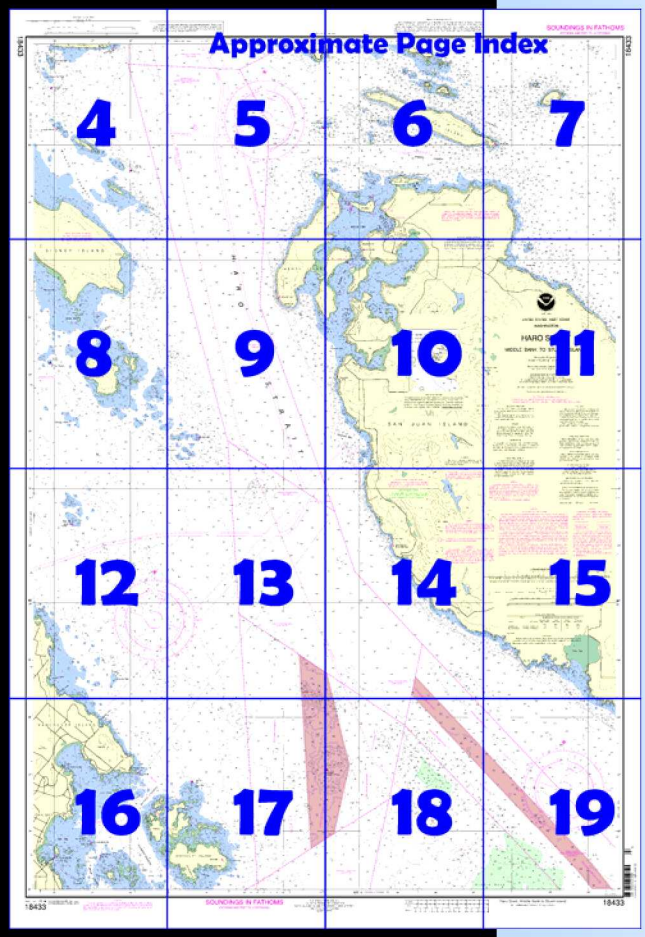
BookletChart™

Haro Strait – Middle Bank to Stuart Island

(NOAA Chart 18433)



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 all Notices to Mariners*
- ☑ *United States Coast Pilot excerpts*
- ☑ *Compiled by NOAA, the nation's chartmaker.*

NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NOAA
U.S. DEPARTMENT OF COMMERCE

Home Edition (not for sale)

Published by the
National Oceanic and Atmospheric Administration
National Ocean Service
Office of Coast Survey
www.NauticalCharts.NOAA.gov
301-713-2770

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™?

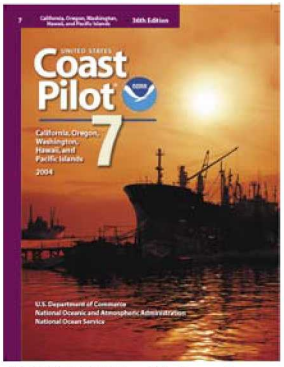
This BookletChart is made to help recreational boaters locate themselves on the water. It has been reduced in scale for convenience, but otherwise contains all the information of the full-scale nautical chart. The bar scales have also been reduced, and are accurate when used to measure distances in this 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.



[Coast Pilot 7, Chapter 12 excerpts]

(207) The waters of the **San Juan Islands** embrace the passages and bays N of the E end of the Strait of Juan de Fuca.

(209) **Haro Strait** and **Boundary Pass** form the westernmost of the three main channels leading from the Strait of Juan de Fuca to the SE end of the Strait of Georgia; it is the one most generally used.

(221) **Kanaka Bay,** a small cove used by fishing boats, is 2.5 miles NW of Eagle Point.

(222) **Lime Kiln Light** (48°31.0'N., 123°09.2'W.), 55 feet above the water, is shown from a 38-foot white octagonal tower attached to a building on the W side of San Juan Island; a fog signal is at the light. Two dwellings are about 150 yards SE of the light. Rocks awash lie close inshore about 1 mile SE of the light.

(223) Differences from the normal variation of as much as 4° have been observed in the vicinity of **Bellevue Point,** 1 mile N of Lime Kiln Light.

(224) During the June-October fishing season, many purse seiners operate in this area. At night these vessels anchor close inshore, generally between Cattle Point and Pile Point.

(225) **Hanbury Point** (48°34.7'N., 123°10.3'W.), 3.8 miles N of Lime Kiln Light, is the N entrance point to **Mitchell Bay,** one of a series of well-sheltered bays on the NW coast of the island. A small islet 3 feet high is in the center of the bay about 350 yards SE of the entrance. A rock about 100 yards W of the islet uncovers 6 feet. The only safe passage into the bay is N of the islet. **Snug Harbor,** a resort and yacht haven on the S side of Mitchell Bay, has about 90 berths with electricity, gasoline, water, ice, and limited marine supplies. A launching ramp is available; engine repairs can be made to small craft. **Mosquito Pass,** available only to small craft with local knowledge, leads N from Hanbury Point to **Garrison Bay, Westcott Bay,** and Roche Harbor.

(226) A large aquaculture facility, covered 3 feet and consisting of clam beds and suspended oyster racks, is in the middle of Westcott Bay about 1 mile above the entrance. Mariners should use caution in the area.

(227) **Henry Island** is close W of the N point of San Juan Island, from which it is separated by Mosquito Pass and Roche Harbor.

(228) **Kellett Bluff,** at the S end of Henry Island, is steep and rocky and prominent from either S or N. It is marked by a light. **Open Bay,** E of Kellett Bluff, offers good holding ground and protection for small boats from N and E weather.

(229) **Roche Harbor** has its main entrance between the N end of Henry Island and the W end of **Pearl Island,** which is marked by a light.

(232) **Battleship Island,** small and 30 feet high, is about 0.2 mile WNW of McCracken Point, the N extremity of Henry Island, and is the W point in the approaches to Roche Harbor.

(233) **Danger Shoal,** with a least depth of 1 fathom, is in the fairway to Spieden Channel about midway between Battleship Island and Spieden Bluff. A lighted horn buoy is close SW of the shoal, which is marked by kelp.

(235) **Spieden Channel** leads E between Spieden Island on the N and Battleship, Henry, and San Juan Islands on the S; the channel leads from Haro Strait to President Channel and San Juan Channel.

(236) **Spieden Island** lies with **Spieden Bluff,** its NW end, 1.6 miles NNE of Battleship Island.

(238) **Stuart Island**, NW of Spieden Island, two prominent hills 640 feet high near the middle. **Turn Point,** the W extremity, is bold, steep-to, and marked by a light and fog signal.

(242) **Johns Pass,** between Stuart Island and **Johns Island** close E, is much used by fishing vessels and small boats. At the S end of the pass foul ground extends about 0.6 mile SE from Stuart Island.

(252) The several channels and passages leading between the islands and dangers off the coast of British Columbia from Gonzales Point to **Cadboro Point,** 2.8 miles NNE, constitute the SW approach to Haro Strait. These passages and channels should be used only by vessels with local knowledge.

(253) The side of Haro Strait W of the international line is bordered by several islands and reefs, the most important of which are, from S to N: **Kelp Reefs,** marked by a light, about 7 miles N of Discovery Island; **Sidney Island** with a radiobeacon on the NW part, about 3 miles NW of the light on Kelp Reefs; **Moresby Island,** marked by a light, about 16 miles N of Baynes Channel and Discovery Island, and the smaller islands and reefs in between.

(299) **Limestone Point,** about 1.2 miles NNW of O'Neal Island forms the W point of the N entrance to San Juan Channel, and is the NE portion of San Juan Island.

(301) **Flattop Island,** prominent in the N approaches to San Juan Channel, is 1 mile NE of the E end of Spieden Island.

Table of Selected Chart Notes

Corrected through NM Apr. 23/05
Corrected through LNM Apr. 26/05

CABLE AND PIPELINE AREAS

The cable and pipeline areas falling within the areas of the larger scale Canadian charts are not shown on this chart.

PLANE COORDINATE GRID
(based on NAD 1927)

Washington State Grid, north zone, is indicated by dashed ticks at 5,000 foot intervals. The last three digits are omitted.

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.

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.

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 include in the U.S. Coast Guard Light List.

WIRE DRAGGED AREAS

The areas within the dashed green lines have been swept clear to at least the depths indicated in fathoms and feet by the green numbers.

805

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) o(Approximate location)

HEIGHTS

Heights in feet above Mean High Water in U.S. Territory. Contour and summit elevation values are in feet and refer to Mean Sea Level. Heights expressed in feet above Higher High Water, Larger Tides, in Canadian Territory.

CAUTION
SUBMARINE PIPELINES AND CABLES

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

Pipeline Area *Cable Area*

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.

LOCAL MAGNETIC DISTURBANCE

Differences of 4° from the normal variation have been observed in Haro Strait in the vicinity of Bellevue Point.

For Symbols and Abbreviations see Chart No. 1

SUPPLEMENTAL INFORMATION

Consult U.S. Coast Pilot 7 for important supplemental information.

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 0.645" southward and 4.681" westward to agree with this chart.

CAUTION

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

CANADIAN WEATHER RADIO BROADCASTS

The Canadian Weather Service station listed below provides continuous marine weather broadcasts. The range of reception is variable, but for most stations is usually 20 to 40 miles from the antenna site.

Vancouver, B.C. CFA-240 162.40 MHz

allas

NOTE D

The U.S. Coast Guard operates a mandatory Vessel Traffic Services (VTS) system in the 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 E

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.

AUTHORITIES

Hydrography and topography by the National Ocean Service, Charting and Geodetic Services, with additional data from the Geological Survey, Corps of Engineer, U.S. Coast Guard and Canadian Authorities.

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.

Mercator Projection
Scale 1:25,000 at Lat 48°33'N

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

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

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.

NATIONAL WILDLIFE REFUGE

The areas labeled NWR (National Wildlife Refuge) are closed to the public to protect breeding colonies of seabirds, endangered and threatened species, and marine mammals. Boaters are requested to stay at least 200 yards away from these islands to avoid disturbance to these animals.

NOTE C

Mariners are cautioned that the Washington State Ferries may deviate from the published standard routes due to inclement weather, traffic conditions, navigational hazards or other emergency conditions. Standard ferry routes within the waters of the San Juan Islands are not displayed on this chart.

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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.

COLREGS, 80.1390 (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 B
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 and Strait of Georgia 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 U.S. 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.

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.

TIDAL INFORMATION

Place Name	(LAT/LONG)	Height referred to datum of soundings (MLLW) Mean Higher High Water	Mean High Water	Mean Low Water	Extreme Low Water
		feet	feet	feet	feet
Kanaka Bay	(48°29'N / 123°05'W)	7.3	6.7	2.4	-4.0
Roche Harbor	(48°37'N / 123°09'W)	7.6	7.0	2.5	-4.0

(Aug 2003)

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 5-8 weeks before their release as traditional NOAA charts. Ask your chart agent about Print-on-Demand charts or contact NOAA at 1-800-584-4683, http://NauticalCharts.gov, help@NauticalCharts.gov, or OceanGrafix at 1-877-56CHART, http://OceanGrafix.com, or help@OceanGrafix.com.

SCALE 1:25,000

Nautical Miles

Yards

Meters

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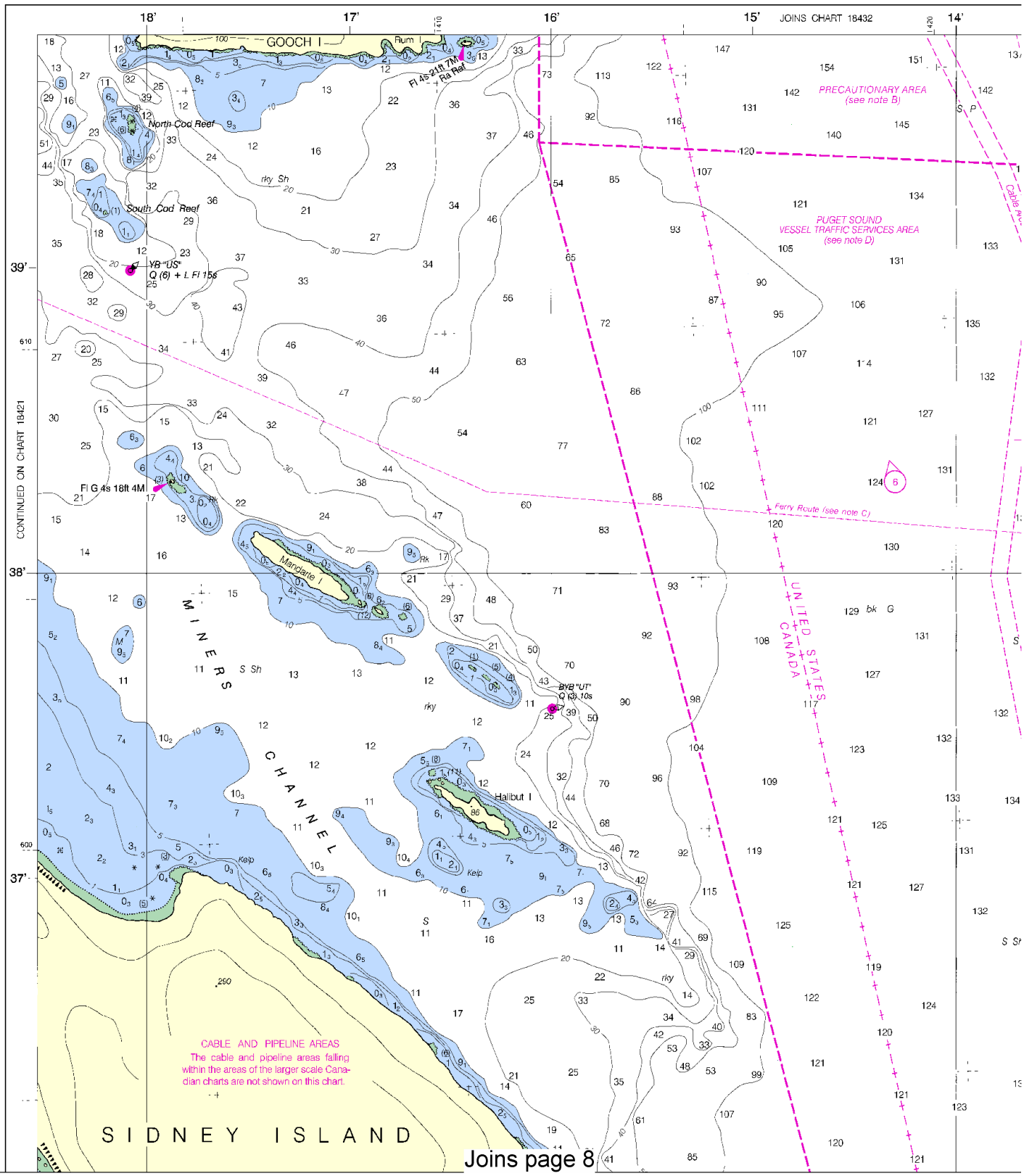

Joins page 8

North

Printed at reduced scale. ~~SCALE 1:25,000~~ See Note on page 5.

Nautical Miles

Yards

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1st Ed., Aug. 1981 KAPP 1686

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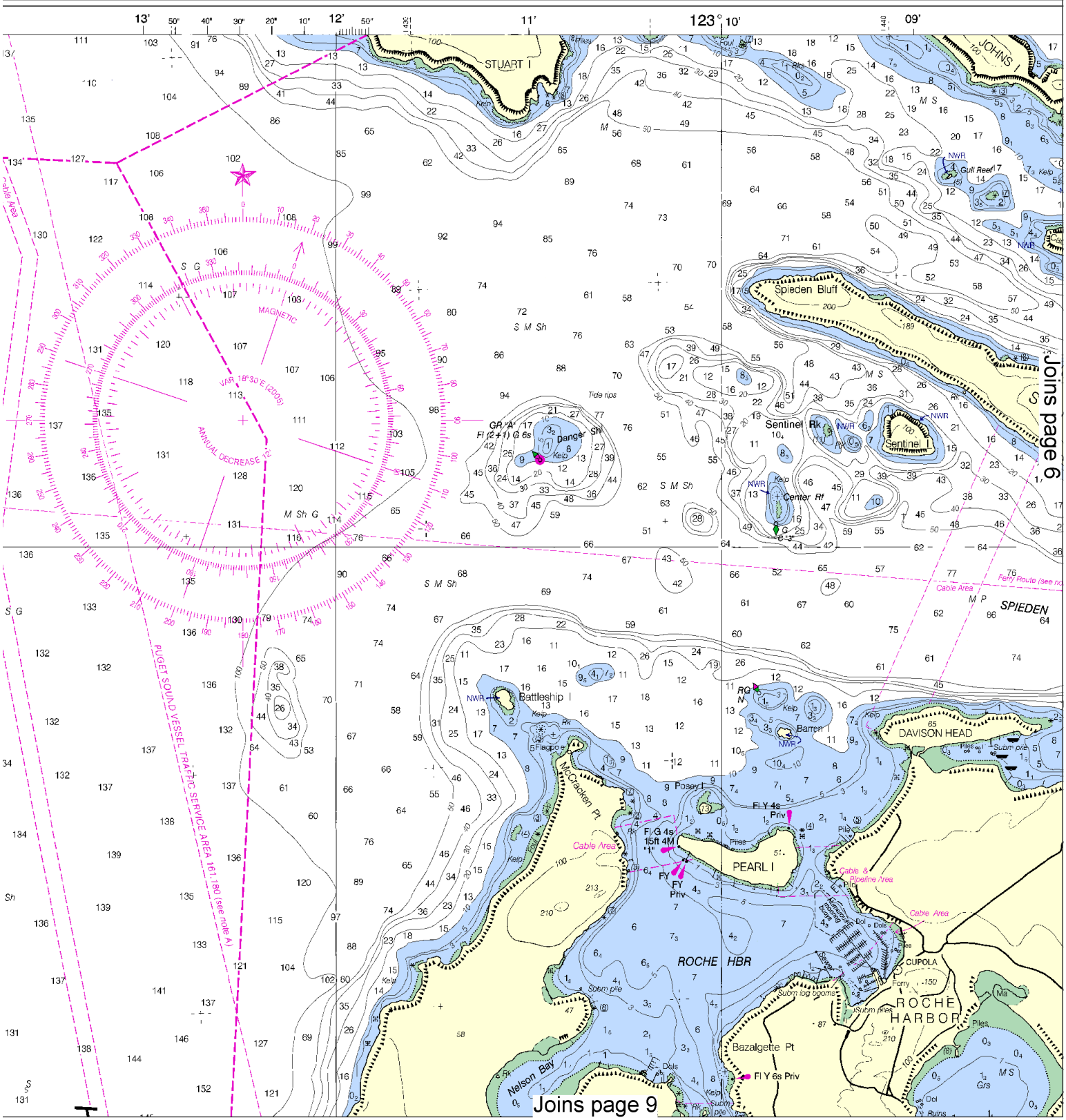

This BookletChart was reduced to 75% of the original chart scale.
The new scale is 1:33333. Barscales have also been reduced and
are accurate when used to measure distances in this BookletChart.

PRINT-O
NOAA and its partner, OceanGrafix, offer t
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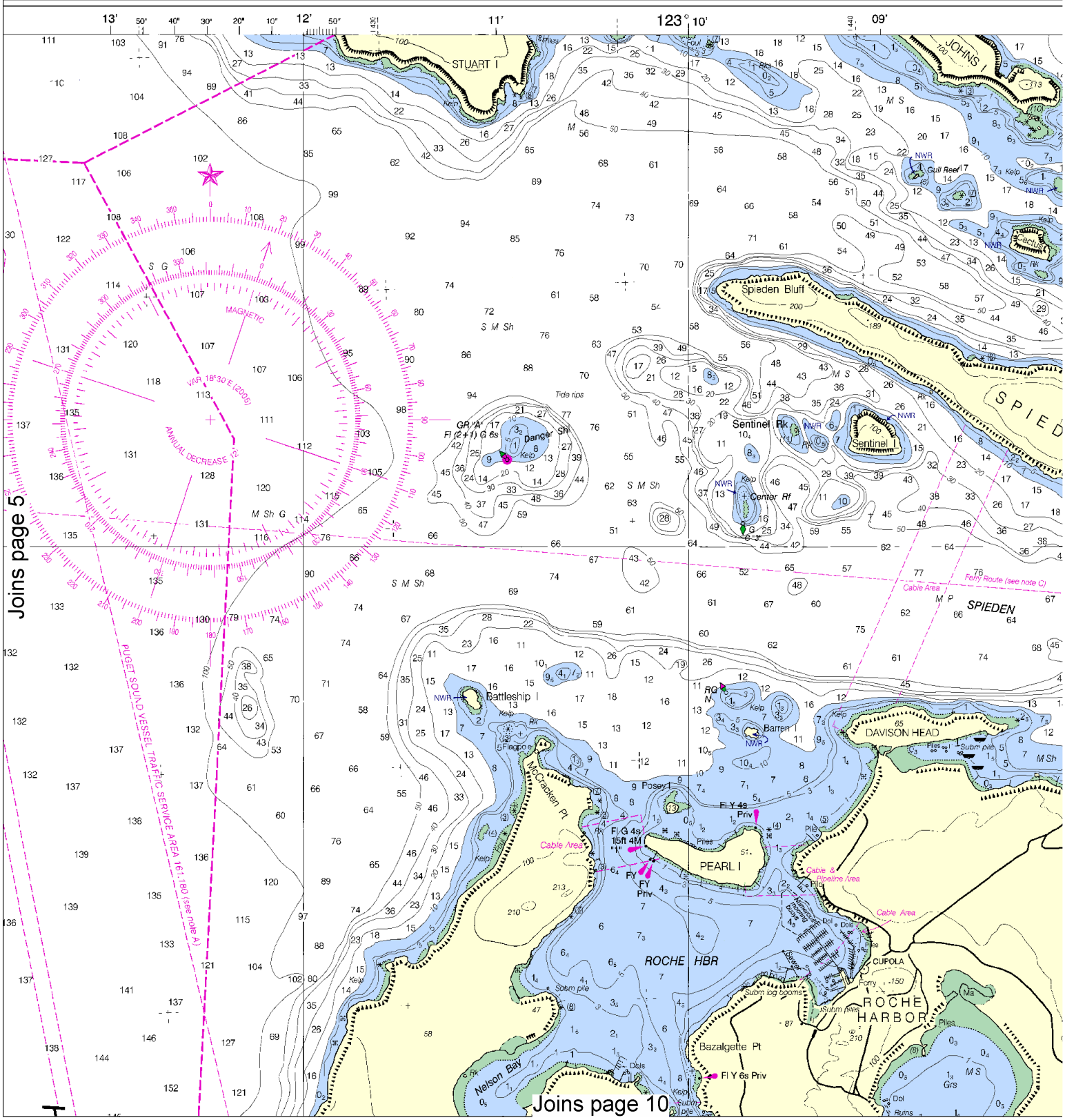
1st Ed., Aug. 1981 KAPP 1686



North

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Nautical Miles

1 ½ 0 1

Yards

1000 0 1000 2000

-ON-DEMAND CHARTS
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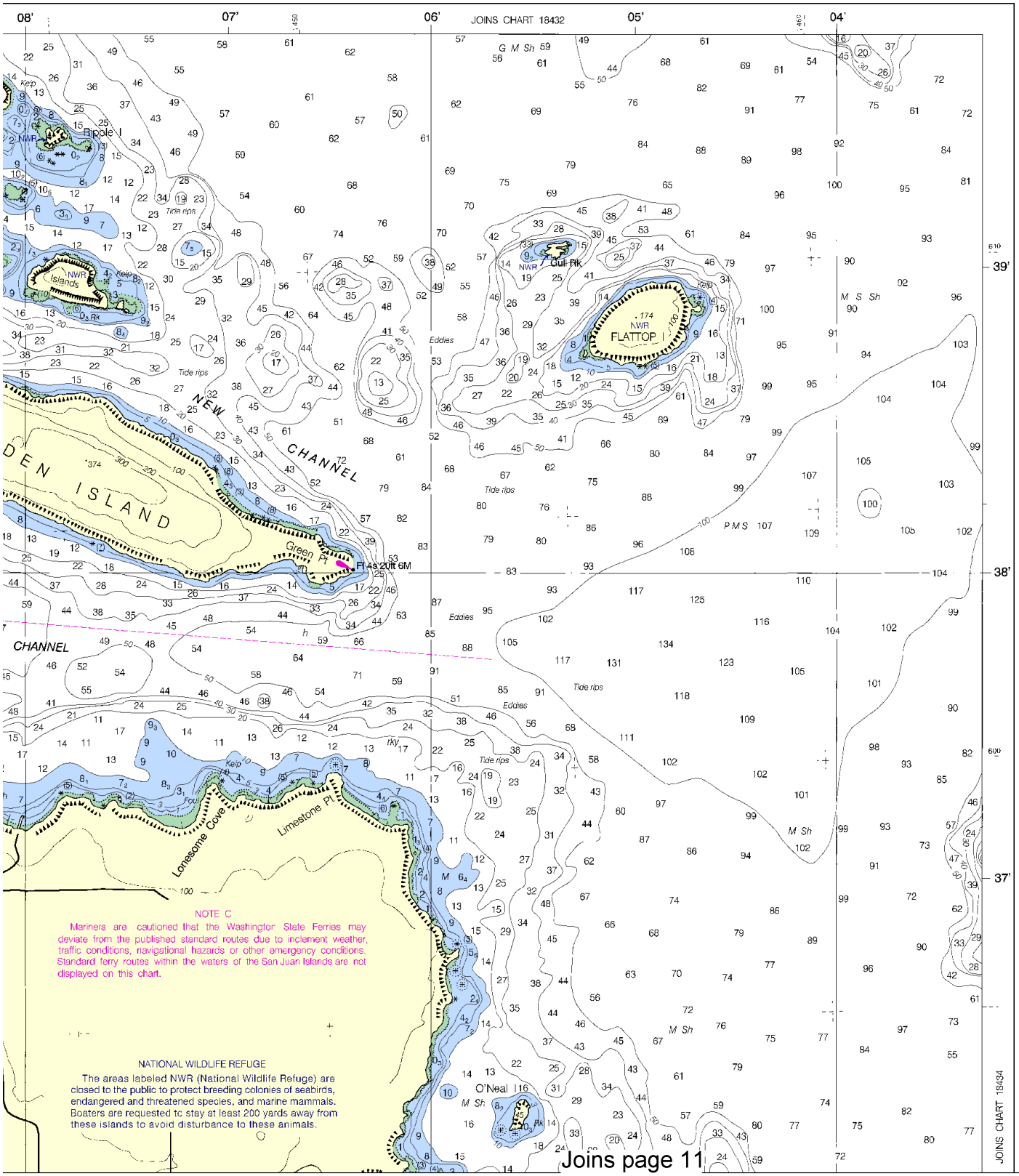
SOUNDINGS IN FATHOMS

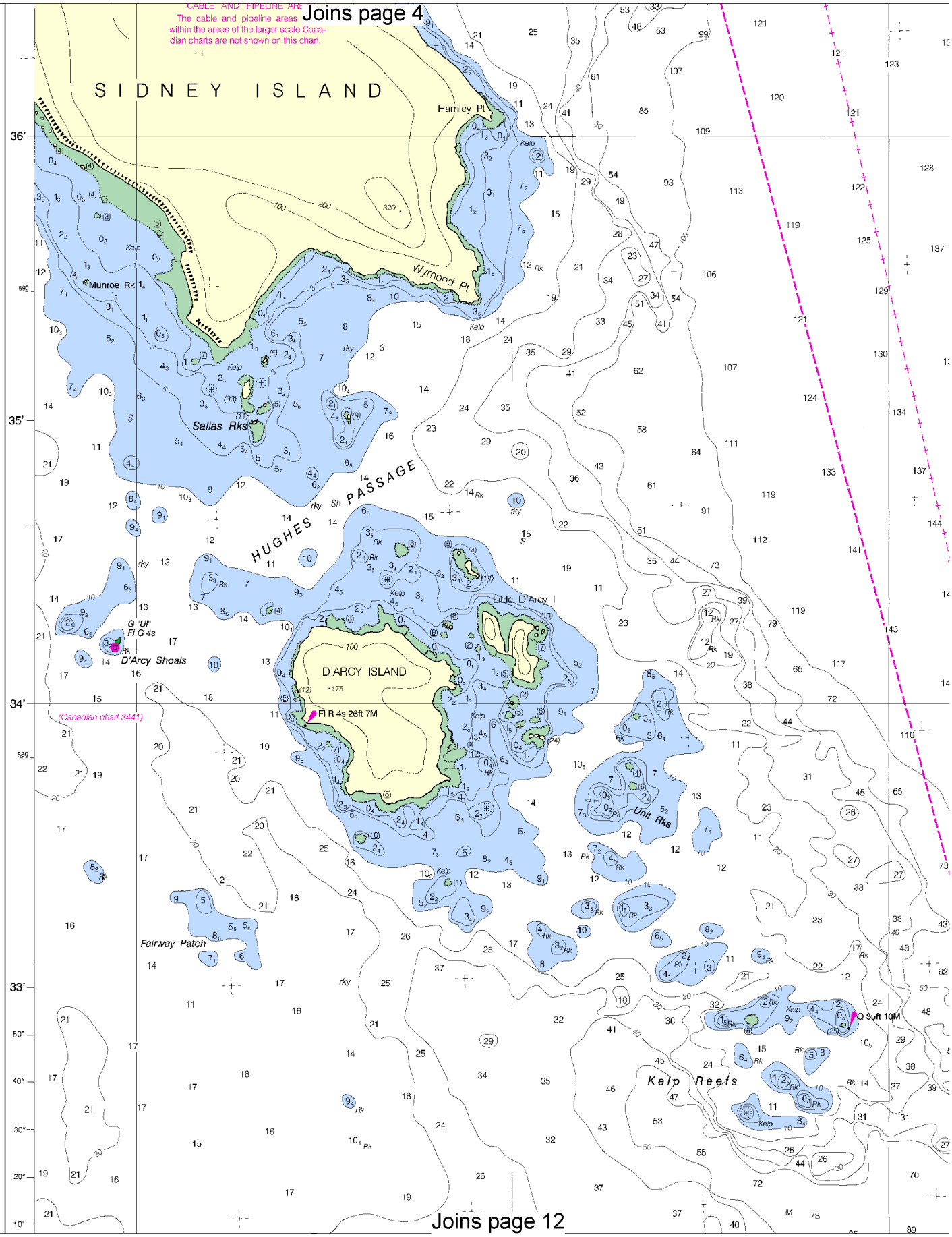
(FATHOMS AND FEET TO 11 FATHOMS)

18433



Joins page 11

This BookletChart has been updated with: Coast Guard Local Notice To Mariners: 0710 2/16/2010,
NGA Weekly Notice to Mariners: 0910 2/27/2010,
Canadian Coast Guard Notice to Mariners: n/a .



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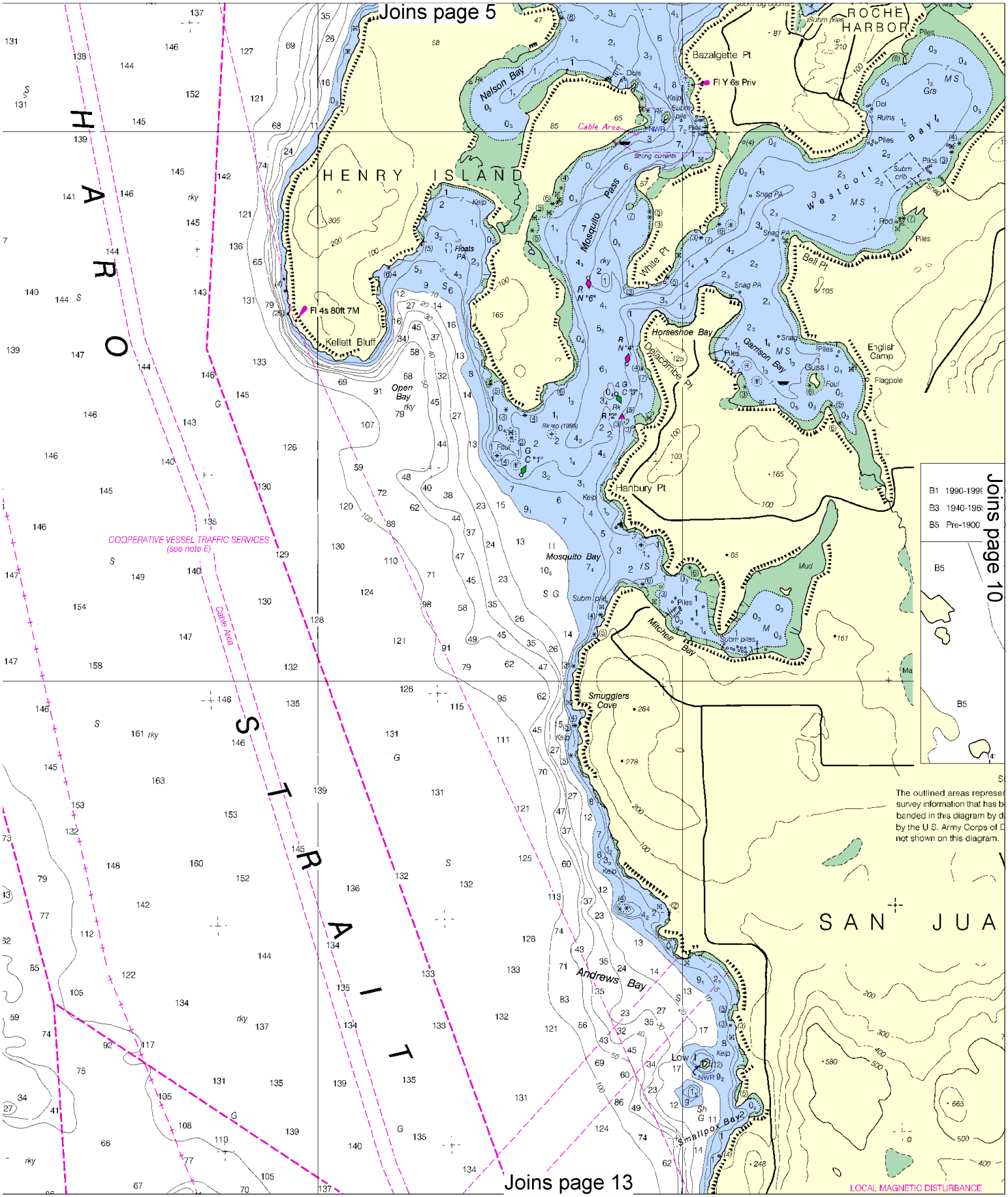
Nautical Miles

1 ½ 0 1

Yards

1000 0 1000 2000


Joins page 5
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Joins page 13
HENRY ISLAND
ROCHE HARBOR
Bazalgette Pt
Fl Y 6s Priv
Nelson Bay
Mosquito Pass
Westcott Bay
White Pt
Bell Pt
Horseshoe Bay
Garrison Bay
English Camp
Flagpole
Fl 4s 80ft 7M
Kellett Bluff
Open Bay
Hanbury Pt
Mosquito Bay
Mitchell Bay
Smugglers Cove
Andrews Bay
Smallpox Bay
Low I
HARO STRAIT
SAN JUA
COOPERATIVE VESSEL TRAFFIC SERVICES
(see note E)
Cable Area
LOCAL MAGNETIC DISTURBANCE
B1 1990-1999
B3 1940-1969
B5 Pre-1900
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survey information that has b
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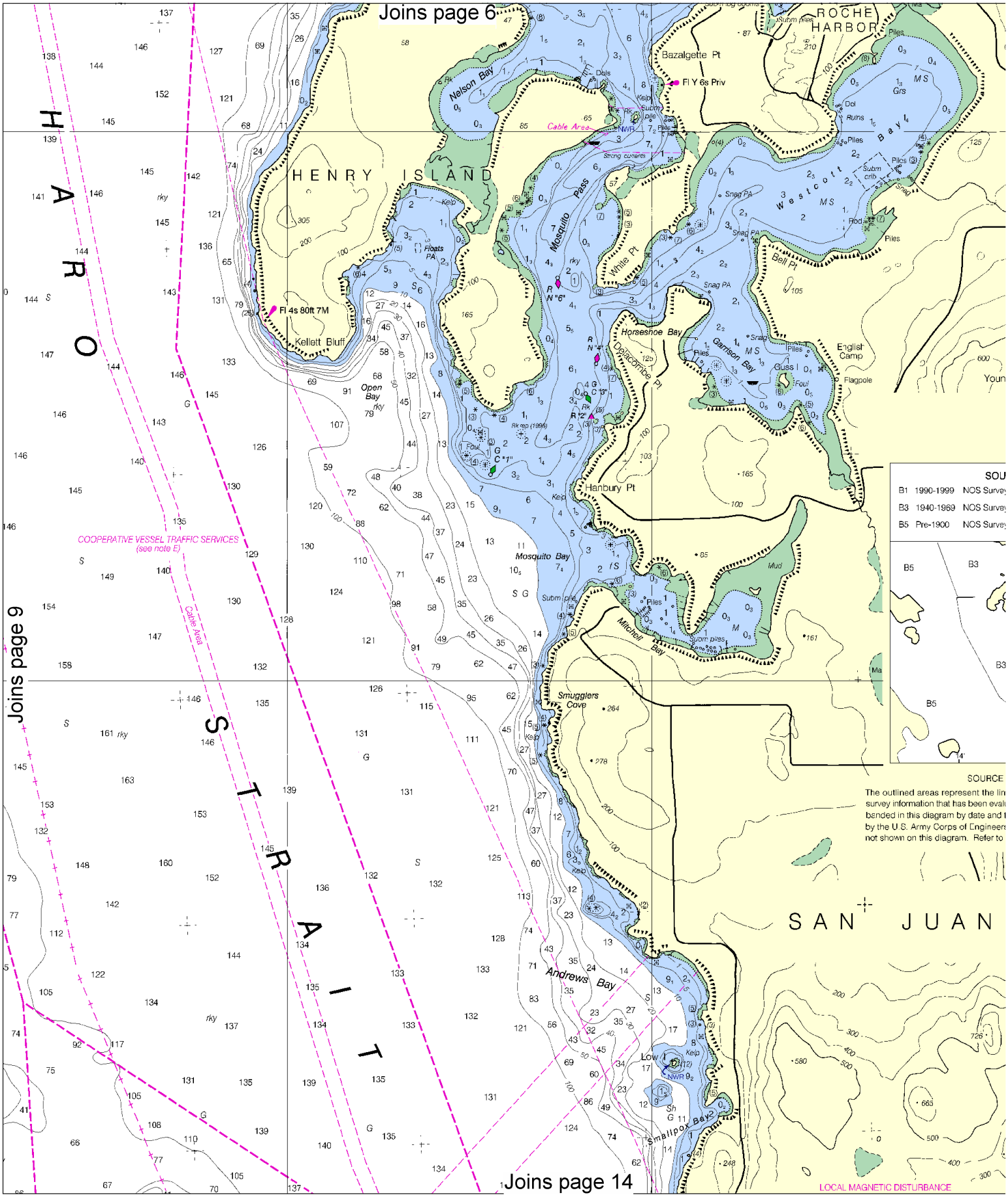
by the U.S. Army Corps of E
not shown on this diagram.



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Nautical Miles

1 ½ 0 1

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Joins page 7

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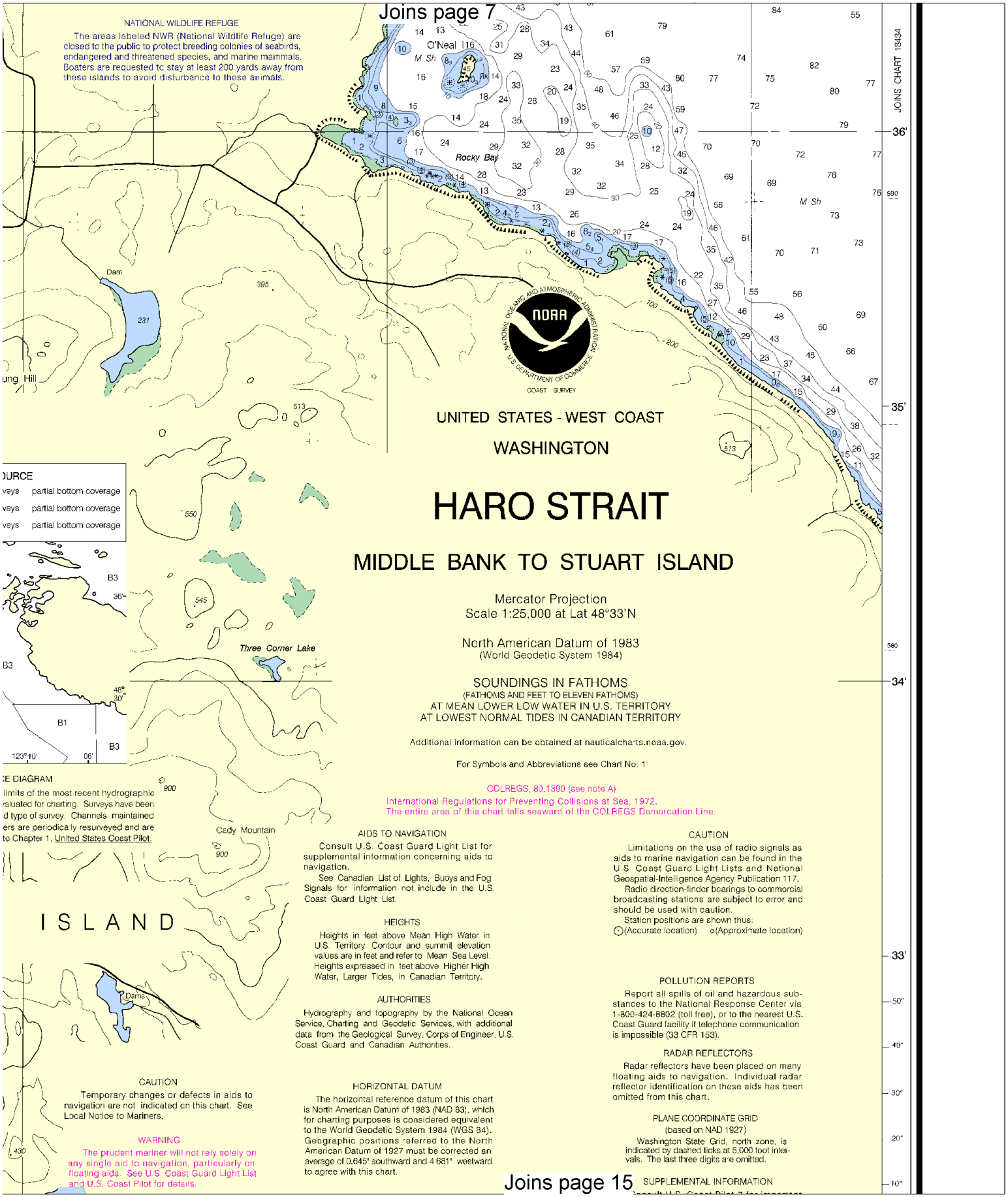

UNITED STATES - WEST COAST

WASHINGTON

HARO STRAIT

MIDDLE BANK TO STUART ISLAND

Mercator Projection
Scale 1:25,000 at Lat 48°33'N

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

For Symbols and Abbreviations see Chart No. 1

COLREGS, 80.1390 (see note A)
International Regulations for Preventing Collisions at Sea, 1972.
The entire area of this chart falls seaward of the COLREGS Demarcation Line.

OURCE

veys	partial bottom coverage
veys	partial bottom coverage
veys	partial bottom coverage

CE DIAGRAM

limits of the most recent hydrographic valuated for charting. Surveys have been d type of survey. Channels maintained ers are periodically resurveyed and are to Chapter 1, United States Coast Pilot.

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 include in the U.S. Coast Guard Light List.

HEIGHTS

Heights in feet above Mean High Water in U.S. Territory. Contour and summit elevation values are in feet and refer to Mean Sea Level. Heights expressed in feet above Higher High Water, Larger Tides, in Canadian Territory.

AUTHORITIES

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CAUTION

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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) o(Approximate location)

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).

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.

PLANE COORDINATE GRID
(based on NAD 1927)

Washington State Grid, north zone, is indicated by dashed ticks at 5,000 foot intervals. The last three digits are omitted.

CAUTION

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

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.

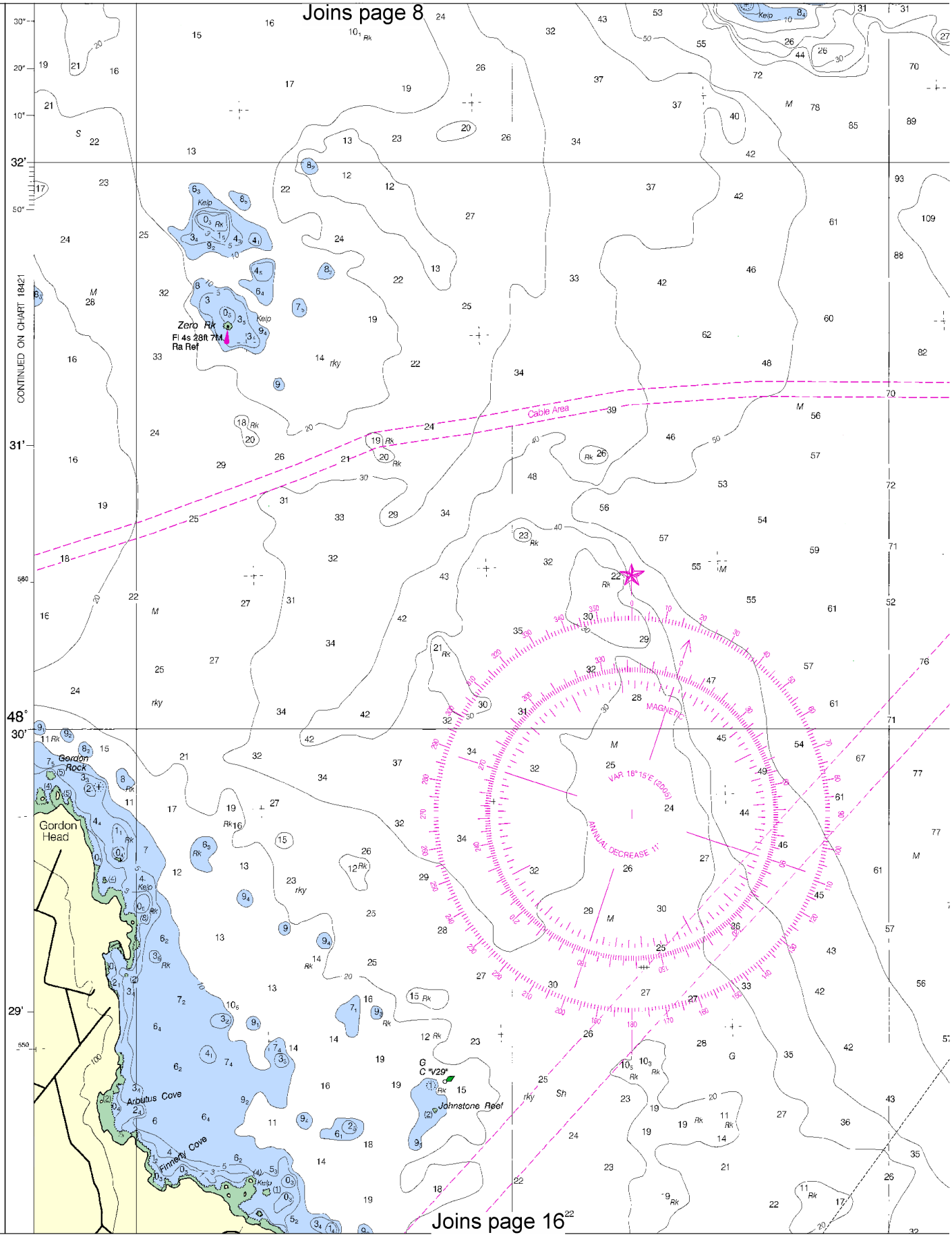
HORIZONTAL DATUM

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 0.645" southward and 4.681" westward to agree with this chart.

SUPPLEMENTAL INFORMATION

Joins page 15

Joins page 8



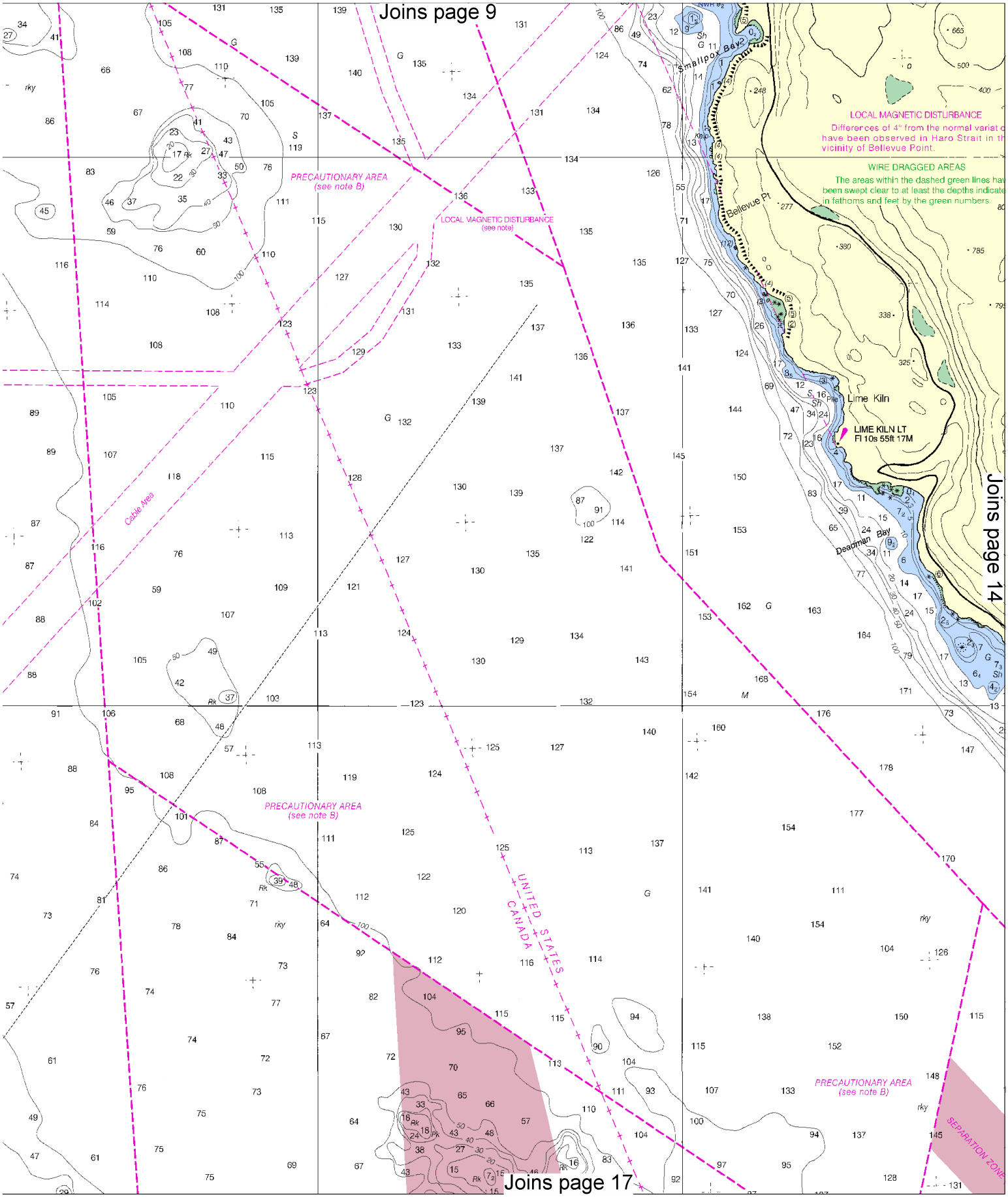
Joins page 16

North

Printed at reduced scale. ~~SCALE 1:25,000~~ See Note on page 5.

Nautical Miles: 1 ½ 0 1

Yards: 1000 0 1000 2000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Joins page 14
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PRECAUTIONARY AREA
(see note B)
LOCAL MAGNETIC DISTURBANCE
(see note)
Smallpox Bay
Bellevue Pt
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LIME KILN LT
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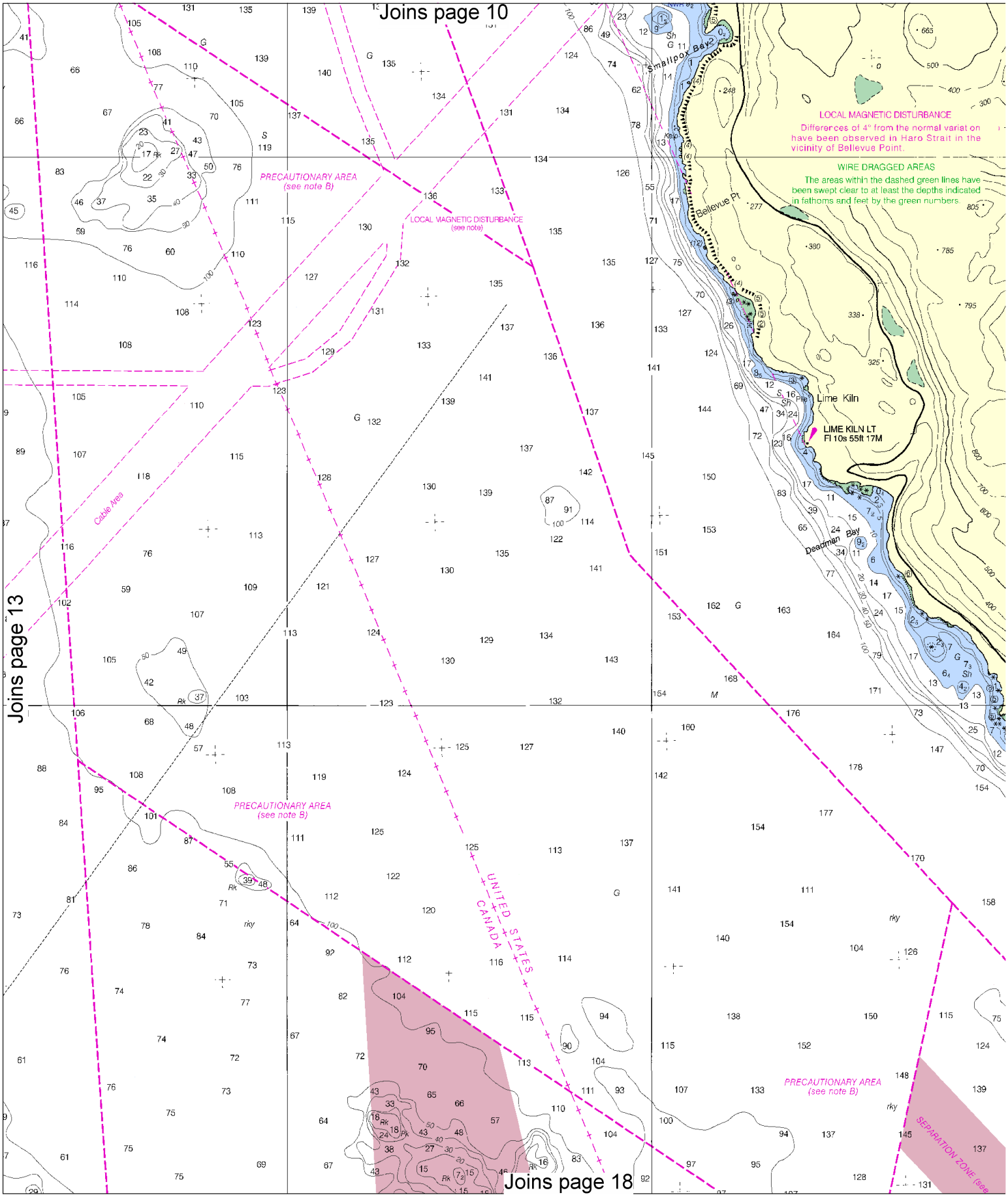
Cable Area
UNITED STATES
CANADA
SEPARATION ZONE



North

Printed at reduced scale. ~~SCALE 1:25,000~~ See Note on page 5.

Nautical Miles

1 ½ 0 1

Yards

1000 0 1000 2000

Joins page 11

CAUTION

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

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.

HORIZ

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 0.645" southward and 4.681" westward to agree with this chart.

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.

floating aids to navigation. Individual radar reflector identification on these aids has been omitted from this chart.

PLANE COORDINATE GRID

(based on NAD 1927)

Washington State Grid, north zone, is indicated by dashed ticks at 5,000 foot intervals. The last three digits are omitted.

SUPPLEMENTAL INFORMATION

Consult U.S. Coast Pilot 7 for important supplemental information.

CANADIAN WEATHER RADIO BROADCASTS

The Canadian Weather Service station listed below provides continuous marine weather broadcasts. The range of reception is variable, but for most stations is usually 20 to 40 miles from the antenna site.

Vancouver, B.C. CFA-240 162.40 MHz

NOTE B

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 and Strait of Georgia 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 U.S. 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.

CAUTION

SUBMARINE PIPELINES AND CABLES

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

Pipeline Area *Cable Area*

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.

NOTE D

The U.S. Coast Guard operates a mandatory Vessel Traffic Services (VTS) system in the 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.

6 Vessel Traffic Services calling-in point with numbers; arrow indicates direction of vessel movement.

NOTE E

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.

LOGARITHMIC SPEED SCALE

1 2 3 4 5 6 7 8 9 10 15 20 25 30 40 50 60

To find SPEED, place one point of dividers on distance run (in any unit) and the other on minutes run. Without changing divider spread, place right point on 60 and left point will then indicate speed in units per hour. Example: with 4.0 nautical miles run in 15 minutes, the speed is 16.0 knots.

SCALE 1:25,000

Nautical Miles: 1 ½ 0 1

Yards: 1000 0 1000 2000

Meters: 1000 0 1000 2000

TIDAL INFORMATION

Place Name	(LAT/LONG)	Height referred to datum of soundings (MLLW) Mean Higher High Water	Mean High Water	Mean Low Water	Extreme Low Water
		feet	feet	feet	feet
Kanaka Bay	(48°29'N / 123°05'W)	7.3	6.7	2.4	-4.0
Roche Harbor	(48°37'N / 123°09'W)	7.6	7.0	2.5	-4.0

(Aug 2003)

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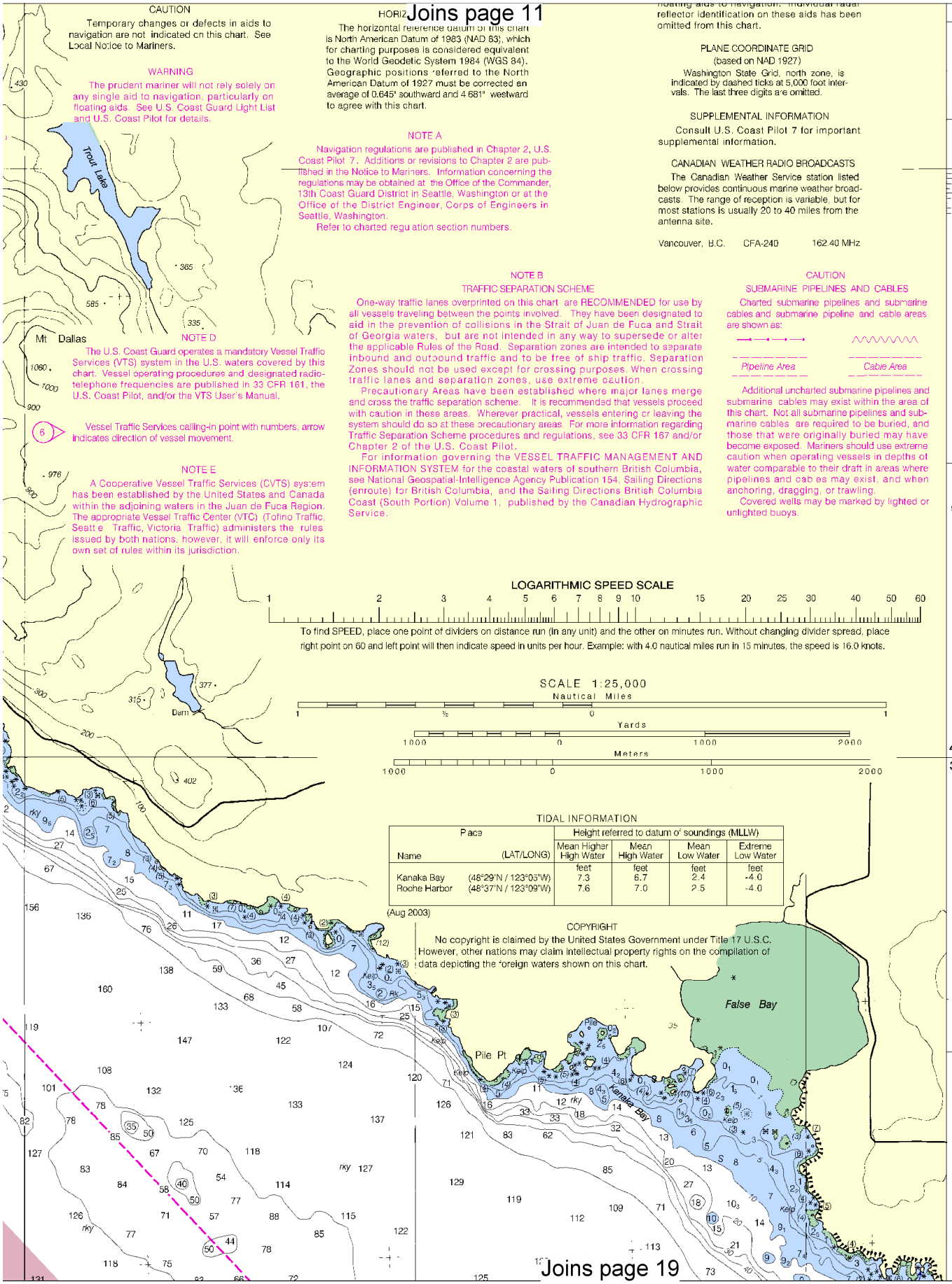
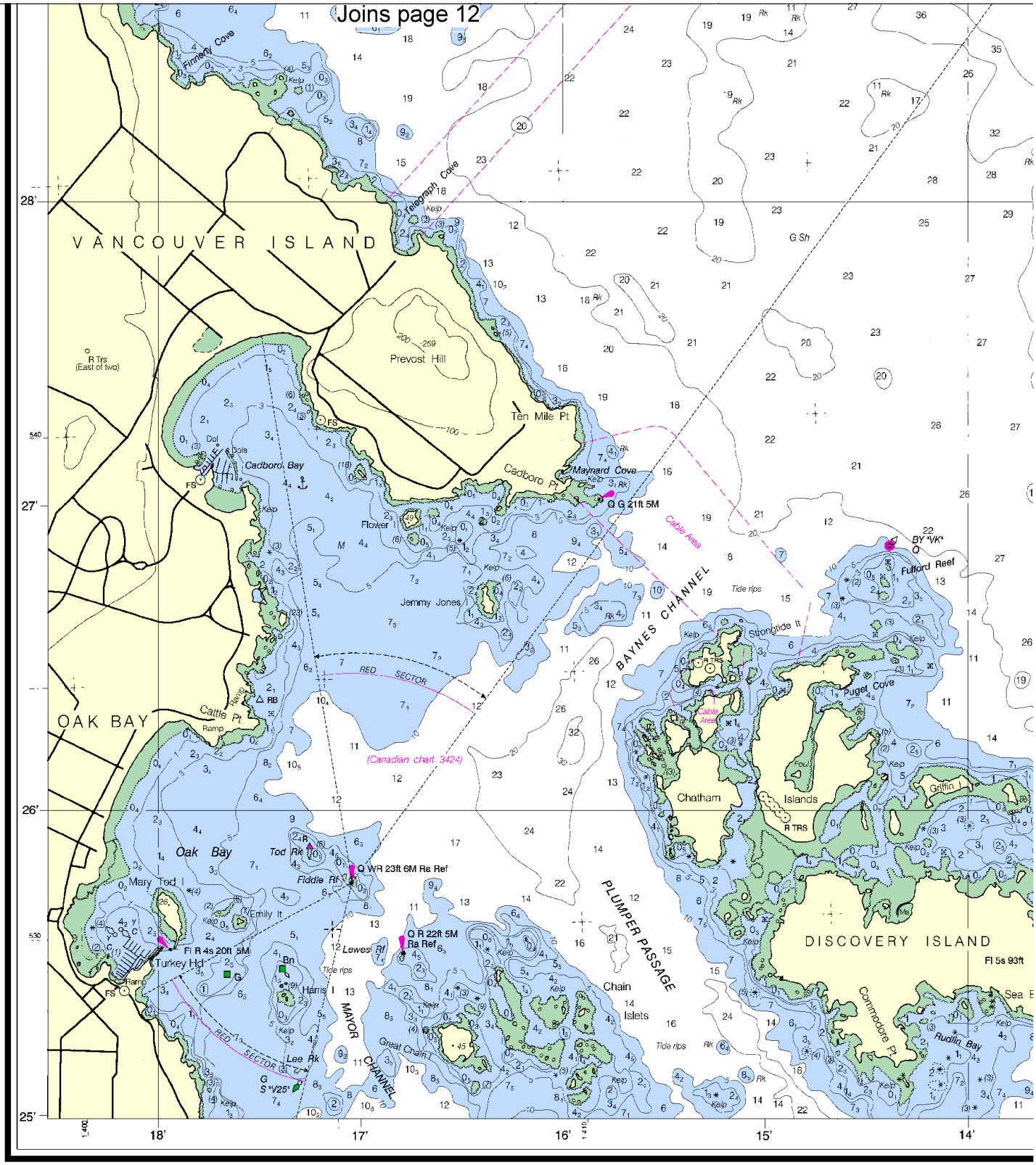


Joins page 19



6th Ed., Apr. / 05 ■ Corrected through NM Apr. 23/05
Corrected through LNM Apr. 26/05

18433

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.

SOU

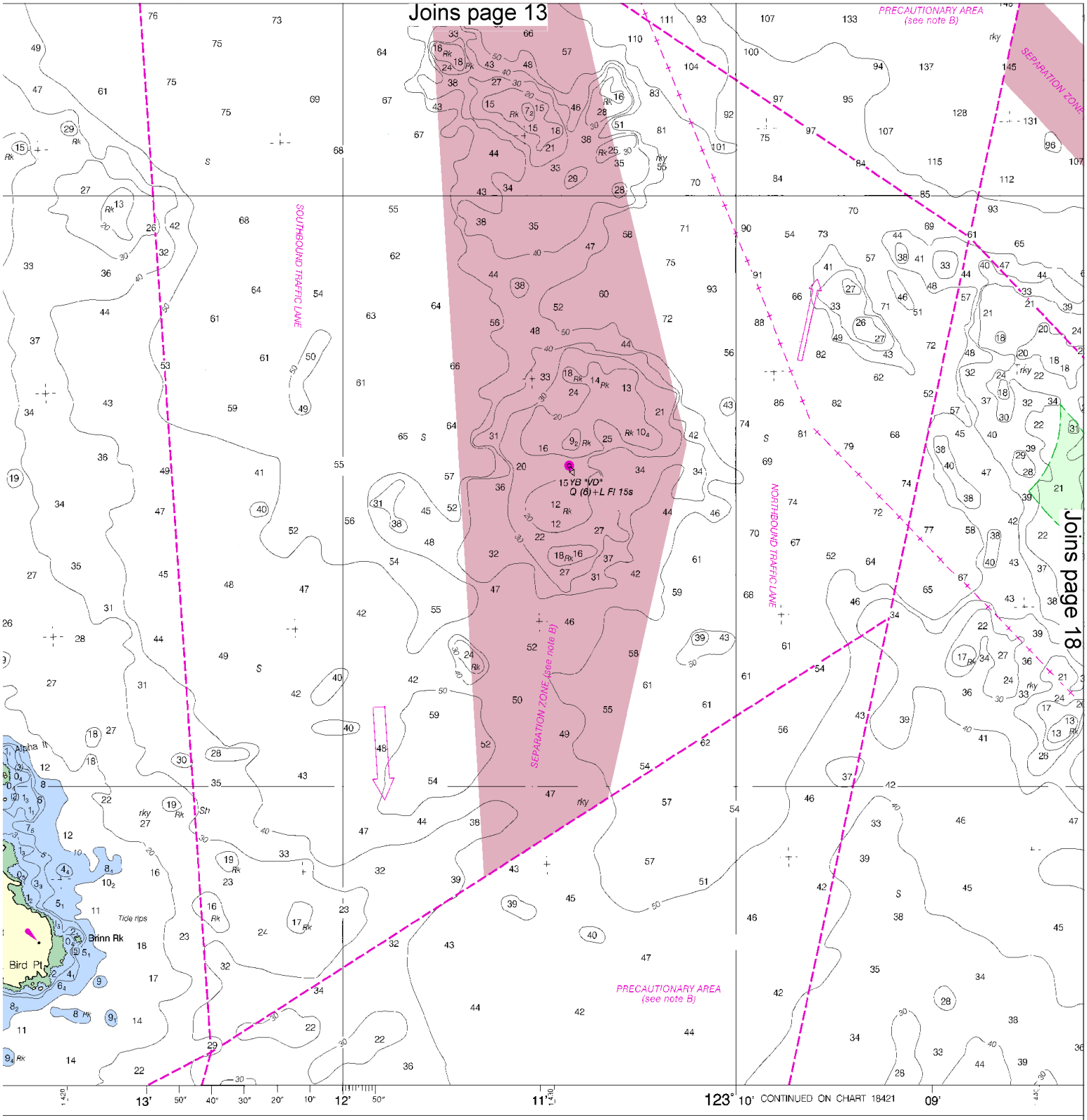
16

North

Printed at reduced scale. ~~SCALE 1:25,000~~ See Note on page 5.

Nautical Miles
1 ½ 0 1

Yards
1000 0 1000 2000

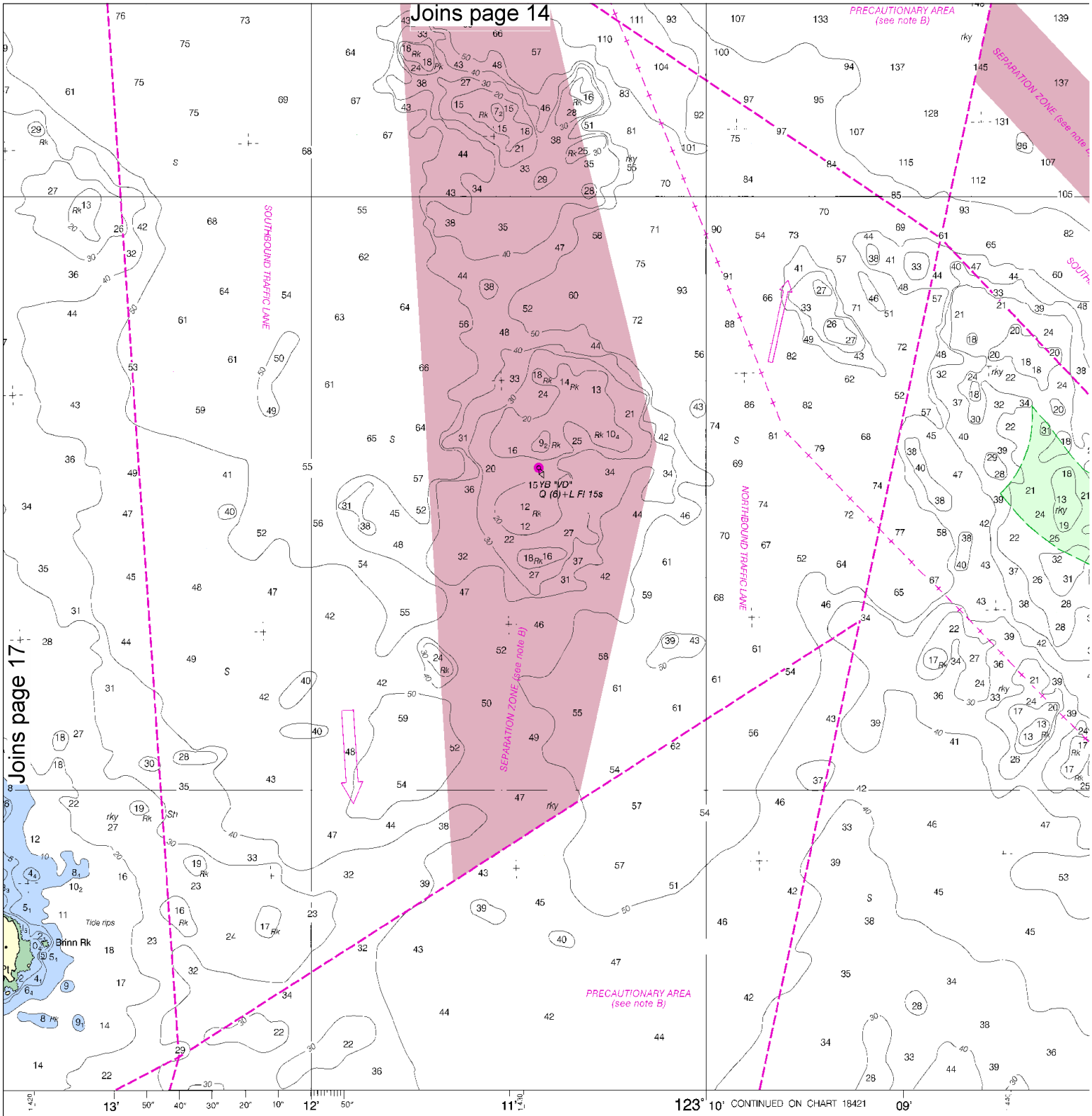


JNDINGS IN FATHOMS

(FATHOMS AND FEET TO 11 FATHOMS)

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

FATHOMS	1	2	3
FEET	6	12	18
METERS	1 2 3 4 5		



DINGS IN FATHOMS

THOMS AND FEET TO 11 FATHOMS)

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

FATHOMS		1		2		3		4	
FEET		6		12		18		24	
METERS	1	2	3	4	5	6	7	8	

North

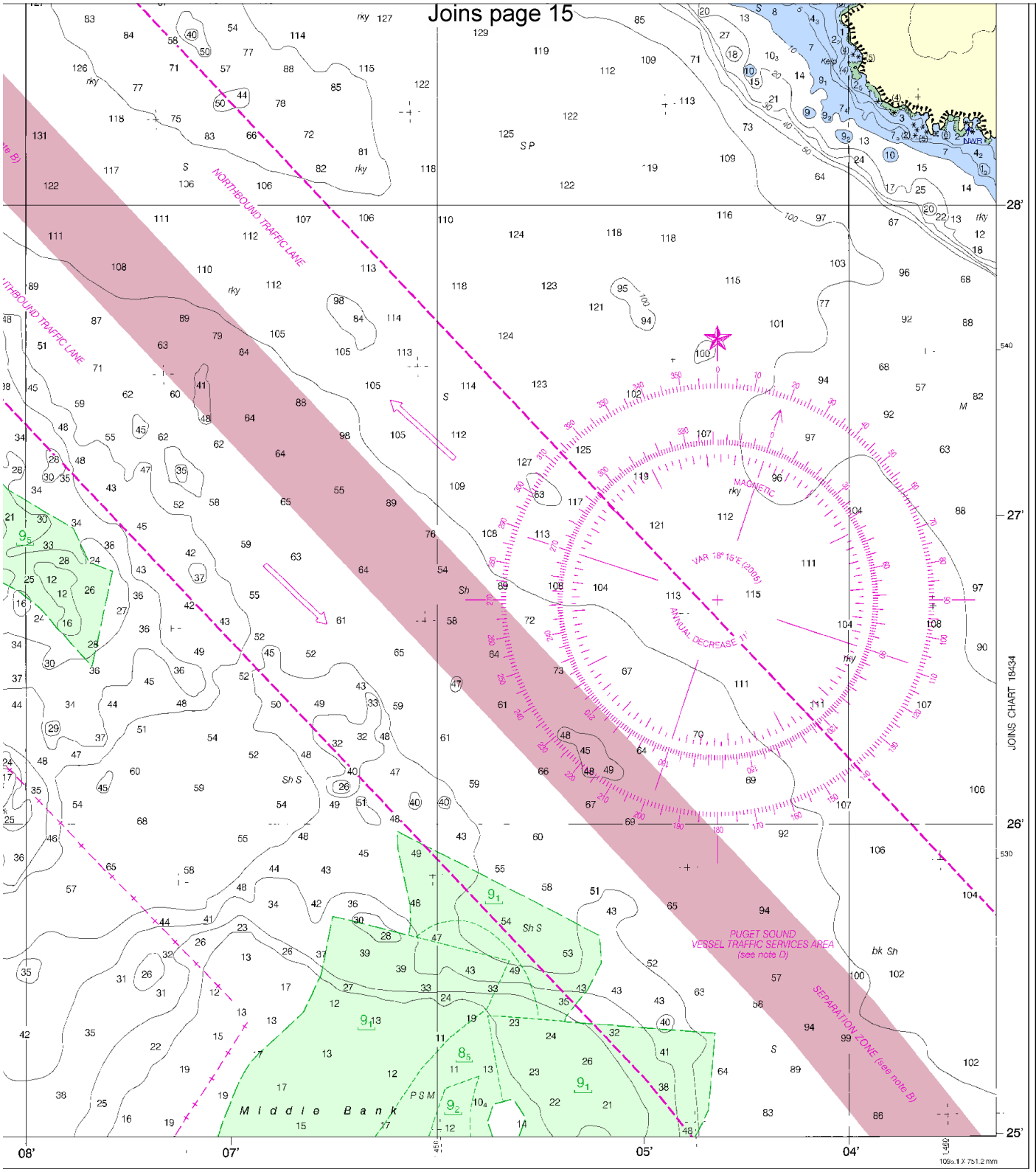
Printed at reduced scale. ~~SCALE 1:25,000~~ See Note on page 5.

Nautical Miles

1 ½ 0 1

Yards

1000 0 1000 2000



Haro Strait, Middle Bank to Stuart Island

SOUNDINGS IN FATHOMS - SCALE 1:25,000

18433

ED. NO. 6

NSN 7642014011565

NGA REFERENCE NO. 18BHA18433

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 & 78A – Recreational boat channels.

Distress Call Procedures

1. Make sure radio is on.
2. Select Channel 16.
3. Press/Hold the transmit button.
4. Clearly say: "MAYDAY, MAYDAY, MAYDAY."
5. Also give: Vessel Name and/or Description; Position and/or Location; Nature of Emergency; Number of People on Board.
6. Release transmit button.
7. Wait for 10 seconds – If no response Repeat MAYDAY Call.

HAVE ALL PERSONS PUT ON LIFE JACKETS !!

Mobile Phones – Call 911 for water rescue.
Coast Guard Search & Rescue – 206-220-7001
Coast Guard Port Angeles – 360-457-4404
Canadian Coast Guard (RCC) – 250-363-2995
Commercial Vessel Assistance – 1-800-367-8222

NOAA Weather Radio – 162.400 MHz, 162.425 MHz, 162.450 MHz, 162.475 MHz, 162.500 MHz, 162.525 MHz, 162.550 MHz.

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.

NOAA, The Nation's Chartmaker

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Official NOAA Nautical Charts – NOAA surveys and charts the national and territorial waters of the U.S, including the Great Lakes. We produce over 1,000 traditional nautical charts covering 3.4 million square nautical miles. Carriage of official NOAA charts is mandatory on the commercial ships that carry our commerce. They are used on every Navy and Coast Guard ship, fishing and passenger vessels, and are widely carried by recreational boaters. NOAA charts are available from official chart agents listed at: www.NauticalCharts.NOAA.gov.

Official Print-on-Demand Nautical Charts – These full-scale NOAA charts are updated weekly by NOAA for all Notice to Mariner corrections. They have additional information added in the margin to supplement the chart. Print-on-Demand charts meet all federal chart carriage regulations for charts and updating. Produced under a public/private partnership between NOAA and OceanGrafix, LLC, suppliers of these premium charts are listed at www.OceanGrafix.com.

Official Electronic Navigational Charts (NOAA ENCs®) – ENCs are digital files of each chart's features and their attributes for use in computer-based navigation systems. ENCs comply with standards of the International Hydrographic Organization. ENCs and their updates are available for free from NOAA at www.NauticalCharts.NOAA.gov.

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Official BookletCharts™ – BookletCharts™ are reduced scale NOAA charts organized in page-sized pieces. The "Home Edition" can be downloaded from NOAA for free and printed. The Internet address is www.NauticalCharts.gov/bookletcharts.

Official PocketCharts™ – PocketCharts™ are for beginning recreational boaters to use for planning and locating, but not for real navigation. Measuring a convenient 13" by 19", they have a 1/3 scale chart on one side, and safety, boating, and educational information on the reverse. They can be purchased at retail outlets and on the Internet.

Official U.S. Coast Pilot® – The Coast Pilots are 9 text volumes containing information important to navigators such as channel descriptions, port facilities, anchorages, bridge and cable clearances, currents, prominent features, weather, dangers, and Federal Regulations. They supplement the charts and are available from NOAA chart agents or may be downloaded for free at www.NauticalCharts.NOAA.gov.

Official On-Line Chart Viewer – All NOAA nautical charts are viewable here on-line using any Internet browser. Each chart is up-to-date with the most recent Notices to Mariners. Use these on-line charts as a ready reference or planning tool. The Internet address is www.NauticalCharts.gov/viewer.

Official Nautical Chart Catalogs – Large format, regional catalogs are available for free from official chart agents. Page size, state catalogs are posted on the Internet and can be printed at home for free. Go to http://NauticalCharts.NOAA.gov/mcd/ccatalogs.htm.

Internet Sites: www.NauticalCharts.NOAA.gov, www.NOAA.gov, www.TidesandCurrents.NOAA.gov, www.NOS.NOAA.gov.