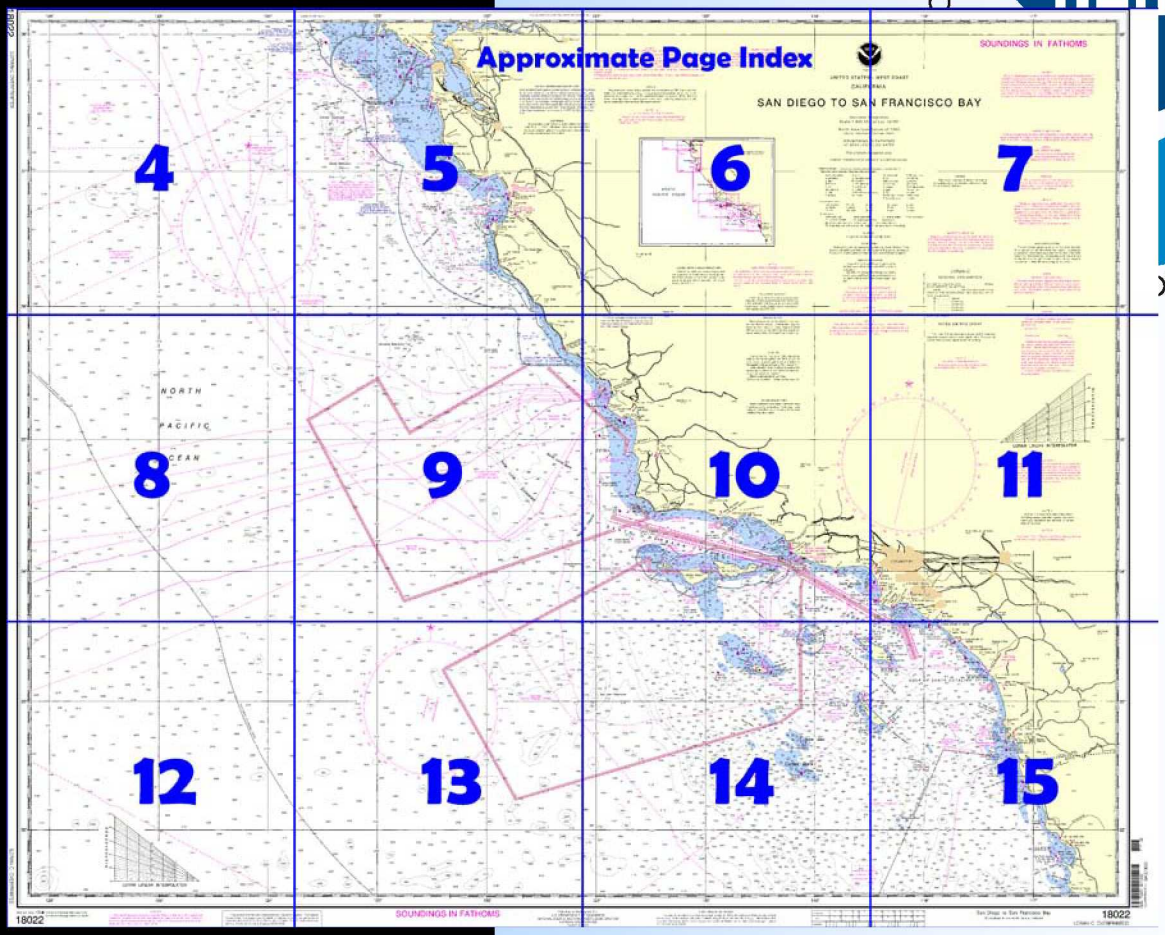
BookletChart™

San Diego to San Francisco Bay

(NOAA Chart 18022)

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.*



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™?

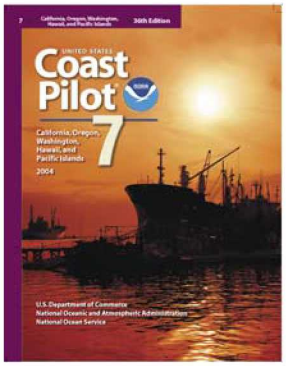
This BookletChart is made to help recreational boaters locate themselves on the water. It has been reduced in scale for convenience, but otherwise contains all the information of the full-scale nautical chart. The bar scales have also been reduced, and are accurate when used to measure distances in this 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 4,5,6 & 7 excerpts]

(1) **San Francisco Bay**, the largest harbor on the Pacific coast of the United States, is more properly described as a series of connecting bays and harbors of which San Francisco Bay proper, San Pablo Bay, and Suisun Bay are the largest. Depths of 29 to 40 feet are available for deep-draft vessels to San Francisco, Oakland, Alameda, Richmond, and Redwood City in San Francisco Bay proper; to Stockton on the San Joaquin River; and to Sacramento through the lower Sacramento River and a deepwater channel. Much of the local navigation is by light-draft vessels and barges.

(18) **San Luis Obispo Bay**, 35 miles N of Point Arguello, is a broad bight that affords good shelter in N or W weather. S gales occur several times during the winter.

(22) The city of **San Diego** is on the NE shore of the bay. **Coronado** is on the sandspit opposite San Diego. **National City** and **Chula Vista** are S of San Diego on the SE shore of the bay. The principal wharves are at San Diego and National City. Coronado, connected to San Diego by a highway bridge, is a residential and resort area of little commercial importance.

(24) **San Clemente Island,** 43 miles SSW of Point Fermin and 57 miles WNW of Point Loma, is 18 miles long in a NW direction and 4 miles wide at its widest part, and reaches an elevation of 1,965 feet.

(44) **Santa Catalina Island,** 18 miles S of Point Fermin, is 18.5 miles long in a SE direction and has a greatest width of 7 miles. The island is privately owned.

(74) **San Pedro Channel** is about 17 miles wide between the mainland, Point Fermin to Point Vicente, and Santa Catalina Island. Current observations have been made 7 miles S of San Pedro Breakwater.

(76) **San Nicolas Island,** the outermost of the group off southern California, is 53 miles off the nearest point of the mainland, 43 miles WNW of San Clemente Island, and 24 miles SW of Santa Barbara Island. The island is a military reservation and off limits to the public.

(86) **Santa Barbara Island,** 33 miles SSW of Point Dume and 21 miles W from the W end of Santa Catalina Island, is 1.5 miles long in a N direction and has a greatest width of 1 mile.

(95) **Santa Cruz Island,** 17 miles WSW of Point Hueneme, is the largest of the Channel Islands. It is privately owned and permission must be obtained to land.

(106) **Santa Rosa Island,** 24.5 miles SW of Goleta Point on the mainland, is 15 miles long in a W direction and has a greatest width of nearly 10 miles.

(121) **Point Sur,** 121 miles NW of Point Arguello and 96 miles SSE of San Francisco Bay entrance, is a black rocky butte 361 feet high with low sand dunes extending E from it for over 0.5 mile. From N or S, it looks like an island and in clear weather is visible about 25 miles.

(149) **Monterey Bay,** between Point Pinos and Point Santa Cruz, is a broad 20-mile-wide open roadstead. The shores are low with sand beaches backed by dunes or low sandy bluffs. **Salinas Valley,** the lowland extending E from about the middle of the bay, is prominent from seaward as it forms the break between the Santa Lucia Range S and the high land of the Santa Cruz Mountains N.

(151) **Santa Barbara Channel** is 63 miles long and increases gradually in width from 11 miles at the E end to 23 miles at the W end. The channel is free of dangers and has depths of 40 to more than 300 fathoms along the recommended track from San Diego and Los Angeles to northern ports.

(174) At **San Clemente Island**, about 60 miles (111 km) northwest of San Diego, west winds dominate at a lower average speed of only seven knots.

(259) **Los Angeles Harbor,** at the W end of San Pedro Bay, includes the districts of **San Pedro, Wilmington,** and a major portion of Terminal Island.

(260) **Long Beach Harbor,** in the E part of San Pedro Bay, includes the City of Long Beach and a portion of Terminal Island. Long Beach and Los Angeles Harbors are connected by Cerritos Channel. The distance between the seaward entrance to the two harbors is about 4 miles.

(262) The **Port of Los Angeles,** one of the largest ports on the Pacific coast, has a history of leading the Pacific coast ports in terms of tonnage handled. It has extensive facilities to accommodate all types of traffic. Some of the principal exports are crude minerals, iron and steel scrap, inorganic chemicals, animal feed, cotton, manufactured fertilizers, and fresh fruits and nuts. Some of the principal imports are iron and steel products, motor vehicles and parts, organic chemicals, fresh fruits and nuts, paper and paperboard, sugar, molasses and syrups, glass, and fresh and frozen fish.

(270) **San Francisco,** one of America's great cities, occupies the N portion of the peninsula forming the S entrance to the bay.

Table of Selected Chart Notes

5 IMO - adopted Recommended Tracks for vessels 300 gross tons and above (except those carrying hazardous cargo in bulk or crude oil).

Corrected through NM Aug. 6/05
Corrected through LNM Jul. 26/05

HEIGHTS

Heights in feet above Mean High Water.

IMO - adopted Recommended Tracks for vessels carrying hazardous cargo in bulk (including ore concentrates, explosives, munitions, chemicals, liquefied gases, refined products, distillates or other non-persistent cargo). Vessels using these tracks should use the Western TSS when entering of leaving San Francisco. 1 1

SEA OTTER REFUGE

The State of California Fish and Game Code prohibits the use of bows or firearms and the trapping of birds or mammals in the California Sea Otter Game Refuge.

MINERAL DEVELOPMENT STRUCTURES

Obstruction lights and sound (fog) signals are required for fixed mineral development structures shown on this chart, subject to approval by the District Commander, U.S. Coast Guard (33 CFR 67).

CAUTION

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

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.

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)

LOCAL MAGNETIC DISTURBANCE

Differences of as much as 5° from the normal variation have been observed in the vicinity of San Clemente Island and as much as 4° in the vicinity of Sixtymile Bank.

NOTE J

Obstructions reported 90 feet off the bottom. All fishing vessels and other vessels involved in subsurface operations are advised to remain clear of this area.

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.

NOTE D
ACOUSTIC RANGE FACILITY

Numerous shore connected bottom cables are located within the outlined area.

NOTE L
NAVAL OPERATING AREA

Vessels should use caution while transiting this area due to naval test operations which involve frequent maneuvers in the vicinity of and around this location.

RACING BUOYS

Racing buoys within the limits of this chart are not shown hereon. Information may be obtained from the U.S. Coast Guard District Offices as racing and other private buoys are not all listed in the U.S. Coast Guard Light List.

Mercator Projection
Scale 1:868,003 at Lat. 35°00'

North American Datum of 1983
(World Geodetic System 1984)

SOUNDINGS IN FATHOMS
AT MEAN LOWER LOW WATER

NOTE M

See Coast Pilot 7, Chapter 5 for information pertaining to the Naval Operating Area in Bechers Bay.

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 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.

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.

LORAN-C
GENERAL EXPLANATION

LORAN-C FREQUENCY.....100kHz
PULSE REPETITION INTERVAL
9940.....99,400 Microseconds
STATION TYPE DESIGNATORS: (Not individual station letter designators).
M ..... Master
W ..... Secondary
X ..... Secondary
Y ..... Secondary
Z ..... Secondary

EXAMPLE: 9940-X

RATES ON THIS CHART

The Loran-C lines of position shown on this chart are based on assumed all sea water signal paths. They are not adjusted for overland signal transmission delay.

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.

MAGNETIC VARIATION

Magnetic variation curves are for 2005 derived from 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.

CAUTION

Mariners are cautioned that exploratory surveys and exploratory drilling operations may be in progress in, or in the vicinity of, the Southern California Traffic Separation Scheme. These operations may pose hazards to navigation. The most recent Eleventh Coast Guard District Local Notice to Mariners should be consulted for the schedule of current operations.

NOTE B
MILITARY EXERCISE AREA

Mariners are cautioned against possible hazards due to military training activities. Normal hours of operation are 0600-2400 local time, daily. For extension of operating times and further information, consult U.S. Coast Guard Local Notice to Mariners.

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

AUTHORITIES

Hydrography and topography by the National Ocean Service, Coast Survey, with additional data from the Corps of Engineers, Geological Survey, U.S. Coast Guard, and National Geospatial-Intelligence Agency.

NOTE C
SUBMARINE PIPELINES AND CABLES

Uncharted submarine pipelines and cables may exist in the vicinity of oil well structures, and between such structures and the shoreline. Mariners should use caution when anchoring.

Oil well structures, submarine pipelines, and cables are charted only where outside of the indicated limits of charts 18746, 18725, and 18721.

NOTE E
CHEMICAL MUNITIONS 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.

AREAS TO BE AVOIDED

All ships, except those bound to and from ports on one of the islands within the areas engaged in the trade of carrying cargo, including but not limited to tankers and other bulk carriers and barges, should avoid the areas. (MSC, IMO 59/33 Annex 21)

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.

NOTE K

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.

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 Pilots appendix for addresses of EPA offices. Dumping subsequent to the survey dates may have reduced the depths shown.

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.

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

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

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

Bottom characteristics:

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

Miscellaneous:

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

(21) 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.

NOTE F
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 major harbors and along heavily traveled coastal waters but are not intended in any way to supersede or to 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.

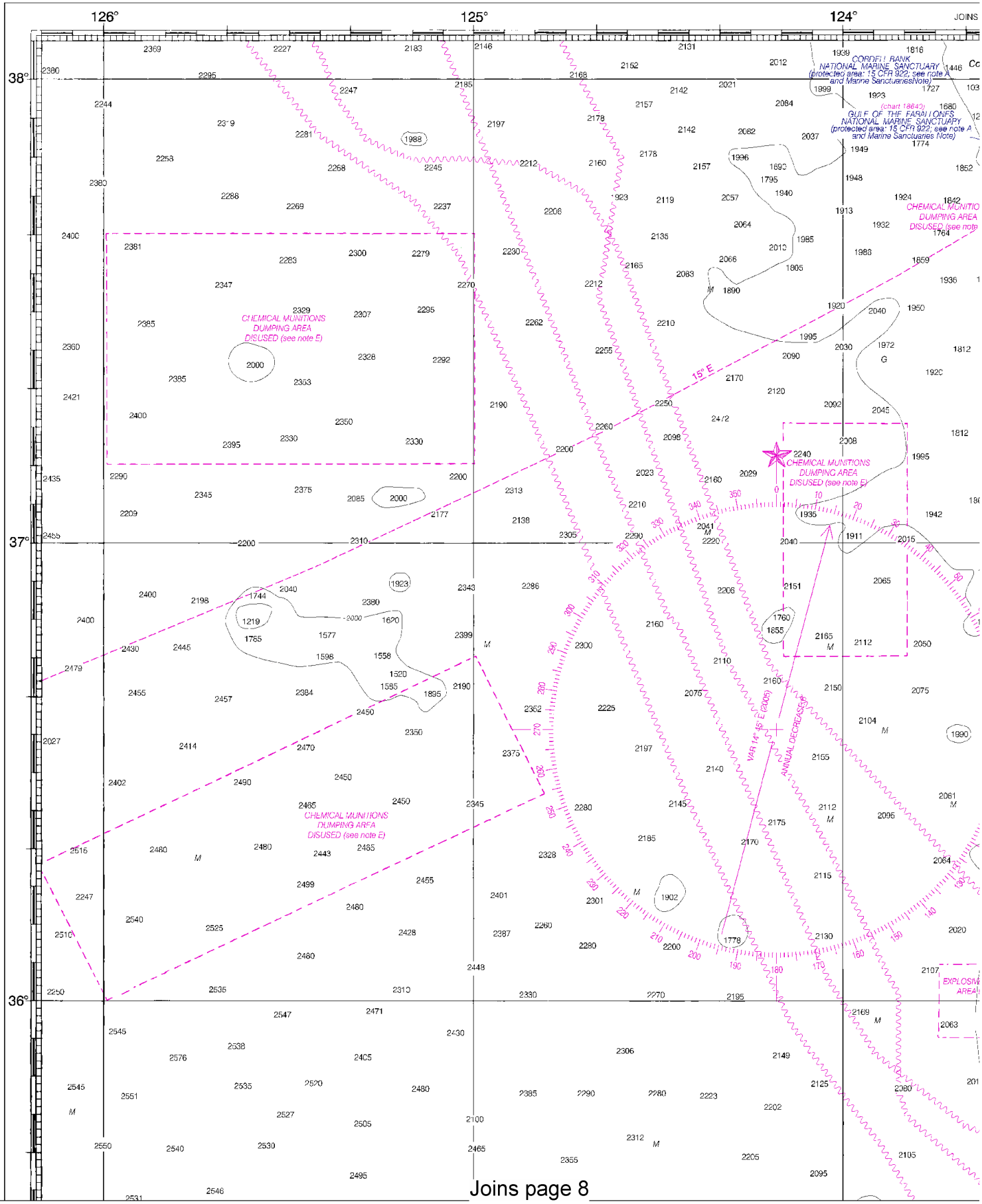
A Precautionary Area has been established at San Pedro Bay. It is recommended that vessels proceed with caution in this area.

PRINT-ON-DEMAND CHARTS

This chart is available in a version 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.

18022

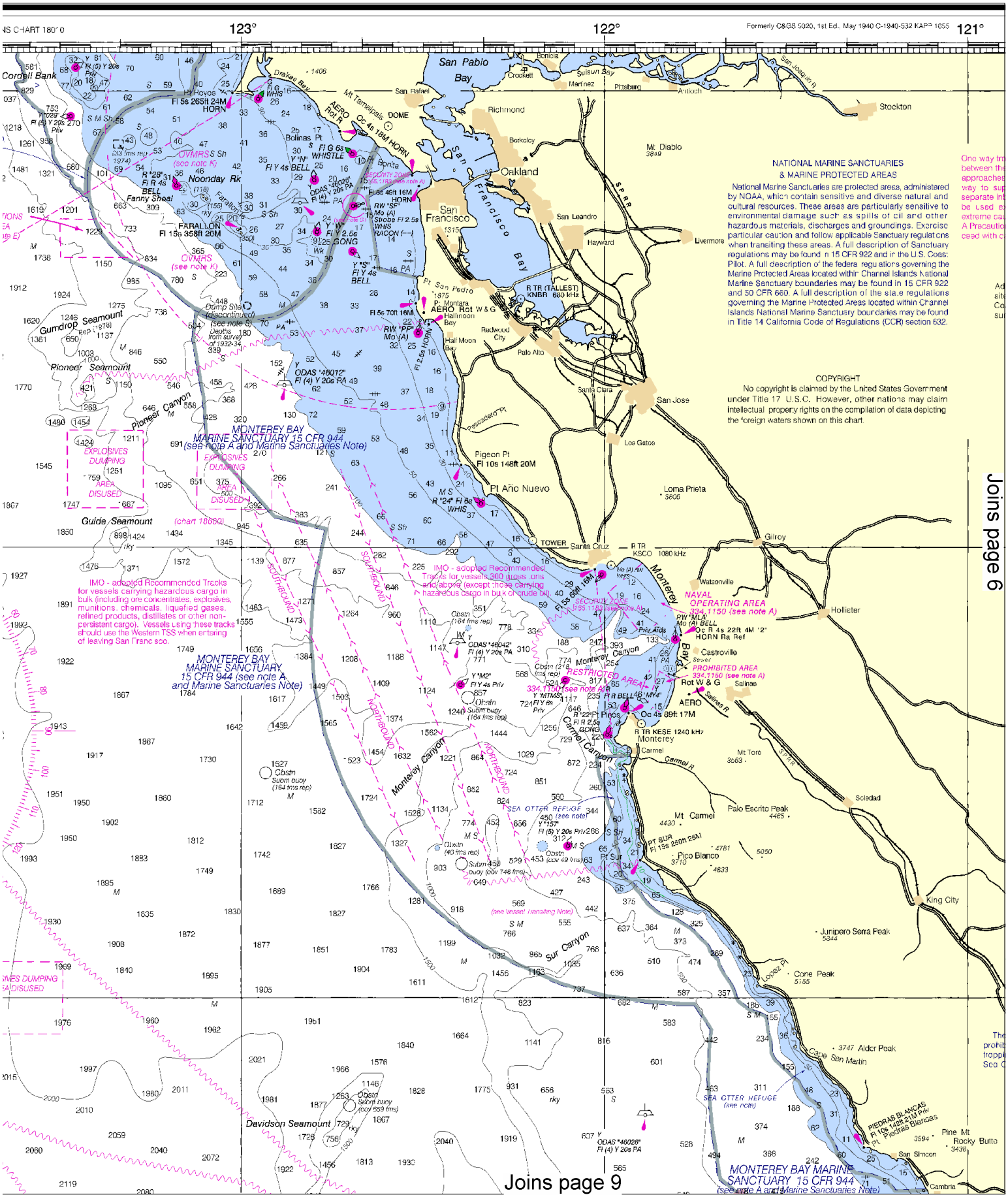
LORAN-C OVERPRINTED



Joins page 8

4

North



This BookletChart was reduced to 70% of the original chart scale.
The new scale is 1:1240004. Barscales have also been reduced and are accurate when used to measure distances in this BookletChart.

May 1940 C-1940-532 KAPS 1055

121° 120° 119°

Stockton

E SANCTUARIES
ECTED AREAS
protected areas, administered
tive and diverse natural and
are particularly sensitive to
as spills of oil and other
cs and groundings. Exercise
pplicable Sanctuary regulations
full description of Sanctuary
CFR 922 and in the U.S. Coast
dera regulations governing the
within Channel Islands National
may be found in 15 CFR 922
tion of the state regulations
Areas located within Channel
ary boundaries may be found
egulations (CCR) section 632.

IGHT
he United States Government
er, other nations may claim
compilation of data depicting
chart.

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TRAFFIC SEPARATION SCHEME

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NOTE G
TRAFFIC SEPARATION SCHEME

Recommended traffic lanes have been established for the approaches to San Francisco Bay. See charts 18645, 18660, and 18640.

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.

UNITED STA
CA

SAN DIEGO TO S

Merc
Scale 1:86

North Ame
(World Ge

SOUNDI
AT MEAN

(For offs

Additional information ca

ABBREVIATIONS (For complete list of S
Aids to Navigation (lights are white unless o

AERO aeronautical	G green
Al alternating	IQ inter
B black	Iso isopl
Bn beacon	LT HO
C can	M nautic
DIA diaphone	m minut
F fixed	MICRO
Fl flashing	Mkr mar

Bottom characteristics:

Bld boulders	Co cora
bk broken	G gravel
Cy clay	Grs grass

Miscellaneous:

AUTH authorized	Obstn
ED existence doubtful	PA po

(1) Wreck, rock, obstruction, or sho
(2) Rocks that cover and uncover,

Heights in f

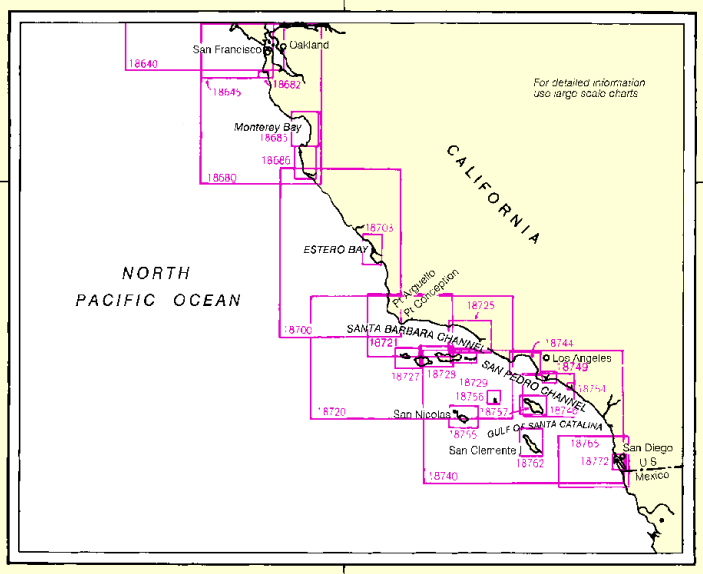
Hydrography and topog
Survey, with additional dat
Survey, U.S. Coast Guard, a

A
Consult U
supplemental
navigat on.
See Nationa
List of Lights ar
included in the
List.

LOCAL M
Differences c
var ation have
of San Clemen
the vicinity of S

San Clemente Isla
closed to the public.

CHEMICAL MUNITIO
Site was formerly usec
dumping. Such use has be
in no way constitutes auth



Joins page 5

Sciedad

San Benito Mt
5258

King City

ro Serra Peak

MINERAL DEVELOPMENT STRUCTURES

Obstruction lights and sound (fog) signals are required for fixed mineral development structures shown on this chart, subject to approval by the District Commander, U.S. Coast Guard (33 CFR 67).

NOTE C
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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).

RACING BUOYS

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SEA OTTER REFUGE

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Castle Mt
4336

747 Alder Peak
Martin

PIEDRAS BLANCAS
Pt Piedras Blancas
Pine Mt
3594
Rocky Butte
3438
San Simeon
Cambria

Joins page 10

6

North

118° 117°

38°

SOUNDINGS IN FATHOMS

COAST SURVEY

ATES - WEST COAST

ALIFORNIA

SAN FRANCISCO BAY

cator Projection
368,003 at Lat. 35°00'

erican Datum of 1983
Geodetic System 1984)

DINGS IN FATHOMS
N LOWER LOW WATER

fshore navigation only)

can be obtained at nauticalcharts.noaa.gov.

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AREAS TO BE AVOIDED

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NOTE L
NAVAL OPERATING AREA

Vessels should use caution while transiting this area due to naval test operations which involve frequent maneuvers in the vicinity of and around this location.

37°

of Symbols and Abbreviations, see Chart No. 1.)
s otherwise indicated):

een	Mo morse code	H IR radio tower
erupted quick	N nun	Rot rotating
ophase	OBSC obscured	s seconds
O lighthouse	Oc occulting	SEC sector
utical mile	Or orange	St M statute miles
nutes	Q quick	VQ very quick
O TR microwave tower	R red	W white
marker	Ra Ref radar reflector	WHIS whistle
	R Bn radiobeacon	Y yellow

gy gray	Oys oysters	so soft
h hard	Rk rock	Sh shells
M mud	S sand	sy sticky

sta obstruction	PD position doubtful	Subm submerged
position approximate	Rep reported	

shoal swept clear to the depth indicated.
r, with heights in feet above datum of soundings.

HEIGHTS

n feet above Mean High Water.

AUTHORITIES

ography by the National Ocean Service, Coast
data from the Corps of Engineers, Geological
, and National Geospatial-Intelligence Agency.

AIDS TO NAVIGATION

U.S. Coast Guard Light List for
al information concerning aids to

na Geospatial-Intelligence Agency
and Fog Signals for information not
he United States Coast Guard Light

MAGNETIC DISTURBANCE

s of as much as 5° from the normal
ve been observed in the vicinity
hente Island and as much as 4° in
of Sixtymile Bank.

WARNING

sland is a NAVAL RESERVATION and is
lic.

NOTE E
IONS DUMPING AREA - RESTRICTION

c or designated for U.S. chemical munitions
been discontinued. Designation of such area
thority for dumping.

CAUTION

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MAGNETIC VARIATION

Magnetic variation curves are for 2005 derived from 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.

LORAN-C
GENERAL EXPLANATION

LORAN-C FREQUENCY.....100kHz
PULSE REPETITION INTERVAL
9940.....99,400 Microseconds
STATION TYPE DESIGNATORS: (Not individual station letter designators).
M..... Master
W..... Secondary
X..... Secondary
Y..... Secondary
Z..... Secondary

EXAMPLE: 9940-X

RATES ON THIS CHART

The Loran-C lines of position shown on this chart are based on assumed all sea water signal paths. They are not adjusted for overland signal transmission delay.

NOTE D
ACOUSTIC RANGE FACILITY

Numerous shore connected bottom cables

WARNING

The prudent mariner will not rely solely on any single aid to navigation, particularly on floating aids. See U.S. Coast Guard Light List and U.S. Coast Pilot for details.

NOTE A

Navigation regulations are published in Chapter 2, U.S. Coast Pilot 7. Additions or revisions to Chapter 2 are published in the Notice to Mariners. Information concerning the regulations may be obtained at the Office of the Commander, 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.

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.

NOTE B
MILITARY EXERCISE AREA

Mariners are cautioned against possible hazards due to military training activities. Normal hours of operation are 0600-2400 local time, daily. For extension of operating times and further information, consult U.S. Coast Guard Local Notice to Mariners.

36°

CAUTION
SUBMARINE PIPELINES AND CABLES

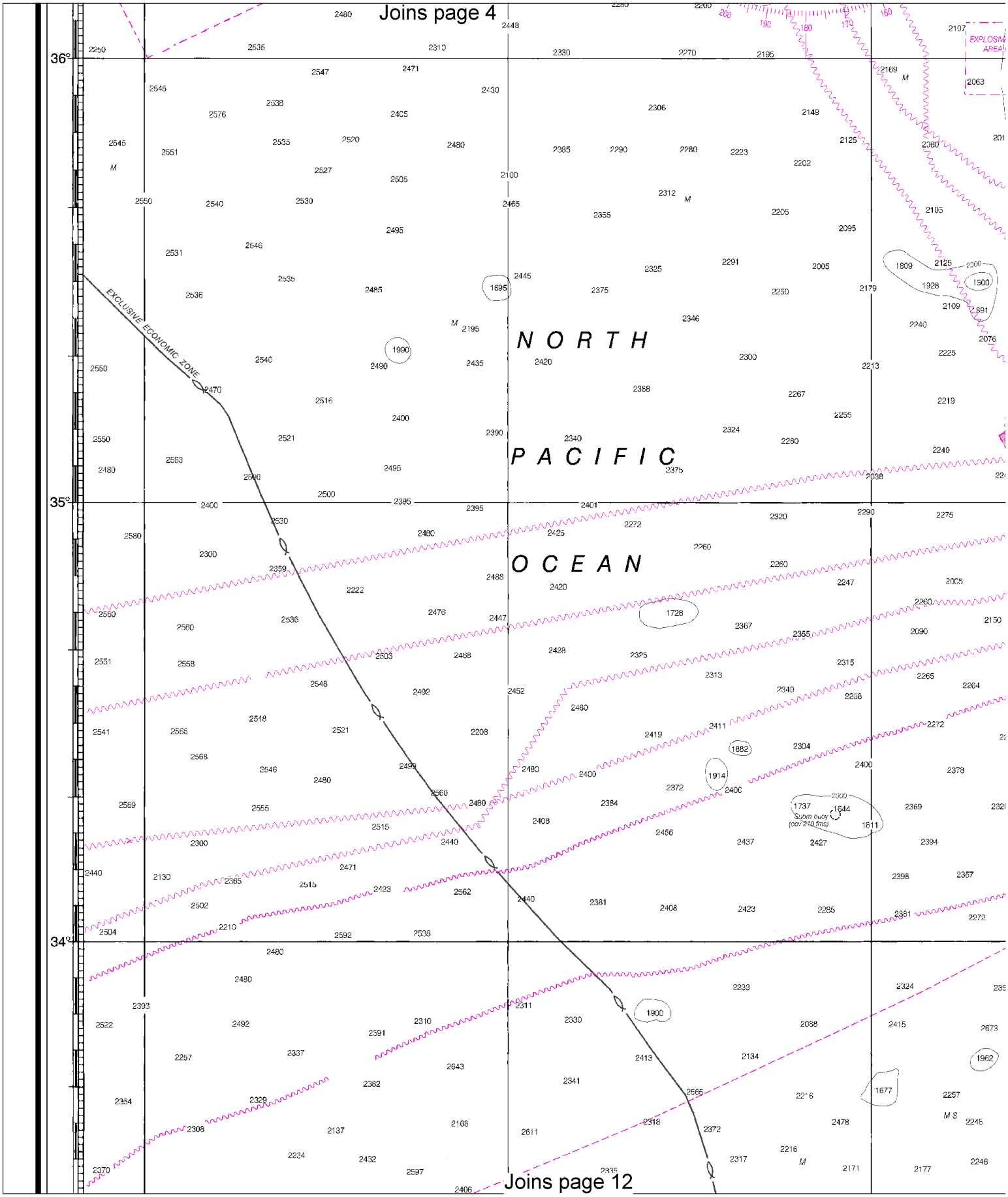
Charted submarine pipelines and submarine cables and submarine pipeline and cable areas are shown as:

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 their draft in areas where

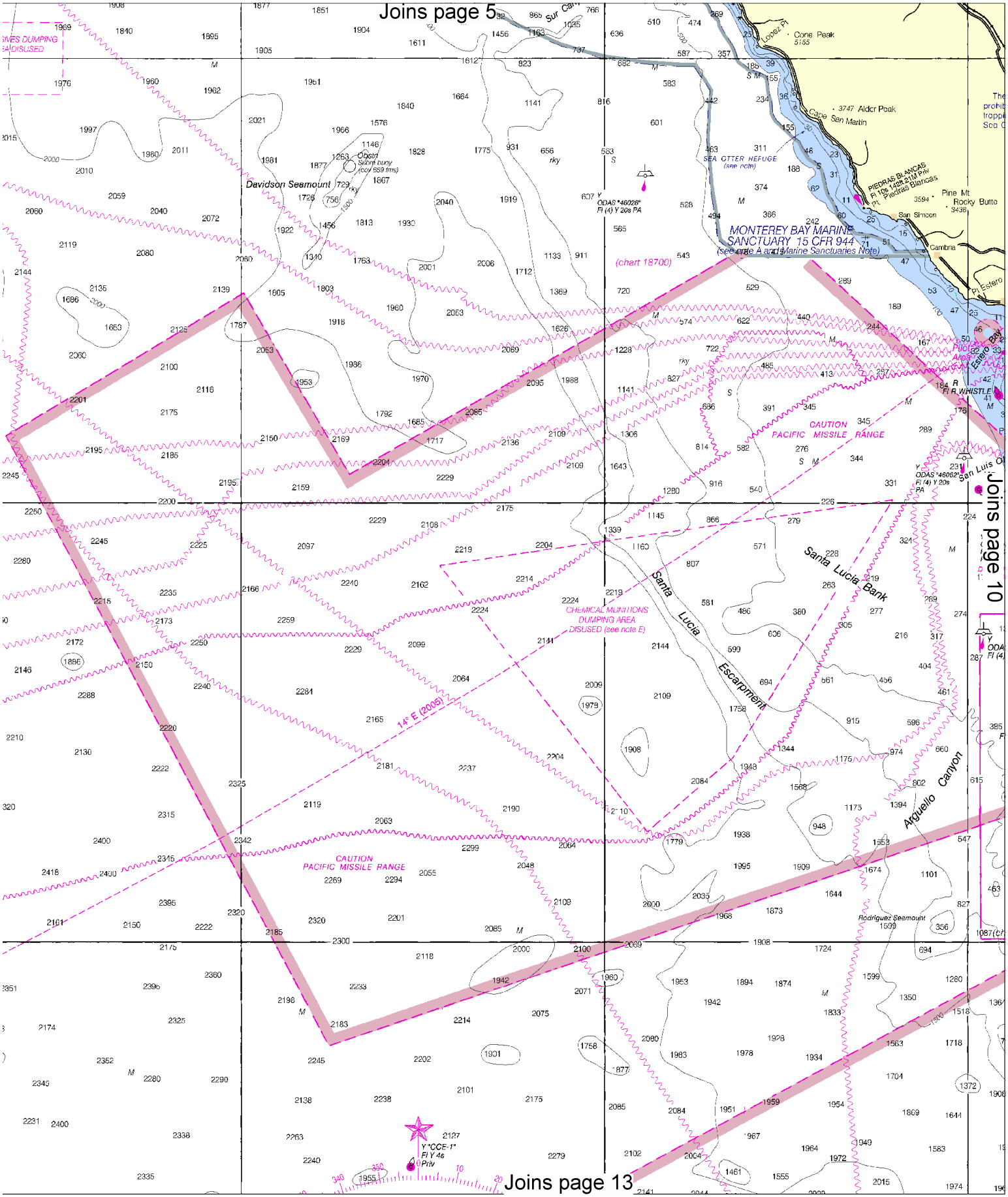
Joins page 11

This BookletChart has been updated with: Coast Guard Local Notice To Mariners: 0510 2/2/2010,
NGA Weekly Notice to Mariners: 0910 2/27/2010,
Canadian Coast Guard Notice to Mariners: n/a .

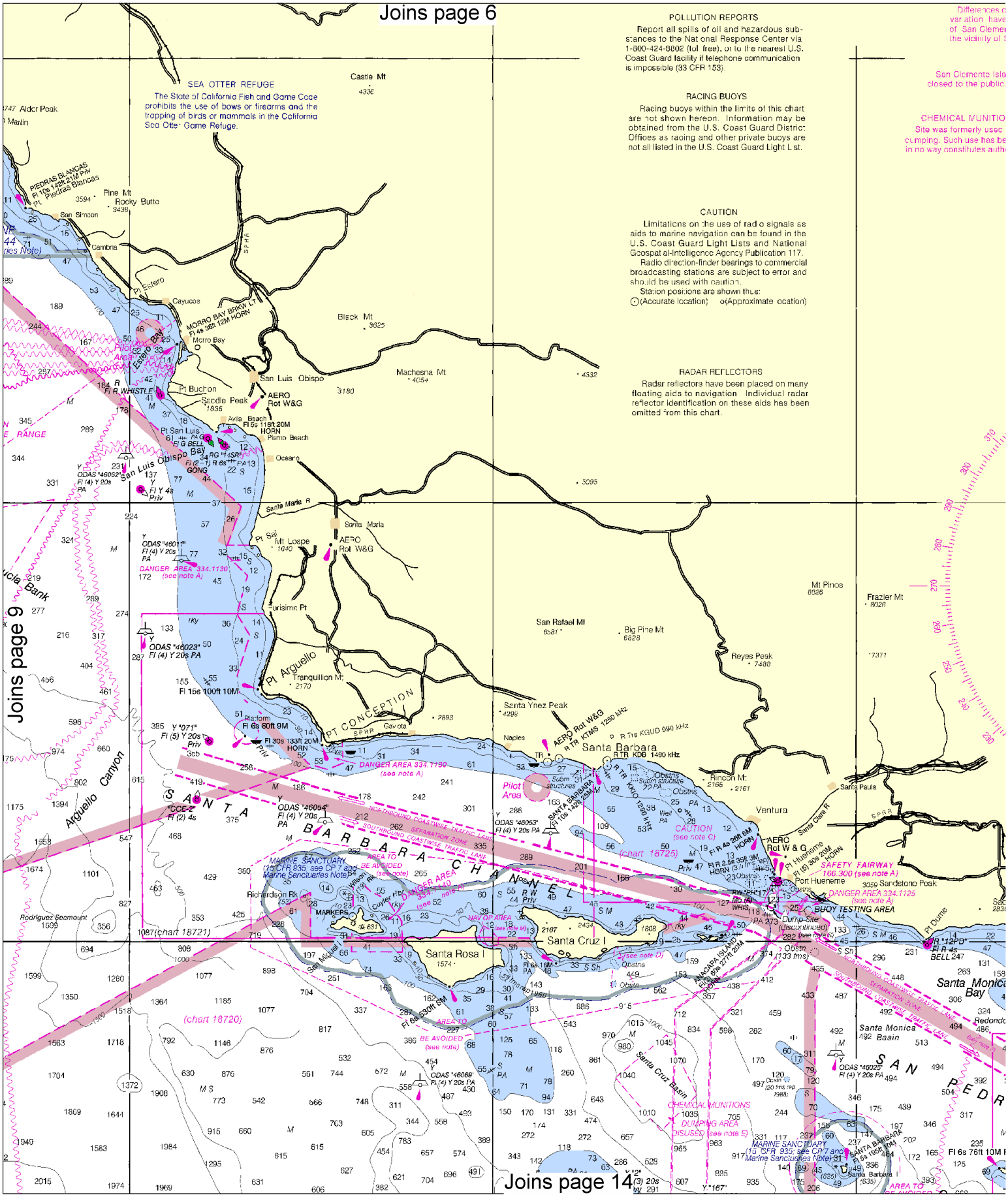

Joins page 4
36°
35°
34°
EXCLUSIVE ECONOMIC ZONE
N O R T H
P A C I F I C
O C E A N
EXPLOSIVE AREA
Joins page 12

8

North


Joins page 5
Joins page 10
Joins page 13
MONTEREY BAY MARINE SANCTUARY 15 CFR 944
(see note A and Marine Sanctuaries Note)
(chart 18700)
CAUTION PACIFIC MISSILE RANGE
CHEMICAL MUNITIONS DUMPING AREA DISUSED (see note E)
Santa Lucia Escarpment
Santa Lucia Bank
Arguello Canyon
Davidson Seamount
Cone Peak
Alder Peak
Cape San Martin
Pine Mt
Rocky Butte
San Simeon
Cambria
Pt Estero
Rodriguez Seamount
14° E (2005)
Y "CCE-1" Fl Y 4s Priv

Joins page 6



North

Joins page 7

s of as much as 5° from the normal
ave been observed in the vicinity
hente Island and as much as 4° in
of Sixtymile Bank.

WARNING

sland is a NAVAL RESERVATION and is
lic.

NOTE E

IONS DUMPING AREA - RESTRICTION

c or designated for U.S. chemical munitions
been discontinued. Designation of such area
thority for dumping.

STATION TYPE DESIGNATORS: (No
letter designators).

M .... Master
W .... Secondary
X .... Secondary
Y .... Secondary
Z .... Secondary

EXAMPLE: 9940-X

RATES ON THIS CHART

The Loran-C lines of position shown on this chart are based on assumed all sea water signal paths. They are not adjusted for overland signal transmission delay.

NOTE D

ACOUSTIC RANGE FACILITY

Numerous shore connected bottom cables are located within the outlined area.

Notice to Mariners.

CAUTION

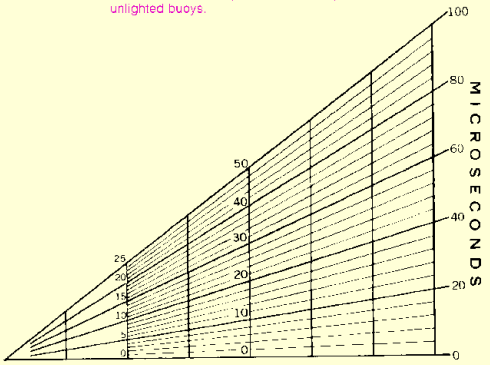
SUBMARINE PIPELINES AND CABLES

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.



LORAN LINEAR INTERPOLATOR

CAUTION

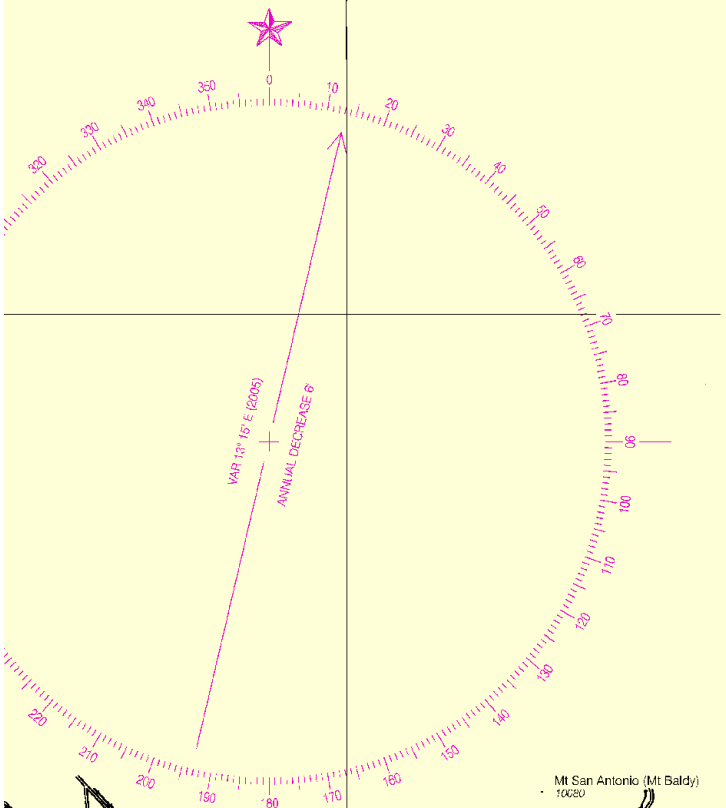
Mariners are cautioned that exploratory surveys and exploratory drilling operations may be in progress in, or in the vicinity of, the Southern California Traffic Separation Scheme. These operations may pose hazards to navigation. The most recent Eleventh Coast Guard District Local Notice to Mariners should be consulted for the schedule of current operations.

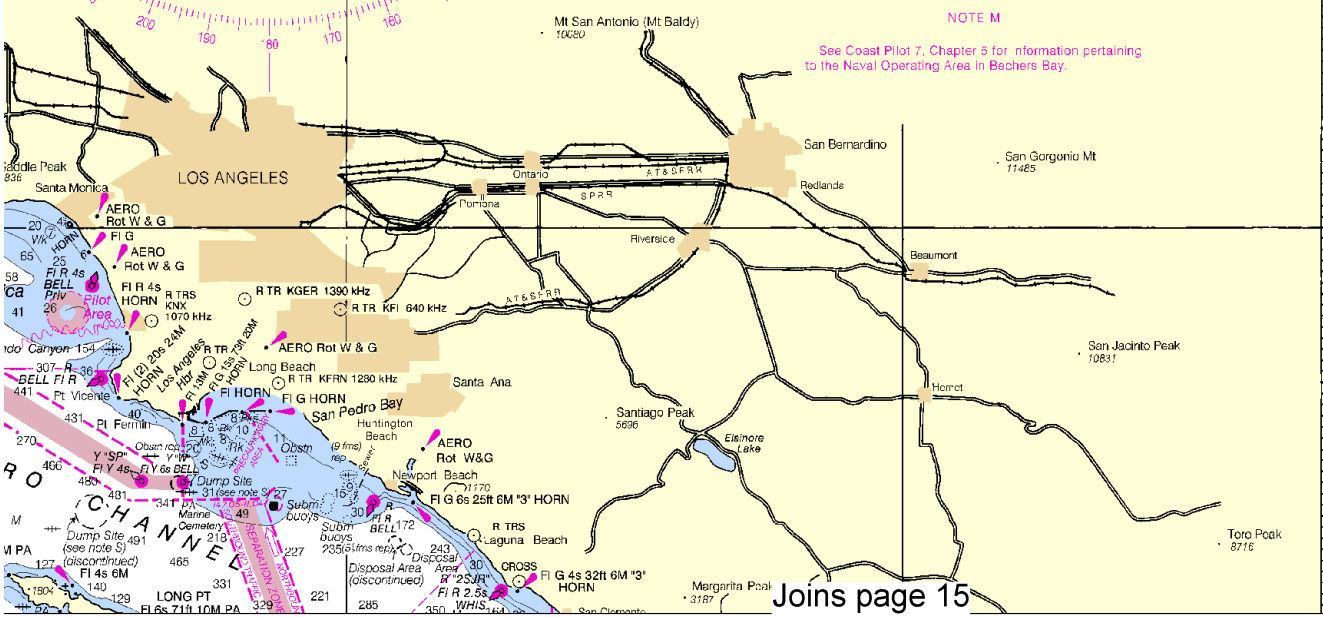
NOTE J

Obstructions reported 90 feet off the bottom. All fishing vessels and other vessels involved in subsurface operations are advised to remain clear of this area.

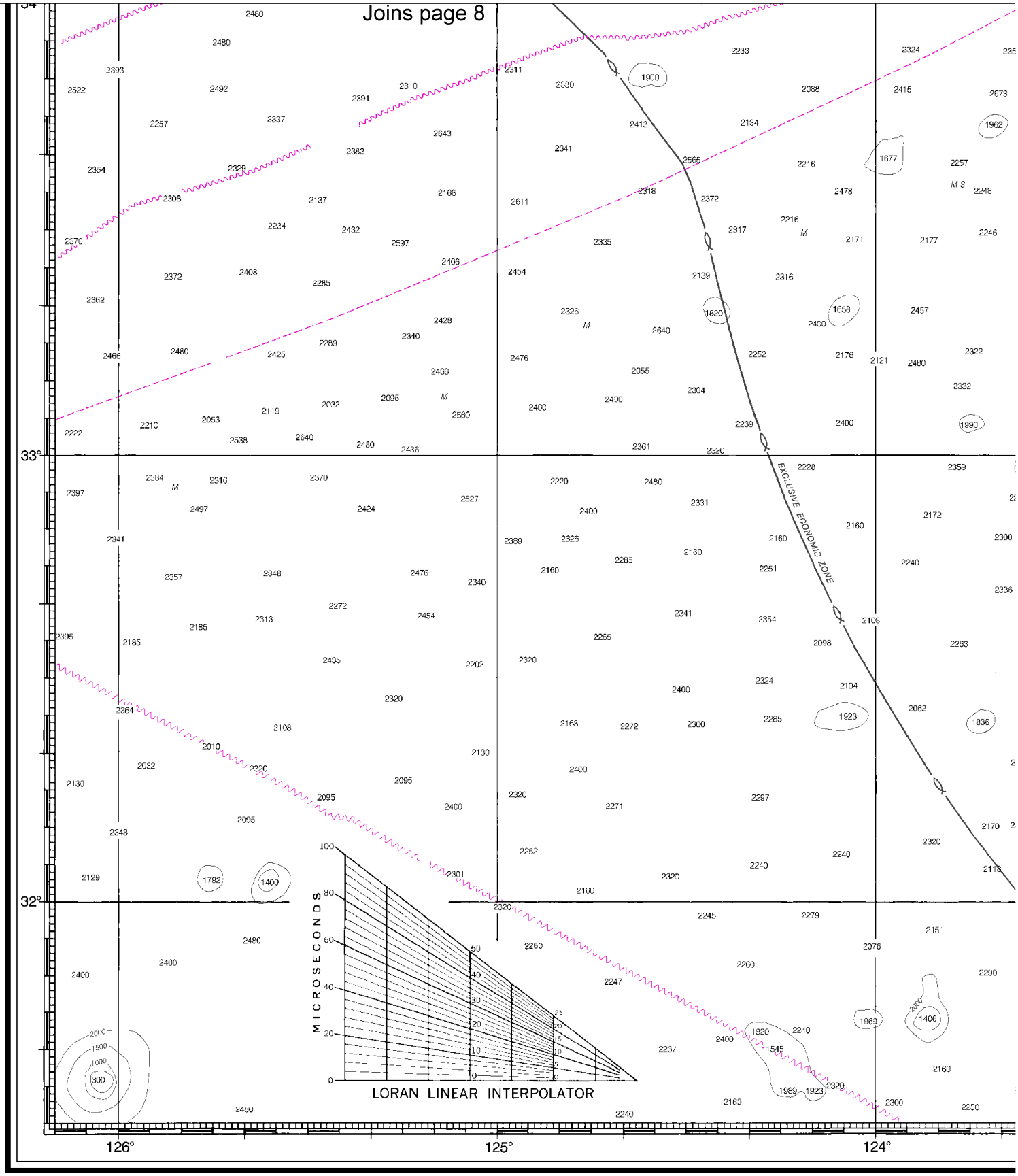
NOTE M

See Coast Pilot 7, Chapter 5 for information pertaining to the Naval Operating Area in Bechers Bay.





Joins page 15



LORAN-C OVERPRINTED

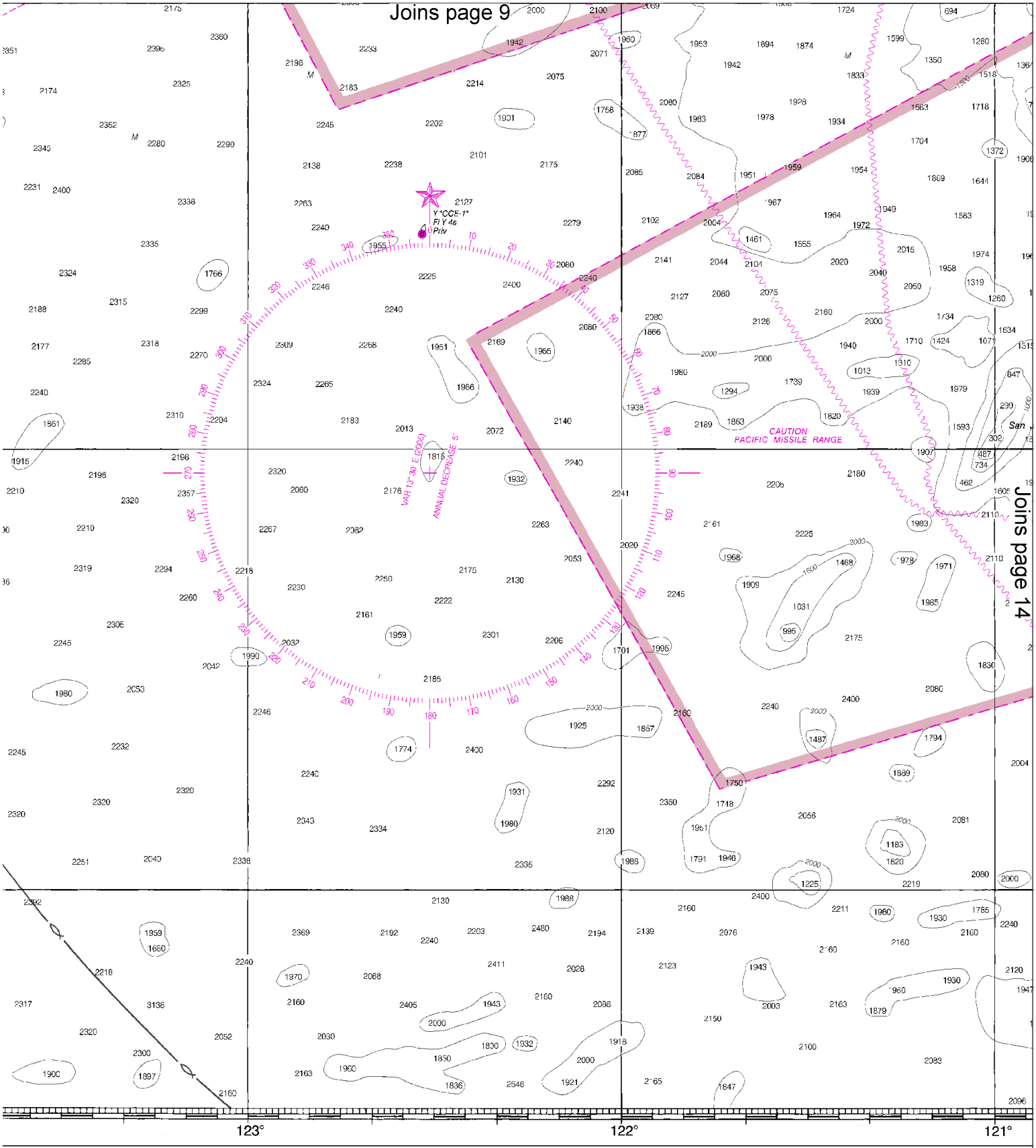
35th Ed., Aug. /05 ■ Corrected through NM Aug. 6/05
Corrected through LNM Jul. 26/05

18022

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.

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

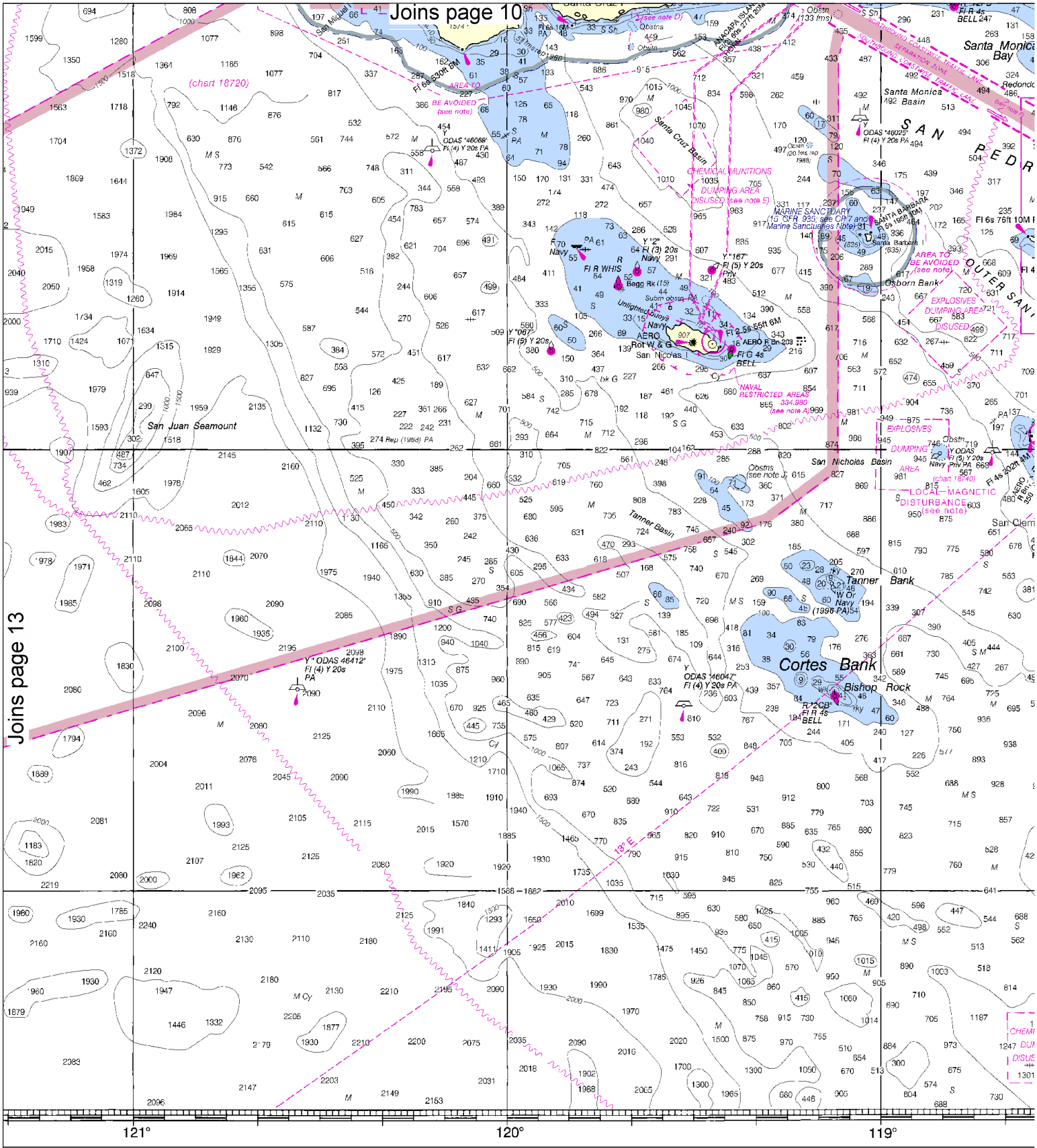
North



SOUNDINGS IN FATHOMS

The National
mments for
onal Ocean

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



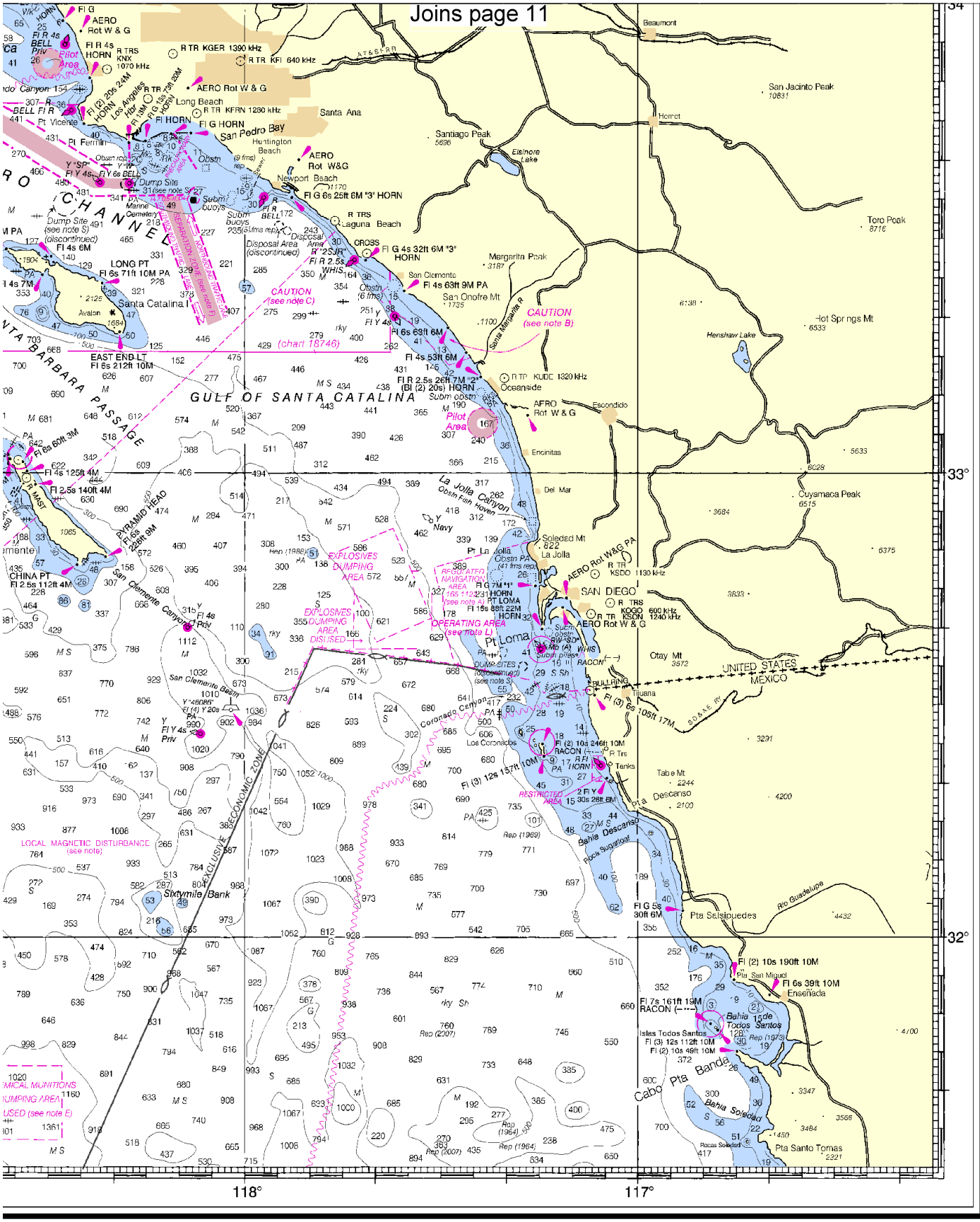
Published at Washington, D.C.
DEPARTMENT OF COMMERCE
EANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL OCEAN SERVICE
COAST SURVEY

PRINT-ON-DEMAND CHARTS

This chart is available n a version updated weekly by NOAA for Notices to Mariners and critical corrections. Charts are printed when ordered using Print-on-Demand techno ogy. New Editions are available 5-8 weeks before their release as traditional NOAA charts. Ask your chart agent about Print-on-Demand charts.

FATHOMS	1	2	3	4	5	6
FEET	6	12	18	24	30	36
METERS	1 2 3 4 5 6 7 8 9 10 11					

North



San Diego to San Francisco Bay

SOUNDINGS IN FATHOMS - SCALE 1:868,003

18022

LORAN-C OVERPRINTED

FD NO. 35

NSN 7642014011489 NGA REFERENCE No. 18ACO18022

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 Pacific SAR Coordinator – 510-437-3700
Coast Guard San Francisco – 415-399-3547
Coast Guard Los Angeles/Long Beach – 310-732-2030
Coast Guard San Diego – 619-683-6470
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

NOAA CHARTING PUBLICATIONS

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.