



SCALE 1:20,000
STATUTE MILES
NAUTICAL MILES

UNITED STATES
CALIFORNIA - WEST COAST
SAN FRANCISCO BAY
ANGEL ISLAND TO POINT SAN PEDRO
Mercator Projection
Scale 1:20,000 at Lat 37° 55'
North American Datum of 1983
SOUNDINGS IN FEET
AT MEAN LOWER LOW WATER

ADDITIONAL INFORMATION AND EXPLANATIONS SHEET, CHANNEL MARKS

SYMBOL	MEANING
(Symbol)	(Meaning)

CAUTION
Improved channels shown by broken lines are subject to shoaling.
Temporary changes or defects in aids to navigation are not indicated on this chart. See Local Notices to Mariners.

PLANE COORDINATE GRID (NAD 1983)
California State Grid Zone 3, is indicated by dashed lines at 5,000 foot intervals.

CAUTION
RICHMOND - SAN RAFAEL BRIDGE
The outlined areas represent the limits of the most recent hydrographic survey information that has been available for charting. Surveys have been conducted in the channels by state and city agencies. Changes maintained by the U.S. Army Corps of Engineers are periodically reviewed and are indicated on this diagram. Refer to Chart 1, Upper San Francisco Bay.

NOA WEATHER RADIO BROADCASTS
The NOAA Weather Radio station listed below provides weather forecasts. The reception range is typically 20 to 40 nautical miles from the antenna site, but can be affected by local topography and atmospheric conditions. For more information, see the NOAA website at www.noaa.gov.

TELE INFORMATION

PLACE	HEIGHT (feet above datum)	COVERAGE (nautical miles)
Alto	110	1.1
Belvedere	110	1.1
Brooklyne	110	1.1
Castro	110	1.1
Golden Gate	110	1.1
Marina	110	1.1
Point San Pedro	110	1.1
San Francisco	110	1.1

HORIZONTAL DATUM
The horizontal reference datum of this chart is Mean Lower Low Water of 1983 (MLLW 83), which for charting purposes is considered equivalent to the World Geodetic System of 1983 (WGS 83). Sounding measurements are taken from the datum of 1929, which is considered an average of 2.009 footward and 3.009 footward to give the chart.

CAUTION
The currents are variable and uncertain. See RPL, swirls, or eddies may occur in the Golden Gate and as far eastward as Redwood Island and Racoon Strait.

ARTICULATED AIDS
An articulated aid consists of a pipe structure that extends around a conventional buoy. The structure is held upright by the buoyancy of an submerged float. The structure is designed primarily to be used in depths of 10 to 20 feet. All articulated aids are marked "A".

ADDITIONAL INFORMATION AND EXPLANATIONS SHEET, CHANNEL MARKS
Channel markings are used to indicate the location and depth of channels. They are used to show the location of channels and to indicate the depth of the channels. Channel markings are used to show the location of channels and to indicate the depth of the channels.