

# BookletChart™

## Grand Marais to Big Bay Point

NOAA Chart 14963

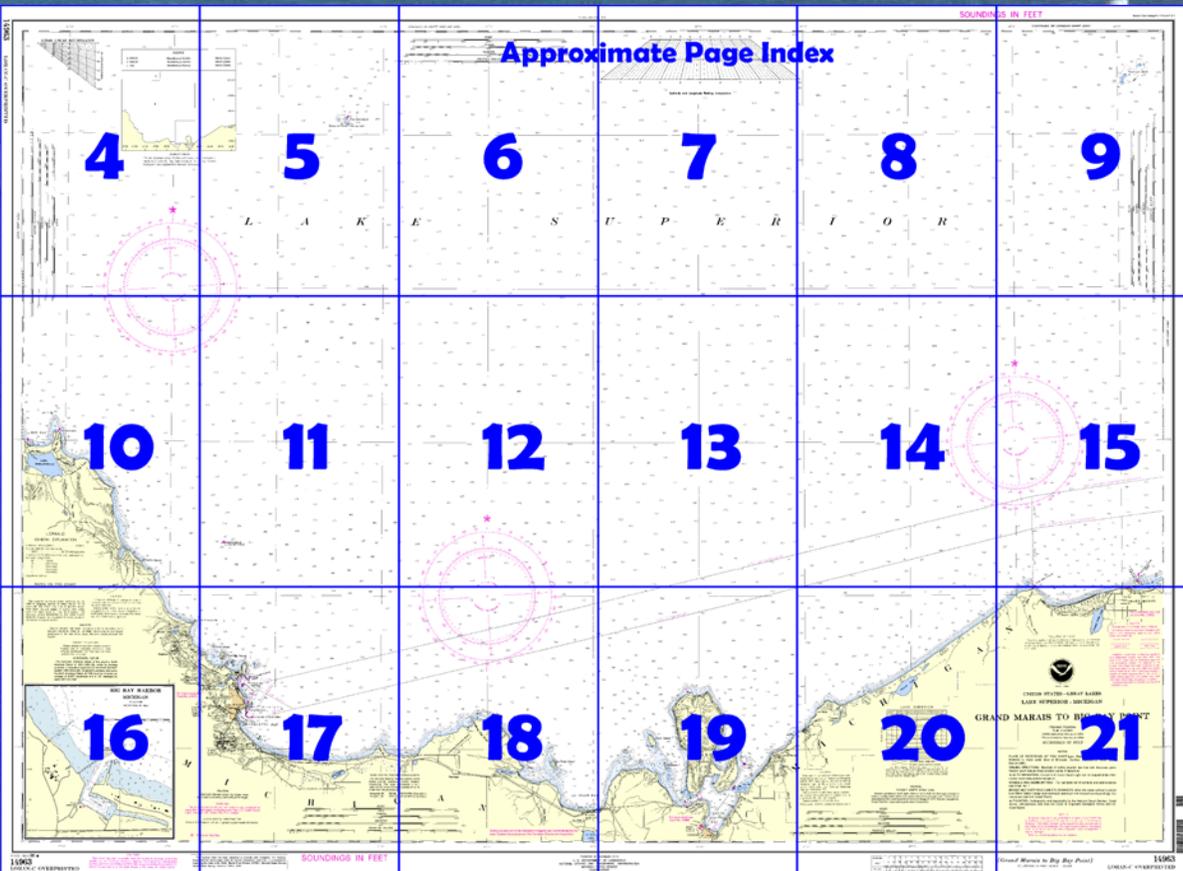


*A reduced-scale NOAA nautical chart for small boaters*

*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.

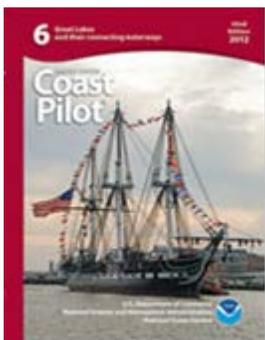
Whenever possible, use the official, full scale NOAA nautical chart for navigation. Nautical chart sales agents are listed on the Internet at <http://www.NauticalCharts.NOAA.gov>.

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=14963>.



**(Selected Excerpts from Coast Pilot)**  
**Grand Marais, MI** is a village and small-craft harbor in **West Bay**, 29 miles west of Little Lake Harbor. It is an important harbor of refuge, being the only harbor of any kind along the dangerous 65-mile stretch of shore between Little Lake and Grand Island. The bay is separated from Lake Superior at the west end by a low sand ridge and at the E end by a shallow sandspit. The natural entrance to the bay, across the spit, has been closed by a pile

dike. The dike is reinforced with riprap, but in 1981, it was in ruins and was not visible above the water. Numerous submerged piles at the dike are a hazard to any craft.

**Prominent features.**—Prominent are a red brick school and chimney in the village and a white building on the west side of the harbor entrance. **Grand Marais Harbor of Refuge Outer Light** (46°41'02"N., 85°58'18"W.), 40 feet above the water, is shown from a skeleton tower, upper part enclosed, on the outer end of the west pier; a seasonal sound signal is at the light.

**Channels.**—A dredged entrance channel leads between parallel piers across the sandspit which separates Lake Superior and West Bay. The outer and inner ends of the W pier and the outer end of the east pier are marked by lights. In 2006, the controlling depth in the channel was 12.2 feet (14.7 feet at midchannel).

**Anchorage.**—West Bay has good anchorage in depths of 18 to 40 feet, sand bottom. Sand moving in through breaks in the dike has caused shoaling in the E end of the harbor, so anchorage in the west end is advised.

**Grand Marais Coast Guard Station**, operated on weekends during the boating season, is on the west side of the entrance channel.

**Small-craft facilities.**—A public dock developed by the Michigan State Waterways Commission at the west end of the harbor provides transient berths, gasoline, diesel fuel, water, electricity, sewage pump-out facilities, and a launching ramp. Arrangements can be made for minor repairs.

From Grand Marais, the shore extends west-southwest for 7 miles, thence northwest for 1.7 miles to Au Sable Point. **Grand Sable**, a steep bluff with elevations of 400 feet above the lake, extends from 1 mile west of Grand Marais to within 1 mile of Au Sable Point. Shoals extend 0.2 to 0.4 mile offshore in this stretch.

**Au Sable Light** (46°40.3'N., 86°08.4'W.), 100 feet above the water, is shown from a white conical tower, red dwelling attached, on **Au Sable Point**.

**Local magnetic disturbance.**—A large area of magnetic disturbance has been observed about 40 miles northwest of Au Sable Point.

A shoal with a least depth of 6 feet extends 0.9 mile northwest from Au Sable Point.

**Pictured Rocks National Lakeshore** occupies the entire shore from 1.5 miles west of Grand Marais W to Au Sable Point, thence southwest for 28 miles to within 2.5 miles of Munising.

From Au Sable Point, the shore extends southwest for 17.5 miles to **Grand Portal Point**. The shore for most of this reach is bluff with high points up to 100 feet above the lake close to shore. About 4 miles northeast of Grand Portal Point, the shore changes to sheer exposed cliffs over 100 feet high. Except for 23- and 24-foot shoals about 0.5 mile offshore 3 and 4 miles northeast of Grand Portal Point, respectively, no outlying obstructions are along this stretch.

From Grand Portal Point, the shore trends southwest for 9.7 miles to **Sand Point**. The cliffs of Pictured Rocks extend along the first 8 miles of this stretch. **Sail Rock** and **Miners Castle Point**, 1 and 6 miles southwest of Grand Portal Point, respectively, are prominent. S of Pictured Rocks, a high wooded bluff continues close to shore past Sand Point. Shoals extend about 0.3 mile offshore in this stretch. About 2.2 miles southwest of Miners Castle Point, a shoal with a least depth of ½ foot makes out from shore and extends southwest to a point 0.3 mile northwest of Sand Point. The shoal is marked by a lighted bell buoy.

**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).

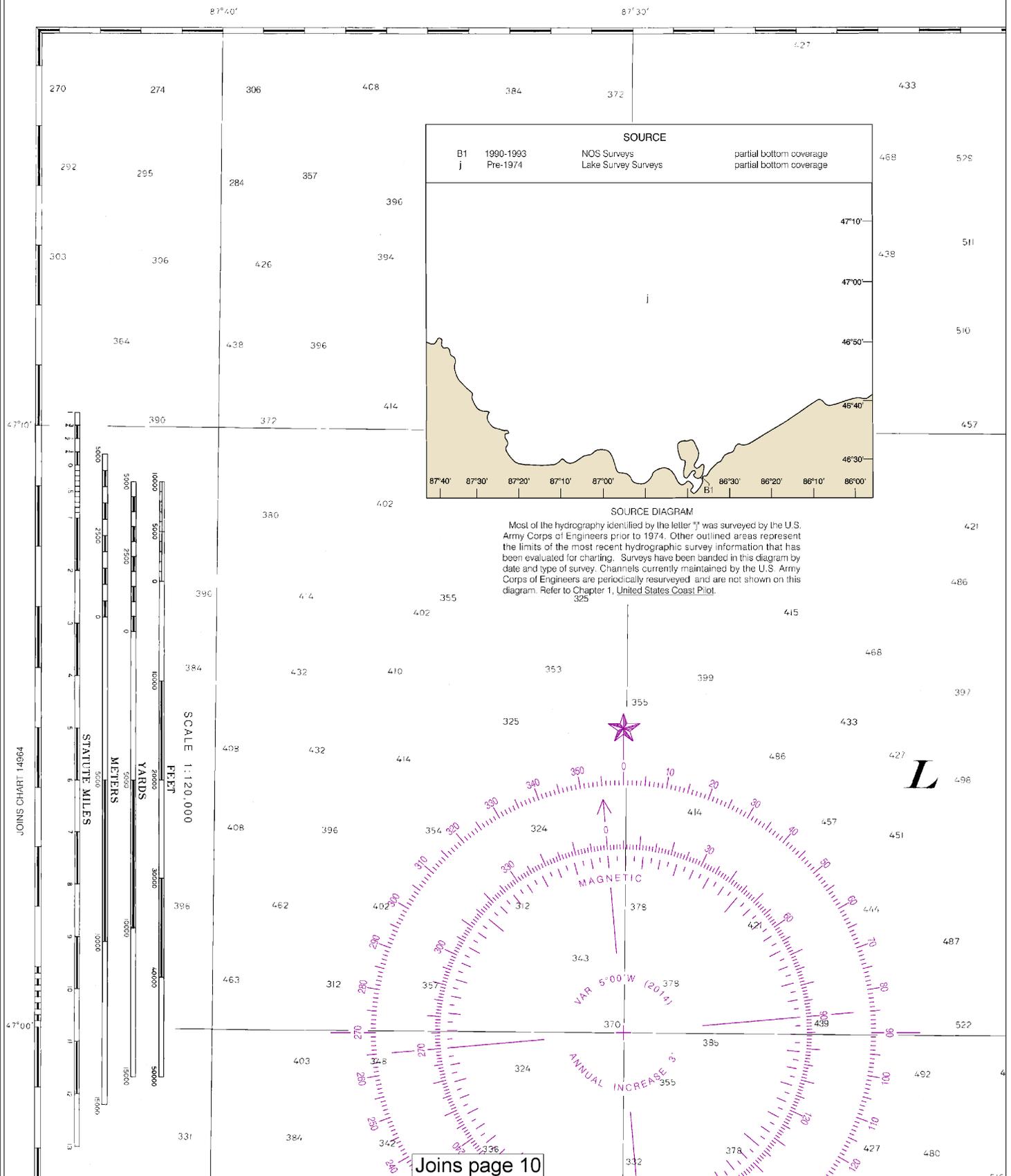
## Lateral System As Seen Entering From Seaward

on navigable waters except Western Rivers



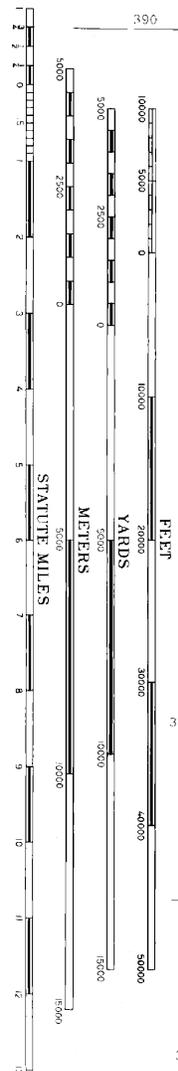
For more information on aids to navigation, including those on Western Rivers, please consult the latest USCG Light List for your area. These volumes are available online at <http://www.navcen.uscg.gov>

14963



SOURCE			
B1	1990-1993	NOS Surveys	partial bottom coverage
j	Pre-1974	Lake Survey Surveys	partial bottom coverage

**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.



JOINS CHART 14964

Joins page 10

4

Note: Chart grid lines are aligned with true north.

Printed at reduced scale.

See Note on page 5.





87°10'

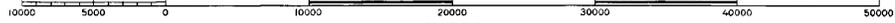
CONTINUED ON CHARTS 14960 AND 14961

87°00'

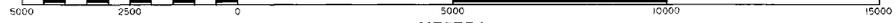
86°5'

SCALE 1:120,000

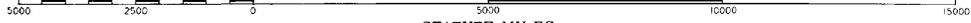
FEET



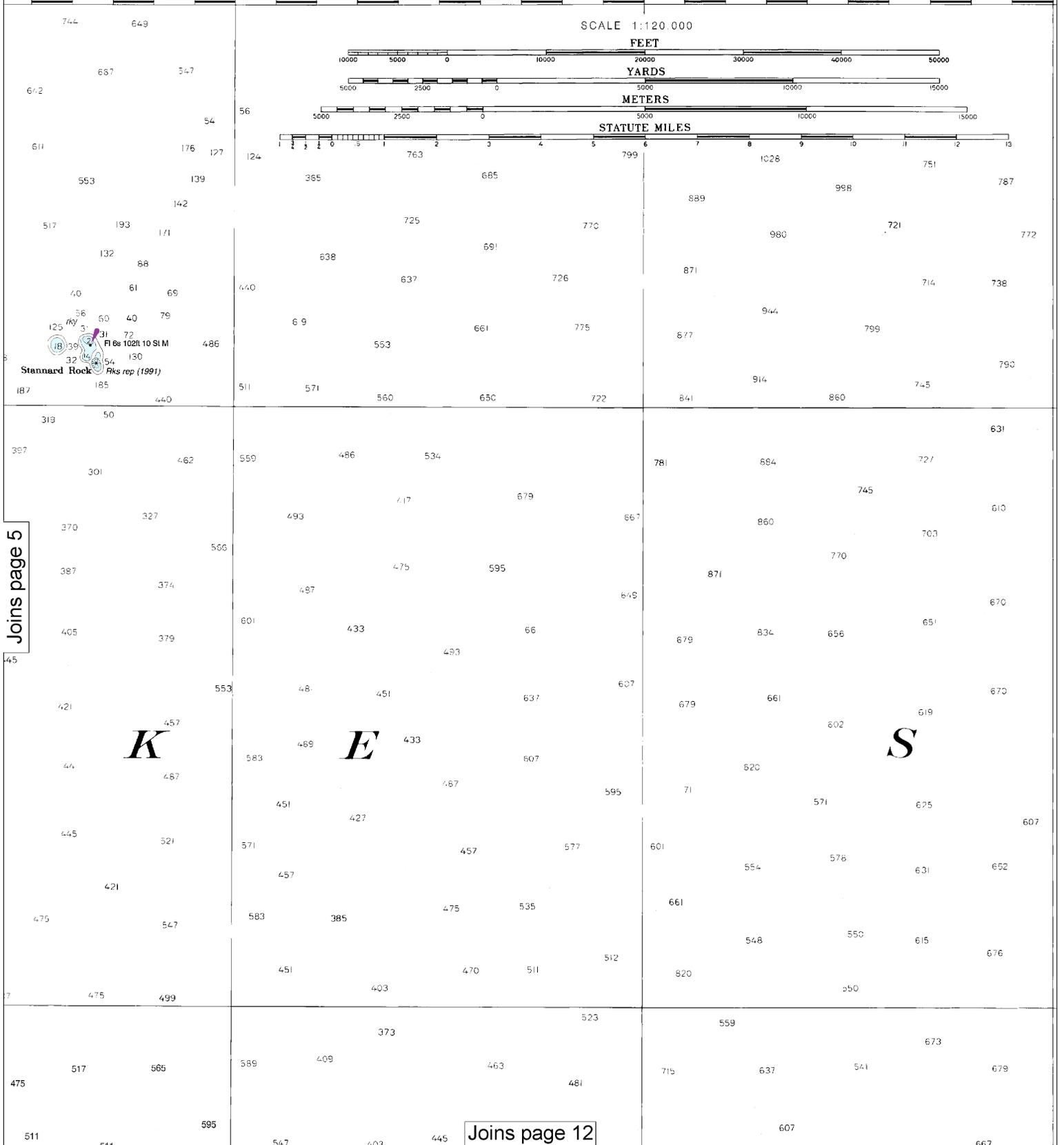
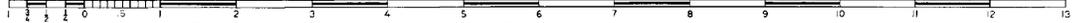
YARDS



METERS



STATUTE MILES



Joins page 5

Joins page 12

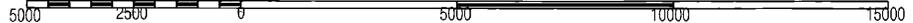


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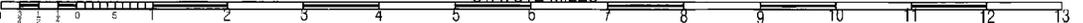
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YARDS

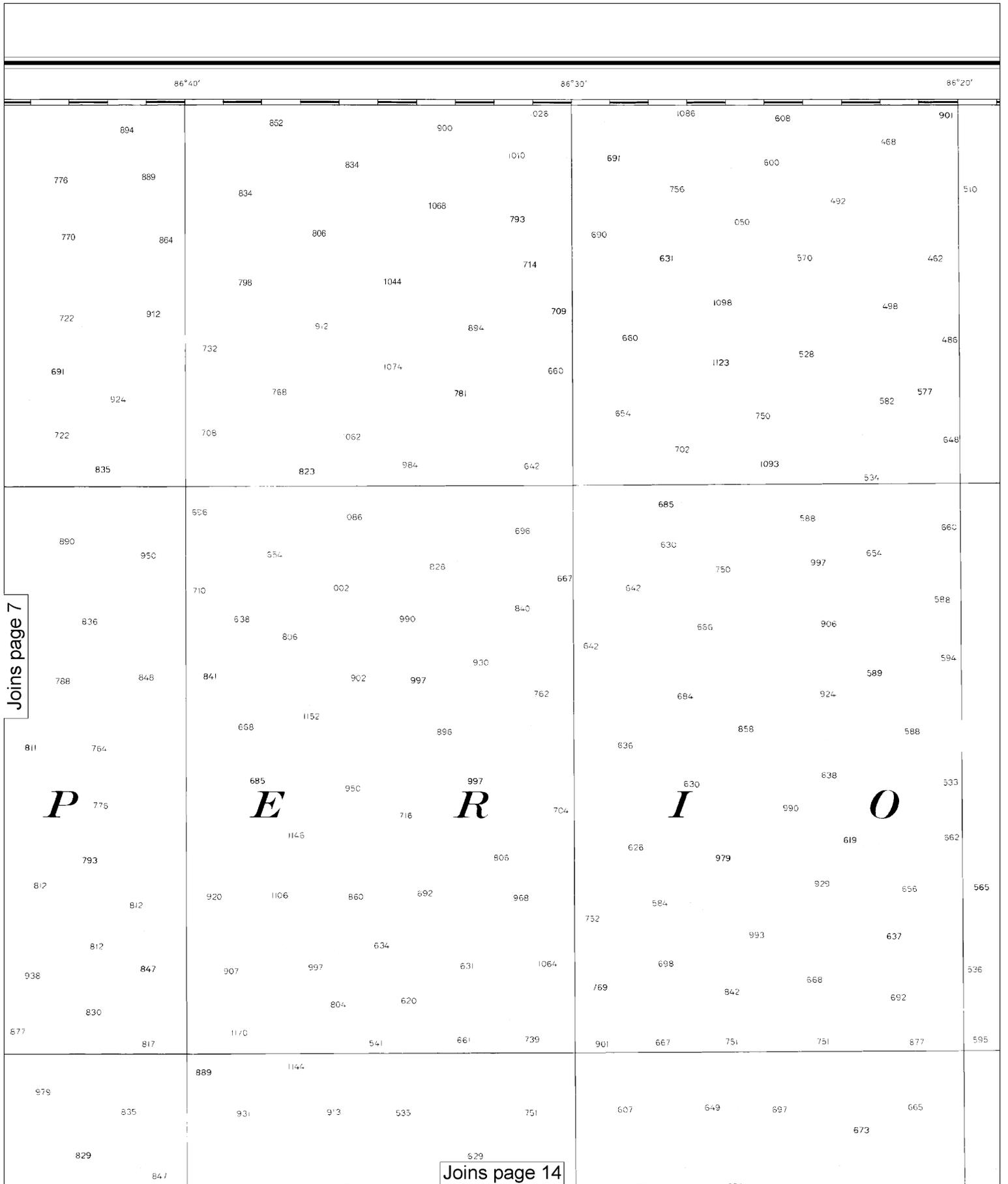
See Note on page 5.



STATUTE MILES





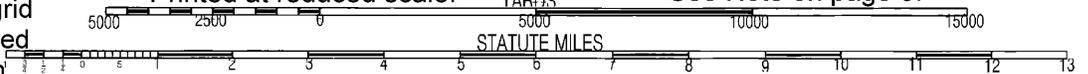


Note: Chart grid lines are aligned with true north.

Printed at reduced scale.

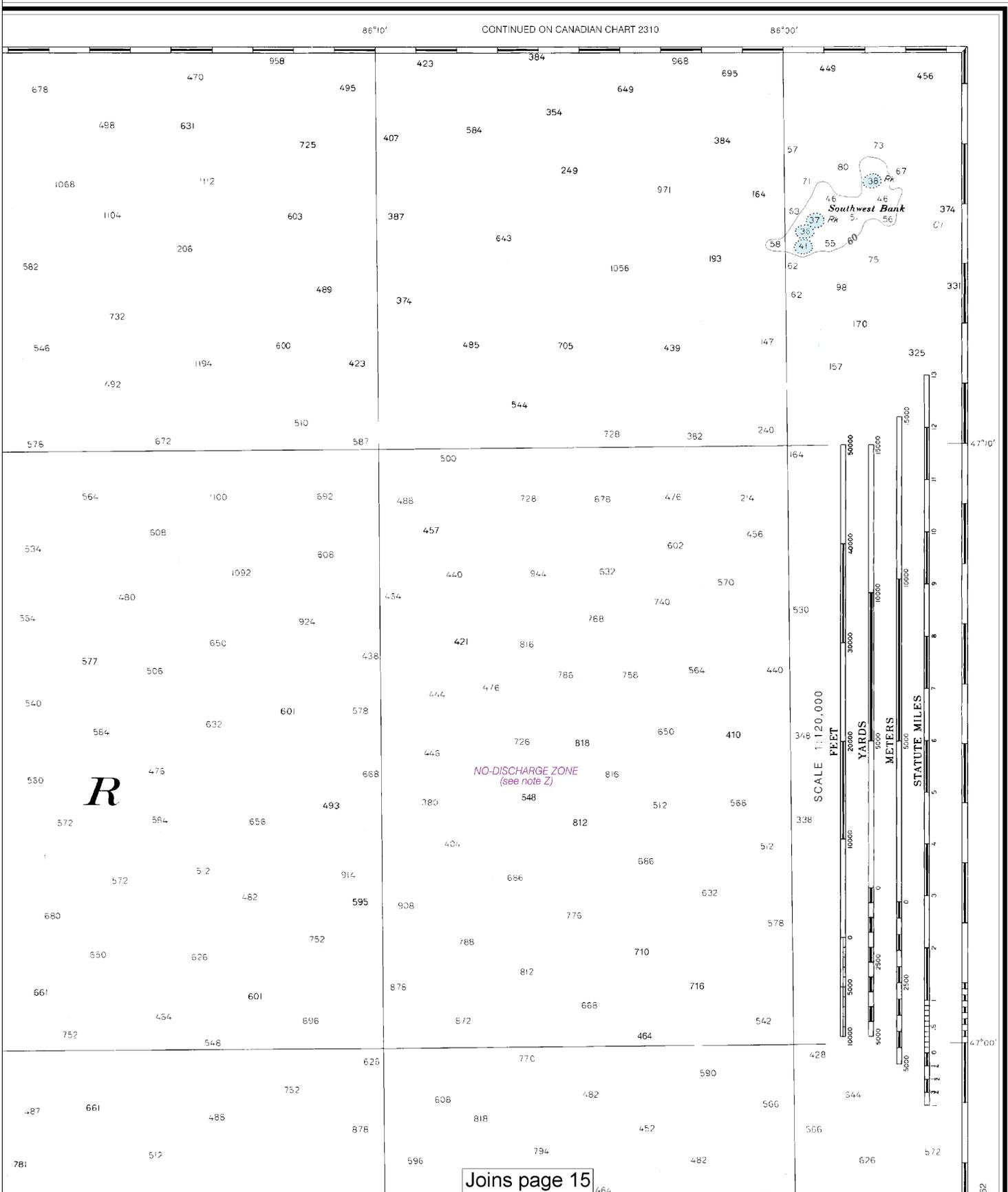
YARDS

See Note on page 5.

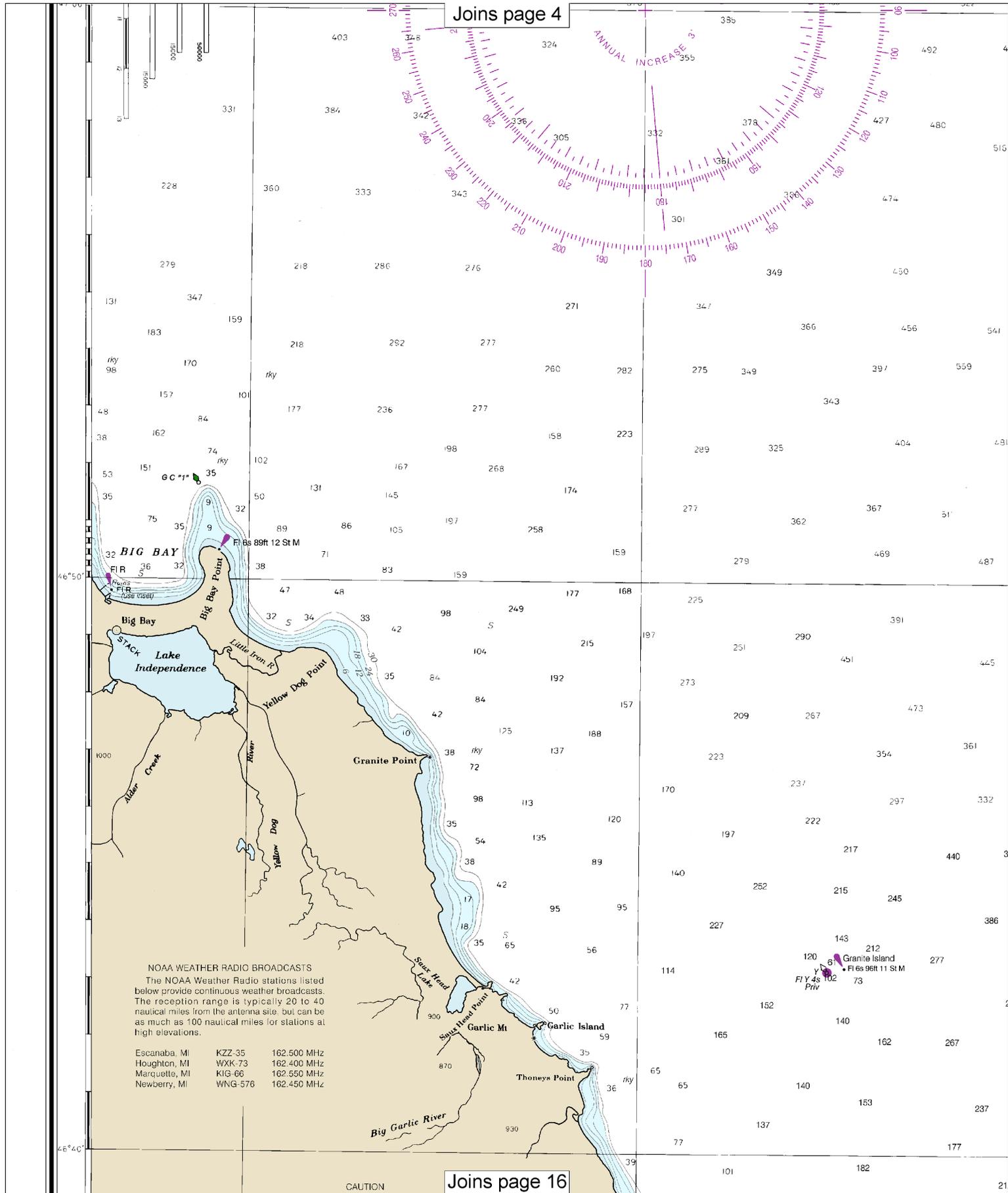


# SOUNDINGS IN FEET

14963



Joins page 15



**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.

Escanaba, MI	KZZ-35	162.500 MHz
Houghton, MI	WXK-73	162.400 MHz
Marquette, MI	KIG-66	162.550 MHz
Newberry, MI	WNG-576	162.450 MHz

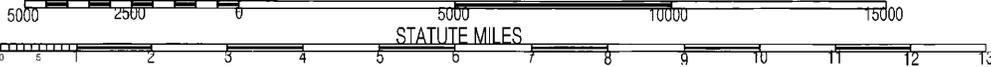


Note: Chart grid lines are aligned with true north.

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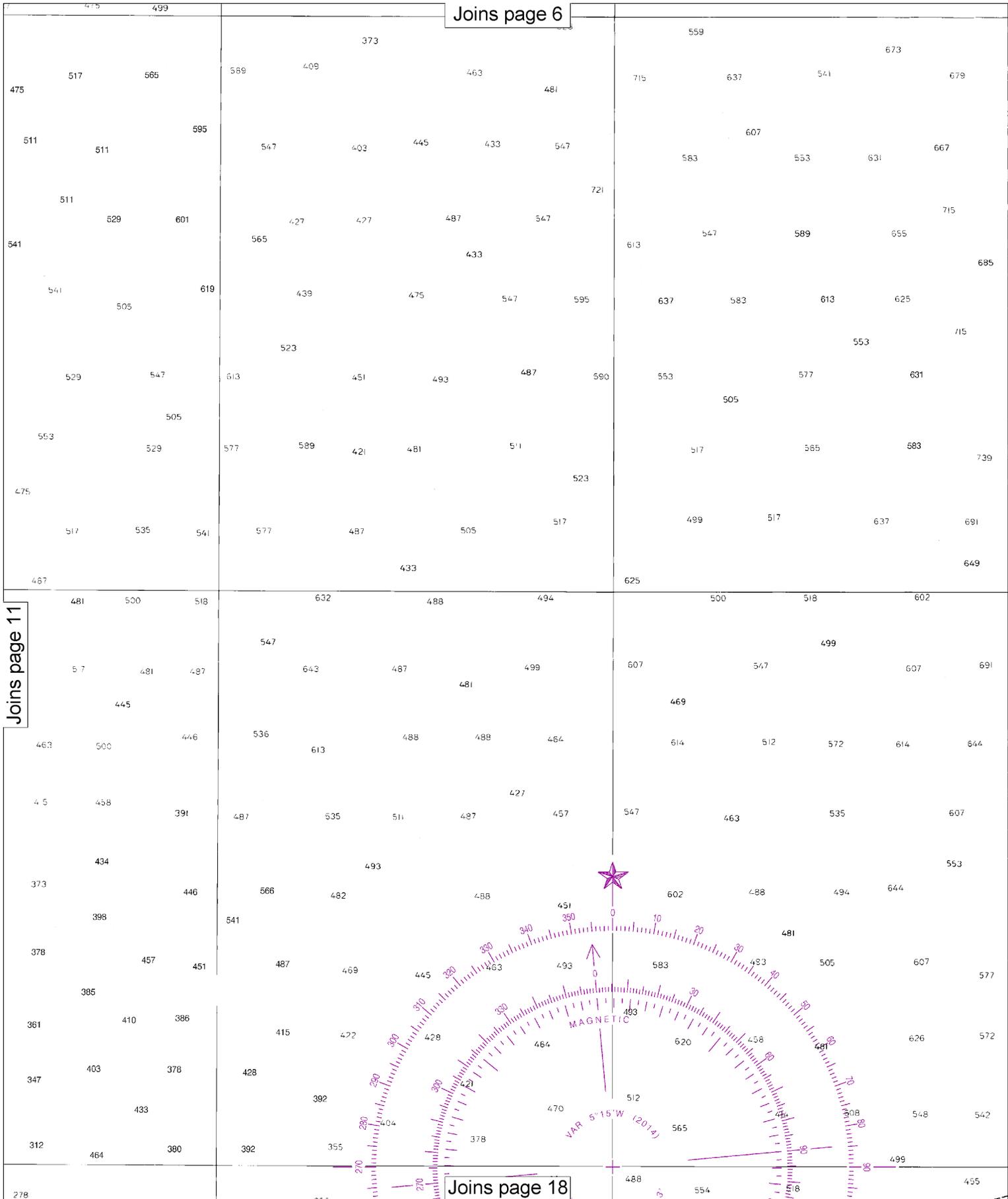
YARDS

See Note on page 5.



CAUTION





Joins page 11

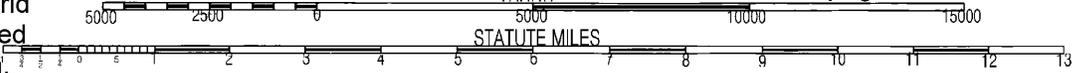
12

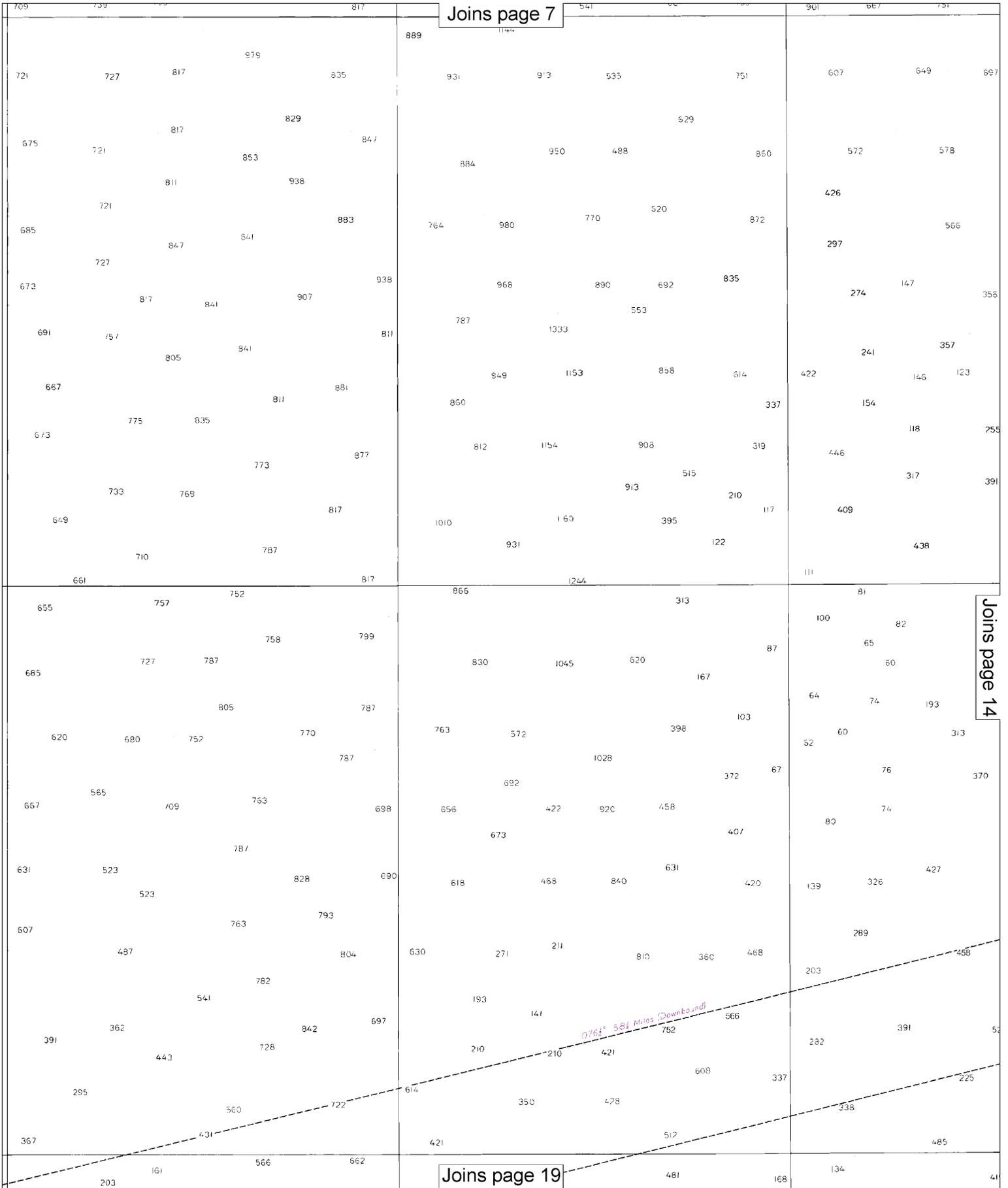
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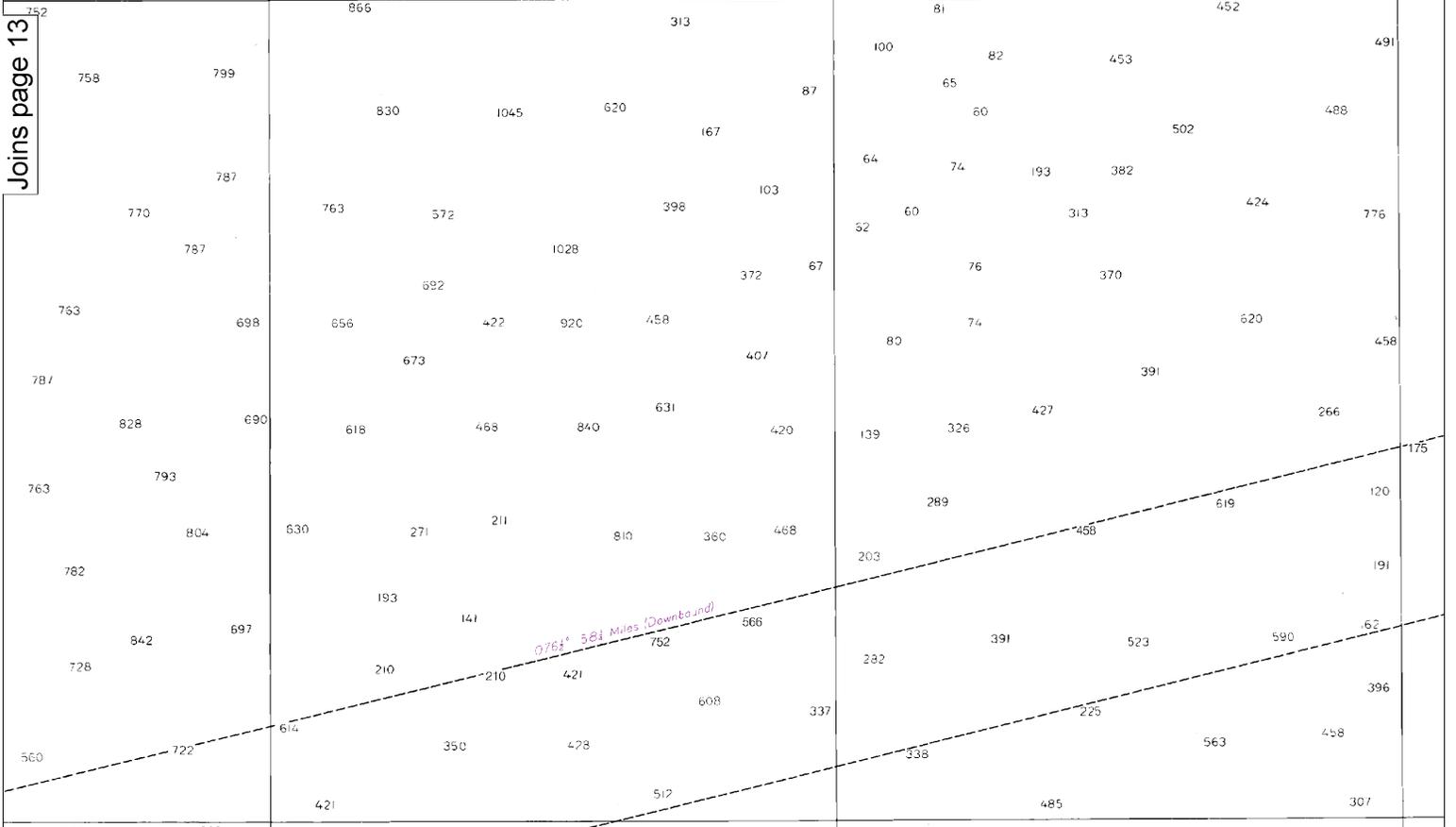
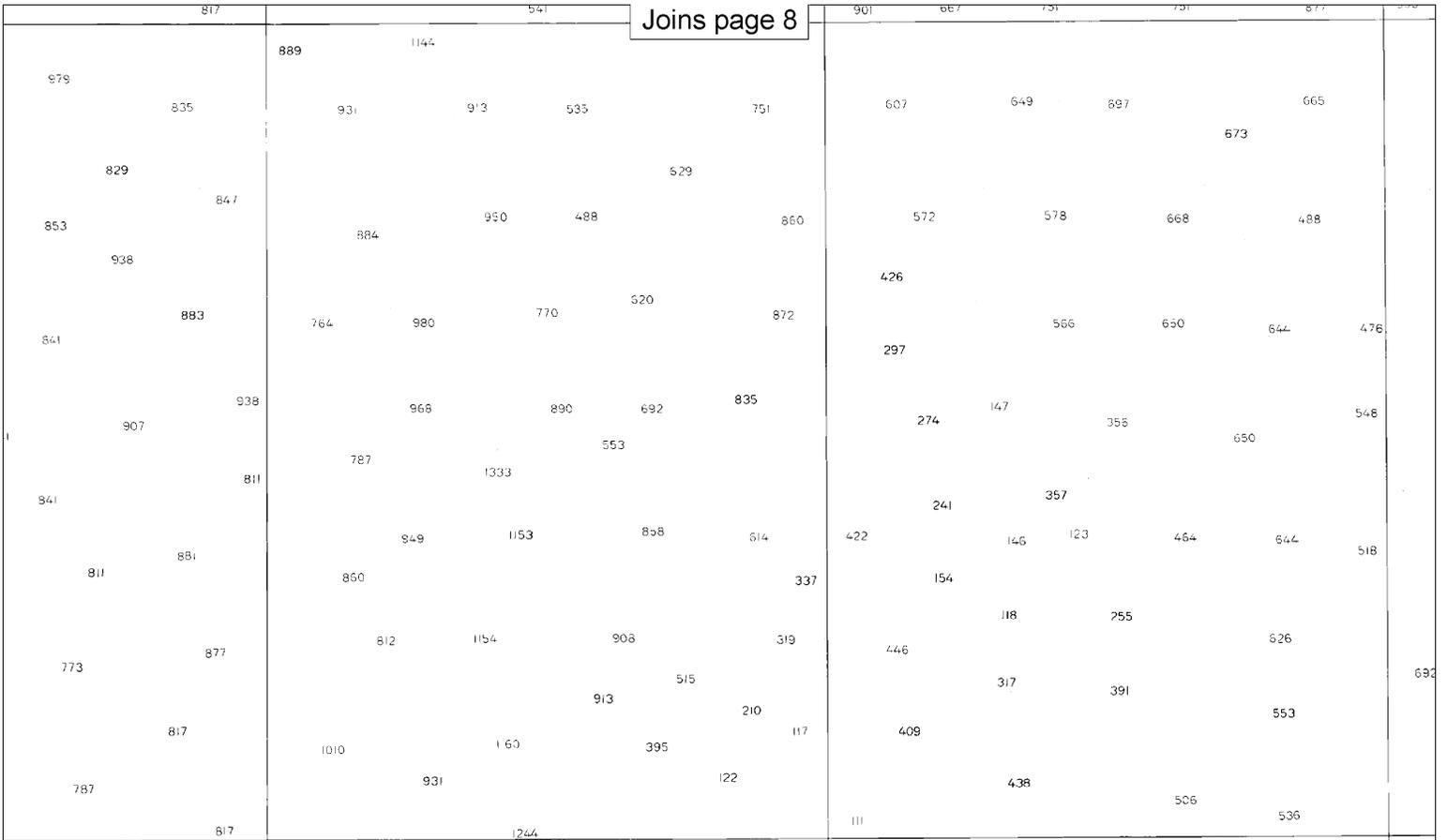
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YARDS

See Note on page 5.







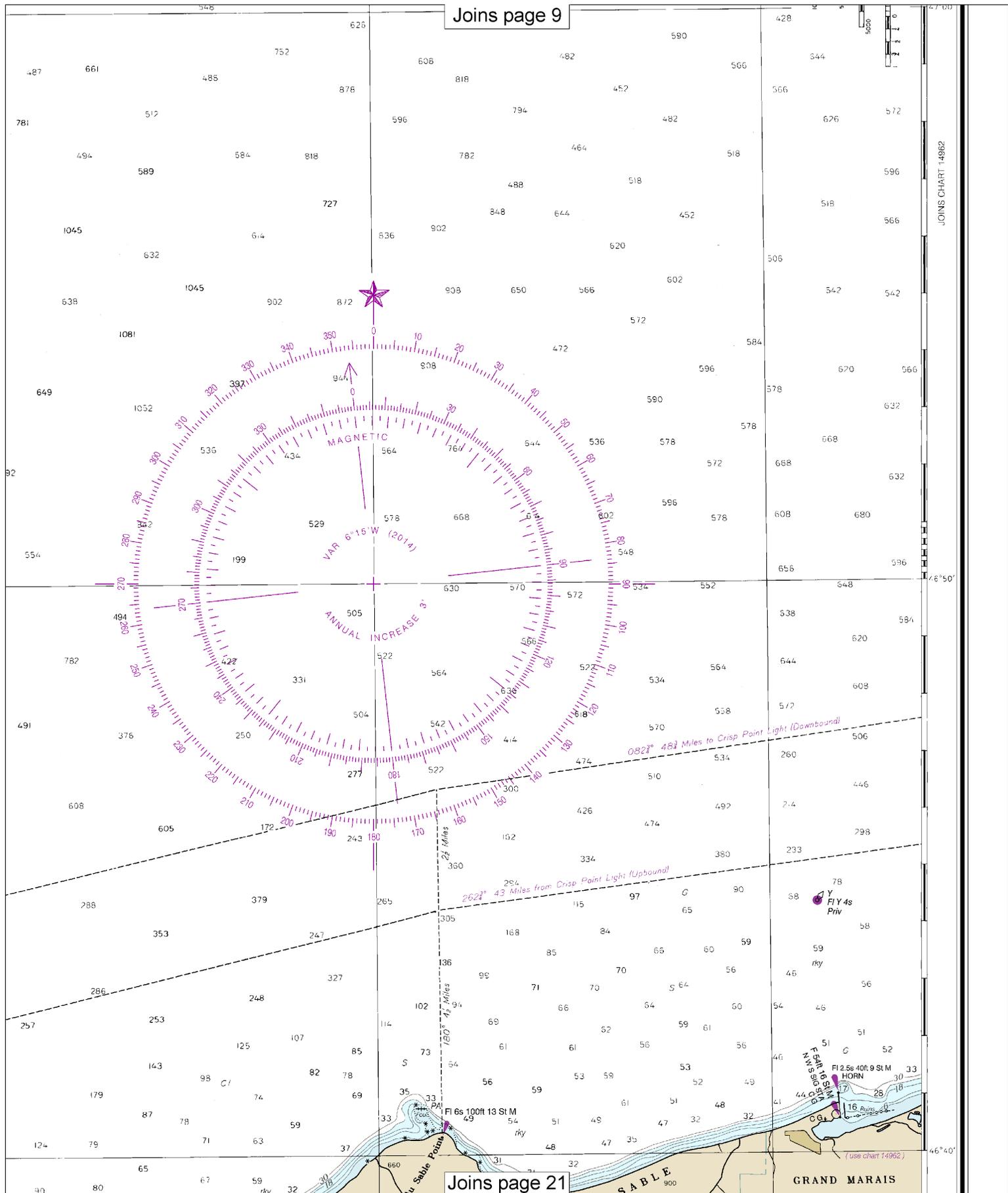
Note: Chart grid lines are aligned with true north.

Printed at reduced scale.

YARDS

See Note on page 5.





Escanaba, MI KZZ-35 162.500 MHz  
 Houghton, MI WXX-73 162.400 MHz  
 Marquette, MI KIG-66 162.550 MHz  
 Newberry, MI WNG-576 162.450 MHz

Joins page 10

**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.

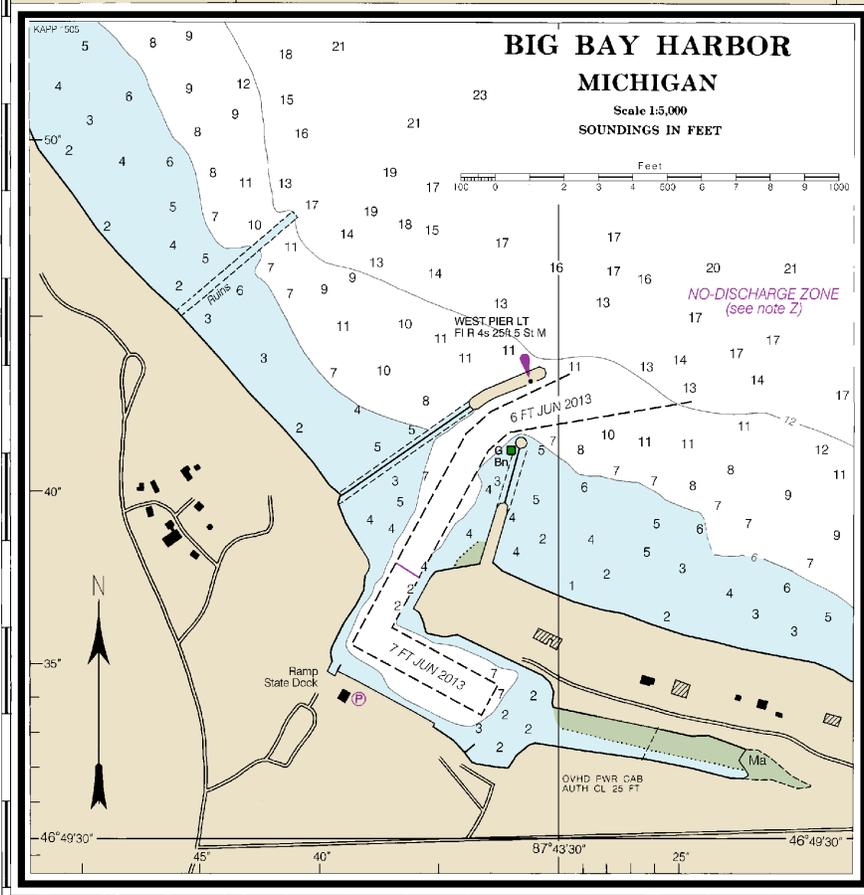
**RADAR REFLECTORS**

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 0.527' southward and 0.776' westward to agree with this chart.

**MARINER ACTIVATED SOUND SIGNAL**  
**MARQUETTE BREAKWATER OUTER LIGHT** (MRASS) Horn is activated by keying mic 5 times on VHF-FM Ch 83A.



For more detail see Chart No. 14970



21st Ed., Oct. 2014

**14963**

Last Correction: 1/5/2016. Cleared through:  
 LNM: 4616 (11/15/2016), NM: 4616 (11/12/2016), CHS: 1016 (10/28/2016)

**16**

Note: Chart grid lines are aligned with true north.

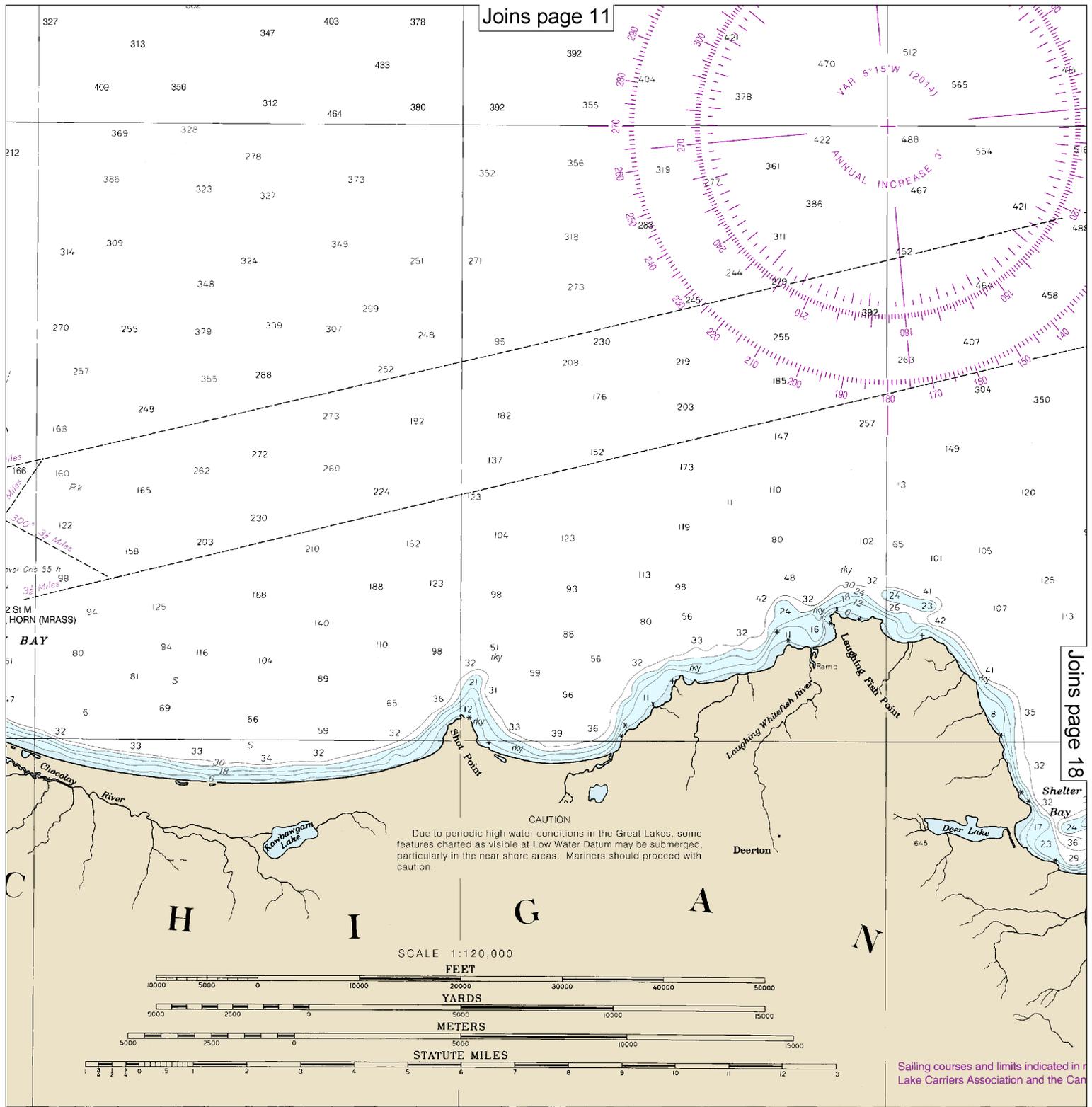
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YARDS

See Note on page 5.

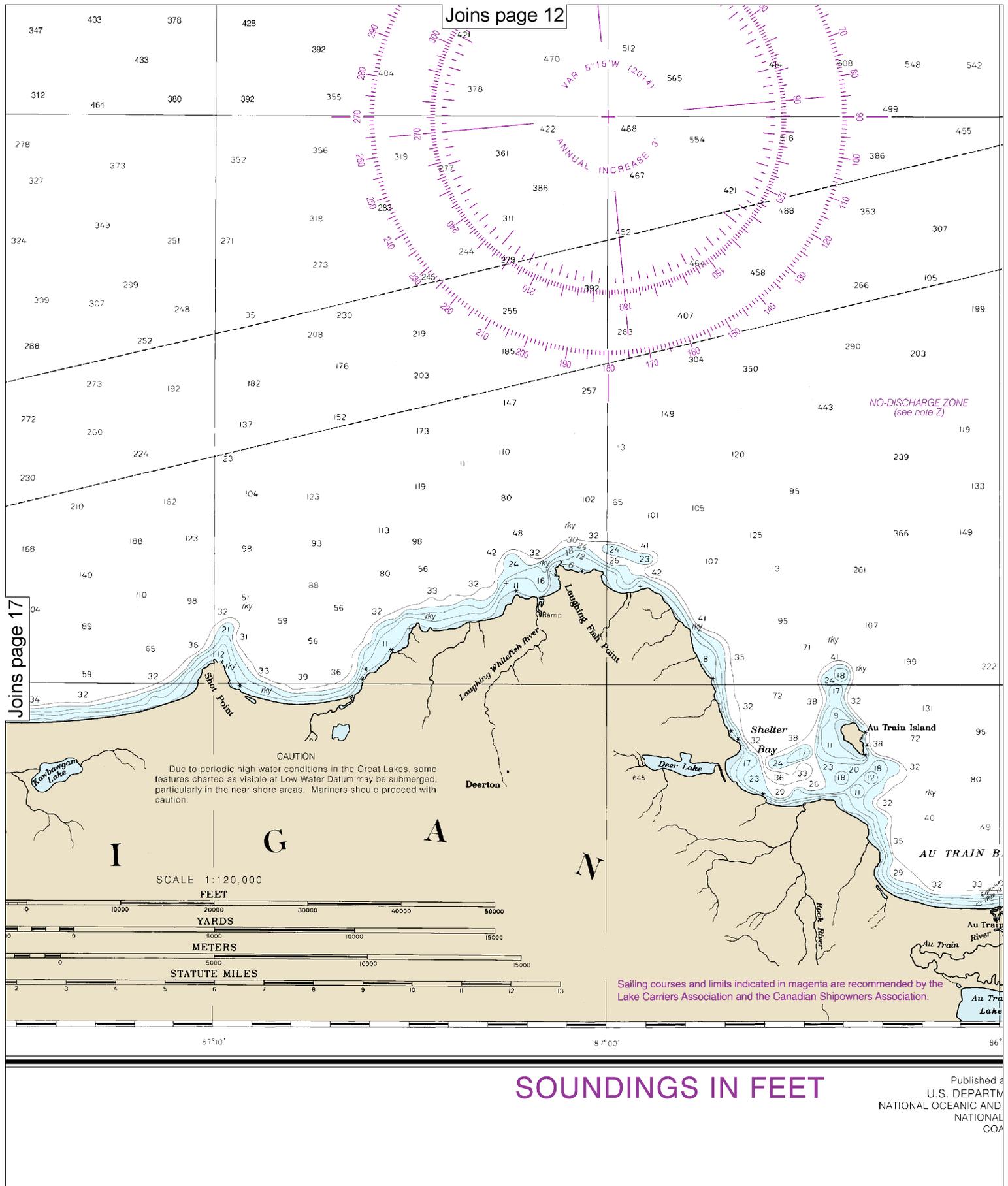
STATUTE MILES





Sailing courses and limits indicated in r Lake Carriers Association and the Can

# SOUNDINGS IN FEET

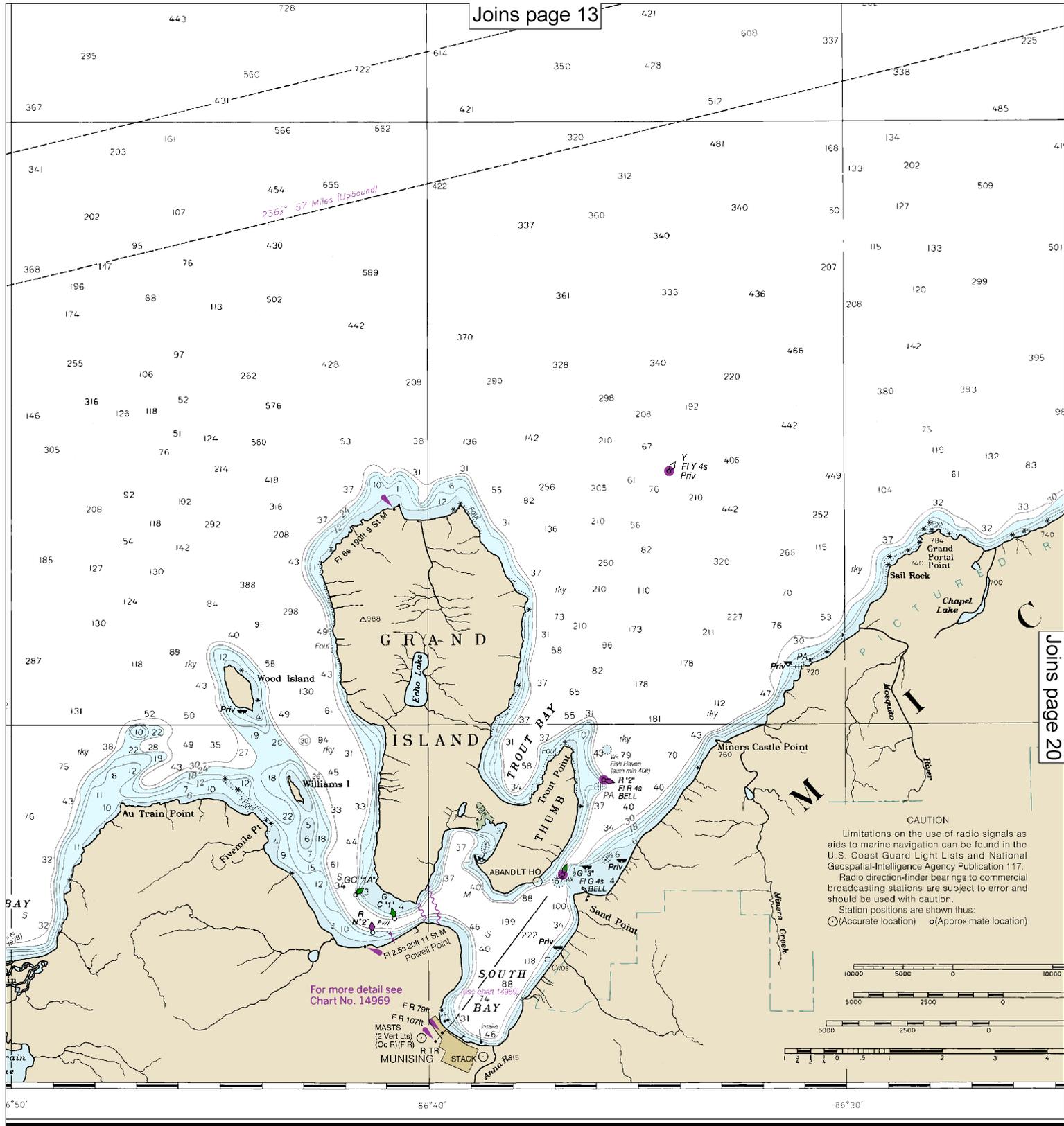


Note: Chart grid lines are aligned with true north.

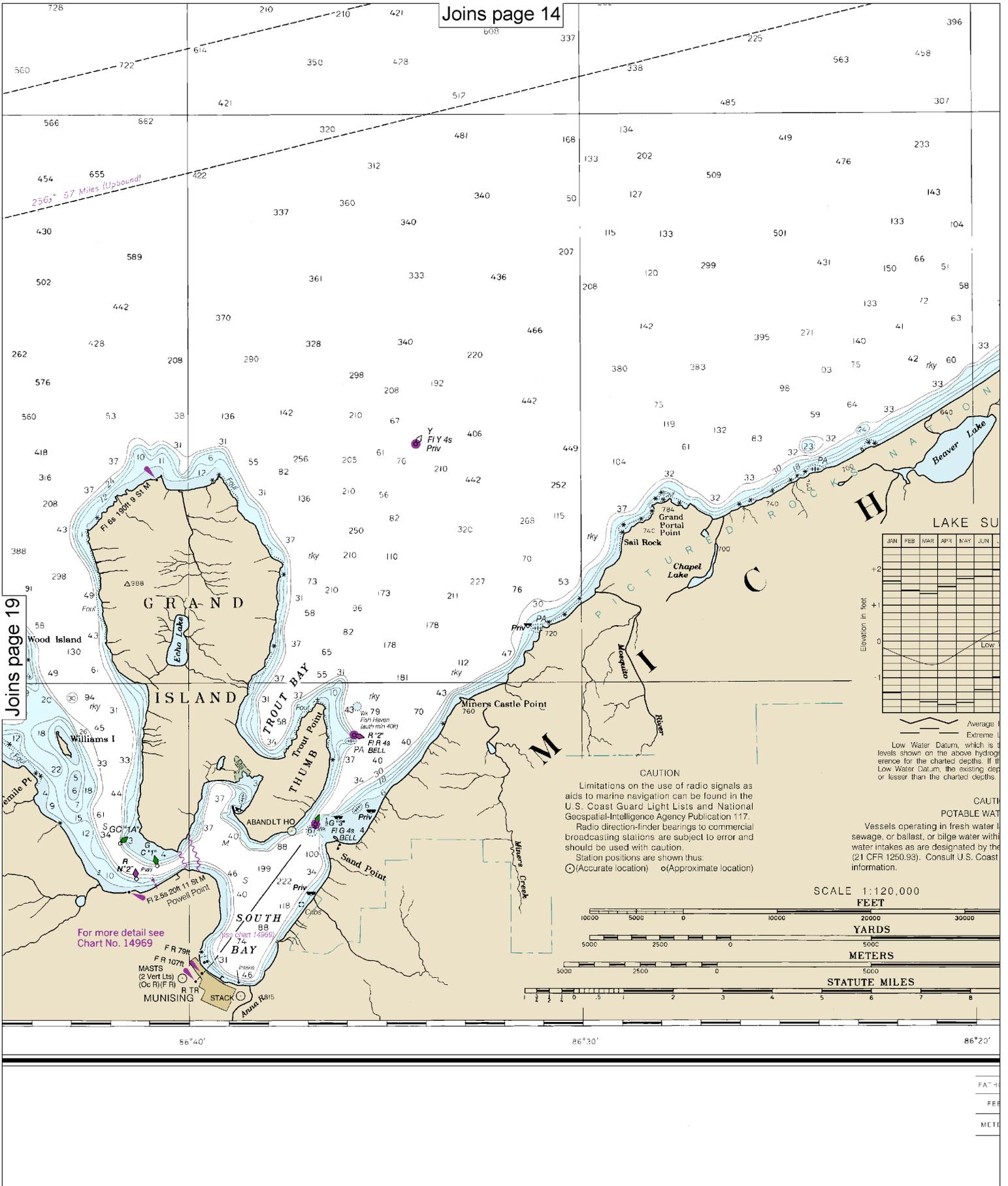
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See Note on page 5.





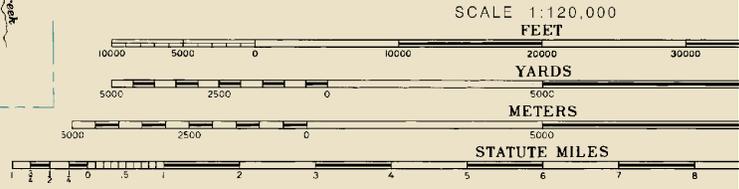
at Washington, D.C.  
 DEPARTMENT OF COMMERCE  
 NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION  
 U.S. COAST AND GEODETIC SURVEY



Joins page 19

For more detail see Chart No. 14969

**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)

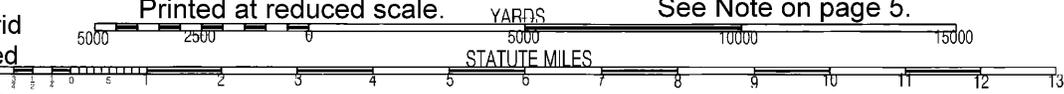


20

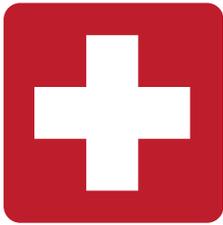
Note: Chart grid lines are aligned with true north.

Printed at reduced scale.

See Note on page 5.







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.

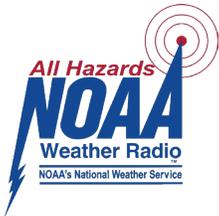
**Channels 68, 69, 71, 72 and 78A** – Recreational boat channels.

**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>



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