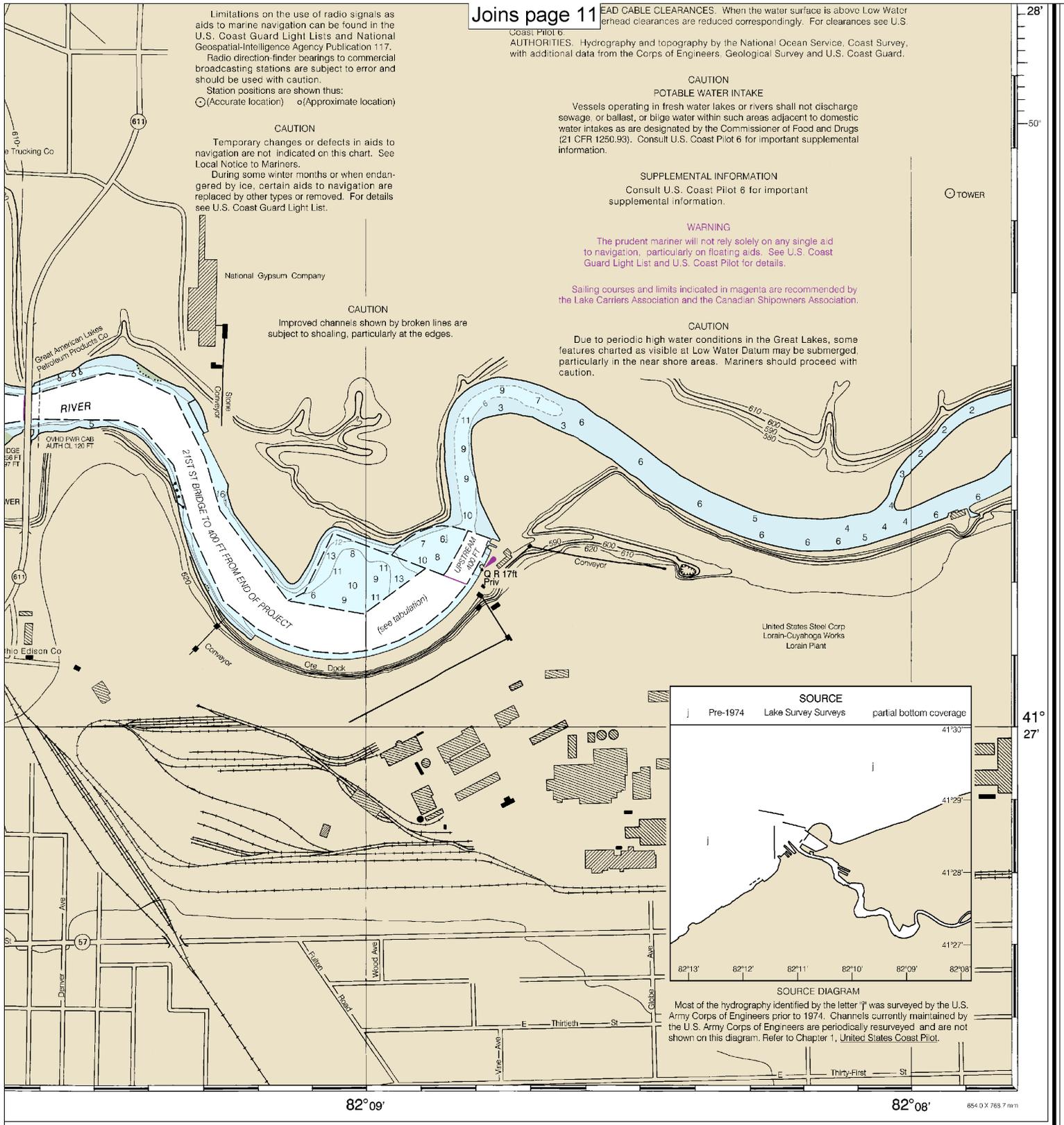
**WARNING**

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

**CAUTION**

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

**Lorain Harbor**  
 SOUNDINGS IN FEET - SCALE 1:10,000

**14841**



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>
- Interactive chart catalog — <http://www.charts.noaa.gov/InteractiveCatalog/nrnc.shtml>
- 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](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 @NOAAcharts



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.