

BookletChart™

Strait of Juan de Fuca Entrance

NOAA Chart 18460

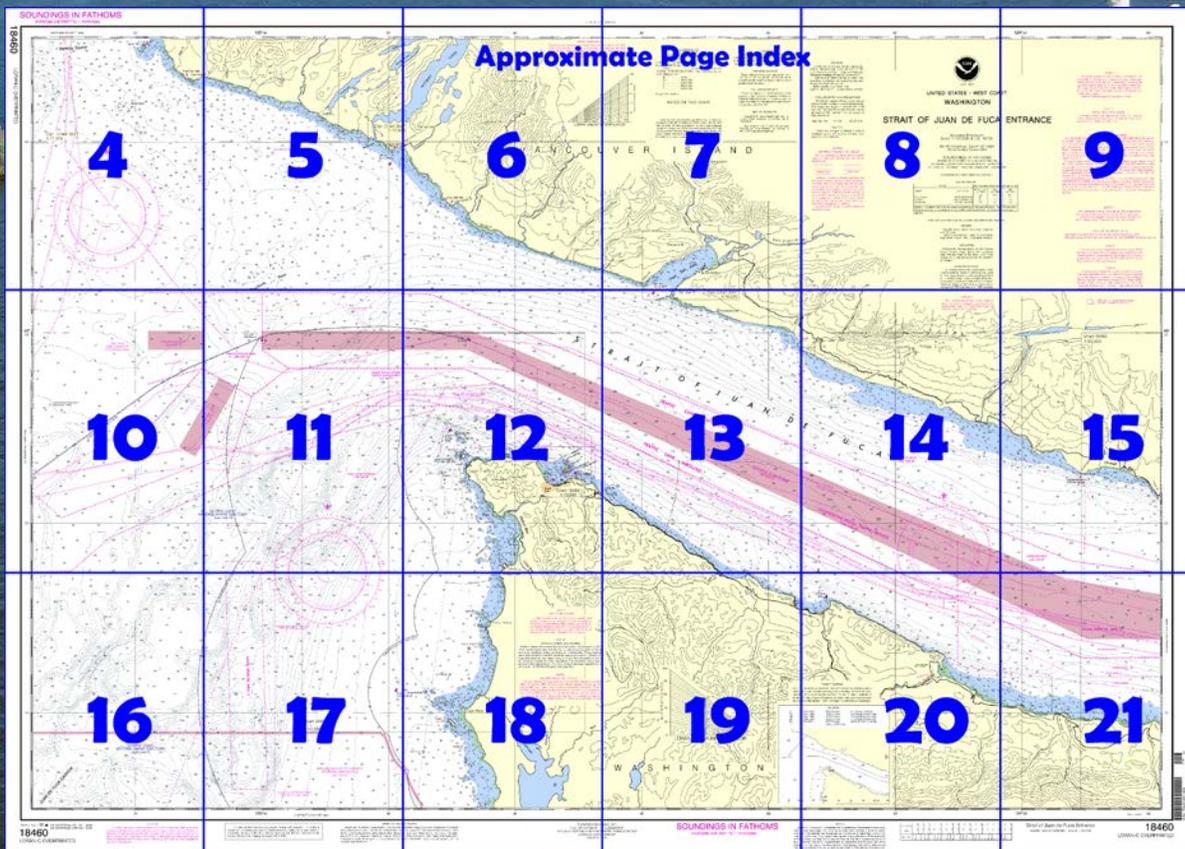


A reduced-scale NOAA nautical chart for small boaters

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.

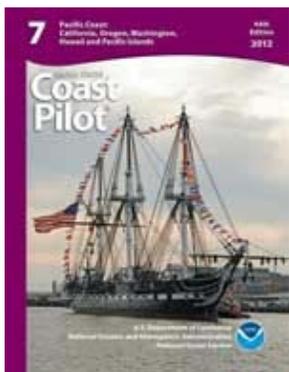
Whenever possible, use the official, full scale NOAA nautical chart for navigation. Nautical chart sales agents are listed on the Internet at <http://www.NauticalCharts.NOAA.gov>.

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=18460>.



(Selected Excerpts from Coast Pilot)

Cape Alava is 13 miles S of Cape Flattery. The seaward face is about 0.6 mile in extent. **Tskawahyah Island**, a steep rocky island is off its NW extremity. The shore is bordered by numerous rocks and covered ledges. **Flattery Rocks** and Umatilla Reef are rocks and islets extending W from Cape Alava for 2.3 miles. **Ozette Island**, 236 feet high, is 0.8 mile SW of the cape. The island, 0.5 mile long, is flat-topped with steep sides. About 0.3 mile off the S and

SE sides are low, black rocks. **Bodelteh Islands**, 1.2 miles WNW of the N end of Cape Alava, have high bold seaward faces.

In season, a few fishermen find shelter in an anchorage off the SE end of Ozette Island. The area is small and requires local knowledge to enter. It affords fair protection from the prevailing NW wind.

Umatilla Reef, 2.3 miles NW of Cape Alava, the greatest danger to navigation off this section of the coast, is 0.7 mile W of the outer Bodelteh Island. It extends for 200 yards in a W direction and is about 75 yards wide. The reef consists of small, low, black rocks and some breakers. There is a rock covered ½ fathom, 0.3 mile E of Umatilla Reef, which endangers passage inside, sometimes used by small boats.

Point of Arches, 5 miles NNE of Cape Alava, is the N point of the cliffs that extend some 1.5 miles S. Numerous rocks and ledges are offshore as far as about a mile.

Father and Son, two rocks connected by a low reef, lie 0.6 mile offshore abreast the S end of the cliffs. From the outer rock to Spike Rock there are several exposed rocks.

A **Cooperative Vessel Traffic Service (CVTS)** has been established in the Strait of Juan de Fuca region, based on an agreement between the United States and Canada. Operated by the U.S. Coast Guard and the Canadian Coast Guard, the system is intended to enhance safe and expeditious vessel movement, and to minimize risk of pollution to the marine environment; the system is **mandatory**. The appropriate Vessel Traffic Center (VTC) (Tofino Traffic, Seattle Traffic, Victoria Traffic) administers the rules issued by both nations, however, it will enforce only its own set of rules within its jurisdiction. The CVTS Exchange lines delineating the sector boundaries and frequency change lines between Vessel Traffic Center management authorities are published below and in the VTS User's Manual. Useful information for operating in the CVTS area is available via <http://www.uscg.mil/d13/cvts>.

Caution.—Since logging is one of the main industries of the region, free-floating logs and submerged deadheads or sinkers are a constant source of danger in the Strait of Juan de Fuca and Puget Sound. The danger is increased during freshets, after storms, and unusually high tides. **Deadheads** or **sinkers** are logs which have become adrift from rafts or booms, have become waterlogged, and float in a vertical position with one end just awash, rising and falling with the tide.

Currents, Cape Flattery to Race Rocks.—The currents may attain velocities of 2 to 4 knots, varying with the range of tide, and are influenced by strong winds. E of Race Rocks, in the wider portion of the strait, the velocity is considerably less. At Race Rocks and Discovery Island the velocity may be 6 knots or more.

The **flood current** entering the Strait of Juan de Fuca sets with considerable velocity over Duncan and Duntze Rocks, but, instead of running in the direction of the channel, it has a continued set toward the Vancouver Island shore, is experienced as far as Race Rocks. The flood current velocity is greater on the N shore of the strait than on the S.

The **ebb current** is felt most along the S shore of the strait, and between New Dungeness Light and Crescent Bay there is a decided set S and W, especially during large tides. With the wind and swell against the current, a short choppy sea is raised near the entrance to the strait.

Pilotage, Strait of Juan de Fuca and Puget Sound.—Pilotage is compulsory for all foreign vessels and U.S. vessels engaged in foreign trade. Pilotage is optional for U.S. vessels engaged in the coastwise trade with a federally licensed pilot on board.

A Canadian Armed Forces **firing** and **practice exercise area** is established in the vicinity of Sheringham Point and San Simon Point about 8 miles to the W.

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

RCC Seattle Commander
13th CG District (206) 220-7001
Seattle, WA

Table of Selected Chart Notes

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).

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.

Neah Bay, WA	KIH-36	162.550 MHz
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CAUTION

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

SOUNDINGS IN FATHOMS

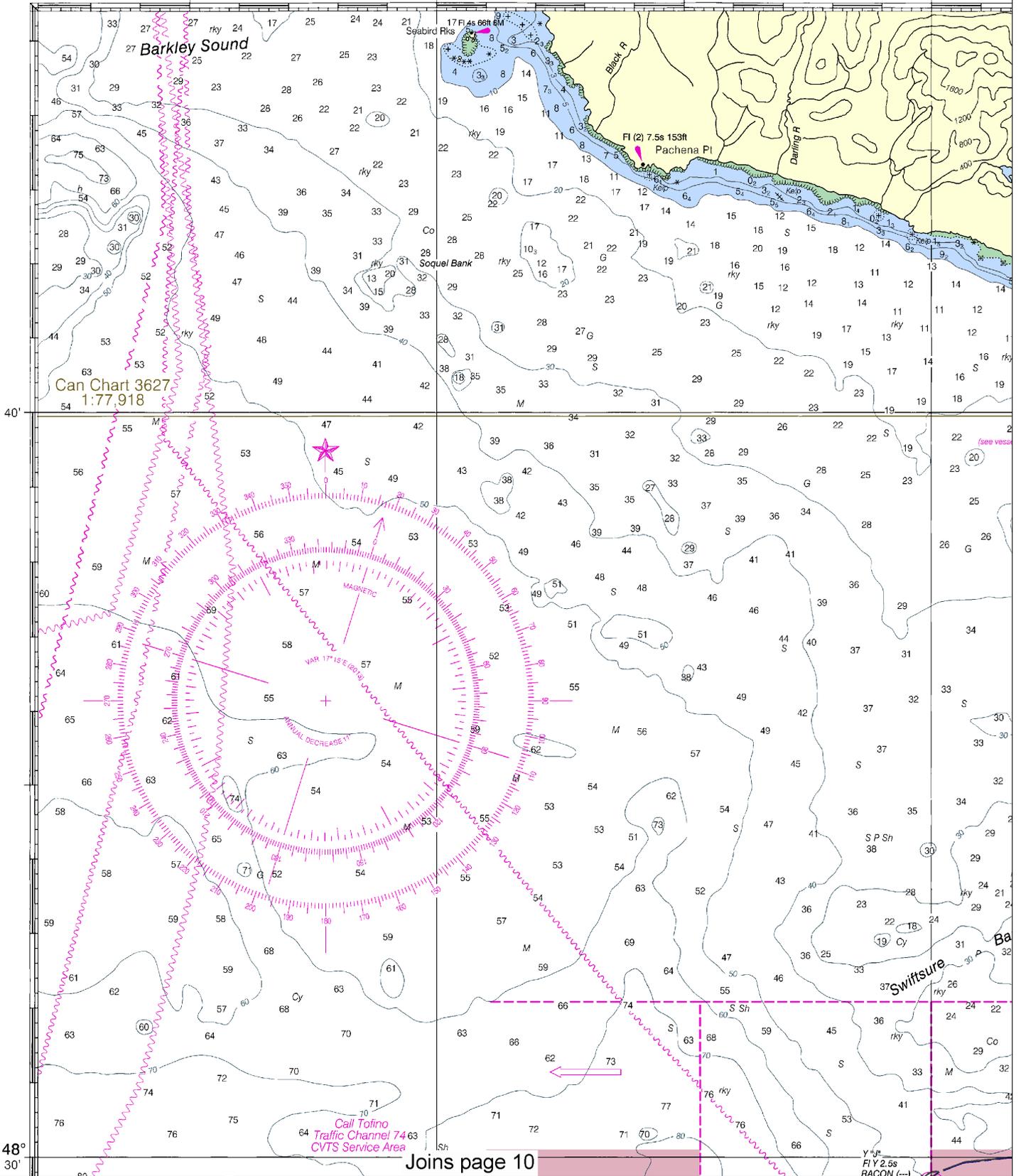
(FATHOMS AND FEET TO 11 FATHOMS)

18460

CONTINUED ON CHART 18480

10'

125°00'



Can Chart 3627
1:77,918

Joins page 10

Y 4.5
Fl Y 2.5s
BACON (—)

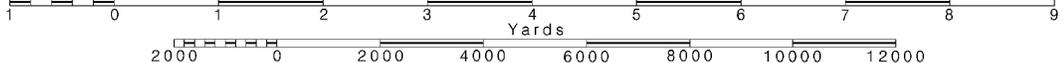
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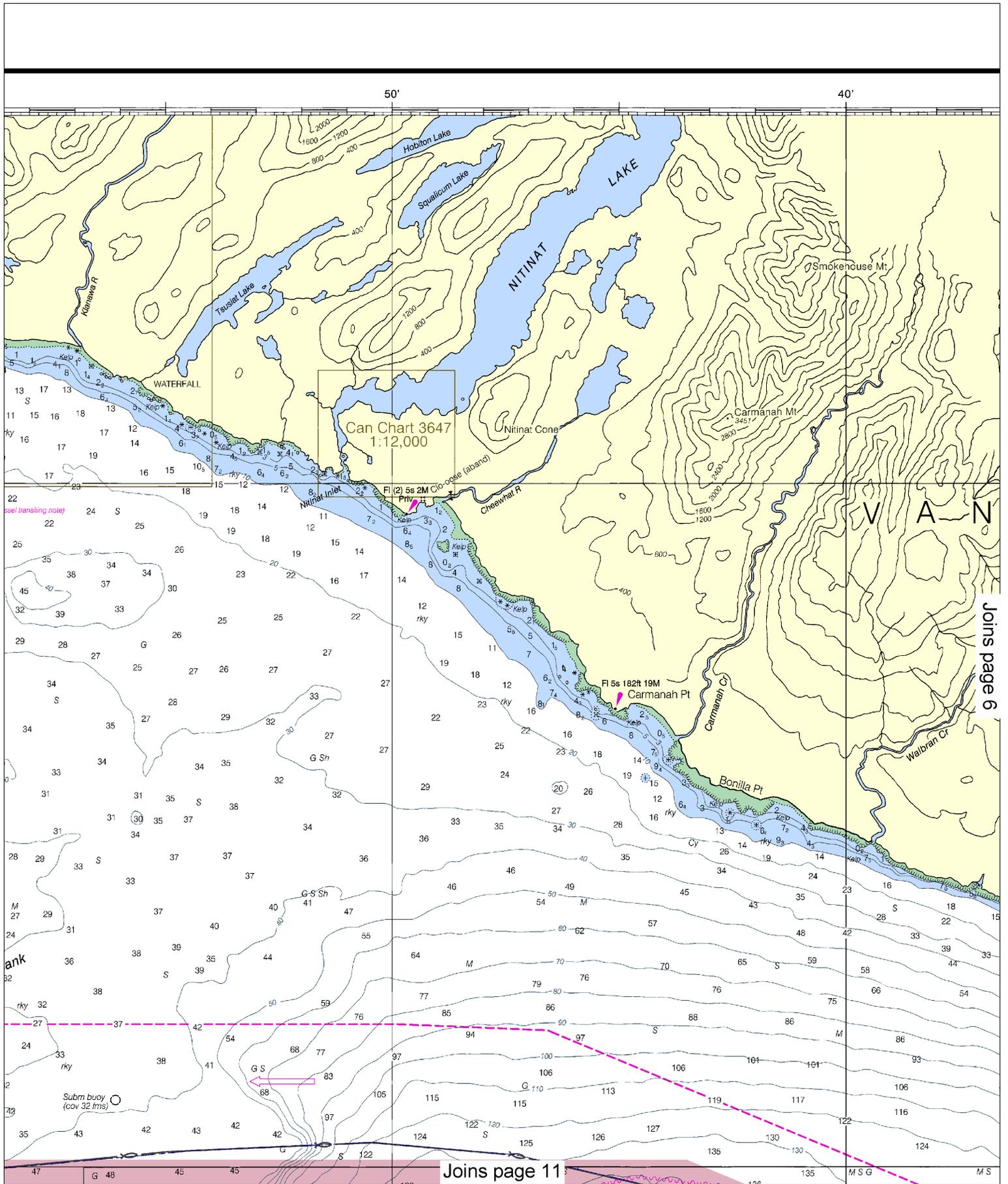
Note: Chart grid lines are aligned with true north.

Printed at reduced scale.

SCALE 1:100,000
Nautical Miles

See Note on page 5.



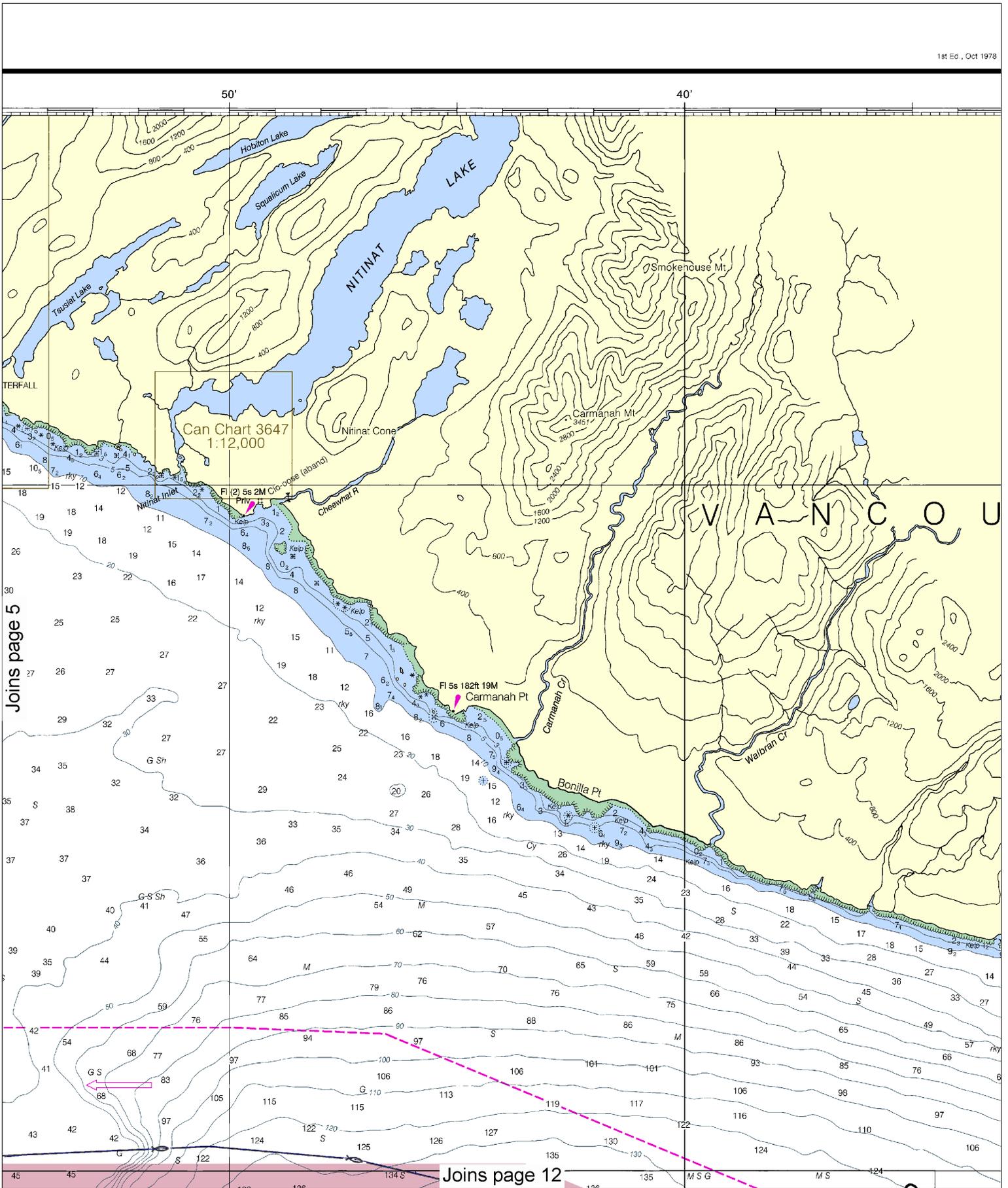


This BookletChart was reduced to 75% of the original chart scale.
 The new scale is 1:133333. Barscales have also been reduced and
 are accurate when used to measure distances in this BookletChart.



50'

40'



Joins page 5

Joins page 12

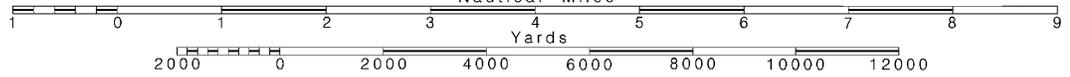


Note: Chart grid lines are aligned with true north.

Printed at reduced scale.

SCALE 1:100,000

See Note on page 5.



30'

20'

VESSEL TRANSITING

The U.S. Coast Guard and the Pacific States/British Columbia Oil Spill Task Force endorse a system of voluntary measures and minimum distances from shore for certain commercial vessels transiting along the coast anywhere between Cook Inlet, Alaska and San Diego, California. See U.S. Coast Pilot 7 or 8, Chapter 3 for details.

NOTE K

Submerged submarine operations are conducted at various times in the waters contained on this chart. Proceed with caution.

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.

COPYRIGHT

No copyright is claimed by the United States Government under Title 17 U.S.C. However, other nations may claim intellectual property rights on the compilation of data depicting the foreign waters shown on this chart.

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.

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).

AIDS TO NAVIGATION

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

See Canadian List of Lights, Buoys and Fog Signals for information not included in the U.S. Coast Guard Light List.

CAUTION

Limitations on the use of radio signals as aids to marine navigation can be found in the U.S. Coast Guard Light Lists and National Geospatial-Intelligence Agency Publication 117.

Radio direction-finder bearings to commercial broadcasting stations are subject to error and should be used with caution.

Station positions are shown thus:
○ (Accurate location) ◦ (Approximate location)

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.

Neah Bay, WA KIH-36 162.550 MHz

CAUTION

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

CAUTION

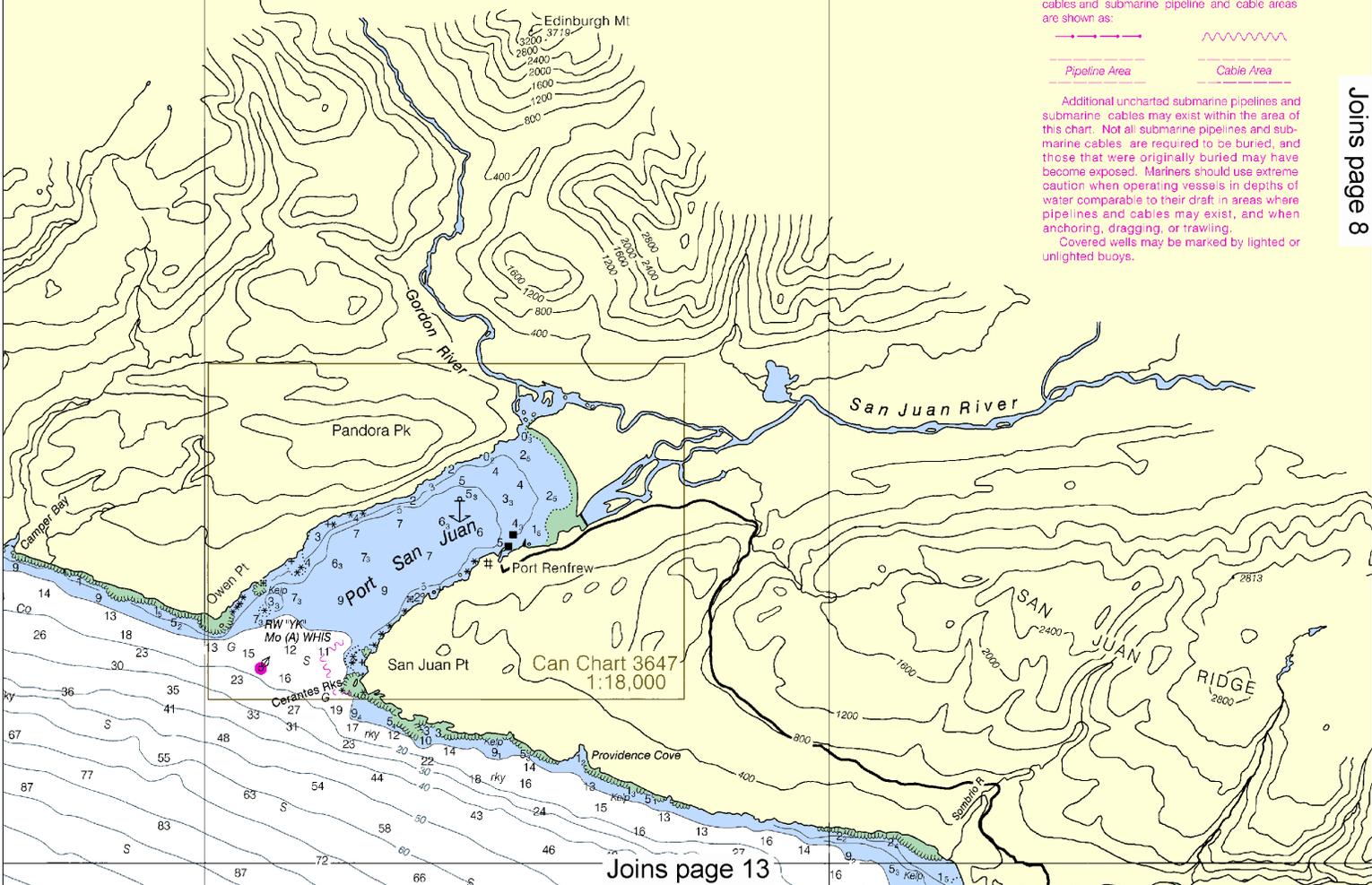
SUBMARINE PIPELINES AND CABLES

Charted submarine pipelines and submarine cables and submarine pipeline and cable areas are shown as:



Additional uncharted submarine pipelines and submarine cables may exist within the area of this chart. Not all submarine pipelines and submarine cables are required to be buried, and those that were originally buried may have become exposed. Mariners should use extreme caution when operating vessels in depths of water comparable to their draft in areas where pipelines and cables may exist, and when anchoring, dragging, or trawling. Covered wells may be marked by lighted or unlighted buoys.

J U V E R I S L A N D



Joins page 13

Joins page 8

20'

10'

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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).

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.

Neah Bay WA KIH-96 162.550 MHz

CAUTION

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

AIDS TO NAVIGATION

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

See Canadian List of Lights, Buoys and Fog Signals for information not included in the U.S. Coast Guard Light List.

EL TRANSITING

Pacific States/British Columbia Oil Spill of voluntary measures and minimum commercial vessels transiting along Cook Inlet, Alaska and San Diego, 7 or 8, Chapter 3 for details.

NOTE K

Submarine operations are sometimes in the waters contained and with caution.

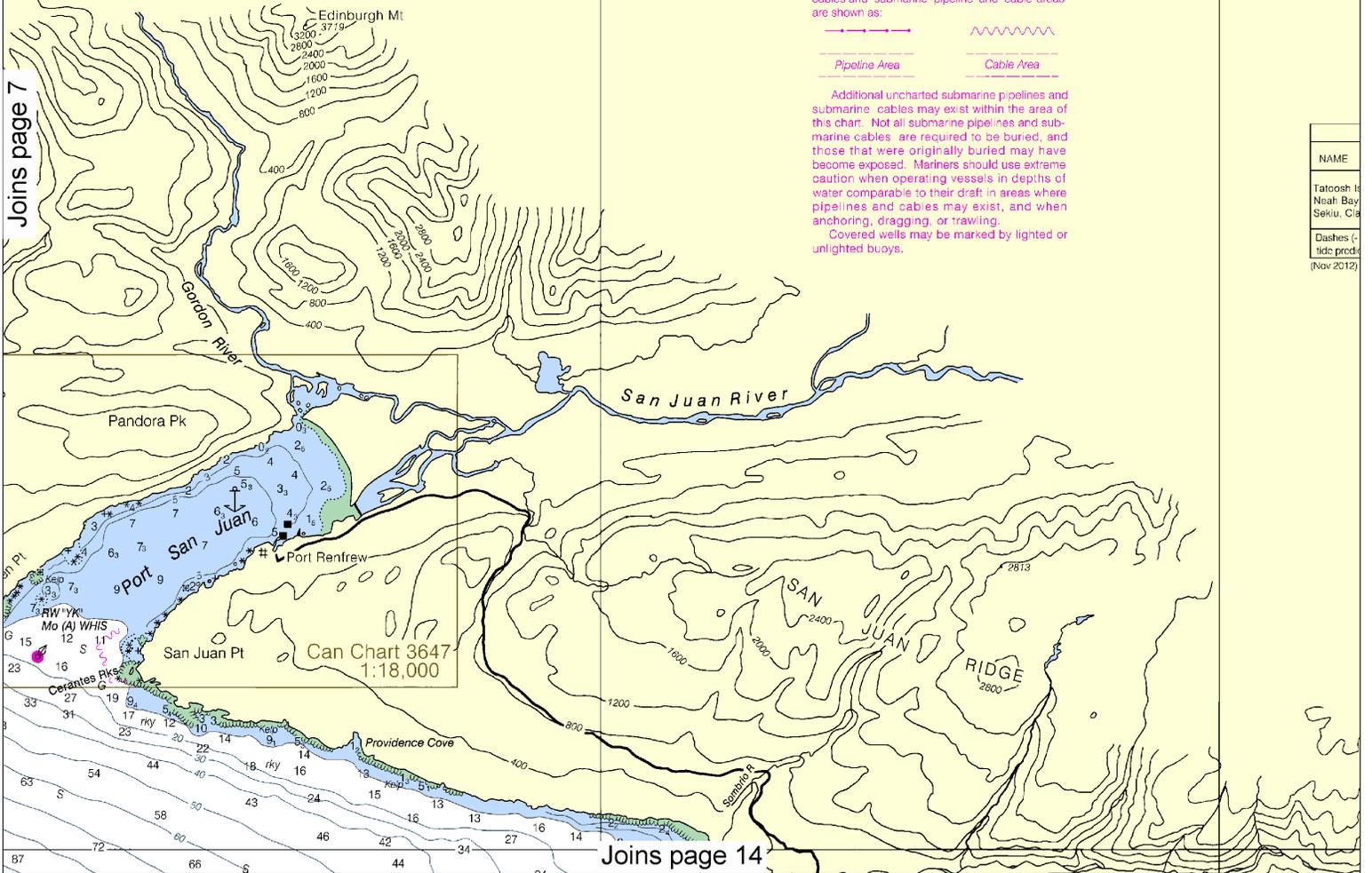
NOTE X

Sea, established by Presidential Proclamation, Nautical Mile Line, previously identified as the 3-mile line, is shown as it continues to depict the jurisdictional line Natural Resource Boundary off the Gulf coast of the Three Nautical Mile Line elsewhere remain in fisheries jurisdiction and the outer limit of the 12-mile Contiguous Zone and the 200-nautical mile Exclusive Economic Zone established by Presidential Proclamation. In some cases, these maritime limits are subject to the Supreme Court, these maritime limits are subject to the Supreme Court.

STRAIT OF

R I S L A N D

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CAUTION
SUBMARINE PIPELINES AND CABLES

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NAME
Tatoosh Is
Neah Bay
Seku, Cl
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tidal proct
(Nov 2012)

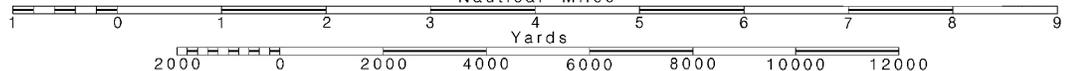


Note: Chart grid lines are aligned with true north.

Printed at reduced scale.

SCALE 1:100,000
Nautical Miles

See Note on page 5.



124°00'

50'



THE NATION'S CHARTMAKER SINCE 1807

UNITED STATES - WEST COAST
WASHINGTON

F JUAN DE FUCA ENTRANCE

Mercator Projection
Scale 1:100,000 at Lat. 48°25'

North American Datum of 1983
(World Geodetic System 1984)

SOUNDINGS IN FATHOMS
(FATHOMS AND FEET TO ELEVEN FATHOMS)
AT MEAN LOWER LOW WATER IN U.S. TERRITORY
AT LOWEST NORMAL TIDES IN CANADIAN TERRITORY

For Symbols and Abbreviations see Chart No. 1

TIDAL INFORMATION

PLACE (LAT/LONG)	Height referred to datum of soundings (MLLW)		
	Mean Higher High Water	Mean High Water	Mean Low Water
	feet	feet	feet
Island, Cape Flattery (48°24'N/124°44'W)	8.0	7.2	1.5
by (48°22'N/124°37'W)	8.0	7.1	1.6
William Bay (48°16'N/124°18'W)	7.5	6.7	1.8

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

2)

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

HEIGHTS

Heights in feet above Mean High Water in U.S. Territory.

Heights expressed in feet above Higher High Water, Larger Tides, in Canadian Territory.

AUTHORITIES

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

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 0.733" southward and 4.828" 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.

NOTE A

Navigation regulations are published in Chapter 2 U.S. Coast Pilot 7. 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, 13th Coast Guard District in Seattle, Washington or at the Office of the District Engineer, Corps of Engineers in Seattle, Washington.

Refer to charted regulation section numbers.

NOTE B

NAVAL OPERATING AREAS

Mariners should use caution as naval craft may be maneuvering within the areas. For further information consult Local Notice to Mariners.

NOTE C

TRAFFIC SEPARATION SCHEME

One-way traffic lanes overprinted on this chart are RECOMMENDED for use by all vessels traveling between the points involved. They have been designated to aid in the prevention of collisions in the Strait of Juan De Fuca waters, but are not intended in any way to supersede or alter the applicable Rules of the Road. Separation zones are intended to separate inbound and outbound traffic and to be free of ship traffic. Separation Zones should not be used except for crossing purposes. When crossing traffic lanes and separation zones, use extreme caution.

Precautionary Areas have been established where major lanes merge and cross the traffic separation scheme. It is recommended that vessels proceed with caution in these areas. Wherever practical, vessels entering or leaving the system should do so at these precautionary areas. For more information regarding Traffic Separation Scheme procedures and regulations, see 33 CFR 167 and / or chapter 2 of the US Coast Pilot.

For information governing the VESSEL TRAFFIC MANAGEMENT AND INFORMATION SYSTEM for the coastal waters of southern British Columbia, see National Geospatial-Intelligence Agency Publication 154, Sailing Directions (enroute) for British Columbia, and the Sailing Directions British Columbia Coast (South Portion) Volume 1, published by the Canadian Hydrographic Service.

NOTE D

For Canadian Firing Practice and Exercise Areas, see Canadian Notice to Mariners No. 35 of each year. Lighted and unlighted buoys are randomly located within these areas. These buoys are not charted.

COLREGS, 80.1385 (see note A)

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

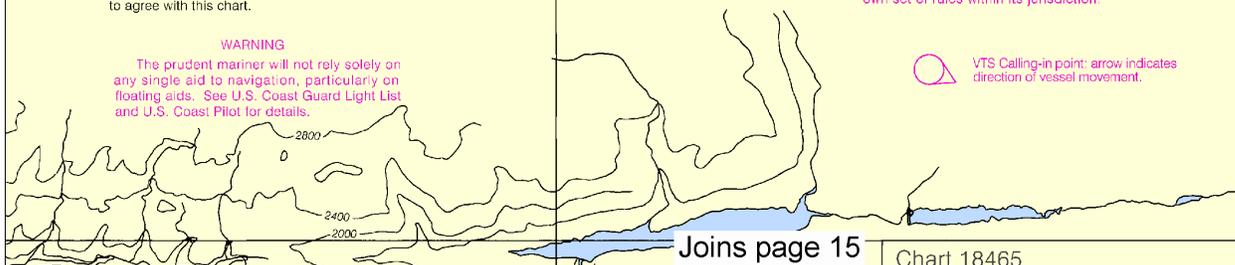
NOTE F

The U.S. Coast Guard operates a mandatory Vessel Traffic Service (VTS) system in U.S. waters covered by this chart. Vessel operating procedures and designated radiotelephone frequencies are published in 33 CFR 161, the U.S. Coast Pilot, and/or the VTS User's Manual.

NOTE G

A Cooperative Vessel Traffic Services (CVTS) system has been established by the United States and Canada within the adjoining waters in the Juan de Fuca Region. The appropriate Vessel Traffic Center (VTC) (Tolno Traffic, Seattle Traffic, Victoria Traffic) administers the rules issued by both nations, however, it will enforce only its own set of rules within its jurisdiction.

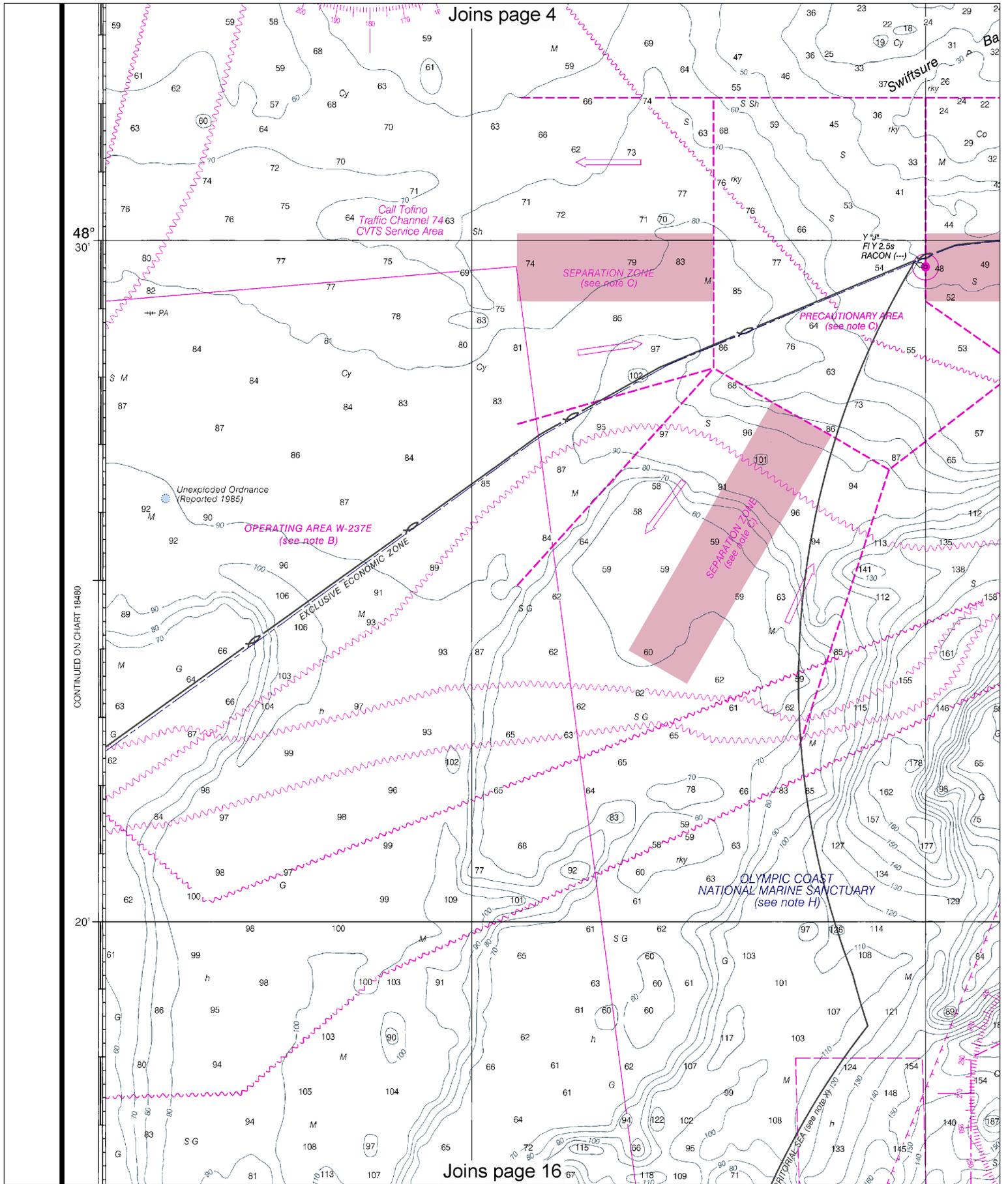
 VTS Calling-in point: arrow indicates direction of vessel movement.



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Chart 18465

48°
30'



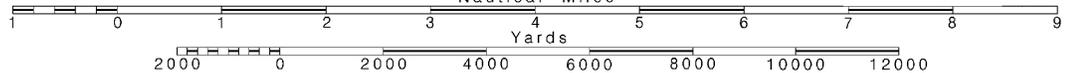
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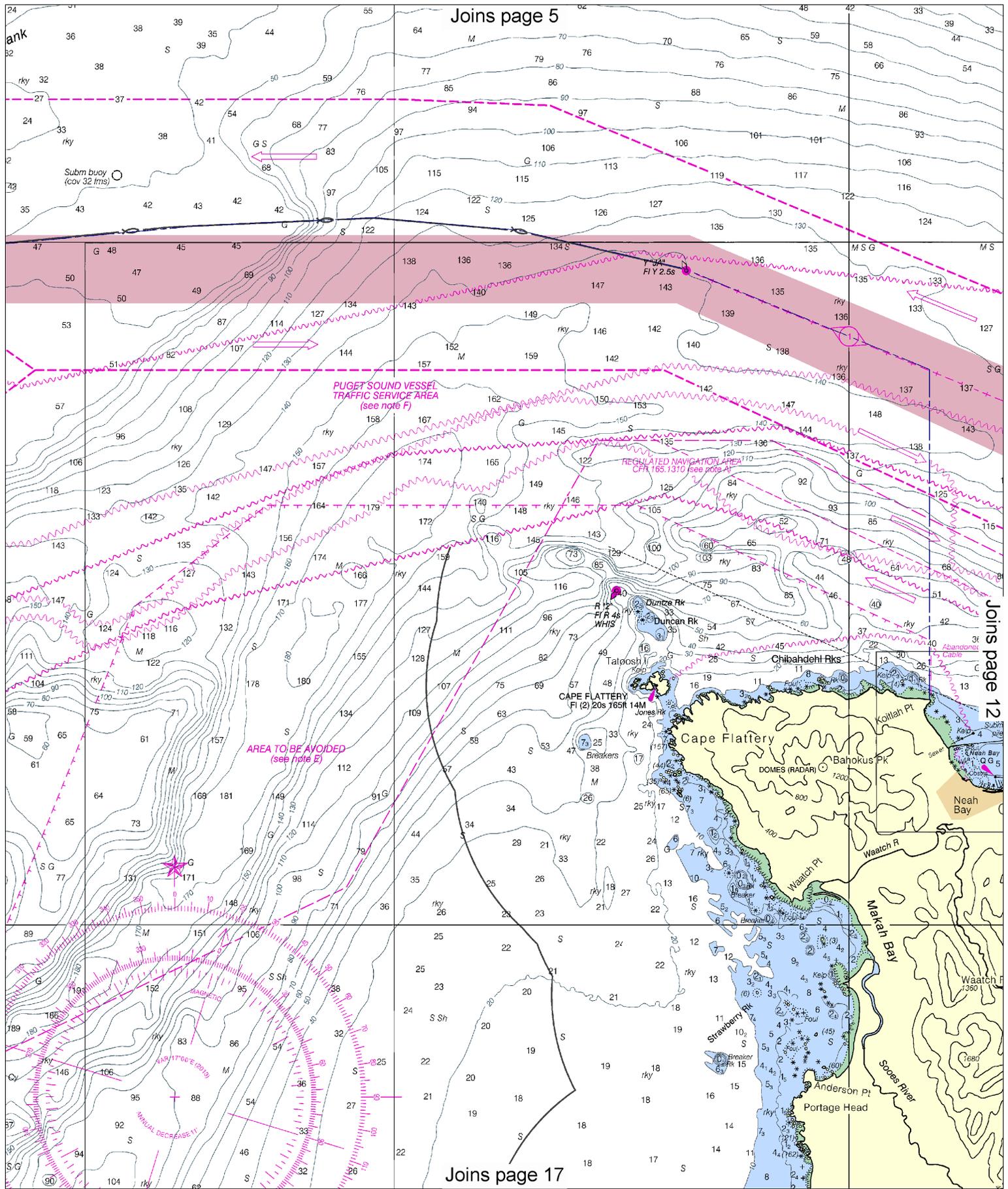
Note: Chart grid lines are aligned with true north.

Printed at reduced scale.

SCALE 1:100,000
Nautical Miles

See Note on page 5.

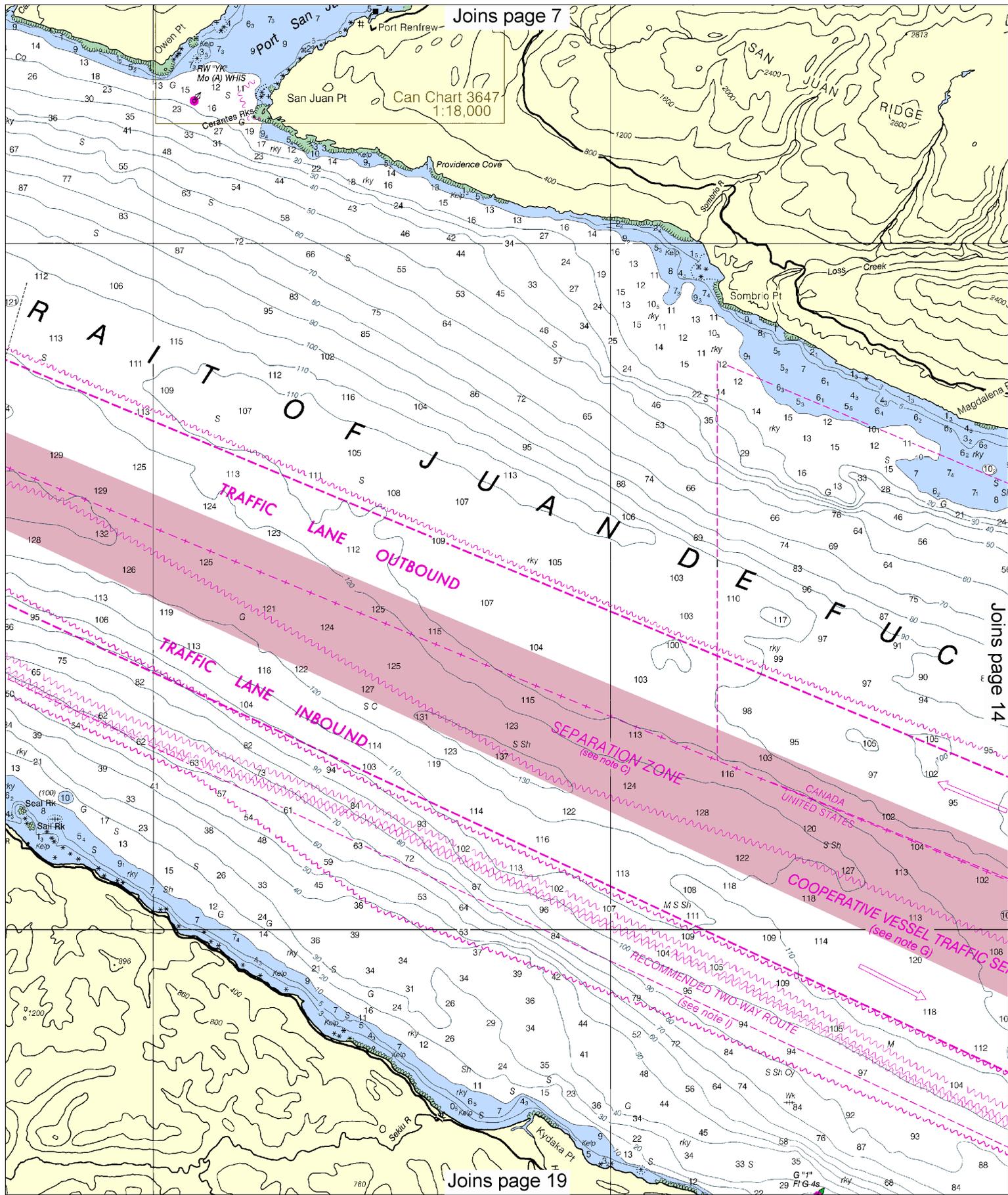


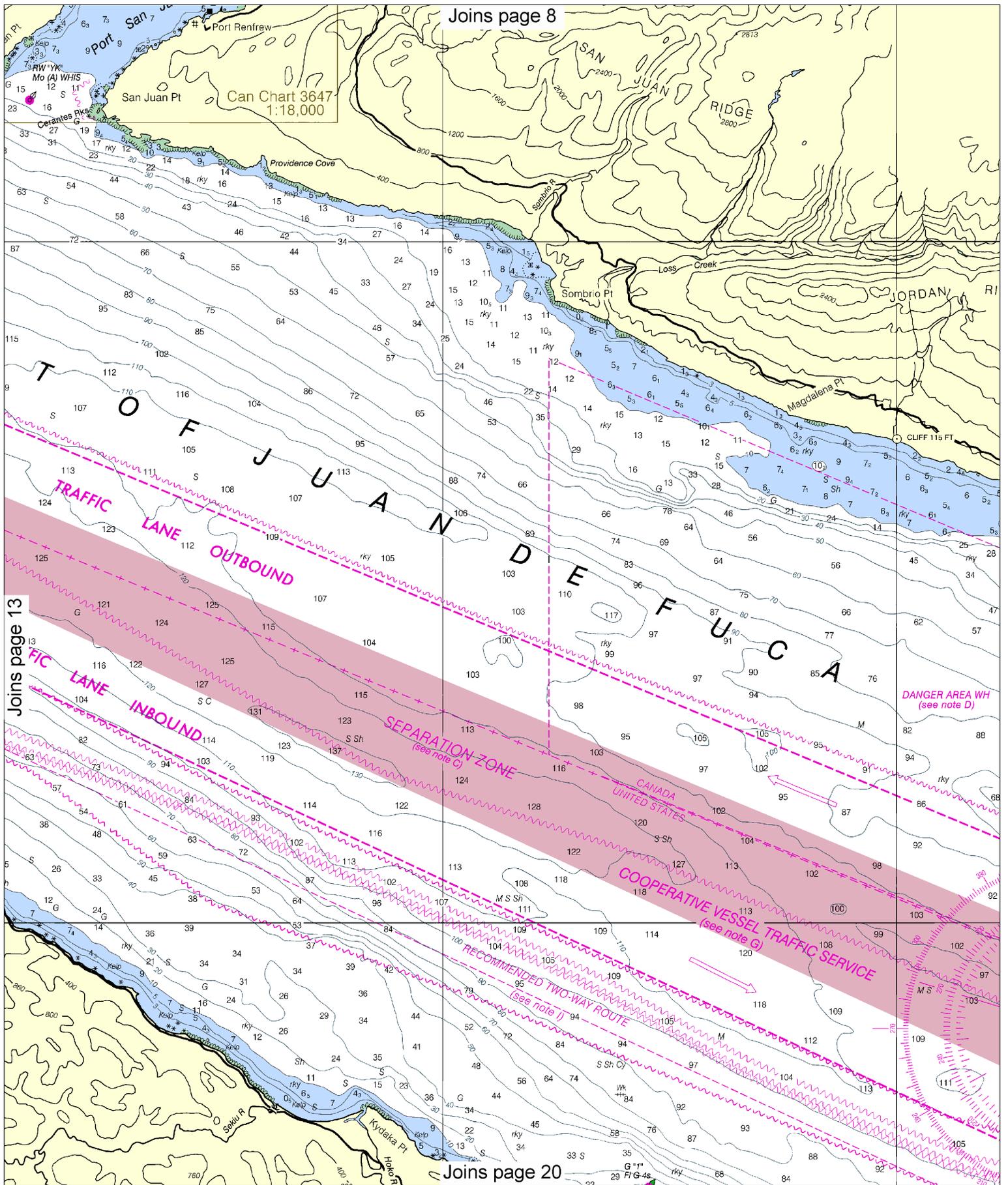


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Joins page 12

Joins page 17





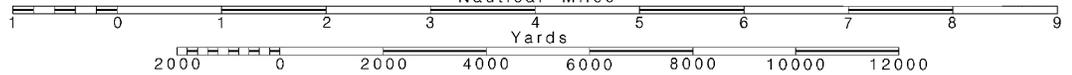
14

Note: Chart grid lines are aligned with true north.

Printed at reduced scale.

SCALE 1:100,000
Nautical Miles

See Note on page 5.



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 0.733" southward and 4.626" 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.

Joins page 9

NOTE G

A Cooperative Vessel Traffic Services (CVTS) system has been established by the United States and Canada within the adjoining waters in the Juan de Fuca Region. The appropriate Vessel Traffic Center (VTC) (Tofino Traffic, Seattle Traffic, Victoria Traffic) administers the rules issued by both nations, however, it will enforce only its own set of rules within its jurisdiction.



VTS Calling-in point: arrow indicates direction of vessel movement.

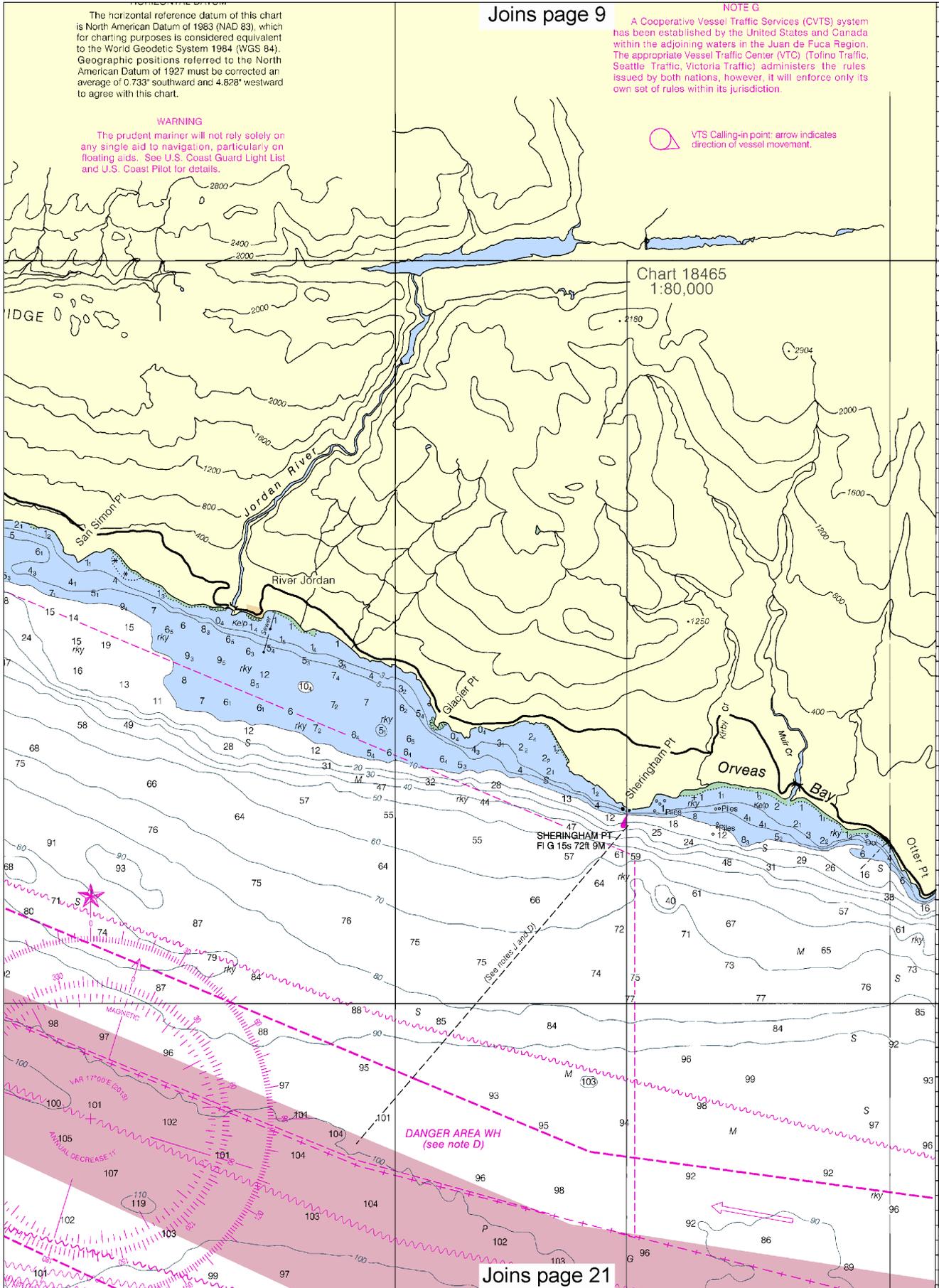
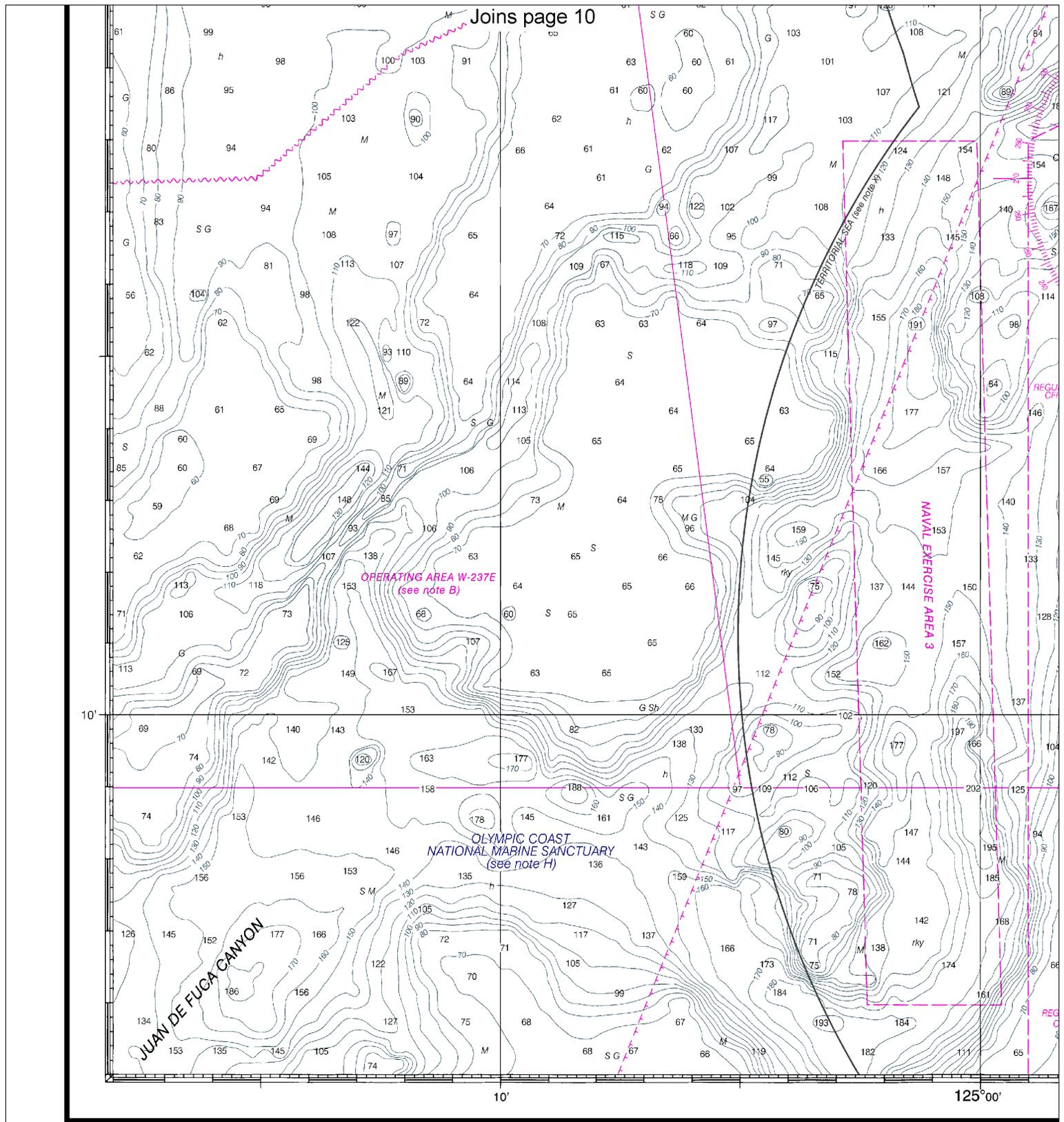


Chart 18465
1:80,000

48°
30'

20'

Joins page 21



Joins page 10

14th Ed., Jan. / 13 ■ Corrected through NM Jan. 12/13
 Corrected through LNM Dec. 25/12

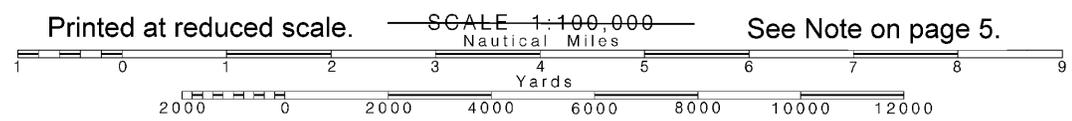
18460

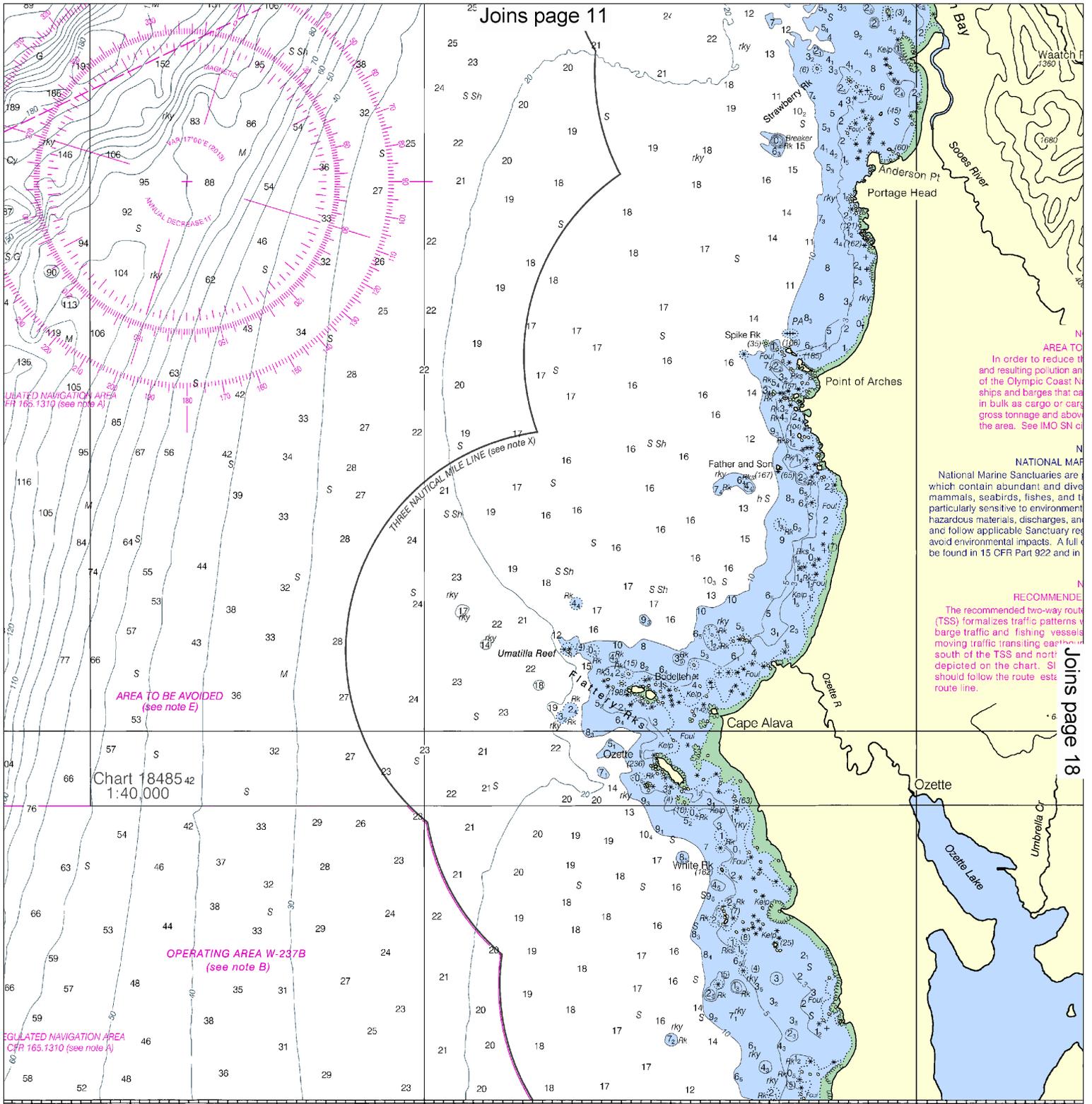
CAUTION
 This chart has been corrected from the Notice to Mariners (NM) published weekly by the National Geospatial-Intelligence Agency and the Local Notice to Mariners (LNM) issued periodically by each U.S. Coast Guard district to the dates shown in the lower left hand corner. Chart updates corrected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

This nautical chart has been designed to promote Ocean Service encourages users to submit correct information to the Chief, Marine Chart Division, NOAA, Silver Spring, Maryland 20910-3209.

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Note: Chart grid lines are aligned with true north.





AREA TO BE AVOIDED
 In order to reduce the risk of collisions and resulting pollution in the Olympic Coast National Marine Sanctuary, ships and barges that carry oil in bulk as cargo or cargo tank should avoid the area. See IMO SN Code.

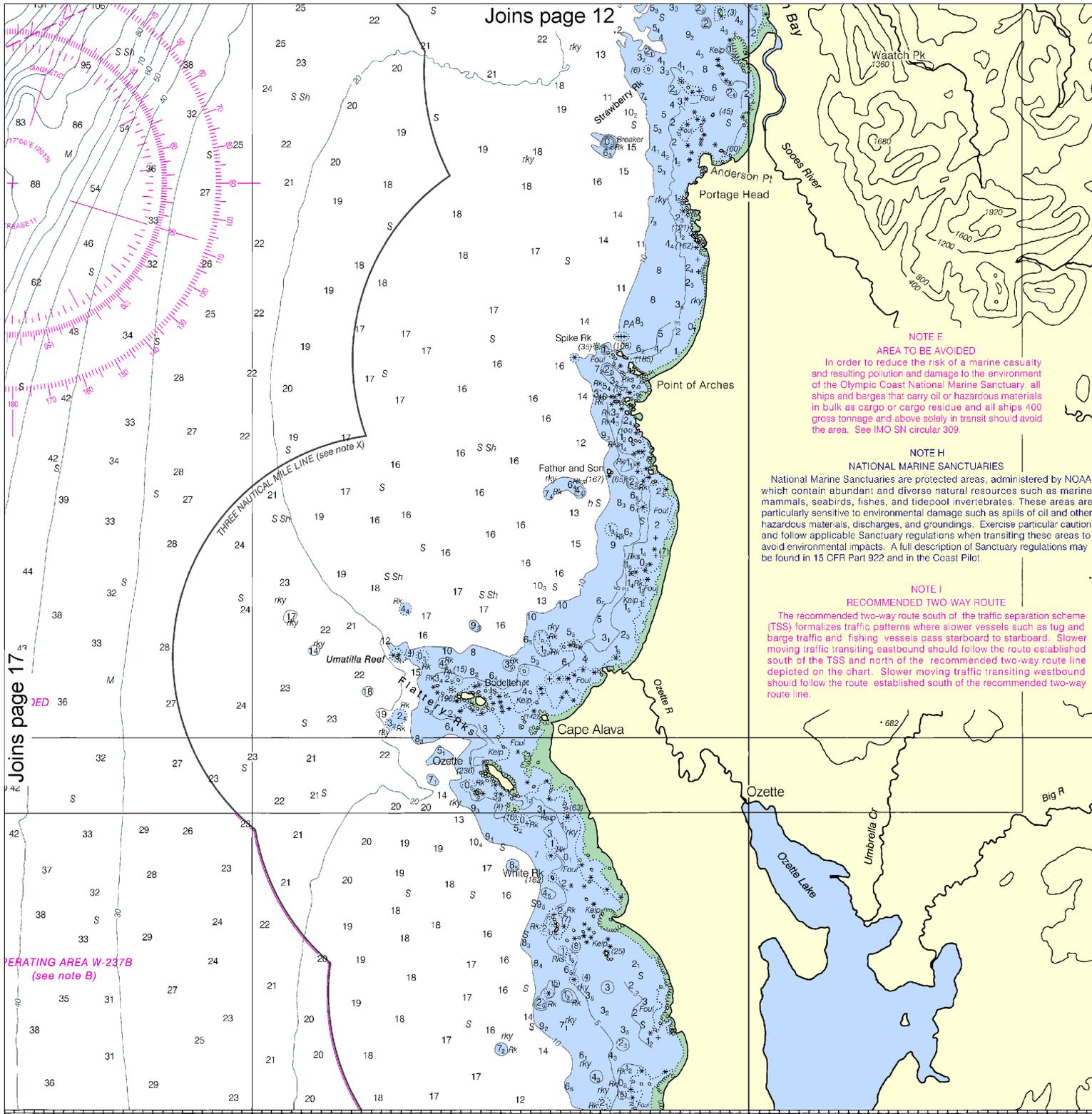
NATIONAL MARINE SANCTUARY
 National Marine Sanctuaries are areas which contain abundant and diverse mammals, seabirds, fishes, and other marine life. They are particularly sensitive to environmental hazards from hazardous materials, discharges, and other pollutants. Ships should avoid environmental impacts. A full description can be found in 15 CFR Part 922 and in the National Oceanic and Atmospheric Administration's National Marine Sanctuaries Handbook.

RECOMMENDED ROUTE
 The recommended two-way route (TSS) for barges, fishing vessels, and other vessels moving traffic transiting east-west through the Strait of Juan de Fuca south of the TSS and north of the Strait of Juan de Fuca is depicted on the chart. Ships should follow the route and stay clear of the route line.

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CONTINUED ON CHART 18480

Promote safe navigation. The National Oceanic and Atmospheric Administration, Department of Commerce, provides this information. For more information, contact the National Oceanic and Atmospheric Administration, National Ocean Service, 1315 East-West Highway, Silver Spring, MD 20910.



NOTE E
AREA TO BE AVOIDED
 In order to reduce the risk of a marine casualty and resulting pollution and damage to the environment of the Olympic Coast National Marine Sanctuary, all ships and barges that carry oil or hazardous materials in bulk as cargo or cargo residue and all ships 400 gross tonnage and above solely in transit should avoid the area. See IMO SN circular 309.

NOTE H
NATIONAL MARINE SANCTUARIES
 National Marine Sanctuaries are protected areas, administered by NOAA which contain abundant and diverse natural resources such as marine mammals, seabirds, fishes, and tidepool invertebrates. These areas are particularly sensitive to environmental damage such as spills of oil and other hazardous materials, discharges, and groundings. Exercise particular caution and follow applicable Sanctuary regulations when transiting these areas to avoid environmental impacts. A full description of Sanctuary regulations may be found in 15 CFR Part 922 and in the Coast Pilot.

NOTE I
RECOMMENDED TWO-WAY ROUTE
 The recommended two-way route south of the traffic separation scheme (TSS) formalizes traffic patterns where slower vessels such as tug and barge traffic and fishing vessels pass starboard to starboard. Slower moving traffic transiting eastbound should follow the route established south of the TSS and north of the recommended two-way route line depicted on the chart. Slower moving traffic transiting westbound should follow the route established south of the recommended two-way route line.

Joins page 17

OPERATING AREA W-237B (see note B)

60' 50' 40'

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 COAST SURV

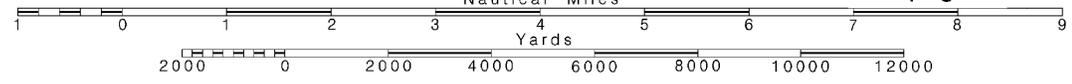
18

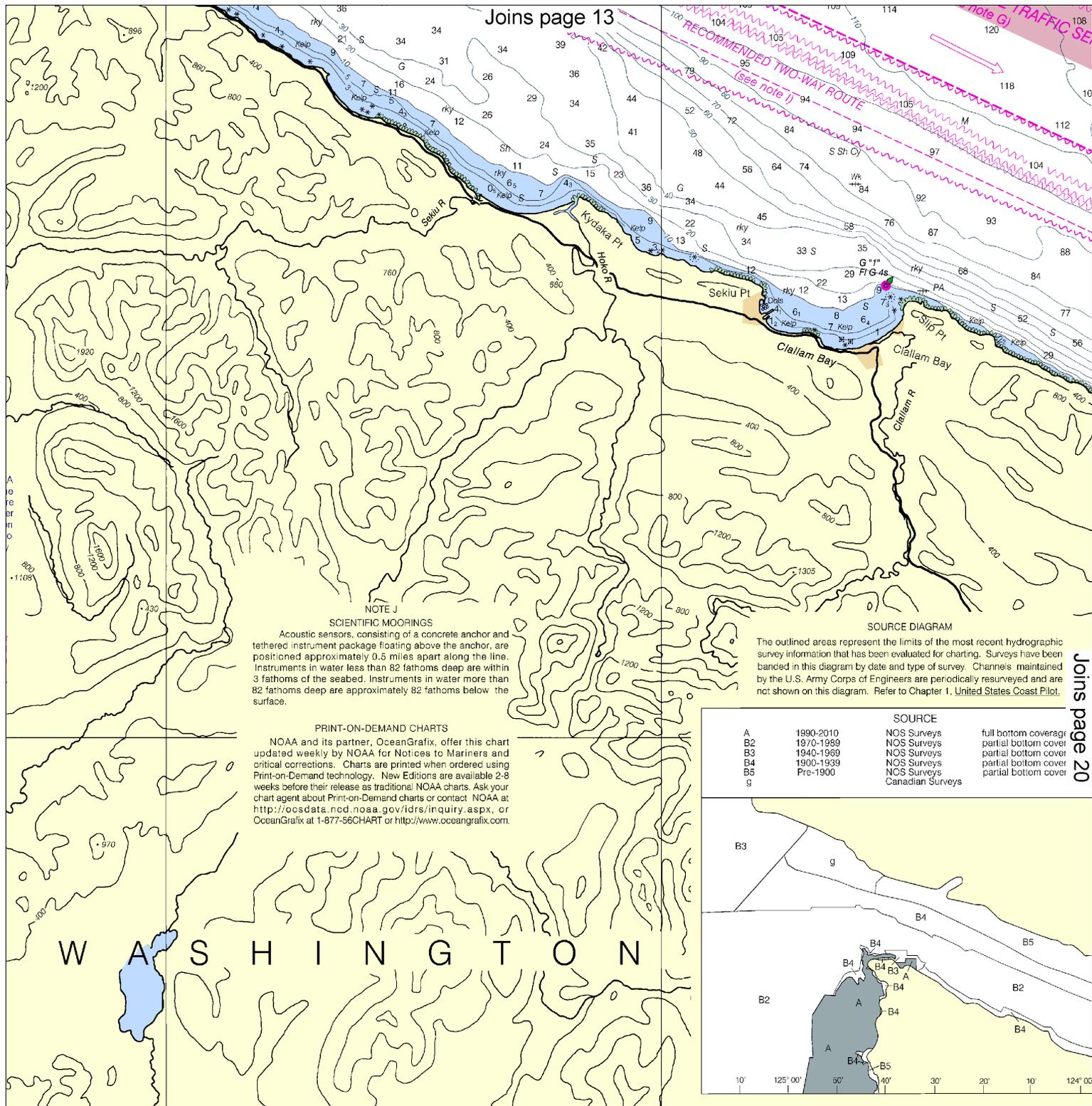
Note: Chart grid lines are aligned with true north.

Printed at reduced scale.

SCALE 1:100,000
 Nautical Miles

See Note on page 5.





NOTE J

SCIENTIFIC MOORINGS

Acoustic sensors, consisting of a concrete anchor and tethered instrument package floating above the anchor, are positioned approximately 0.5 miles apart along the line. Instruments in water less than 82 fathoms deep are within 3 fathoms of the seabed. Instruments in water more than 82 fathoms deep are approximately 82 fathoms below the surface.

PRINT-ON-DEMAND CHARTS

NOAA and its partner, OceanGrafix, offer this chart updated weekly by NOAA for Notices to Mariners and critical corrections. Charts are printed when ordered using Print-on-Demand technology. New Editions are available 2-8 weeks before their release as traditional NOAA charts. Ask your chart agent about Print-on-Demand charts or contact NOAA at <http://ocsddata.mod.noaa.gov/ldr/inquiry.aspx>, or OceanGrafix at 1-877-56CHART or <http://www.oceangrafix.com>.

SOURCE DIAGRAM

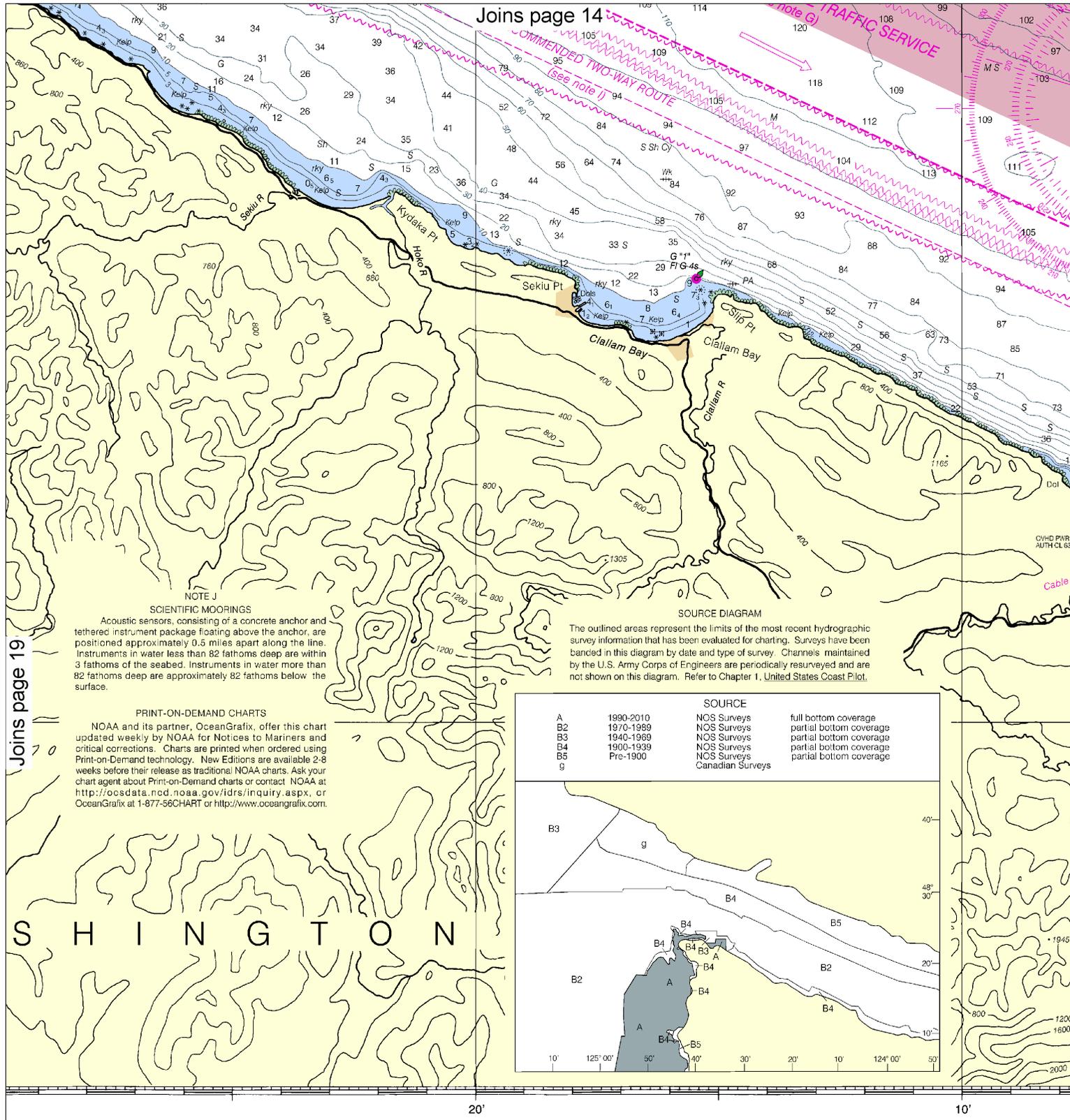
The outlined areas represent the limits of the most recent hydrographic survey information that has been evaluated for charting. Surveys have been banded in this diagram by date and type of survey. Channels maintained by the U.S. Army Corps of Engineers are periodically resurveyed and are not shown on this diagram. Refer to Chapter 1, United States Coast Pilot.

SOURCE		SOURCE	
A	1990-2010	NOS Surveys	full bottom coverage
B2	1970-1989	NOS Surveys	partial bottom cover
B3	1940-1969	NOS Surveys	partial bottom cover
B4	1900-1939	NOS Surveys	partial bottom cover
B5	Pre-1900	NOS Surveys	partial bottom cover
G		Canadian Surveys	

WASHINGTON

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

SOUNDINGS IN FATHOMS
 (FATHOMS AND FEET TO 11 FATHOMS)



Joins page 19

NOTE J

SCIENTIFIC MOORINGS

Acoustic sensors, consisting of a concrete anchor and tethered instrument package floating above the anchor, are positioned approximately 0.5 miles apart along the line. Instruments in water less than 82 fathoms deep are within 3 fathoms of the seabed. Instruments in water more than 82 fathoms deep are approximately 82 fathoms below the surface.

PRINT-ON-DEMAND CHARTS

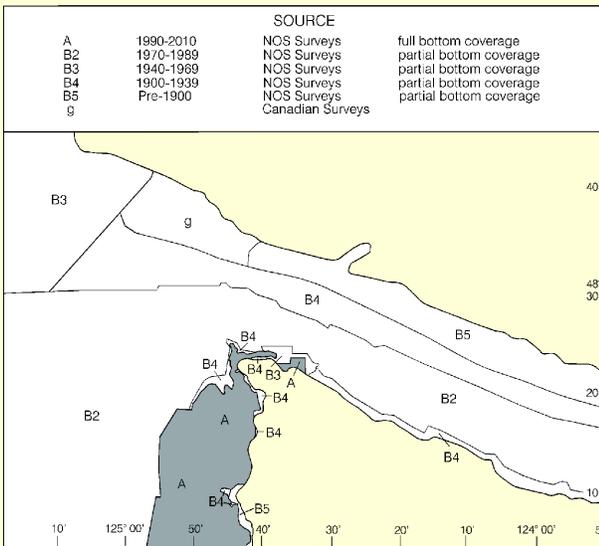
NOAA and its partner, OceanGrafix, offer this chart updated weekly by NOAA for Notices to Mariners and critical corrections. Charts are printed when ordered using Print-on-Demand technology. New Editions are available 2-8 weeks before their release as traditional NOAA charts. Ask your chart agent about Print-on-Demand charts or contact NOAA at <http://ocsddata.nod.noaa.gov/ids/inquiry.aspx>, or OceanGrafix at 1-877-56CHART or <http://www.oceangrafix.com>.

SOURCE DIAGRAM

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SOURCE

Source	Survey Period	Survey Type	Coverage
A	1990-2010	NOS Surveys	full bottom coverage
B2	1970-1989	NOS Surveys	partial bottom coverage
B3	1940-1969	NOS Surveys	partial bottom coverage
B4	1900-1939	NOS Surveys	partial bottom coverage
B5	Pre-1900	NOS Surveys	partial bottom coverage
G		Canadian Surveys	



S H I N G T O N

SOUNDINGS IN FATHOMS

(FATHOMS AND FEET TO 11 FATHOMS)

FATHOMS	1	2
FEET	6	12
METERS	1	3

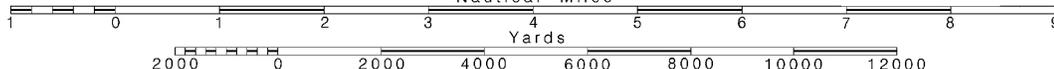


Note: Chart grid lines are aligned with true north.

Printed at reduced scale.

SCALE 1:100,000 Nautical Miles

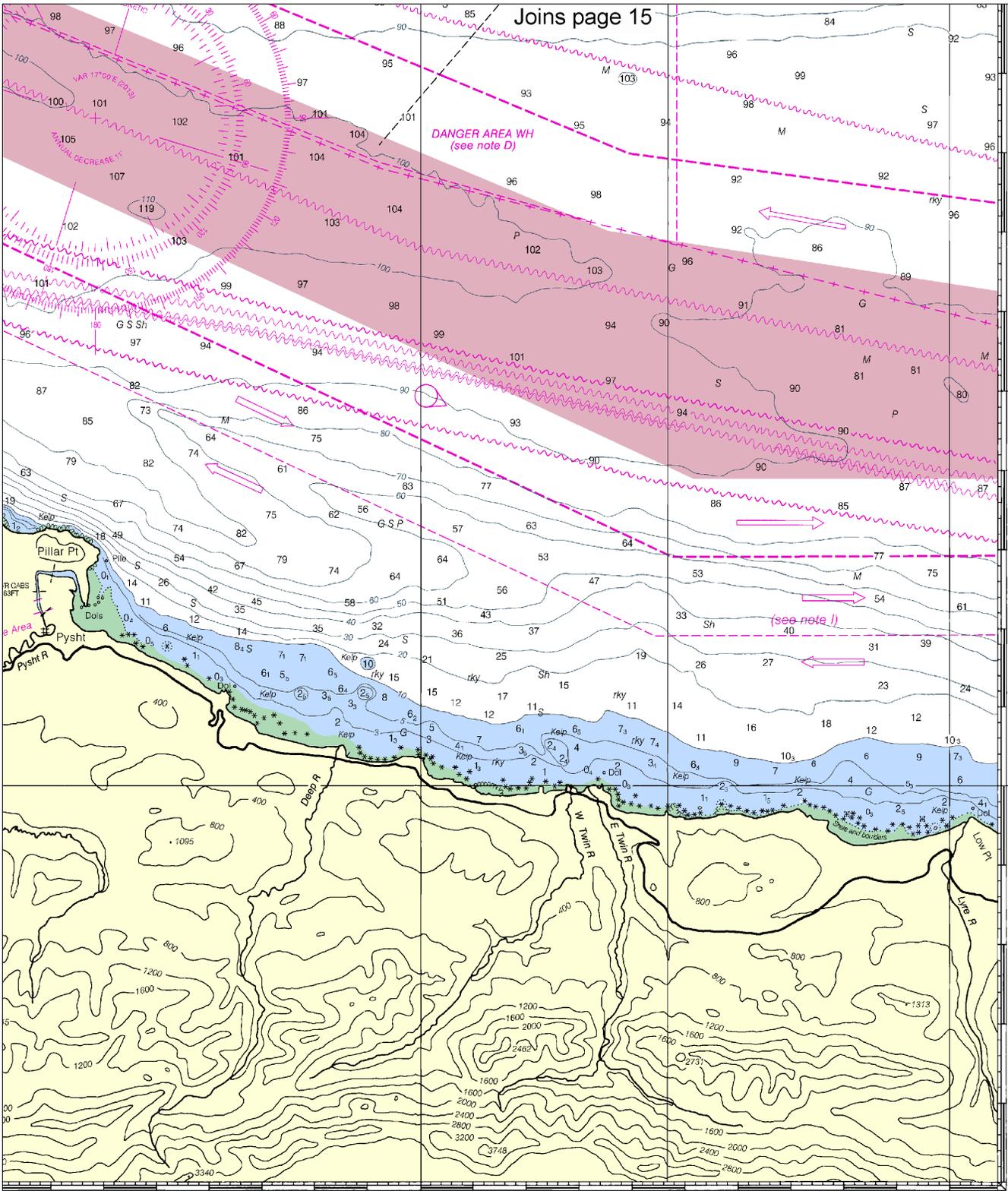
See Note on page 5.



Joins page 15

DANGER AREA WH
(see note D)

CONTINUED ON CHART 18465

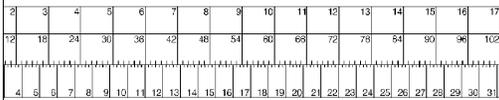


124°00'

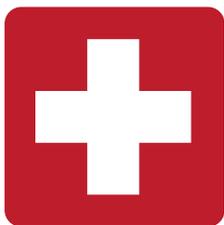
744.2 X 1097.3 mm 50'

Strait of Juan de Fuca Entrance
SOUNDINGS IN FATHOMS - SCALE 1:100,000

18460



21



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.

