
Form 504

U. S. COAST AND GEODETIC SURVEY
DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

<table>
<thead>
<tr>
<th>Type of Survey</th>
<th>Shoreline</th>
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<tbody>
<tr>
<td>Field No.</td>
<td>Ph-76(51)</td>
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<table>
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<th>LOCALITY</th>
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<td>State</td>
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<tr>
<td>General locality</td>
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<tr>
<td>Locality</td>
</tr>
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</table>

<table>
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<th>194/51-52</th>
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</table>

CHIEF OF PARTY
P.L. Bernstein, Chief of Party (Field)
J.E. Waugh, Tampa Photo. Office, Fla.

LIBRARY & ARCHIVES

DATE March 31, 1953
DATA RECORD

T-9919

Project No. (II): Ph-76 (51)  Quadrangle Name (IV):

Field Office (II): Houston, Texas  Chief of Party: P. L. Bernstein
Photogrammetric Office (III): Tampa, Florida  Officer-in-Charge: J. E. Waugh

Instructions dated (II) (III): 21 November 1951  Copy filed in Division of

Method of Compilation (III): Graphic

Manuscript Scale (III): 1:10,000  Stereoscopic Plotting Instrument Scale (III): Inapplicable

Scale Factor (III): None

Date received in Washington Office (IV): JAN 5 1954

Applied to Chart No.  Date:

Publication Scale (IV):

Geographic Datum (III): N. A. 1927  Vertical Datum (III): M. H. W.

Reference Station (III): PELLY MUNICIPAL TANK, 1931

Lat.: 29°43'21.302 (655.9 m.) Long.: 94°58'32.377 (870.2 m.)

Plane Coordinates (IV):

Y=  X=  Adjusted

Roman numerals indicate whether the item is to be entered by (II) Field Party, (III) Photogrammetric Office,
or (IV) Washington Office.

When entering names of personnel on this record give the surname and initials, not initials only.
Areas contoured by various personnel
(Show name within area)
(II) (III)
DATA RECORD

Field Inspection by (II): J. A. Clear, Jr.  
W. H. Shearouse  
W. M. Reynolds

Date: June 1952

Planetary contouring by (II): Not applicable.

Completion Surveys by (II): L. F. Woodcock  
Inapplicable

Date:

Mean High Water Location (III) (State date and method of location): Air Photo Compilation  
June 1952

Projection and Grids ruled by (IV): Jack Allen (W.O.)

Date: 30 Oct. 1952

Projection and Grids checked by (IV): H. D. Wolfe (W.O.)

Date: 30 Oct. 1952

Control plotted by (III): I. I. Saperstein

Date: 28 Jan. 1953

Control checked by (III): R. J. Pate

Date: 28 Jan. 1953

Radial Plot or Stereoscopic Control extension by (III): M. M. Slavney

Date: 18 Sept. 1953

Stereoscopic Instrument compilation (III): Planimetry  
Inapplicable  
Contours

Manuscript delineated by (III): R. A. Reece

Date: 20 Nov. 1953

Photogrammetric Office Review by (III): J. A. Giles

Date: 12 Dec. 1953

Elevations on Manuscript checked by (IV) (III): Inapplicable

Date:
Camera (kind or source) (III): Fairchild Cartographic Camera "O" 6" focal length

<table>
<thead>
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<th>Number</th>
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Camera "W"
54°46' - 54°49' A, B, C
54°46' - 54°52'9 to 54°52'12

Tide (III)

Reference Item 7

Reference Station:
Subordinate Station:
Subordinate Station:

Washington Office Review by (IV): 

Final Drafting by (IV):
Drafting verified for reproduction by (IV):

Proof Edit by (IV):

Date: 10 March, 1954
10 April, 1957

Land Area (Sq. Statute Miles) (III): 5
Shoreline (More than 200 meters to opposite shore) (III): 10 Statute Linear Miles
Shoreline (Less than 200 meters to opposite shore) (III):
Control Leveling - Miles (II): None
Number of Triangulation Stations searched for (II): 27
Number of BMs searched for (II): None
Number of Recoverable Photo Stations established (III): None
Number of Temporary Photo Hydro Stations established (III): None

Remarks:
SHORELINE MAPPING PROJECT PH-76
TEXAS, Houston to Galveston Bay (Buffalo Bayou)

OFFICIAL MILEAGE FOR COST ACCOUNTS

<table>
<thead>
<tr>
<th>Sheet No.</th>
<th>Lin. Miles Shoreline</th>
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<tr>
<td>T-9914</td>
<td>3</td>
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<td>T-9915</td>
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<td>T-9916</td>
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<td>T-9919</td>
<td>10</td>
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<tr>
<td>T-9920</td>
<td>10</td>
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</table>

TOTAL 106

Compiled at scale 1:10,000 from 1:24,000 scale single-lens photographs taken May 1951
(Refer to Air-Photo Indexes 99-E and 99-F)
SUMMARY TO ACCOMPANY T-9920
HOUSTON SHIP CHANNEL, TEXAS

Project PH-76 (51) consists of seven map manuscripts, 1:10,000 scale, which delineate the shoreline and the inland area for one-half mile each side of the Houston Ship Channel from Galveston Bay to the city of Houston.

T-9920 covers the Houston Ship Channel where it enters Galveston Bay at Morgan Point and Atkinson Island.

After smooth drafting and printing a cronar film positive of the map and the Descriptive report will be registered and filed in the Bureau Archives.

This project was initiated in late 1951 and photographs taken in May 1952. The field inspection was completed in June 1952 and the maps compiled at the Tampa Office in November 1953.

When the maps were applied to the charts in March 1954 it was felt that the photogrammetric location of range lights was not as accurate as desired due to lack of control, consequently additional field work was done and the maps revised as follows:

New photography was taken in October 1954. LT Lorin F. Woodcock as Chief of Party between December 1954 and the early part of 1955 located most of the aids to navigation and field edited the project making notes on the new 1954 photographs.

The maps were then revised at the Tampa Office. All the additional triangulation was plotted and map details corrected from the 1954 photographs and field edit notes made thereon.

When all the maps of the project have been thus registered, and filed in the library, a Completion Report for the project will be written. It will describe the project as to purpose, reports, and records turned in and filed.
FIELD INSPECTION REPORT WAS SUBMITTED

WITH T-9915
Field Ed. Report (with Completion Report)
COMPILATION REPORT T-9919

PHOTOGRAHMETRIC PLOT REPORT.

This report submitted with T-9915.

31. DELINEATION.

The graphic method of compilation was used.

There are many new subdivisions. All that could be shown, using the photographs available, were delineated.

In some areas, photographic coverage permitted only two cuts on detail points. These have been shown with a green circle.

Photographs were clear and of fairly good scale.

Field inspection was adequate.

32. CONTROL.

An adequate number of well placed pass points were established for the cutting in of detail points.

33. SUPPLEMENTAL DATA.

None.

34. CONTOURS AND DRAINAGE.

Contours are inapplicable.

Drainage was delineated without any difficulty.

35. SHORELINE AND ALONGSHORE DETAILS.

The shoreline inspection was adequate. No difficulty was encountered during the delineation of the shoreline or adjacent areas. The shoreline of SAN JACINTO BAY was not field inspected and is shown according to office photo interpretation.
The low-water line is based on data furnished by the field party. Reference Item 7.

36. **OFFSHORE DETAILS.**

No unusual problems were encountered during compilation of details offshore from the high-water line.

37. **LANDMARKS AND AIDS.**

There are no landmarks.

Four (4) nonfloating aids have been listed on Forms 567 and 524. They are also listed under Item 49.

Aids to navigation were identified on the 1934 photography or located by field methods.

See also Special Report "Landmarks for Charts — bound with Completion Report."

38. **CONTROL FOR FUTURE SURVEYS.**

None.

39. **JUNCTIONS.**

A satisfactory junction has been made with T-9918 on the west and T-9920 on the south.

Project limits are to the north and east.

40. **HORIZONTAL AND VERTICAL ACCURACY.**

Reference Item 31 relative to green circled detail points. Vertical accuracy is inapplicable.

41. **BRIDGES.**

Five (5) bridges have been shown. Three (3) were inspected in the field and clearances given. These bridges are over water navigable by small craft only.

See Item 14, page 11a. (T-9915)
46. **COMPARISON WITH EXISTING MAPS.**

Comparison was made with Army Map Service Quadrangle, MORGAN POINT (Sheet 7043 III N.W., Series V882), scale 1:25,000; copied in 1947 from the 1943 edition.

SAN JACINTO BAY has been separated from the HOUSTON SHIP CHANNEL and HOG ISLAND has been enlarged - both by spoil that has been deposited from dredging operations.

Another bridge and road are under construction near the mouth of GOOSE CREEK. No other major changes have taken place.

47. **COMPARISON WITH NAUTICAL CHARTS.**

Comparison was made with USC&GS Nautical Chart No. 588, published January 1937 and corrected 16 November 1951.

After comparing the maps listed under Item 46, it is believed that much of the planimetry of the nautical chart was taken from it and the same differences appear.

**ITEMS TO BE APPLIED TO NAUTICAL CHARTS IMMEDIATELY.**

None.

**ITEMS TO BE CARRIED FORWARD.**

None.

Approved and forwarded

Richard A. Reece
Carto. Photo Aid

J. E. Waugh, Chief of Party
DEPARTMENT OF COMMERCE  
U.S. COAST AND GEODETIC SURVEY  
Arabi, Louisiana

To: District Engineer  
Galveston District  
Corps of Engineers, U.S. Army  
606 Santa Fe Building  
Galveston, Texas

Subject: Bridge Data

There is enclosed a list of the bridge clearance data determined by this party.

Percy L. Bernstein  
Commander, U.S.C.& G.S.  
Chief of Party

Encl.
cc: The Director
<table>
<thead>
<tr>
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<th></th>
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<tbody>
<tr>
<td>Goose Creek, Texas</td>
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<td>56.0</td>
<td>56.0</td>
<td>12.8</td>
<td>8.0</td>
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<tr>
<td>Highway</td>
<td>F</td>
<td>56.0</td>
<td>56.0</td>
<td>12.8</td>
<td>8.0</td>
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<td>Railroad</td>
<td>F</td>
<td>45.5</td>
<td>45.0</td>
<td>11.0</td>
<td>4.0</td>
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</table>

Measurements were made at 1000 and 1015 respectively 3 July 1952.
Winds and rain water strongly influence vertical clearance and accurate comparison cannot be made.

*List of Bridges Over The Navigable Waters of the United States revised to July 1, 1941 and Supplement thereto.
48. GEOGRAPHIC NAME LIST.

BAYTOWN

CALVERT CHURCH
CEDAR BAYOU CHANNEL
DECKER DRIVE
EVERGREEN - PELLY ROAD
EVERGREEN POINT

GALVESTON BAY
G. W. CARVER HIGH SCHOOL
GOOSE CREEK (COMMUNITY)
GOOSE CREEK (STREAM)

HILL OF REST CEMETERY
HOG ISLAND
HOUSTON SHIP CHANNEL

MARKET STREET ROAD
MEMORIAL STADIUM
MISSOURI PACIFIC RAILROAD
MT ROSE CHURCH

NEW HOPE CHURCH

PELLY

ROBERT E. LEE HIGH SCHOOL
ST JOHN CHURCH
ST PAUL CHURCH
SAN JACINTO BAY
SOUTHERN PACIFIC RAILROAD
SPILMANS ISLAND
SPIRITUAL TEMPLE CHURCH
STATE 146

TABBS BAY
TEXAS

W. MAIN STREET
W. TEXAS AVENUE
WOODRUFF STREET

These are sections of Baytown which is the main city.

Names approved
3-10-54. L. Heck
49. **NOTES FOR THE HYDROGRAPHER.**

The following topographic stations may be of use to the hydrographer:

HOUSTON CHANNEL, RANGE A REAR LIGHT, 1952, 1955

HOUSTON CHANNEL, RANGE F FRONT LIGHT, 1952, 1955

HOUSTON CHANNEL, RANGE F REAR LIGHT, 1952, 1955

CEDAR BAYOU, CHANNEL LIGHT 14, 1952
I recommend that the following objects which have been inspected from seaward to determine their value as landmarks be charted on the charts indicated.

The positions given have been checked after listing by

Richard A. Keese, Carto Photo Aid

<table>
<thead>
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<th>STATE</th>
<th>TEXAS</th>
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<tr>
<td>CHARTING NAME</td>
<td>DESCRIPTION</td>
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<tr>
<td>GALVESTON BAY - HOUSTON SHIP</td>
<td>CHANNEL, RANGE A, FRONT LIGHT</td>
</tr>
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<td>CHANNEL, RANGE A, REAR LIGHT</td>
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<tr>
<td>GALVESTON BAY - HOUSTON SHIP</td>
<td>CHANNEL, RANGE P, FRONT LIGHT</td>
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<td>GALVESTON BAY - CEDAR BAYOU</td>
<td>CHANNEL LIGHT 1</td>
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<th>LATITUDE</th>
<th>LONGITUDE</th>
<th>DATUM</th>
<th>METHOD OF LOCATION AND SURVEY NO.</th>
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<td>29 41</td>
<td>18 12</td>
<td>M.A.</td>
<td>Plot 7-9919</td>
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<td>29 41</td>
<td>56 56</td>
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<td>29 41</td>
<td>56 56</td>
<td>1927</td>
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This form shall be prepared in accordance with Hydrographic Manual, pages 800 to 804. Positions of charted landmarks and nonfloating aids to navigation, if redetermined, shall be reported on this form. The data should be considered for the charts of the area and not by
## MAP T-9919

### PROJECT NO. Ph-76

### SCALE OF MAP 1:10,000

<table>
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<tr>
<th>STATION</th>
<th>SOURCE OF INFORMATION (INDEX)</th>
<th>DATUM</th>
<th>LATITUDE OR ( y )-COORDINATE</th>
<th>LONGITUDE OR ( x )-COORDINATE</th>
<th>DISTANCE FROM GRID IN FEET, OR PROJECTION LINE IN METERS FORWARD (BACK)</th>
<th>DATUM CORRECTION</th>
<th>N.A. 1927-DATUM DISTANCE FROM GRID OR PROJECTION LINE IN METERS FORWARD (BACK)</th>
<th>FACTOR DISTANCE FROM GRID OR PROJECTION LINE IN METERS FORWARD (BACK)</th>
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<td>HOU.S.H. CH.Pg 3</td>
<td>N.A. 1927</td>
<td>29 42</td>
<td>02.874</td>
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<td>1561.0 (51.9)</td>
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**Computed by:** R. S. Tibbetts  **Date:** 3-7 Oct. 1955  **Checked by:** E. R. Ballance  **Date:** 17 Oct. 1955
PHOTOGRAMMETRIC OFFICE REVIEW
T. 9919


CONTROL STATIONS
5. Horizontal control stations of third-order or higher accuracy M.M.S. 6. Recoverable horizontal stations of less than third-order accuracy (topographic stations) J.G. 7. Photo hydro stations XX 8. Bench marks J.G.

ALONGSHORE AREAS
(Nautical Chart Data)

PHYSICAL FEATURES

CULTURAL FEATURES

BOUNDARIES
31. Boundary lines XX 32. Public land lines XX

MISCELLANEOUS

40. Signed: Josie A. Giles
Reviewer

Willa A. Rease
Supervisor, Review Section of Unit

41. Remarks (see attached sheet)

FIELD COMPLETION ADDITIONS AND CORRECTIONS TO THE MANUSCRIPT
42. Additions and corrections furnished by the field completion survey have been applied to the manuscript. The manuscript is now complete except as noted under item 43.

Compiler

Supervisor

43. Remarks:
Review Report  
Shoreline Map T-9919  
10 March 1954

62. **Comparison with Registered Surveys.**—

- **T-4614** 1:5,000 1931 Morgan Point and vicinity
- **T-4615** " " Spilmans Island and vicinity

Except for the contour, these maps are superseded by T-9919 for charting purposes.

63. **Comparison with Maps of Other Agencies.**—

- **AMS Quad.** Morgan Point, Texas, 1:25,000, 1949

The present survey supersedes the quadrangle for shoreline, aids, and those cultural features one-half mile inland noted by the field inspector.

64. **Comparison with Contemporary Hydrographic Surveys.**—No hydrographic surveys have been made since the 1931 series H-5121 to 5128 incl. 1:5,000.

65. **Comparison with Nautical Charts.**—


Atkinson Island to Alexander Island. Because of extensive changes in the area, the present survey supersedes the charts for shoreline, aids, and cultural and physiographic features within the half-mile mainland limit covered by the 1952 field inspection.

The following charted obstructions were not noted by the field inspector, but may still exist.

1. Four piles between Hog Island and the Ship Channel
2. A group of five piles south of the Channel in that area
3. A group of piles in Tabbs Bay
4. A line of piles at 29° 42' / 95° 59½'
5. Two snags north of Cherry Bayou Channel.

66. **Accuracy.**—The map conforms to project instructions and meets the National Standards of Map Accuracy.

Reviewed by:

[Signature]

Lena T. Stevens
APPROVED

L. A. Lande
Chief, Review Branch
Div. of Photogrammetry

Will Swanson
Chief, Div. of Photogrammetry

M. R. Kittles
Chief, Nautical Chart Branch
Division of Charts

Chief, Div. of Coastal Surveys

6 March 1958
<table>
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<tr>
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<th>CARTOGRAPHER</th>
<th>REMARKS</th>
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<td>3/19/54</td>
<td>588</td>
<td>SA McGavran</td>
<td>Before After Verification and Review Before approved</td>
</tr>
<tr>
<td>8-20-58</td>
<td>586</td>
<td>LR Williams</td>
<td>Before After Verification and Review</td>
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</table>

A basic hydrographic or topographic survey supersedes all information of like nature on the uncorrected chart. Give reasons for deviations, if any, from recommendations made under "Comparison with Charts" in the Review.