

BookletChart™



Unalaska Island – Kuliliak Bay to Surveyor Bay

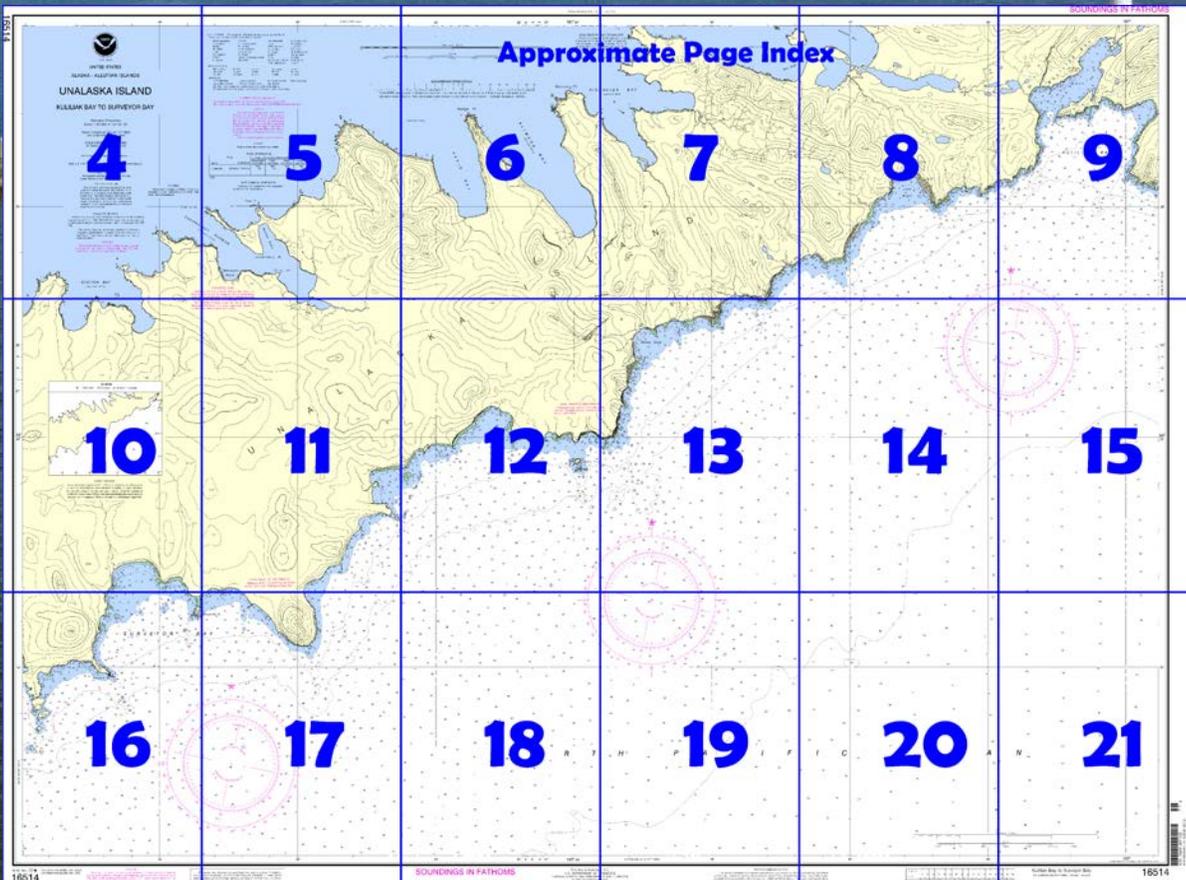
NOAA Chart 16514

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.

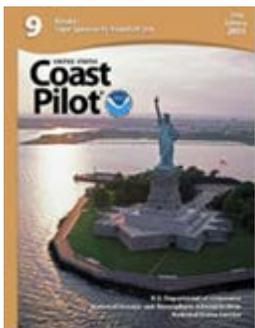
Whenever possible, use the official, full scale NOAA nautical chart for navigation. Nautical chart sales agents are listed on the Internet at <http://www.NauticalCharts.NOAA.gov>.

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=16514>.



(Selected Excerpts from Coast Pilot)

Kuliliak Bay indents the SE coast of Unalaska Island immediately to the W of Eagle Point. The bay is divided by a narrow ridge of land into two parts, forming an outer bay and a well-protected inner bay. The end of this narrow ridge of land, **Repetition Point**, is the E point of the entrance to the inner bay.

A chain of low, black rocks extends 325 yards offshore in a SW direction from the SW corner of Eagle Point and marks the E

side of the entrance to outer Kuliliak Bay. A shoal, covered 18 fathoms, 0.8 mile from shore, extends SW from the outer rock of this group.

Outer Kuliliak Bay is open to the S. The shores are characterized by rock cliffs, except at the head of the deep bight which forms the NE part of the outer bay. At the head of this bight is a sand beach and a valley passes N of Eagle Point into Eagle Bay. Anchorage in 13 to 14 fathoms may be had at the opening of the bight, with some protection in SE weather and good protection in N and NW weather.

A reef, with the outer part of it awash at half-tide, makes out from the center of the N shore of outer Kuliliak Bay, and a shoal covered 8 fathoms extends 330 yards S from the reef. Otherwise the bottom of the outer bay is very even, decreasing in depth very gradually from 30 fathoms at the entrance to 12 fathoms at an average distance of about 200 yards off the N shore.

Inner Kuliliak Bay affords good shelter E of Nest Rock in 7 fathoms in all weather. The entrance is about 500 yards wide between the cliffs 200 feet high on the W side and on the steep tip of Repetition Point on the E side.

Dome Rock, the outer rock of a conspicuous group that extends 120 yards SW from Repetition Point, is a good landmark on the E side of the entrance to the inner bay; the rock is about 30 feet wide and 5 feet high. Along the W shore of the entrance to inner Kuliliak Bay, flat reefs, rocks awash, covered rocks, and heavy kelp form a fringe some 200 yards wide. In this area is a large black rock, part of which rises to a sharp point 10 feet above high water, 75 yards out from the base of the shore cliff. About 160 yards NE from this large, black rock and 180 yards offshore is Perch Rock, a small, black rock about 1 foot high and surrounded by kelp.

Trava Point is a small, flat, grassy point on the S side of inner Kuliliak Bay and 0.5 mile NE of the entrance. **Nest Rock** is a small, grass-covered rock island, 15 feet high and 0.9 mile NE of the entrance. **Williwaw Point** is a low, sandy point 0.3 mile beyond Nest Rock. A cascade is 0.5 mile inland from the head of the bay.

The W shore of the inner bay is a curving, pebble beach fronting a low, grassy bluff. A low, wide valley, through which fog often drifts and winds always draw in N and W weather, extends across Unalaska Island to Kashega Bay. The W and NW shores of the inner bay, E of Nest Rock, are lined with low reefs, rocks awash and covered, and heavy kelp for a distance of 100 to 300 yards offshore. A rock, awash at half tide and surrounded by kelp, is 300 yards off the N shore directly N of the entrance. A fringe of heavy kelp, 50 yards wide, lines the S shore from the entrance to Trava Point.

Proceeding to sheltered anchorage inside the inner bay, the controlling depth is 4½ fathoms after passing the entrance. A channel with this depth is close to the SE shore of the bay and just outside a heavy fringe of kelp along the NW shore of Repetition Point. On the N side of this channel the water shoals very gradually to the opposite side of the bay. NE of Trava Point the water deepens and the bottom is flat.

In N and W weather violent williwaws occur in the head of inner Kulikiak Bay, above Williwaw Point. In S weather short seas, almost breaking across the entrance, make it difficult to enter.

W of Kuliliak Bay the country is less rugged; the peaks are lower and are separated by wide valleys. In the spring and early summer the snow disappears from all the peaks to the W, while in the area E of Kuliliak Bay many peaks remain snow-covered throughout the summer.

From Kulikiak Bay the shore trends SW for 11 miles to Lance Point. Rocky ledges extend some distance off the intervening points.

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

RCC Juneau Commander
17th CG District (907) 463-2000
Juneau, Alaska

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

To make suggestions or ask questions online, go to nauticalcharts.noaa.gov/inquiry.
To report a chart discrepancy, please use 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>



UNITED STATES
ALASKA - ALEUTIAN ISLANDS
UNALASKA ISLAND
KULILIAK BAY TO SURVEYOR BAY

Mercator Projection
Scale 1:40,000 at Lat 53°20'

North American Datum of 1983
(World Geodetic System 1984)

SOUNDINGS IN FATHOMS
AT MEAN LOWER LOW WATER

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

TIDAL INFORMATION

PLACE	NAME (LAT/LONG)	Height referred to datum of soundings (MLLW)		
		Mean Higher High Water	Mean High Water	Mean Low Water
Kulliliak Bay	(53°28'N/167°01'W)	5.6 feet	5.0 feet	-.5 feet

Dashes (- -) located in datum columns indicate unavailable datum values for a tide station. Real-time water levels, tide predictions, and tidal current predictions are available on the Internet from <http://tidesandcurrents.noaa.gov>. (Feb 2014)

HEIGHTS

Heights in foot above Mean High Water.

AUTHORITIES

Hydrography and topography by the National Ocean Service, Coast Survey.

SUPPLEMENTAL INFORMATION

Consult U.S. Coast Pilot 9 for important supplemental information.

CAUTION

Temporary changes or defects in aids to navigation are not indicated on this chart. See Local Notice to Mariners.

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.

ABBREVIATIONS (For complete list of Symbols and Abbreviations, see Aids to Navigation (lights are white unless otherwise indicated):

AERO aeronautical	G green	Mo
Al alternating	IQ interrupted quick	N
B black	Isb isophase	OB
Bn beacon	LT LC lighthouse	OC
C can	M nautical mile	OR
DIA diaphone	m minutes	Q
F fixed	MICRO TR microwave tower	R
Fl flashing	Mkr marker	Ra
		R

Bottom characteristics:

Bds boulders	Co coral	gy gray
bk broken	G gravel	h hard
Cy clay	Gra grass	M mud

Miscellaneous:

AUTH authorized	Costn obstruction	PD
ED existence doubtful	PA position approximate	Reg
(W) Wreck, rock, obstruction, or shoal swept clear to the depth		
(R) Rocks that cover and uncover, with heights in feet above		

COLREGS, 80 1705 (see note)
International Regulations for Preventing Collisions
The entire area of this chart falls seaward of the C

NOTE A

Navigation regulations are Chapter 2, U.S. Coast Pilot 9. Revisions to Chapter 2 are published in Notices to Mariners. Information on the regulations may be obtained from the Commander, 17th Coast Guard District, in Juneau, Alaska, or at the Office of the Engineer, Corps of Engineers in Alaska. Refer to charted regulations.

HORIZONTAL DATUM

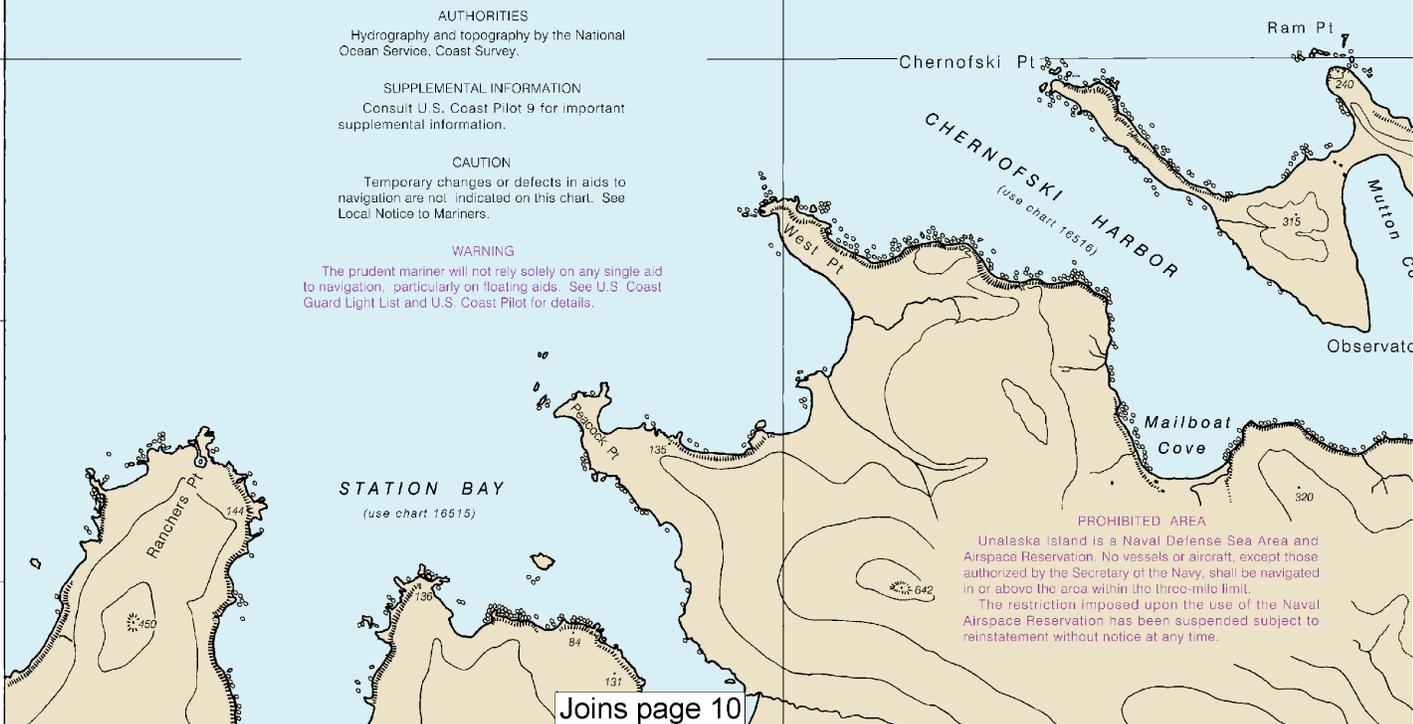
The horizontal reference datum is North American Datum of 1983 (World Geodetic System 1984). Geographic positions referred to the World Geodetic System 1984 datum of 1927 must be corrected by an average of 3.151" southward and 6.0" eastward to agree with this chart.

POLLUTION REPORT

Report all spills of oil and hazardous substances to the National Response Center via 1-800-424-8802 (toll free) or the nearest Coast Guard facility if telephone communication is not possible (1-907-546-1533).

25'

35'



Joins page 10

4

Note: Chart grid lines are aligned with true north.

Printed at reduced scale.

SCALE 1:40,000
Nautical Miles

See Note on page 5.



30'

JOINS CHART 16515

25'

22' 45' 30'

see Chart No. 1.)

Mo morse code R TR radio tower
 N nun Rot rotating
 DBSC obscured s seconds
 Dc occulting SEC sector
 Dr orange St M statute miles
 D quick VO very quick
 R red W white
 Ra Ref radar reflector WHIS whistle
 R Bn radiobeacon Y yellow

Oys oysters so soft
 Rk rock Sh shells
 S sand sy sticky

D position doubtful Subm submerged
 Rep reported
 Dth indicated.
 Datum of soundings.

Note A)
 as at Sea, 1972.
 COLREGS Demarcation Line.

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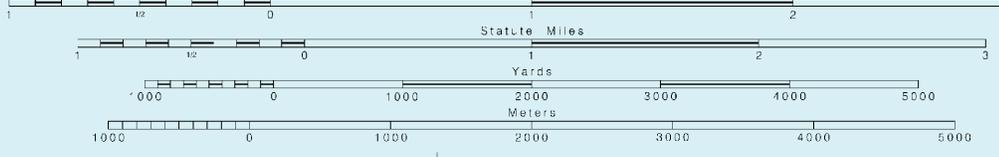
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Nautical Miles

Statute Miles

Yards

Meters

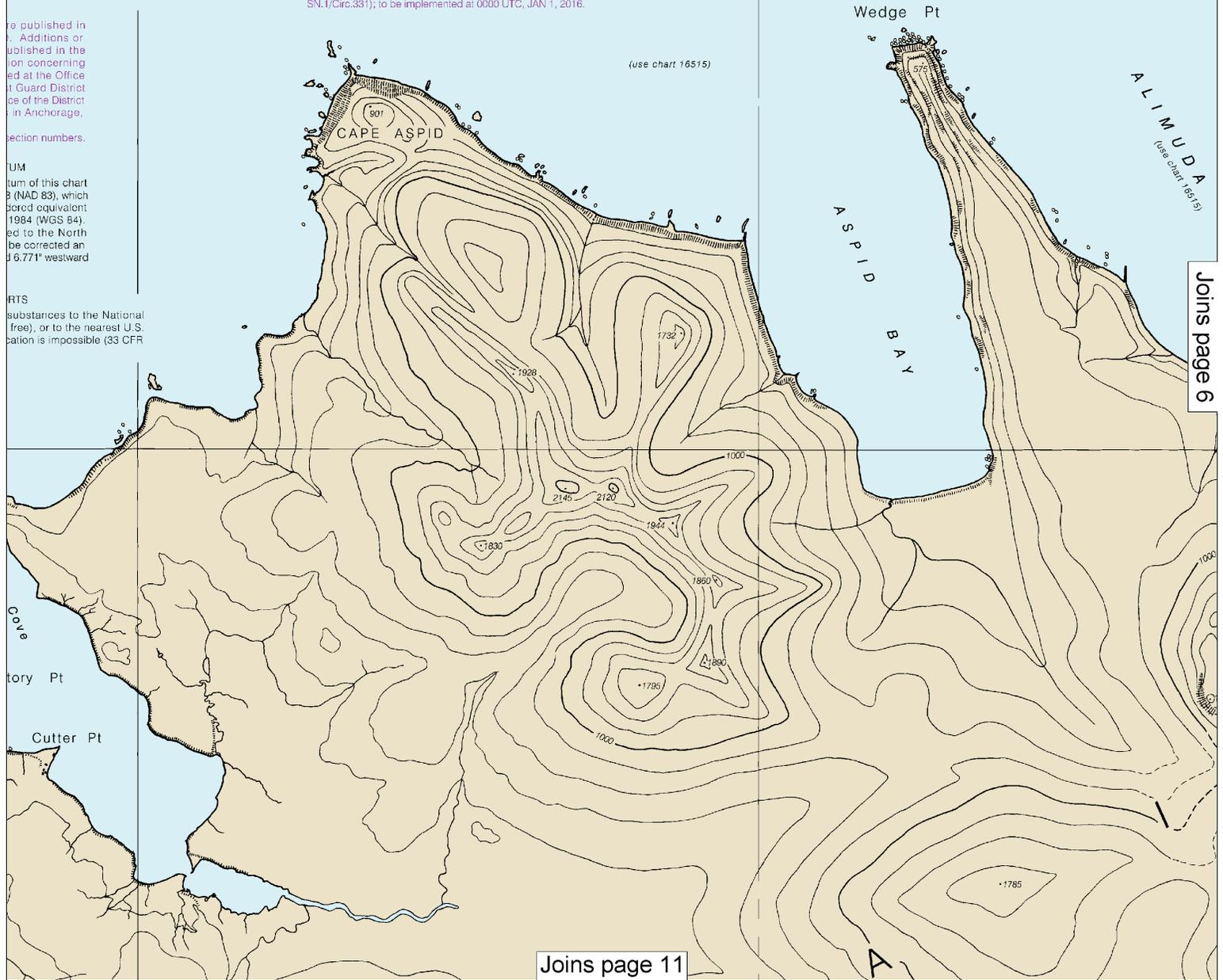


The contour lines are hill shapes, sketched to afford the navigator a generalized indication of the character of the land forms. They should not be relied upon as lines of equal elevation.

AREA TO BE AVOIDED (ATBA)

The entire area of this chart falls within an Area to be Avoided. All ships 400 gross tonnage and upwards solely in transit should avoid the Area. This Area is IMO-Adopted (MSC IMO SN.1/Circ.331); to be implemented at 0000 UTC, JAN 1, 2016.

(use chart 16515)



Joins page 6

Joins page 11

This BookletChart was reduced to 75% of the original chart scale.
 The new scale is 1:53333. Barscales have also been reduced and
 are accurate when used to measure distances in this BookletChart.



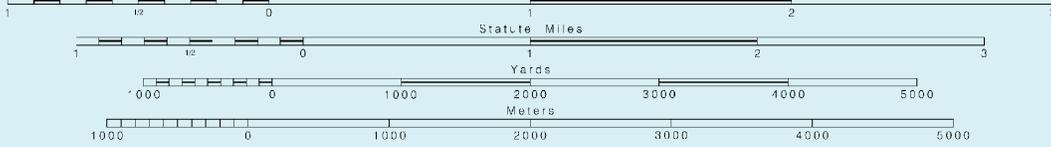
JOINS CHART 16515

25'

22' 45' 30' 15' 21'

167° 20'

SCALE 1:40,000
Nautical Miles



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The contour lines are hill shapes, sketched to afford the navigator a generalized indication of the character of the land forms. They should not be relied upon as lines of equal elevation.

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(use chart 16515)

Manning Pt

Wedge Pt

CAPE ASPID

ALIMUDA BAY
(use chart 16515)

ASPID BAY

Joins page 5

Joins page 12

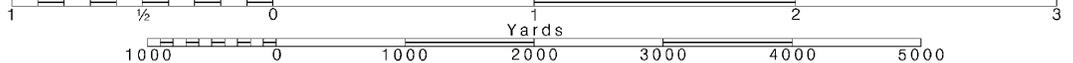
6

Note: Chart grid lines are aligned with true north.

Printed at reduced scale.

SCALE 1:40,000
Nautical Miles

See Note on page 5.



15'

10'

NOAA WEATHER RADIO BROADCASTS
NOAA Weather Radio station listed provides continuous weather broadcasts. Operation range is typically 20 to 40 miles from the antenna site, but can be as far as 100 nautical miles for stations at sea.

1a, AK WXK-89 162.550 MHz

(use chart 16515)

KASHEGA BAY

Buck Bight

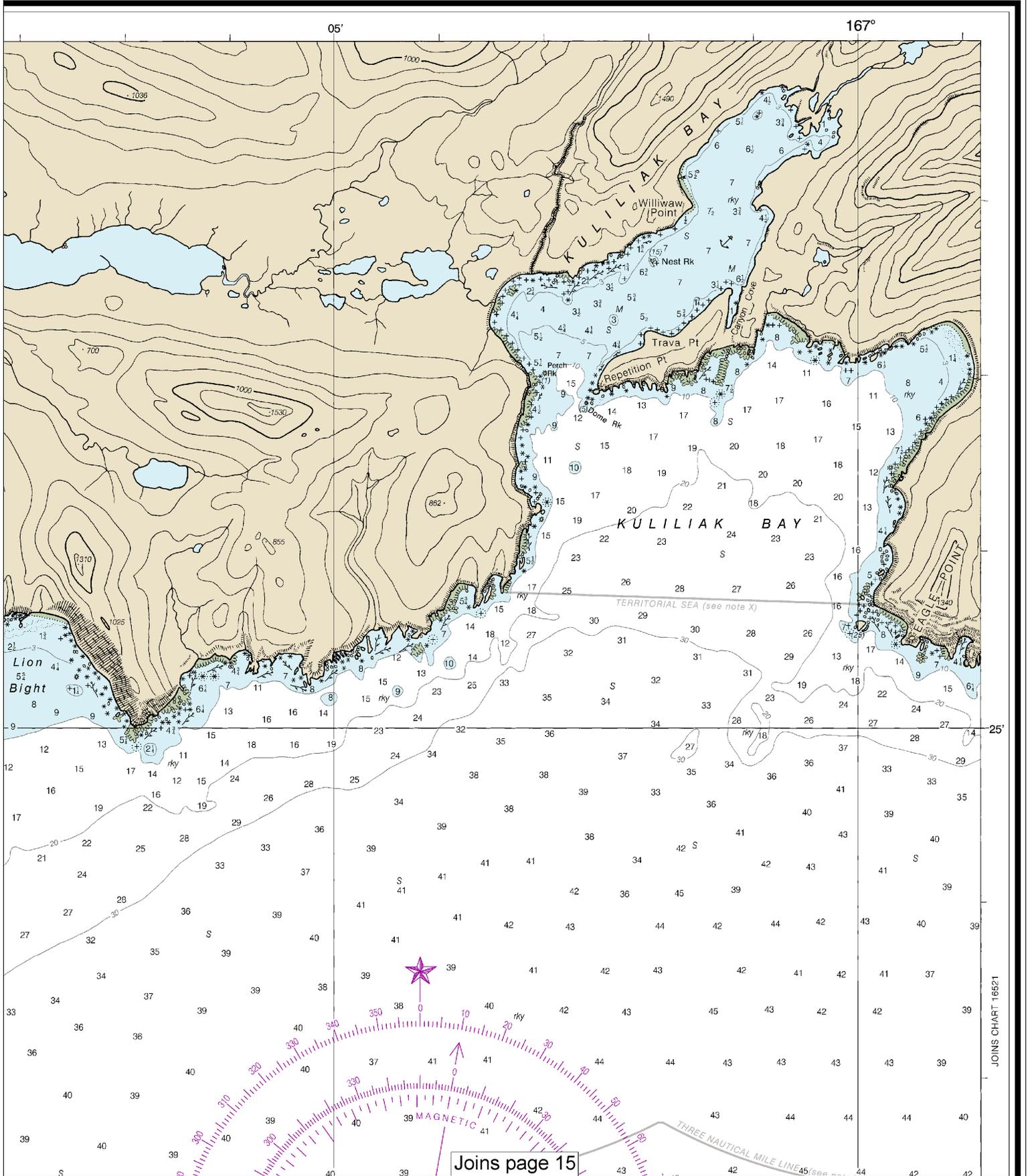
KISMALIUK BAY
(use chart 16515)



Joins page 8

Joins page 13

SOUNDINGS IN FATHOMS



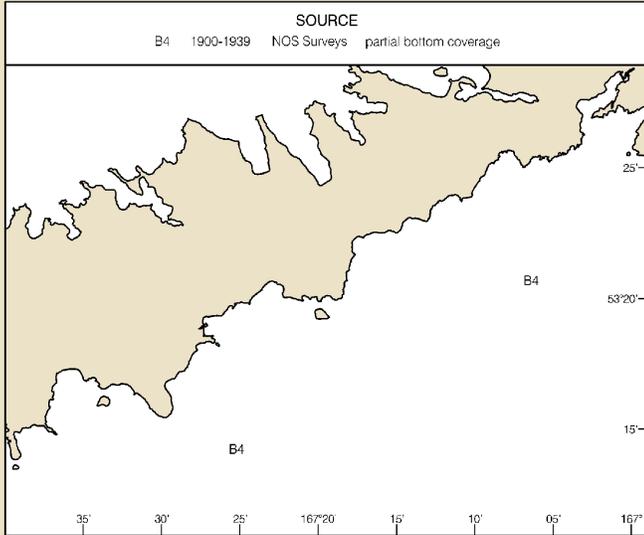
Joins page 15

JOINS CHART 16521

Airspace Reservation. No vessels or aircraft, except those authorized by the Secretary of the Navy, shall be navigated in or above the area within the three-mile limit. The restriction imposed upon the use of the Naval Airspace Reservation has been suspended subject to reinstatement without notice at any time.

22'
45'
30'
15'
21'

53°
20'



SOURCE DIAGRAM

The 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 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.

NOTE X

Within the 12-nautical mile Territorial Sea, established by Presidential Proclamation, some Federal laws apply. The Three Nautical Mile Line, previously identified as the outer limit of the territorial sea, is retained as it continues to depict the jurisdictional limit of the other laws. The 9-nautical mile Natural Resource Boundary off the Gulf coast of Florida, Texas, and Puerto Rico, and the Three Nautical Mile Line elsewhere remain in most cases the inner limit of Federal fisheries jurisdiction and the outer limit of the jurisdiction of the states. The 24-nautical mile Contiguous Zone and the 200-nautical mile Exclusive Economic Zone were established by Presidential Proclamation. Unless fixed by treaty or the U.S. Supreme Court, these maritime limits are subject to modification.

CAUTION

UNEXPLODED ORDNANCE

Mariners are cautioned against anchoring, dredging, or trawling within the area of the dashed black lines due to the presence of unexploded ordnance.

LOCAL MAGNETIC
Differences of as much variation have been observed.

10

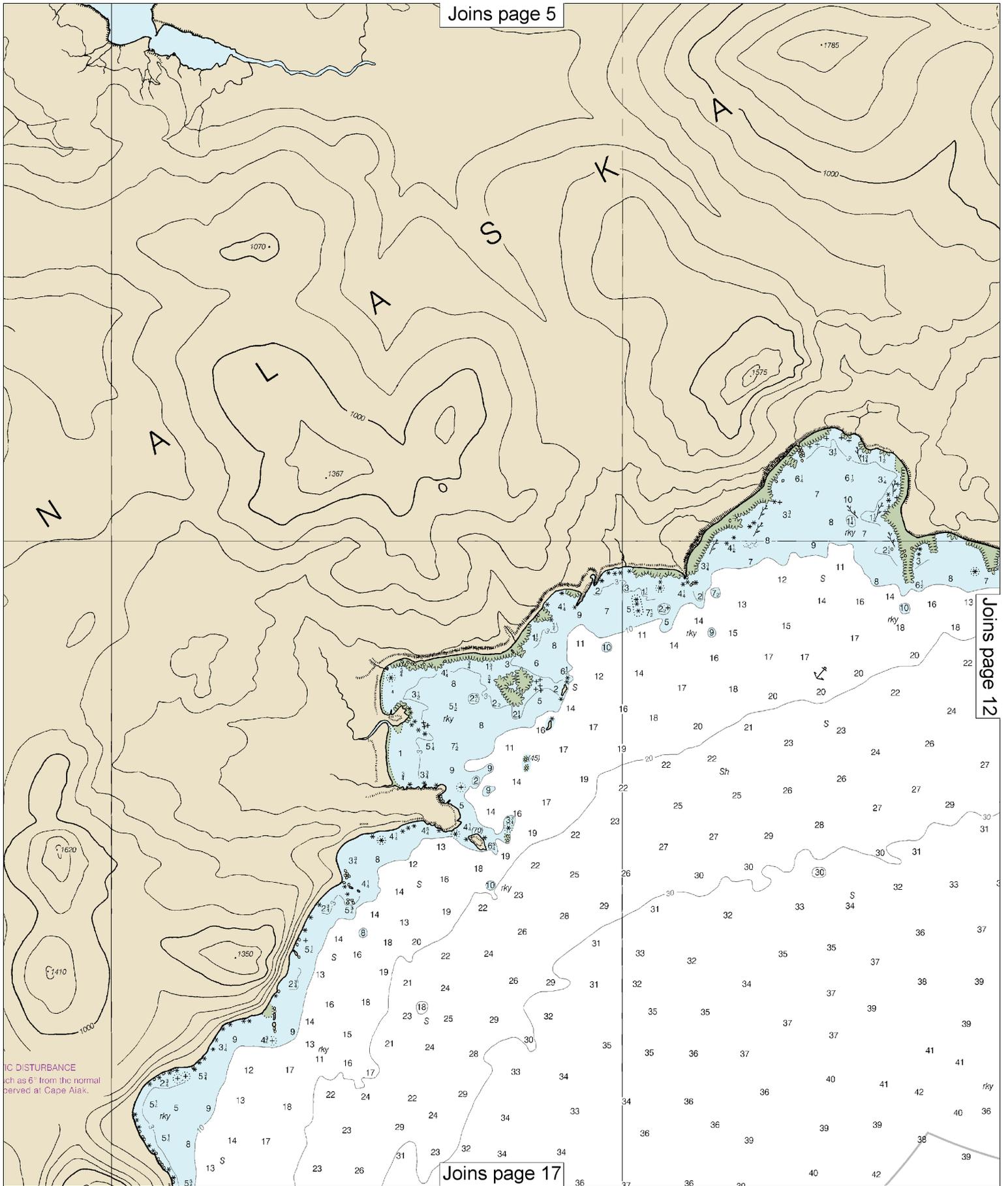
Note: Chart grid lines are aligned with true north.

Printed at reduced scale.

SCALE 1:40,000
Nautical Miles

See Note on page 5.



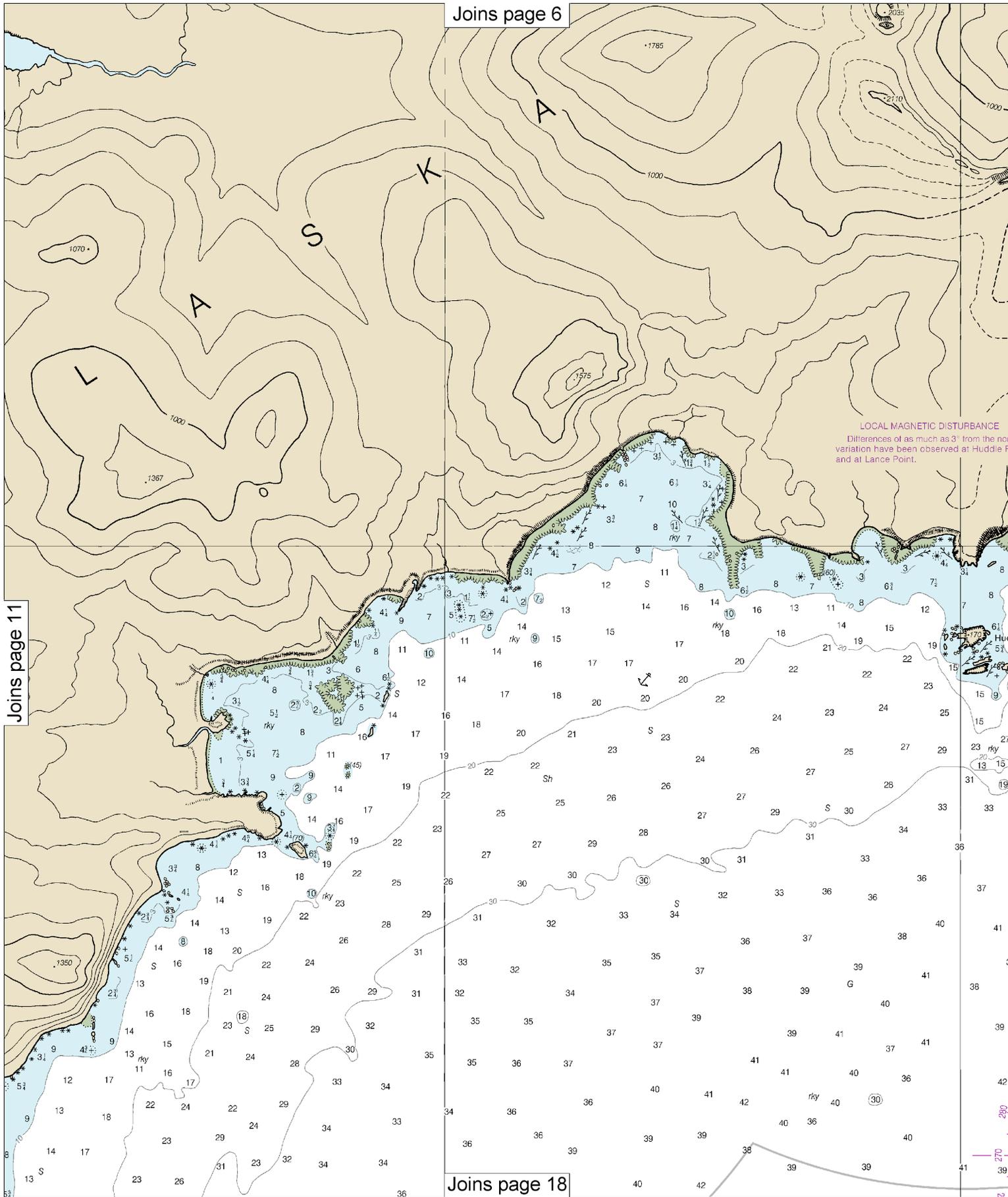


Joins page 6

Joins page 11

Joins page 18

LOCAL MAGNETIC DISTURBANCE
Differences of as much as 3° from the normal variation have been observed at Huddle Point and at Lance Point.



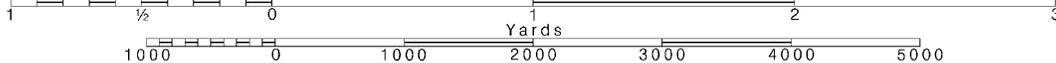
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Note: Chart grid lines are aligned with true north.

Printed at reduced scale.

SCALE 1:40,000
Nautical Miles

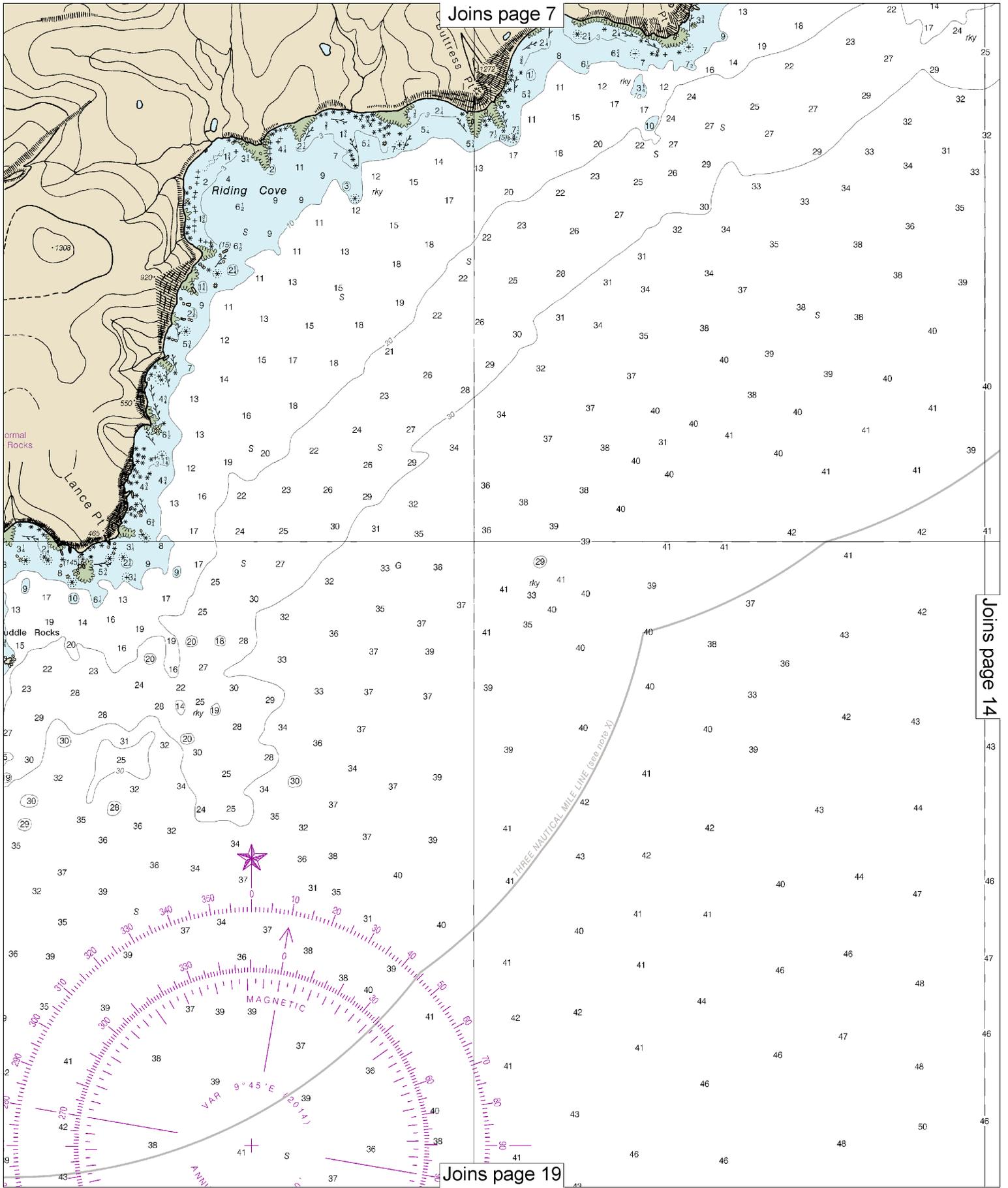
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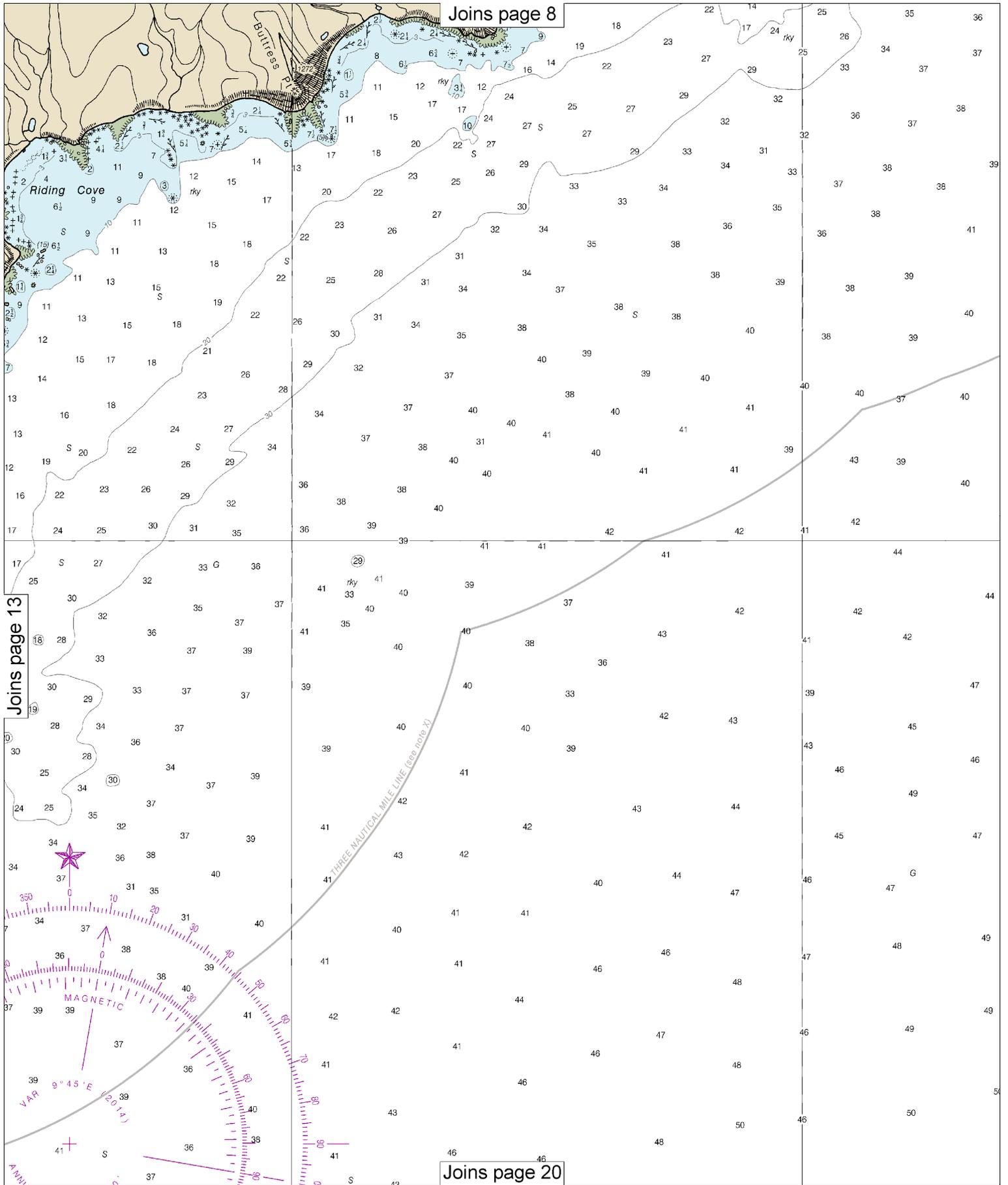


Joins page 7

Joins page 14

Joins page 19



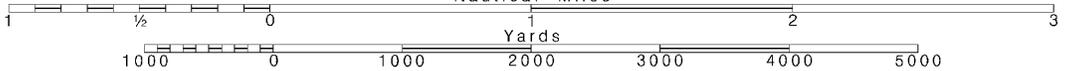


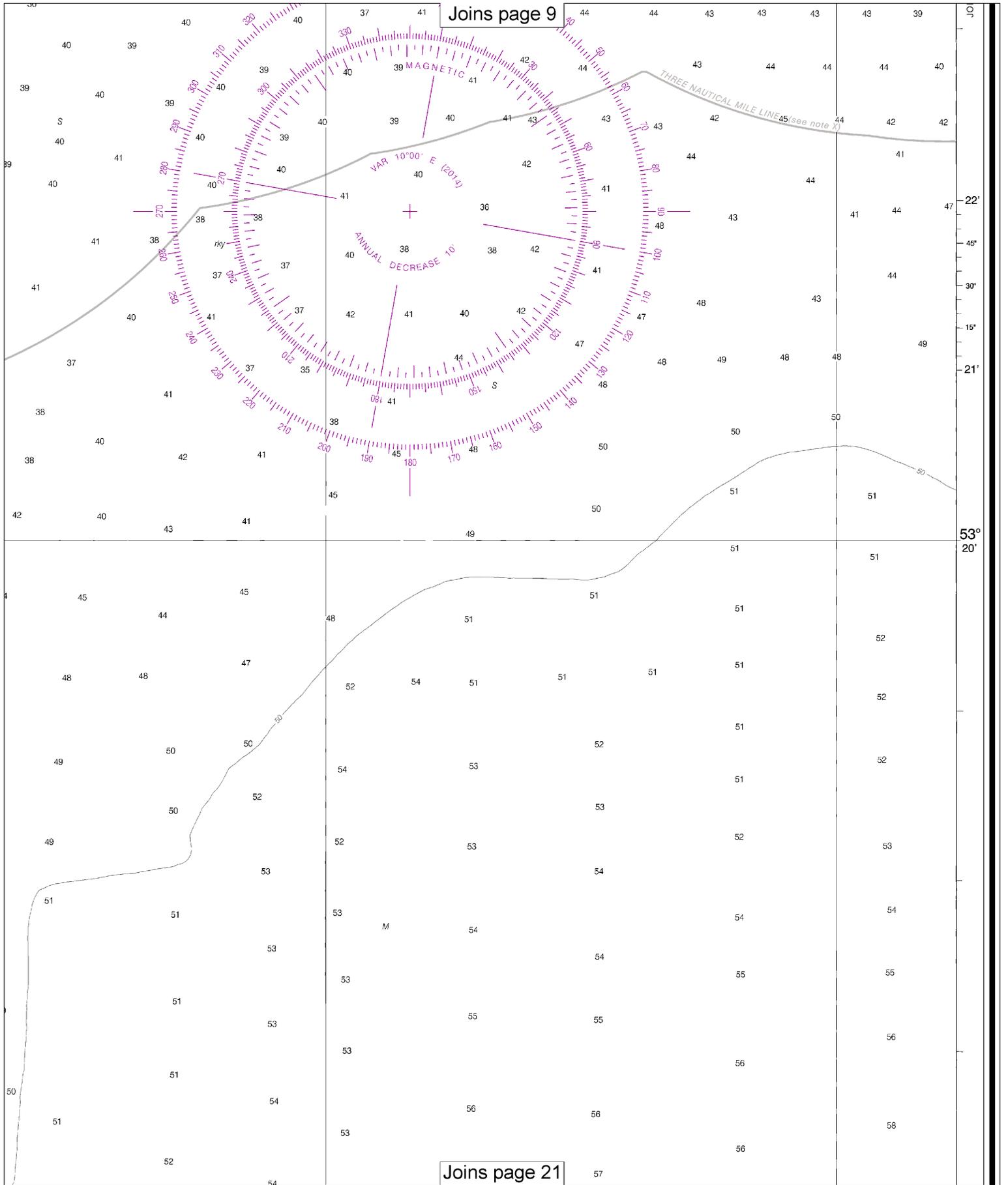
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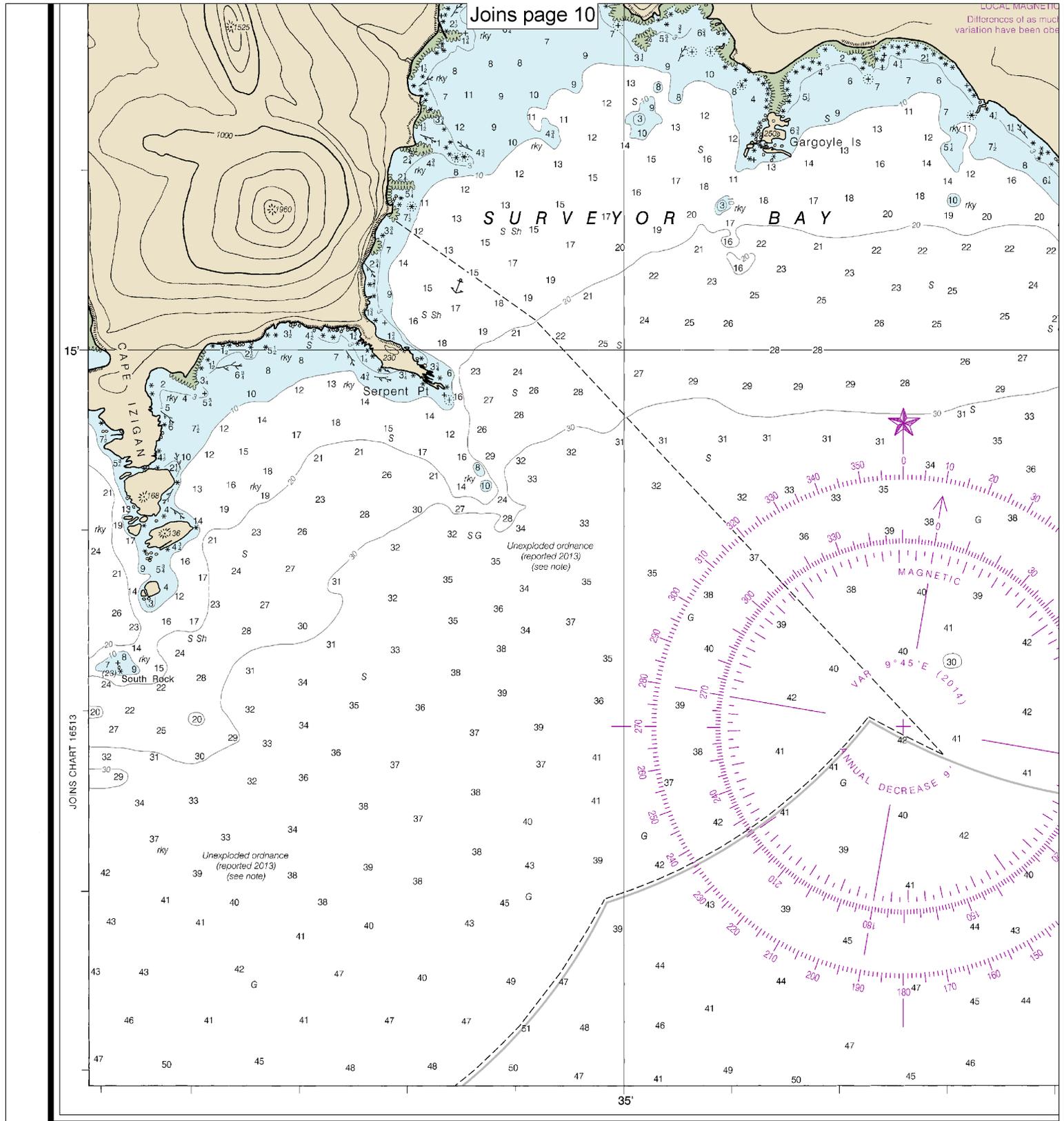
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SCALE 1:40,000
Nautical Miles

See Note on page 5.







16514

CAUTION
 This chart has been corrected from the Notice to Mariners (NM) published weekly by the National Geospatial-Intelligence Agency and the Local Notices 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.

NOAA encourages users to submit inquiries, discrepancies or comments about this chart at <http://www.nauticalcharts.noaa.gov/staff/contact.htm>.

5th Ed., May 2014. Last Correction: 12/10/2015. Cleared through:
 LNM: 4916 (12/6/2016), NM: 5116 (12/17/2016), CHS: 1116 (11/25/2016)

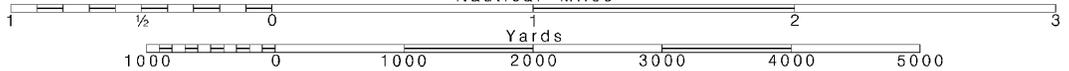
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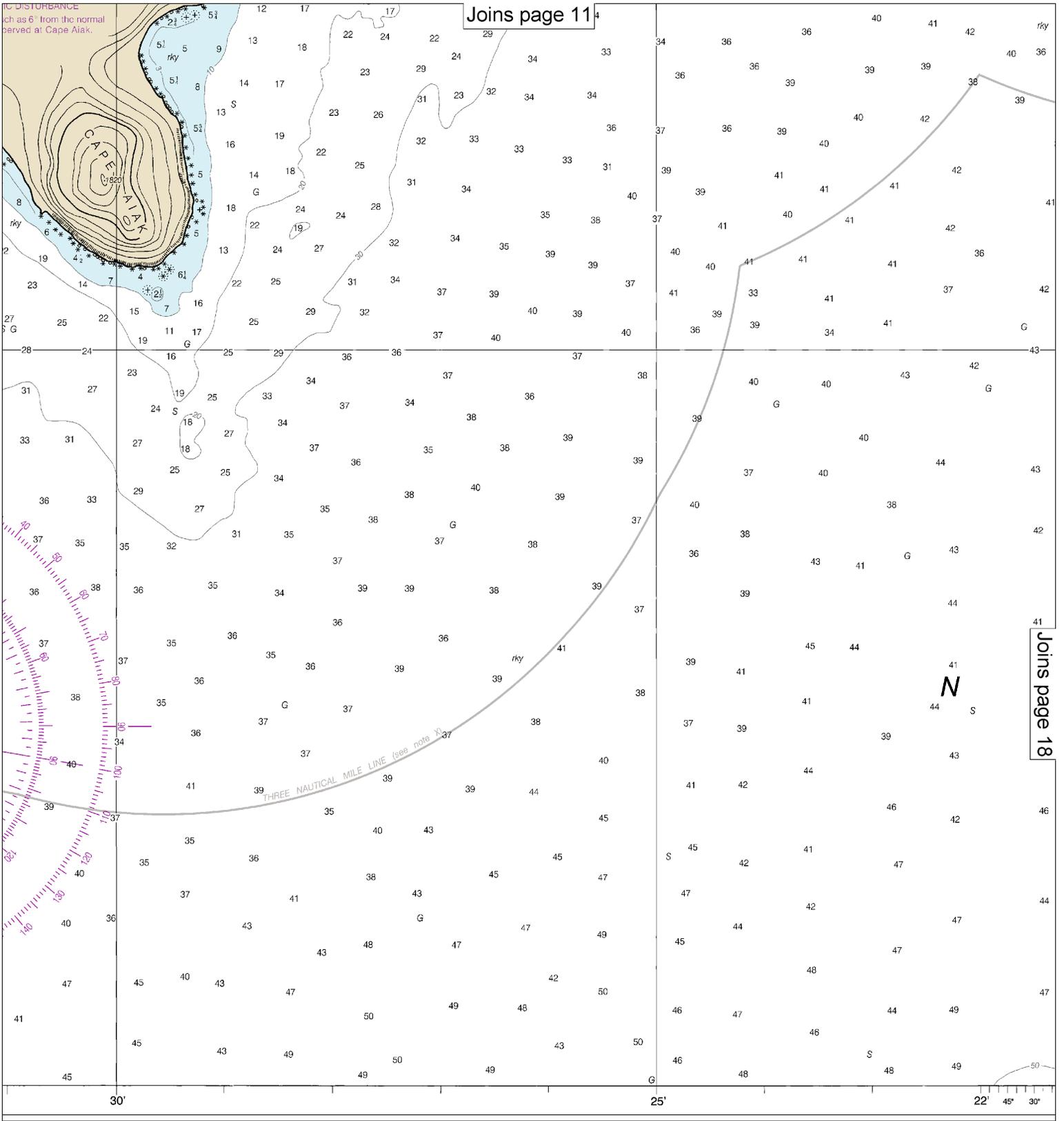
Note: Chart grid lines are aligned with true north.

Printed at reduced scale.

SCALE 1:40,000
 Nautical Miles

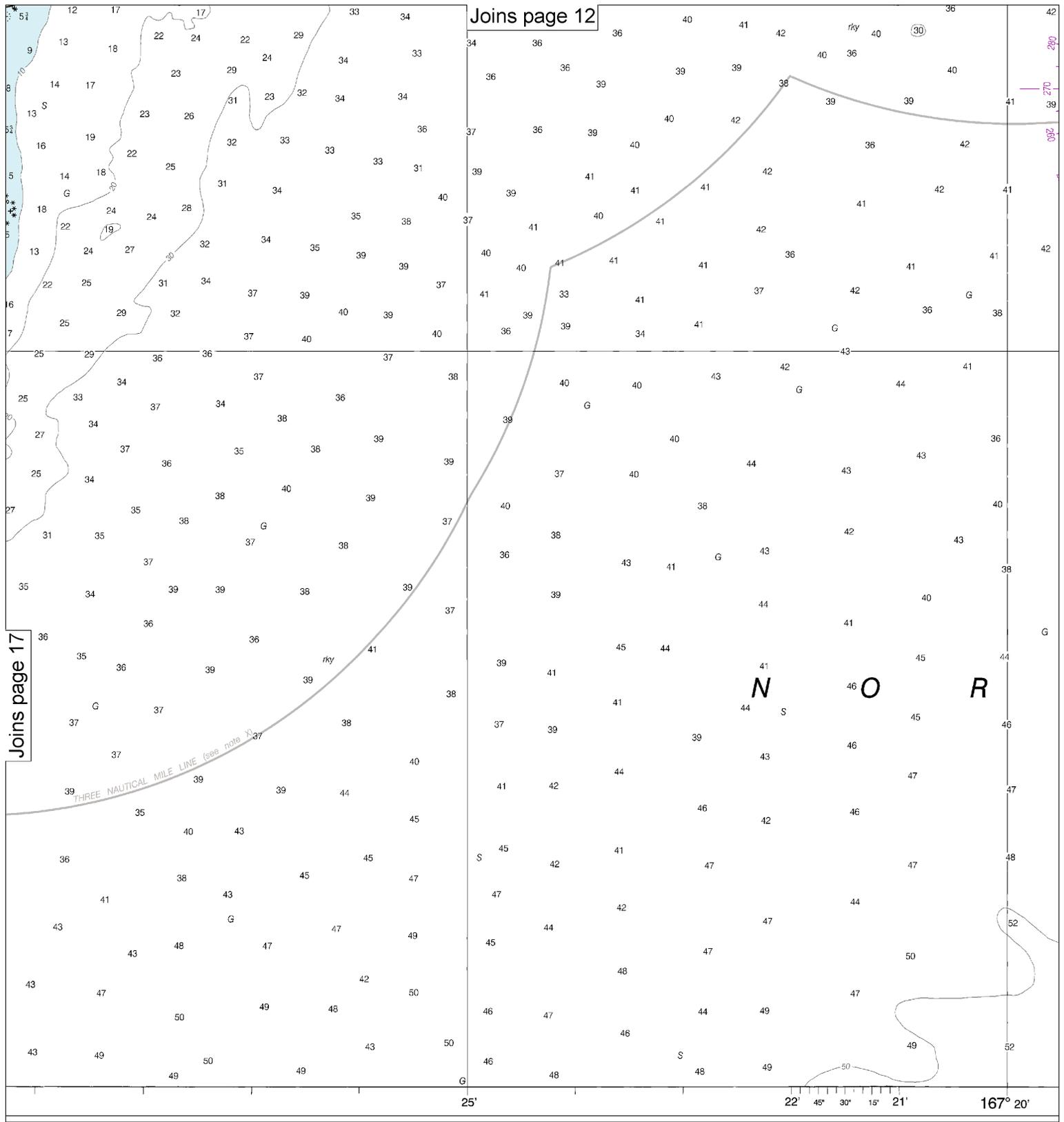
See Note on page 5.





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SOUNDINGS IN FATHOMS



Joins page 12

Joins page 17

NDINGS IN FATHOMS

Published at
U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL CENTER FOR ENVIRONMENTAL OCEANOGRAPHY
COAST AND GEODETIC SURVEY

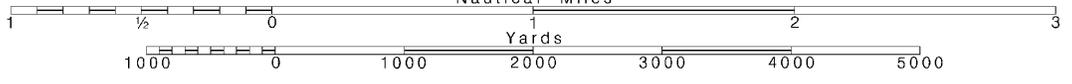
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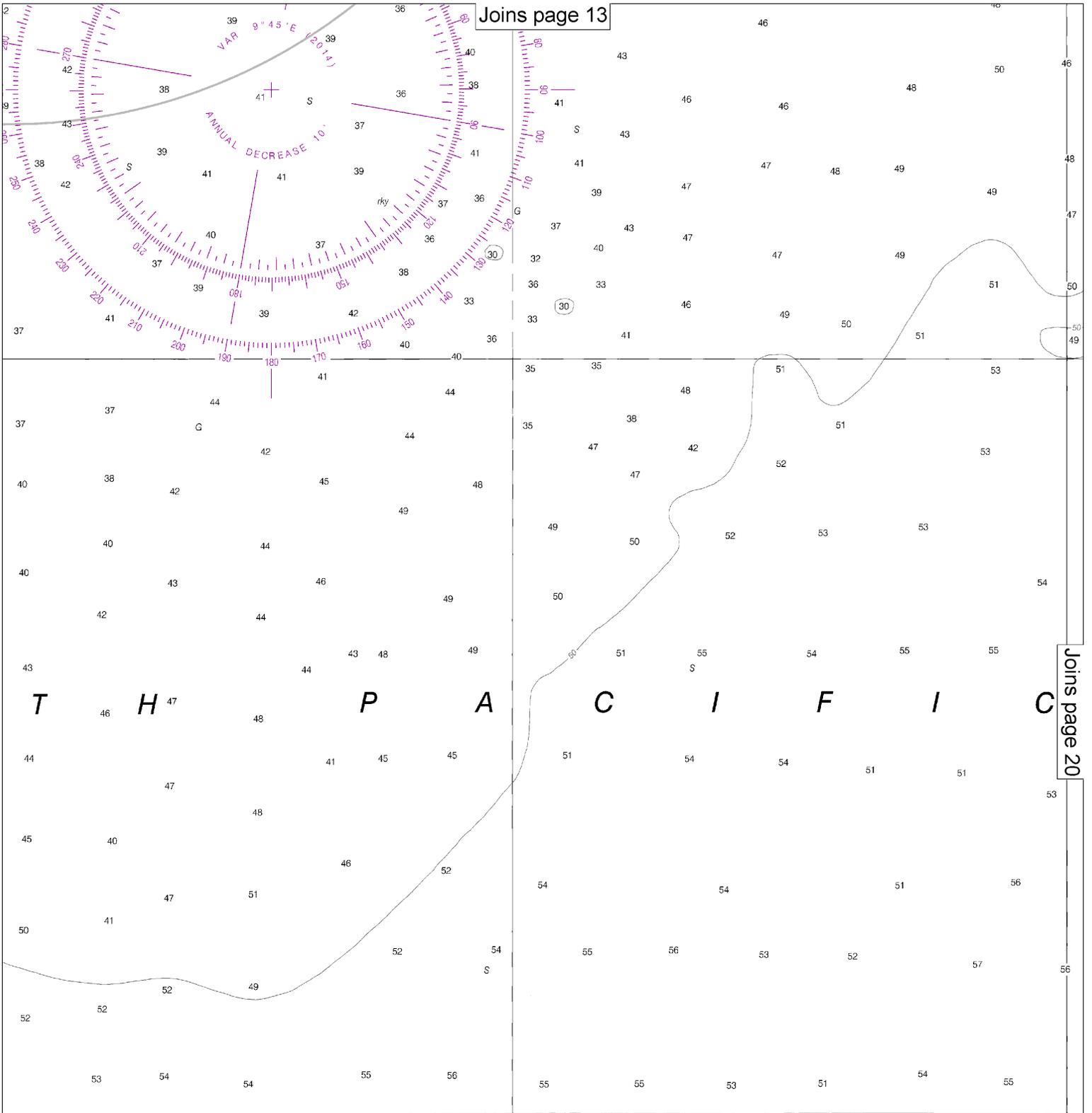
Note: Chart grid lines are aligned with true north.

Printed at reduced scale.

SCALE 1:40,000
Nautical Miles

See Note on page 5.



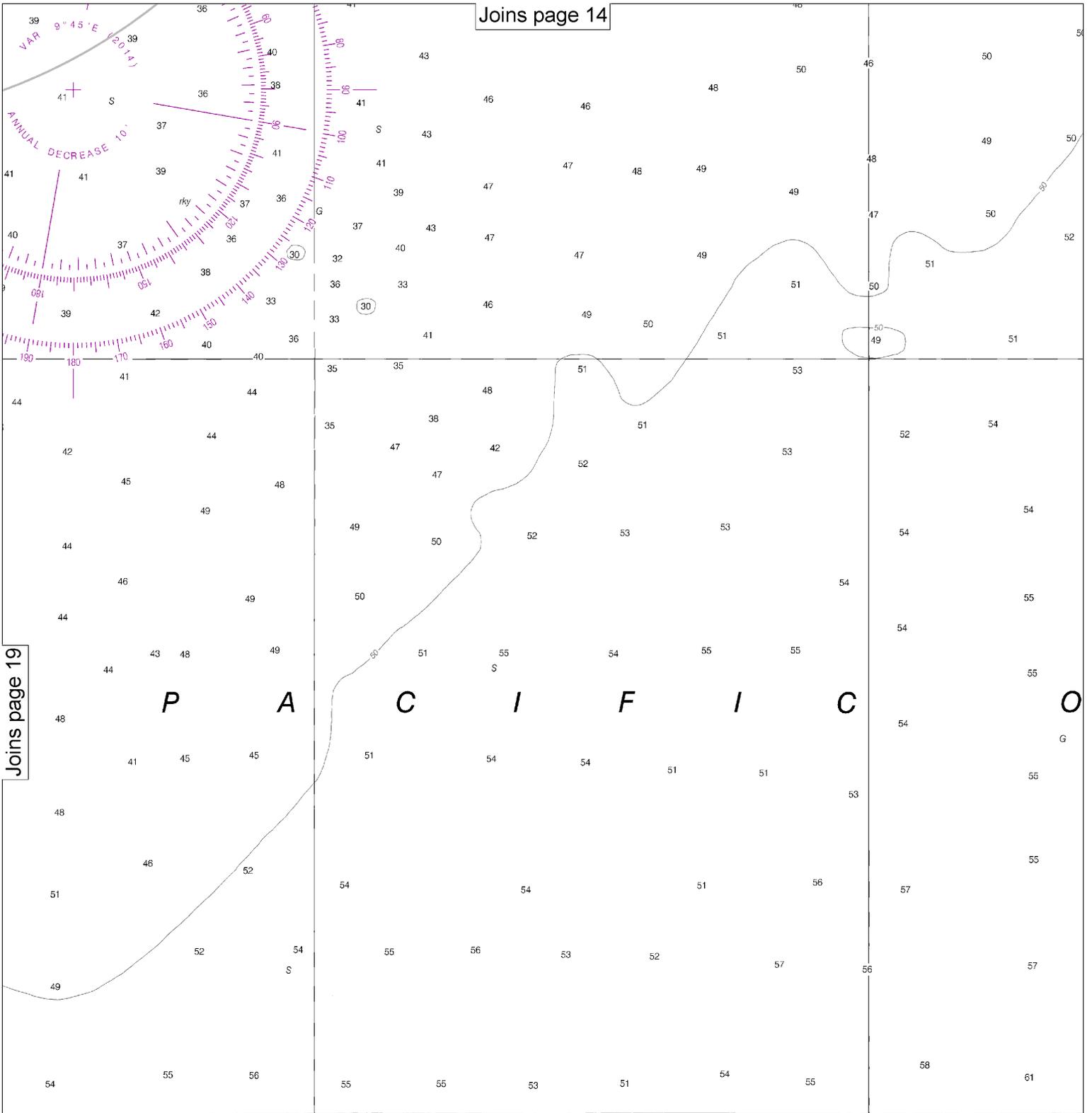


CONTINUED ON CHART 16500

15'

10'

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



Joins page 19

JED ON CHART 16500

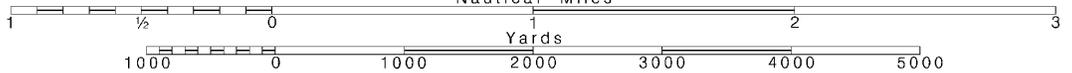
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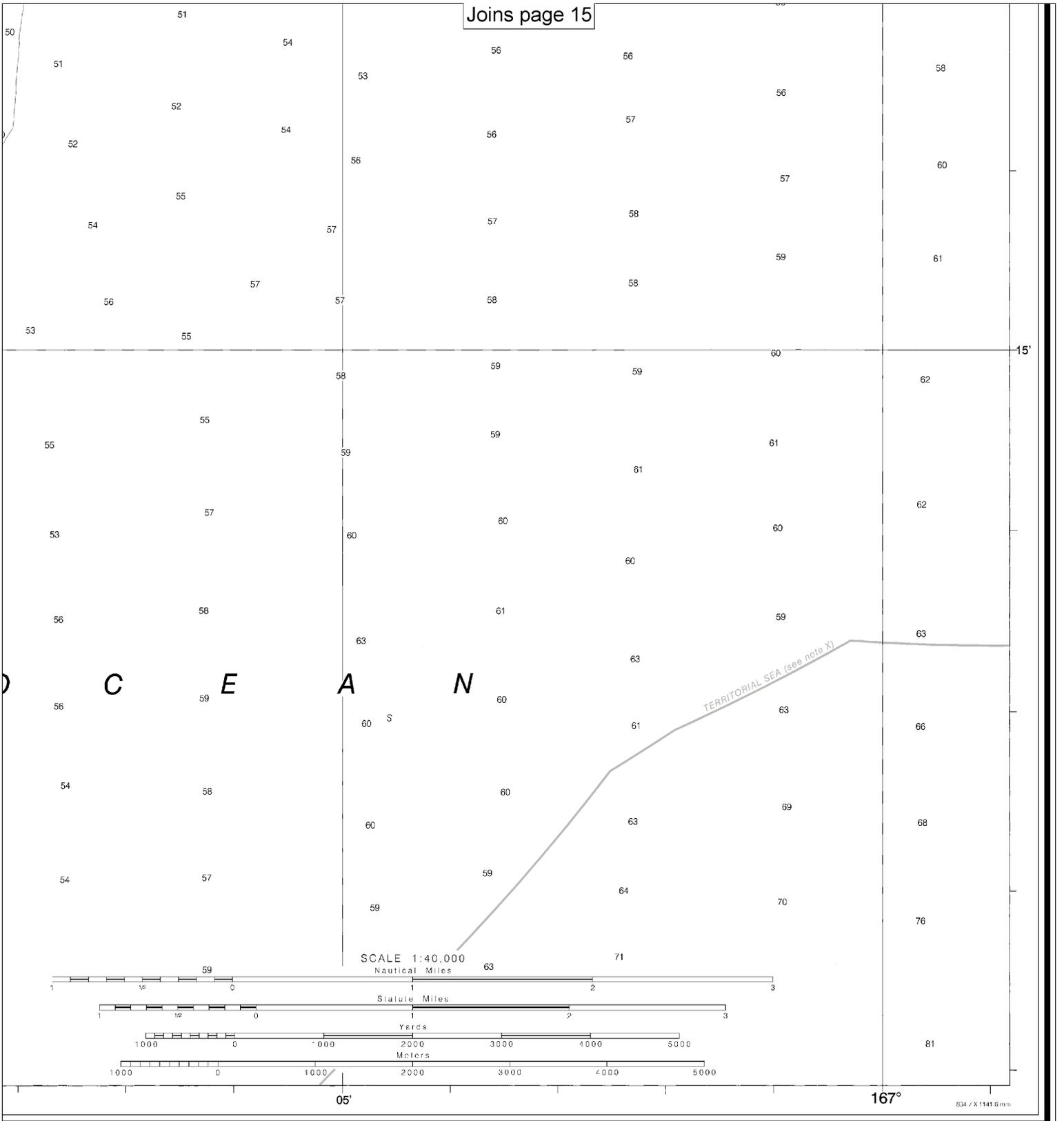
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SCALE 1:40,000
Nautical Miles

See Note on page 5.

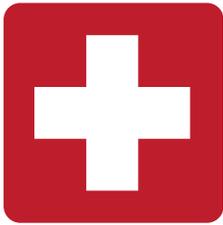




FATHOMS	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
FEET	6	12	18	24	30	36	42	48	54	60	66	72	78	84	90	96	102
METERS	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17

Kuliliak Bay to Surveyor Bay
SOUNDINGS IN FATHOMS - SCALE 1:40,000

16514



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
- 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.