

BookletChart™



Passage Canal – Including Port of Whittier

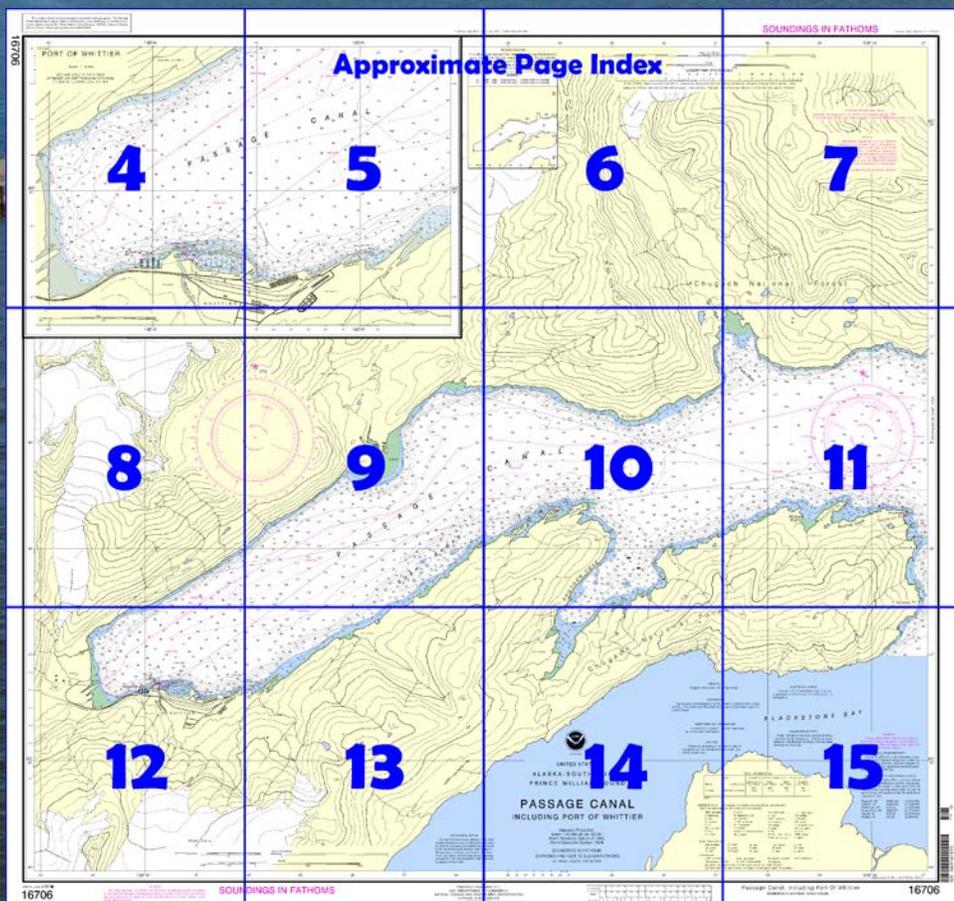
NOAA Chart 16706

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.

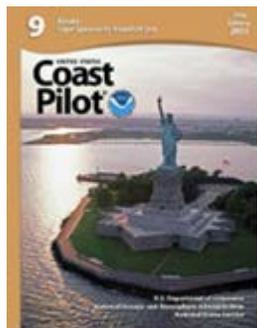
Whenever possible, use the official, full scale NOAA nautical chart for navigation. Nautical chart sales agents are listed on the Internet at <http://www.NauticalCharts.NOAA.gov>.

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=16706>.



(Selected Excerpts from Coast Pilot)

Decision Point, on the S side of Passage Canal about 3 miles W of Point Pigot, is marked on the N end by **Decision Point Light** (60°48'22"N., 148°27'20"W.), 35 feet (10.7 m) above the water and shown from a skeleton tower with a red and white diamond-shaped daymark.

Shotgun Cove, on the S side of Passage Canal 2.5 miles W of Decision Point, has depths through the middle of 21 to 32 fathoms, muddy bottom. The cove rapidly

shoals at the narrow parts at the head; approaching slowly, a small vessel can select anchorage just above the head of the bay in 15 to 20 fathoms. Several mooring buoys are in the cove used by tug and barges.

The bight on the SE side of Shotgun Cove is obstructed near the middle by a rock covered ½ fathom. Anchorage with a clear width of 0.3 mile can be had in the NE part of this bight in 15 to 20 fathoms, mud bottom. **Trinity Point** is on the S side of Passage Canal 3 miles W of Decision Point. Tiny **Emerald Island** is 0.4 mile W of Trinity Point. A light, 39 feet above water, is shown from a skeleton tower with a red and white daymark on the outer end of the narrow point between Trinity Point and Emerald Island. Small **Emerald Bay** extends SW from the island. Small craft can anchor just outside the bay in 2½ to 3¾ fathoms of water with mud bottom.

Anchorage in 12 to 18 fathoms, sticky bottom, can be had on **Bush Banks** which extend 0.3 mile from the S side of Passage Canal at a point 0.7 mile WSW from Emerald Island and 3 miles from the head. The least depth is 4½ fathoms at the SW end of the banks. Small craft can anchor at the NW end of the head of the canal in 6 to 12 fathoms.

Whittier is on the S side of Passage Canal, 1.5 miles from the head. The town is the terminus for the Alaska Railroad and has a fish processing plant and a U.S. Army fuel depot. The waterfront was greatly destroyed during the 1964 earthquake and the dock facilities were rebuilt in the 1970's. The port handles large numbers of railroad cars, the Alaska State Ferry handles autos and passengers, and cruise ships and tour boats bring tourists during the summer.

Anchorage.—Large vessels sometimes anchor clear of the 4 ½-fathom shoal on Bush Banks about 2 miles NE of Whittier or in Pigot Bay.

Currents.—The currents have little velocity in Passage Canal.

Ice.—Whittier is a year round ice-free port.

Pilotage, Whittier.—Pilotage, except for certain exempted vessels, is compulsory for all vessels navigating the waters of the State of Alaska. Pilots for Prince William Sound are available from the Southwest Alaska Pilots Association. (See **Pilotage, General** (indexed), chapter 3, for pilot pickup station and other details.)

Vessels en route Whittier or Valdez can contact the pilot boat by calling "EMERALD ISLAND" on VHF-FM channels 13 and 16, 24 hours daily.

Quarantine, customs, immigration, and agricultural quarantine.—(See chapter 3, Vessel Arrival Inspections, and Appendix A for addresses.)

Quarantine is enforced in accordance with regulations of the U.S. Public Health Service. (See Public Health Service, chapter 1.)

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

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

Table of Selected Chart Notes

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HEIGHTS
Heights in feet above Mean High Water.

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

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

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 2.135" southward and 7.587" westward to agree with this chart.

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.

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 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.

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.

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
Naked I, AK	WNG-530	162.500 MHz
Point Pigot, AK	KZZ-93	162.450 MHz
Potato Point, AK	WNG-527	162.425 MHz
Wasilla, AK	KZZ-98	162.400 MHz
Whittier, AK	KXI-29	162.40 MHz

Mercator Projection
Scale 1:20,000 at Lat. 60°49'
North American Datum of 1983
(World Geodetic System 1984)

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

AUTHORITIES
Hydrography and topography by the National Ocean Service, Coast Survey, with additional data from the Corps of Engineers, and U.S. Coast Guard.

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.

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.

TIDAL INFORMATION					
Place		Height referred to datum of soundings (MLLW)			
Name	(LAT/LONG)	Mean Higher High Water	Mean High Water	Mean Low Water	Extreme Low Water
Whittier	(60°47'N/148°40'W)	feet 12.3	feet 11.3	feet 1.5	feet -4.0
(397)					

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

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

Bottom characteristics:

Bids boulders	Co coral	gy gray	Oys oysters	so soft
bk broken	G gravel	h hard	Rk rock	Sh shells
Cy clay	Grs grass	M mud	S sand	sy sticky

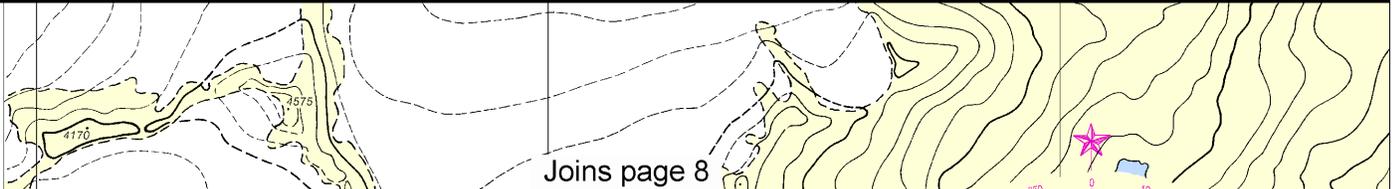
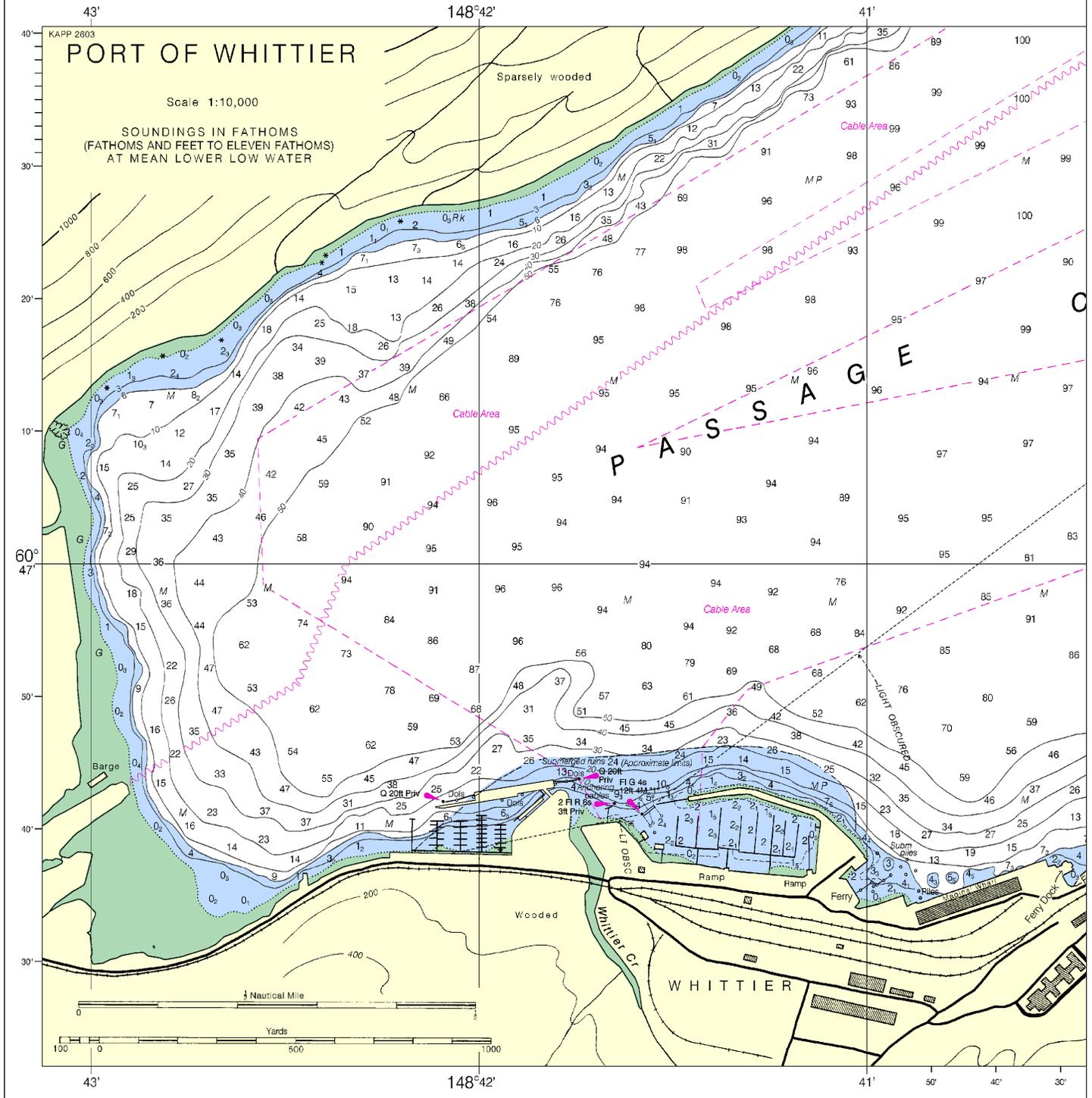
Miscellaneous:

AUTH authorized	Obstm obstruction	PD position doubtful	Subm submerged
ED existence doubtful	PA position approximate	Rep reported	

(1) 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.

This nautical chart has been designed to promote safe navigation. The National Ocean Service encourages users to submit corrections, additions, or comments for improving this chart to the Chief, Marine Chart Division (N/CS2), National Ocean Service, NOAA, Silver Spring, Maryland 20910-3282.

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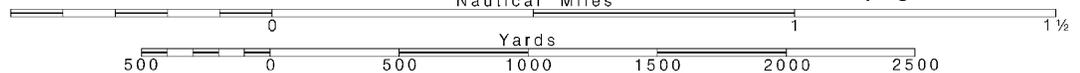
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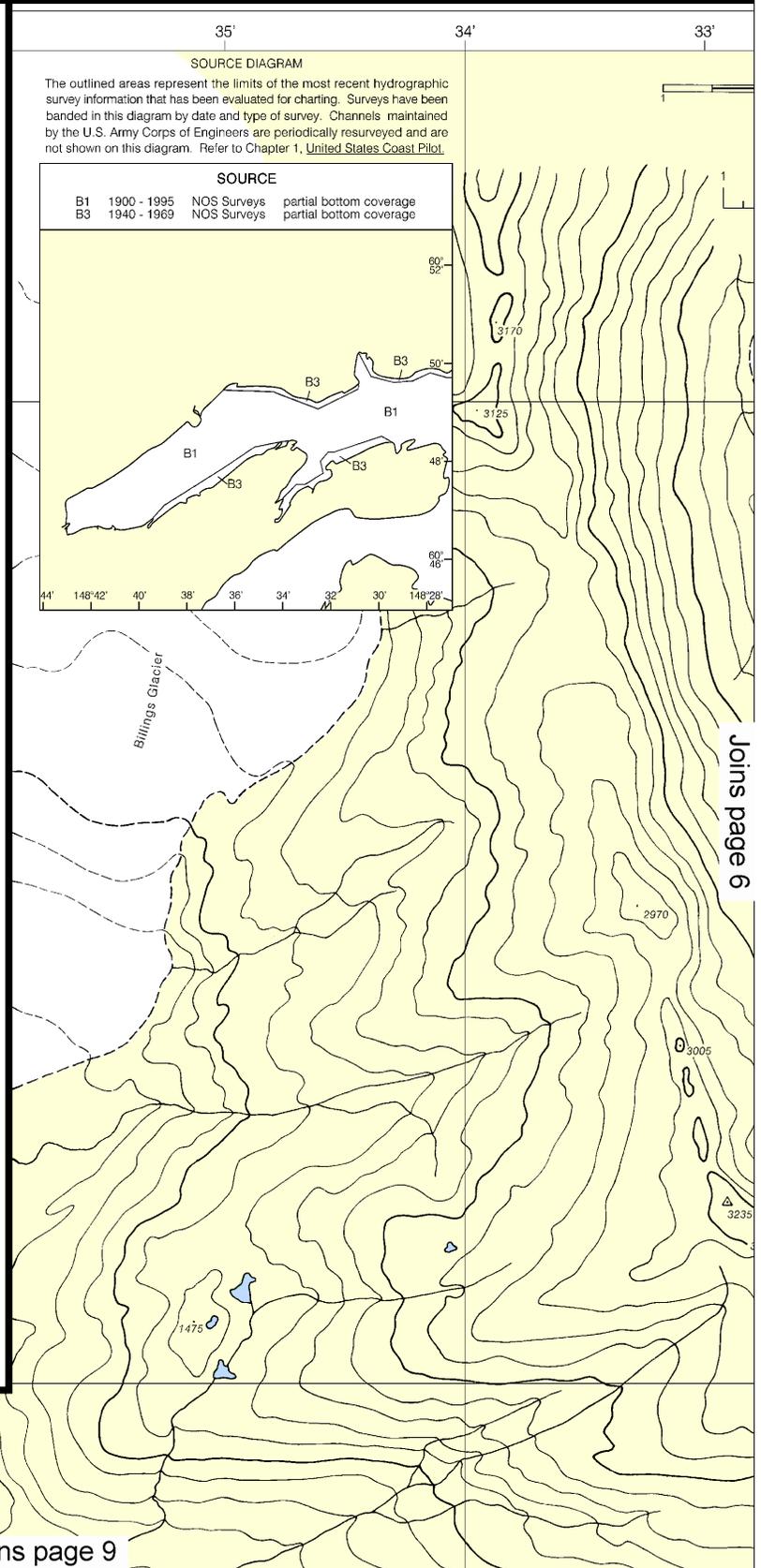
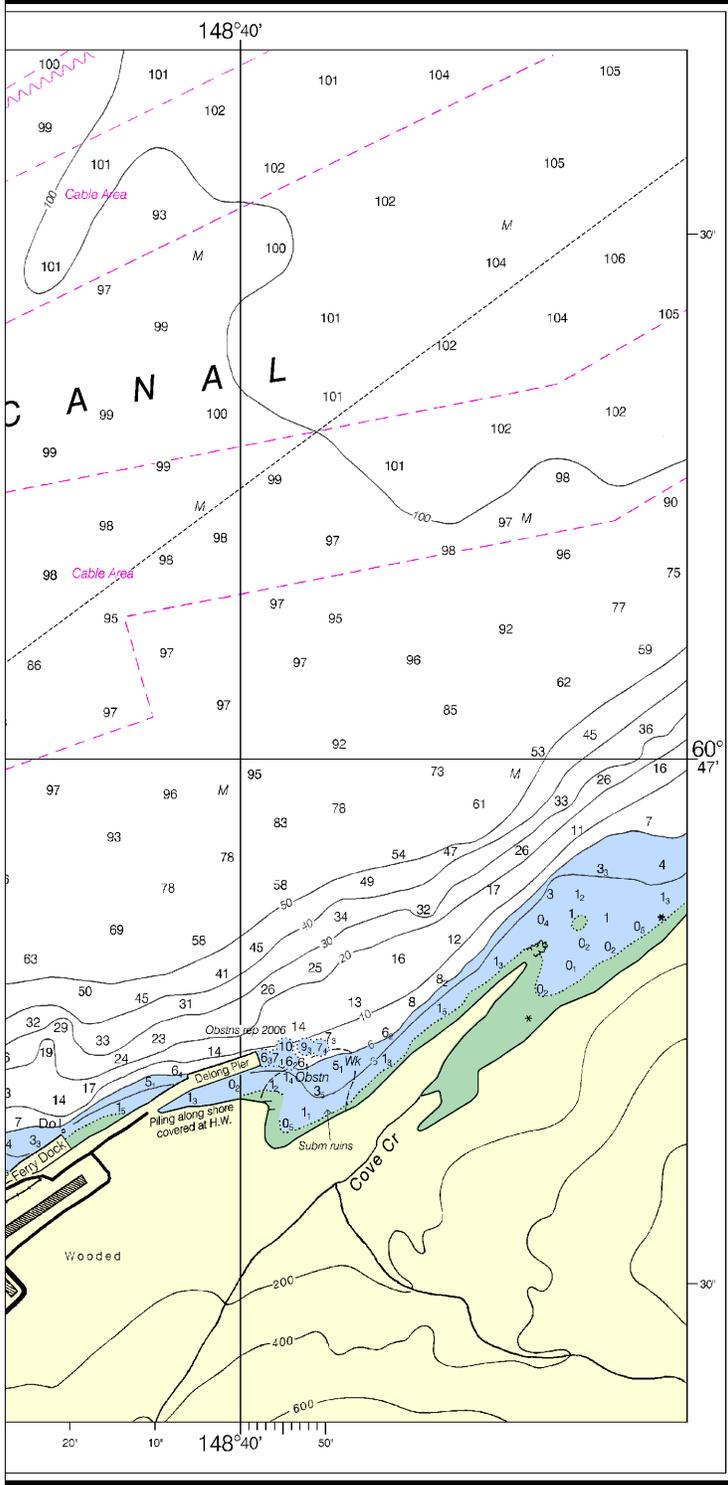
Note: Chart grid lines are aligned with true north.

Printed at reduced scale.

SCALE 1:20,000
Nautical Miles

See Note on page 5.



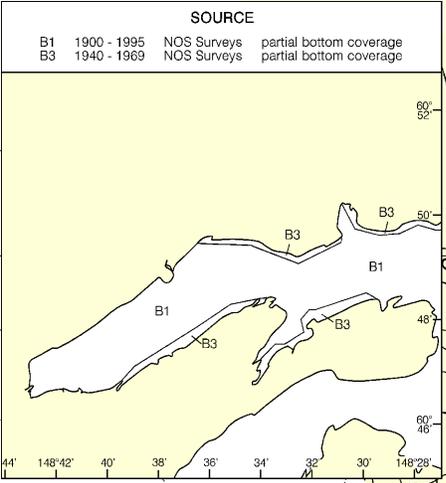


SOURCE DIAGRAM

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.

SOURCE

B1	1900 - 1995	NOS Surveys	partial bottom coverage
B3	1940 - 1969	NOS Surveys	partial bottom coverage



Joins page 6

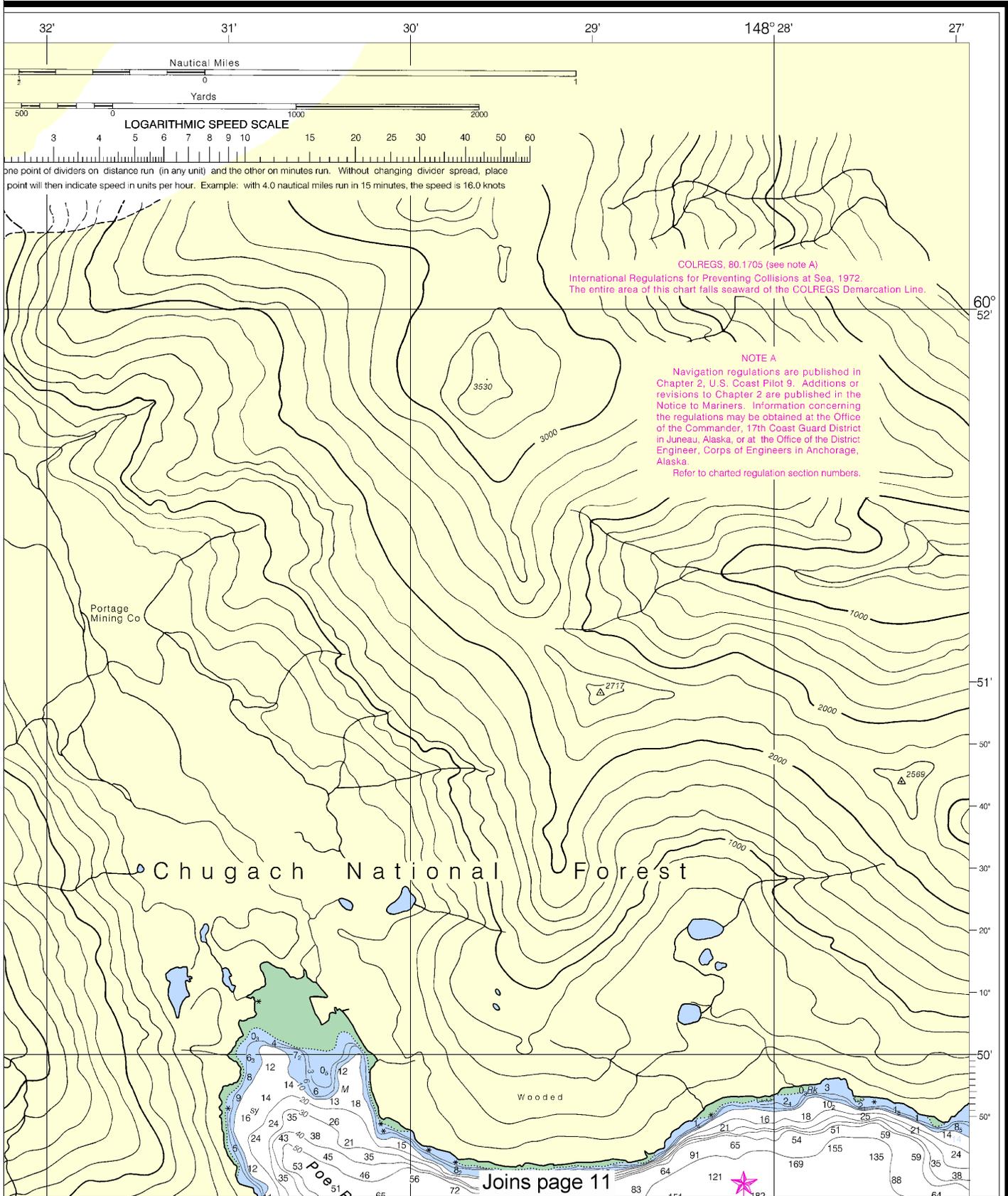
Joins page 9

This BookletChart was reduced to 75% of the original chart scale. The new scale is 1:26667. Barscales have also been reduced and are accurate when used to measure distances in this BookletChart.

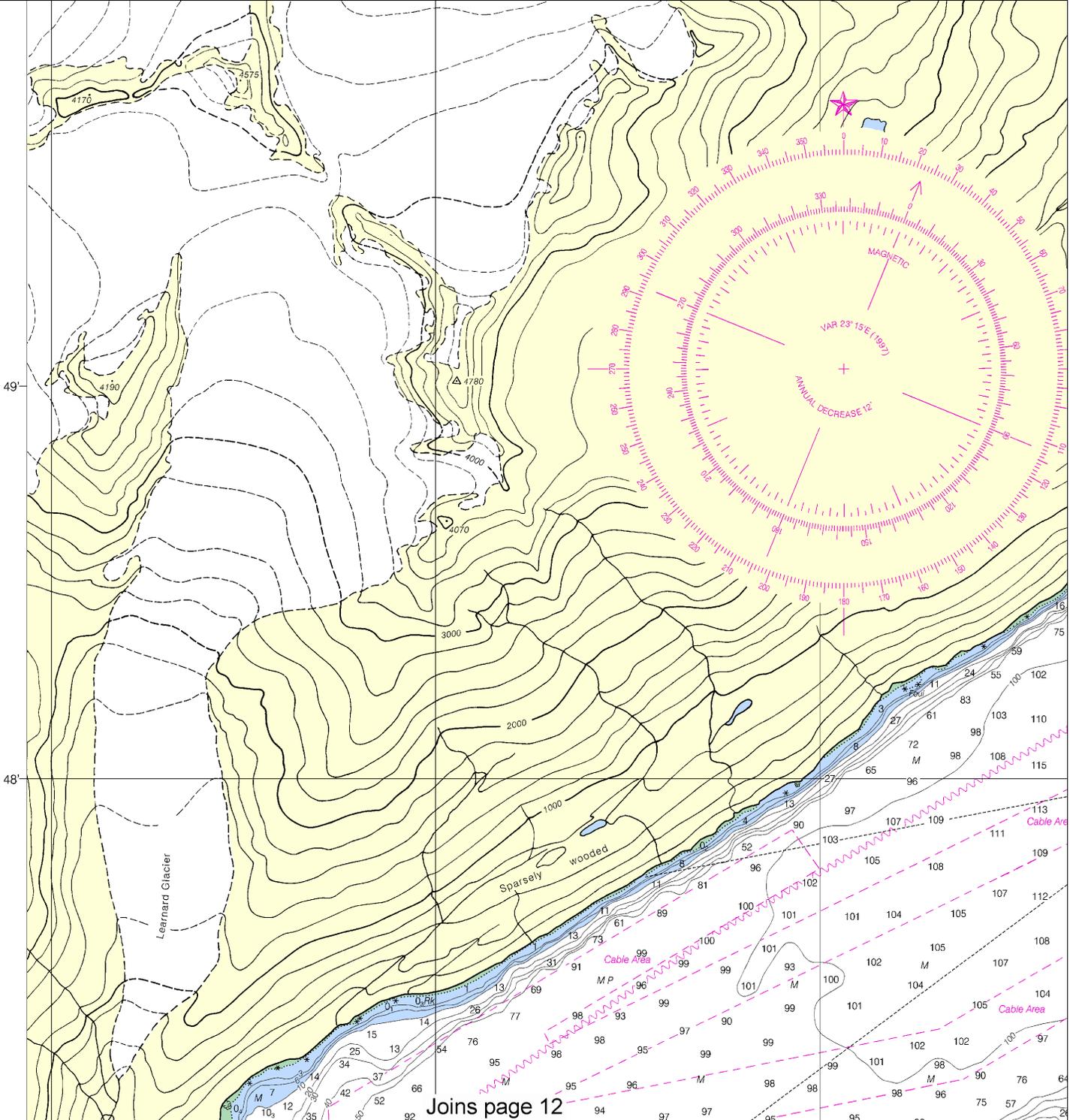
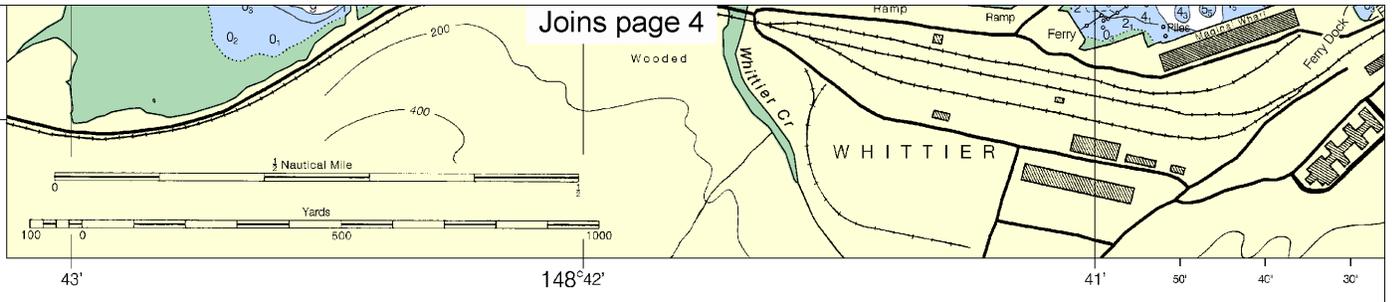


SOUNDINGS IN FATHOMS

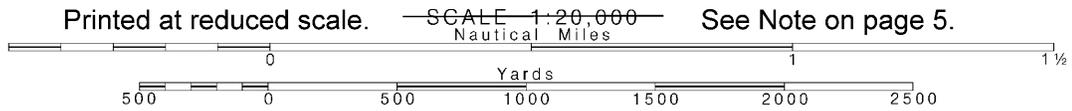
Nautical Chart Catalog No. 3, Panel L

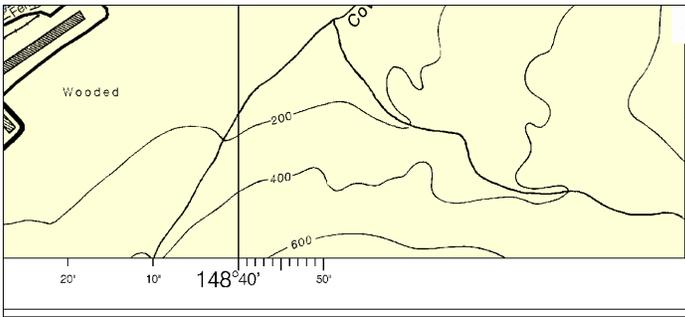


This BookletChart has been updated through: Coast Guard Local Notice To Mariners: 4812 11/27/2012,
NGA Weekly Notice to Mariners: 4812 12/1/2012,
Canadian Coast Guard Notice to Mariners: 0912 9/28/2012.

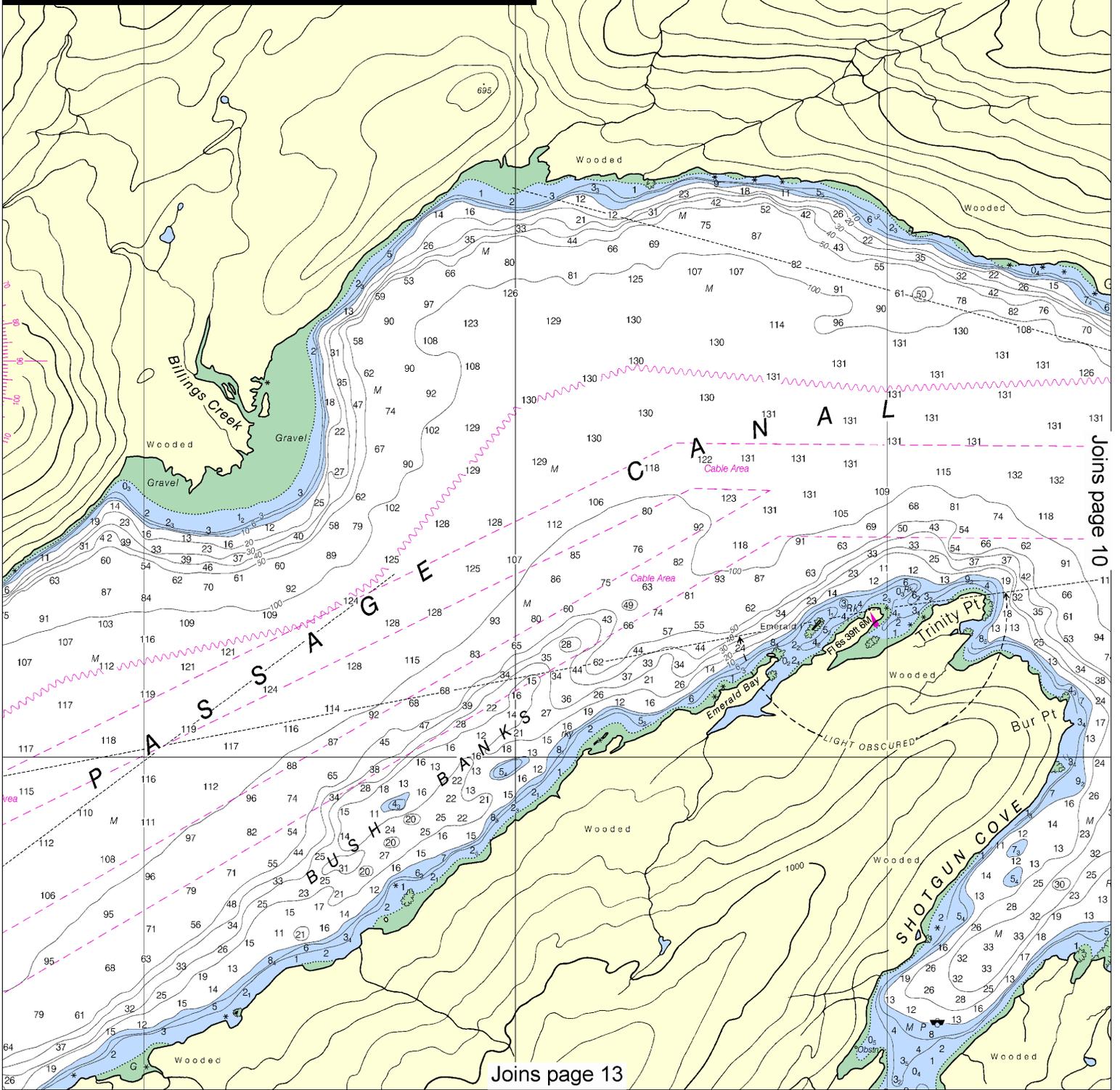


Note: Chart grid lines are aligned with true north.



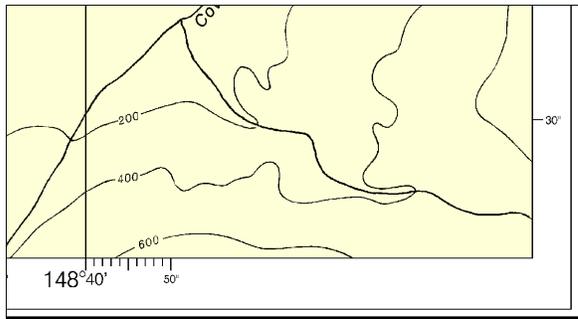


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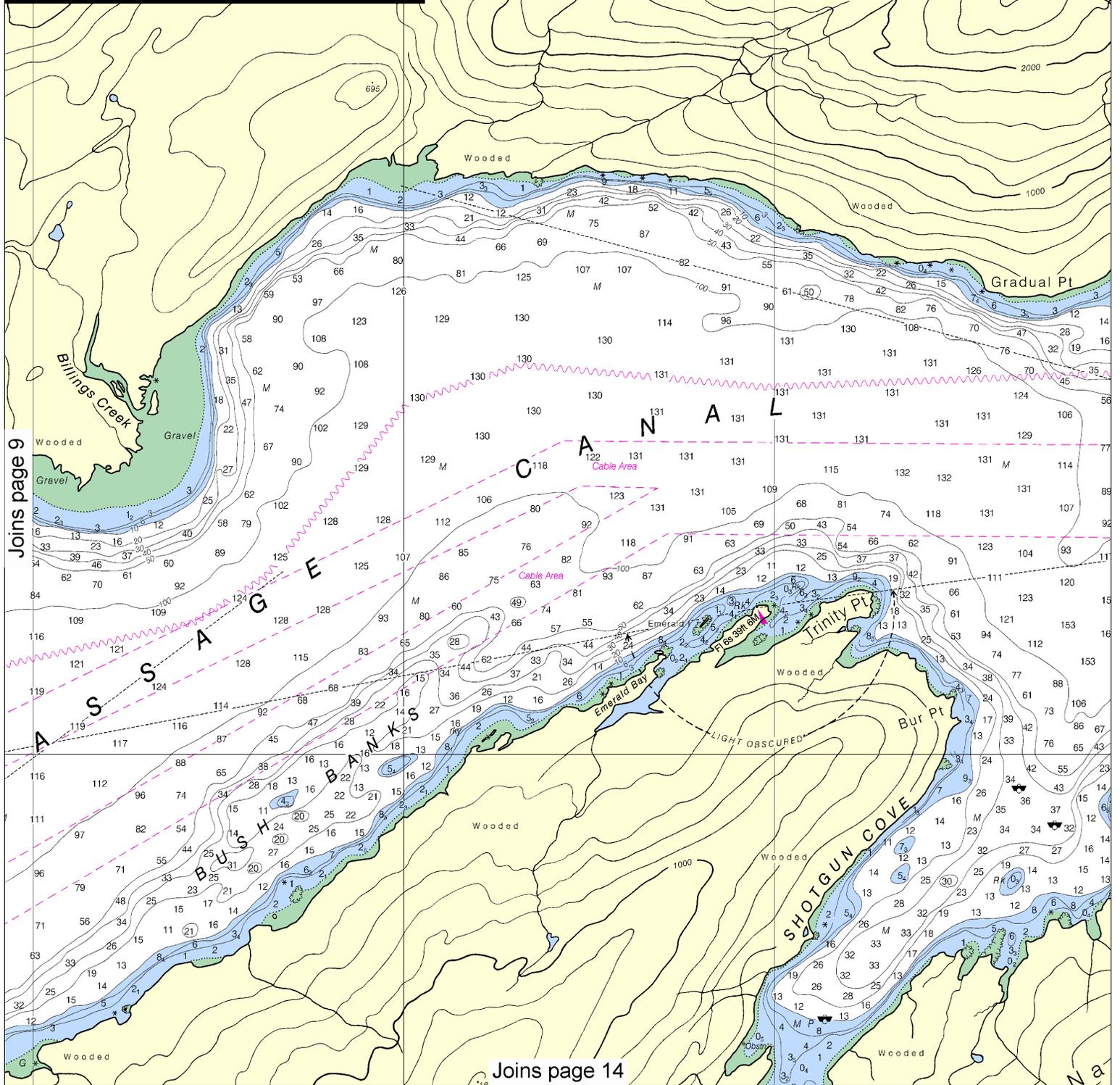


Joins page 10

Joins page 13



Joins page 6



Joins page 14

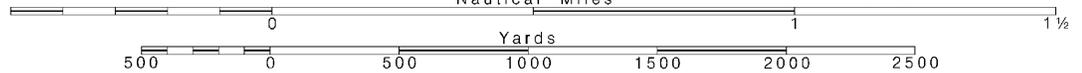
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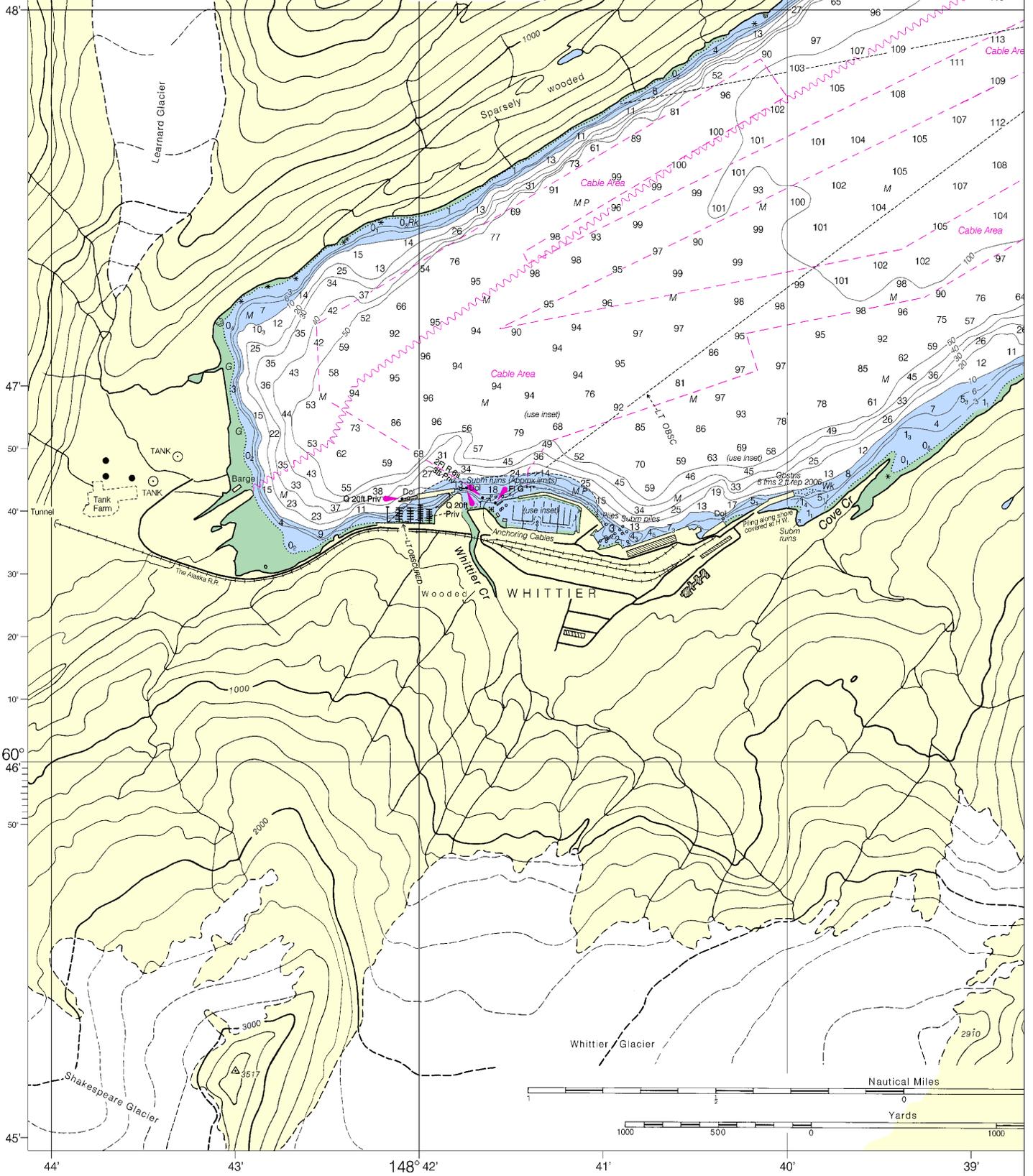
Note: Chart grid lines are aligned with true north.

Printed at reduced scale.

SCALE 1:20,000
Nautical Miles

See Note on page 5.





10th Ed., July 26/97 ■
16706

CAUTION

This chart has been corrected from the Notice to Mariners published weekly by the National Imagery and Mapping Agency and the Local Notice to Mariners issued periodically by each U.S. Coast Guard district to the date shown in the lower left hand corner.

SOUNDINGS IN FATHOMS

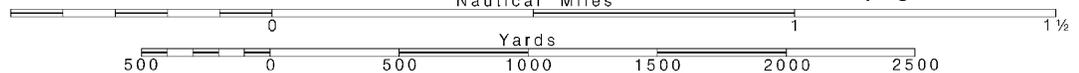
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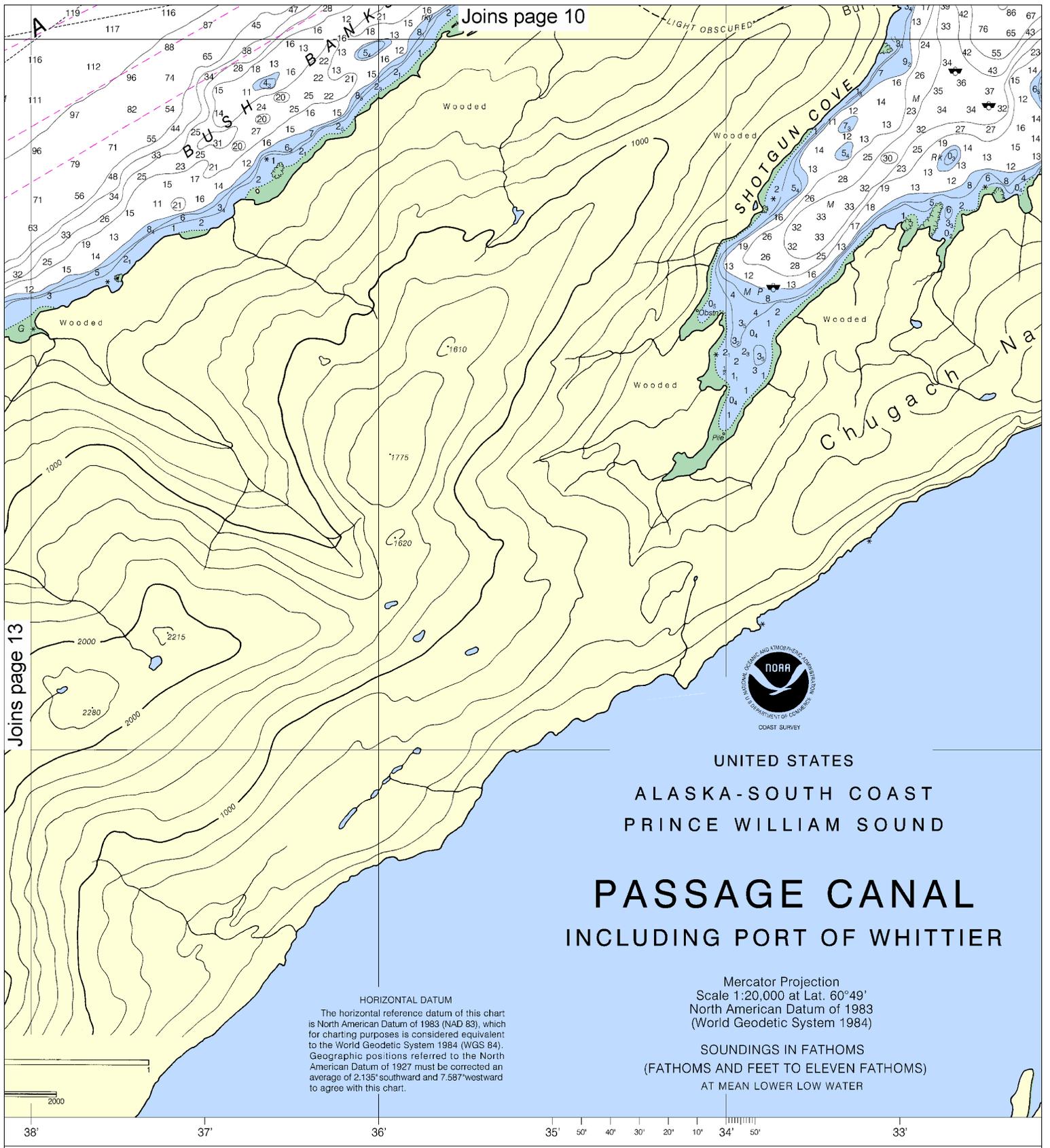
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SCALE 1:20,000
Nautical Miles

See Note on page 5.





Joins page 10

Joins page 13



UNITED STATES
 ALASKA-SOUTH COAST
 PRINCE WILLIAM SOUND

PASSAGE CANAL

INCLUDING PORT OF WHITTIER

HORIZONTAL DATUM
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Mercator Projection
 Scale 1:20,000 at Lat. 60°49'
 North American Datum of 1983
 (World Geodetic System 1984)

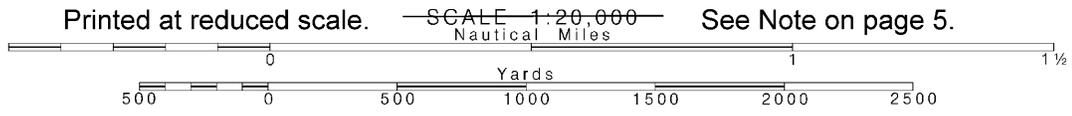
SOUNDINGS IN FATHOMS
 (FATHOMS AND FEET TO ELEVEN FATHOMS)
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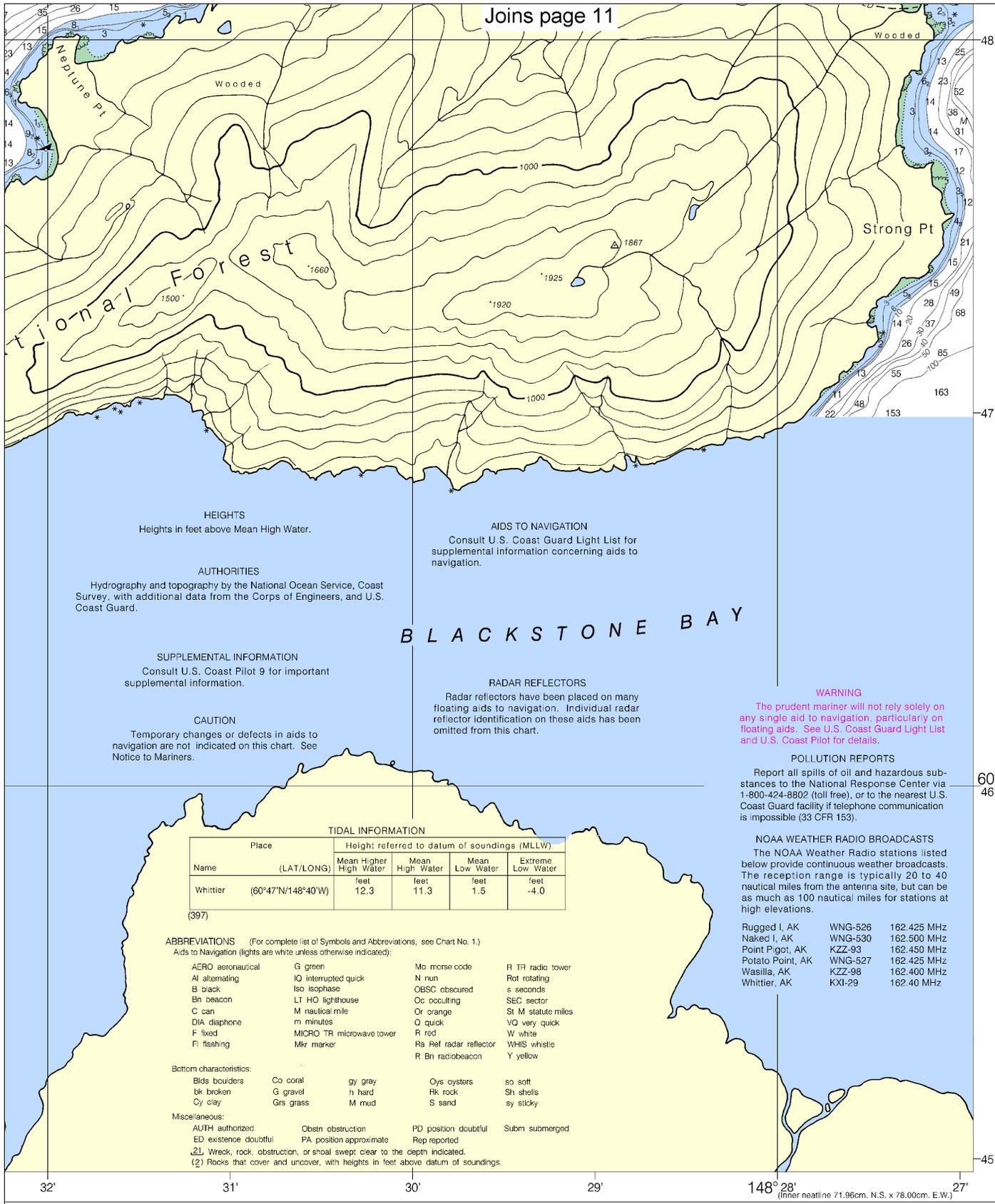
Published at Washington, D.C.
 U.S. DEPARTMENT OF COMMERCE
 NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
 NATIONAL OCEAN SERVICE
 COAST SURVEY

FATHOMS	1	2	3	4	5	6	7	8
FEET	6	12	18	24	30	36	42	48
METERS	1	2	3	4	5	6	7	8

14

Note: Chart grid lines are aligned with true north.





HEIGHTS
Heights in feet above Mean High Water.

AUTHORITIES
Hydrography and topography by the National Ocean Service, Coast Survey, with additional data from the Corps of Engineers, and U.S. Coast Guard.

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

CAUTION
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AIDS TO NAVIGATION
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NOAA WEATHER RADIO BROADCASTS
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Whittier, AK	KXI-29	162.40 MHz

TIDAL INFORMATION

Place Name (LAT/LONG)	Height referred to datum of soundings (MLLW)			
	Mean Higher High Water feet	Mean High Water feet	Mean Low Water feet	Extreme Low Water feet
Whittier (60°47'N/148°40'W) (397)	12.3	11.3	1.5	-4.0

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

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

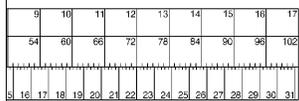
Bottom characteristics:

Blds boulders	Co coral	gy gray	Oys oysters	so soft
bk broken	G gravel	h hard	Rk rock	Sh shells
Cy clay	Grs grass	M mud	S sand	sy sticky

Miscellaneous:

AUTH authorized	Obstn obstruction	PD position doubtful	Subm submerged
ED existence doubtful	PA position approximate	Rep reported	

(W) Wreck, rock, obstruction, or shoal swept clear to the depth indicated.
(U) Rocks that cover and uncover, with heights in feet above datum of soundings.



Passage Canal, including Port Of Whittier
SOUNDINGS IN FATHOMS - SCALE 1:20,000

16706





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>
- Online chart viewer — <http://www.nauticalcharts.noaa.gov/mcd/NOAChartViewer.html>
- 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 @nauticalcharts



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.

