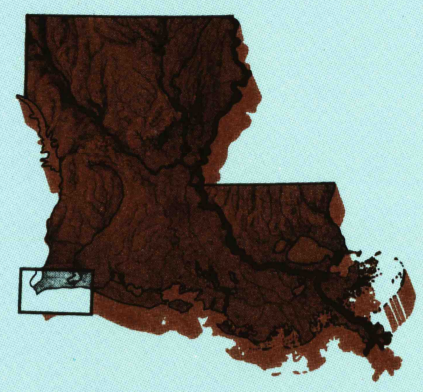


Port Arthur

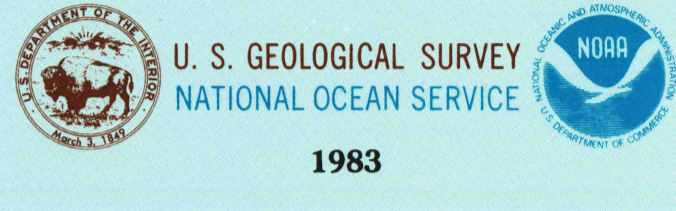
TEXAS-LOUISIANA

1:100 000-scale metric
topographic-bathymetric map



30 X 60 MINUTE QUADRANGLE
SHOWING

- Contours and elevations in meters
- Highways, roads and other manmade structures
- Water features
- Woodland areas
- Geographic names
- Bathymetric contours in meters



Produced by the United States Geological Survey and the National Ocean Service
 Completed from USGS 1:24 000 and 1:62 500-scale topographic maps dated 1958-1962. Bathymetry derived from aerial photographs taken 1978 and other source data. Revised information not field checked. Map dated 1983.
 Bathymetry compiled by the National Ocean Service from tide-coordinated hydrographic surveys. This information is not intended for navigational purposes. Mean low water (dashed line) and mean high water (heavy solid line) compiled by NOS from tide-coordinated aerial photographs. Apparent shoreline (outer edge of vegetation) shown by light solid line.
 To place on the projected North American Datum 1983, use the projection line 20 meters south and 17 meters east.
 Oblique projection survey data shown in red, compiled by the Bureau of Land Management. The projections on this map are not for Federal leasing purposes. For lease purposes, refer to the 1:500 000-scale OCS Official Protection Diagrams available from the Bureau of Land Management. There may be private landholdings within the boundaries of the National or State reservations shown on this map. All or part of this quadrangle lies within a subsidence area.

CONTOUR INTERVAL 2 METERS
 NATIONAL GEODETIC VERTICAL DATUM OF 1929
 ELEVATIONS SHOWN TO THE NEAREST 0.5 METERS
 BATHYMETRIC CONTOUR INTERVAL 2 METERS WITH SUPPLEMENTARY 1 METER CONTOURS IN LOWER LOW WATER DATUM
 THE RELATIONSHIP BETWEEN THE TWO DATUMS IS VARIABLE
 BASE MAP COMPLES WITH NATIONAL MAP ACCURACY STANDARDS. BATHYMETRIC SURVEY DATA COMPLES WITH INTERNATIONAL HYDROGRAPHIC ORGANIZATION (IHO) SPECIAL PUBLICATION 44 ACCURACY STANDARDS AND IHO STANDARDS USED AS OF THE DATE OF THE SURVEYS

CONVERSION TABLE		DECLINATION DIAGRAM		ADJOINING MAPS	
Meters	Feet	M	S	1	2
1	3.2808	1	1	4	5
2	6.5616	2	2	6	7
3	9.8424	3	3	7	8
4	13.1232	4	4		
5	16.4040	5	5		
6	19.6848	6	6		
7	22.9656	7	7		
8	26.2464	8	8		
9	29.5272	9	9		
10	32.8080	10	10		

To convert meters to feet multiply by 3.2808
 To convert feet to meters divide by 3.2808

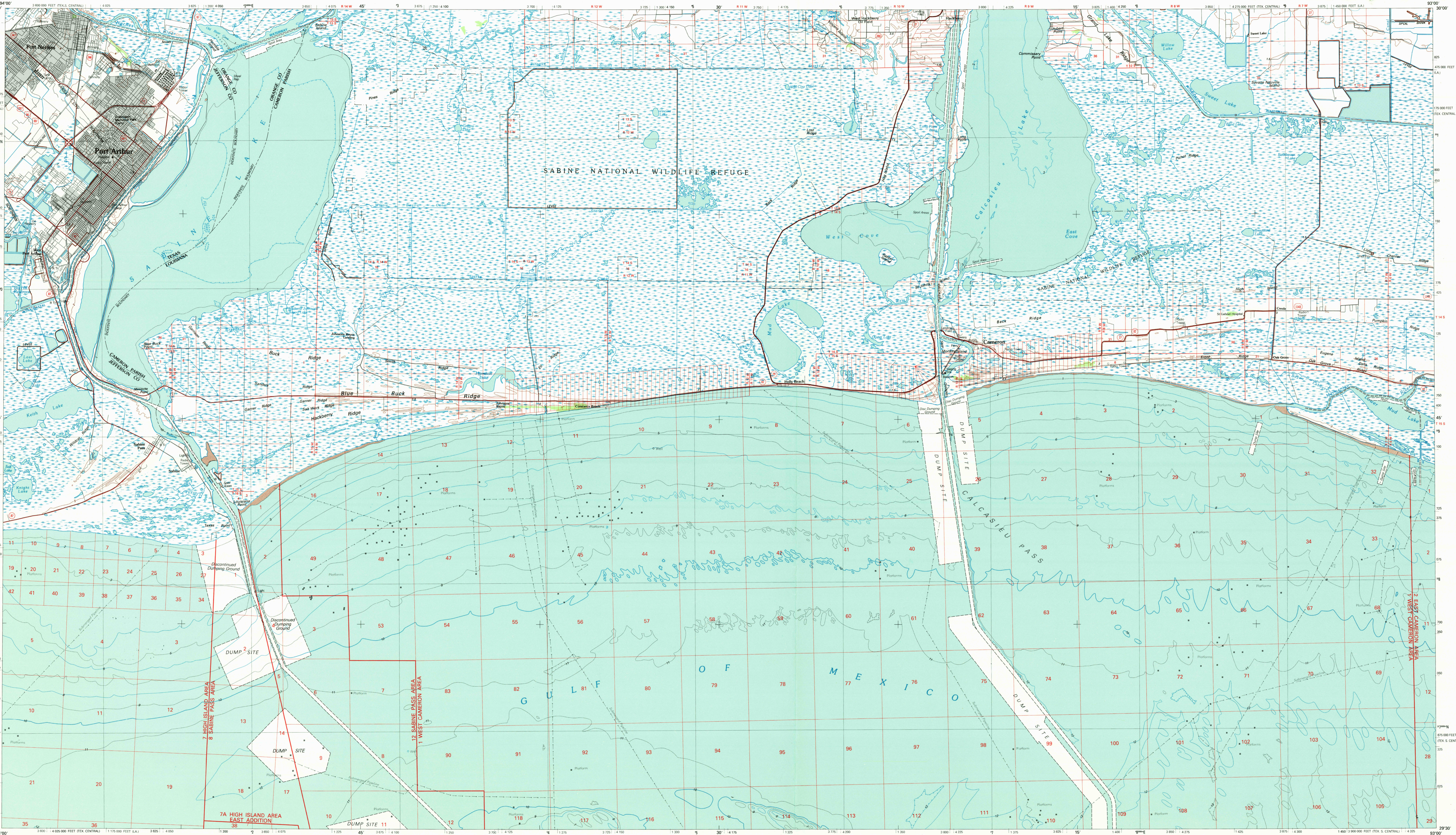
UTM grid convergency (GNI and 1983 magnetic declination) shown at center of map
 Dip angle is approximate



Topographic Map Symbols

- Primary highway, hard surface
- Secondary highway, hard surface
- Light duty road, principal street, hard or improved surface
- Other road or street, trail
- Road marker: Interstate, U. S. State
- Railroad: standard gage, narrow gage
- Bridge: overpass, underpass
- Tunnel: road, railroad
- Bulk up area, locality, elevation
- Alps: landing field, landing strip
- National boundary
- State boundary
- County boundary
- National or State reservation boundary
- Land grant boundary
- U. S. public lands survey: range, township, section
- Range, township, section line: protected
- Power transmission line, pipeline
- Dam; dam with lock
- Cemetery: building
- Wharf; water well; spring
- Mine shaft; ash or ore; quarry; gravel pit
- Campground; picnic area; U. S. location monument
- Ruin; cliff dwelling
- Disturbed surface: strip mine, lava, sand
- Contour: index, intermediate, supplementary
- Bathymetric contours: index, intermediate
- Stream, lake: perennial, intermittent
- Riprap, large and small; boulder, large and small
- Area to be submerged, marsh, swamp
- Land subject to controlled inundation, woodland
- Scrub; mangrove
- Orchard; vineyard

A pamphlet describing topographic maps is available on request

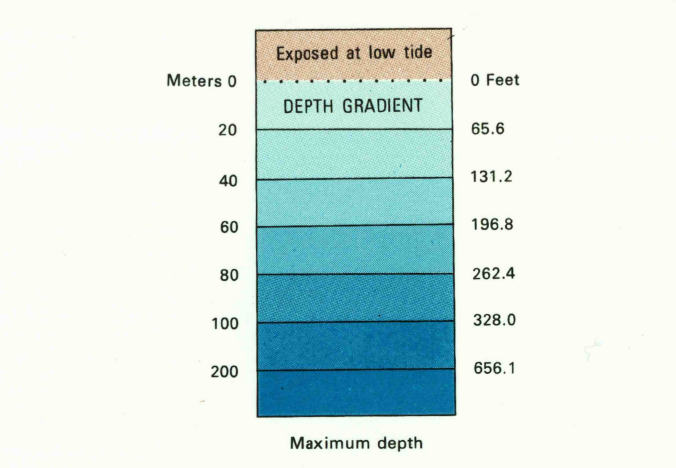
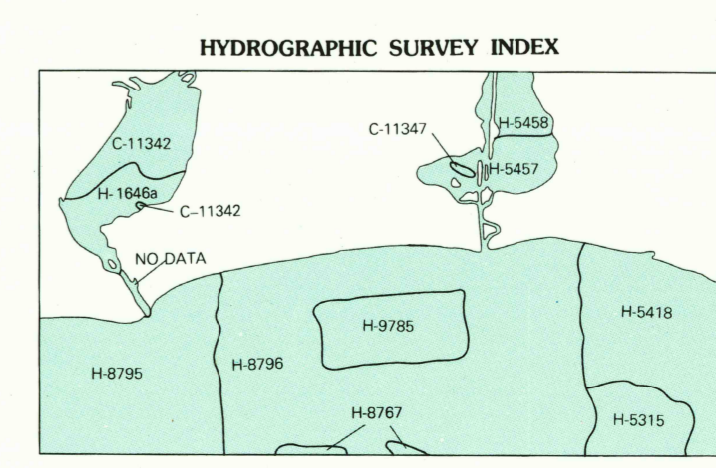
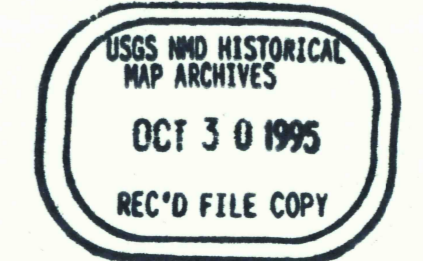


PORT ARTHUR, TEXAS-LOUISIANA
29093-E1-TB-10
1983

HYDROGRAPHIC SURVEY INFORMATION

Survey Number	Survey Date	Survey Scale	Line Spacing (Meters)
H-1646	1885	1:20,000	03.60
H-1671	1893	1:40,000	07.20
H-1678	1903	1:40,000	07.20
H-1679	1903	1:20,000	03.60
H-1680	1903	1:20,000	03.60
H-1681	1903	1:20,000	03.60
H-1682	1903	1:20,000	03.60
H-1683	1903	1:20,000	03.60
H-1684	1904	1:40,000	07.20
H-1685	1904	1:40,000	07.20
H-1686	1905	1:20,000	03.60

NOS CHART 11287 (1979)
 NOS CHART 11287 (1979) 1:50,000



FOR SALE BY U.S. GEOLOGICAL SURVEY, DENVER, COLORADO 80225; OR RESTON, VIRGINIA 20192; AND NATIONAL OCEAN SERVICE, ROCKVILLE, MARYLAND 20855