BookletChart™

West Coast of North America – Mexican Border to Dixon Entrance

NOAA Chart 501

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/coastpilot_w.php?book=7.

(Selected Excerpts from Coast Pilot)
Islands of Four Mountains are a group of five, treeless, volcanic islands W of Umnak Island. Their names are Uliaga, Kagamil, Chuginadak, Carlisle, and Herbert. These islands are high and snowcapped, with some snow remaining throughout the year. Clouds obscure the peaks most of the time. Frequently in the summer, while low fog banks are over the adjacent waters, the peaks stand clear above and are visible away from the fog banks. Fog is often in patches that may be avoided by passing around one of the islands, or by moving out of the sweep of wind through a pass. The winds play about the islands with all the vagaries common to williwaws and may sometimes be avoided by making a move of 1 mile or so.

Navigation among the islands is beset by frequent fogs, strong and treacherous currents, and tide rips that may be dangerous for small craft. Because of the frequent fogs and strong currents it is emphasized that navigation is safe only by frequent sounding and constant reference to the chart. All waters are clear for large ships beyond about 1 mile from the shores, and for small craft beyond 0.25 mile except where obstructions are charted. It is not safe to attempt passage inside any of the off-lying rocks.

In **Samalga Pass**, between Samalga Island and the Four Mountains Group, the waters are deep and 15 miles in width; however, a good berth must be given the shoals that extend SW from Samalga Island.

A bank, with a minimum depth of 13 fathoms, is about 5.5 miles S of Concord Point, Chuginadak Island. Apparently it is the high spot of a large shoal area rather than a pinnacle.

It is strongly recommended that a vessel proceeding along the N side of the Aleutian Islands avoid anchorage in the Four Mountains Group in bad weather. With a heavy sea running in the Bering Sea, dangerous tide rips will be encountered among the islands, and any lee afforded by indentations on the islands' shores is offset by the sudden shifting of the wind that may necessitate shifting anchorage during thick fog through narrow passes subject to strong tide rips.

Uliaga Pass, between Uliaga and Kagamil Islands, has 9 fathoms across almost its entire width, and a midchannel course clears all known dangers. In the middle of the pass is a light growth of kelp; it is towed under and difficult to see except during the periods of slack water.

Chuginadak Pass, between Chuginadak and Herbert Islands, is about 3 miles wide, with depths of more than 100 fathoms.

Between Herbert Island and Yunaska Island, to the W of the Four Mountains Group, the passage is 14 miles wide and very deep.

Currents.–Currents observations among the Islands of Four Mountains have not been sufficiently detailed to serve as a basis for precise predictions. The best index to the times of flood and ebb appears to be the information for a location 1 mile E of Yunaska Island which is given in the Tidal Current Tables. Flood sets generally N and ebb S. The duration of slack is usually very short.

Anchorages.–Anchorages in the group of Four Mountains Islands are few and inadequate. The principal one is in Applegate Cove, a bight on the N shore of Chuginadak Island. Protection from N weather may be found in South Cove on the opposite side of this island from Appellate Cove. About 3.5 miles to the E of South Cove is another anchorage, of small extent but offering excellent protection from the N. An anchorage giving protection from SW to NW weather is available in the bight at the NE corner of Chuginadak Island, about 0.9 mile S of Corwin Rock.

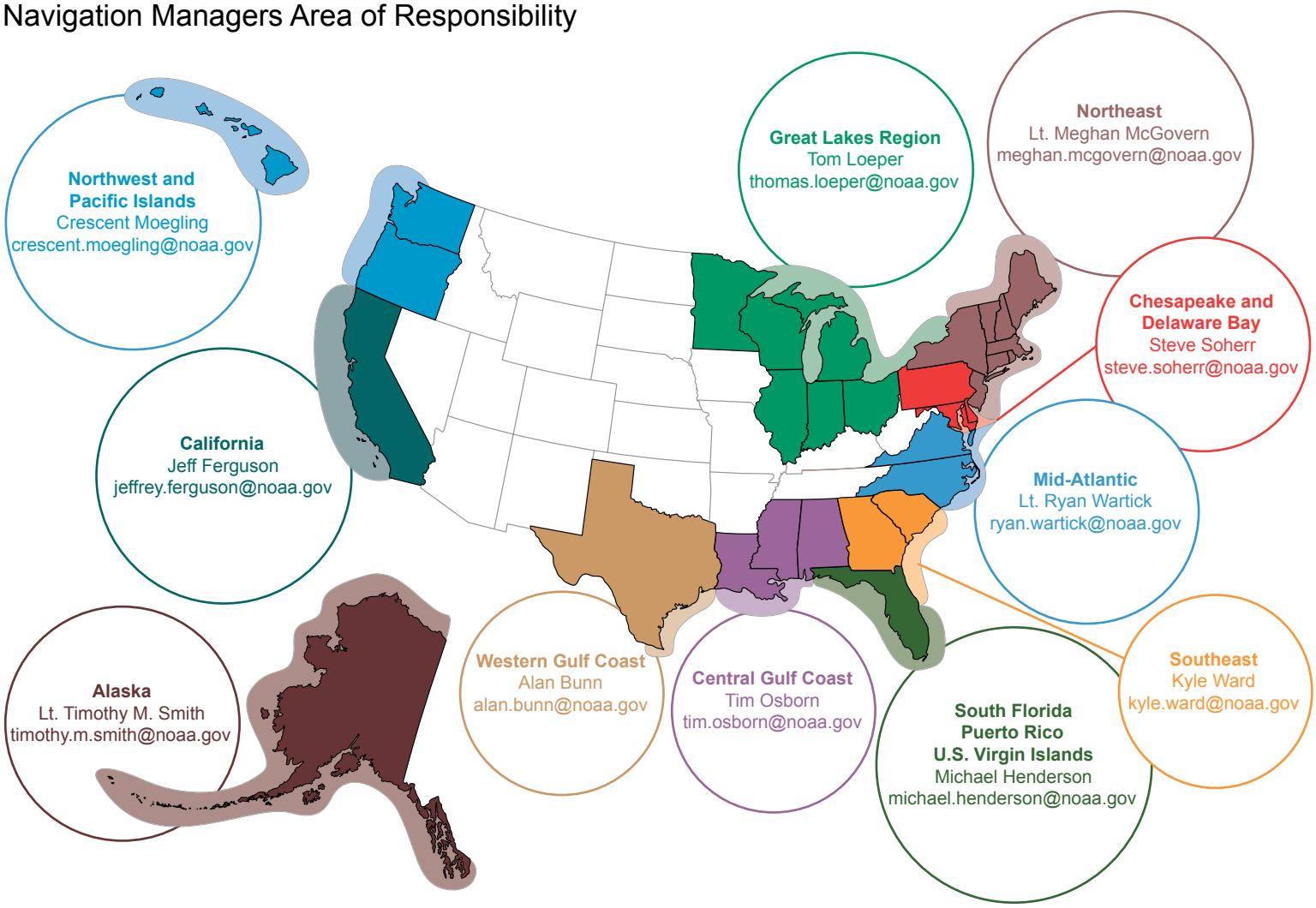
A fair anchorage for medium-sized craft is in a cove on the N side of Kagamil Island. Another anchorage is in a bight on the S side of the extreme E end of Kagamil Island.

No other anchorages about these islands can be recommended and none around Carlisle and Herbert Islands. Small craft may find bights here and there where the depths and swinging room are suitable for anchoring, but the prevalence of strong currents, heavy seas, and bad wind conditions make them unsafe. The bottom in and around this group of islands, where it is not rocky, is essentially cinders and volcanic ash mixed with sand and gravel.

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

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

Navigation Managers Area of Responsibility

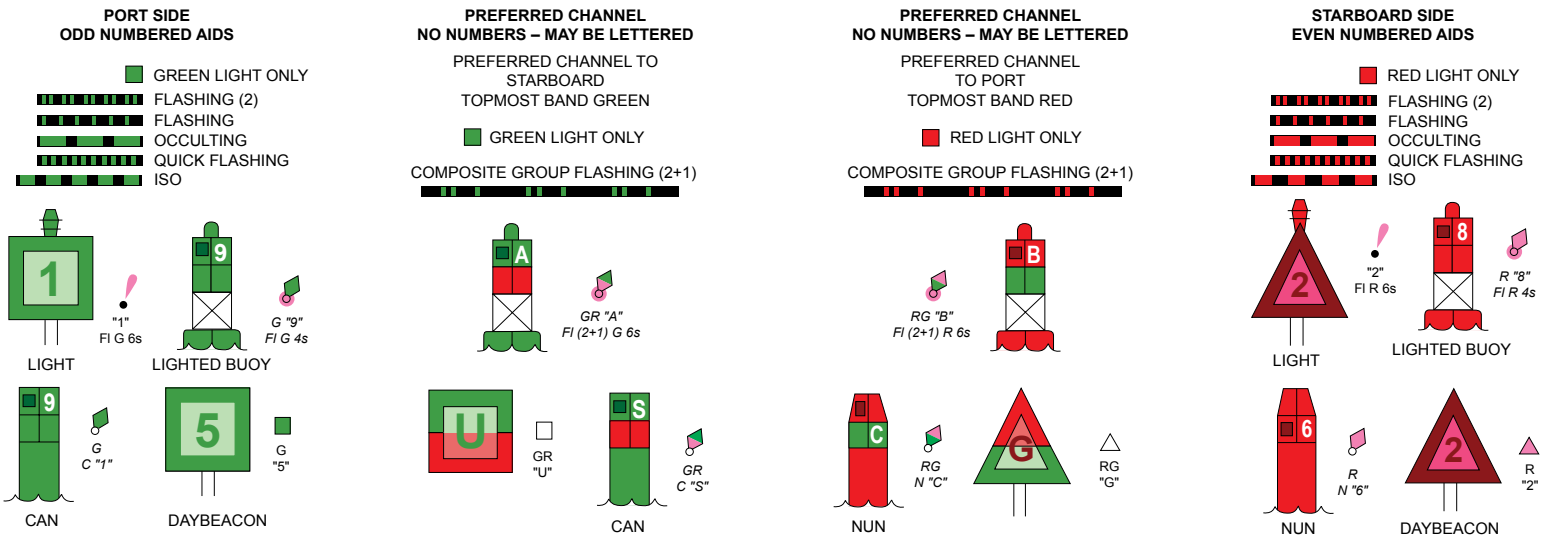


NOAA's navigation managers serve as ambassadors to the maritime community. They help identify navigational challenges facing professional and recreational mariners, and provide NOAA resources and information for safe navigation. For additional information, please visit *nauticalcharts.noaa.gov/service/navmanagers*

To make suggestions or ask questions online, go to *nauticalcharts.noaa.gov/inquiry*.
To report a chart discrepancy, please use *ocsdata.ncd.noaa.gov/idrs/discrepancy.aspx*.

Lateral System As Seen Entering From Seaward

on navigable waters except Western Rivers



For more information on aids to navigation, including those on Western Rivers, please consult the latest USCG Light List for your area. These volumes are available online at *http://www.navcen.uscg.gov*

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

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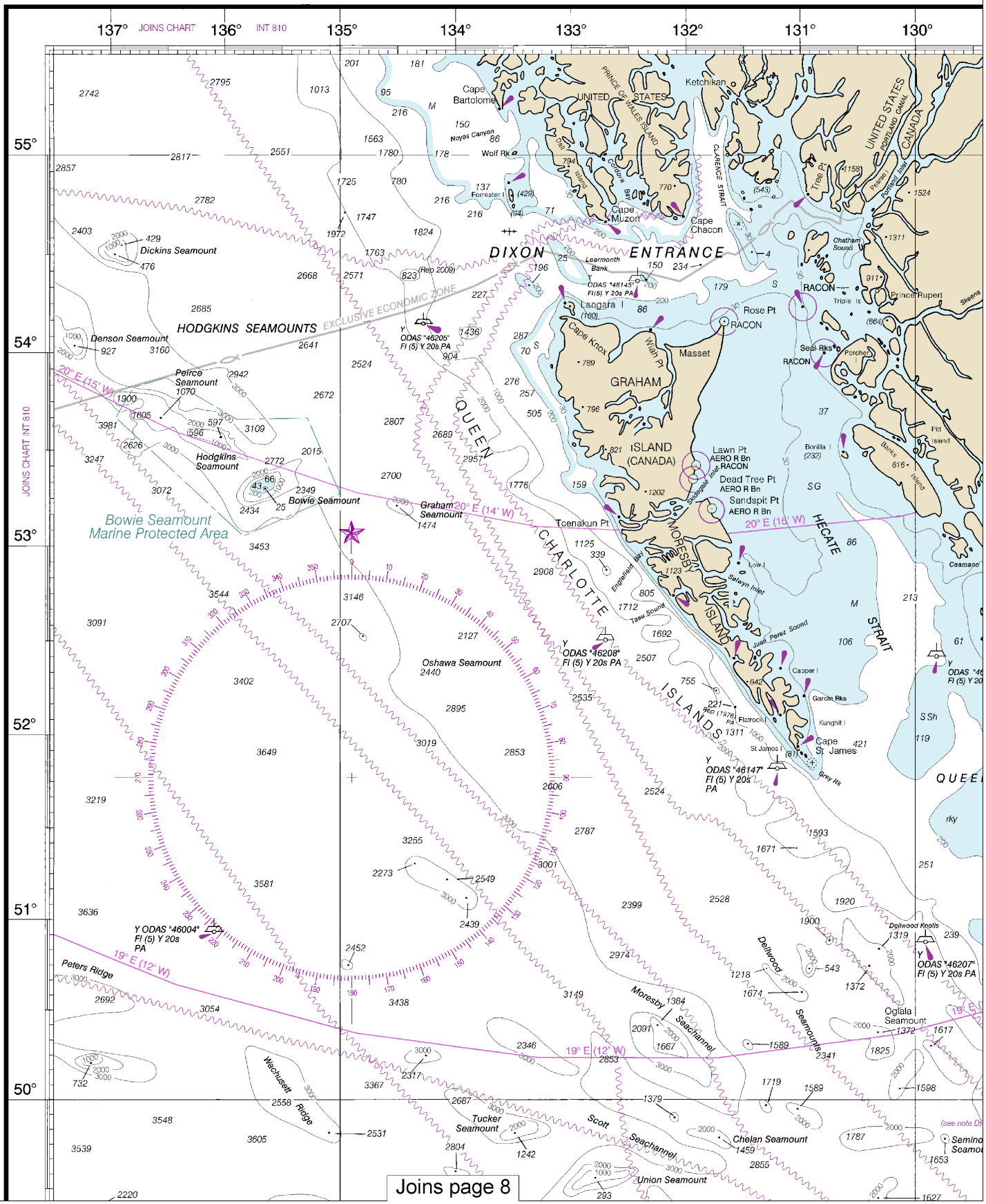


4

Note: Chart grid lines are aligned with true north.

1st Ed., June 1975 KAPP 1650

129° 128° 127° 126° 125° 124° 123° 122° 121°

INTERNATIONAL

THE NATION'S CHARTMAKER SINCE 1807

CHART SERIES

NORTH PACIFIC O

WEST COAST OF NOR

UNITED STATES - CANA

MEXICAN BORDER TO DIXON

1:3,500,000 (22°30)
Mercator Projection
North American Datum of 1983
(World Geodetic System 1984)

DEPTH
Depth contou
(under 1000
HEIGHT

AUTHORITIES

Hydrography and Topography by the National G
Survey, with additional data from the National Ge
Agency, U.S. Coast Guard, and Canadian Hydro

Joins page 6

MAGNETIC VARIATION

Magnetic variation curves are for 2009 derived from th
Model and accompanying secular change. If annual chan
as variation it is additive and the variation is increasing,
opposite in direction to variation it is subtractive and the

International boundaries as shown are approximat

DOUBTFUL DATA: Reported but unconfirmed depths or
are indicated by an encircling dotted line.

ABBREVIATIONS

For Symbols and Abbreviations see Chart No. 1

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)

AIDS TO NAVIGATION

Consult U.S. Coast Guard Light List fo
supplemental information concerning aids t
navigation.

See National Geospatial-Intelligence Agency
List of Lights and Fog Signals for information
not included in the United States Coast Guard
Light List.

CAUTION

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

RADAR REFLECTORS

CANADA

Kitimat

Princess Royal I

Gosling Rks

EN CHARLOTTE SOUND

Cape Caution

Cape Scott

QUEEN CHARLOTTE STRAIT

Johnstone Strait

VANCOUVER

Victoria Peak 2163

Golden Hinde 2200

Estevan Pt

Lookout I

Mt Wolfenden 1279

Scott Islands

ODAS "46204" Fl (5) Y 20s PA

ODAS "46132" Fl (5) Y 20s PA

Joins page 9

This BookletChart was reduced to 75% of the original chart scale.
The new scale is 1:4666666. Barscales have also been reduced an
are accurate when used to measure distances in this BookletChart.

Note: Chart grid lines are aligned with true north.

125° 124° 123° 122° 121° 120° 119° 118° 117°

55°30'00"N

55° 54° 53° 52° 51° 50°

INTERNATIONAL

THE NATION'S CHARTMAKER SINCE 1807

CHART SERIES

NORTH PACIFIC OCEAN

WEST COAST OF NORTH AMERICA

UNITED STATES - CANADA

MEXICAN BORDER TO DIXON ENTRANCE

1:3,500,000 (22°30)
Mercator Projection
North American Datum of 1983
(World Geodetic System 1984)

DEPTHS IN METERS
Depth contour interval, 1000 meters
(under 1000, at 30 and 200 meters)
HEIGHTS IN METERS

CAUTION

Danger, Prohibited, and Restricted Areas falling within the limits of the larger scale charts are shown thereon and not repeated on this chart.

AUTHORITIES

Hydrography and Topography by the National Ocean Service, Coast Survey, with additional data from the National Geospatial-Intelligence Agency, U.S. Coast Guard, and Canadian Hydrographic Service.

TRAFFIC SEPARATION SCHEME

Recommended traffic lanes established for the approaches to San Francisco Bay are shown on charts 18645, 18680, and 18640.

Recommended traffic lanes established in Santa Barbara Channel are shown on charts 18740 and 18720.

Recommended traffic lanes established for the approaches to the Strait of Juan De Fuca are shown on charts 18480, 18400, and 18465.

MAGNETIC VARIATION

Magnetic variation curves are for 2009 derived from the 2005 World Magnetic Model and accompanying secular change. If annual change is in same direction as variation it is additive and the variation is increasing. If annual change is opposite in direction to variation it is subtractive and the variation is decreasing.

International boundaries as shown are approximate.

DOUBTFUL DATA: Reported but unconfirmed depths or dangers are indicated by an encircling dotted line.

CAUTION

Submerged Submarine Operating Areas falling within the limits of the larger scale charts are shown thereon and not repeated on this chart.

NOTE D

LOCAL MAGNETIC DISTURBANCE

Differences as great as 7° from the normal variation have been observed in the vicinity of 49°55'N., 129°50'W.

ABBREVIATIONS

For Symbols and Abbreviations see Chart No. 1

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)

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).

AIDS TO NAVIGATION

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

See National Geospatial-Intelligence Agency List of Lights and Fog Signals for information not included in the United States Coast Guard Light List.

CAUTION

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

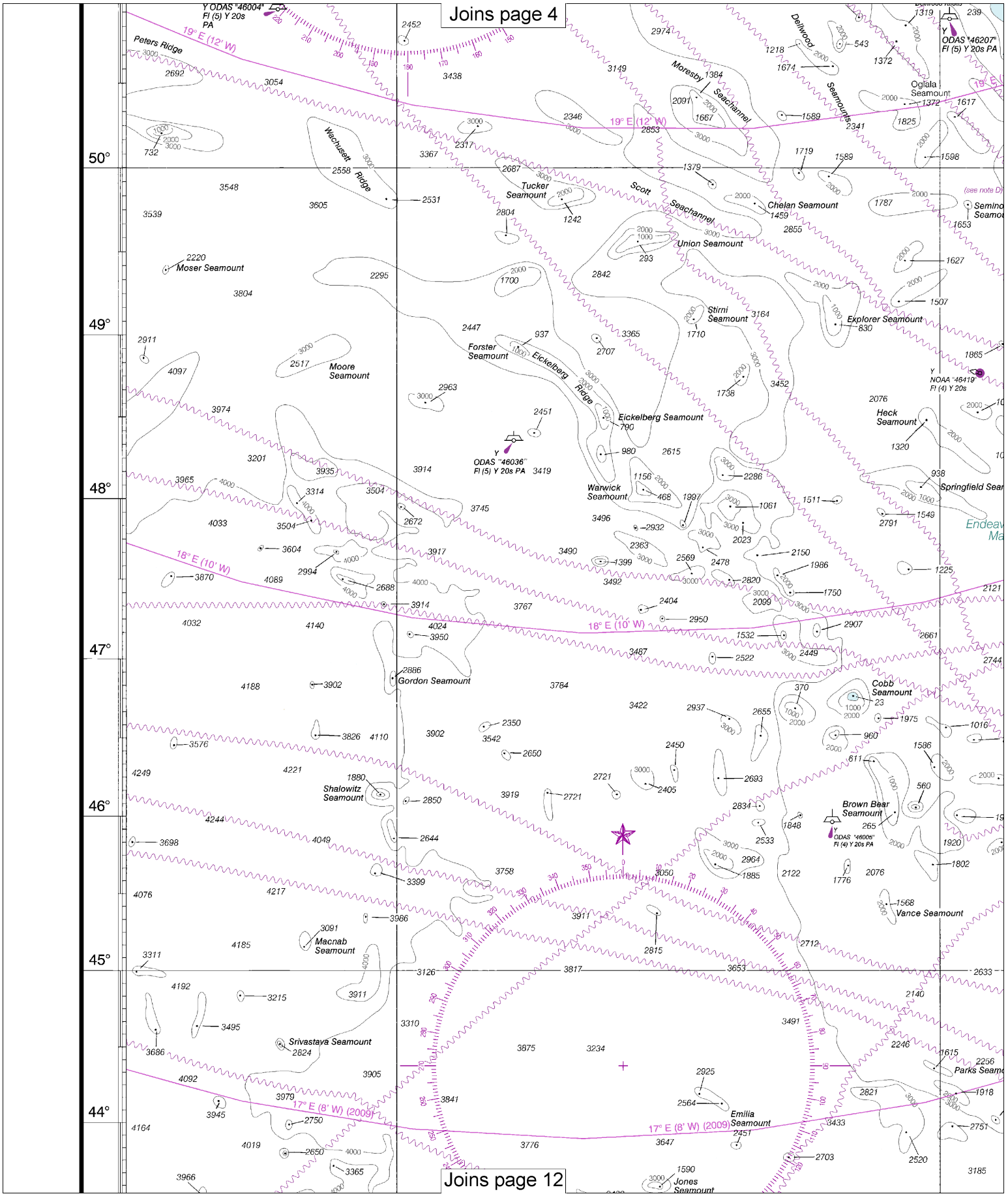
HORIZONTAL DATUM

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 of 1984 (WGS 84). Geographic positions referred

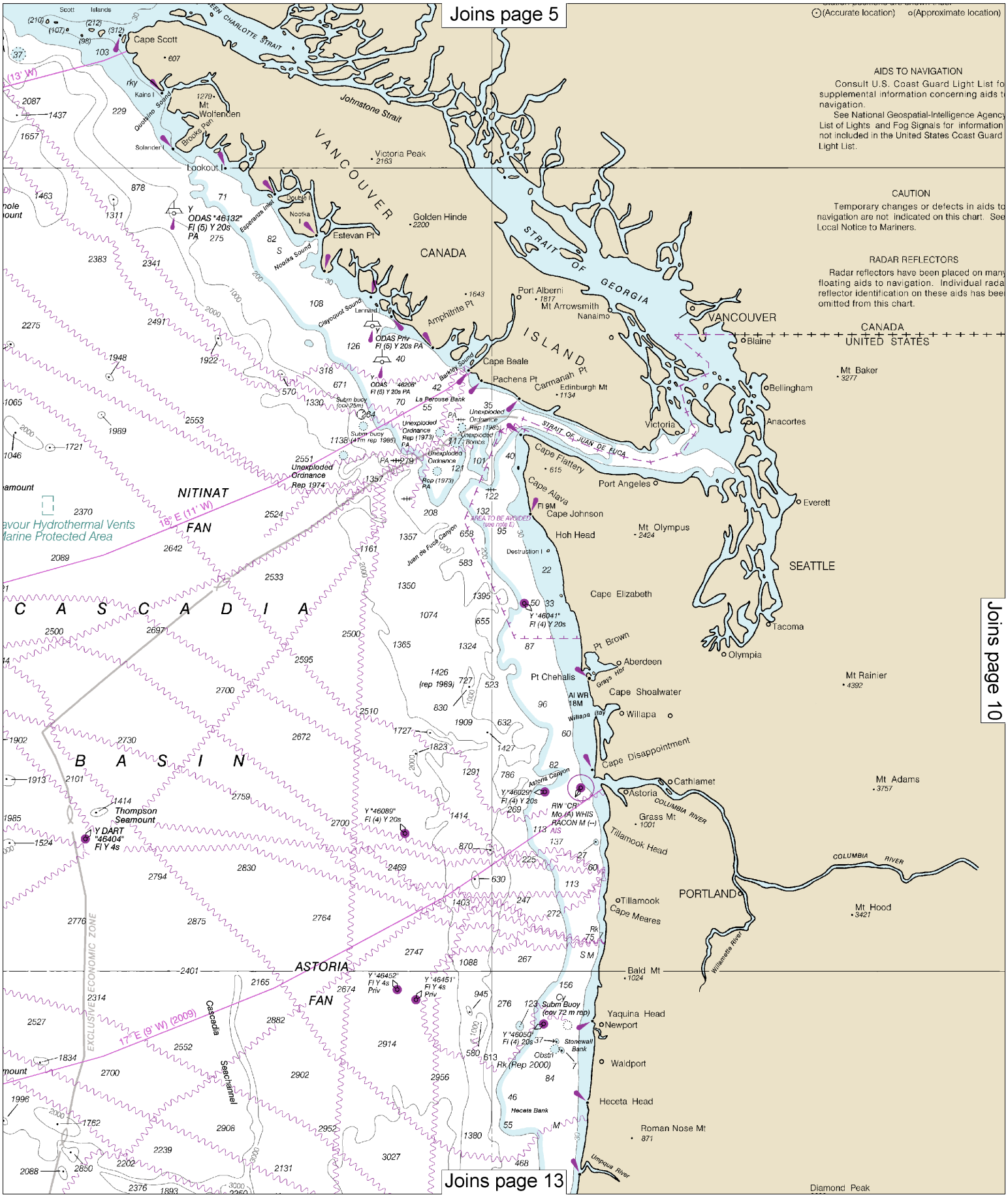
STRAIT

RADAR

Joins page 11



Note: Chart grid lines are aligned with true north.


Joins page 5
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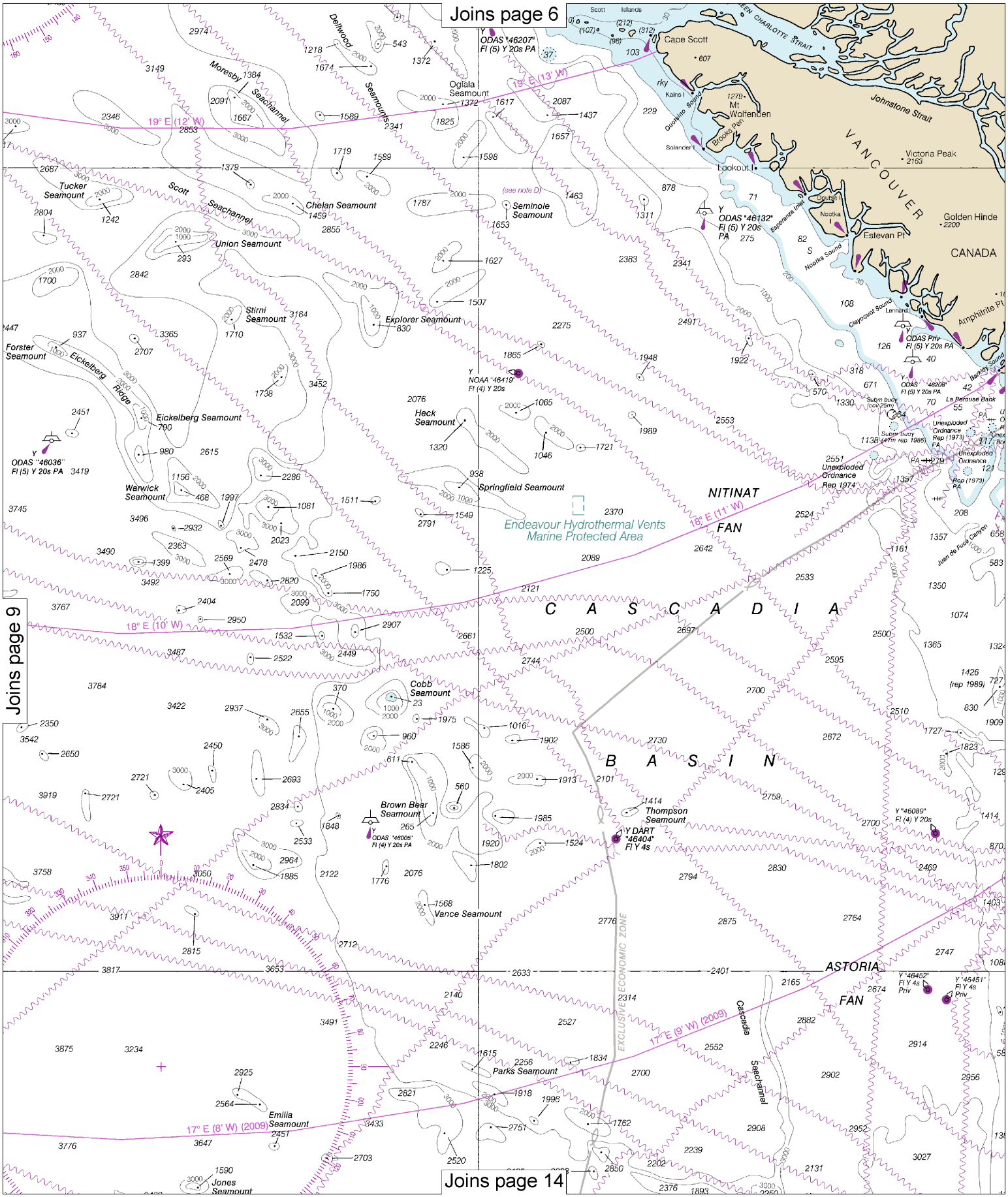
Joins page 13
(Accurate location) (Approximate location)
AIDS TO NAVIGATION
Consult U.S. Coast Guard Light List for supplemental information concerning aids to navigation.
See National Geospatial-Intelligence Agency List of Lights and Fog Signals for information not included in the United States Coast Guard Light List.
CAUTION
Temporary changes or defects in aids to navigation are not indicated on this chart. See Local Notice to Mariners.
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.
Cape Scott
Johnstone Strait
VANCOUVER
Victoria Peak
2163
Lookout I
Golden Hinde
2200
Estevan Pt
CANADA
STRAIT OF GEORGIA
Port Alberni
Mt Arrowsmith
Nanaimo
VANCOUVER
CANADA
UNITED STATES
Blaine
Mt Baker
3277
Bellingham
Anacortes
Victoria
ISLAND
Cape Beale
Pachena Pt
Carmanah Pt
Edinburgh Mt
1134
STRAIT OF JUAN DE FUCA
Cape Flattery
615
Port Angeles
Everett
Cape Alava
Fl 9M
Cape Johnson
Hoh Head
Mt Olympus
2424
SEATTLE
Destruction I
Cape Elizabeth
Tacoma
Olympia
Pt Brown
Aberdeen
Grays Hbr
Pt Chehalis
Mt Rainier
4392
Cape Shoalwater
Al WR
18M
Willapa Bay
Willapa
Cape Disappointment
Cathlamet
Mt Adams
3757
Astoria
COLUMBIA RIVER
Grass Mt
1001
Tillamook Head
COLUMBIA RIVER
PORTLAND
Tillamook
Cape Meares
Mt Hood
3421
Bald Mt
1024
Yaquina Head
Newport
Waldport
Heceta Head
Roman Nose Mt
871
Umpqua River
Diamond Peak
NITINAT
FAN
CASCADIA
BASIN
ASTORIA
FAN
Thompson Seamount
Y DART "46404" Fl Y 4s
Y "46089" Fl (4) Y 20s
Y "46029" Fl (4) Y 20s
RW "CR" Mo (A) WHIS RACON M (--) AIS
Y "46041" Fl (4) Y 20s
Y "46452" Fl Y 4s Priv
Y "46451" Fl Y 4s Priv
Y "46050" Fl (4) 20s
Cy Subm Buoy (esv 72 m rep)
Stonewall Bank
Obstn
Rk (Rep 2000)
Heceta Bank
Juan de Fuca Canyon
Astoria Canyon
Barkley Sound
Clayoquot Sound
Nootka Sound
Quatsino Sound
Brooks Pen
Esperanza Inlet
Kains I
Mt Wolfenden
1279
Solander I
Nootka I
Bunsby I
Lennard
Amphitrite Pt
ODAS Priv Fl (5) Y 20s PA
ODAS 46206 Fl (6) Y 20s PA
La Perouse Bank
Subm buoy (cov 25m)
Subm buoy (47m rep 1985)
Unexploded Ordnance Rep (1973) PA
Unexploded Ordnance Rep 1974
Unexploded Ordnance
117 Bombs
AREA TO BE AVOIDED (see note E)
Rep (1973) PA
Rep (1985) PA
Rep (rep 1989)
Subm Buoy (esv 72 m rep)
Rk
S M
Cascadia
EXCLUSIVE ECONOMIC ZONE
17° E (9° W) (2009)
18° E (11° W)
Seachannel
Hydrothermal Vents
Marine Protected Area



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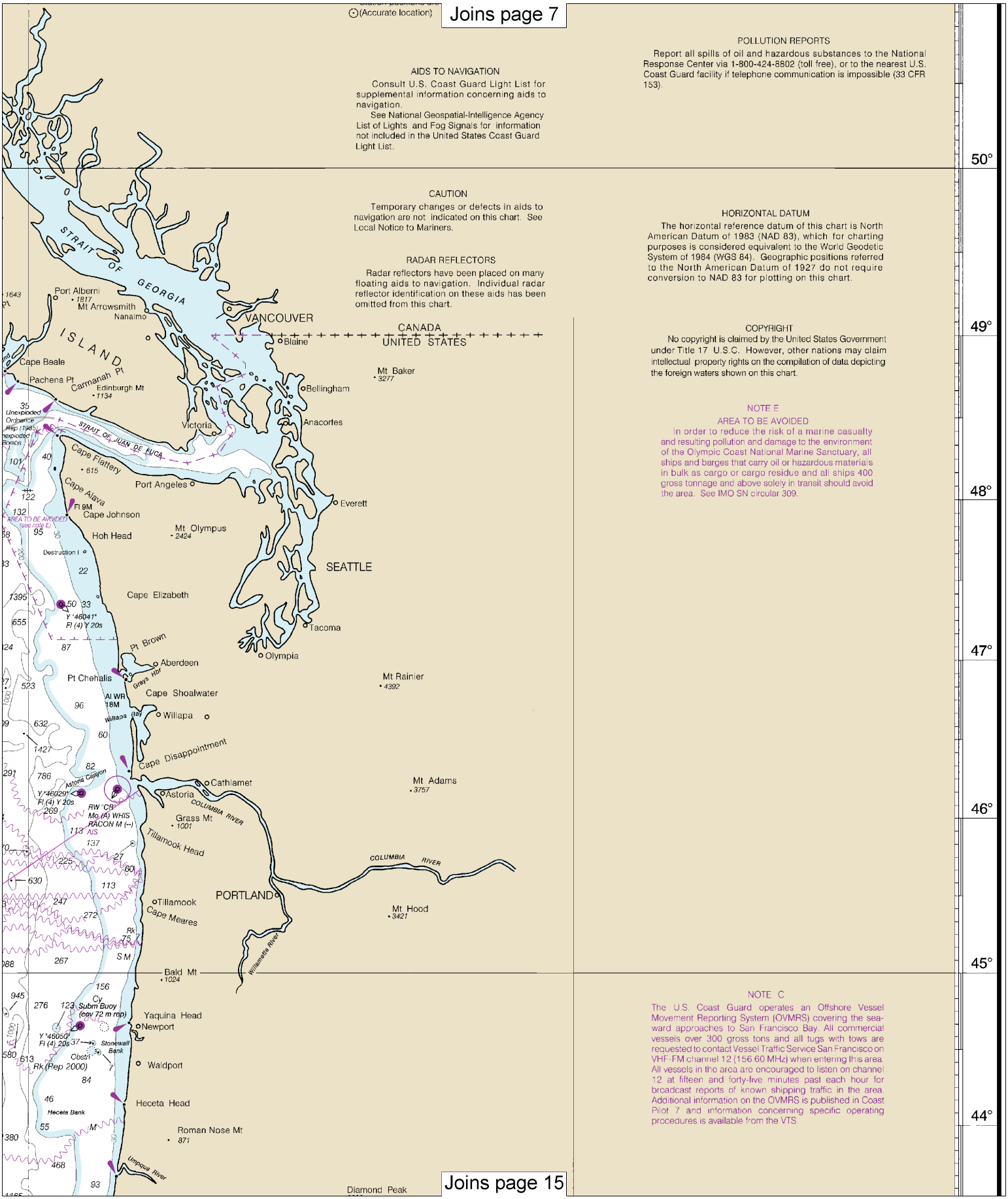
Note: Chart grid lines are aligned with true north.


⊙(Accurate location)
Joins page 7
AIDS TO NAVIGATION
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See National Geospatial-Intelligence Agency List of Lights and Fog Signals for information not included in the United States Coast Guard Light List.
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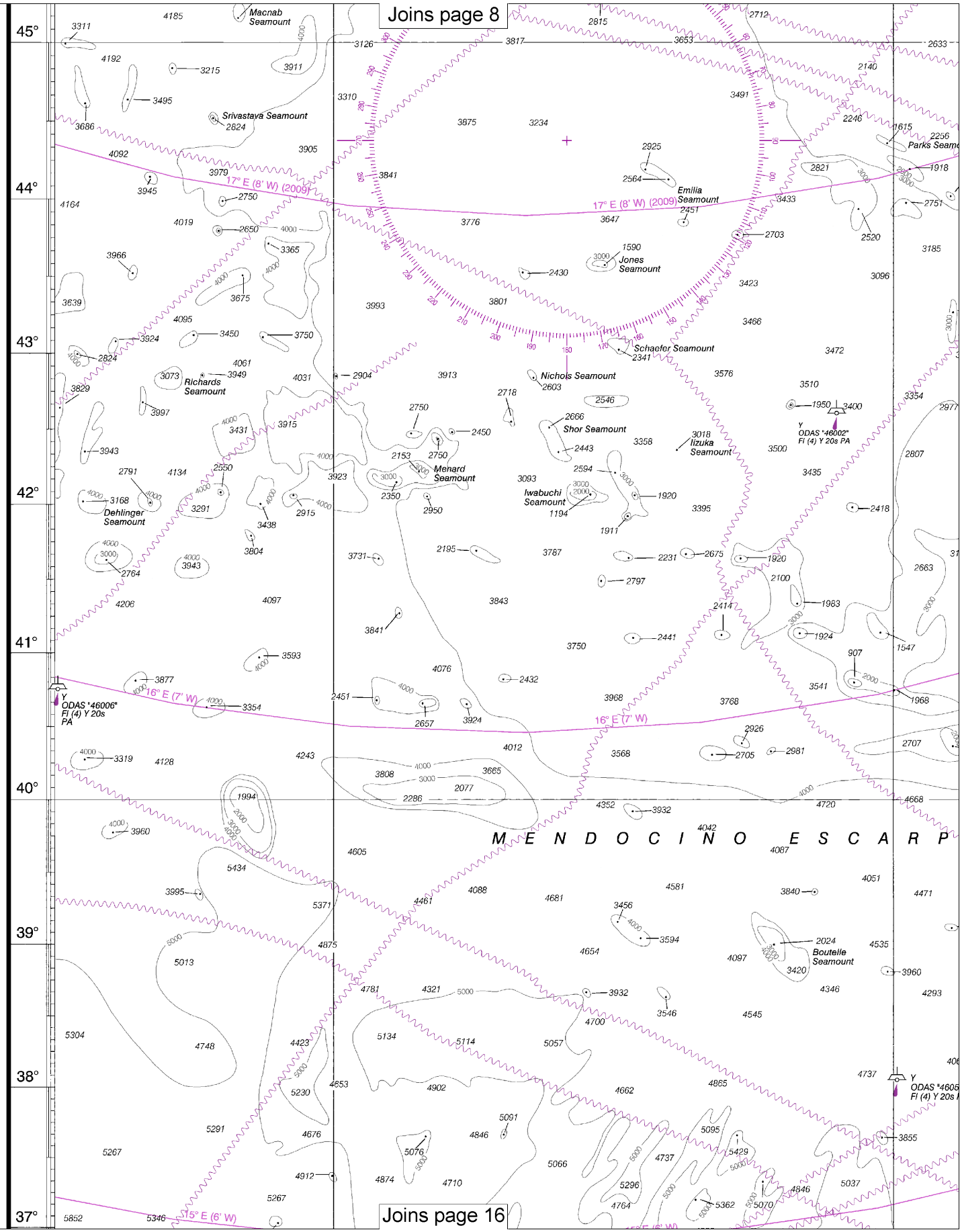
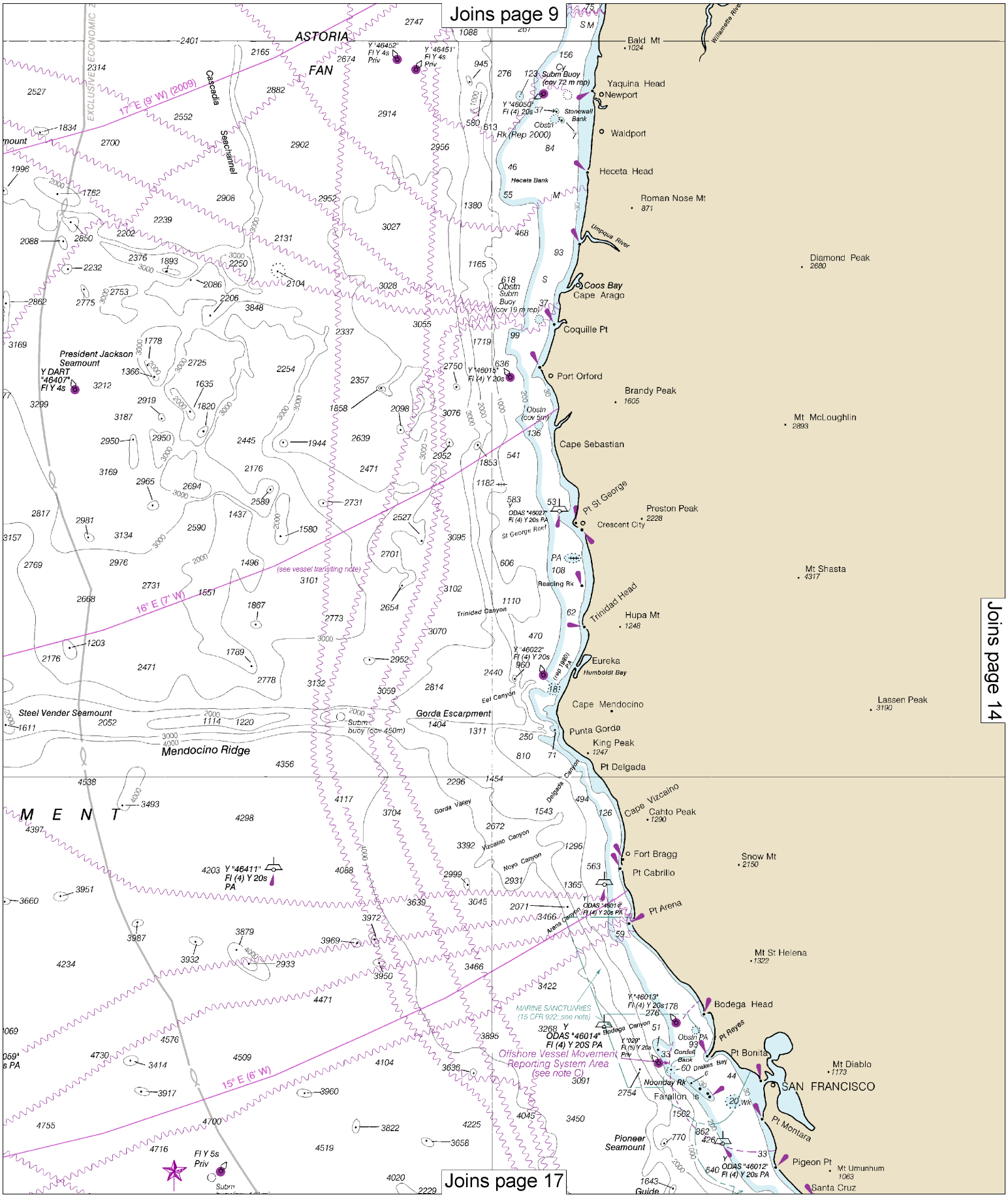
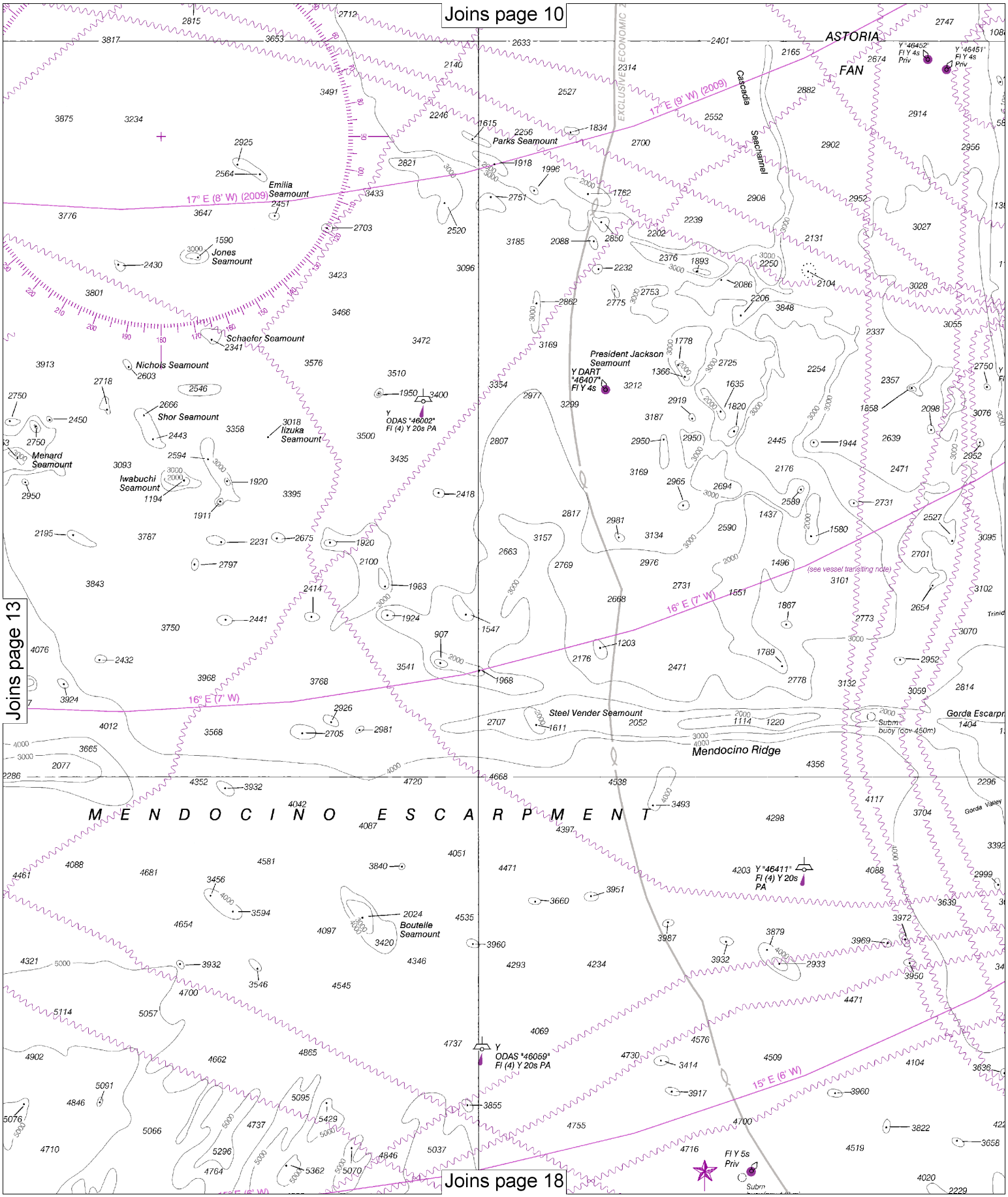
RADAR REFLECTORS
Radar reflectors have been placed on many floating aids to navigation. Individual radar reflector identification on these aids has been omitted from this chart.
POLLUTION REPORTS
Report all spills of oil and hazardous substances to the National Response Center via 1-800-424-8802 (toll free), or to the nearest U.S. Coast Guard facility if telephone communication is impossible (33 CFR 153).
HORIZONTAL DATUM
The horizontal reference datum of this chart is North American Datum of 1983 (NAD 83), which for charting purposes is considered equivalent to the World Geodetic System of 1984 (WGS 84). Geographic positions referred to the North American Datum of 1927 do not require conversion to NAD 83 for plotting on this chart.
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.
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 C
The U.S. Coast Guard operates an Offshore Vessel Movement Reporting System (OVMRS) covering the seaward approaches to San Francisco Bay. All commercial vessels over 300 gross tons and all tugs with tows are requested to contact Vessel Traffic Service San Francisco on VHF-FM channel 12 (156.60 MHz) when entering this area. All vessels in the area are encouraged to listen on channel 12 at fifteen and forty-five minutes past each hour for broadcast reports of known shipping traffic in the area. Additional information on the OVMRS is published in Coast Pilot 7 and information concerning specific operating procedures is available from the VTS.
50°
49°
48°
47°
46°
45°
44°
STRAIT OF GEORGIA
VANCOUVER ISLAND
CANADA
UNITED STATES
Port Alberni
Mt Arrowsmith
Nanaimo
Blaine
Cape Beale
Pachena Pt
Carmanah Pt
Edinburgh Mt
Mt Baker
Bellingham
Victoria
Anacortes
STRAIT OF JUAN DE FUCA
Cape Flattery
Port Angeles
Everett
Cape Alava
Cape Johnson
Mt Olympus
Hoh Head
SEATTLE
Cape Elizabeth
Tacoma
Olympia
Pt Brown
Aberdeen
Pt Chehalis
Grays Hbr
Mt Rainier
Cape Shoalwater
Willapa
Willapa Bay
Cape Disappointment
Cathlamet
Mt Adams
Astoria
COLUMBIA RIVER
Grass Mt
Tillamook Head
COLUMBIA RIVER
PORTLAND
Tillamook
Cape Meares
Mt Hood
Bald Mt
Yaquina Head
Newport
Waldport
Heceta Head
Roman Nose Mt
Umpqua River
Diamond Peak
Joins page 15



12

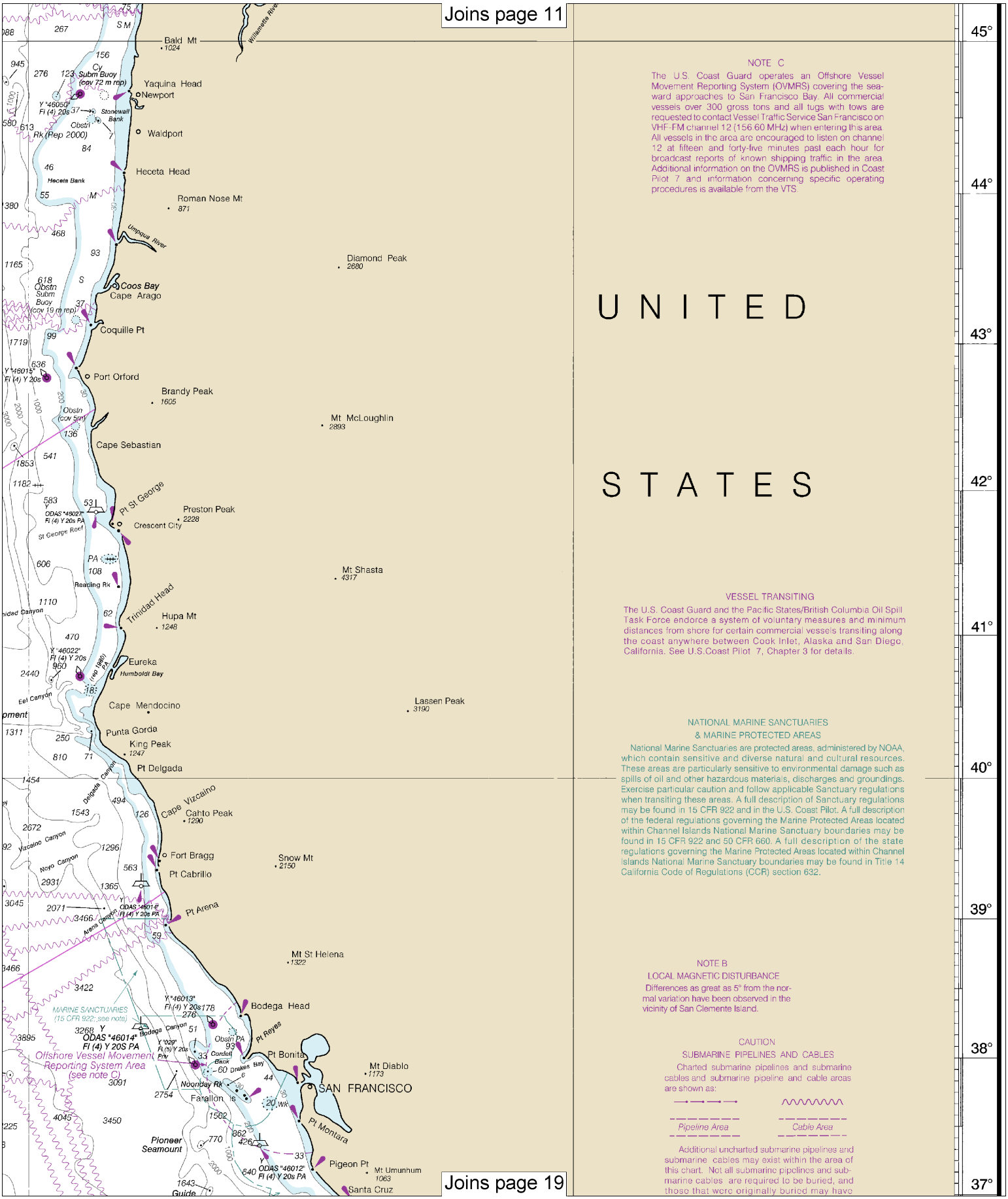
Note: Chart grid lines are aligned with true north.

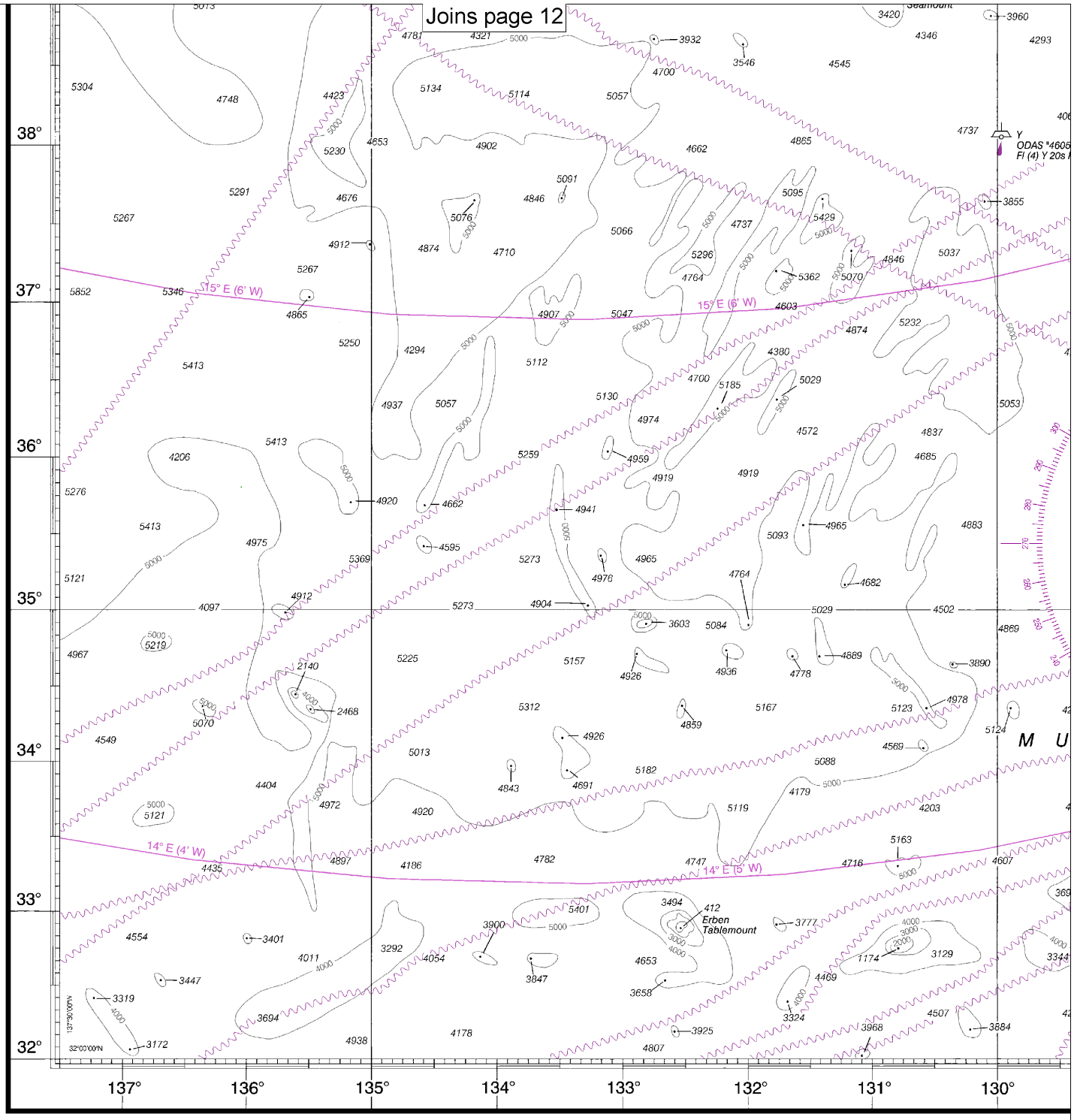

Joins page 9
Joins page 14
Joins page 17
ASTORIA
FAN
Cascadia
Sepchannel
EXCLUSIVE ECONOMIC
17° E (9° W) (2009)
16° E (7° W)
15° E (6° W)
Bald Mt
Yaquina Head
Newport
Waldport
Heceta Head
Roman Nose Mt
Umpqua River
Diamond Peak
Coos Bay
Cape Arago
Coquille Pt
Port Orford
Brandy Peak
Mt McLoughlin
Cape Sebastian
Pt St George
Preston Peak
Crescent City
Mt Shasta
Trinidad Head
Hupa Mt
Eureka
Humboldt Bay
Cape Mendocino
Lassen Peak
Punta Gorda
King Peak
Pt Delgada
Cape Vizcaino
Cahto Peak
Fort Bragg
Snow Mt
Pt Cabrillo
Pt Arena
Mt St Helena
Bodega Head
Pt Reyes
Pt Bonita
Mt Diablo
SAN FRANCISCO
Pt Montara
Pigeon Pt
Mt Umunhum
Santa Cruz
President Jackson Seamount
Steel Vender Seamount
Mendocino Ridge
Gorda Escarpment
Pioneer Seamount
Stonewall Bank
Heceta Bank
St George Reef
Reading Rk
Trinidad Canyon
Eel Canyon
Delgada Canyon
Gorda Valley
Vizcaino Canyon
Noyo Canyon
Arena Canyon
Bodega Canyon
Drakes Bay
Noonday Rk
Farallon Is
Cordell Bank
MARINE SANCTUARIES
(15 CFR 922; see note)
Offshore Vessel Movement
Reporting System Area
(see note C)
(see vessel transiting note)
Subm buoy (cov 450m)
Subm Buoy (cov 72 m rep)
Obstn Subm Buoy (cov 19 m rep)
Obstn (cov 5m)
Rk (Rep 2000)
ODAS "46014" Fl (4) Y 20S PA
ODAS "46012" Fl (4) Y 20s PA
ODAS "46022" Fl (4) Y 20s
ODAS "46027" Fl (4) Y 20s PA
Y "46452" Fl Y 4s Priv
Y "46451" Fl Y 4s Priv
Y "46050" Fl (4) 20s
Y "46015" Fl (4) Y 20s
Y DART "46407" Fl Y 4s
Y "46411" Fl (4) Y 20s PA
Y "46013" Fl (4) Y 20s
Y "029" Fl (5) Y 20s Priv
Fl Y 5s Priv
Obstn PA
20 Wk
Guide
Mendocino Ridge
Gorda Escarpment
Pioneer Seamount



14

Note: Chart grid lines are aligned with true north.


Joins page 11
Bald Mt
1024
Yaquina Head
Newport
Waldport
Heceta Head
Roman Nose Mt
871
Umpqua River
Diamond Peak
2680
Coos Bay
Cape Arago
Coquille Pt
Port Orford
Brandy Peak
1605
Mt McLoughlin
2893
Cape Sebastian
Pt St George
Preston Peak
2228
Crescent City
St George Reef
Mt Shasta
4317
Trinidad Head
Hupa Mt
1248
Eureka
Humboldt Bay
Cape Mendocino
Lassen Peak
3190
Punta Gorda
King Peak
1247
Pt Delgada
Cape Vizcaino
Cahto Peak
1290
Fort Bragg
Snow Mt
2150
Pt Cabrillo
Pt Arena
Mt St Helena
1322
Bodega Head
Pt Reyes
Pt Bonita
Mt Diablo
1173
SAN FRANCISCO
Pt Montara
Pigeon Pt
Mt Umunhum
1063
Santa Cruz
Joins page 19
NOTE C
The U.S. Coast Guard operates an Offshore Vessel Movement Reporting System (OVMRS) covering the seaward approaches to San Francisco Bay. All commercial vessels over 300 gross tons and all tugs with tows are requested to contact Vessel Traffic Service San Francisco on VHF-FM channel 12 (156.60 MHz) when entering this area. All vessels in the area are encouraged to listen on channel 12 at fifteen and forty-five minutes past each hour for broadcast reports of known shipping traffic in the area. Additional information on the OVMRS is published in Coast Pilot 7 and information concerning specific operating procedures is available from the VTS.
UNITED
STATES
VESSEL TRANSITING
The U.S. Coast Guard and the Pacific States/British Columbia Oil Spill Task Force endorce 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, Chapter 3 for details.
NATIONAL MARINE SANCTUARIES
& MARINE PROTECTED AREAS
National Marine Sanctuaries are protected areas, administered by NOAA, which contain sensitive and diverse natural and cultural resources. 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. A full description of Sanctuary regulations may be found in 15 CFR 922 and in the U.S. Coast Pilot. A full description of the federal regulations governing the Marine Protected Areas located within Channel Islands National Marine Sanctuary boundaries may be found in 15 CFR 922 and 50 CFR 660. A full description of the state regulations governing the Marine Protected Areas located within Channel Islands National Marine Sanctuary boundaries may be found in Title 14 California Code of Regulations (CCR) section 632.
NOTE B
LOCAL MAGNETIC DISTURBANCE
Differences as great as 5° from the normal variation have been observed in the vicinity of San Clemente Island.
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
45°
44°
43°
42°
41°
40°
39°
38°
37°



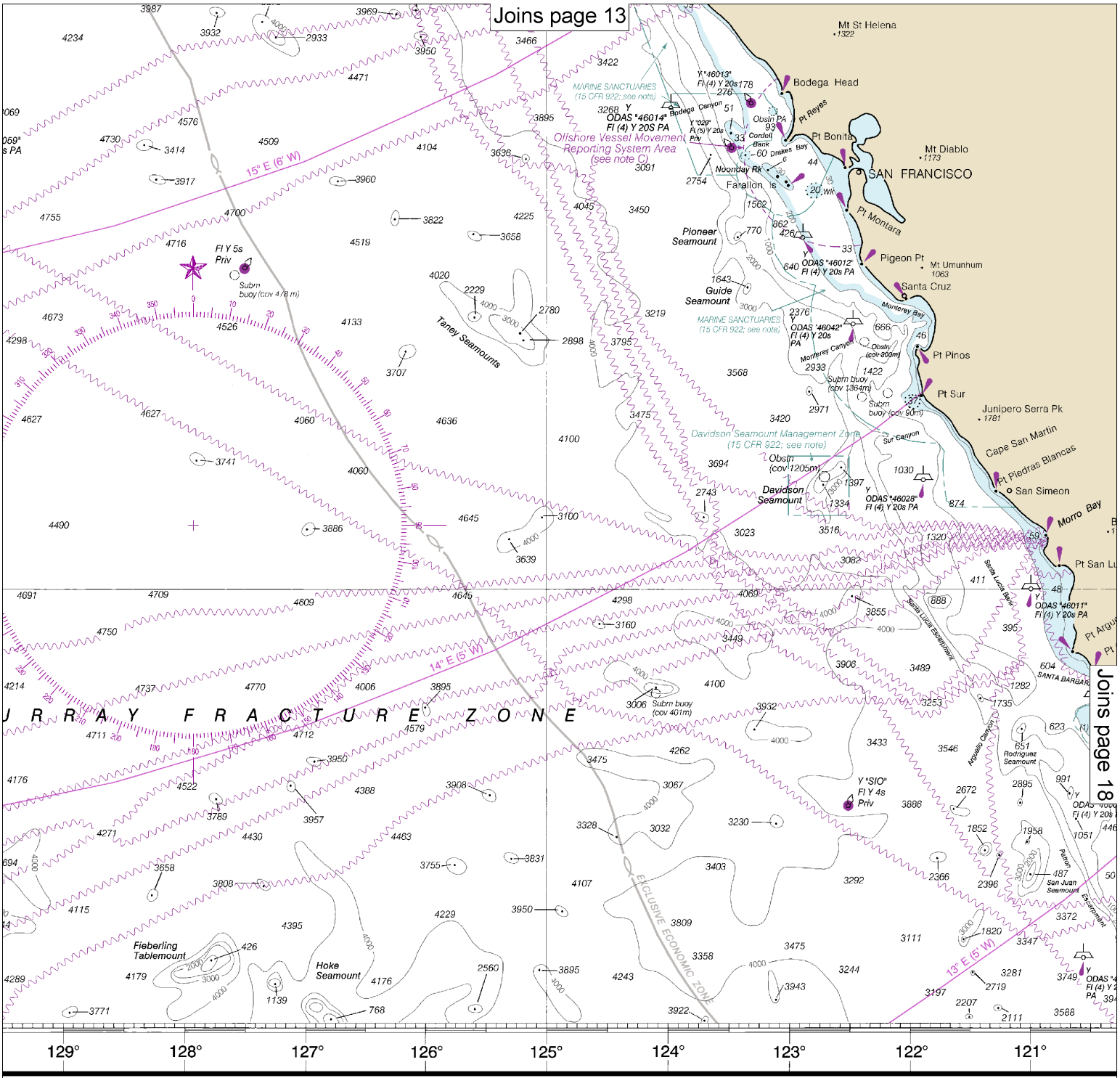
501

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.

13th Ed., Jun. 2009. Last Correction: 12/8/2016. Cleared through:
LNM: 4816 (11/29/2016), NM: 4916 (12/3/2016), CHS: 1116 (11/25/2016)

Note: Chart grid lines are aligned with true north.



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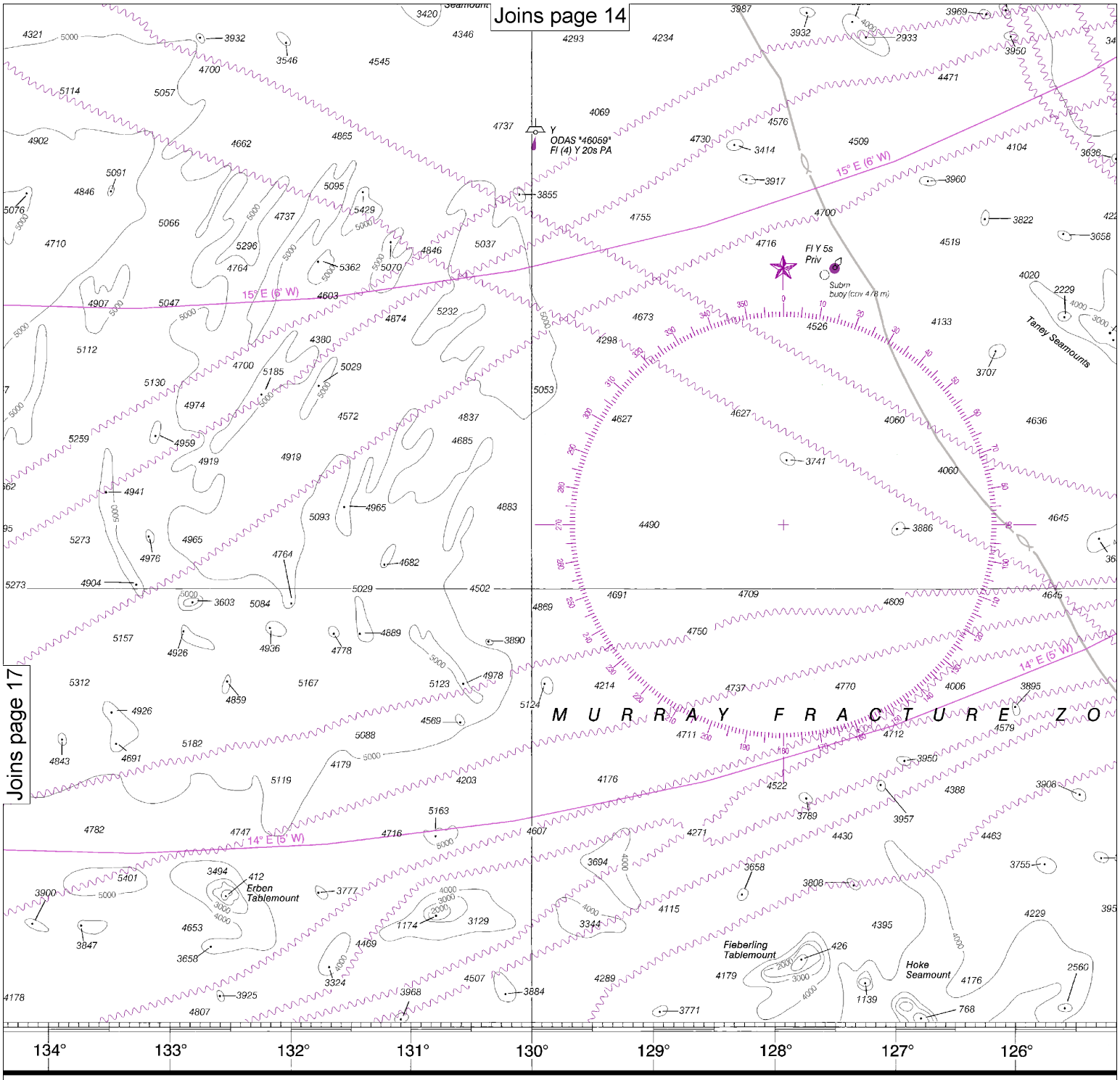
U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL OCEAN SERVICE
COAST SURVEY

FATHOMS	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	
FEET	6	12	18	24	30	36	42	48	54	60	66	72	78	84	90	96	102	
METERS	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31



CAUTION

rected from the Notice to Mariners (NM) published spatial-Intelligence Agency and the Local Notice to iodically by each U.S. Coast Guard district to the lt hand corner. Chart updates corrected from Notice to ates shown in the lower left hand corner are available at

DEPTHS IN METERS

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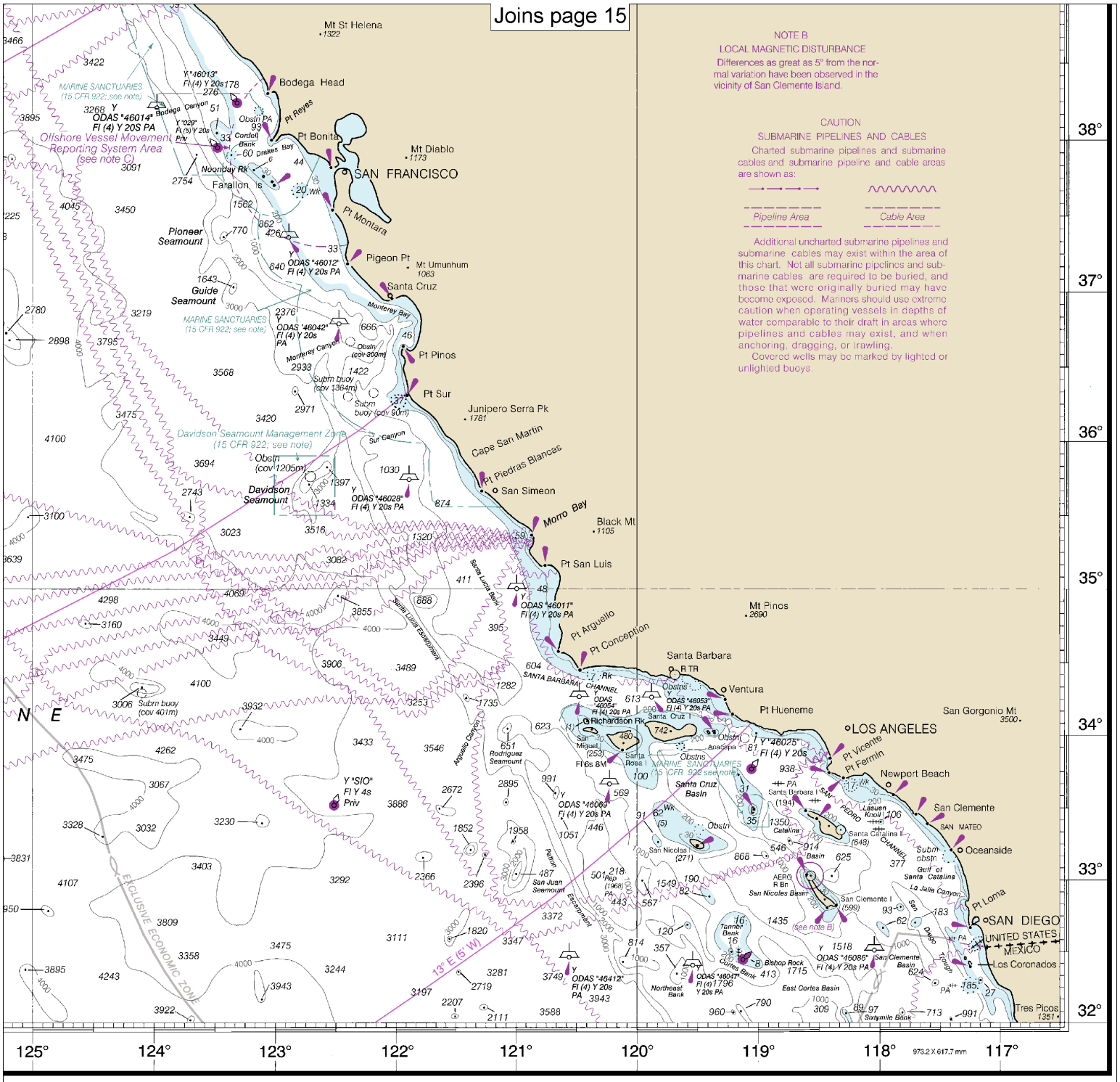
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL OCEAN SERVICE
COAST SURVEY

Cleared through:
CHS: 1116 (11/25/2016)

Note: Chart grid lines are aligned with true north.

Joins page 15



FATHOMS	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
FEET	6	12	18	24	30	36	42	48	54	60	66	72	78	84	90	96	102
METERS	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31

West Coast of North America
Mexican Border to Dixon Entrance
DEPTHS IN METERS - SCALE 1:3,500,000

INT 801
501

EMERGENCY INFORMATION

VHF Marine Radio channels for use on the waterways:

Channel 6 – Inter-ship safety communications.
Channel 9 – Communications between boats and ship-to-coast.
Channel 13 – Navigation purposes at bridges, locks, and harbors.
Channel 16 – Emergency, distress and safety calls to Coast Guard and others, and to initiate calls to other vessels. Contact the other vessel, agree to another channel, and then switch.
Channel 22A – Calls between the Coast Guard and the public. Severe weather warnings, hazards to navigation and safety warnings are broadcast here.
Channels 68, 69, 71, 72 and 78A – Recreational boat channels.

Getting and Giving Help — Signal other boaters using visual distress signals (flares, orange flag, lights, arm signals); whistles; horns; and on your VHF radio. You are required by law to help boaters in trouble. Respond to distress signals, but do not endanger yourself.

Distress Call Procedures

- Make sure radio is on.
- Select Channel 16.
- Press/Hold the transmit button.
- Clearly say: "MAYDAY, MAYDAY, MAYDAY."
- Also give: Vessel Name and/or Description; Position and/or Location; Nature of Emergency; Number of People on Board.
- Release transmit button.
- Wait for 10 seconds — If no response Repeat MAYDAY call.

HAVE ALL PERSONS PUT ON LIFE JACKETS!

All Hazards NOAA Weather Radio NOAA's National Weather Service

NOAA Weather Radio All Hazards (NWR) is a nationwide network of radio stations broadcasting continuous weather information directly from the nearest National Weather Service office. NWR broadcasts official Weather Service warnings, watches, forecasts and other hazard information 24 hours a day, 7 days a week.
http://www.nws.noaa.gov/nwr/

Quick References

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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**
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Marine Forecasts	—	**http://www.nws.noaa.gov/om/marine/home.htm**
National Data Buoy Center	—	**http://www.ndbc.noaa.gov/**
NowCoast web portal for coastal conditions	—	**http://www.nowcoast.noaa.gov/**
National Weather Service	—	**http://www.weather.gov/**
National Hurrican Center	—	**http://www.nhc.noaa.gov/**
Pacific Tsunami Warning Center	—	**http://ptwc.weather.gov/**
Contact Us	—	**http://www.nauticalcharts.noaa.gov/staff/contact.htm**

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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.

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