# Descriptive Report

**Type of Survey**
Photogrammetric Shoreline

**Field No.**
PH-14(46)

**Office No.**
T-8946

## Locality
- **State**: Texas
- **General Locality**: Intracoastal Waterway
- **Locality**: Carancahua Bayou to Basford Bayou

**Date**: October 27, 1952

---

**Chief of Party**
Ross A. Gilmore, Chief of Field Party

**Thos. B. Reed, Baltimore Photo. Office**
DATA RECORD

T - 8946

Project No. (II): FH-14(46)  Quadrangle Name (IV):

Field Office (II): Port Lavaca, Texas  Chief of Party: Ross A. Gilmore
Photogrammetric Office (III): Baltimore, Md.  Officer-in-Charge: Thos. B. Reed
Instructions dated (II) (III): Not dated  Copy filed in Division of
Letter 711-rs 4 Feb. 1949  Photogrammetry (IV)

Method of Compilation (III): graphic
Manuscript Scale (III): 1:10,000
Stereoscopic Plotting Instrument Scale (III):
Scale Factor (III): 1.000

Date received in Washington Office (IV): 225.99  Date reported to Nautical Chart Branch (IV):
Applied to Chart No.  Date: Date registered (IV): 20 Aug. 1952
Publication Scale (IV):
Publication date (IV):
Geographic Datum (III): N. A. 1927
Vertical Datum (III):
Mean sea level except as follows: MSL
Elevations shown as (25) refer to mean high water
Elevations shown as (+) refer to sounding datum
i.e., mean low water or mean lower low water

Reference Station (III): HITCHCOCK, 1933

Lat. 29° 16' 52.589'' (1619.1)m  Long. 94° 58' 30.127'' (813.2)m
Adjusted
Unadjusted

Plane Coordinates (IV):  State: Texas  Zone: South Central
Y = 547,532.09  X = 3,282,802.29

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)

Shoreline
DATA RECORD

Field Inspection by (II): C.H.Bishop
H.A.Duffy

Date: Oct. 1947
Jan. 1948

Plane table contouring by (II): Date:

Completion Surveys by (II): Date:

Mean High Water Location (III) (State date and method of location): Same as date of photographs, supplemented by field inspection. Located by field identification supplemented by office inspection.

Projection and Grids ruled by (IV): W.L.W.

Date: 1/6/49

Projection and Grids checked by (IV): W.L.W.

Date: 1/6/49

Control plotted by (III): M.F. Kirk

Date: 5/11/49

Control checked by (III): F.J.Tarcza

Date: 5/11/49

Radial Plot or Stereoscopic F.J.Tarcza
Control extension by (III):

Date: 5/18/49

Planimetry

Stereoscopic Instrument compilation (III):
Contours

Date:

Manuscript delineated by (III): M.L.Rosenberg

Date: 6/23/49 to 7/7/49

Photogrammetric Office Review by (III): R. Glaser

Date: 7/8 to 7/11/49
7/15 to 7/18/49

Elevations on Manuscript checked by (II) (III):

Date:
PHOTOGRAPHS (III)

<table>
<thead>
<tr>
<th>Number</th>
<th>Date</th>
<th>Time</th>
<th>Scale</th>
<th>Stage of Tide</th>
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<td>11/21/46</td>
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<td>2:26</td>
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<td>2:28</td>
<td>&quot;</td>
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<td>18411</td>
<td>&quot;</td>
<td>2:38</td>
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</tr>
</tbody>
</table>

Tide (III)

Galveston, Texas

Reference Station: Caranahua Reef, West Bay, Texas

Washington Office Review by (IV): Lema T. Stevens
Final Drafting by (IV): Baltimore Office
Drafting verified for reproduction by (IV): Lema T. Steiner
Proof Edit by (IV): Lema T. Steiner

Ratio of Ranges | Mean Range | Spring Range |
---              | ---        | ---          |
0.7             | 0.7        |              |

Date: 6 Sept. 1950

Land Area (Sq. Statute Miles) (III): 2

Shoreline (More than 200 meters to opposite shore) (III): 8 statute miles
Shoreline (Less than 200 meters to opposite shore) (III): 5 statute miles

Control Leveling - Miles (II):
Number of Triangulation Stations searched for (II): 6
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:

Form T-Page 4
SHORELINE MAPPING PROJECT
PH-14(46) (PART 3)
TEXAS, Vicinity of Galveston
Summary to Accompany T-8946

Shoreline survey T-8946, scale 1:10,000 (Lat. 29°13' to 19', Long. 94°57' to 95°01') is one of 76 maps in project Ph-14(46), Intracoastal Waterway, which consists of four parts. This project was planned to furnish data for a new series of Inland Waterway charts at 1:40,000 scale.

T-8946 is one of the Part III group which consists of 16 maps (T-8935 to T-8950, inclusive), vicinity of Galveston.
FIELD REPORT
Shoreline Manuscript  Survey No. T-8946

For field data covering this survey refer to the Special Report for Project PH-14(46)—Gulf Intracoastal Waterway, Fort Arthur to Cedar Lakes, Texas. This report was submitted by Ross A. Gilmore and dated January 1948.

Chart Letter No. 34(1948). Filed in Nautical Chart Branch, Division of Charts.
<table>
<thead>
<tr>
<th>STATION</th>
<th>SOURCE OF INFORMATION INDEX</th>
<th>LATITUDE OR y-COORDINATE</th>
<th>LONGITUDE OR x-COORDINATE</th>
<th>DISTANCE FROM GRID IN FEET OR PROJECTION LINE IN METERS</th>
<th>DATUM CORRECTION</th>
<th>N.A. 1927 - DATUM DISTANCE FROM GRID OR PROJECTION LINE IN METERS</th>
<th>FACTOR DISTANCE FROM GRID OR PROJECTION LINE IN METERS</th>
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<tbody>
<tr>
<td>Hitchcock, 1933</td>
<td>G-2122 Fg 28</td>
<td>29 16</td>
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<td>94 58</td>
<td>30.127</td>
<td>1619.1</td>
<td>228.2</td>
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<td>West Bay BN NO. 21, 1933</td>
<td>G-2122 Fg 39</td>
<td>29 14</td>
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<td>94 57</td>
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<td>West Bay BN NO. 23, 1933</td>
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<td>32.303</td>
<td>94 57</td>
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<td>West Bay BN NO. 25, 1933</td>
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<td>12.656</td>
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<td>18.377</td>
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<td>West Bay BN NO. 27, 1933</td>
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<td>29 13</td>
<td>54.692</td>
<td>94 58</td>
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<td>1457.6</td>
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<td>West Bay BN NO. 29, 1933</td>
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<td>36.113</td>
<td>94 59</td>
<td>09.055</td>
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<td>Sub. Sta. Hitchcock *</td>
<td></td>
<td>29 16</td>
<td></td>
<td>94 58</td>
<td></td>
<td>1640.6</td>
<td>206.7</td>
</tr>
</tbody>
</table>

* This station computed by M.K. Kirk 9 May 1949

Mon. 506, 1947 (US) fm 814

1 ft. = 0.3048008 meter

Computed by: J. Honick

Date: 4/9/48

Checked by: Wm. J. Hughes

Date: 4/11/48
COMPILATION REPORT - T-8946

This manuscript is one of a series of surveys in Project No. PH-14(46) and covers the area along the Intracoastal Waterway between Carancahua Bayou and Basford Bayou.

PHOTOGRAMMETRIC PLOT REPORT


31. DELINEATION

The manuscript was delineated by graphic methods only.

The field inspection is considered generally satisfactory; however, in some areas where there was no field inspection, there was some doubt as to the difference between marsh land and firm ground. This in turn created a doubt as to whether the shoreline was a MHWL or an apparent shoreline. Delineation was completed after careful examination of the photographs.

The southeastern corner of the survey covering a small island, a small part of Galveston Island and Hoeckers Point has not been delineated on the manuscript because there was no photograph coverage of this area.

32. CONTROL

The horizontal control for this survey is adequately discussed in the Photogrammetric plot report referred to above.

33. SUPPLEMENTAL DATA

1. Field Observations, Vol. 4 of 5 vols., Sextant Fixes, was used to determine the locations of all floating aids and five non-floating aids.

2. Geographic Name Standards dated 15 July 1949 were furnished by the Washington Office.

34. CONTOURS AND DRAINAGE

Inapplicable.

35. SHORELINE AND ALONGSHORE DETAILS

The shoreline inspection is considered generally adequate except as noted in paragraph 31.

Low water lines, a small shoal area and the limits of shallow areas were delineated from office interpretation of the photographs.

36. OFFSHORE DETAILS

No comment
37. LANDMARKS AND AIDS

Form 567 for the West Bay Channel Daybeacons number 21, 23, 25, 27 and 29 have been submitted by Ross A. Gilmore in January 1948. The geographic positions reported for these daybeacons are as of the 1933 triangulation. This same group of daybeacons were also cut in by sextant fixes and found to be consistently in disagreement with the triangulation positions. No evidence could be found that these daybeacons have been rebuilt since 1933; their sextant fix positions reported on Form 567 are attached to this report.

Form 567 for Galveston-Freeport Buoys number 101 through 110 are also attached to this report.

38. CONTROL FOR FUTURE SURVEYS

Form 524 for MON. 506 (U.S.E.) 1947 is submitted with this report and the station is also listed in paragraph 49, NOTES FOR THE HYDROGRAPHER.

39. JUNCTIONS

Junction to the east with Survey No. T-8945 and to the west with Survey No. T-8947 have been made and are in agreement. There are no contemporary surveys to the north and to the south.

40. HORIZONTAL AND VERTICAL ACCURACY

No comment.

41. Through 45

Inapplicable.

46. COMPARISON WITH EXISTING MAPS

The manuscript covers an area found in part on the following War Department Corps of Engineers quadrangles, scale 1:25,000, edition of 1943:

Hitchcock, Texas.
Virginia Point, Texas
(Carancahua)
Kamankawa Lake, Texas. BGN/1940

No major differences between the manuscript and the above quadrangles were noted.
47. **COMPARISON WITH NAUTICAL CHARTS**

The manuscript and chart No. 1282, scale 1:80,000, edition of 1945, corrected to 18 July 1949, were in good agreement.

Items to be applied to nautical charts immediately:

None.

Items to be carried forward:

Ruins, north of Galveston Freeport Range  
Pipe, east of Entrance to Greens Lake  
Pipe, northeast of Caranasahua Reef

These items are not shown on the manuscript, but are believed to still exist and should be carried forward on the chart.

Respectfully submitted  
21 July 1949

[Signature]

Raymond Green  
Engineering Draftsman

Approved and forwarded  
27 July 1949

[Signature]

Officer in Charge  
Baltimore Photogrammetric Office
West Bay Channel Daybeacons No. 21, 23, 25, 27, and 29 were replotted in this office with a recently calibrated three-arm protractor. The positions obtained were in agreement with the triangulation positions of these daybeacons within the accuracy of the sextant and radial plot method of location. As there is no record of these daybeacons having been moved since the 1933 triangulation positions were obtained, the triangulation positions have been accepted as being correct. The sextant fix positions have been removed from the manuscript, form 567 has been corrected to show the triangulation positions of these daybeacons, and the Nautical Chart Branch has been notified of this change.

Sec. 65, par. 3.

L. C. Lande, Chief
Graphic Compilation Section
Division of Photogrammetry

31 March 1950
PHOTOGRAMMETRIC OFFICE REVIEW

1. Projection and grids  
2. Title  
3. Manuscript numbers  
4. Manuscript size  

CONTROL STATIONS:
5. Horizontal control stations of third-order or higher accuracy  
6. Recoverable horizontal stations of less than third-order accuracy (topographic stations)  
7. Photo-hydro stations  
8. Bench marks  
9. Plotting of sextant fixes  
10. Photogrammetric plot report  
11. Detail points  

ALONGSHORE AREAS
(Nautical Chart Data)
12. Shoreline  
13. Low-water line  
14. Rocks, shoals, etc.  
15. Bridges  
16. Aids to navigation  
17. Landmarks  
18. Other alongshore physical features  
19. Other alongshore cultural features  

PHYSICAL FEATURES
20. Water features  
21. Natural ground cover  
22. Planetary contours  
23. Stereoscopic instrument contours  
24. Contours in general  
25. Spot elevations  
26. Other physical features  

CULTURAL FEATURES
27. Roads  
28. Buildings  
29. Railroads  
30. Other cultural features  

BOUNDARIES
31. Boundary lines  
32. Public land lines  

MISCELLANEOUS
33. Geographic names  
34. Junctions  
35. Legibility of the manuscript  
36. Discrepancy overlay  
37. Descriptive Report  
38. Field inspection photographs  
39. Forms  

Reviewer: [Signature]  
Supervisor, Review Section of Unit: [Signature]

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: [Signature]  
Supervisor: [Signature]

43. Remarks:
REMARKS

5. In lieu of Form 525, Pamphlet No. 871, U.S.C.& G.S. Descriptions of Triangulation Stations, Texas Coast, Part III, Galveston Bay to Matagorda Lighthouse, was furnished.

14. Chart section has not been prepared. The one item to be checked is mentioned in notes to hydrographer. (See Project Report, 65, par. 1.)
I recommend that the following objects which have (have not) been inspected from seaward to determine their value as landmarks, be charted on (deleted from) the charts indicated.

The positions given have been checked after listing by R. Glaser

<table>
<thead>
<tr>
<th>CHARTING NAME</th>
<th>DESCRIPTION</th>
<th>SIGNAL NAME</th>
<th>LATITUDE</th>
<th>LONGITUDE</th>
<th>DATUM</th>
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<tbody>
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<td>Daybeacon</td>
<td>West Bay Channel</td>
<td>29 14</td>
<td>1562</td>
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<td>1572</td>
<td>94 57</td>
<td>712</td>
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<td>29 14</td>
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<td>175</td>
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<td>245</td>
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<td>Lt 112</td>
<td>Galveston-Freeport</td>
<td>29 16</td>
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<td>1497</td>
<td>94 58</td>
<td>1552</td>
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</table>

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 individual field survey sheets. Information under each column heading should be given.
I recommend that the following objects which have (have not) been inspected from seaward to determine their value as landmarks, be charted on (deleted from) the charts indicated.

The positions given have been checked after listing by

R. Glaser

Thos. E. Reed  Chief of Party

<table>
<thead>
<tr>
<th>STATE</th>
<th>CHARTING NAME</th>
<th>DESCRIPTION</th>
<th>SIGNAL NAME</th>
<th>POSITION</th>
<th>METHOD OF LOCATION AND SURVEY NO.</th>
<th>DATE OF LOCATION</th>
<th>HARBOR CHART</th>
<th>MARINE CHART</th>
<th>EMERGENCY &amp; WATERWAY CHARTS AFFECTED</th>
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<td></td>
<td>BUOY 101</td>
<td>Galveston-Freeport</td>
<td></td>
<td>29 17 146 94 57 163</td>
<td>N.A. 1527 FLX 8946</td>
<td>Oct.1547</td>
<td>x x</td>
<td>x x</td>
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</table>

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 individual field survey sheets. Information under each column heading should be given.
48. GEOGRAPHIC NAMES

Basford Bayou
Big Marsh
Caranahua Bayou
Caranahua Reef
Hoeckers Cove
Hoeckers Point

In 1940 B&G revised its former decision of Caranahua to Caranahua for all features here and in Matagorda Bay area.

Intracoastal Waterway
Galveston Island
Greens Lake
West Bay
Texas

Names are taken from geographic name standards dated 15 July 1949.

These names do not appear on the manuscript; the features were not delineated because there was no photograph coverage of the area.

Names preceded by * are approved. 9-6-50.
L. Heek
Review Report T-8946
Shoreline Survey
6 September 1950

61. Comparison with Registered Topographic Surveys.

<table>
<thead>
<tr>
<th>Survey</th>
<th>Scale</th>
<th>Date</th>
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<tr>
<td>T-328</td>
<td>1:20,000</td>
<td>1851</td>
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<td>T-4852</td>
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<td>1933</td>
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<tr>
<td>T-4867</td>
<td></td>
<td>1933</td>
</tr>
</tbody>
</table>

63. Comparison with Maps of Other Agencies.

- USE Hitchcock 1:25,000, 1949 (1942 photographs)
- USE Virginia Point
- USE Karankawa

(Note: These maps are the same as the 1943 edition except for marginal data revision, and the addition of the Universal Mercator Grid).

64. Comparison with Contemporary Hydrographic Surveys.

None

65. Comparison with Nautical Charts.

1282 1:80,000 ed. Feb. 1945 rev. Sept. 1948 (see also 47 in Compilation Report)

An obstruction north of Beacon No. 19 is charted a "ruins". It is probably the same object that is mapped as a "submerged wreck, pipe (3)" on T-8946.

In the extreme southwestern part on T-8946 manuscript near Beacon 33, "Photo Pt. A" was circled. This point was also labeled "old light tower" by the field inspector on photograph 18406 (1946). It is a prominent object, but it does not appear on chart 1282, therefore, the omission has been called to the attention of the Nautical Chart Branch.

Few changes were made during review, the more noteworthy being some small stretches of fast land shoreline in the vicinity of Greens Lake and at Carancahua Bayou. The West Bay Channel Daybeacons listed on form 567 were changed to "piles" by H.O. Notice to Mariners 36, 1949 and noted on the standard as of Aug. 31, 1949.

66. Accuracy. This compilation complies with project instructions and is adequate for charting purposes.

Reviewed by:

Lena T. Stevens
### NAUTICAL CHARTS BRANCH
#### SURVEY NO. T-8946

**Record of Application to Charts**

<table>
<thead>
<tr>
<th>DATE</th>
<th>CHART</th>
<th>CARTOGRAPHER</th>
<th>REMARKS</th>
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<tbody>
<tr>
<td>6-10-50</td>
<td>887</td>
<td>Dr. Eng.</td>
<td>Before After Verification and Review</td>
</tr>
<tr>
<td>10/2/50</td>
<td>1282</td>
<td>S. McDav</td>
<td>Before After Verification and Review</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Partially applied (Obstr. in West Bay)</td>
</tr>
</tbody>
</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.