LONG BEACH

REVISED, EDITED, AND PUBLISHED BY THE U. S. GEOLOGICAL SURVEY AND THE NATIONAL OCEAN SURVEY

Topographic map prepared by the Defense Mapping Agency Topographic Center from 1:24,000 and 1:25,000-scale maps dated 1943-51, and from aerial photographs taken 1952-55. Field checked 1957. Revised by the U. S. Geological Survey from aerial photographs taken 1977 and other source data. Revised information not field checked. Map edited 1978

Bathymetry and shoreline compiled by the National Ocean Survey (NOS). Bathymetry compiled from NOS Hydrographic Surveys (see index) which comply with International Hydrographic Organization (IHO) Special Publication 44 accuracy standards and/or standards used as of the date of the surveys. Shoreline (mean high water line) from NOS nautical charts which are compiled from tide-coordinated aerial photographs. This information is not intended for navigational purposes

Offshore protraction survey data, shown in red, compiled by the Bureau of Land Management. Heavy lines indicate limits of BLM Outer Continental Shelf Official Protraction Diagrams dated August 8, 1966 and July 24, 1967. The protractions on this map are not for Federal leasing purposes; for such purposes, refer to the OCS Official Protraction Diagrams available from the Bureau of Land Management

100,000-foot grid based on California coordinate system, zone 7

Certain land grant names and boundaries are omitted to avoid congestion

Location of geodetic control established by government agencies is shown on corresponding 1:250,000-scale Geodetic Control Diagram

There may be private inholdings within the boundaries of the National or State reservations shown on this map

LEGEND

Figures in red denote approximate distances in miles between stars

POPULATED PLACES
- Over 500,000 — LOS ANGELES
- 100,000 to 500,000 — OMAHA
- 25,000 to 100,000 — GALVESTON
- 5,000 to 25,000 — Durango
- 1,000 to 5,000 — Grand Coulee
- Less than 1,000 — Sun Valley

RAILROADS — Single track, Double or Multiple
- International
- Normal gauge
- Narrow gauge

BOUNDARIES
- State
- County
- Park or reservation

ROADS
- Primary, all-weather, hard surface
- Secondary, all-weather, hard surface
- Light-duty, all-weather, hard or improved surface
- Fair or dry weather, unimproved surface
- Trail
- Interchange
- Route markers: Interstate, U.S., State (15) (25) (66)
- Mine
- Power line
- Landmark: School; Church; Other
- Spot elevation in feet 221
- Marsh or swamp
- Approximate shoreline
- Sounding datum line — uncovers

Landplane airport
Landing area
Seaplane airport
Seaplane anchorage
Woods-brushwood

SECTIONIZED TOWNSHIP

6	5	4	3	2	1
7	8	9	10	11	12
18	17	16	15	14	13
19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36

TOWNSHIP OR RANGE LINE
LAND GRANT BOUNDARY

Scale 1:250,000

5 0 5 10 15 20 Statute Miles
5 0 5 10 15 20 25 30 Kilometers
5 0 5 10 15 Nautical Miles

CONTOUR INTERVAL 200 FEET
WITH SUPPLEMENTARY CONTOURS AT 100 FOOT INTERVALS
NATIONAL GEODETIC VERTICAL DATUM OF 1929
BATHYMETRIC CONTOUR INTERVALS: 10 METERS TO THE 200 METER DEPTH, 50 METERS TO THE MAXIMUM DEPTH
DATUM: MEAN LOWER LOW WATER
THE RELATIONSHIP BETWEEN THE TWO DATUMS IS VARIABLE

TRANSVERSE MERCATOR PROJECTION

BLACK NUMBERED LINES INDICATE THE 10,000 METER UNIVERSAL TRANSVERSE MERCATOR GRID, ZONE 11

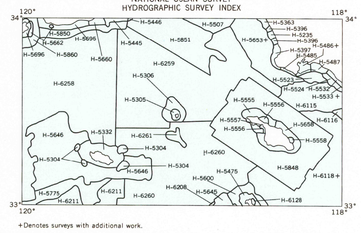
MAGNETIC VARIATION FOR 1978 IS 14½° (260 MILS) EASTERLY OVER THE ENTIRE AREA

FOR SALE BY U.S. GEOLOGICAL SURVEY, DENVER, COLORADO 80225, OR RESTON, VIRGINIA 22092
AND BY NATIONAL OCEAN SURVEY, ROCKVILLE, MARYLAND 20852

NATIONAL OCEAN SURVEY
HYDROGRAPHIC SURVEY INFORMATION

SURVEY NUMBER	SURVEY DATE	SURVEY SCALE	SURVEY LINE SPACING (NAUT MILES)
H-5235	1933	1:10,000	.03-.05
H-5304	1933	1:40,000	.11-.43
H-5305	1932	1:10,000	.05-.21
H-5306	1932	1:40,000	.21-.43
H-5332	1932	1:20,000	.05-.16
H-5363	1933	1:10,000	.03-.11
H-5396	1933	1:10,000	.05-.11
H-5397	1933	1:10,000	.04-.06
H-5444	1934	1:40,000	.11-.43
H-5445	1934	1:40,000	.11-.43
H-5475	1933	1:20,000	.05-.16
H-5485	1933	1:10,000	.05-.11
H-5486 & Add. Wk.	1935	1: 5,000	.04-.06
H-5487	1933-34	1:10,000	.05-.11
H-5507	1934	1:40,000	.16-.43
H-5523	1933-34	1:20,000	.10-.12
H-5524	1934	1:20,000	.10-.12
H-5532	1934	1:10,000	.05-.11
H-5533 & Add. Wk.	1934	1:10,000	.04-.06
H-5555	1935	1:20,000	.04-.06
H-5556	1934	1:10,000	.10-.12
H-5557	1934	1:10,000	.05-.11
H-5558	1934	1: 5,000	.02-.04
H-5600	1934	1:20,000	.03-.05
H-5645	1934	1:40,000	.11-.21
H-5646	1933	1:40,000	.11-.65
H-5653 & Add. Wk.	1933-34	1:40,000	.11-.43
H-5658	1935	1:40,000	.11-.43
H-5660	1934	1:20,000	.05-.11
H-5662	1934-35	1:10,000	.03-.05
H-5695	1934-35	1: 5,000	.03-.16
H-5696	1934-35	1:10,000	.03-.05
H-5775	1933	1:120,000	1.0-4.0
H-5848	1934	1:40,000	.21-.86
H-5850	1934-35	1:40,000	.11-.43
H-5851	1934-35	1:80,000	.50-2.0
H-5860	1935	1:40,000	.11-.43
H-6115	1934-35	1:40,000	.11-.86
H-6116	1935	1:40,000	.11-.43
H-6118 & Add. Wk.	1935	1:80,000	.50-2.0
H-6128	1936	1: 5,000	.01-.03
H-6208	1936	1:80,000	1.0-2.0
H-6211	1936	1:80,000	1.0-2.0
H-6258	1937	1:80,000	0.5-2.0
H-6259	1937	1:80,000	.25-1.0
H-6260	1937	1:80,000	1.0-2.0
H-6261	1937	1:20,000	.11-.21

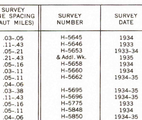
NATIONAL OCEAN SURVEY
HYDROGRAPHIC SURVEY INDEX



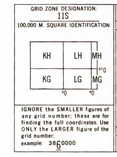
+Denotes surveys with additional work.

Photographic copies of the above and prior surveys may be obtained, at the cost of reproduction by addressing the Director, (C-353) National Ocean Survey, National Oceanic and Atmospheric Administration, Rockville, Maryland 20852.

DEPTH GRADIENTS



GRID ZONE DESIGNATION: 11S
100,000 M. SQUARE IDENTIFICATION



IGNORE the SMALLER figures of any grid number; these are for finding the full coordinates. Use ONLY the LARGER figure of the grid number.
Example: 360000 mE

TO GIVE A STANDARD REFERENCE ON THIS SHEET TO NEAREST 1000 METERS

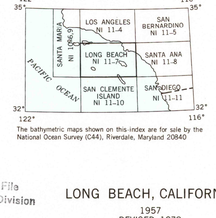
SAMPLE POINT: AVALON

1. Read letters identifying 100,000 meter square in which the point lies: LG
2. Locate first VERTICAL grid line to LEFT of point and read LARGE figure labeling the line either in the top or bottom margin, or on the line itself: 7
   Estimate tenths from grid line to point: 7
3. Locate first HORIZONTAL grid line BELOW point and read LARGE figure labeling the line either in the left or right margin, or on the line itself: 9
   Estimate tenths from grid line to point: 0

SAMPLE REFERENCE: LG7790

If reporting beyond 10° in any direction, prefix Grid Zone Designation, ex: 11SLG7790

INDEX TO ADJOINING SHEETS



The bathymetric maps shown on this index are for sale by the National Ocean Survey (C44), Riverdale, Maryland 20840

INTERIOR—GEOLOGICAL SURVEY, RESTON, VIRGINIA—1979

USGS
Historical File
Topographic Division

OCT 22 1980

LONG BEACH, CALIFORNIA
1957
REVISED 1978
TOPOGRAPHIC-BATHYMETRIC

14775