



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-scale maps dated 1943, and from aerial photographs taken 1955. Field checked 1957. Planimetry revised by the U. S. Geological Survey from aerial photographs taken 1971 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 Survey supplemented by other hydrographic sources (see index) which comply with International Hydrographic Organization (IHO) Special Publication 44 accuracy standards and/or standards used as of the date of the survey. 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 protection survey data, shown in red, compiled by the Bureau of Land Management. Heavy lines indicate limits of BLM Outer Continental Shelf Official Protection Diagrams, dated August 8, 1966, April 25, 1977, and September 27, 1977. The protections on this map are not for Federal leasing purposes; for such purposes, refer to the OCS Official Protection Diagrams available from the Bureau of Land Management.
 100,000-foot grid based on California coordinate system, zone 7. 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, GALVESTON, Durango
 25,000 to 100,000: Grand Coulee
 5,000 to 25,000:
 1,000 to 5,000:
 Less than 1,000:
 RAILROADS: Normal gauge, Sun Valley Route markers: Interstate, U.S., State,
 Narrow gauge:
 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; Grand Coulee Interchange

BOUNDARIES: International, State, County, Park or reservation

LANDMARKS: Landplane airport, Landing area, Seaplane airport, Seaplane anchorage, Power line, Landmark: School, Church, Other, Spot elevation in feet, Marsh or swamp, Approximate shoreline, Sounding datum line, Woods/brushwood

Scale 1:250,000
 0 5 10 15 20 25 30 Statute Miles
 0 5 10 15 20 25 30 Kilometers
 0 5 10 15 20 Nautical Miles

CONTOUR INTERVAL 200 FEET
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

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

1978 MAGNETIC DECLINATION FROM TRUE NORTH VARIES FROM 14° 14' (250 MILES) EASTERLY FOR THE CENTER OF THE WEST EDGE TO 14° 25' (250 MILES) EASTERLY FOR THE CENTER OF THE EAST EDGE

FOR SALE BY THE 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-5499	1933	1:100,000	09-05
H-5474	1933	1:200,000	09-14
H-5600	1934	1:200,000	11-21
H-5601	1934	1:200,000	11-21
H-5645	1934	1:400,000	11-21
H-5646	1934	1:400,000	11-21
H-5758	1933-34	1:200,000	11-75
H-5759	1933	1:100,000	11-45
H-5776	1933	1:200,000	11-45
H-5818	1933	1:800,000	11-25
H-5819	1935	1:800,000	11-25
H-5845	1934	1:400,000	11-21
H-6120	1935	1:800,000	10-20
H-6121	1935	1:100,000	11-24
H-6122	1935	1:800,000	11-24
H-6123	1935	1:800,000	11-24
H-6124	1935	1:800,000	11-24
H-6125	1935	1:800,000	11-24
H-6126	1935	1:800,000	11-24
H-6127	1935	1:800,000	11-24
H-6128	1935	1:800,000	11-24
H-6129	1935	1:800,000	11-24
H-6130	1935	1:800,000	11-24
H-6131	1935	1:800,000	11-24
H-6132	1935	1:800,000	11-24
H-6133	1935	1:800,000	11-24
H-6134	1935	1:800,000	11-24
H-6135	1935	1:800,000	11-24
H-6136	1935	1:800,000	11-24
H-6137	1935	1:800,000	11-24
H-6138	1935	1:800,000	11-24
H-6139	1935	1:800,000	11-24
H-6140	1935	1:800,000	11-24
H-6141	1935	1:800,000	11-24
H-6142	1935	1:800,000	11-24
H-6143	1935	1:800,000	11-24
H-6144	1935	1:800,000	11-24
H-6145	1935	1:800,000	11-24
H-6146	1935	1:800,000	11-24
H-6147	1935	1:800,000	11-24
H-6148	1935	1:800,000	11-24
H-6149	1935	1:800,000	11-24
H-6150	1935	1:800,000	11-24
H-6151	1935	1:800,000	11-24
H-6152	1935	1:800,000	11-24
H-6153	1935	1:800,000	11-24
H-6154	1935	1:800,000	11-24
H-6155	1935	1:800,000	11-24
H-6156	1935	1:800,000	11-24
H-6157	1935	1:800,000	11-24
H-6158	1935	1:800,000	11-24
H-6159	1935	1:800,000	11-24
H-6160	1935	1:800,000	11-24
H-6161	1935	1:800,000	11-24
H-6162	1935	1:800,000	11-24
H-6163	1935	1:800,000	11-24
H-6164	1935	1:800,000	11-24
H-6165	1935	1:800,000	11-24
H-6166	1935	1:800,000	11-24
H-6167	1935	1:800,000	11-24
H-6168	1935	1:800,000	11-24
H-6169	1935	1:800,000	11-24
H-6170	1935	1:800,000	11-24
H-6171	1935	1:800,000	11-24
H-6172	1935	1:800,000	11-24
H-6173	1935	1:800,000	11-24
H-6174	1935	1:800,000	11-24
H-6175	1935	1:800,000	11-24
H-6176	1935	1:800,000	11-24
H-6177	1935	1:800,000	11-24
H-6178	1935	1:800,000	11-24
H-6179	1935	1:800,000	11-24
H-6180	1935	1:800,000	11-24
H-6181	1935	1:800,000	11-24
H-6182	1935	1:800,000	11-24
H-6183	1935	1:800,000	11-24
H-6184	1935	1:800,000	11-24
H-6185	1935	1:800,000	11-24
H-6186	1935	1:800,000	11-24
H-6187	1935	1:800,000	11-24
H-6188	1935	1:800,000	11-24
H-6189	1935	1:800,000	11-24
H-6190	1935	1:800,000	11-24
H-6191	1935	1:800,000	11-24
H-6192	1935	1:800,000	11-24
H-6193	1935	1:800,000	11-24
H-6194	1935	1:800,000	11-24
H-6195	1935	1:800,000	11-24
H-6196	1935	1:800,000	11-24
H-6197	1935	1:800,000	11-24
H-6198	1935	1:800,000	11-24
H-6199	1935	1:800,000	11-24
H-6200	1935	1:800,000	11-24

DEPTH GRADIENTS
 Feet
 0
 200
 1000
 2000
 3000
 max depth

TO OBTAIN A STANDARD REFERENCE ON THIS SHEET TO NEAREST 100 METERS
 SAMPLE POINT: FEET FURTHER
 1. Read letters identifying 100,000 meter squares in which the grid line
 2. Locate first VERTICAL grid line to LEFT of center and read letter designating square, or on the line itself
 3. Locate first HORIZONTAL grid line BELOW center and read letter designating square, or on the line itself
 4. Identify the line within the left or right margin, or on the line itself
 5. Estimate tenths from grid line point

INDEX TO ADJOINING SHEETS
 122° 31' 122° 32' 122° 33' 122° 34'
 31° 32° 33° 34°
 PACIFIC OCEAN

14775