

# BookletChart™

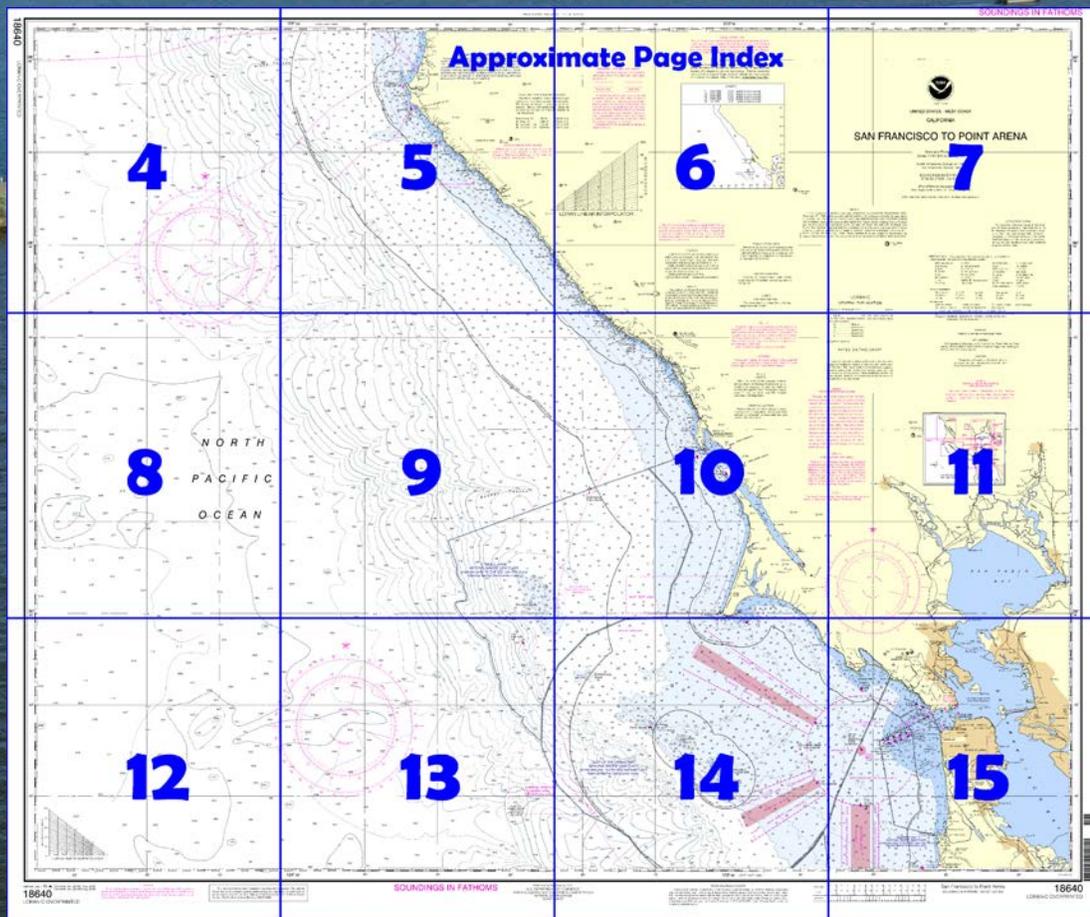


## San Francisco to Point Arena NOAA Chart 18640

*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](http://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.

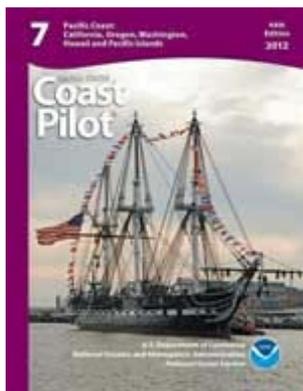
Whenever possible, use the official, full scale NOAA nautical chart for navigation. Nautical chart sales agents are listed on the Internet at <http://www.NauticalCharts.NOAA.gov>.

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=18640>.



**(Selected Excerpts from Coast Pilot)**  
**San Francisco Bay** is a series of connecting bays and harbors of which San Francisco Bay proper, San Pablo Bay, and Suisun Bay are the largest. The **Gulf of the Farallones National Marine Sanctuary** encompasses the waters off Bodega Head and Point Reyes, and the waters surrounding Farallon Islands. The sanctuary includes Bodega Bay but not Bodega Harbor. Recreational use of the area is encouraged. (See **15 CFR 922**, chapter 2, for limits and regulations.)

The **precautionary area** off the entrance to San Francisco Bay is inscribed by a circle with a radius of 6 miles centered on San Francisco Approach Lighted Whistle Buoy SF (37°45.0'N., 122°41.6'W.) with the traffic lanes fanning out from its periphery. The W half of the circle has depths of 15 to 30 fathoms, the E half has lesser depths of 4 to 21 fathoms. Extreme caution must be exercised in navigating within the precautionary area inasmuch as both incoming and outgoing vessels use the area in making the transition between San Francisco Main Ship Channel and one of the established directed traffic areas as well as maneuvering to embark and disembark pilots. It is recommended that all vessels in the precautionary area guard VHF-FM channel 13 and 14. A circular area to be avoided, with a 0.5 mile radius, centered on the San Francisco Approach Lighted Whistle Buoy SF, has been established in the precautionary area of the San Francisco Traffic Separation Scheme. This zone has been established for the protection of the lighted whistle buoy. Mariners are cautioned that San Francisco Approach Lighted Whistle Buoy SF cannot be safely used as a leading mark to be passed close aboard, and are requested to stay outside the separation zone.

The **pilot boat cruising area** is about 1 mile NE of the San Francisco Approach Lighted Whistle Buoy SF. (See pilotage for San Francisco Bay, this chapter.)

A **Regulated Navigation Area** has been established in Golden Gate and San Francisco Bay. (See **165.1181**, chapter 2, for limits and regulations.)

**Bodega Marine Life Refuge** is just north of Bodega Head. Its sea perimeter begins at 38°18'40"N., 123°04'04"W. and extends offshore around **Mussel Point** to 38°19'23"N., 123°04'22"W. The refuge extends from the shoreline, at the line of mean high water (tide), a distance of 1,000 feet offshore.

**Bodega Head Light** (38°18'01"N., 123°03'14"W.), 110 feet above the water, is shown from a post with a red and white diamond-shaped daymark on the SE end of Bodega Head.

Lighted buoys mark the entrance to Bodega Bay.

**Sunken Reef** extends 0.8 mile from shore 4.5 miles NW of Russian River; it is marked by a bell buoy.

**Fort Ross Reef**, 5.7 miles NW of Russian River and nearly 1 mile SE of Fort Ross Cove, consists of pinnacle rocks 35 feet high, 600 yards offshore, and connected with the beach by a reef which is partially marked by kelp.

**Robinson Reef** lies N of the mouth of Gualala River and 1.1 miles N of Gualala Point. It is a cluster of 25 or more visible rocks about 600 yards offshore, with a covered rock 70 yards WNW of the outer rock.

**Saunders Reef**, 4.5 miles NW of Fish Rocks, is 0.5 mile offshore. It shows several rocks that uncover and is well marked by kelp. Foul ground extends between it and the shore. A lighted gong buoy is 0.4 mile SW of the outer rock and 7.5 miles SE of Point Arena.

**Arena Cove**, 2.5 miles SE of Point Arena, is a slight indentation affording shelter to small vessels in NW weather. A lighted bell buoy is 0.6 mile SW from the end of the wharf.

A breaker is reported in a heavy SW swell 0.8 mile WSW of the N point of Arena Cove, and scattered kelp extends almost out to that position.

**Point Arena Light** (38°57'17"N., 123°44'26"W.), 155 feet above the water, is shown from a 115-foot white cylindrical tower with black gallery at the extremity of the point. A reef that usually shows breakers extends about 0.6 mile NW from the extremity of the point.

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

RCC Alameda      Commander  
11<sup>th</sup> CG District      (510) 437-3700  
Alameda, CA

# 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](http://nauticalcharts.noaa.gov/service/navmanagers)

To make suggestions or ask questions online, go to [nauticalcharts.noaa.gov/inquiry](http://nauticalcharts.noaa.gov/inquiry).

To report a chart discrepancy, please use [ocsdata.ncd.noaa.gov/idrs/discrepancy.aspx](http://ocsdata.ncd.noaa.gov/idrs/discrepancy.aspx).

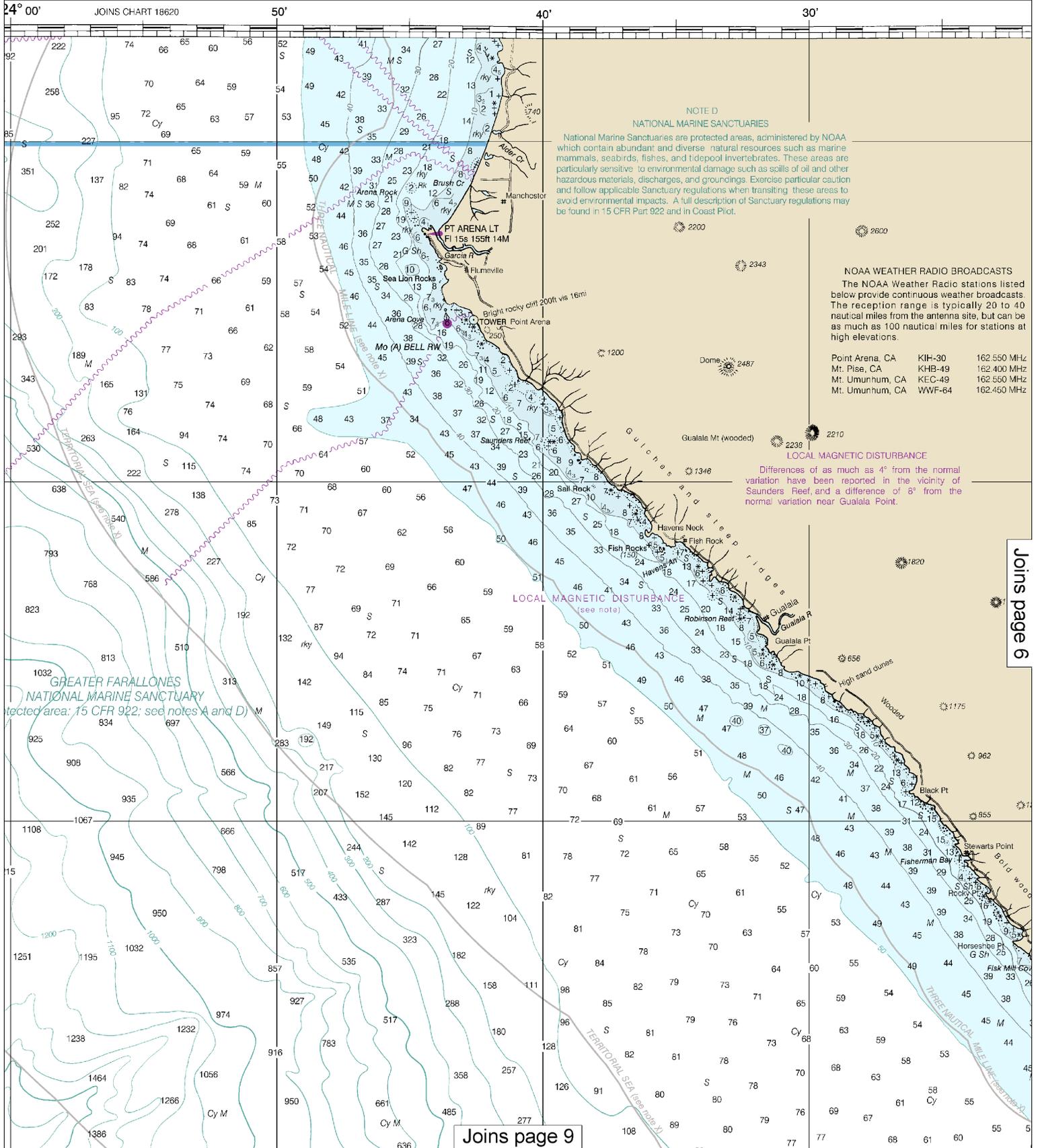
## Lateral System As Seen Entering From Seaward

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>





Joins page 9

Joins page 6

This BookletChart was reduced to 75% of the original chart scale. The new scale is 1:277120. Barscales have also been reduced and are accurate when used to measure distances in this BookletChart.



20' 10' 123°00' 50'

**VESSEL TRANSITING**

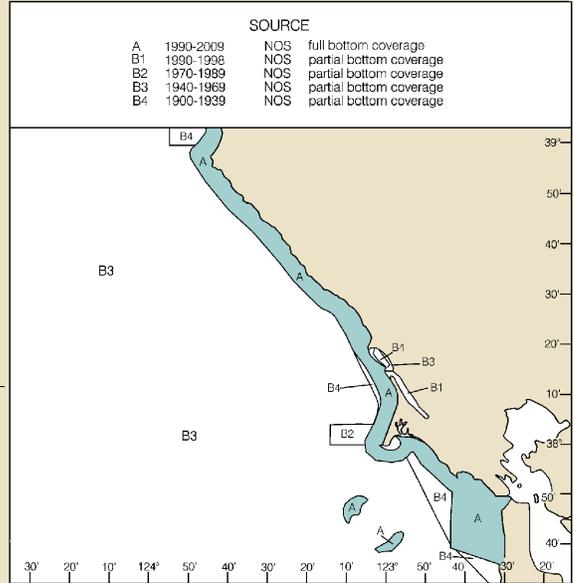
The U.S. Coast Guard and the Pacific States/British Columbia Oil Spill Task Force endorse a system of voluntary measures and minimum distances from shore for certain commercial vessels transiting along the coast anywhere between Cook Inlet, Alaska and San Diego, California. See U.S. Coast Pilot 7, Chapter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

**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**

A	1990-2009	NCS	full bottom coverage
B1	1990-1998	NOS	partial bottom coverage
B2	1970-1999	NOS	partial bottom coverage
B3	1940-1969	NOS	partial bottom coverage
B4	1900-1939	NOS	partial bottom coverage



**WEATHER RADIO BROADCASTS**

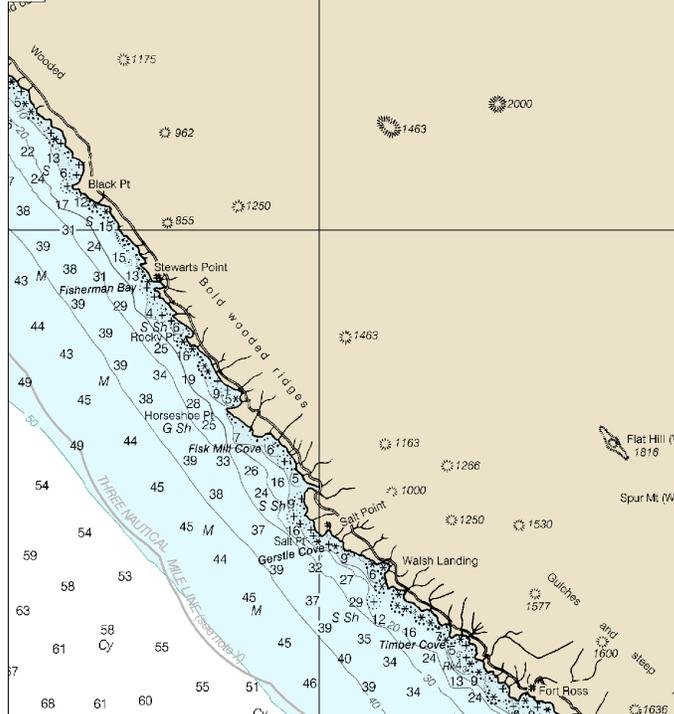
VOA Weather Radio stations listed provide continuous weather broadcasts. Reception range is typically 20 to 40 miles from the antenna site, but can be as far as 100 nautical miles for stations at sea.

San Francisco, CA	KIH-30	162.550 MHz
San Francisco, CA	KHB-49	162.400 MHz
San Francisco, CA	KEC-49	162.550 MHz
San Francisco, CA	WWF-64	162.450 MHz

**DISTURBANCE**

Disturbance is 4° from the normal depth in the vicinity of the point of 8° from the point.

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**NOTE J**

The U.S. Coast Guard operates a Vessel Traffic Service Offshore Vessel Movement Reporting System covering the seaward approaches to San Francisco Bay. Vessels are requested to monitor VTSS on Channel 12 at 15 and 45 minutes past each hour for broadcast reports of known shipping traffic in the area.

**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)

**NOTE S**

Regulations for Ocean Dumping Sites are contained in 40 CFR, Parts 220-229. Additional information concerning the regulations and requirements for use of the sites may be obtained from the Environmental Protection Agency (EPA). See U.S. Coast Pilot's appendix for addresses of EPA offices. Dumping subsequent to the survey dates may have reduced the depths shown.

**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.

**NOTE B**

**MAIN SHIP CHANNEL**  
The project depth is 55 feet. For controlling depths see chart 18649.

**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



Note: Chart grid lines are aligned with true north.

40' 30' 20'

39° 00'



THE NATION'S CHARTMAKER SINCE 1807

UNITED STATES - WEST COAST

CALIFORNIA

## SAN FRANCISCO TO POINT ARENA

Mercator Projection  
Scale 1:207,840 at Lat 38° 37'

North American Datum of 1983  
(World Geodetic System 1984)

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

(For offshore navigation only)  
Use larger scale charts for inshore navigation

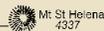
Additional information can be obtained at [nauticalcharts.noaa.gov](http://nauticalcharts.noaa.gov).

50'

Peak 460

**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 of 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.



38° 40'

**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 0.280' southward and 3.926' westward to agree with this chart.

**NOTE K**

**MARINER ACTIVATED SOUND SIGNAL (MRASS)**  
Horn is activated by keying the mic 5 times on VHF-FM Ch 81A - horn will operate for thirty minutes.

**ABBREVIATIONS** (For complete list of Symbols and Abbreviations, see Chart No. 1.)

Aids to Navigation (lights are white unless otherwise indicated):

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

**Bottom characteristics:**

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

**Miscellaneous:**

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

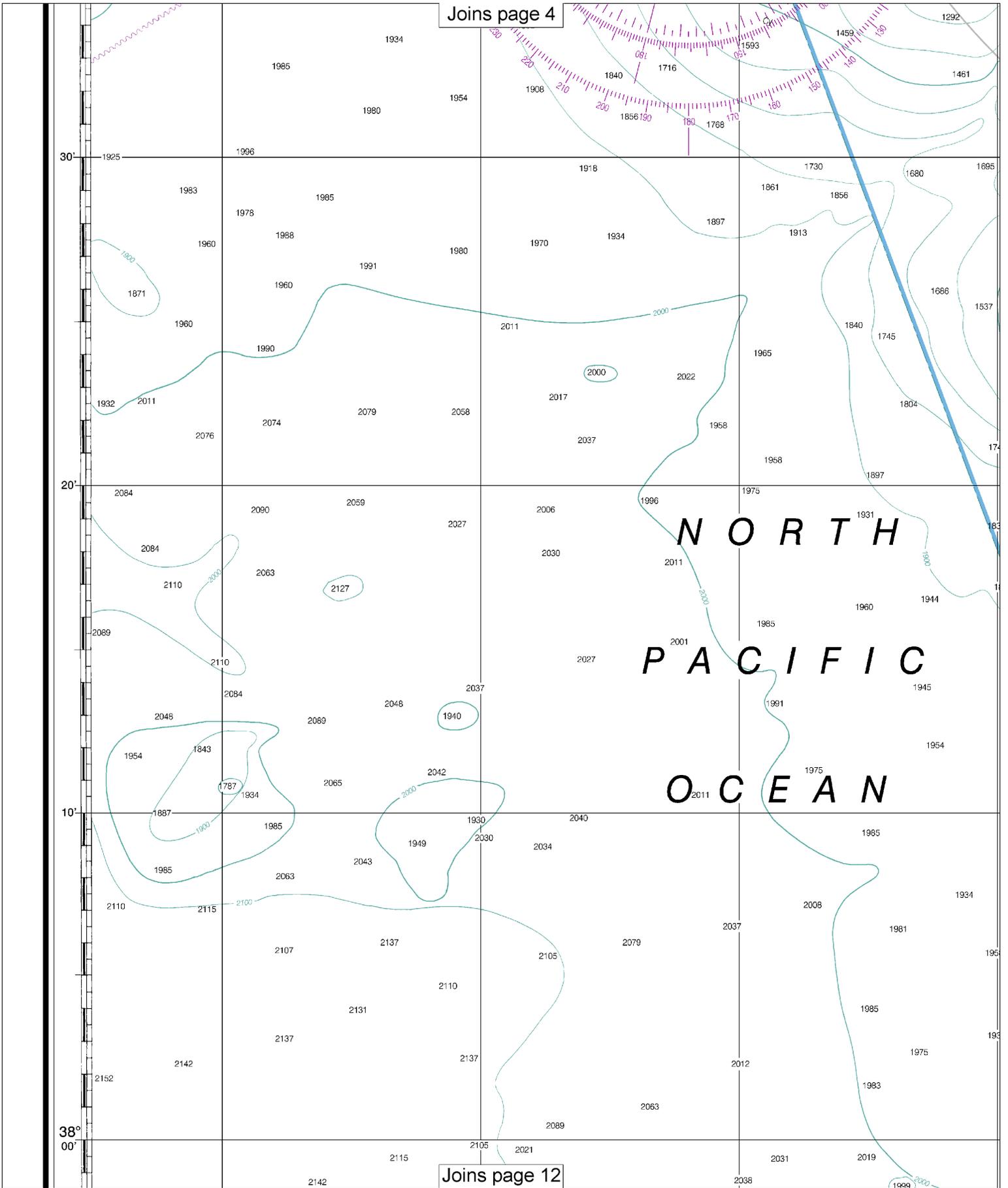
(1) Wreck, rock, obstruction, or shoal swept clear to the depth indicated.  
(2) Rocks that cover and uncover, with heights in feet above datum of soundings.

**COLREGS:** International Regulations for Preventing Collisions at Sea, 1972.

Demarcation lines are shown thus: - - - - -

Joins page 11

Joins page 4

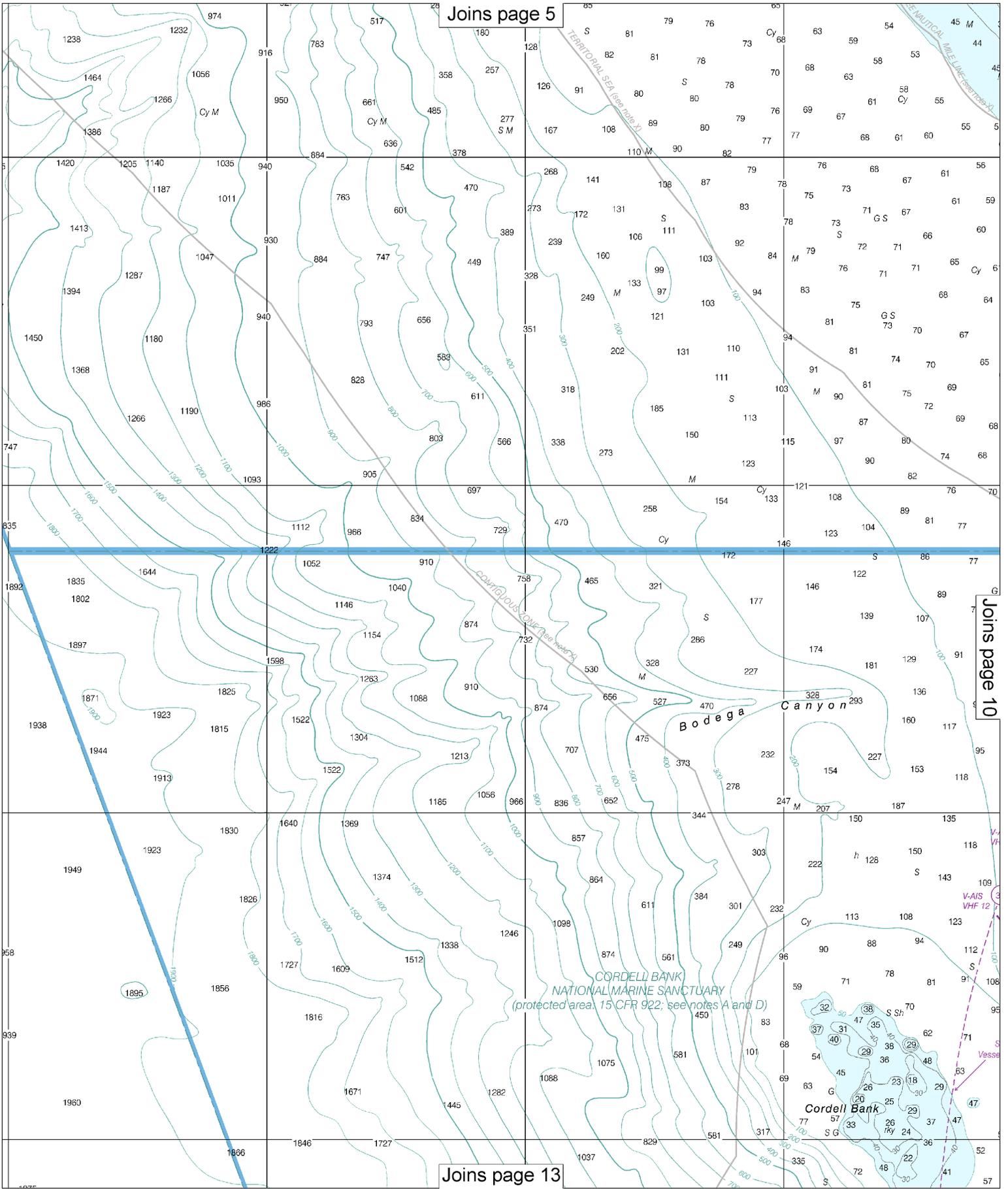


Joins page 12



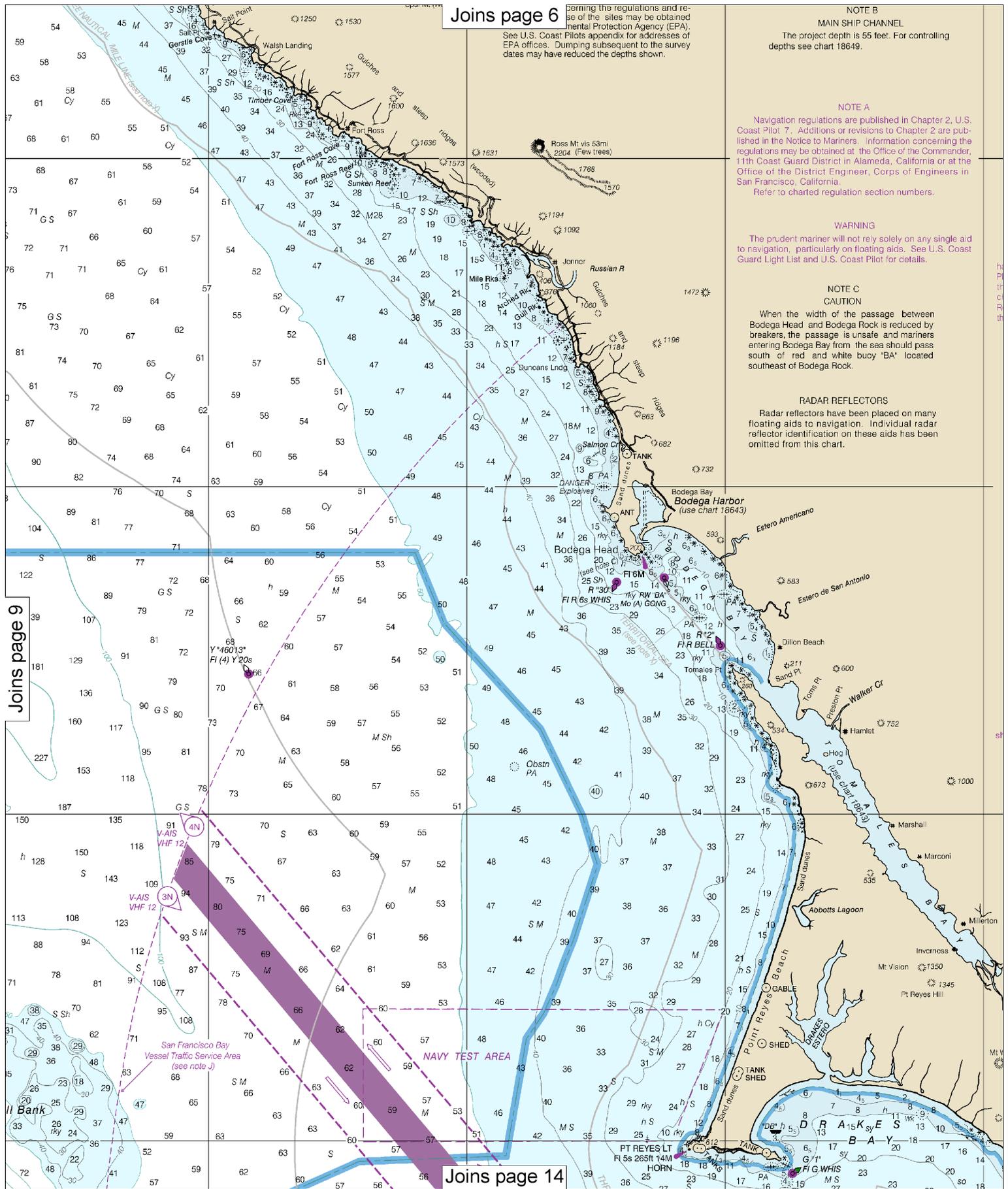
Note: Chart grid lines are aligned with true north.

Joins page 5



Joins page 10

Joins page 13



Joins page 6

perning the regulations and re-  
of the sites may be obtained  
mental Protection Agency (EPA).  
See U.S. Coast Pilots appendix for addresses of  
EPA offices. Dumping subsequent to the survey  
dates may have reduced the depths shown.

NOTE B

MAIN SHIP CHANNEL  
The project depth is 55 feet. For controlling  
depths see chart 18649.

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,  
11th Coast Guard District in Alameda, California or at the  
Office of the District Engineer, Corps of Engineers in  
San Francisco, California.  
Refer to charted regulation section numbers.

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 C

CAUTION

When the width of the passage between  
Bodega Head and Bodega Rock is reduced by  
breakers, the passage is unsafe and mariners  
entering Bodega Bay from the sea should pass  
south of red and white buoy "BA" located  
southeast of Bodega Rock.

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.

Joins page 9

Joins page 14

10

Note: Chart grid  
lines are aligned  
with true north.

average of 0.280" southward and 3.926" westward to agree with this chart.

**NOTE K**

**MARINER ACTIVATED SOUND SIGNAL (MRASS)**  
Horn is activated by keying the mic 5 times on VHF-FM Ch 81A - horn will operate for thirty minutes.

Cy clay Gns Joins page 7 S sand sy sticky  
Miscellaneous:  
AUTH authorized Obstr obstruction PD position doubtful Subm submerged  
ED existence doubtful PA position approximate Rep reported  
21 Wreck, rock, obstruction, or shoal swept clear to the depth indicated.  
22 Rocks that cover and uncover, with heights in feet above datum of soundings.  
COLREGS: International Regulations for Preventing Collisions at Sea, 1972.  
Demarcation lines are shown thus: - - - - -

**HEIGHTS**  
Heights in feet above Mean High Water.

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

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

**NOTE G  
CHEMICAL MUNITION DUMPING  
AREA-RESTRICTION**

Site was formerly used or designated for U.S. chemical munitions dumping. Such use has been discontinued. Designation of such area in no way constitutes authority for dumping.

**IMO AMENDED TRAFFIC SEPARATION SCHEME**  
Portions of the traffic separation scheme shown on this chart have been amended by the IMO. See IMO COLREG.2/Circ.64. Please be advised that these portions have not been revised by the United States Coast Guard and that the corresponding changes have not been updated in the Code of Federal Regulations (33 CFR part 167). There are differences between the two traffic separation schemes and caution is advised.

**NOTE E  
TRAFFIC SEPARATION SCHEME**

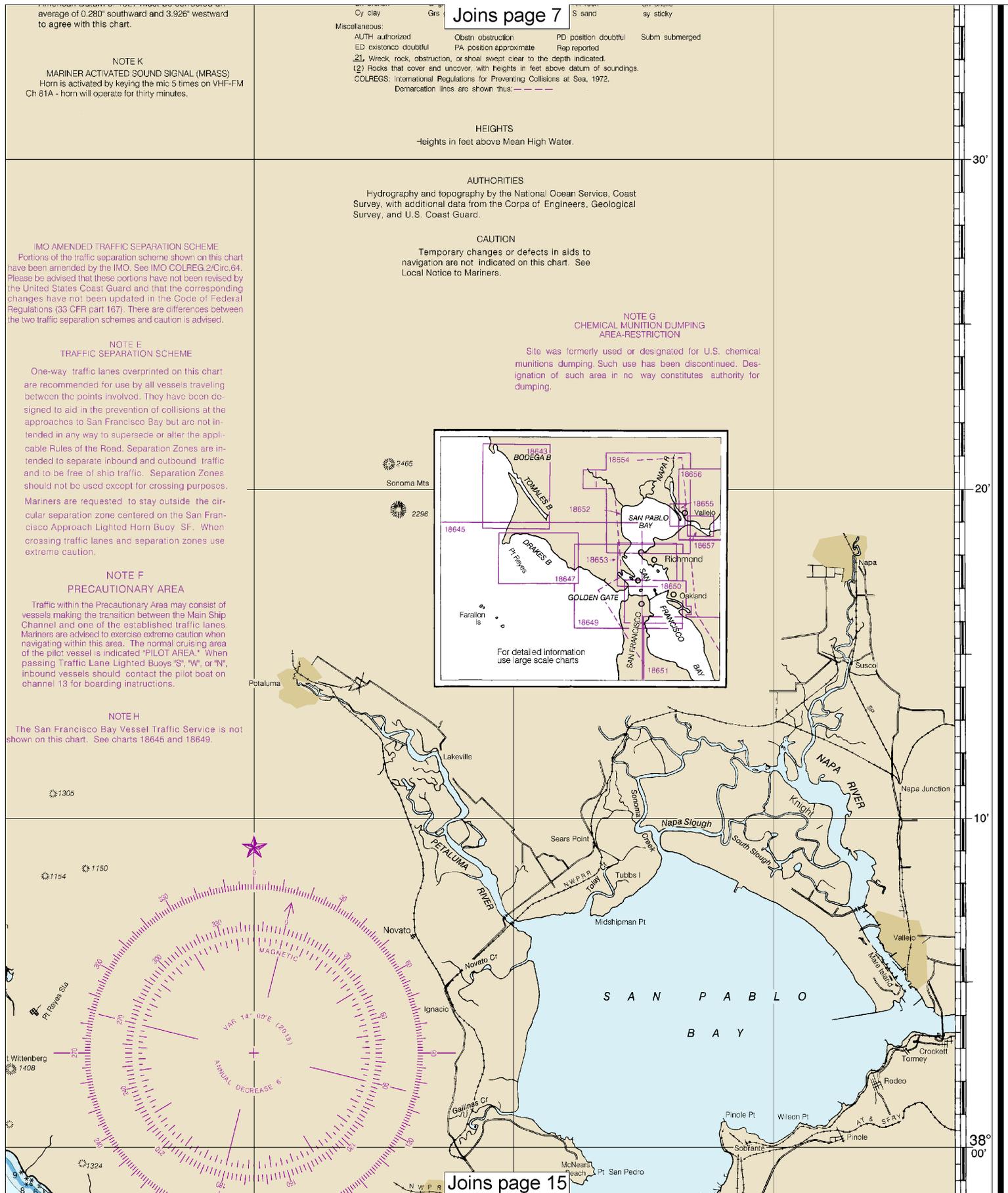
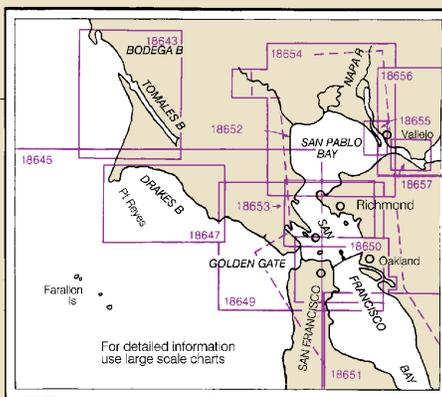
One-way traffic lanes overprinted on this chart are recommended for use by all vessels traveling between the points involved. They have been designed to aid in the prevention of collisions at the approaches to San Francisco Bay but are not intended in any way to supersede or alter the applicable Rules 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. Mariners are requested to stay outside the circular separation zone centered on the San Francisco Approach Lighted Horn Buoy SF. When crossing traffic lanes and separation zones use extreme caution.

**NOTE F  
PRECAUTIONARY AREA**

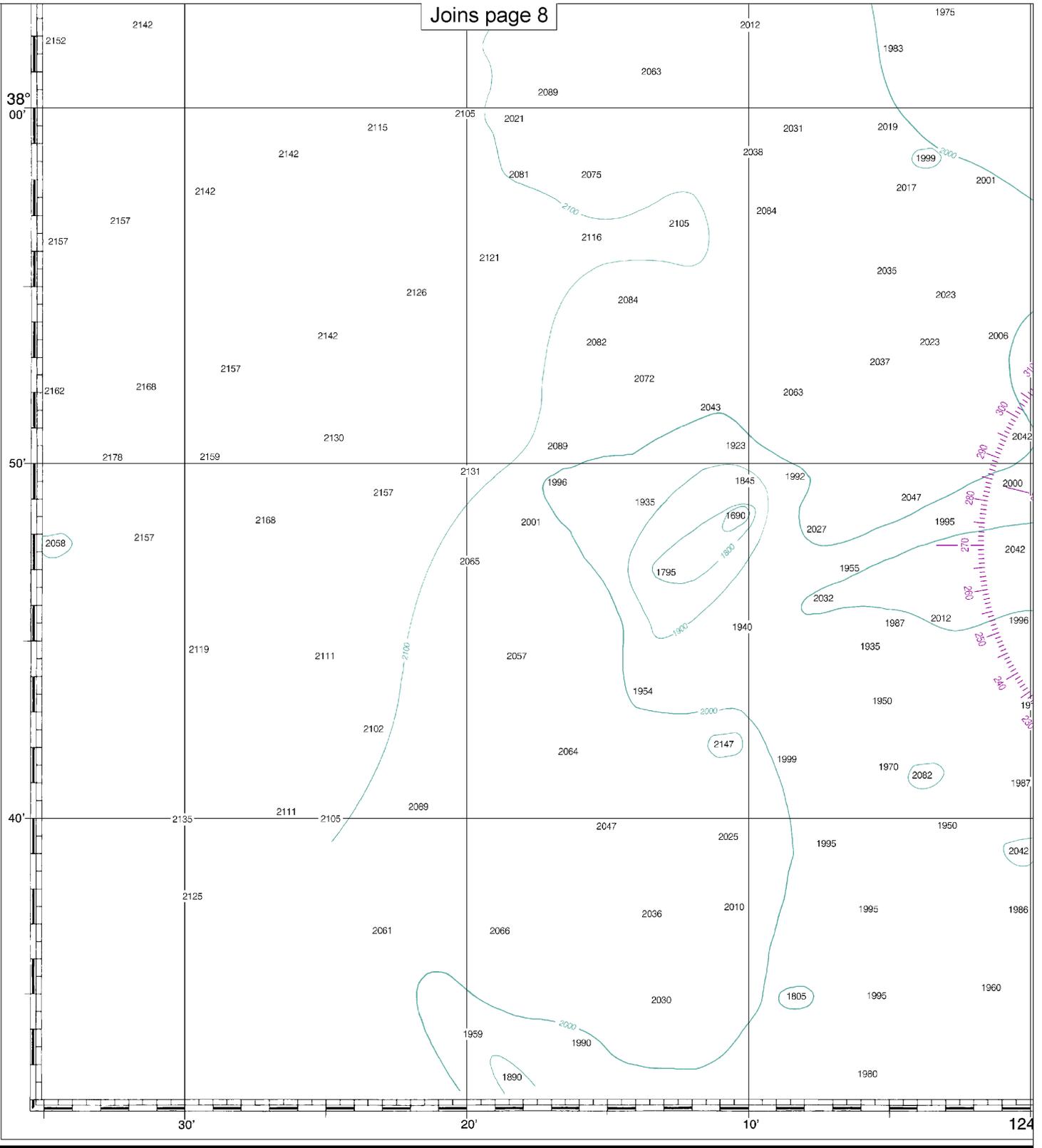
Traffic within the Precautionary Area may consist of vessels making the transition between the Main Ship Channel and one of the established traffic lanes. Mariners are advised to exercise extreme caution when navigating within this area. The normal cruising area of the pilot vessel is indicated "PILOT AREA." When passing Traffic Lane Lighted Buoys "S", "W", or "N", inbound vessels should contact the pilot boat on channel 13 for boarding instructions.

**NOTE H**

The San Francisco Bay Vessel Traffic Service is not shown on this chart. See charts 18645 and 18649.



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CAUTION

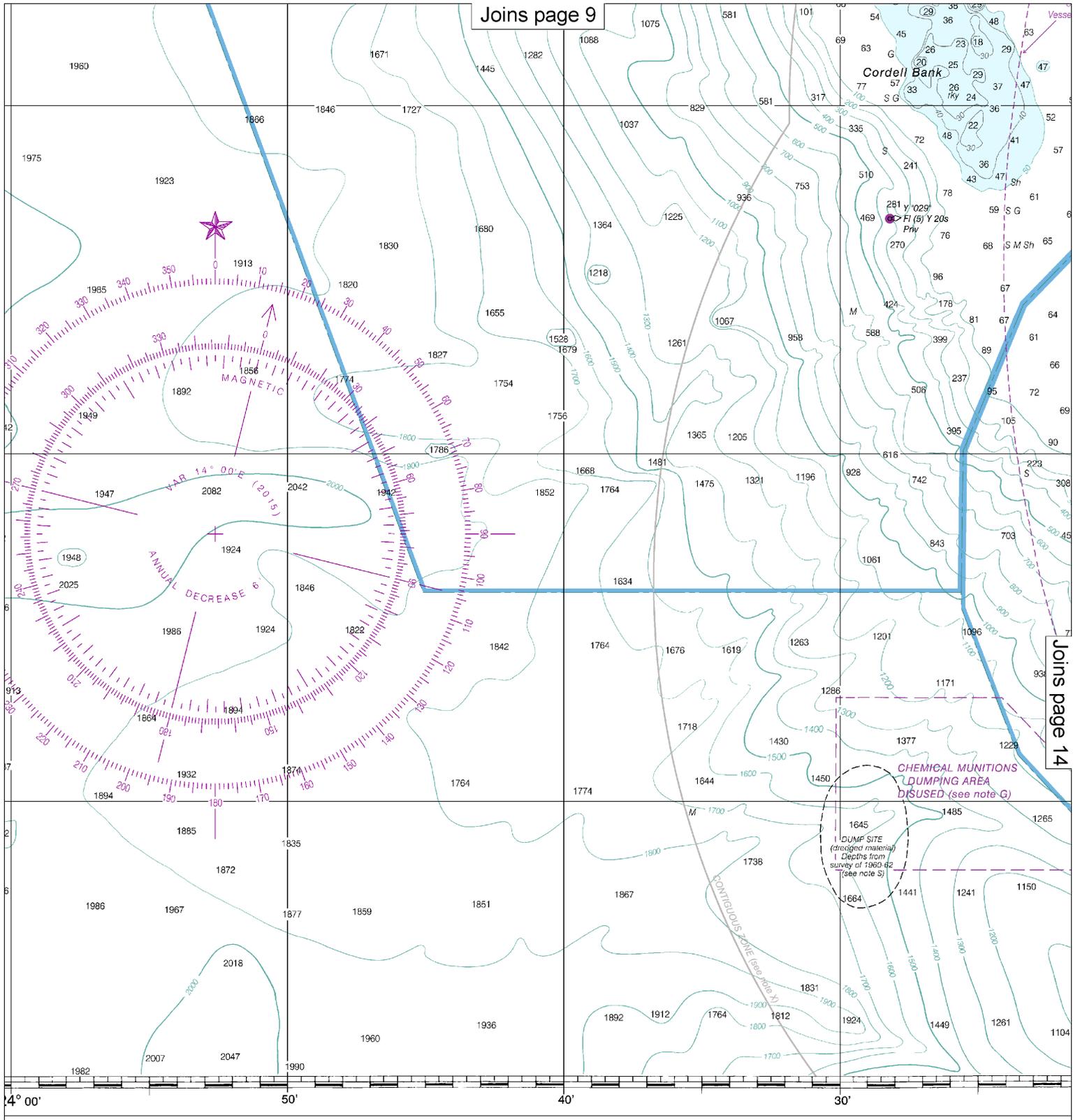
This chart has been corrected from the Notice to Mariners (NM) published weekly by the National Geospatial-Intelligence Agency and the Local Notice to Mariners (LNM) issued periodically by each U.S. Coast Guard district to the dates shown in the lower left hand corner. Chart updates corrected from Notice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

NOAA encourages users to submit inquiries, discrepancies about this chart at <http://www.nauticalcharts.noaa.gov/staff/con>

27th Ed., Oct. 2015. Last Correction: 8/12/2016. Cleared through:  
 LNM: 4816 (11/29/2016), NM: 5016 (12/10/2016)



Note: Chart grid lines are aligned with true north.

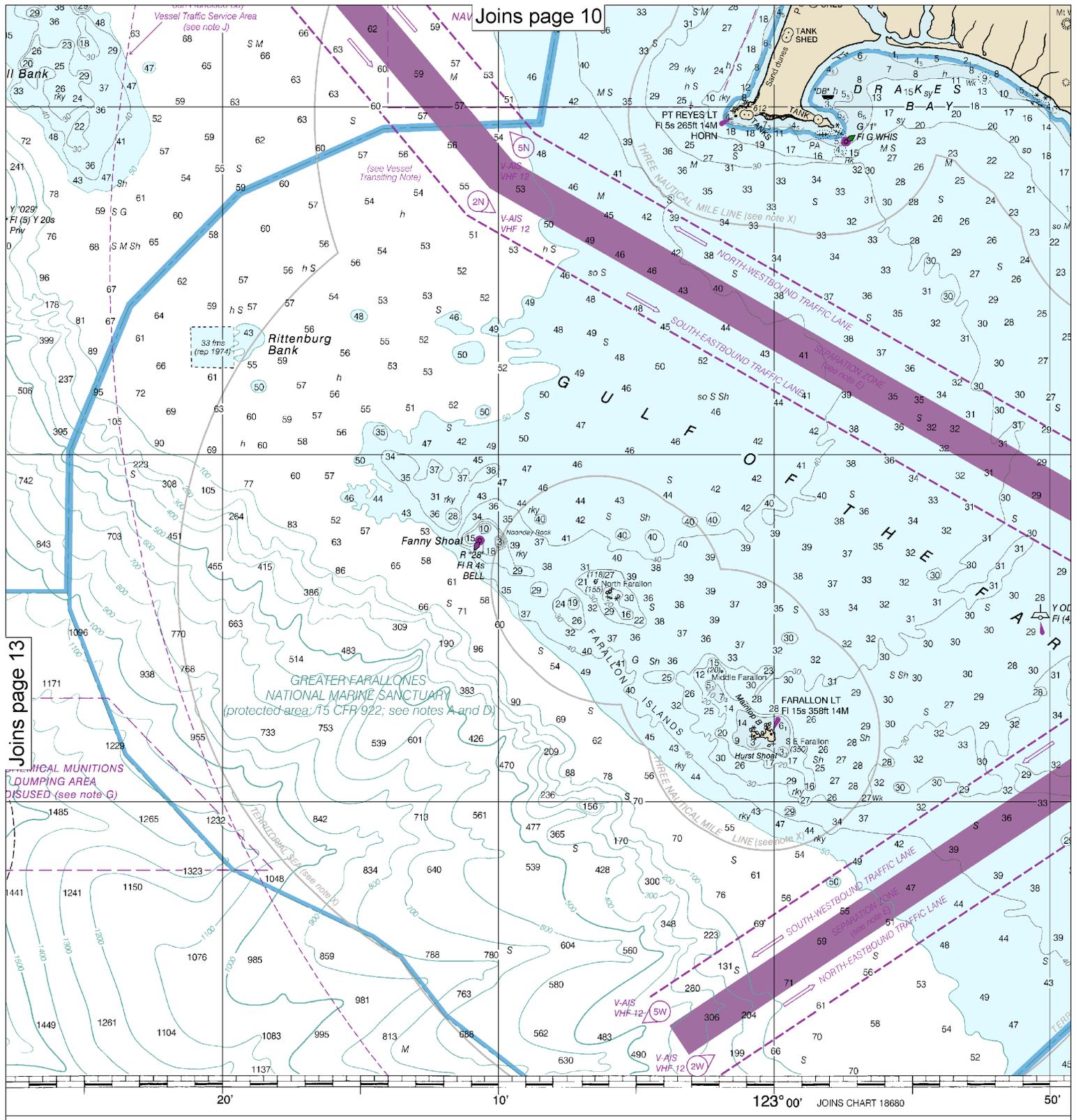


ps or comments  
contact.htm

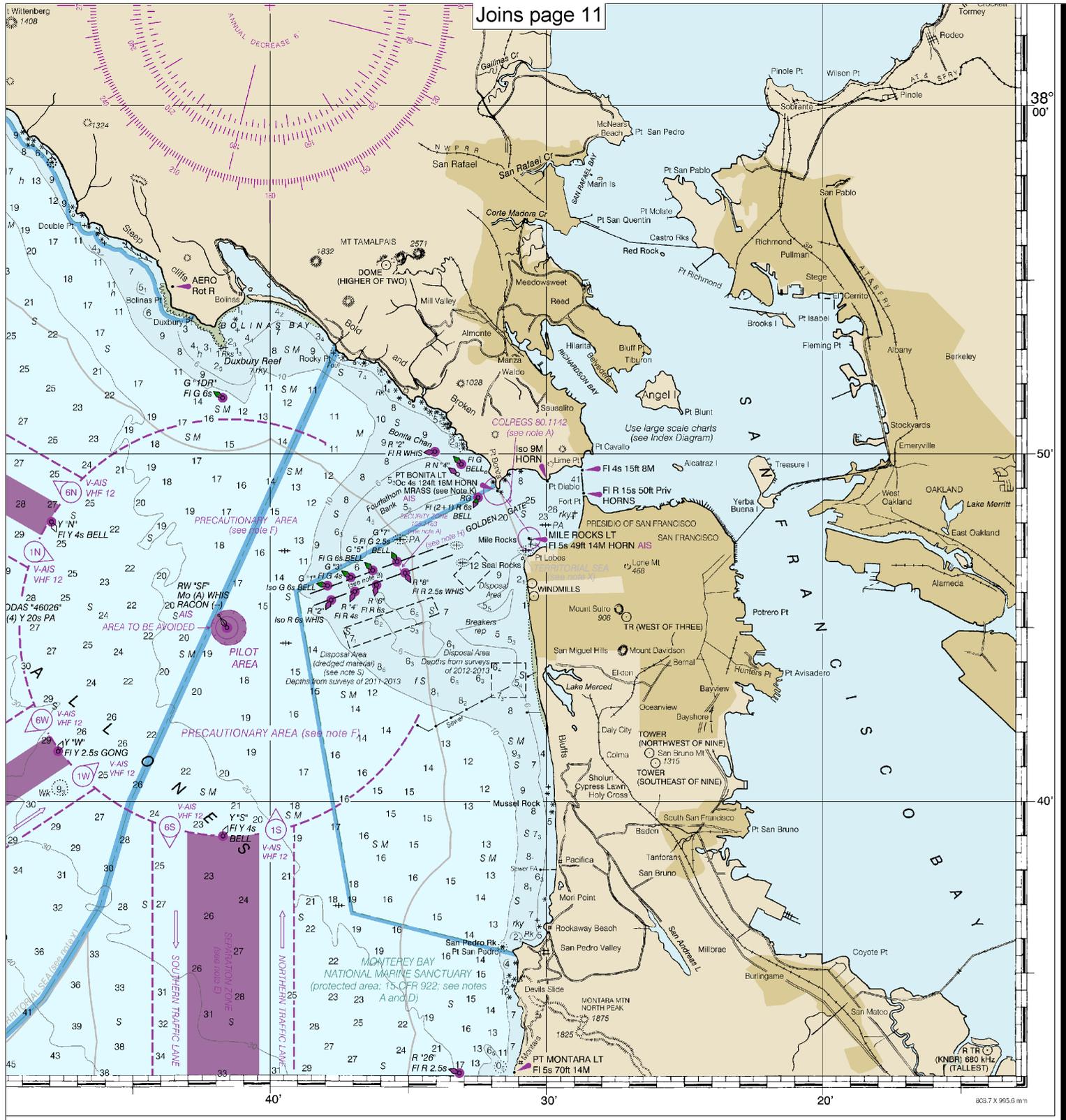
# SOUNDINGS IN FATHOMS

(FATHOMS AND FEET TO 11 FATHOMS)

Published at Washington, D.  
 U.S. DEPARTMENT OF COMM  
 NATIONAL OCEANIC AND ATMOSPHERIC A  
 NATIONAL OCEAN SERVICE  
 COAST SURVEY



Note: Chart grid lines are aligned with true north.



38° 00'

50'

40'

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

San Francisco to Point Arena  
SOUNDINGS IN FATHOMS - SCALE 1:207,840

18640



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>
- Interactive chart catalog — <http://www.charts.noaa.gov/InteractiveCatalog/nrnc.shtml>
- 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](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 @NOAAcharts



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.