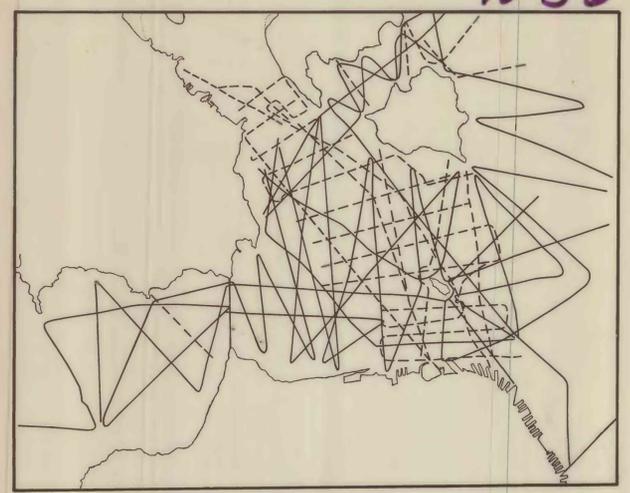
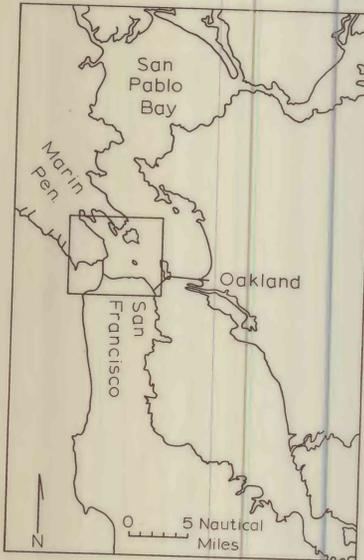


122°30'

122°25'



Track Lines

EXPLANATION

The accompanying map shows the surface of the bedrock beneath the central part of San Francisco Bay. In some places the bedrock crops out on the bay floor, and in others it is covered by as much as 300 feet of unconsolidated sediments. The depth to the bedrock surface was determined by continuous subbottom acoustic profiling. Tracks of these profiles are shown on the inset map. Dashed lines indicate tracks run by the California Division of Bay Toll Crossings, San Francisco. These profiles were made using a "Precision EG&G Boomer" as a sound source. Solid lines indicate tracks run by the U.S. Geological Survey on which a high resolution modified EG&G boomer and a conventional sparker (two 3-electrode EG&G sparker cages) were used simultaneously. Navigation on the dashed tracks was controlled by a visual alidade-godimeter technique, and on the solid tracks by visual and radar fixes.

The depth to bedrock as shown on the map is calculated with the assumption that the velocity of the sound source through the unconsolidated sediment above the bedrock is equal to its velocity through water. This assumption appears to be valid in southern San Francisco Bay where the depths to individual acoustic reflectors within the sediments can be correlated with bore hole data to a depth of 400 feet.

The on-land bedrock surface data used on this map are from U.S. Geological Survey Open File Report (April 17, 1962), entitled "Bedrock-surface map of the San Francisco North Quadrangle, California" by Julius Schlocker.



37°50'

BEDROCK-SURFACE MAP OF CENTRAL
SAN FRANCISCO BAY

BY
Paul R. Carlson and David S. McCulloch
1970

Compiled in 1969

U.S. GEOLOGICAL SURVEY
OPEN FILE MAP

This map is preliminary and has not been reviewed for conformity with U.S. Geological Survey standards and nomenclature.