



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 maps dated 1942-54, and from aerial photographs taken 1953-56. Field checked 1956. Primarily revised by the U.S. Geological Survey from aerial photographs taken 1972 and other source data. Map edited 1973.
 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 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. 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 Louisiana coordinate system, south zone and Texas coordinate system, south central zone.
 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
 100,000 to 500,000
 25,000 to 100,000
 5,000 to 25,000
 1,000 to 5,000
 Less than 1,000

RAILROADS
 Normal gauge
 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
 Fair
 Interchange

BOUNDARIES
 International
 State
 County
 Park or reservation

Other symbols:
 Landline airport
 Landing area
 Spot elevation in feet
 Marsh or swamp
 Seaplane anchorage
 Sounding datum line

SECTIONIZED TOWNSHIP

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

TOWNSHIP OR RANGE LINE
 LAND GRANT BOUNDARY

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 25 30 Nautical Miles

NATIONAL OCEAN SURVEY HYDROGRAPHIC SURVEY INFORMATION

| SURVEY NUMBER | SURVEY DATE | SURVEY SCALE | SURVEY LINE SPACING (NAUTICAL MILES) |
|---------------|-------------|--------------|--------------------------------------|
| H-1666a | 1985 | 1:20,000 | 0.3-6.0 |
| H-1666b | 1986 | 1:20,000 | 0.3-6.0 |
| H-1777 | 1986 | 1:20,000 | 0.3-6.0 |
| H-1821 | 1986 | 1:20,000 | 0.3-6.0 |
| H-1822 | 1986 | 1:20,000 | 0.3-6.0 |
| H-5115 | 1952 | 1:20,000 | 20-70 |
| H-5334 | 1953 | 1:20,000 | 0.3-6.0 |
| H-5415 | 1953-54 | 1:40,000 | 10-40 |
| H-5416 | 1954 | 1:40,000 | 20-12 |
| H-5417 | 1954 | 1:40,000 | 10-40 |
| H-5418 | 1954-55 | 1:40,000 | 20-12 |
| H-5419 | 1954-55 | 1:40,000 | 10-40 |
| H-5420 | 1954-55 | 1:40,000 | 20-12 |
| H-5421 | 1954-55 | 1:40,000 | 10-40 |
| H-5422 | 1954-55 | 1:40,000 | 20-12 |
| H-5423 | 1954-55 | 1:40,000 | 10-40 |
| H-5424 | 1954-55 | 1:40,000 | 20-12 |
| H-5425 | 1954-55 | 1:40,000 | 10-40 |
| H-5426 | 1954-55 | 1:40,000 | 20-12 |
| H-5427 | 1954-55 | 1:40,000 | 10-40 |
| H-5428 | 1954-55 | 1:40,000 | 20-12 |
| H-5429 | 1954-55 | 1:40,000 | 10-40 |
| H-5430 | 1954-55 | 1:40,000 | 20-12 |
| H-5431 | 1954-55 | 1:40,000 | 10-40 |
| H-5432 | 1954-55 | 1:40,000 | 20-12 |
| H-5433 | 1954-55 | 1:40,000 | 10-40 |
| H-5434 | 1954-55 | 1:40,000 | 20-12 |
| H-5435 | 1954-55 | 1:40,000 | 10-40 |
| H-5436 | 1954-55 | 1:40,000 | 20-12 |
| H-5437 | 1954-55 | 1:40,000 | 10-40 |
| H-5438 | 1954-55 | 1:40,000 | 20-12 |
| H-5439 | 1954-55 | 1:40,000 | 10-40 |
| H-5440 | 1954-55 | 1:40,000 | 20-12 |
| H-5441 | 1954-55 | 1:40,000 | 10-40 |
| H-5442 | 1954-55 | 1:40,000 | 20-12 |
| H-5443 | 1954-55 | 1:40,000 | 10-40 |
| H-5444 | 1954-55 | 1:40,000 | 20-12 |
| H-5445 | 1954-55 | 1:40,000 | 10-40 |
| H-5446 | 1954-55 | 1:40,000 | 20-12 |
| H-5447 | 1954-55 | 1:40,000 | 10-40 |
| H-5448 | 1954-55 | 1:40,000 | 20-12 |
| H-5449 | 1954-55 | 1:40,000 | 10-40 |
| H-5450 | 1954-55 | 1:40,000 | 20-12 |
| H-5451 | 1954-55 | 1:40,000 | 10-40 |
| H-5452 | 1954-55 | 1:40,000 | 20-12 |
| H-5453 | 1954-55 | 1:40,000 | 10-40 |
| H-5454 | 1954-55 | 1:40,000 | 20-12 |
| H-5455 | 1954-55 | 1:40,000 | 10-40 |
| H-5456 | 1954-55 | 1:40,000 | 20-12 |
| H-5457 | 1954-55 | 1:40,000 | 10-40 |
| H-5458 | 1954-55 | 1:40,000 | 20-12 |
| H-5459 | 1954-55 | 1:40,000 | 10-40 |
| H-5460 | 1954-55 | 1:40,000 | 20-12 |

NOS CHART 11342 AUGUST 1975 1:40,000
 NOS CHART 11347 JULY 1975 1:50,000

MAXIMUM ELEVATION LESS THAN 50 FEET
 NATIONAL GEODETIC VERTICAL DATUM OF 1929
 BATHYMETRIC CONTOUR INTERVAL 10 METERS
 SUPPLEMENTED BY 2 METER CONTOUR INTERVALS TO MAXIMUM DEPTH
 GULF COAST LOW WATER DATUM
 THE RELATIONSHIP BETWEEN THE TWO DATUMS IS VARIABLE

TRANSVERSE MERCATOR PROJECTION

BLACK NUMBERED LINES INDICATE THE 10,000 METER UNIVERSAL TRANSVERSE MERCATOR GRID, ZONE 15

1978 MAGNETIC DECLINATION FROM TRUE NORTH VARIES FROM 6° (110 MILES) EASTERLY FOR THE CENTER OF THE WEST EDGE TO 9° (190 MILES) EASTERLY FOR THE CENTER OF THE EAST EDGE

FOR SALE BY U.S. GEOLOGICAL SURVEY, DENVER, COLORADO 80225, OR RESTON, VIRGINIA 22082
 OR NATIONAL OCEAN SURVEY, ROCKVILLE, MARYLAND 20852

INDEX OF ADJOINING SHEETS

| | | | | | |
|-------------------|----------------------|---------------------|---------------------|---------------------|-----------------|
| 36° | 35° | 34° | 33° | 32° | 31° |
| BEAUMONT NH 15-4 | LAKE CHARLES NH 15-5 | BAYOU ROUGE NH 15-6 | NEW ORLEANS NH 15-7 | PORT ARTHUR NH 15-8 | HOUSTON NH 15-9 |
| BAY CITY NH 15-10 | BOUMA BANK NH 15-11 | EWING BANK NH 15-12 | | | |
| 28° | 29° | 30° | 31° | 32° | 33° |

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USGS Historical File Topographic Division

NATIONAL OCEAN SURVEY HYDROGRAPHIC SURVEY INDEX

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1956
 REVISED 1973
 SHORELINE REVISED AND BATHYMETRY ADDED 1978
 TOPOGRAPHIC-BATHYMETRIC

12,400