

BookletChart™

Constantine Harbor

NOAA Chart 16446

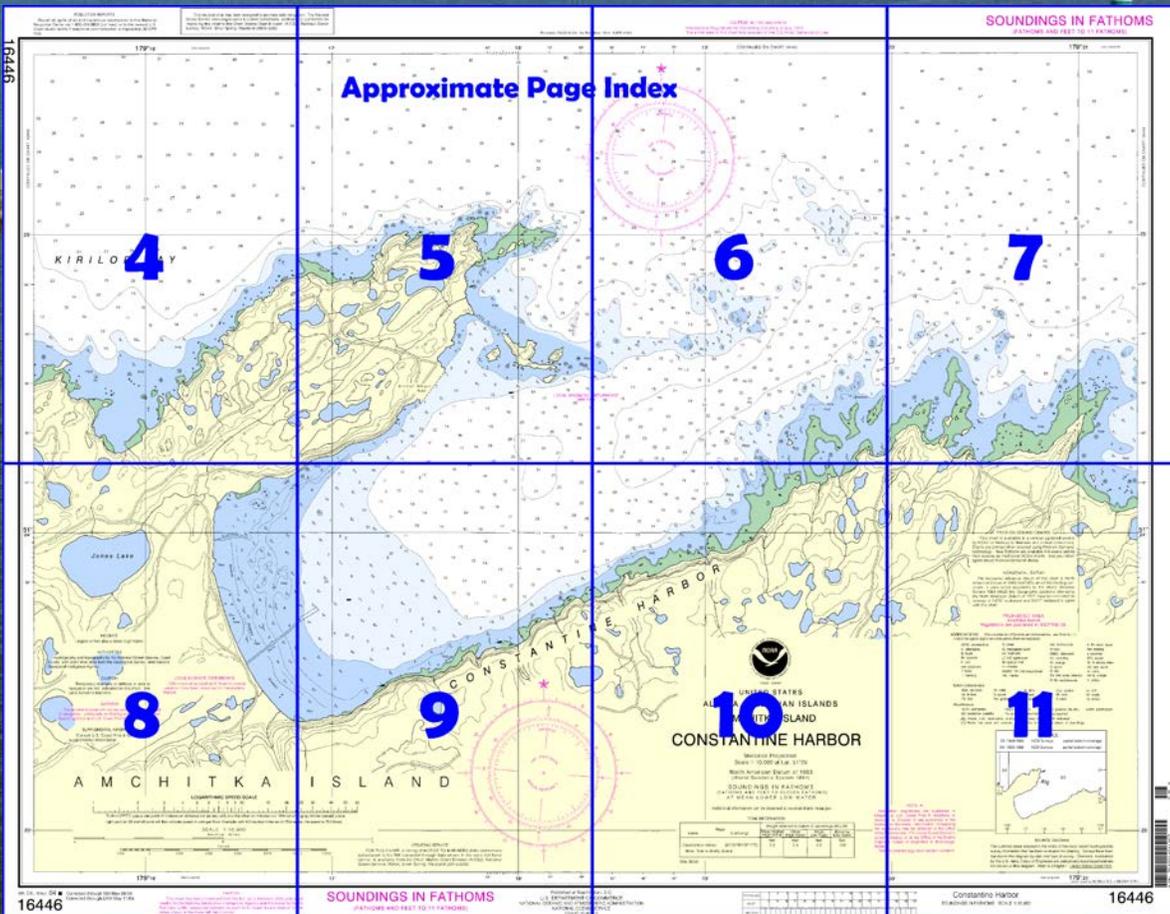


A reduced-scale NOAA nautical chart for small boaters

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.

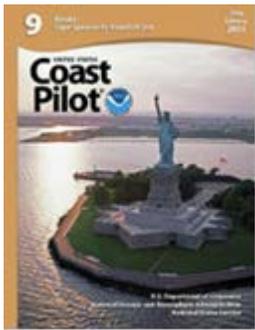
Whenever possible, use the official, full scale NOAA nautical chart for navigation. Nautical chart sales agents are listed on the Internet at <http://www.NauticalCharts.NOAA.gov>.

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=16446>.



(Selected Excerpts from Coast Pilot)

Constantine Harbor, on the N side of Amchitka Island 6 miles W of East Cape, provides a fair anchorage. Because there are no prominent features on the island, caution is necessary to avoid mistaking other indentations for Constantine Harbor. The S side of Constantine Harbor entrance is foul for 0.5 mile offshore. On the N side a reef, covered less than 2 fathoms in places and marked by heavy kelp, extends almost 1.5 miles E of **Kirilof Point**. The head of the

harbor is a sand beach; other shores are rocky bluffs.

Currents.—Currents in the entrance to Constantine Harbor are strong and set across the narrow entrance channel. N to NE gales may force

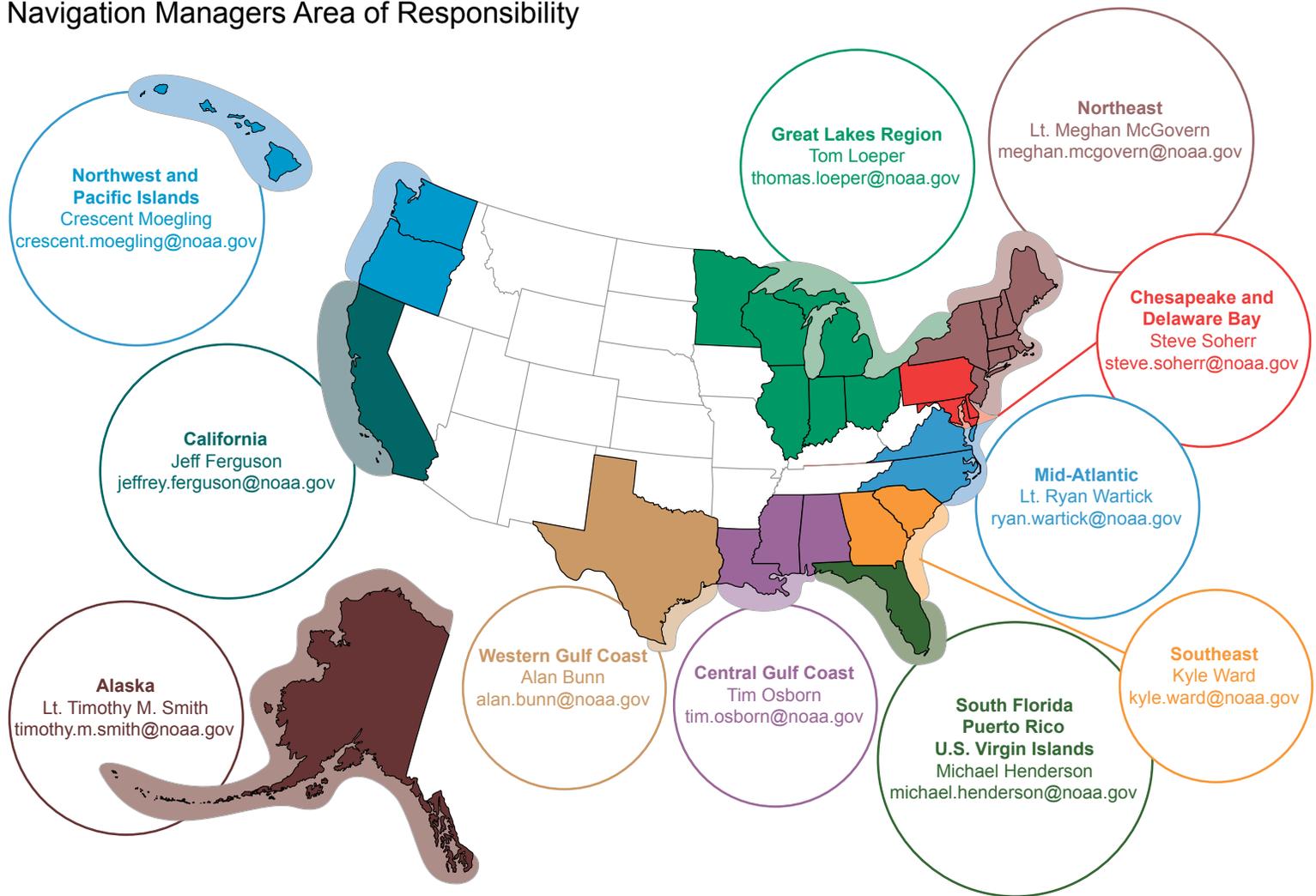
vessels anchored in the harbor out to sea. The harbor is reported free of williwaws.

Local magnetic disturbance.—Differences of as much as 5° from the normal variation have been observed in Constantine Harbor. The 0.2-mile-wide channel between the reefs at the entrance can be made on course **235°**; depths are 20 to 30 fathoms. Once inside anchorage is available in 6 to 20 fathoms, fair holding ground in sand and shell bottom.

**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.

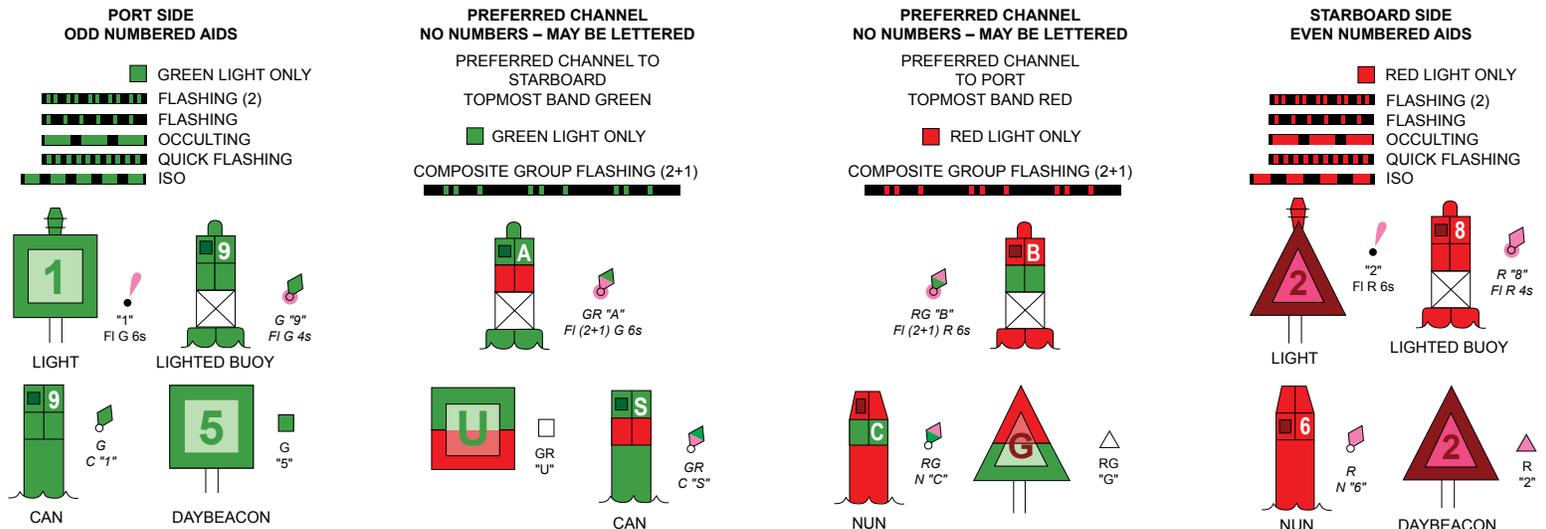
They help identify navigational challenges facing professional and recreational mariners, and provide NOAA resources and information for safe navigation. For additional information, please visit nauticalcharts.noaa.gov/service/navmanagers

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



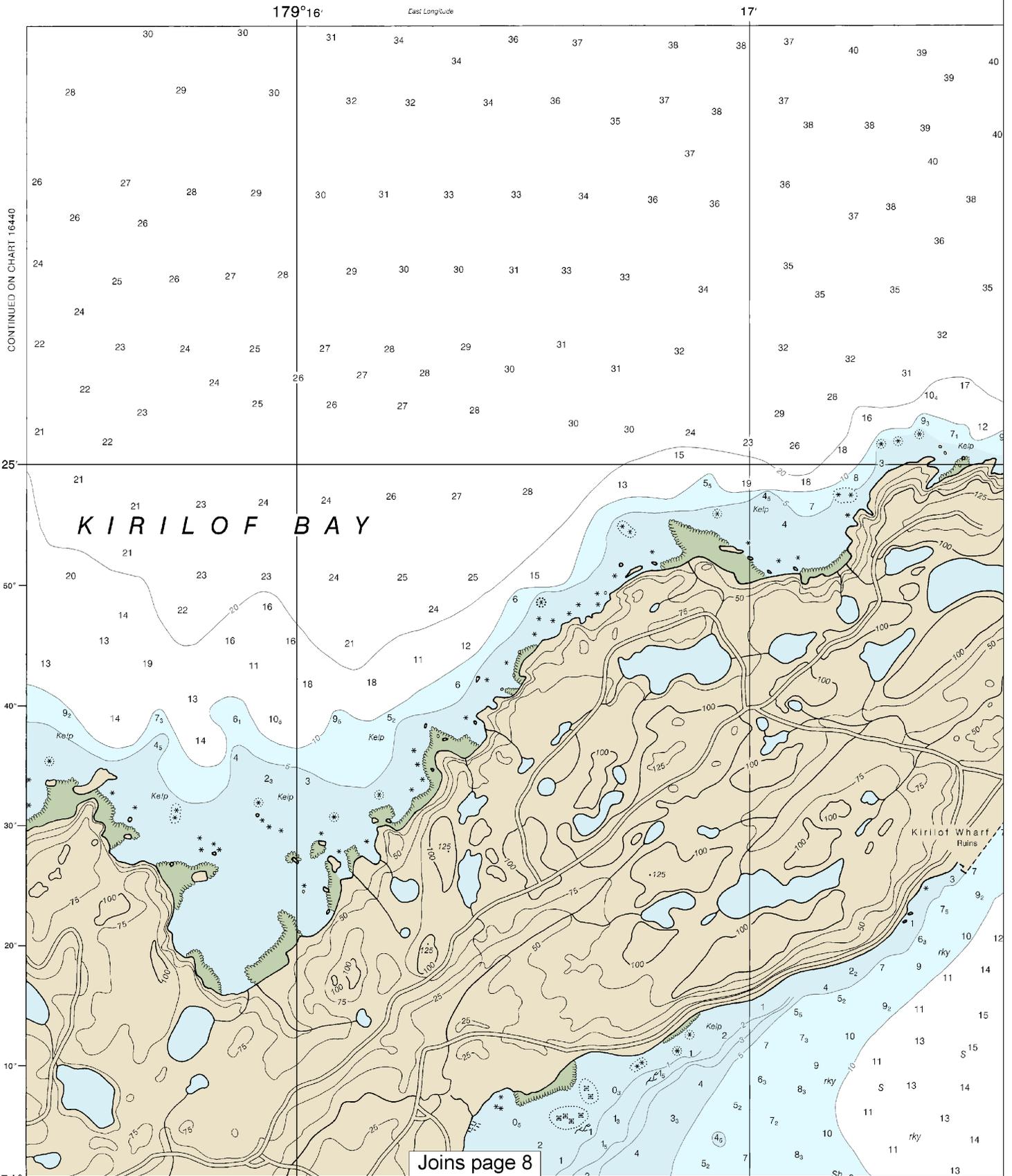
For more information on aids to navigation, including those on Western Rivers, please consult the latest USCG Light List for your area. These volumes are available online at <http://www.navcen.uscg.gov>

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 163).

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

16446

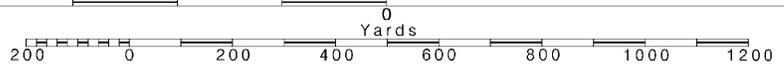


4

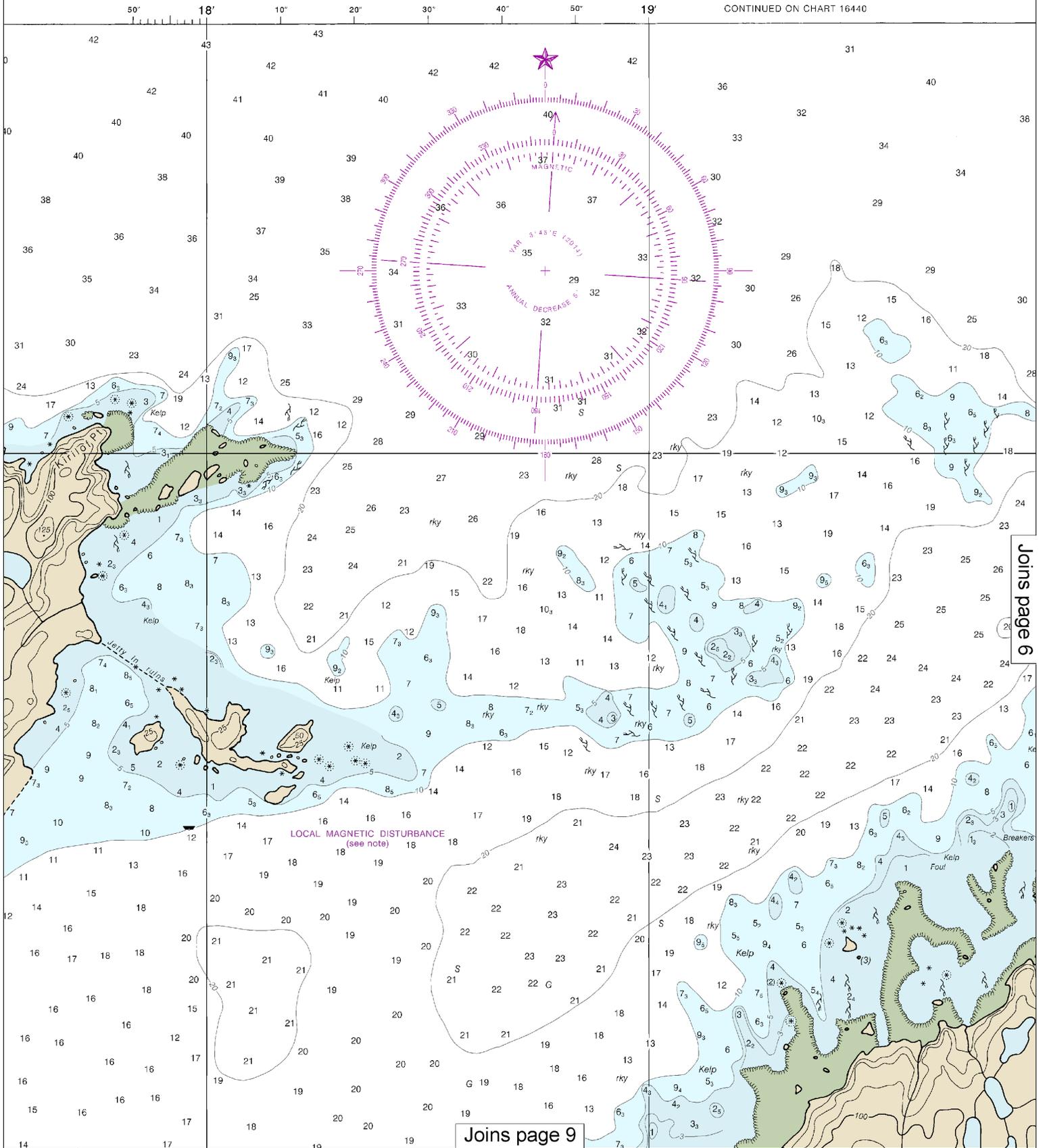
Note: Chart grid lines are aligned with true north.

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

See Note on page 5.



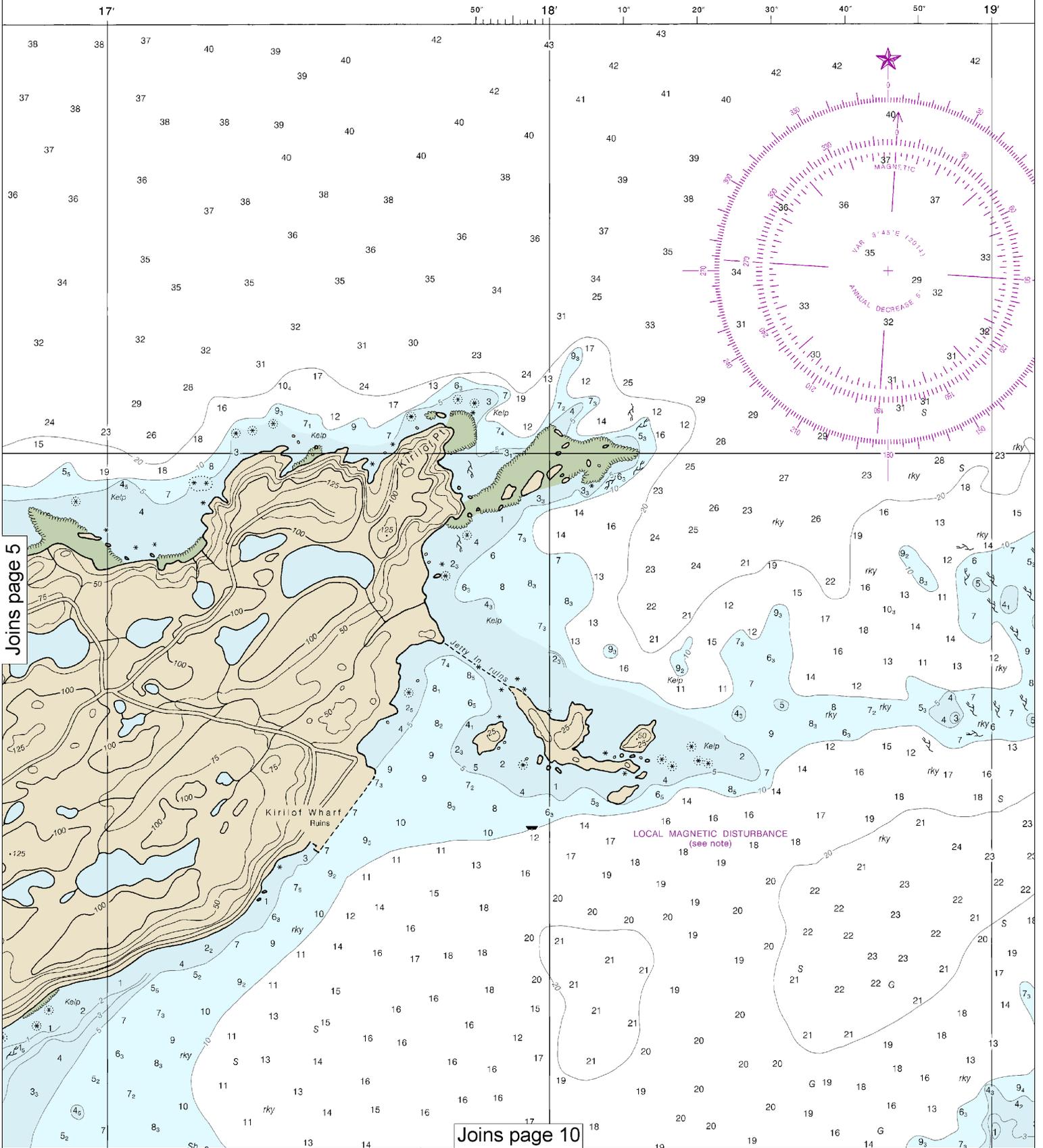
CONTINUED ON CHART 16440



Joins page 6

Joins page 9

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.



Joins page 5

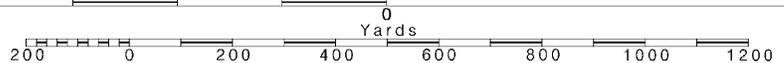
Joins page 10



Note: Chart grid lines are aligned with true north.

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

See Note on page 5.



SOUNDINGS IN FATHOMS

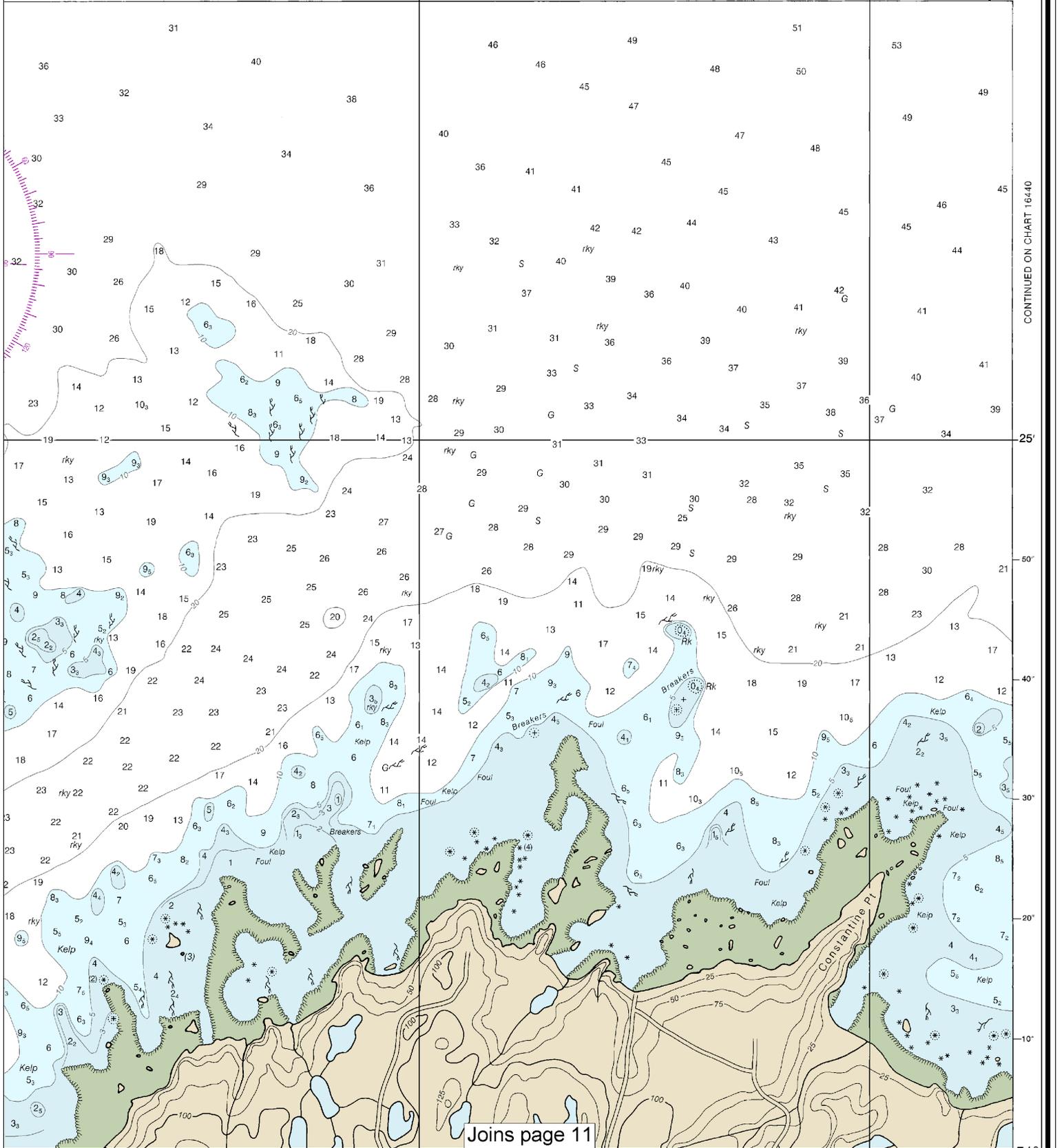
(FATHOMS AND FEET TO 11 FATHOMS)

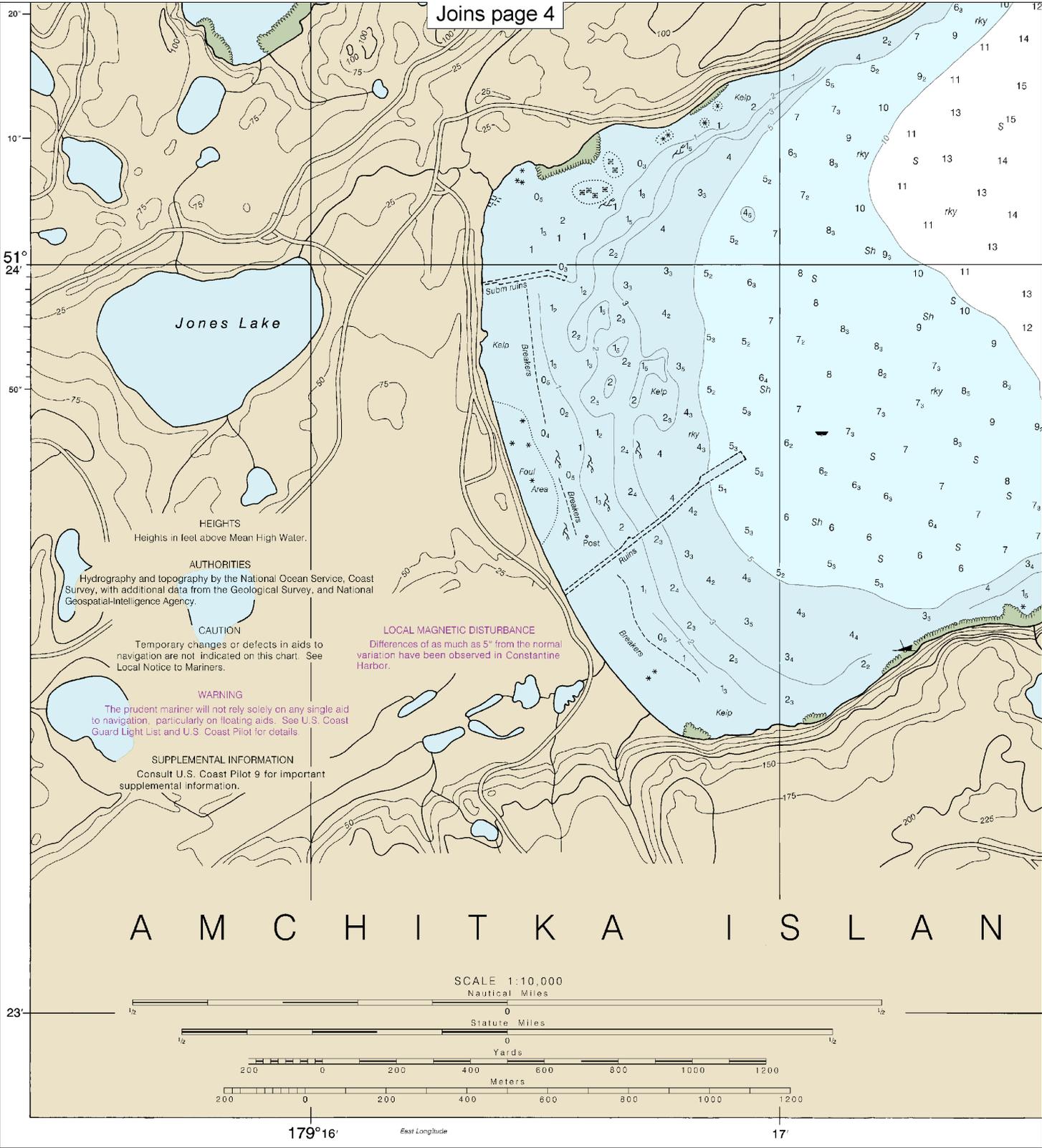
CONTINUED ON CHART 16440

20°

179° 21'

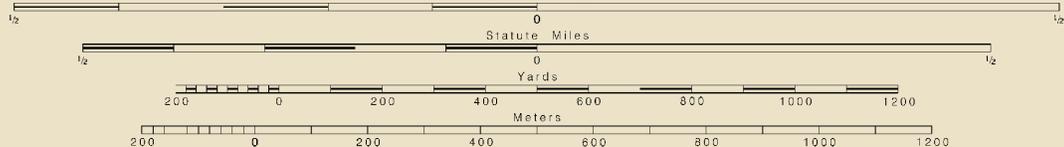
East Longitude





A M C H I T K A I S L A N

SCALE 1:10,000
Nautical Miles



179°16' East Longitude 17

16446

9th Ed., Jun. 2014. Last Correction: 12/11/2015. Cleared through:
LNM: 4816 (11/29/2016), NM: 4916 (12/3/2016), CHS: 1116 (11/25/2016)

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

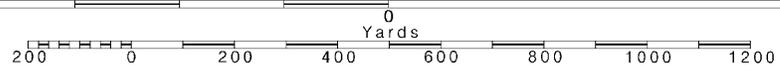
SOUNDINGS IN F (FATHOMS AND FEET TO 11



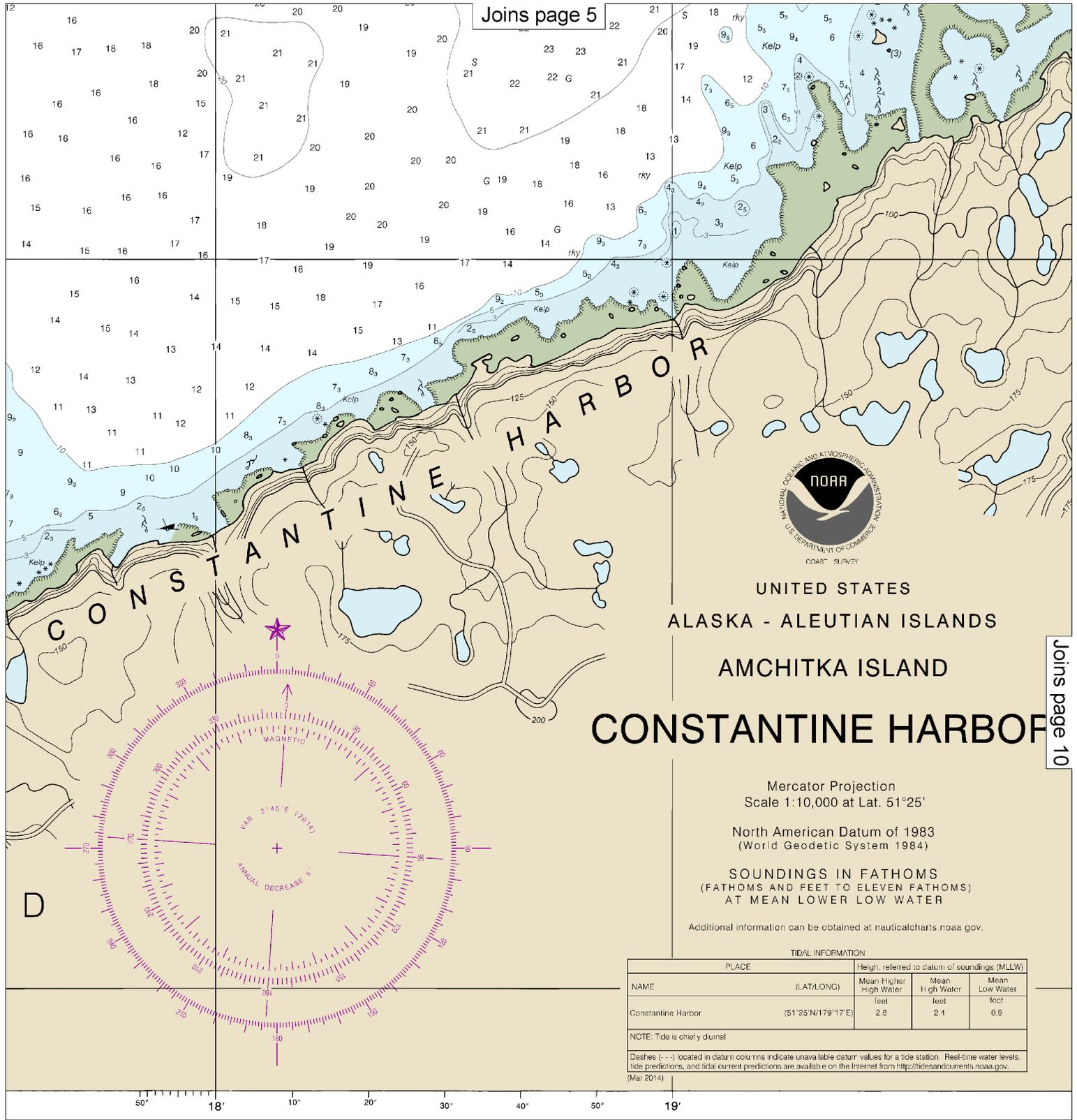
Note: Chart grid lines are aligned with true north.

Printed at reduced scale. SCALE 1:10,000

See Note on page 5.



Joins page 5



UNITED STATES
ALASKA - ALEUTIAN ISLANDS
AMCHITKA ISLAND

CONSTANTINE HARBOR

Mercator Projection
Scale 1:10,000 at Lat. 51°25'

North American Datum of 1983
(World Geodetic System 1984)

SOUNDINGS IN FATHOMS
(FATHOMS AND FEET TO ELEVEN FATHOMS)
AT MEAN LOWER LOW WATER

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

TIDAL INFORMATION

PLACE	NAME	Height, referred to datum of soundings (MLLW)		
		Mean Higher High Water feet	Mean High Water feet	Mean Low Water feet
Constantine Harbor	(51°25'N/179°17'E)	2.8	2.1	0.9

NOTE: Tide is chiefly diurnal

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>. (Mar 2014)

Joins page 10

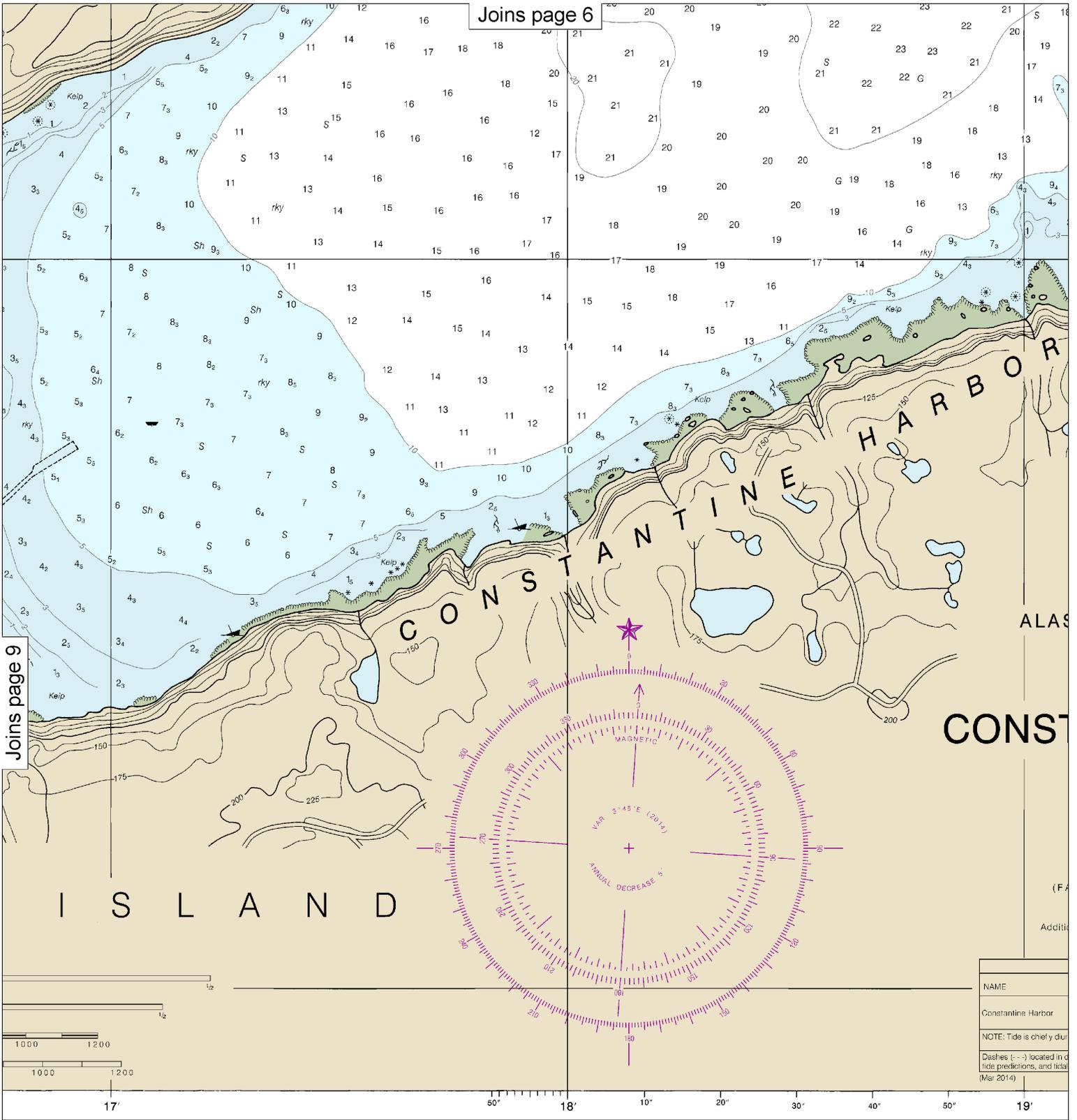
FATHOMS
(FATHOMS)

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

FATHOMS	1	2	3	4	5	6	7	8	9	10	11
FEET	6	12	18	24	30	36	42	48	54	60	66
METERS	1	2	3	4	5	6	7	8	9	10	11

Joins page 6

Joins page 9



SOUNDINGS IN FATHOMS

(FATHOMS AND FEET TO 11 FATHOMS)

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

NAME	Constantine Harbor
NOTE: Tide is chiefly diurnal	
Dashes (---) located in depth predictions, and tidal	
(Mar 2014)	

Published notice to mariners is available at

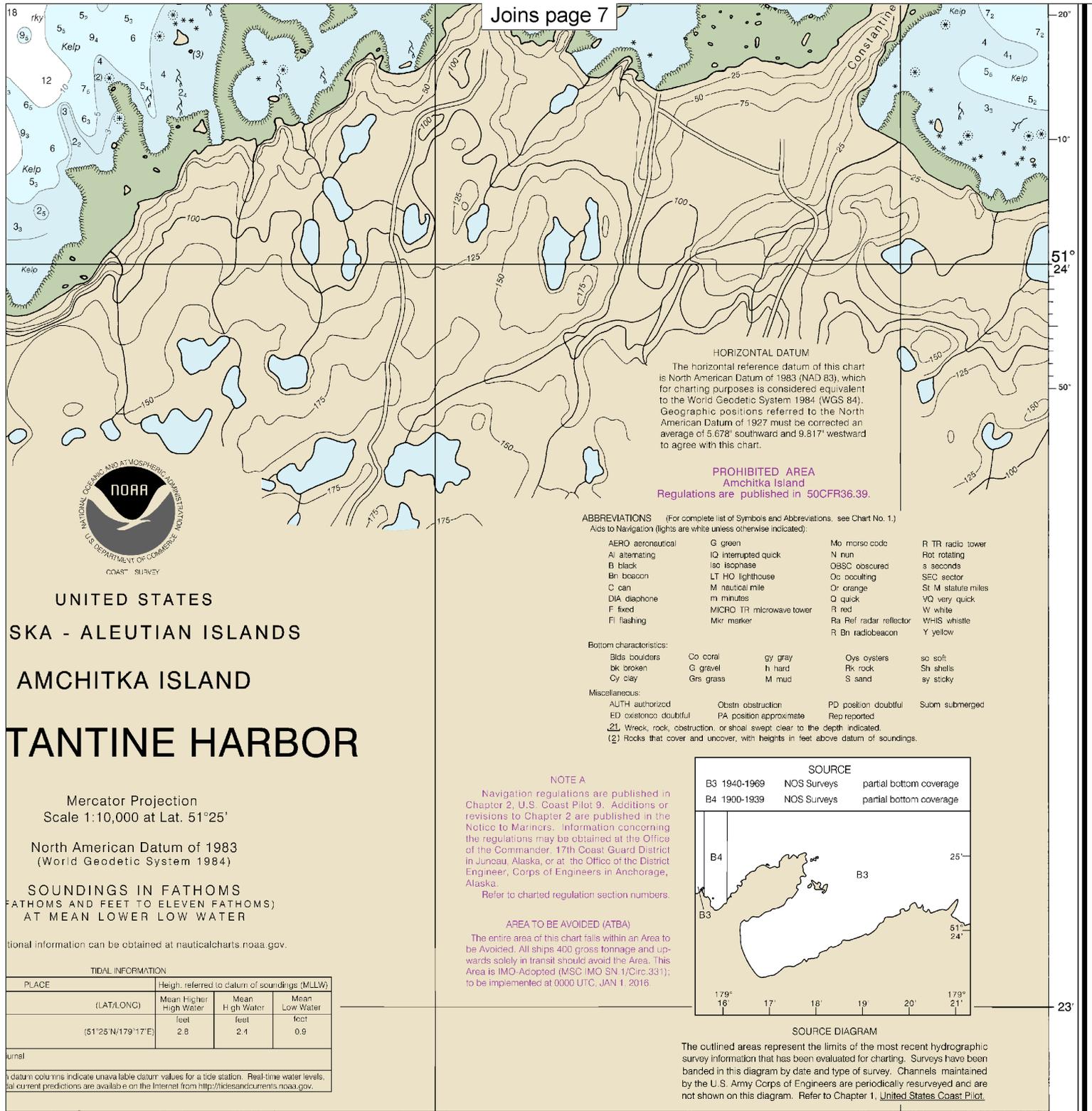


Note: Chart grid lines are aligned with true north.

Printed at reduced scale. SCALE 1:10,000

See Note on page 5.





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 5.678' southward and 9.517' westward to agree with this chart.

PROHIBITED AREA
 Amchitka Island
 Regulations are published in 50CFR36.39.

ABBREVIATIONS (For complete list of Symbols and Abbreviations, see Chart No. 1.)
 Aids to Navigation (lights are white unless otherwise indicated):

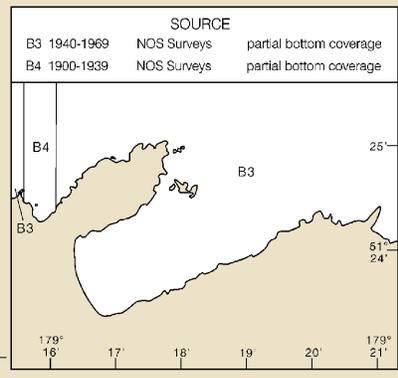
- AERO aeronautical
- Al alternating
- B black
- Bn beacon
- C can
- DIA diaphone
- F fixed
- Fl flashing
- G green
- IQ interrupted quick
- iso isophase
- LT HO lighthouse
- M nautical mile
- m minutes
- MICRO TR microwave tower
- Mkr marker
- Mo Morse code
- N nun
- OBSC obscured
- Oc occulting
- Or orange
- Q quick
- R red
- Ra Ref radar reflector
- R Bn radiobeacon
- R TR radio tower
- Rot rotating
- s seconds
- SEC sector
- St M stature miles
- VQ very quick
- W white
- WHIS whistle
- Y yellow

- Bottom characteristics:**
- Bds boulders
 - bk broken
 - Cy clay
 - Co coral
 - G gravel
 - GrS grass
 - gy gray
 - h hard
 - M mud
 - Oys oysters
 - Rk rock
 - S sand
 - so soft
 - Sh shells
 - sy sticky

- Miscellaneous:**
- AUTH authorized
 - ED obsolete doubtful
 - 2L Wreck, rock, obstruction, or shoal swept clear to the depth indicated.
 - (2) Rocks that cover and uncover, with heights in feet above datum of soundings.
 - Obstrn obstruction
 - PA position approximate
 - PD position doubtful
 - Rep reported
 - Subm submerged

NOTE A
 Navigation regulations are published in Chapter 2, U.S. Coast Pilot 9. 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, 17th Coast Guard District in Juneau, Alaska, or at the Office of the District Engineer, Corps of Engineers in Anchorage, Alaska.
 Refer to charted regulation section numbers.

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.



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.

UNITED STATES
SKA - ALEUTIAN ISLANDS
AMCHITKA ISLAND
TANTINE HARBOR

Mercator Projection
 Scale 1:10,000 at Lat. 51°25'

North American Datum of 1983
 (World Geodetic System 1984)

SOUNDINGS IN FATHOMS
 FATHOMS AND FEET TO ELEVEN FATHOMS
 AT MEAN LOWER LOW WATER

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

TIDAL INFORMATION			
PLACE	Height, referred to datum of soundings (MLLW)		
(LAT/LONG)	Mean Higher High Water	Mean High Water	Mean Low Water
	feet	feet	feet
(51°25'N/179°17'E)	2.8	2.1	0.9

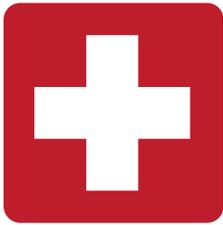
Journal

Latitude column indicates unavale datum values for a tide station. Real-time water levels, tidal current predictions are available on the Internet from <http://tidesandcurrents.noaa.gov>.

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

Constantine Harbor
 SOUNDINGS IN FATHOMS - SCALE 1:10,000

16446



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.