

BookletChart™



Unimak and Akutan Passes and Approaches

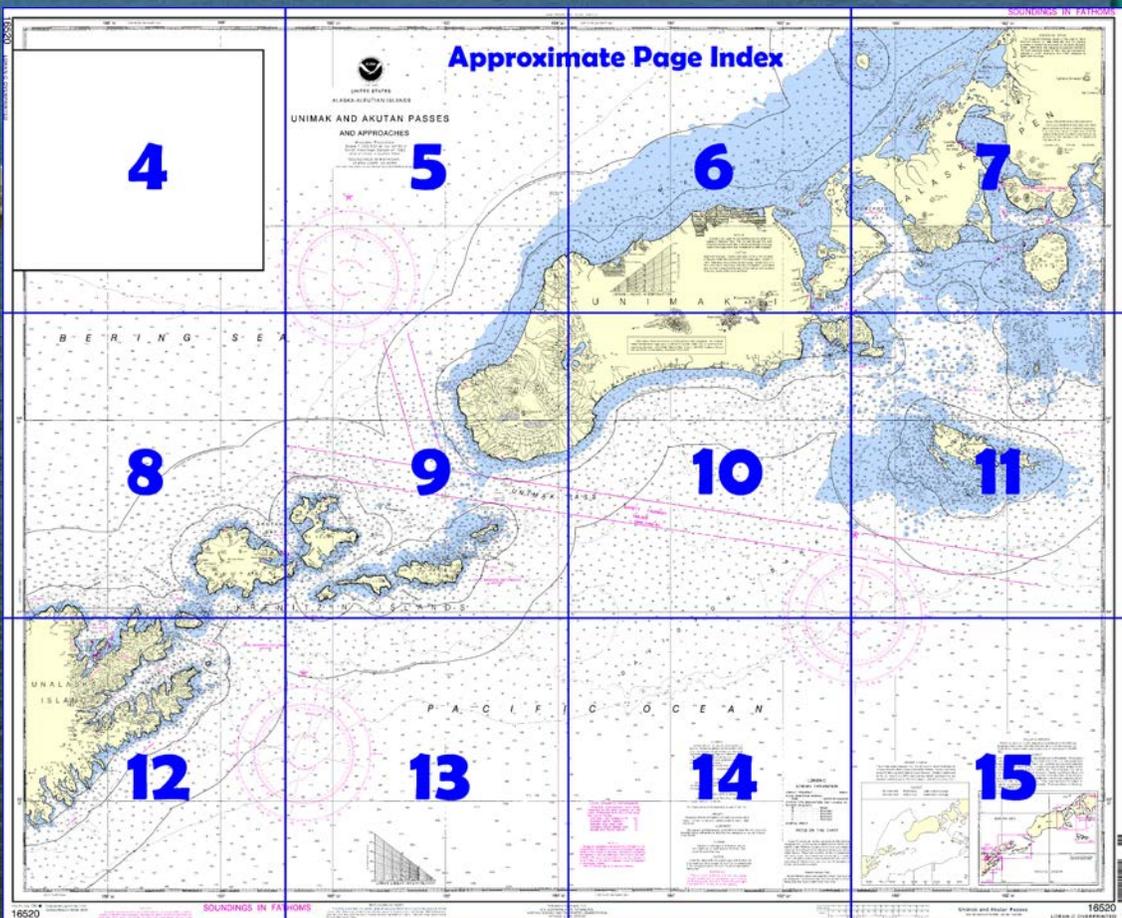
NOAA Chart 16520

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=16520>.



(Selected Excerpts from Coast Pilot)

Dangers along the N side of Sanak Islands are within 0.5 mile of the shore, except **Crowley Rock**, 1.5 miles offshore 348° from Sanak Peak. This rock has several small pinnacles with a least depth of ½ fathom over them. The rock, not always marked by kelp, only breaks in a disturbed sea and occasionally shows a prominent slick. Foul ground of numerous reefs, islands, islets, shoals, and covered and uncovered rocks extends almost 6 miles S and over 12

miles W of Sanak Islands; heavy breakers extend a considerable distance offshore. **Aleks Rock**, 16.7 miles 241° from Sanak Peak, is covered 1½

fathoms and is the farthest outlying known rock SW of Sanak Islands. A 7½-fathom pinnacle is 4 miles N of the rock. The harbors on the S side of the Sanak Islands, except possibly Peterson Bay, should not be approached without local knowledge. **Caton Island**, at the E end of the Sanak group, is rolling and grass covered. Most of the beaches are composed of rocky ledges, or boulders and gravel. Steep and prominent bluffs are on the NW point. The low E side and the S side of the island are fringed with rocky ledges up to 1 mile offshore.

Whale Bay, on the NE side of Caton Island, is extremely shoal. Temporary anchorage in S winds can be had W of Caton Island and S of Lida Island. Approaching the anchorage from E, stand in near the visible rocks off the E end of Lida Island, taking care to avoid the partially covered reef, nearly 0.5 mile E of Lida Island, that extends N from Caton Island. Anchor about 0.4 mile from Caton Island, and 0.3 to 0.5 mile S of Lida Island, in 6 to 7 fathoms, sandy bottom. Care should be taken not to approach the S side of the anchorage.

If the anchorage S of Lida Island is approached from W, steer for the SW side of Caton Island on 144°, passing about 0.5 mile S of Lida Island, and leaving a rock that uncovers, 0.5 mile N from **Wanda Island**, about 0.4 mile on the starboard hand, and anchor as directed above. The W end of Lida Island should not be approached closer than 0.5 mile.

Caton Harbor, between Sanak Island on the E and Caton Island on the W, is large and affords anchorage in 2 to 3 fathoms, sandy bottom; it is protected on the S by Elma Island and on the N by the islands and reefs between Caton Island and Sanak Island. The harbor is protected from all swells, and schooners of considerable size have wintered here. These waters provide the best all-weather anchorage for small vessels in the Sanak Islands. Water in small quantities may be obtained.

Princess Rock, off the W end of the islet in the center of Caton Harbor, is the most prominent feature in the vicinity. It is high and grassy on top; extensive reefs surround the rock.

The best entrance to Caton Harbor is from the N through a narrow channel close to the W end of Caton Island. Proceed as directed for entering the anchorage S of Lida Island from W, and when well past the rock that uncovers, 0.5 mile N of Wanda Island, bring the S side of the rock that uncovers in range with Northeast Point astern, and stand in, keeping the range astern, course 125°, until close to Caton Island. Then keep the bare rocks and kelp projecting from Caton Island close aboard on the port hand, but do not approach the kelp on the starboard hand; the least depth in the narrowest part of the passage is 3½ fathoms, shoaling inside to 3 fathoms. When past the rocks on the port hand, steer 193° for about 0.5 mile, and anchor in about 3 fathoms with Princess Rock in line with Sanak Mountain, bearing 294°. This anchorage is about 0.5 mile from Caton Island, and the same distance from the nearest reef on the W side. Anchorage, with probably better shelter from NE gales, can be made off the sand beach on Caton Island, just inside the narrow entrance.

To enter **Caton Harbor** from the S through Devils Pass, W from Elma Island, or through Southeast Pass, E of Elma Island, requires local knowledge to avoid the reefs and breakers. These passes should not be attempted by a stranger. Surveys indicate a controlling depth of 1¼ fathoms in the approach to Devils Pass with deeper water through the narrow part of the pass. Tide rips in Devils Pass are at times dangerous to small craft.

**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

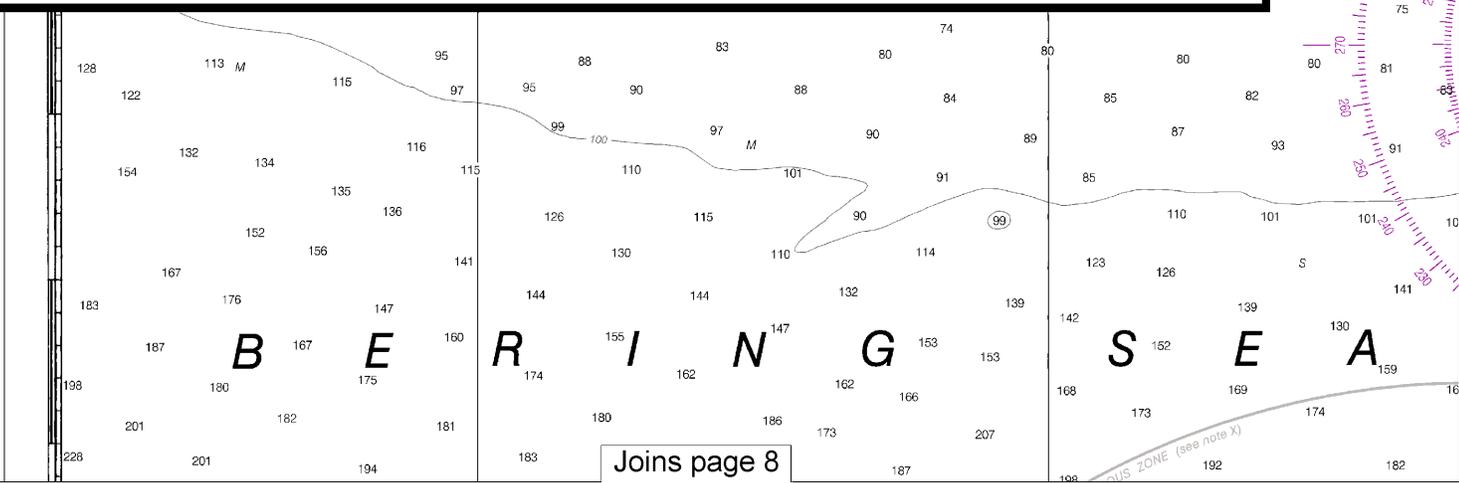
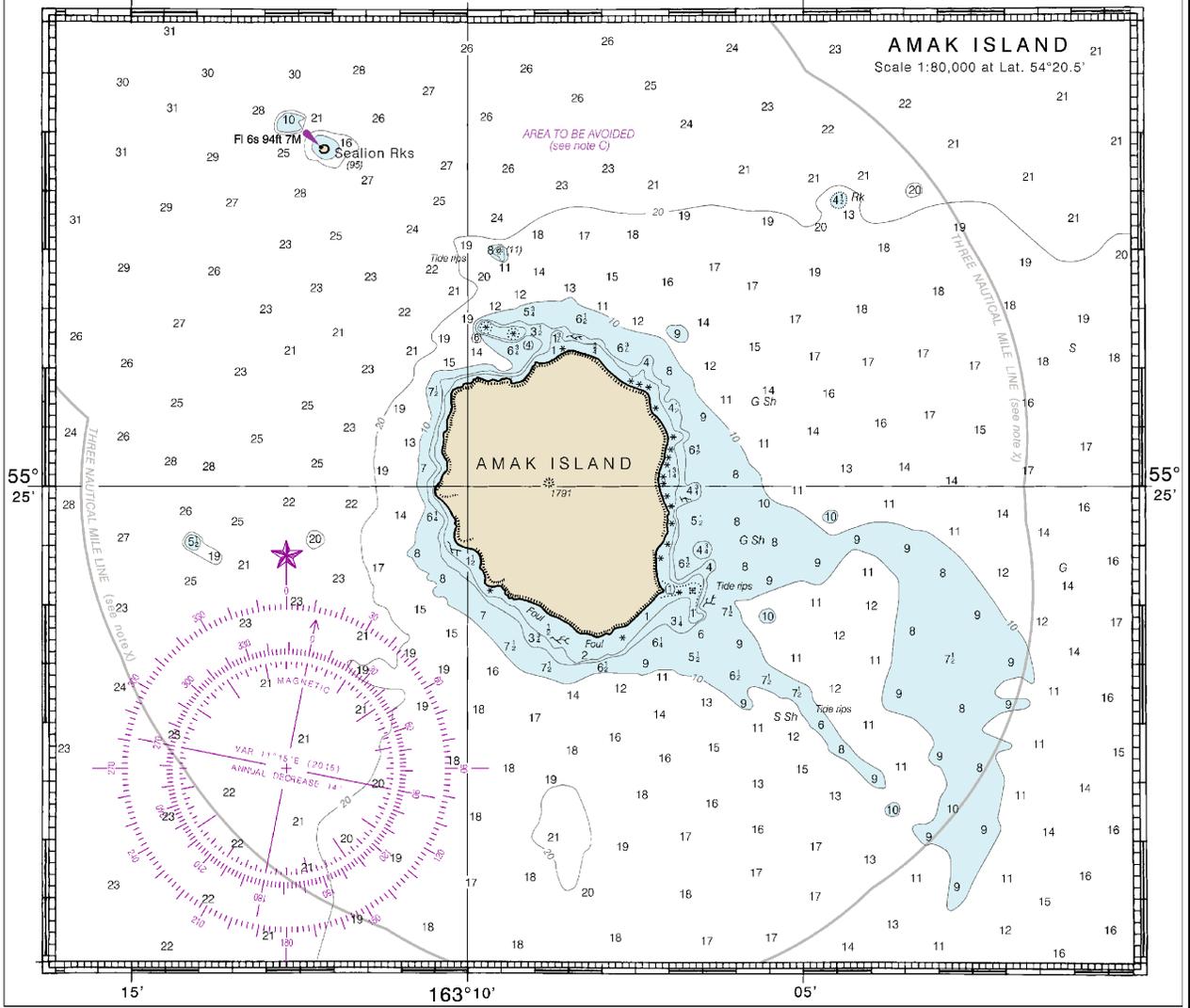
on navigable waters except Western Rivers



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>

AMAK ISLAND

Scale 1:80,000 at Lat. 54°20.5'



4

Note: Chart grid lines are aligned with true north.

165° 30'

165°

164° 30'

CONTINUED ON 6



THE NATION'S CHARTMAKER SINCE 1807

UNITED STATES

ALASKA-ALEUTIAN ISLANDS

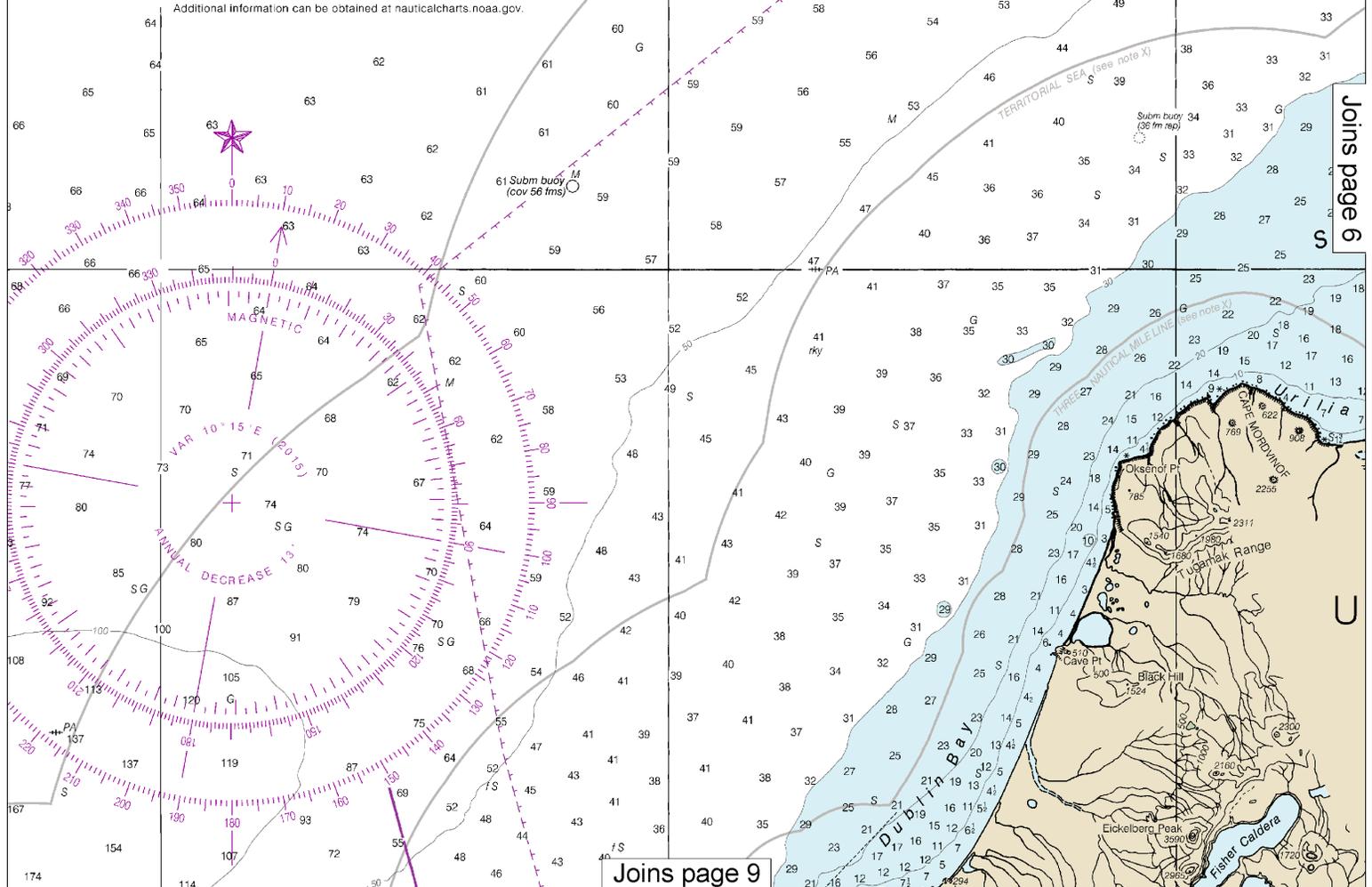
NIMAK AND AKUTAN PASSES AND APPROACHES

AND APPROACHES

Mercator Projection
Scale 1:300,000 at Lat 54°20.5'
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.



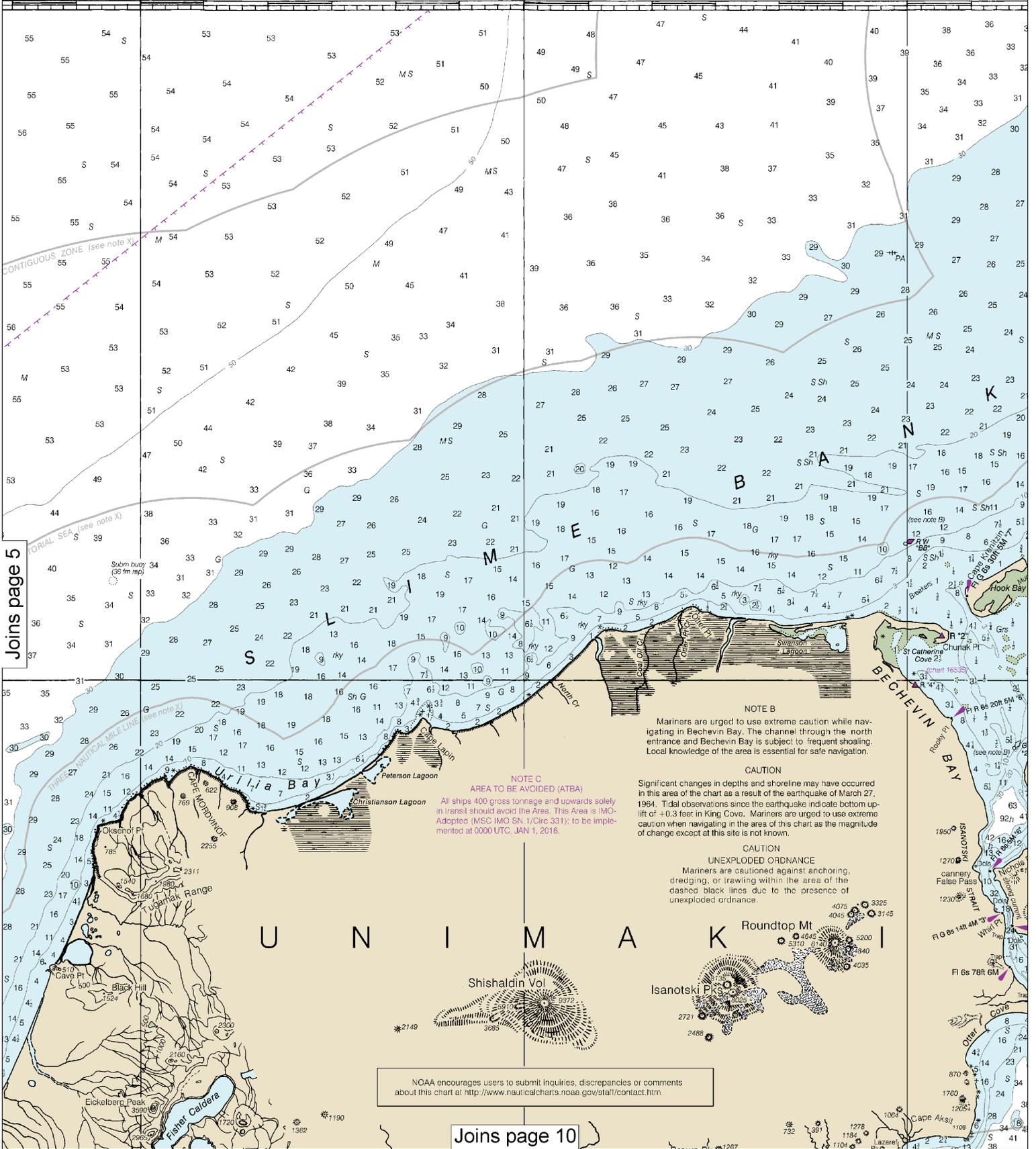
Joins page 6

Joins page 9

This BookletChart was reduced to 70% of the original chart scale. The new scale is 1:428571. Barscales have also been reduced and are accurate when used to measure distances in this BookletChart.



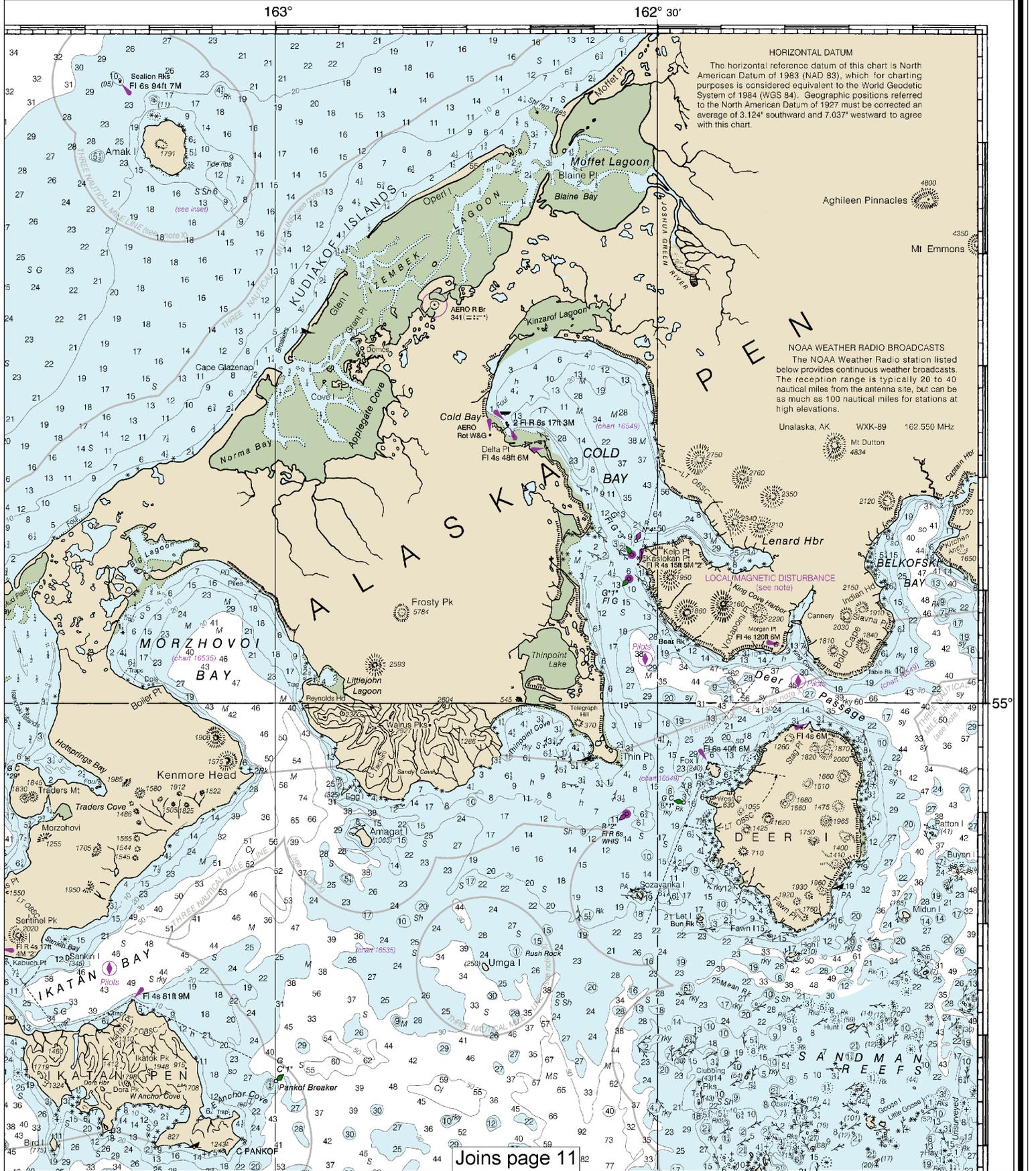
Joins page 5



Joins page 10



Note: Chart grid lines are aligned with true north.



HORIZONTAL DATUM
 The horizontal reference datum of this chart is North American Datum of 1983 (NAD 83), which for charting purposes is considered equivalent to the World Geodetic System of 1984 (WGS 84). Geographic positions referred to the North American Datum of 1927 must be corrected an average of 3.124" southward and 7.037" westward to agree with this chart.

NOAA WEATHER RADIO BROADCASTS
 The NOAA Weather Radio station listed below provides 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.

Unalaska, AK WXX-89 162.550 MHz
 Mt. Dutton 4834

LOCAL MAGNETIC DISTURBANCE
 (see note)

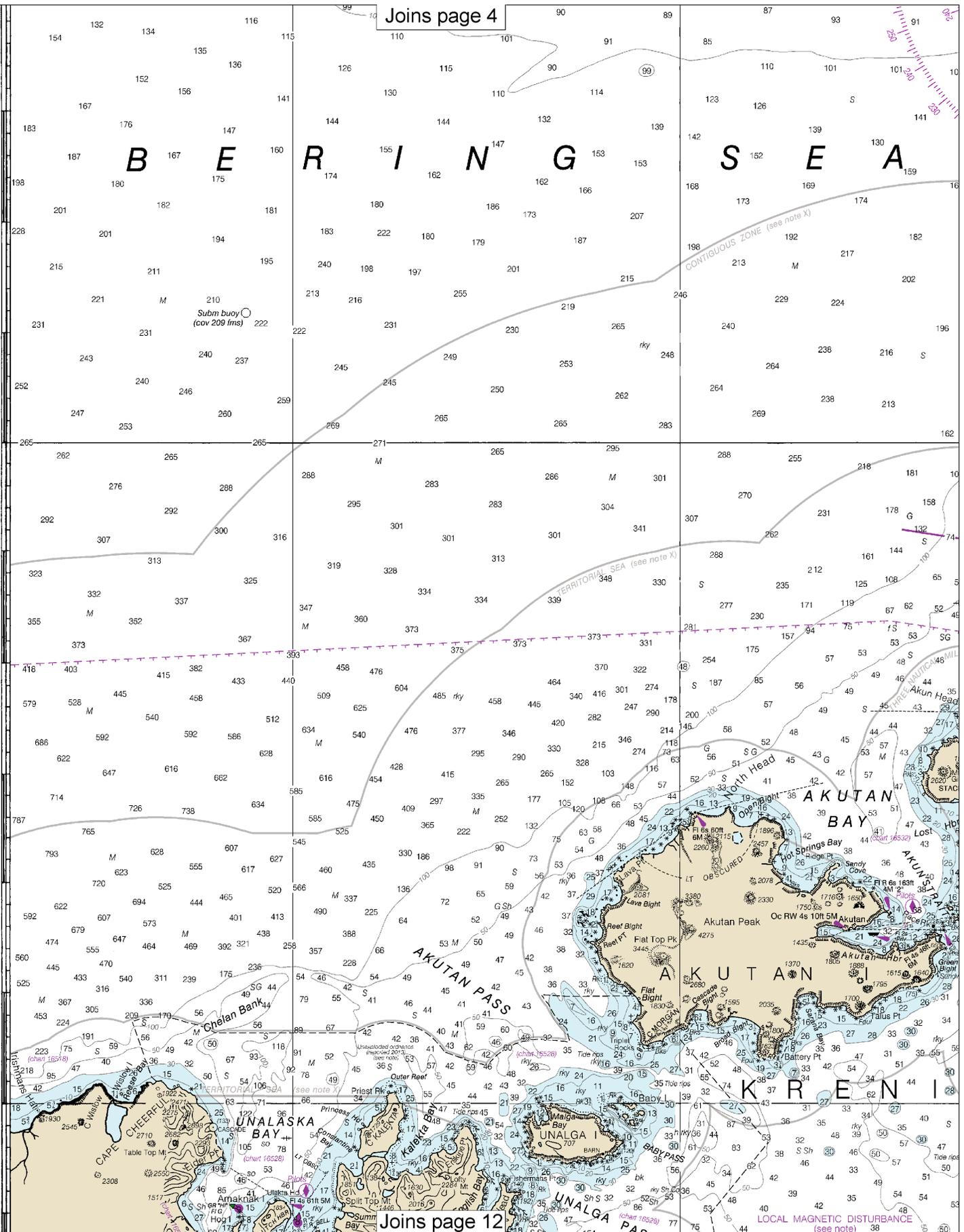
Joins page 11

25th Ed., Dec. 2015. Last Correction: 12/13/2016. Cleared through:
 LNM: 4916 (12/6/2016), NM: 5116 (12/17/2016), CHS: 1116 (11/25/2016)

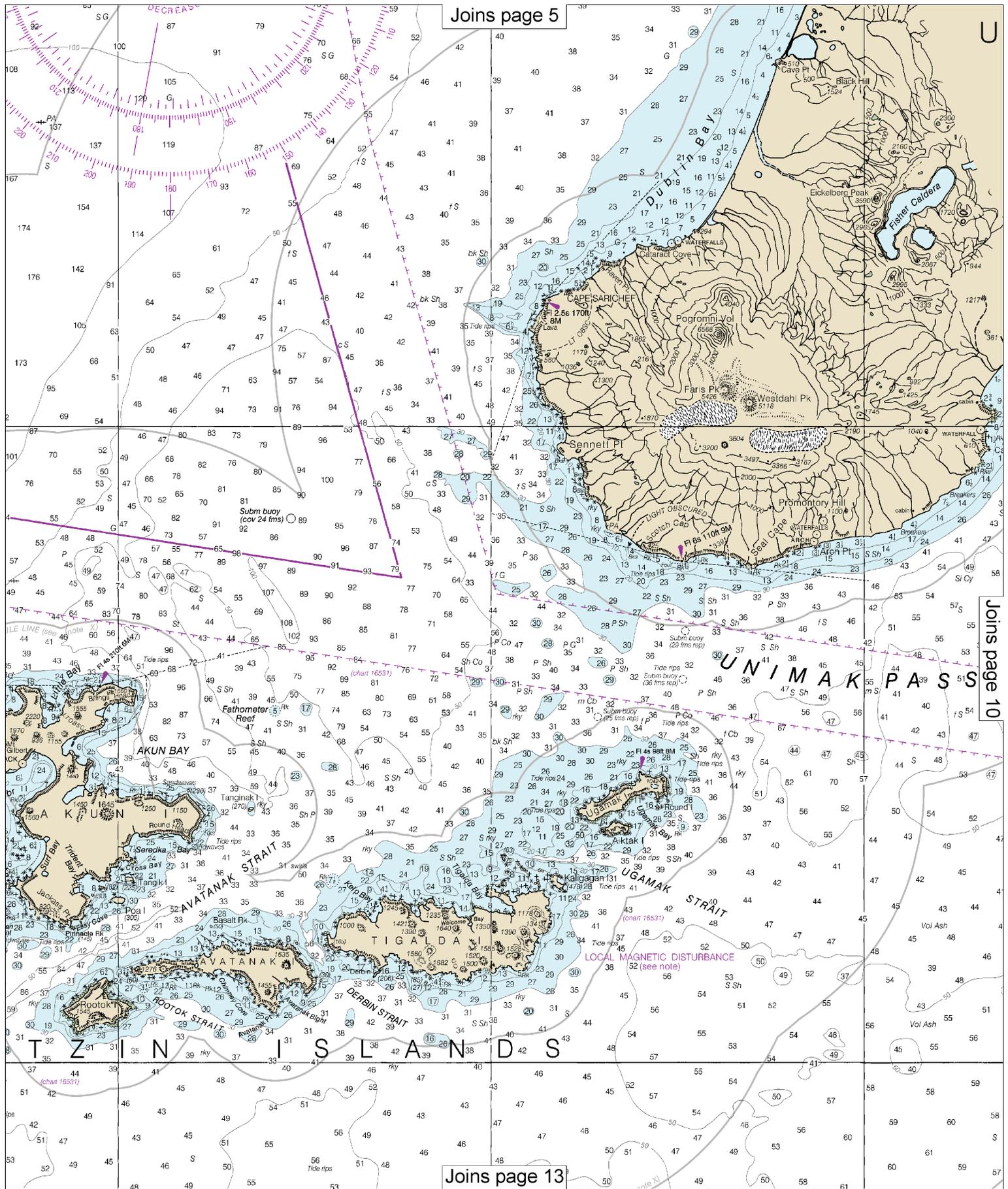
54° 30'

54°

JOINS CHART 16500



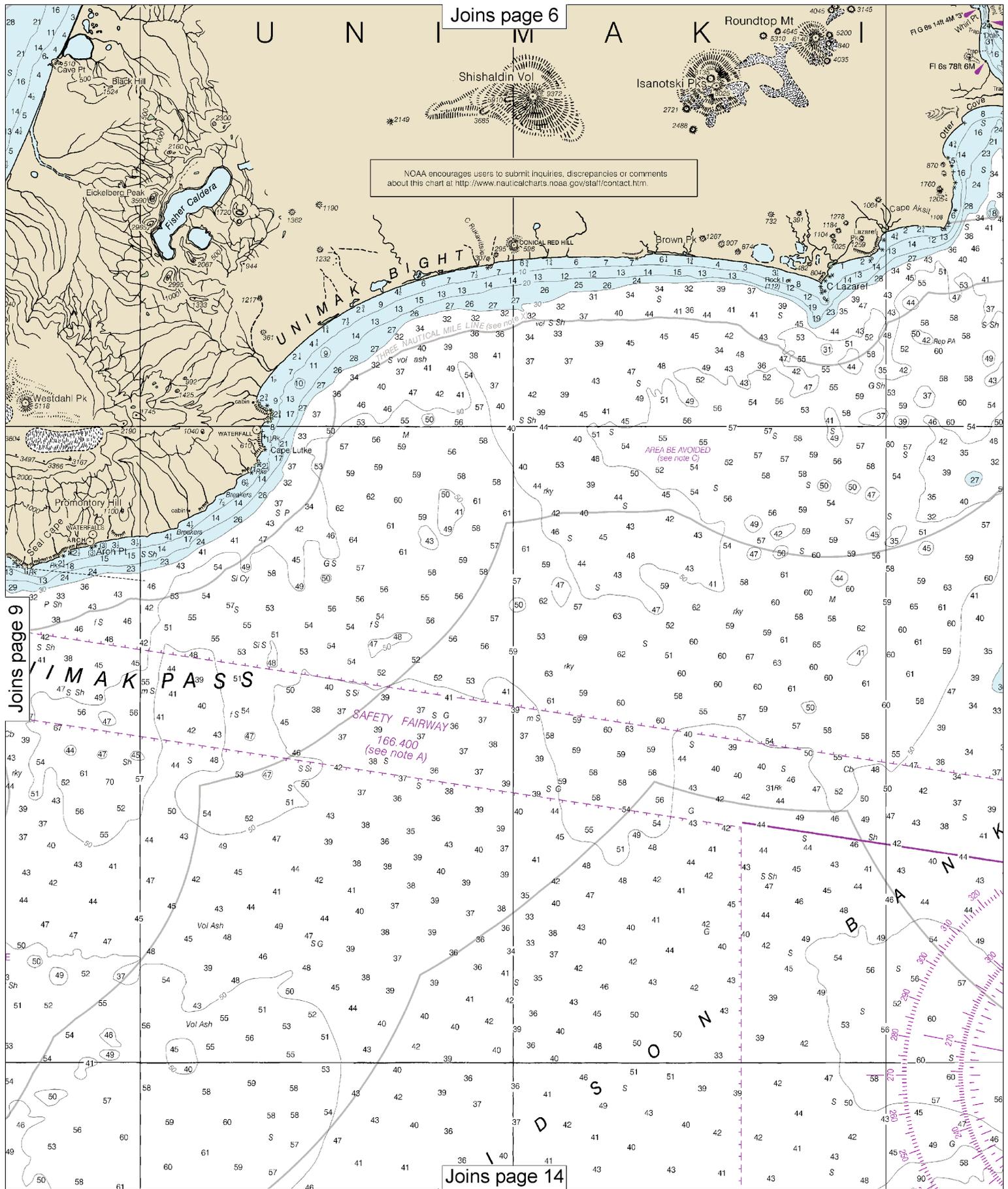
Note: Chart grid lines are aligned with true north.



Joins page 5

Joins page 10

Joins page 13



Joins page 6

Roundtop Mt

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

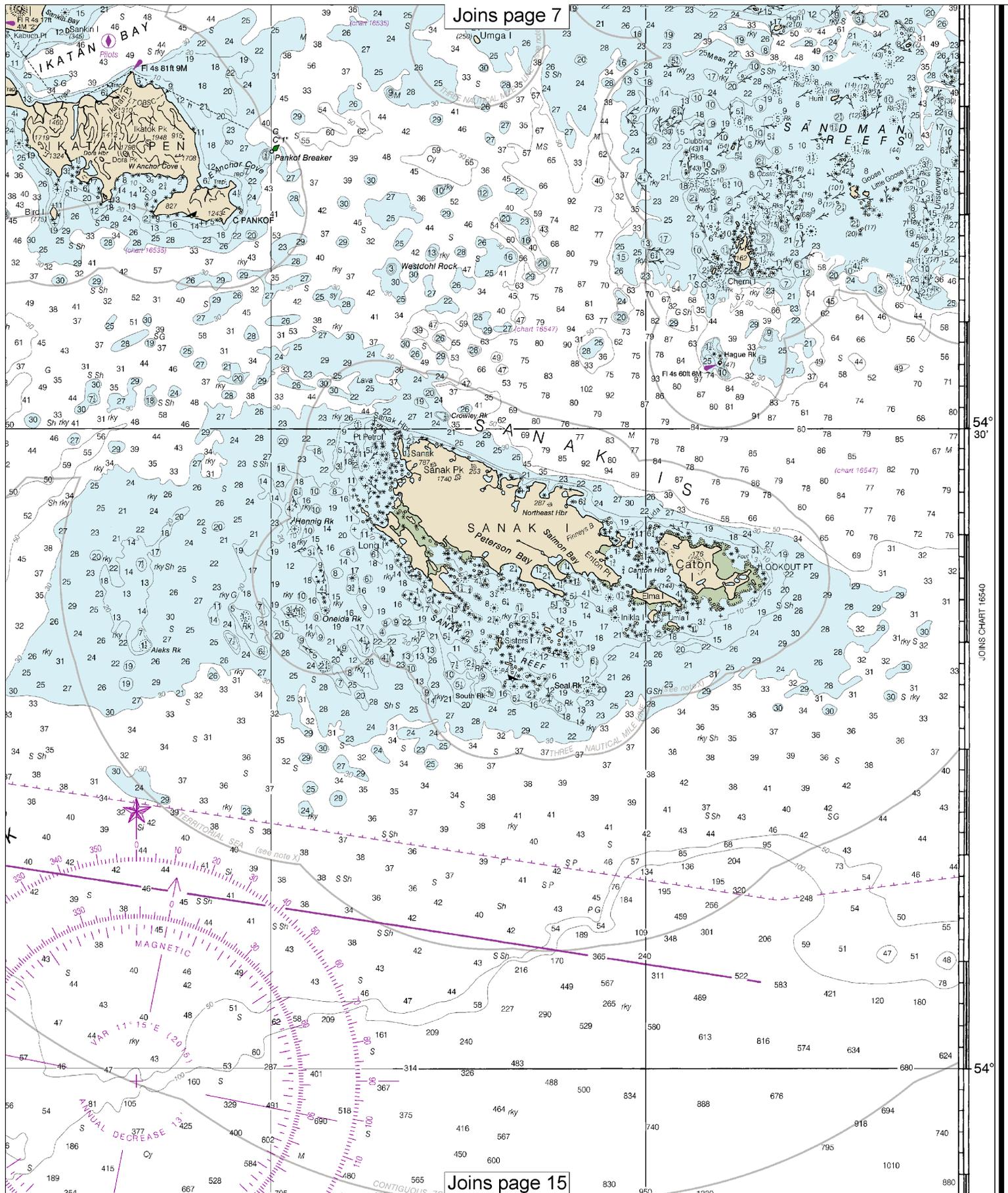
Joins page 9

Joins page 14

10

Note: Chart grid lines are aligned with true north.

Joins page 7



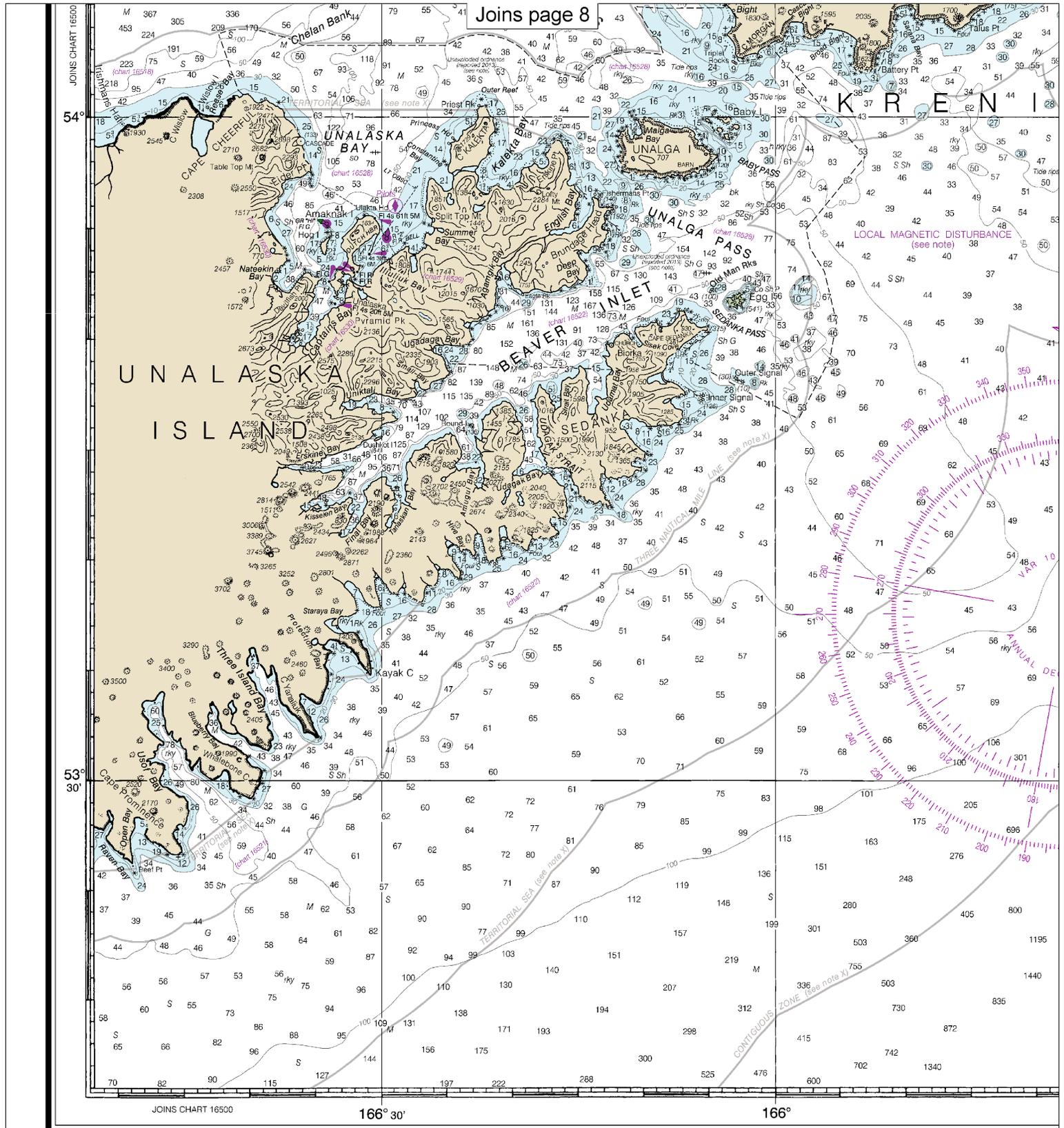
54° 30'

JOINS CHART 16540

54°

Joins page 15

Joins page 8



16520

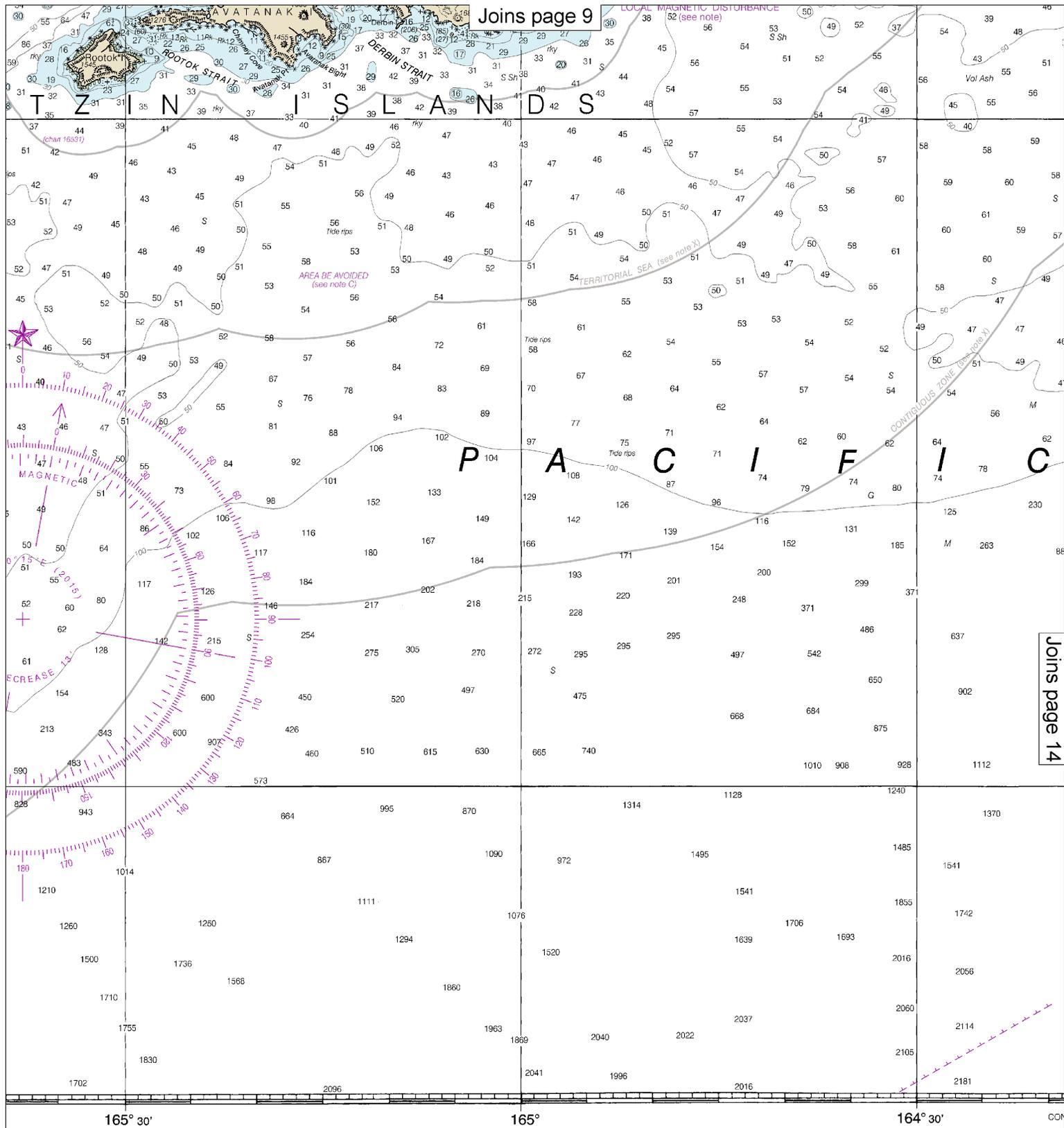
25th Ed., Dec. 2015. Last Correction: 12/13/2016. Cleared through:
LNM: 4916 (12/6/2016), NM: 5116 (12/17/2016), CHS: 1116 (11/25/2016)

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 nautica.charts.noaa.gov.

SOUNDINGS I

12

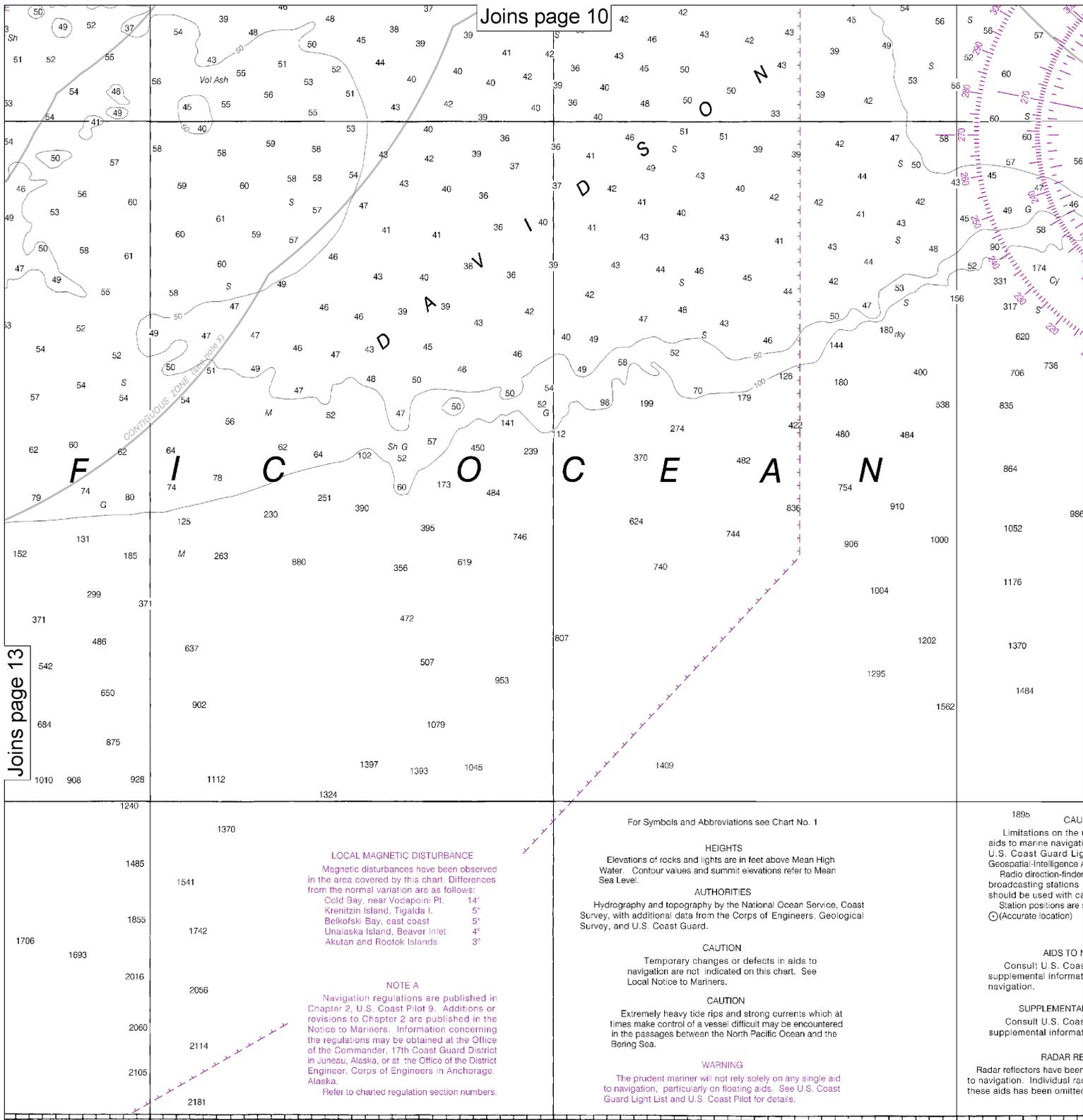
Note: Chart grid lines are aligned with true north.



JOINS page 14

IN FATHOMS

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



LOCAL MAGNETIC DISTURBANCE
 Magnetic disturbances have been observed in the area covered by this chart. Differences from the normal variation are as follows:
 Cold Bay, near Vodapoini Pt. 14°
 Krenitzin Island, Tigalda I. 5°
 Belkofski Bay, east coast 5°
 Unalaska Island, Beaver Inlet 4°
 Akutan and Rootok Islands 3°

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.

For Symbols and Abbreviations see Chart No. 1

HEIGHTS
 Elevations of rocks and lights are in feet above Mean High Water. Contour values and summit elevations refer to Mean Sea Level.

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

CAUTION
 Extremely heavy tide rips and strong currents which at times make control of a vessel difficult may be encountered in the passages between the North Pacific Ocean and the Bering Sea.

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.

1895 CAU
 Limitations on the aids to marine navigation U.S. Coast Guard Light Geospatial-Intelligence Agency Radio direction-finder broadcasting stations should be used with caution. Station positions are indicated by (C) (Accurate location)

AIDS TO NAVIGATION
 Consult U.S. Coast Pilot for supplemental information.

SUPPLEMENTAL INFORMATION
 Consult U.S. Coast Pilot for supplemental information.

RADAR REFLECTORS
 Radar reflectors have been placed on these aids to navigation. Individual radar reflector details have been omitted.

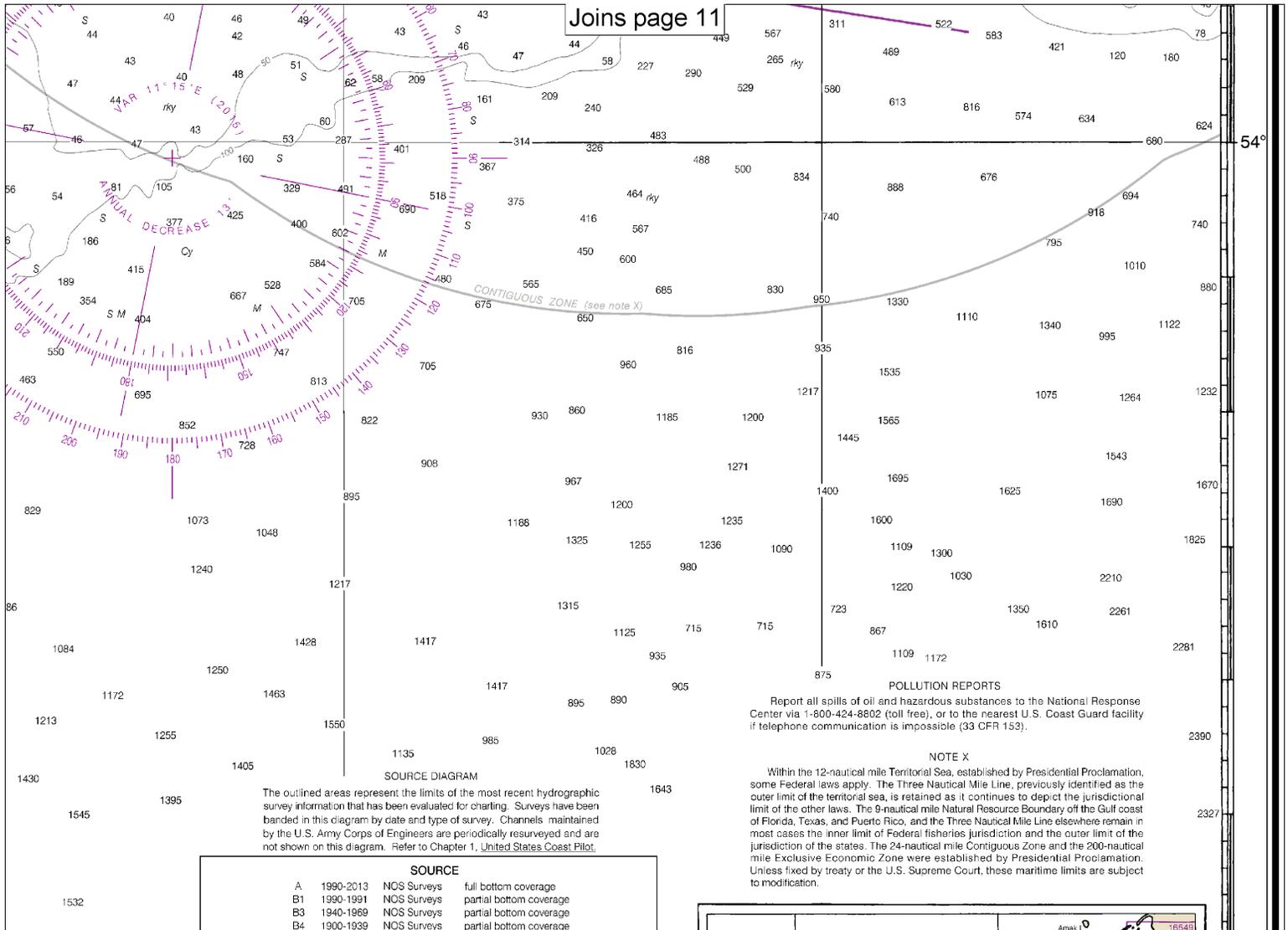
164° 30'

CONTINUED ON CHART 16011

164°

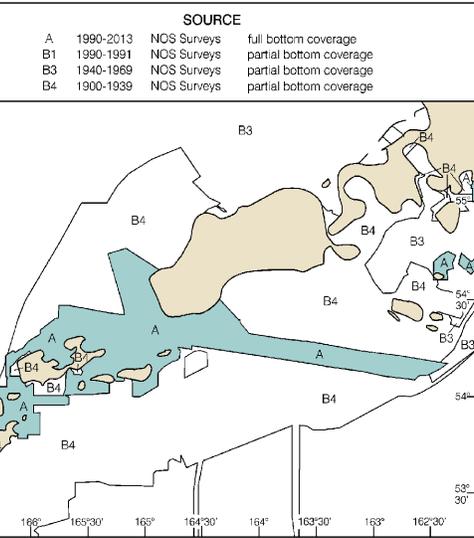
163° 30'

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



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.

SOURCE DIAGRAM



SOURCE			
A	1990-2013	NCS Surveys	full bottom coverage
B1	1990-1991	NCS Surveys	partial bottom coverage
B3	1940-1969	NCS Surveys	partial bottom coverage
B4	1900-1939	NCS Surveys	partial bottom coverage

CAUTION
The use of radio signals as a navigation aid can be found in the Light Lists and National Ocean Service Publication 117. Bearings to commercial aids are subject to error and caution. Aids shown thus: (Approximate location)

NAVIGATION
Consult Guard Light List for information concerning aids to navigation.

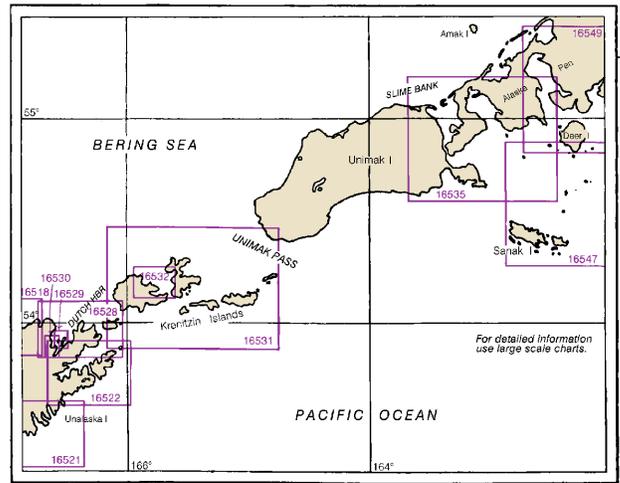
ADDITIONAL INFORMATION
Consult Pilot 9 for important information.

REFLECTORS
Reflectors are placed on many floating aids to aid in radar reflector identification on electronic displays.

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).

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.



For detailed information use large scale charts.

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

Unimak and Akutan Passes
SOUNDINGS IN FATHOMS - SCALE 1:300,000

16520



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.