NOTE X

Within the 12-nautical mile Territorial Sea, established by Presidential Proclamation, some Federal laws apply. The Three Nautical Mile Line, previously identified as the outer limit of the territorial sea, is retained as it continues to depict the jurisdictional limit of the other laws. The 9-nautical mile Natural Resource Boundary off the Gulf coast of Florida, Texas, and Puerto Rico, and the Three Nautical Mile Line elsewhere remain in most cases the inner limit of Federal fisheries jurisdiction and the outer limit of the jurisdiction of the states. The 24-nautical mile Contiguous Zone and the 200-nautical mile Exclusive Economic Zone were established by Presidential Proclamation. Unless fixed by treaty or the U.S. Supreme Court, these maritime limits are subject to modification.

Formerly C&GS 5599, 1st Ed., June 1892 C-1897-21 KAPP 1821

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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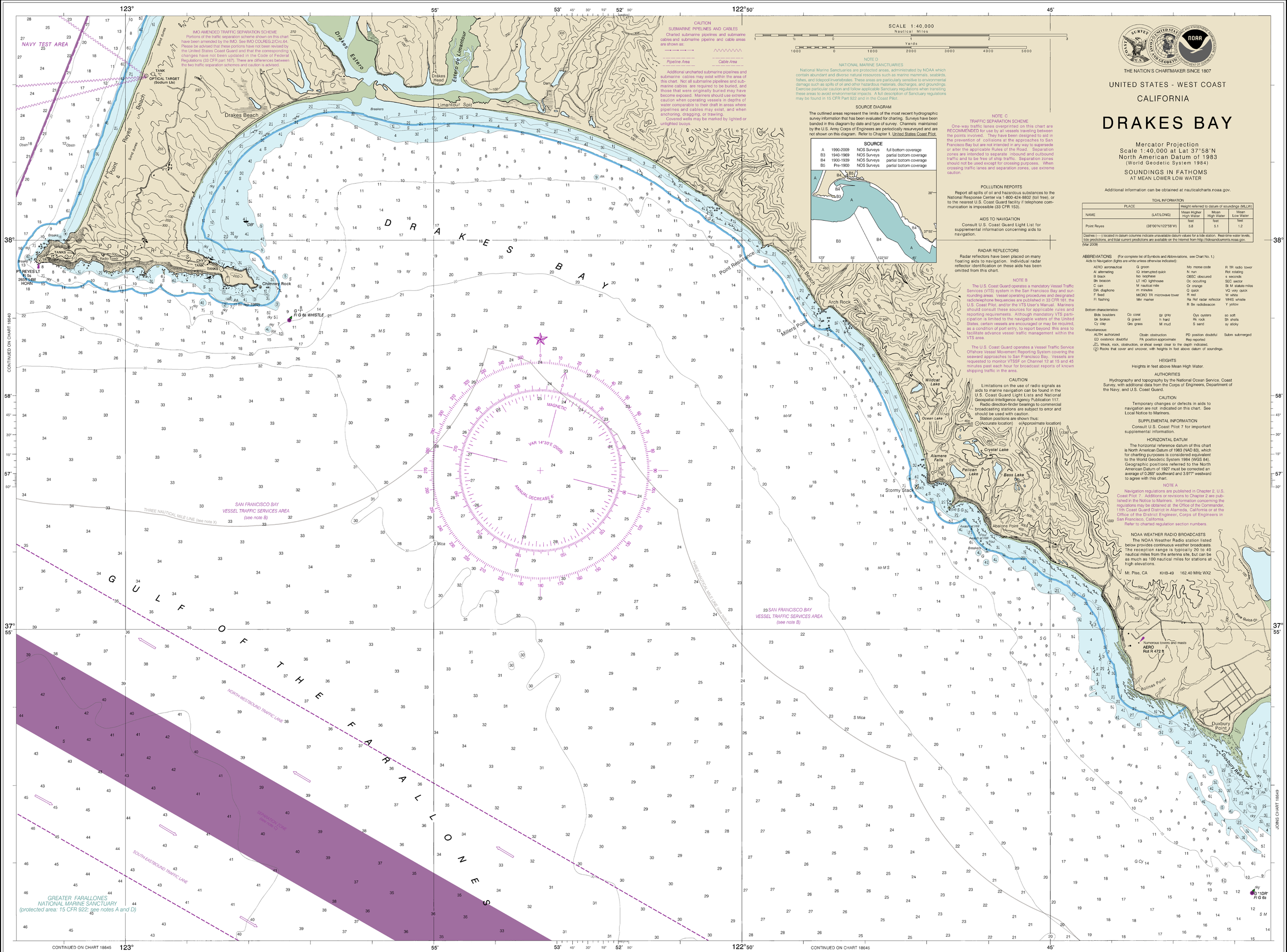
SOUNDINGS IN FATHOMS



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.

SCALE 1:40,000
Nautical Miles
Yards

NOTE D
NATIONAL MARINE SANCTUARIES

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

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	NOS Surveys	full bottom coverage
B3	1940-1969	NOS Surveys	partial bottom coverage
B4	1900-1939	NOS Surveys	partial bottom coverage
B5	Pre-1900	NOS Surveys	partial bottom coverage

NOTE C
TRAFFIC SEPARATION SCHEME

One-way traffic lanes overprinted on this chart are RECOMMENDED for use by all vessels traveling between the points involved. They have been 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. When crossing traffic lanes and separation zones, use extreme caution.

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.

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.

NOTE B

The U.S. Coast Guard operates a mandatory Vessel Traffic Services (VTS) system in the San Francisco Bay and surrounding areas. Vessel operating procedures and designated radiotelephone frequencies are published in 33 CFR 161, the U.S. Coast Pilot, and/or the VTS User's Manual. Mariners should consult these sources for applicable rules and reporting requirements. Although mandatory VTS participation is limited to the navigable waters of the United States, certain vessels are encouraged or may be required, as a condition of port entry, to report beyond this area to facilitate advance vessel traffic management within the VTS area.

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 VTSSF 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)

THE NATION'S CHARTMAKER SINCE 1807

UNITED STATES - WEST COAST

CALIFORNIA

DRAKES BAY

Mercator Projection
Scale 1:40,000 at Lat 37°58'N
North American Datum of 1983
(World Geodetic System 1984)

SOUNDINGS IN FATHOMS
AT MEAN LOWER LOW WATER

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

TIDAL INFORMATION

PLACE		Height referred to datum of soundings (MLLW)		
NAME	(LAT/LONG)	Mean Higher High Water	Mean High Water	Mean Low Water
		feet	feet	feet
Point Reyes	(38°00'N/122°58'W)	5.8	5.1	1.2

Dashes (- - -) located in datum columns indicate unavailable datum values for a tide station. Real-time water levels, tide predictions, and tidal current predictions are available on the Internet from http://tidesandcurrents.noaa.gov. (Mar 2009)

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

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

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

Bottom characteristics:

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

Miscellaneous:

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

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.

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, Department of the Navy, 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.

SUPPLEMENTAL INFORMATION

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

HORIZONTAL DATUM

The horizontal reference datum of this chart is North American Datum of 1983 (NAD 83), which for charting purposes is considered equivalent to the World Geodetic System 1984 (WGS 84). Geographic positions referred to the North American Datum of 1927 must be corrected an average of 0.265" southward and 3.977" westward to agree with this chart.

NOTE A

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

NOAA WEATHER RADIO BROADCASTS

The NOAA Weather Radio station listed below provides continuous weather broadcasts. The reception range is typically 20 to 40 nautical miles from the antenna site, but can be as much as 100 nautical miles for stations at high elevations.

Mt. Pise, CA KHB-49 162.40 MHz WX2

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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.

SOUNDINGS IN FATHOMS

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

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.

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