BookletChart™

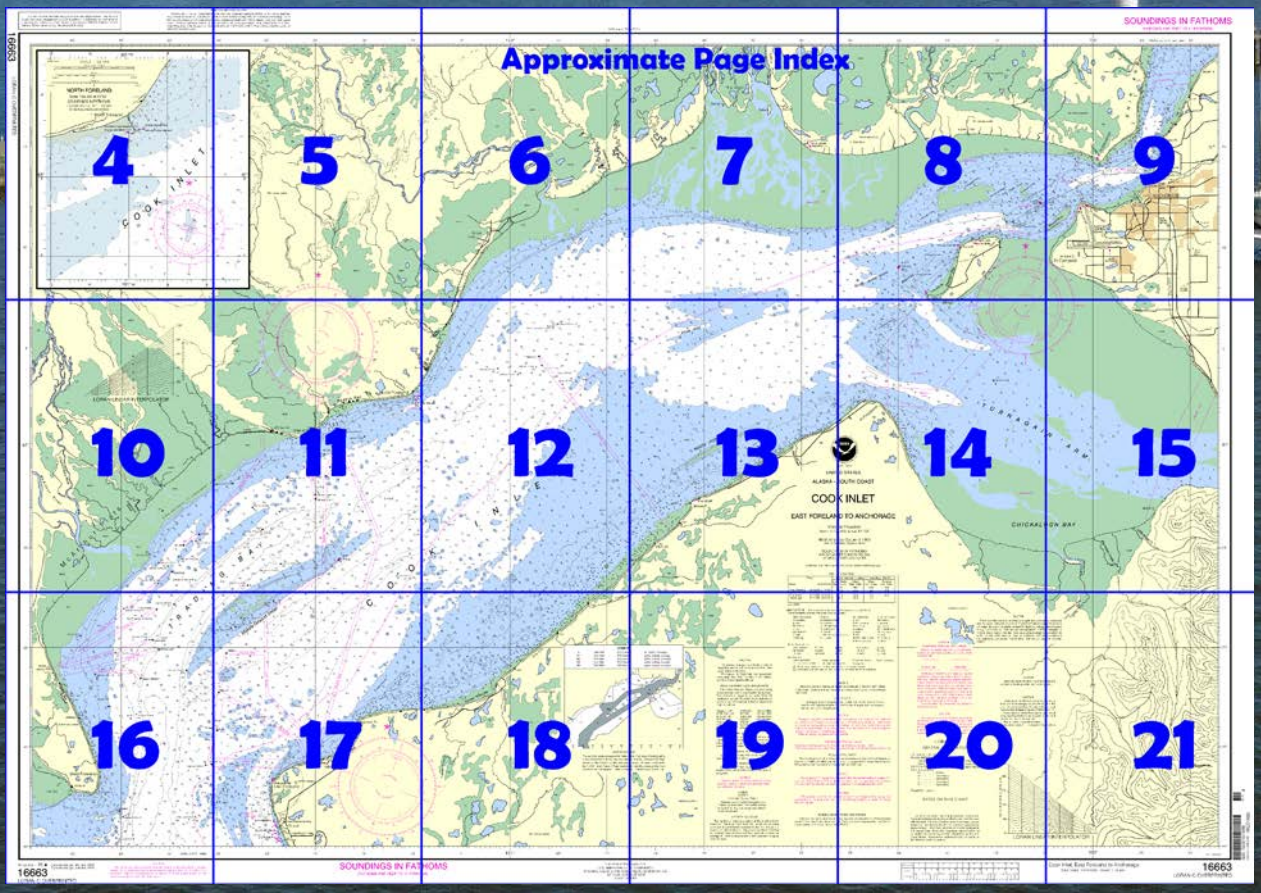
Cook Inlet – East Foreland to Anchorage

NOAA Chart 16663

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.

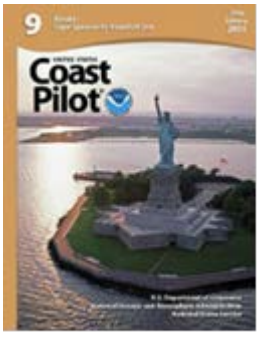
Whenever possible, use the official, full scale NOAA nautical chart for navigation. Nautical chart sales agents are listed on the Internet at http://www.NauticalCharts.NOAA.gov.

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=16663

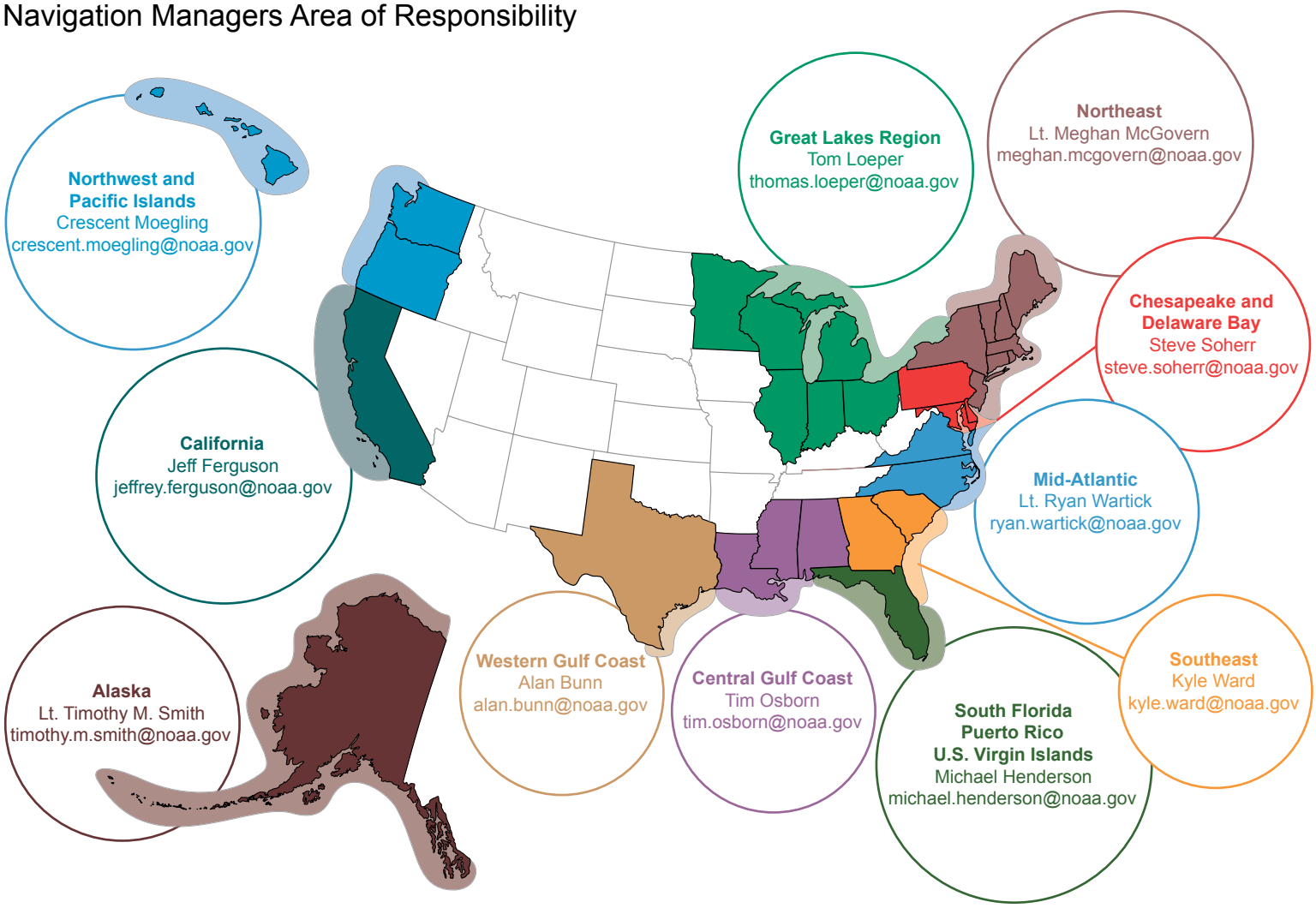


(Selected Excerpts from Coast Pilot)
Caution: Flood currents are reported to set vessels off the terminal while ebb currents set them on. See Winter Operating Guidelines, Cook Inlet, indexed as such; contact the COTP W Alaska in Anchorage for info.
A boulder-strewn shoal with depths of 7 fathoms or less extends N from the NE point of Kalgin Island to West Foreland. The outer boulders which are covered 8 to 11 feet, are 2.5 miles from the island.
Small vessels anchor off the middle of the N end of Kalgin Island, with good shelter from S gales drawing up the inlet. Fair holding ground is from the middle of the N shore W. Caution must be observed, however, at low water when crossing the broken boulder-strewn area with depths of less than 5 fathoms off from the N end.
The highest parts of the offlying shoal between Kalgin Island and West Foreland uncover between 3 and 4 feet. The shoal has been shifting S and extends 5.5 to 10 miles from the N end of Kalgin Island.
Caution.–The area surrounding the mouth of Kenai River, for a radius of over 4 miles, is strewn with rocks, boulders, shoals, wrecks, and other obstructions. The bars at the entrance to the river are nearly dry at low water, but there are depths of 8 to 10 feet in places in the river. (See **162.245**, chapter 2, for navigation regulations for the Kenai River.)
Currents.–The currents in the river mouth attain velocities of 5 knots or more. Strong SW wind and flood current; SW swell at the river entrance.
Pilotage, Kenai.–Pilotage, except for certain exempted vessels, is compulsory for all vessels navigating the inside waters of the State of Alaska. (See **Pilotage, General**, chapter 3, and **Pilotage, Homer**, earlier this chapter, for the pilot pickup stations and other details.)
Quarantine.–A U.S. Public Health Service Contract Physician is located at the medical center in Kenai. (See appendix for additional information.)
Caution.–The area surrounding the approach to Nikiski is strewn with rocks, boulders, shoals, and other obstructions. A shoal area, about 7 miles long with depths of 2½ to 6 fathoms, marked by a seasonal buoy.
Note: Vessels keep clear of the areas in close proximity and downwind of ammonia and LNG loading ops while material is being transferred.
Currents.–Nikiski has a PORTS site which provides water level, wind speed and direction, and barometric pressure information, that is updated every ten minutes. The PORTS site is accessible through a voice response system at 907-776-5436.
Ice floes are a severe problem at Nikiski during Jan and Feb. See Winter Operating Guidelines, Cook Inlet, indexed as such, earlier this chapter, and contact the COTP W Alaska in Anchorage for more information.
Pilotage, Nikiski.–Pilotage, except for certain exempted vessels, is compulsory for all vessels navigating the inside waters of the State of Alaska. (See **Pilotage, General**, chapter 3, **Pilotage, Cook Inlet**, and **Pilotage, Homer**, for the pilot pickup stations and other details.)
Quarantine.-A U.S. Public Health Service Contract Physician is located at a medical center in Nikiski. (See Appendix A for additional information.)
Caution: A 2 to 3-knot set into Trading Bay exists on an ebb current by S bound vessels when abreast of N end of Middle Ground Shoal.
Dangers.–In addition to the dangers in Cook Inlet previously described, **North Point Shoal**, about 2.5 miles NNE of North Point on Fire Island, changes radically from year to year and bares several feet at low water.
Currents.–Anchorage has a PORTS site which provides water level, wind speed and direction, and barometric pressure information, that is updated every ten minutes. The PORTS site is accessible through a voice response system at 866-257-6787.
Ice.–Upper Cook Inlet rarely, if ever, freezes solid because of the enormous tidal range. Vessels can navigate Cook Inlet in the winter, but the combination of currents and ice floes can cause a strain on mooring lines. See Winter Operating Guidelines, Cook Inlet, and contact the Coast Guard Captain of the Port, Western Alaska in Anchorage for more info. Extra caution should be exercised in the restricted approach to Anchorage. Ice leads can break the wrong way and potentially cause up to 30 course diversion, especially for lower-powered vessels.
Pilotage, Anchorage.–Pilotage, except for certain exempted vessels, is compulsory for all vessels navigating the waters of the State of Alaska. (See **Pilotage, General** (indexed), chapter 3, and **Pilotage, Cook Inlet** and **Pilotage, Homer** (indexed), for details.)

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

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

Navigation Managers Area of Responsibility

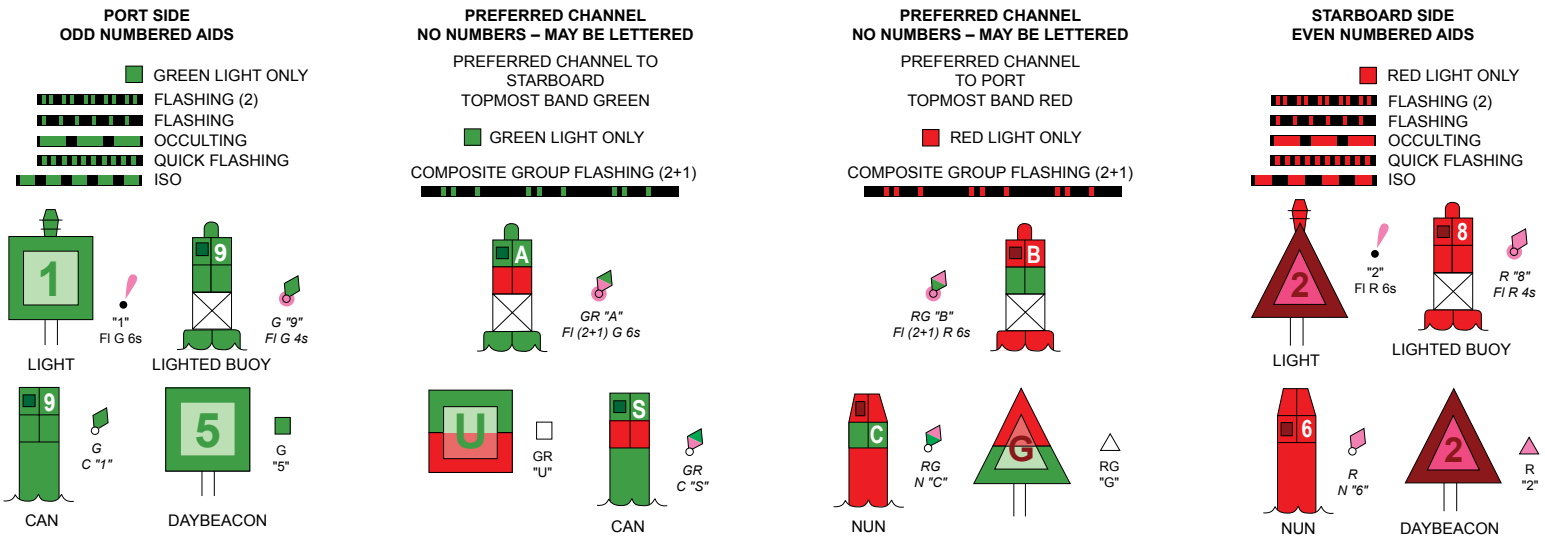


NOAA's navigation managers serve as ambassadors to the maritime community. They help identify navigational challenges facing professional and recreational mariners, and provide NOAA resources and information for safe navigation. For additional information, please visit *nauticalcharts.noaa.gov/service/navmanagers*

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*

KAPP 2854

SCALE 1:25,000
Nautical Miles
Yards
Meters

NORTH FORELAND

Scale 1:25,000 at 61°02'

SOUNDINGS IN FATHOMS
(FATHOMS AND FEET TO 11 FATHOMS)
AT MEAN LOWER LOW WATER

North Foreland

Cabin

Tyonek Cr

SOUTH END TYONEK PIER LT
Fl 2.5s 13ft 4M Priv

NORTH END TYONEK PIER LT
Fl 2.5s 13ft 4M Priv

COOK INLET

MAGNETIC
VAR 16° 25' E (2016)
ANNUAL DECREASE 20'

Numerous ponds

Marsh

Marsh

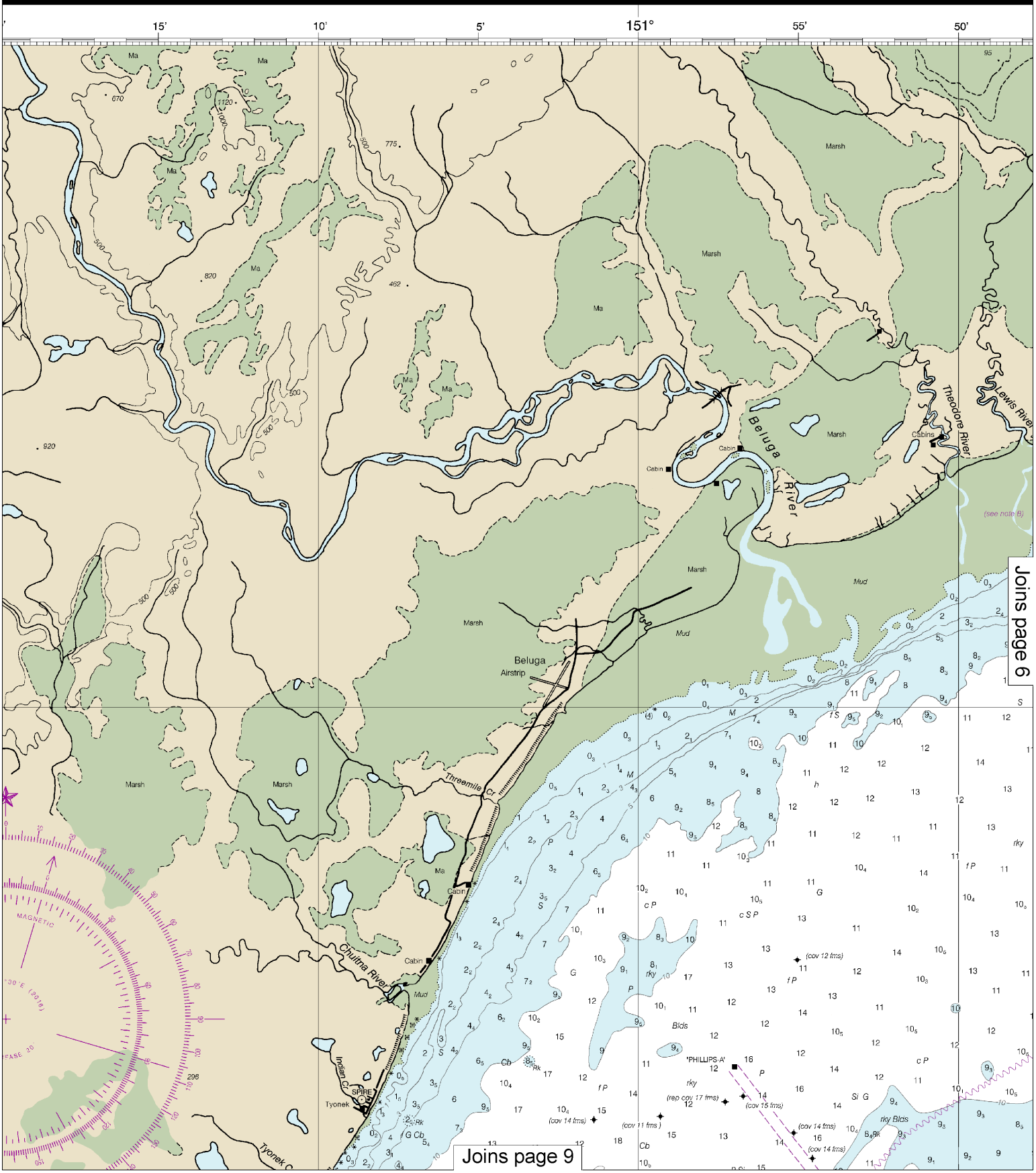
Joins page 8

Note: Chart grid lines are aligned with true north.

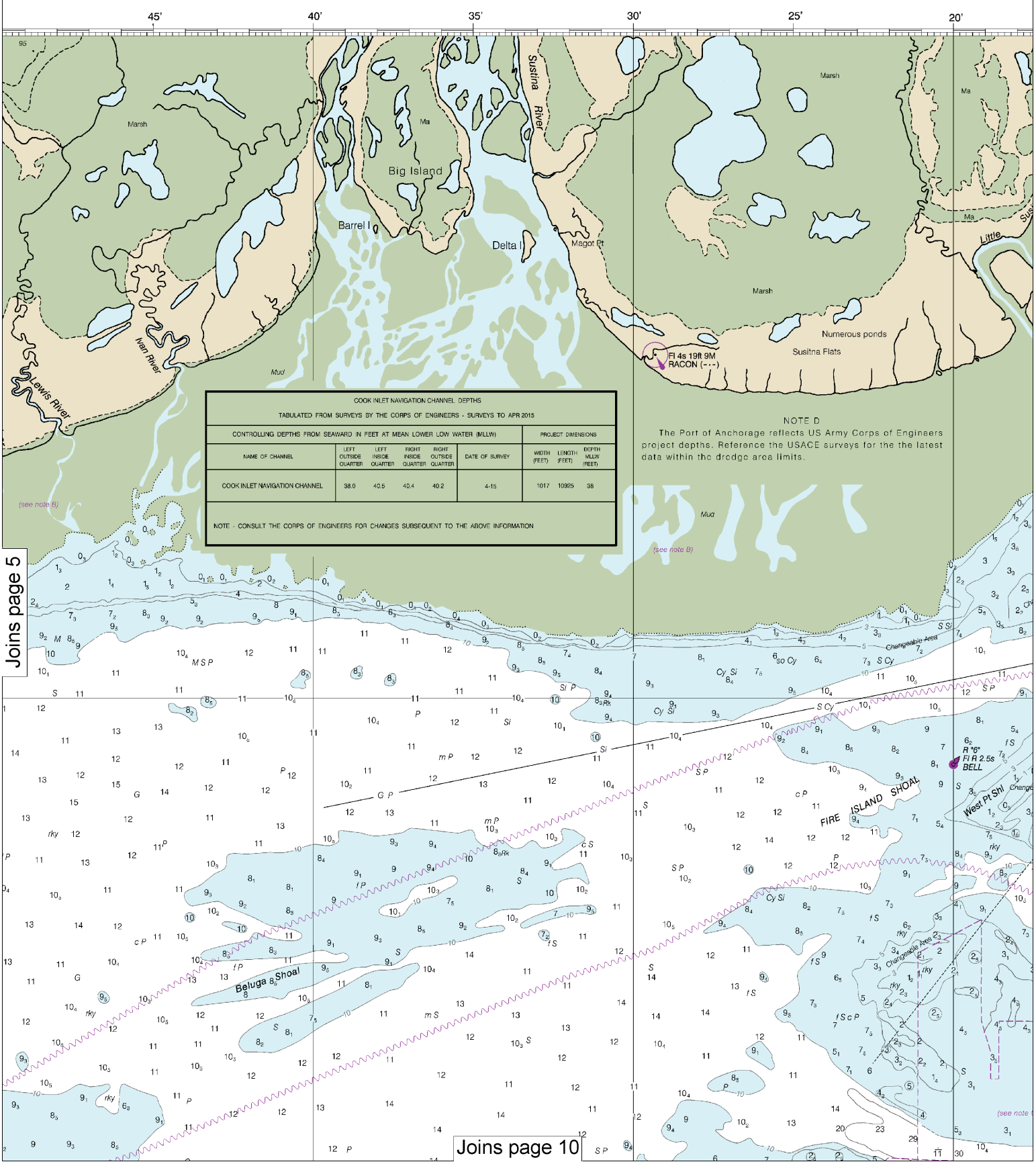
Printed at reduced scale.

~~SCALE 1:100,000~~
Nautical Miles
Yards

See Note on page 5.



This BookletChart was reduced to 70% of the original chart scale.
The new scale is 1:142857. Barscales have also been reduced and
are accurate when used to measure distances in this BookletChart.



COOK INLET NAVIGATION CHANNEL DEPTHS

TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS - SURVEYS TO APR 2015

CONTROLLING DEPTHS FROM SEAWARD IN FEET AT MEAN LOWER LOW WATER (MLLW)						PROJECT DIMENSIONS		
NAME OF CHANNEL	LEFT OUTSIDE QUARTER	LEFT INSIDE QUARTER	RIGHT INSIDE QUARTER	RIGHT OUTSIDE QUARTER	DATE OF SURVEY	WIDTH (FEET)	LENGTH (FEET)	DEPTH MLLW (FEET)
COOK INLET NAVIGATION CHANNEL	38.0	40.5	40.4	40.2	4-15	1017	10925	38

NOTE - CONSULT THE CORPS OF ENGINEERS FOR CHANGES SUBSEQUENT TO THE ABOVE INFORMATION

NOTE D

The Port of Anchorage reflects US Army Corps of Engineers project depths. Reference the USACE surveys for the the latest data within the dredge area limits.

Printed at reduced scale. ~~SCALE 1:100,000~~ See Note on page 5.

Nautical Miles

1 0 1 2 3 4 5 6 7 8 9

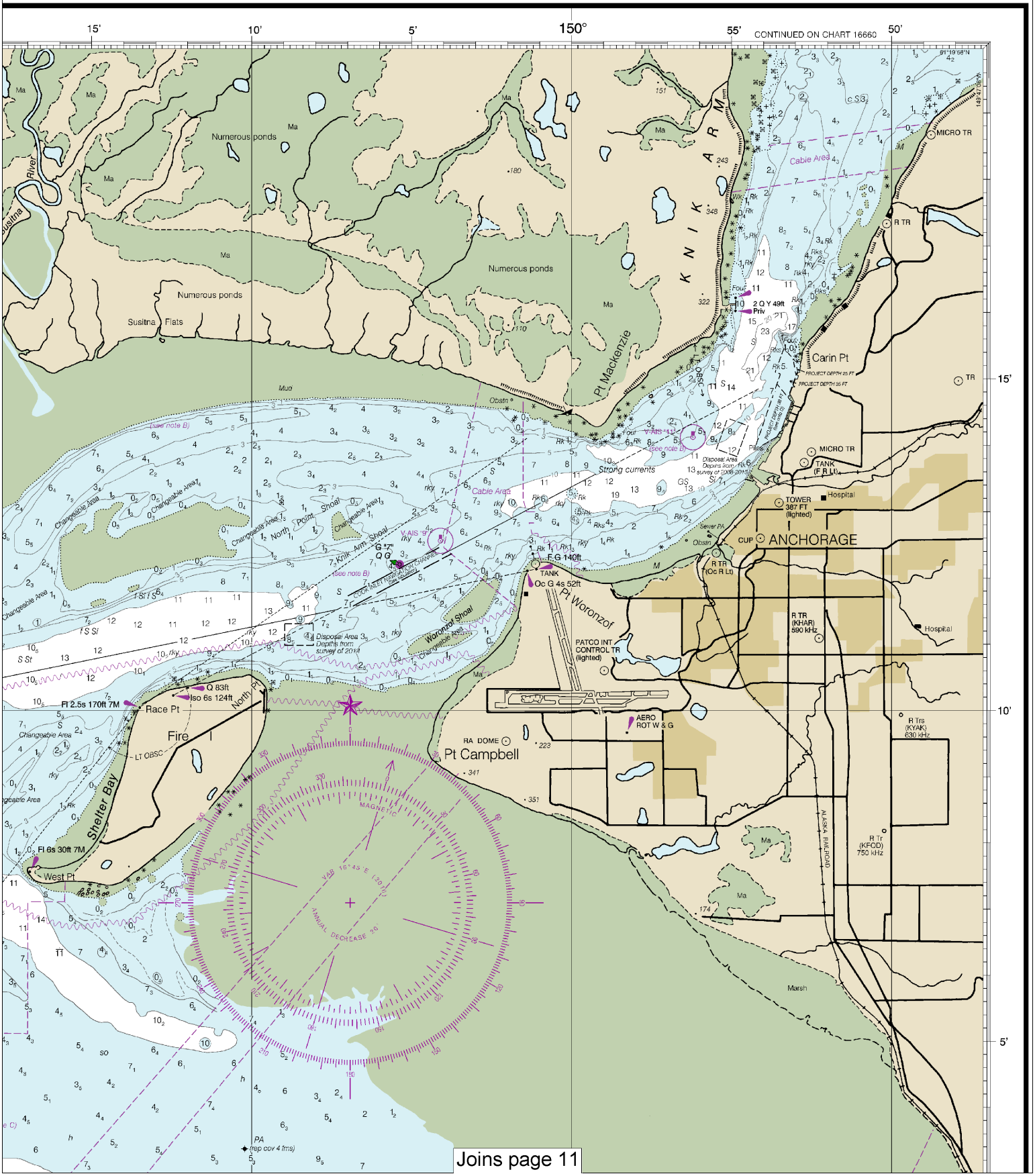
Yards

2000 0 2000 4000 6000 8000 10000 12000

Note: Chart grid lines are aligned with true north.

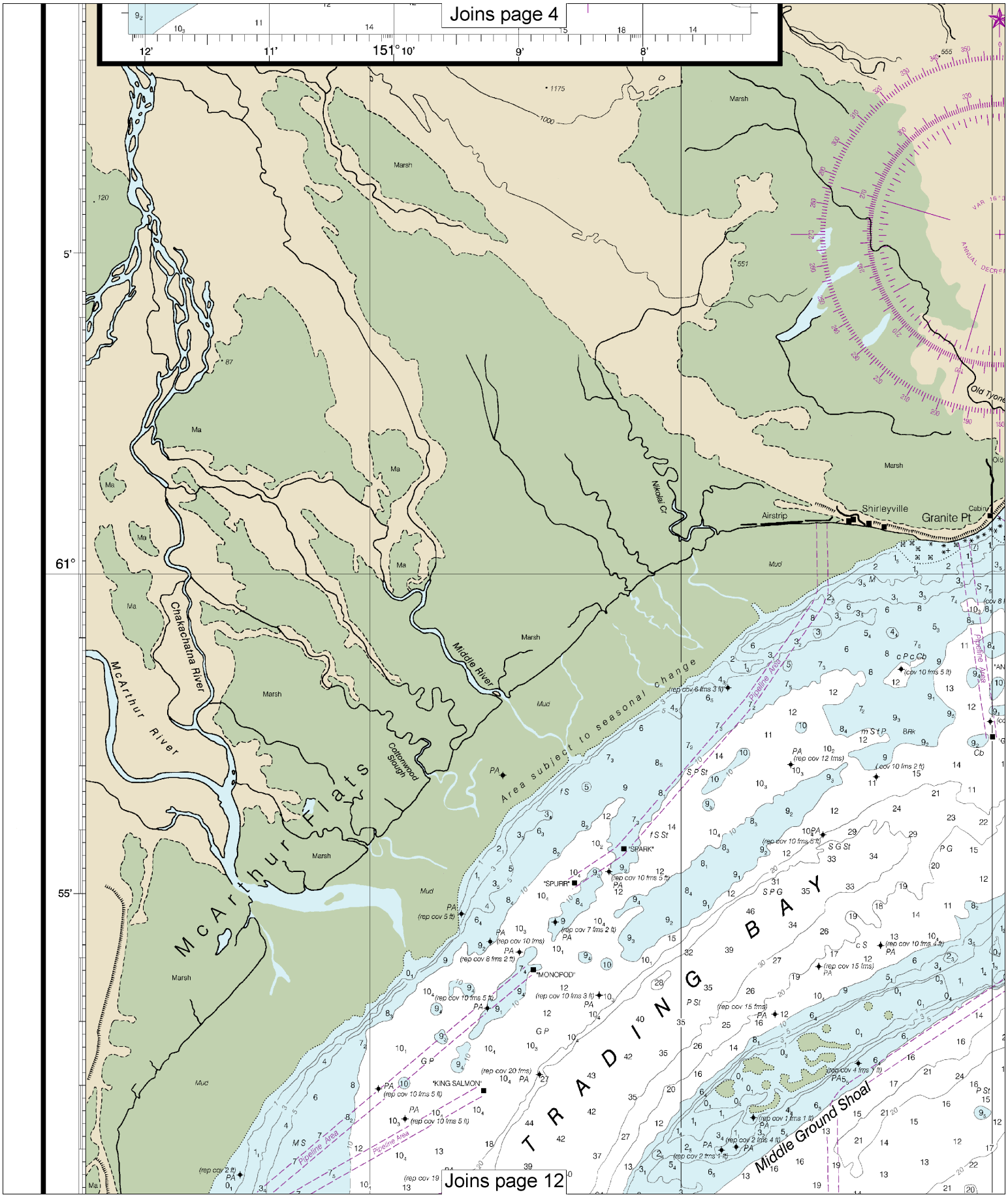
SOUNDINGS IN FATHOMS

(FATHOMS AND FEET TO 11 FATHOMS)



hand corner are available at nauticalcharts.noaa.gov.

10th Ed., Aug. 2016. Last Correction: 8/26/2016. Cleared through:
LNM: 4916 (12/6/2016), NM: 5116 (12/17/2016), CHS: 1116 (11/25/2016)



8

Note: Chart grid lines are aligned with true north.

Printed at reduced scale. ~~SCALE 1:100,000~~

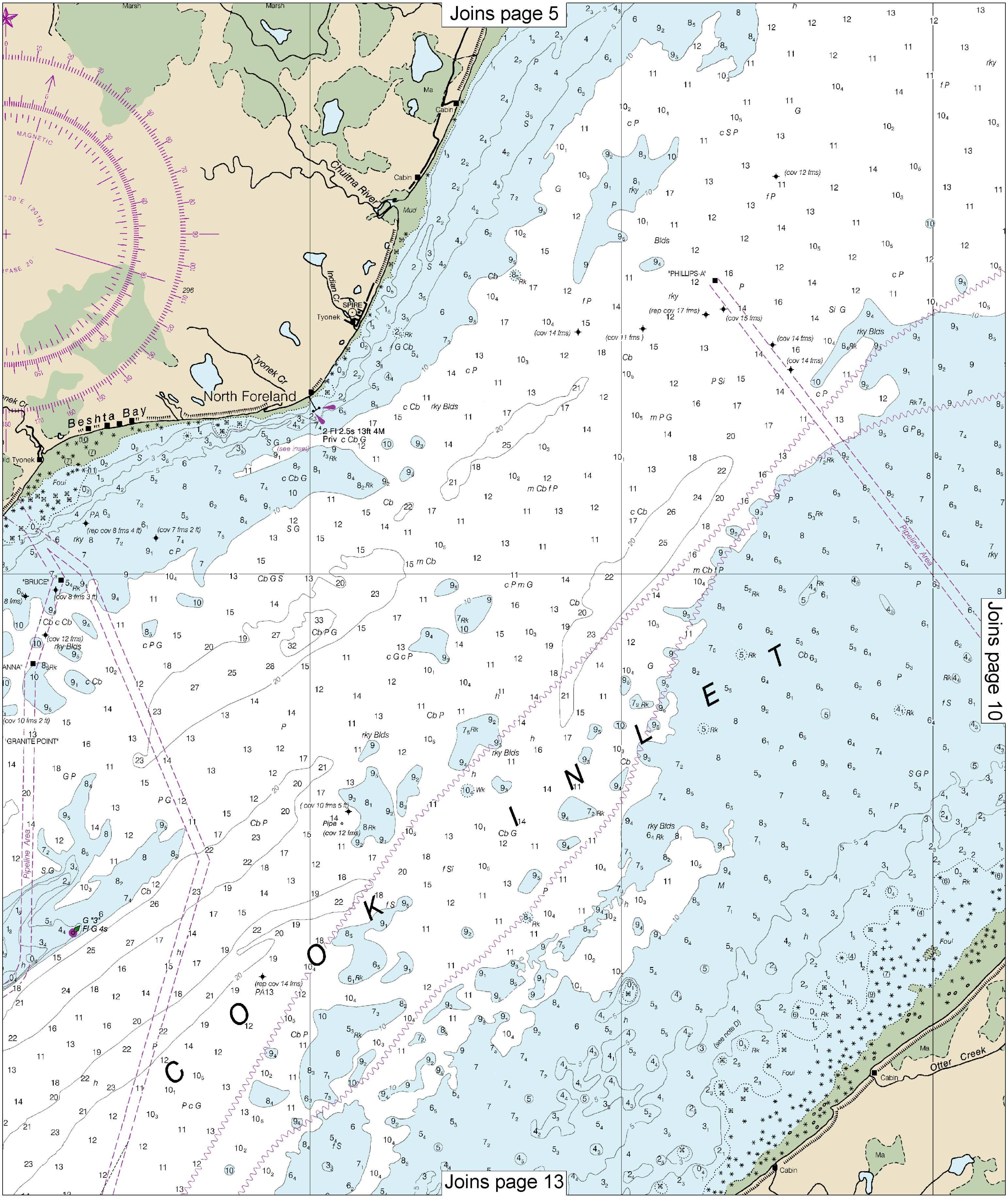
Nautical Miles

1 0 1 2 3 4 5 6 7 8 9

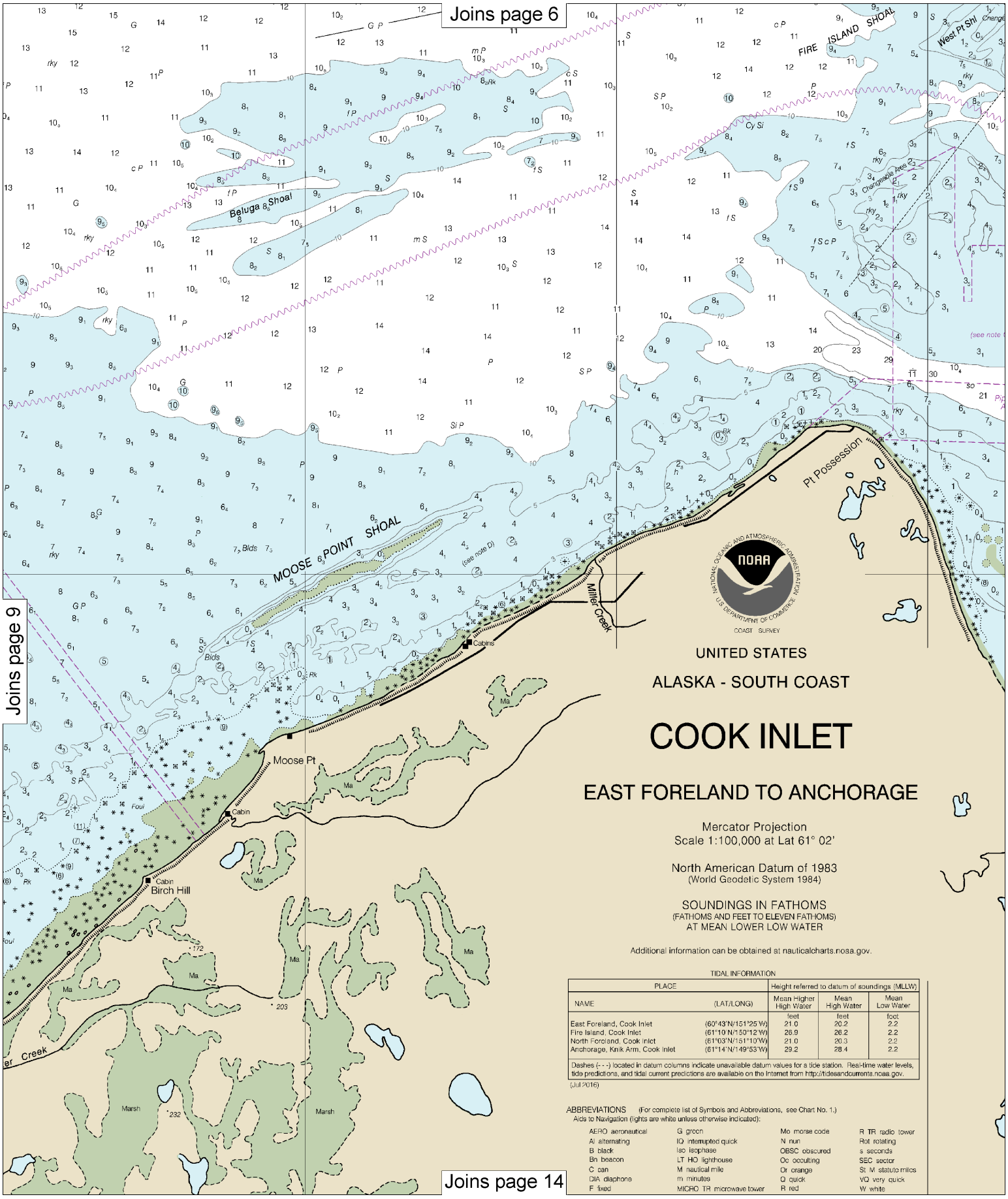
Yards

2000 0 2000 4000 6000 8000 10000 12000

See Note on page 5.



Joins page 5
Joins page 10
Joins page 13
Marsh
Chuitna River
Cabin
Mud
Indian Cr
SPIRE
Tyonek
Tyonek Cr
North Foreland
Beshta Bay
Old Tyonek
2 Fl 2.5s 13ft 4M
Priv
'PHILLIPS-A'
'BRUCE'
'GRANITE POINT'
Pipeline Area
G "3"
Fl G 4s
C O O K I N L E T
Otter Creek
Foul



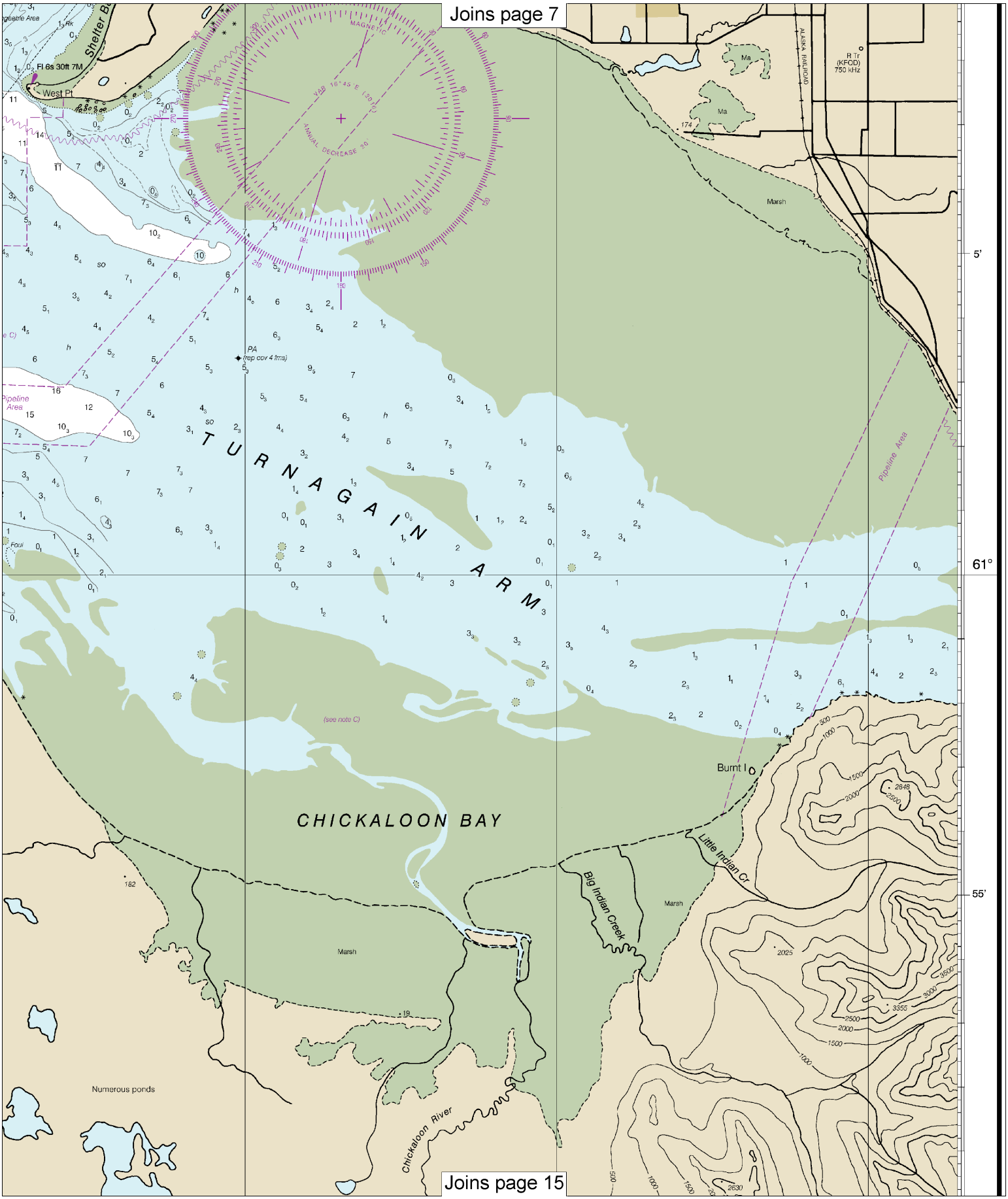
Note: Chart grid lines are aligned with true north.

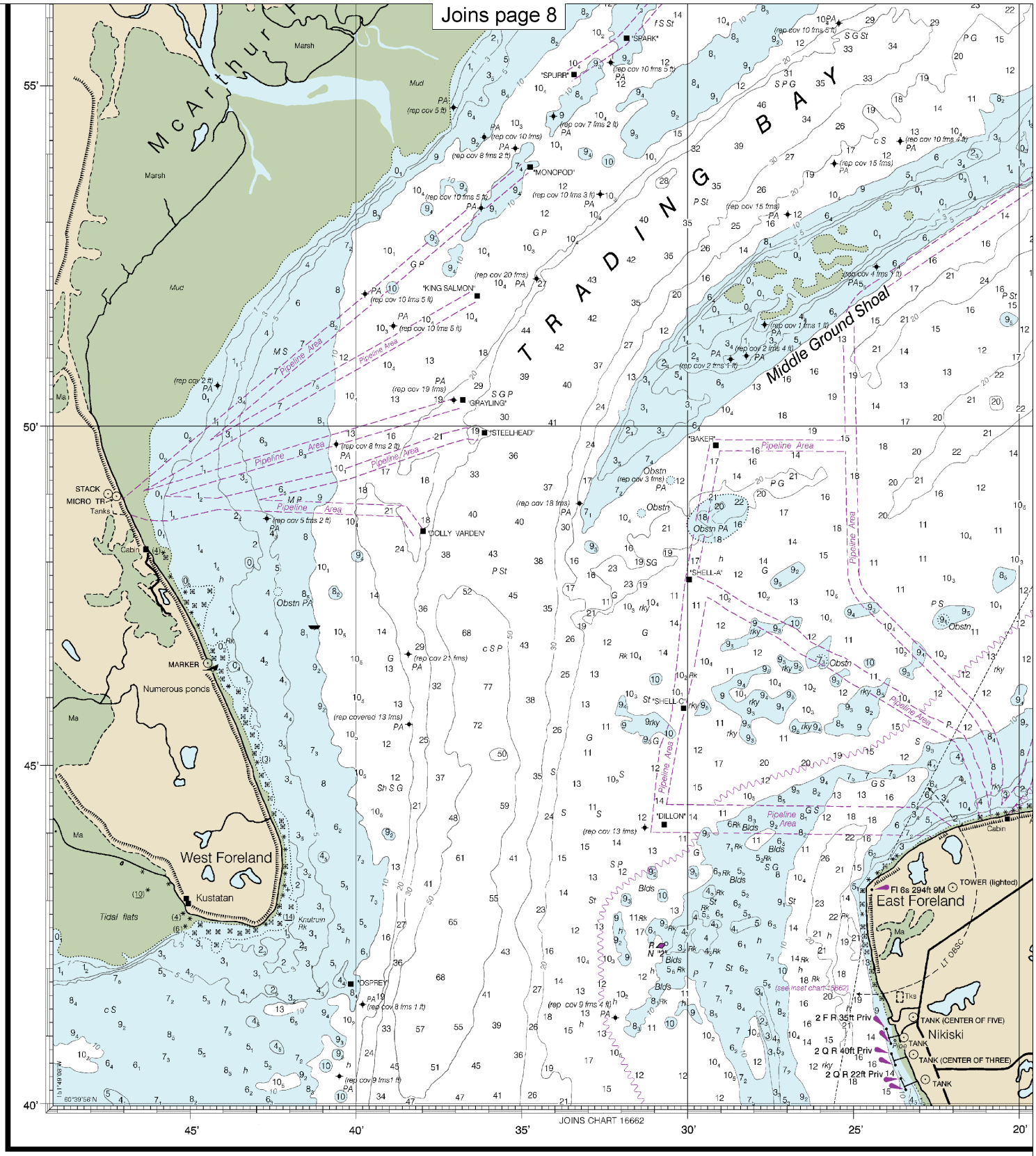
Printed at reduced scale. ~~SCALE 1:100,000~~

Nautical Miles: 1 0 1 2 3 4 5 6 7 8 9

Yards: 2000 0 2000 4000 6000 8000 10000 12000

See Note on page 5.


Joins page 7
Shelter Bay
Fl 6s 30ft 7M
West Pt
MAGNETIC
VAR 16° 45' E (2017)
ANNUAL DECREASE 3.0
PA
(rep cov 4 fms)
Pipeline Area
TURNAGAIN ARM
Foul
(see note C)
Marsh
ALASKA RAILROAD
R Tr
(KFOD)
750 kHz
Ma
174
Pipeline Area
Burnt I
CHICKALOON BAY
Little Indian Cr
Big Indian Creek
Marsh
2025
2849
3355
Marsh
162
19
Numerous ponds
Chickaloon River
2630
5'
61°
55'
Joins page 15



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.

16663

10th Ed., Aug. 2016. Last Correction: 8/26/2016. Cleared through:
LNM: 4916 (12/6/2016), NM: 5116 (12/17/2016), CHS: 1116 (11/25/2016)

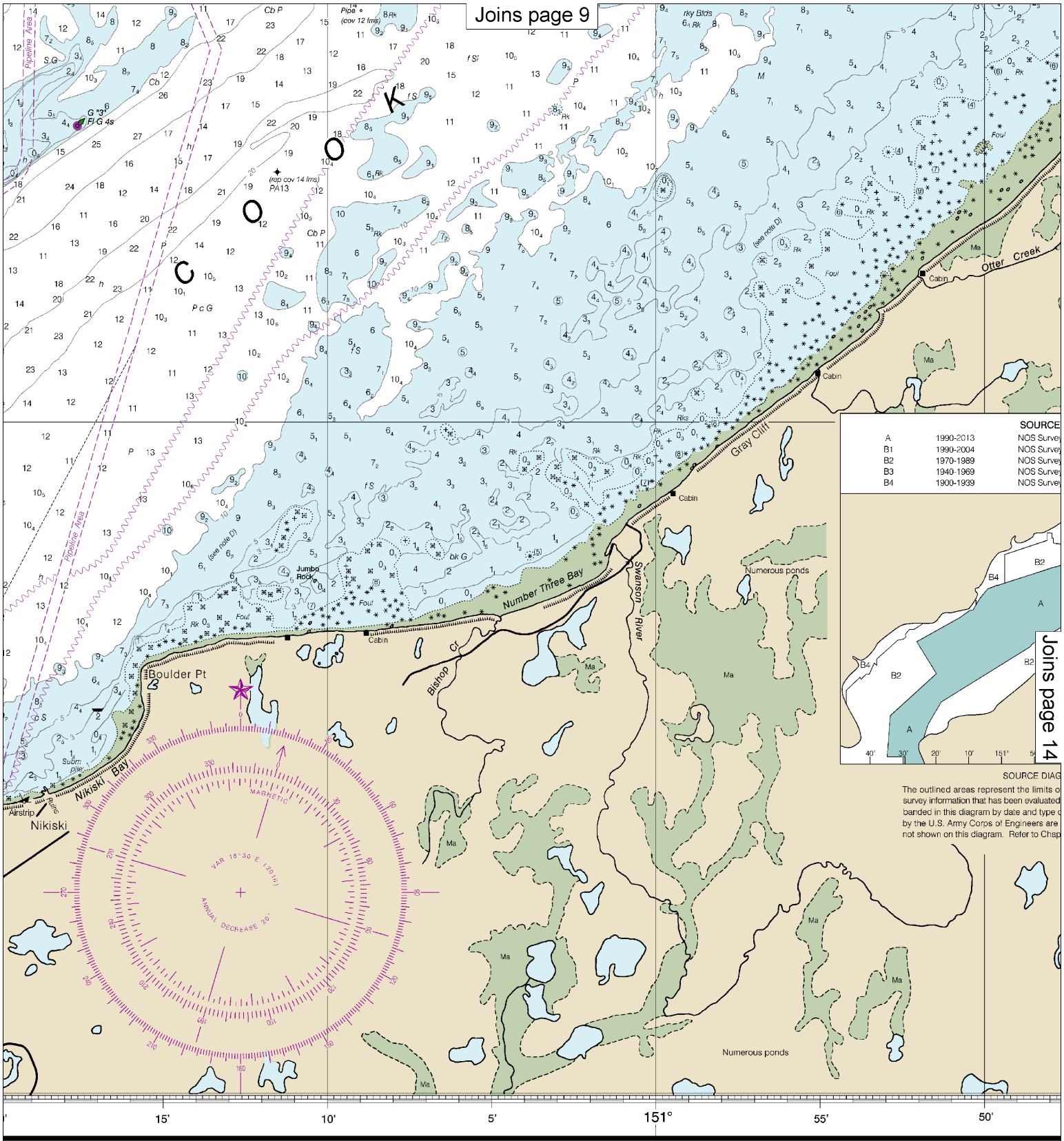
Note: Chart grid lines are aligned with true north.

Printed at reduced scale. ~~SCALE 1:100,000~~

Nautical Miles: 1 0 1 2 3 4 5 6 7 8 9

Yards: 2000 0 2000 4000 6000 8000 10000 12000

See Note on page 5.



SOUNDINGS IN FATHOMS

(FATHOMS AND FEET TO 11 FATHOMS)

Published at Wash
U.S. DEPARTMENT
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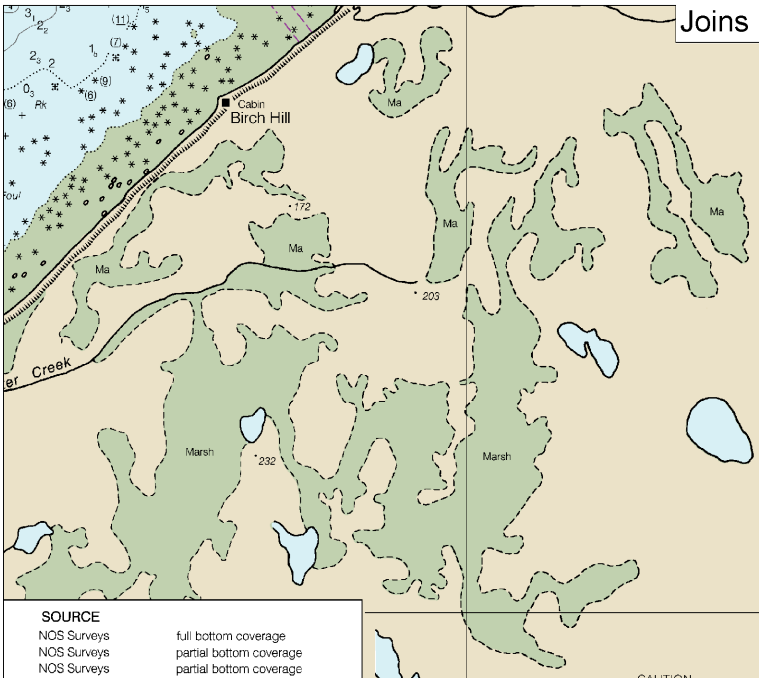
COAST SU

Joins page 10



Mercator Projection
Scale 1:100,000 at Lat 61° 02'

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	(LAT/LONG)	Height referred to datum of soundings (MLLW) Mean Higher High Water	Mean High Water	Mean Low Water
		feet	feet	feet
East Foreland, Cook Inlet	(60°43'N/151°25'W)	21.0	20.2	2.2
Fire Island, Cook Inlet	(61°10'N/150°12'W)	26.9	26.2	2.2
North Foreland, Cook Inlet	(61°03'N/151°10'W)	21.0	20.3	2.2
Anchorage, Knik Arm, Cook Inlet	(61°14'N/149°53'W)	29.2	28.4	2.2

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.

(Jul 2016)

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
s seconds
Oc occulting
Or orange
Q quick
R red
Ra Ref radar reflector
R Bn radiobeacon
R TR radio tower
Rot rotating
SEC sector
St M statute miles
VQ very quick
W white
WHIS whistle
Y yellow

Bottom characteristics:

Blds 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 existence doubtful
Obstn obstruction
PA position approximate
PD position doubtful
Rep reported
Subm submerged

(21) 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.

HEIGHTS

Elevations of rocks, bridges, landmarks and lights are in feet and refer to Mean High Water. Contour and summit elevation values are in feet and 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.

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.

COLREGS, 80.1705 (see note A)

International Regulations for Preventing Collisions at Sea, 1972.
The entire area of this chart falls seaward of the COLREGS Demarcation Line.

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 C

Hydrography in Tumagain Arm indicated within the dashed outline originates from surveys dated 1910 and 1912. Because of the highly changeable nature of the bottom, mariners should use extreme caution when navigating in this area.

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.

MINERAL DEVELOPMENT STRUCTURES

Obstruction lights and sound (fog) signals are required for fixed mineral development structures shown on this chart, subject to approval by the District Commander, U.S. Coast Guard (33 CFR 67).

CAUTION

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

The buoys in Cook Inlet are seasonally maintained from May 1 to Nov. 1. For details see U.S. Coast Guard Light List.

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.

Rugged I, AK	WNG-526	162.425 MHz
Point Pigot, AK	KZZ-93	162.450 MHz
Bede Mt, AK	WNG-528	162.450 MHz
Ninilchik, AK	KZZ-97	162.550 MHz
Wasilla, AK	KZZ-98	162.400 MHz
Anchorage, AK	KEC-43	162.550 MHz
Soldotna, AK	WWG-39	162.475 MHz

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.

SUPPLEMENTAL INFORMATION

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

AIDS TO NAVIGATION

Consult U.S. Coast Guard Light List for supplemental information concerning aids to navigation.

NOTE B

Area is subject to drastic and continuing change. Caution should be exercised when navigating in this area.

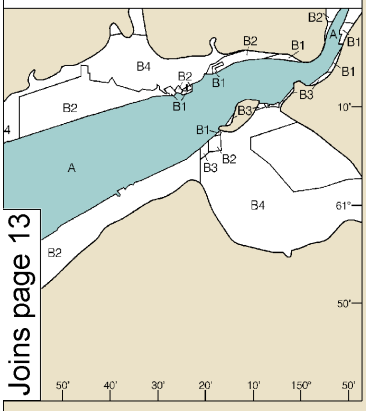
NOTE D
CAUTION
Cook Inlet, Eastern Portion

Numerous uncharted and dangerous submerged boulders exist in the eastern portion of Cook Inlet. Mariners should use extreme caution in this area.

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 1.988" southward and 7.996" westward to agree with this chart.

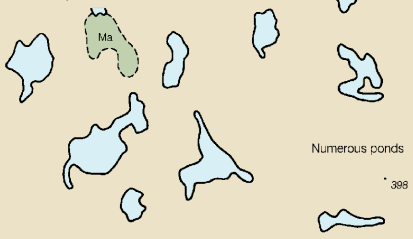
SOURCE	
NOS Surveys	full bottom coverage
NOS Surveys	partial bottom coverage
NOS Surveys	partial bottom coverage
NOS Surveys	partial bottom coverage
NOS Surveys	partial bottom coverage



Joins page 13

SOURCE DIAGRAM

esent the limits of the most recent hydrographic as been evaluated for charting. Surveys have been by date and type of survey. Channels maintained of Engineers are periodically resurveyed and are m. Refer to Chapter 1, United States Coast Pilot.



45' 40' 35' 30' 25' 20'

lished at Washington, D.C.
PARTMENT OF COMMERCE
IC AND ATMOSPHERIC ADMINISTRATION
TIONAL OCEAN SERVICE
COAST SURVEY

FATHOMS
FEET
METERS

14

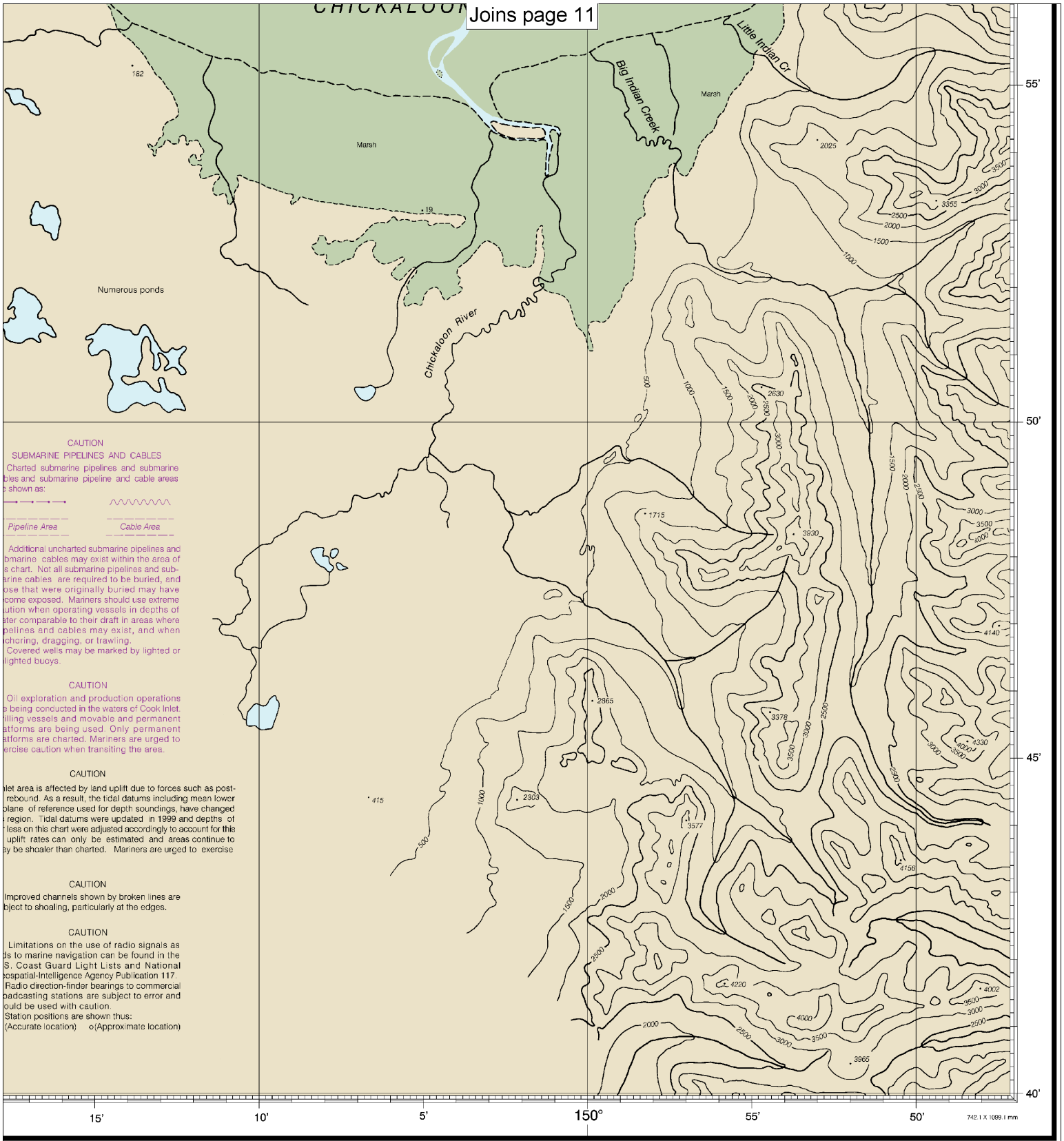
Note: Chart grid lines are aligned with true north.

Printed at reduced scale. ~~SCALE 1:100,000~~

Nautical Miles
1 0 1 2 3 4 5 6 7 8 9

Yards
2000 0 2000 4000 6000 8000 10000 12000

See Note on page 5.



CAUTION

SUBMARINE PIPELINES AND CABLES

Charted submarine pipelines and submarine bles and submarine pipeline and cable areas e shown as:

Pipeline Area — Cable Area

Additional uncharted submarine pipelines and bmarine cables may exist within the area of s chart. Not all submarine pipelines and sub- arine cables are required to be buried, and ose that were originally buried may have come exposed. Mariners should use extreme ution when operating vessels in depths of ater comparable to their draft in areas where pelines and cables may exist, and when chor ing, dragging, or trawling. Covered wells may be marked by lighted or lighted buoys.

CAUTION

Oil exploration and production operations e being conducted in the waters of Cook Inlet. illing vessels and movable and permanent atforms are being used. Only permanent atforms are charted. Mariners are urged to ercise caution when transiting the area.

CAUTION

let area is affected by land uplift due to forces such as post- rebound. As a result, the tidal datums including mean lower plane of reference used for depth soundings, have changed region. Tidal datums were updated in 1999 and depths of less on this chart were adjusted accordingly to account for this uplift rates can only be estimated and areas continue to ay be shoaler than charted. Mariners are urged to exercise

CAUTION

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

CAUTION

Limitations on the use of radio signals as ds to marine navigation can be found in the S. Coast Guard Light Lists and National ospatial-Intelligence Agency Publication 117. Radio direction-finder bearings to commercial oadcasting stations are subject to error and ould be used with caution.

Station positions are shown thus:

(Accurate location) o(Approximate location)

Cook Inlet, East Foreland to Anchorage

SOUNDINGS IN FATHOMS - SCALE 1:100,000

16663

15

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!

All Hazards NOAA Weather Radio NOAA's National Weather Service

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://ocsdata.ncd.noaa.gov/idrs/discrepancy.aspx**
Chart and chart related inquiries and comments	—	**http://ocsdata.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 Hurrican 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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