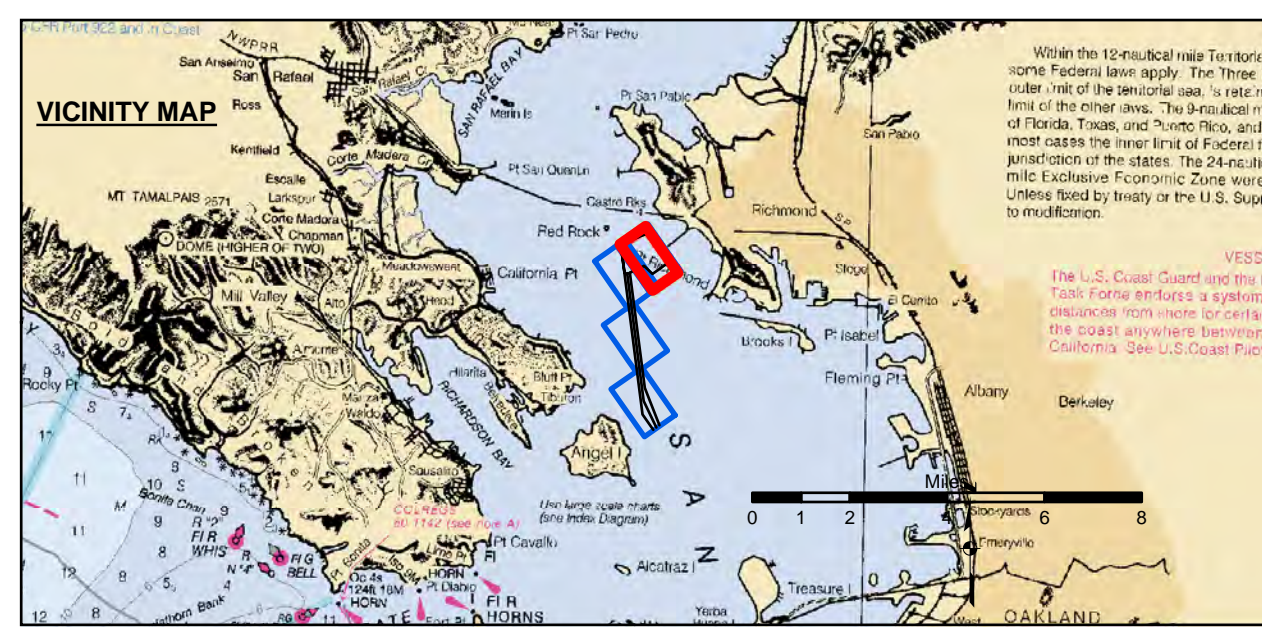


US Army Corps of Engineers
 San Francisco District
 1455 Market Street
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DISCLAIMER
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Prepared Under the Direction of:	Chart Date:
LT COLONEL J. RAYFIELD	Jan 30, 2018
Subplot:	Plotted By:
Hydro Survey Team Leader	PDT
Recommended:	Checked By:
Chief, Hydro Survey Section	PDT
Approved:	Drawn by:
Chief, Construction Branch	PDT



Federal Navigation Channel	Beacon, General	Contours
Shoaling Area	Obstruction Point	-45
Placement Area	Navigation Buoy	-44
Anchorage Area	Navigation Buoy	-43
Wreck Area	Shoalest Sounding*	-42
Submerged Wreck		-41
Angle Point		

NOTES:
 HORIZONTAL COORDINATE SYSTEM:
 NORTH AMERICAN DATUM OF 1983 (NAD83), PROJECTED TO THE STATE PLANE COORDINATE SYSTEM (SPCS), CALIFORNIA ZONE III. DISTANCE UNITS IN U.S. SURVEY FEET.
 VERTICAL DATUM:
 SOUNDINGS ARE SHOWN IN FEET AND INDICATE DEPTHS BELOW MEAN LOWER LOW WATER.
 THE INFORMATION DEPICTED ON THIS MAP REPRESENTS THE RESULTS OF A SURVEY CONDUCTED ON THE DATE INDICATED AND CAN ONLY BE CONSIDERED TO REPRESENT THE GENERAL CONDITION EXISTING AT THAT TIME.
 *SHOALEST SOUNDING PER QUARTER PER REACH DRAWING NOT TO BE USED FOR NAVIGATION.
 ONLY CHANNEL CONDITION AT DATE OF SURVEY.
 THE LOCATION OF ALL NAVIGATION AIDS ARE BASED ON INFORMATION PROVIDED BY THE U.S. COAST GUARD. BUOY LOCATION REPRESENT THE POSITION OF THE SINKER ONLY.
 SURVEYED BY THE CORPS OF ENGINEERS.

SOUNDINGS WERE TAKEN BY FATHOMETER AND ARE SHOWN TO THE NEAREST TENTH OF A FOOT.
 SOUNDINGS ARE BASED ON THE DATUM OF MEAN LOWER LOW WATER AT THE LOCALITY, NAVD 88.
 BASE MAPS ARE USDA NAIP 2010.
 THE PROJECT DEPTHS ARE AS FOLLOWS:
 SOUTHAMPTON SHOALS CHANNEL -45 FEET.
 LONG WHARF MANEUVERING AREA -45 FEET.
 1:00 INDICATED THE NUMBER AND BEGINNING OF A LINE OF SOUNDINGS.
 HORIZONTAL CONTROL:
 HORIZONTAL POSITIONING: COAST GUARD DGPS
 VERTICAL TIDES: INTERPOLATED FROM NOAA ONLINE TIDE STATIONS:
 941 4863 - RICHMOND, CA
 941 4290 - SAN FRANCISCO, CA
 VERTICAL CONTROL:
 (SOUTHAMPTON SHOALS & LONG WHARF MANEUVERING) BENCHMARK *11 1937 ELEV 15.86 FT. MLLW.
 AND BENCHMARK *11 1946 ELEV 15.47 FT. MLLW.
 TIDE GAUGE LOCATED AT TIBURON NET DEPOT.

CALIFORNIA
 ALAMEDA COUNTY
**RICHMOND OUTER HARBOR
 LONG WHARF
 CONDITION SURVEY**
 25 JANUARY 2018

**Sheet
 Reference
 Number**
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