Form 504

U. S. COAST AND GEODETIC SURVEY
DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey: SHORELINE PHOTOGRAMMETRIC

Field No.: Ph-14(46) Office No.: T-9284

LOCALITY

State: TEXAS

General locality: PASS CAVALLO

Locality: PORT O'CONNOR TO BLACKBERRY ISLAND

Chief of Party:
R. A. Gilmore, Chief of Field Party.
T. B. Reed, Baltimore Photogrammetric Office.

LIBRARY & ARCHIVES

DATE: Jan 30 - 1953
DATA RECORD

T = 9284

Project No. (II): Ph-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): (no date); Supplement 1, 22 July 1947  Copy filed in Division of
Letters dated 5 June 1947, 29 July 1947, 4 February 1949 Photogrammetry (IV)

Method of Compilation (III): Graphic

Manuscript Scale (III): 1:20,000  Stereoscopic Plotting Instrument Scale (III):

Scale Factor (III): 1.000

Date received in Washington Office (IV): 11-25-47  Date reported to Nautical Chart Branch (IV): 11-30-47

Applied to Chart No.  Date:  Date registered (IV): 14 Nov. 1952

Publication Scale (IV):

Geographic Datum (III): N.A. 1927

Publication date (IV): (Date of issue: July 1952)

Vertical Datum (III): M.H.W.

Mean sea level except as follows:
Elevations shown as (1) refer to mean high water
Elevations shown as (2) refer to sounding datum
i.e., mean low water or mean lower low water

Reference Station (III): PORTO, 1934

Lat.: 28° 25' 45.233" (1392.5m)  Long.: 96° 28' 38.828" (1056.7m)  Adjusted

Plane Coordinates (IV):

State:  Zone:

X =  Y =

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): Charles H. Bishop
Date: January 1948

Planetable contouring by (II):
Date:

Completion Surveys by (II):
Date:

Mean High Water Location (III) (State date and method of location): 21 November 1946, 7 January 1948, 9 January 1948, 21 January 1948. Refer to par. 35 of the report.

Projection and Grids ruled by (IV): On original manuscript
Date: 1934

Projection and Grids checked by (IV): On original manuscript
Date: 1934

Control plotted by (III): M. F. Kirk
Date: 17 August 1949

Control checked by (III): L. A. Senasack
Date: 19 August 1949

Radial Plotting
Completed by (III): L. A. Senasack
Date: 15 September 1949

Stereoscopic Instrument compilation (III):
- Planimetry
- Contours
Date:

Manuscript delineated by (III): L. A. Senasack
Date: 27 October 1949

Photogrammetric Office Review by (III): J.W. Vonasek
Date: 18 November 1949

Elevations on Manuscript
checked by (II) (III):
Date:
Camera (kind or source) (III): U. S. Coast and Geodetic Survey nine lens, focal length 3½ inches.

<table>
<thead>
<tr>
<th>Number</th>
<th>Date</th>
<th>Time</th>
<th>Scale</th>
<th>Stage of Tide</th>
</tr>
</thead>
<tbody>
<tr>
<td>18299 to 18302 incl.</td>
<td>11-21-46</td>
<td>1134</td>
<td>1:10,000</td>
<td>0.5' above MLW</td>
</tr>
<tr>
<td>18303 to 18314</td>
<td>&quot;</td>
<td>&quot;</td>
<td>&quot;</td>
<td>0.6' above MLW</td>
</tr>
<tr>
<td>18320 to 18321</td>
<td>&quot;</td>
<td>1227</td>
<td>&quot;</td>
<td>0.7' above MLW</td>
</tr>
</tbody>
</table>

+ 1:20,000 reductions (for delineation purposes)

Tide (III)

<table>
<thead>
<tr>
<th></th>
<th>Ratio of Ranges</th>
<th>Mean Range</th>
<th>Range of Range</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1.0</td>
<td>1.0</td>
<td>1.4</td>
</tr>
<tr>
<td></td>
<td>1.0</td>
<td>1.0</td>
<td>1.4</td>
</tr>
</tbody>
</table>

Reference Station: Galveston, Galveston Channel, Texas
Subordinate Station: Pass Cavallo, Texas
Computed from the predicted Tide Tables
Washington Office Review by (IV): [Signature]
Final Drafting by (IV): [Signature]
Drafting verified for reproduction by (IV): [Signature]
Proof Edit by (IV): [Signature]

Land Area (Sq. Statute Miles) (III): 19 (revised)
Shoreline (More than 200 meters to opposite shore) (III): 43 statute miles
Shoreline (Less than 200 meters to opposite shore) (III): 29 statute miles
Control Leveling - Miles (II): 4
Number of Triangulation Stations searched for (II): Recovered: 4 Identified: 4
Number of BMs searched for (II): Recovered: 4 Identified: 4 *
Number of Recoverable Photo Stations established (III): 1
Number of Temporary Photo Hydro Stations established (III):

Remarks:
* These are also traverse stations; they were identified as Recoverable Photo Stations.
SHORELINE MAPPING PROJECT
PH-14 (46) (PART 4)
TEXAS, Vicinity of Matagorda Bay
Summary to Accompany T-9284

Shoreline survey T-9284, scale 1:20,000 (Latitude 28° 18' to 28° 1'; Longitude 96° 21' to 29°) is one of 76 maps in project Ph-14(h46), 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-9284 is one of the Part IV group which consists of 14 maps (T-9284 to T-9298, inclusive), Vicinity of Matagorda Bay, Texas.

Original field work for the entire sheet was accomplished in January 1948 with a subsequent field investigation in June 1950 of only those aids located along the Intracoastal Waterway and lying east of Port O'Connor.
Field Report
Shoreline Manuscript T-9287


(Chart Letter No. 150 (1948). Filed in Nautical Chart Branch, Division of Charts.)
PHOTOGRAMMETRIC PLOT REPORT

21. AREA COVERED

This radial plot covers all of Survey No. T-9284 and a small part on the east side of Survey No. T-9295.

22. METHOD

This radial plot was run graphically with vinylite templets on a red lithographic print on acetate of Survey No. T-5045 (1934), scale 1:20,000. In addition to the triangulation stations recovered and identified, the field party identified four (4) traverse stations as recoverable topographic stations which were used in the plot. All sub. stations were plotted graphically.

The photographs used in this radial plot were 1:20,000 scale reductions of 1:10,000 scale nine lens photographs, taken with the U.S.C. & G.S. camera focal length 8½ inches. Nineteen (19) photographs were used, numbered as follows: 18298 to 18314 incl. and 18320 to 18321 incl.

All identified control, aids to navigation, centers and conjugate centers and pass points were identified on the photographs prior to reduction.

To correct for paper distortion and transforming error from the 1:20,000 scale master templet, which was made from the 1:10,000 scale master templet No. 16664, dated September 1948, was used. Vinylite templets of the 1:20,000 scale photographs were made using the reduced master templet.

The templet of photograph 18298 was laid first and the plot extended easterly along the Intracoastal Waterway to Matagorda Bay, then down to Pass Cavallo and along Matagorda Island to the Sub. Pt. of Station FAR, 1934. Sub. Pt. FAR, 1934 could not be held. To check this part of the plot, templets of a flight of photographs along Ferry Channel were laid attempting to tie in to Sub. Pt. FAR, 1934. It was found that the station could not be held. The plot was completed without attempting to hold to Sub. Pt. FAR, 1934. A radially plotted position of Sub. Pt. FAR, 1934 was established.

After completing the plot the red line print was carefully turned over and the photograph centers, pass points, aids to navigation, etc. were pricked and circled directly on the back of the manuscript. The size of photograph centers and pass points were made one half specified dimensions in order that these circles coincide with the circles on the 1:20,000 scale photographs.

23. ADEQUACY OF CONTROL

The radially plotted position of Sub. Pt. FAR, 1934 falls 1.4 mm north-east of its plotted position. Considering that the station was destroyed and that the site was verified by measurements between monuments lying on their sides in the water, it was believed best to reject the identification of this station. It is believed that this part of the radial plot is the weakest due to the placement of photographs and loss of this station.
23. **ADEQUACY OF CONTROL** (continued)

Four traverse stations and one bench mark (U.S.E.) were held only tangentially. Station 667+000 held approximately 0.7 mm SSE of the plotted position. These stations were identified as recoverable topographic stations.

24. **SUPPLEMENTAL DATA**

None.

25. **PHOTOGRAPHY**

The coverage and definition of photographs were adequate. It is believed that many of the photographs were tilted in the process of reduction. Several photographs had bad chambers.

26. **PURPOSE OF PLOT**

This plot was run to establish aids to navigation along the Ferry Channel in Espiritu Santo Bay, photo points for sextant fixes to establish the mean high water line around Pass Cavallo, and pass points to orient the photographs where there is no common detail between the red line print and photographs.
<table>
<thead>
<tr>
<th>STATION</th>
<th>SOURCE OF INFORMATION</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</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>
</tr>
</thead>
<tbody>
<tr>
<td>CARLOS, 1934</td>
<td>G-2874 Pg. 60</td>
<td>N.A. 1927</td>
<td>28</td>
<td>25</td>
<td>03.325</td>
<td>102.4</td>
<td>1744.6</td>
<td>436.2 1196.1</td>
</tr>
<tr>
<td>PORTO, 1934</td>
<td>&quot;</td>
<td>&quot;</td>
<td>28</td>
<td>25</td>
<td>45.233</td>
<td>1392.5</td>
<td>454.5</td>
<td>1056.7 576.2</td>
</tr>
<tr>
<td>SALURIA COAST GUARD, CUPOLA, 1934</td>
<td>&quot; Pg. 83</td>
<td>&quot;</td>
<td>28</td>
<td>23</td>
<td>56.008</td>
<td>1724.2</td>
<td>122.8</td>
<td>664.1 969.2</td>
</tr>
<tr>
<td>MATAGORDA LIGHTHOUSE, 1906</td>
<td>Pg. 60</td>
<td>&quot;</td>
<td>28</td>
<td>20</td>
<td>15.388</td>
<td>473.7</td>
<td>1373.3</td>
<td>700.8 933.5</td>
</tr>
<tr>
<td>BM 981.0 (USE)</td>
<td>Field Report</td>
<td></td>
<td>28</td>
<td>25</td>
<td>25.729</td>
<td>700.8</td>
<td>933.5</td>
<td>1815.5 31.5</td>
</tr>
<tr>
<td>TRAV. STA. 645+000 (USE) (BM 988)</td>
<td>&quot;</td>
<td></td>
<td>28</td>
<td>25</td>
<td>936.0</td>
<td>1232.2</td>
<td>400.6</td>
<td>911.0 323.4</td>
</tr>
<tr>
<td>TRAV. STA. 651+000 (USE) (BM 994)</td>
<td>&quot;</td>
<td></td>
<td>28</td>
<td>26</td>
<td>1309.5</td>
<td>1299.0</td>
<td>334.0</td>
<td>957.9 889.1</td>
</tr>
<tr>
<td>TRAV. STA. 658+000 (USE) (BM 1001)</td>
<td>&quot;</td>
<td></td>
<td>28</td>
<td>24</td>
<td>1559.5</td>
<td>1559.5</td>
<td>73.7</td>
<td></td>
</tr>
</tbody>
</table>

1 FT. = 0.3048006 METER

COMPUTED BY: L.A. Sennasack     DATE: 19 August 1949
CHECKED BY: M.F. Kirk       DATE: 22 August 1949
FIELD INSPECTION REPORT

Refer to the Special Report for Project Ph-14(46), Gulf Intracoastal Waterway, Cedar Lakes, Texas to Aransas Pass, Texas submitted by Ross A. Gilmore, Chief of Party, January 1948.

31. DELINEATION

The manuscript was delineated by graphic methods only.

Due to the difficulty of clearly delineating the area along Pass Cavallo from Barroom Bay south to the Gulf of Mexico, it was deemed advisable to delineate this part of the manuscript using planimetric symbols.

A large tidal flat area on Matagorda Island at Pass Cavallo was delineated as a sand flat since the field party also identified the MHWL in this area.

The east end of Dewberry Island near Blackberry Island falls in the area but has been delineated on Survey No. T-9295.

The roads were classified in the compilation office.

32. CONTROL

No comment.

33. SUPPLEMENTAL DATA

* One lithographic copy of T-5045 (1934) was furnished as a geographic name standard. Pg. 27.

* Topographic sheet D with accompanying descriptive report was submitted by the field party for floating and non-floating aids to navigation in Matagorda Bay.

* Sextant fixes were furnished in a form 250, labeled "Sextant Fixes 890" 1948, Vol. 2 of 6.

34. CONTOURS AND DRAINAGE

Contours - inapplicable.

Drainage - No comment.

35. SHORELINE AND ALONGSHORE DETAILS

The MHWL on Decres Point was located by reference measurements on 7 January 1948 (Field photograph 18304). The MHWL on Pelican Island was located by sextant fixes on 9 January 1948. Refer to page 17 of the field report for a discussion of this area. The MHWL on Matagorda Island near Pass Cavallo Light 3 was located by sextant fixes on 21 January 1948.

* Destroyed.
35. SHORELINE AND ALONGSHORE DETAILS (continued)

There was no field inspection of the MHWL for the area between Matagorda Island and Port O'Connor. The shoreline in this area was delineated after careful office interpretation.

All low water line and shoal line was delineated from office interpretation of the photographs. All low water line is approximate and is believed to be the limit of tidal flats.

36. OFFSHORE DETAILS

Inapplicable.

37. LANDMARKS AND AIDS

The position for Pass Cavallo Lt. 3 was accepted from the topographic sheet D.* Cuts from sextant fixes on Pelican Island verified this position within mapping accuracy requirements.

Form 567 for landmarks and nonfloating aids to navigation have been submitted in January 1948 with the field report. Form 567 for floating aids to navigation along with the aforementioned is being submitted with this report.

The positions of the Matagorda Bay buoys and Matagorda Bay Range D Rear light were transferred from topographic sheet D by means of the vertical projector. Refer to paragraph 37 of the descriptive report for Survey No. T-9285 for a discussion of this procedure.

See Supplement to Reissue Report of Chart Letters 182(1951) and 186(1952) for change in aids east of Port O'Connor. Refer to page 37 of the field report regarding aids that do not appear on this manuscript. i.e.,

Sulina Bayou Break Buoy, non-existent, Jan. 1958
Big Bayou Flat Light
Big Bayou Flat Buoy
Big Bayou Flat Light

* Sheet D destroyed.

38. CONTROL FOR FUTURE SURVEYS

One recoverable topographic station was recovered and one was established by the field party for this survey. Forms 524 are being submitted with this report.

Chimney, 1939 (Port O'Connor) 1944
Matagorda Bay Range D Rear Light, 1944

No information was furnished regarding the four recoverable topo stations, listed on the original manuscript. It is believed that Nos. 2 and 3, (end telephone posts at the submerged cable crossing over the inlet to Barroom Bay) are still in existence, and they have been carried forward on T-9285.
39. **JUNCTIONS**

Junctions with Survey No. T-9285 to the east and Survey No. T-9295 to the west have been made and are in agreement. No revision has been made on Survey No. T-5351 (1934) to the north, hence no junction. The Gulf of Mexico is to the south.

40. **HORIZONTAL AND VERTICAL ACCURACY**

No comment.

41. **SUBMERGED CABLES AND TELEPHONE LINES**

All field inspected submerged cable crossings were delineated. For the lack of more information the old Coast Guard telephone line was retained on the manuscript with the old symbol. It is believed there is a new line there now, but the exact location is unknown in this office. Refer to page 16 of the field report for further information regarding submerged cables in the area. I.e., "The cable layer was carried seaward and hung on a bar by the wind and tide. This accident resulted in the cable being laid on an area that required an additional amount of cable. (From Sotaria C.G. Sta. 1 to Decros Point)"

42 through 45

Inapplicable.

46. **COMPARISON WITH EXISTING MAPS**

Comparison was made with the Corps of Engineers, Port O'Connor quadrangle, scale 1:125,000, dated 1913, revised 1929, reprinted 1942.

47. **COMPARISON WITH NAUTICAL CHARTS**

Comparison was made with Chart No. 1284, dated 29 September 1947, corrected to 13 September 1948.

The manuscript shows shoreline changes have taken place on Decros Point and Matagorda Island. The largest amount of change has taken place in the area west of Pass Cavallo between Matagorda Island Port O'Connor. Pelican Island in Pass Cavallo has changed considerably. One wreck east of Matagorda Lighthouse and south of Pass Cavallo Lt. 3 has changed to a submerged wreck. It is now 200 meters offshore.

**Items to be applied to nautical charts immediately**

None.

**Items to be carried forward**

None.

Respectfully submitted

[Signature]

Cartographic Aid

Approved and forwarded

[Signature]

23 November 1949

Officer in Charge

Baltimore Photogrammetric Office
PHOTOGRAMMETRIC OFFICE REVIEW
T-9284

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 along-shore cultural features

PHYSICAL FEATURES
20. Water features
21. Natural ground cover
22. Elevation 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. Obliquity of overlay
37. Descriptive Report
38. Field inspection photographs
39. Forms

Reviewer

Supervisor, Review Section or 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

M-2623-12
50. REMARKS

1. The projection was printed on this manuscript as it appears on the published air photo compilation No. T-5045. There are no state grids on this manuscript. *Grids were added*

5. Three triangulation stations were printed on the manuscript.

8. No information was furnished on the tidal bench marks at Port O'Connor.

15. No bridges exist in the area.
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

Joseph W. Vornsek

<table>
<thead>
<tr>
<th>STATE</th>
<th>TEXAS</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHARTING NAME</td>
<td>DESCRIPTION</td>
</tr>
<tr>
<td></td>
<td>Espiritu Santo Bay Ferry Channel</td>
</tr>
<tr>
<td></td>
<td>Daybn. 3</td>
</tr>
<tr>
<td></td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>LT. 11</td>
</tr>
<tr>
<td></td>
<td>Daybn. 41</td>
</tr>
<tr>
<td></td>
<td>LT. 43</td>
</tr>
<tr>
<td></td>
<td>Daybn. 45</td>
</tr>
<tr>
<td></td>
<td>47</td>
</tr>
<tr>
<td></td>
<td>49</td>
</tr>
<tr>
<td></td>
<td>LT. 51</td>
</tr>
<tr>
<td></td>
<td>Daybn. 53</td>
</tr>
<tr>
<td></td>
<td>LT. 55</td>
</tr>
</tbody>
</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.
### Nonfloating Aids or Landmarks for Charts

I recommend that the following objects which have been inspected from seaward to determine their value as landmarks, be charted on the charts indicated:

<table>
<thead>
<tr>
<th>Charting Name</th>
<th>Description</th>
<th>Signal Name</th>
<th>Latitude</th>
<th>Longitude</th>
<th>Datum</th>
<th>Method of Location and Survey No.</th>
<th>Date of Location</th>
<th>Charts Affected</th>
</tr>
</thead>
<tbody>
<tr>
<td>LT. 1</td>
<td>Port O'Connor</td>
<td></td>
<td>28 26</td>
<td>1112 26</td>
<td>96 23</td>
<td>1032 1927</td>
<td>Photo Comp. 1-926</td>
<td>XX 889,890</td>
</tr>
<tr>
<td># 2</td>
<td>Port O'Connor</td>
<td></td>
<td>28 26</td>
<td>1345 26</td>
<td>96 23</td>
<td>1122 n/a</td>
<td>1948</td>
<td>XX XX XX</td>
</tr>
<tr>
<td>Daybn. 3</td>
<td>Port O'Connor Dump</td>
<td></td>
<td>28 26</td>
<td>1451 26</td>
<td>96 23</td>
<td>544 XX</td>
<td>XX XX XX</td>
<td>XX XX XX</td>
</tr>
<tr>
<td># 4</td>
<td></td>
<td></td>
<td>28 26</td>
<td>347 26</td>
<td>96 23</td>
<td>820 XX</td>
<td>XX XX XX</td>
<td>XX XX XX</td>
</tr>
<tr>
<td>LT.</td>
<td>Salaria Bay Entrance</td>
<td></td>
<td>28 23</td>
<td>1676 23</td>
<td>96 23</td>
<td>1393 XX</td>
<td>XX XX XX</td>
<td>XX XX XX</td>
</tr>
<tr>
<td>LT. 3</td>
<td>Pass Cavallo</td>
<td></td>
<td>28 20</td>
<td>1082 20</td>
<td>96 23</td>
<td>1492 Place Table XX XX XX XX</td>
<td>XX XX XX</td>
<td>XX XX XX</td>
</tr>
<tr>
<td>LT.</td>
<td>Matagorda Bay Range &quot;D&quot; Near</td>
<td></td>
<td>28 27</td>
<td>34 27</td>
<td>96 21</td>
<td>85 XX</td>
<td>XX XX XX</td>
<td>XX XX XX</td>
</tr>
</tbody>
</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 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

Joseph W. Vonasek

Chief of Party.

<table>
<thead>
<tr>
<th>State</th>
<th>Charting Name</th>
<th>Description</th>
<th>Signal Name</th>
<th>Latitude</th>
<th>Longitude</th>
<th>Datum</th>
<th>Method of Location and Survey No.</th>
<th>Date of Location</th>
<th>Charts Affected</th>
</tr>
</thead>
<tbody>
<tr>
<td>Texas</td>
<td>BUOY 112</td>
<td>Matagorda Bay</td>
<td></td>
<td>28 27</td>
<td>1071</td>
<td>96 21</td>
<td>159</td>
<td>Plane table</td>
<td>Jan. 1948 1927</td>
</tr>
<tr>
<td></td>
<td>BUOY 113</td>
<td></td>
<td></td>
<td>28 27</td>
<td>848</td>
<td>96 21</td>
<td>577</td>
<td></td>
<td>x x x</td>
</tr>
<tr>
<td></td>
<td>BUOY 116</td>
<td></td>
<td></td>
<td>28 27</td>
<td>790</td>
<td>96 21</td>
<td>981</td>
<td></td>
<td>x x x</td>
</tr>
<tr>
<td></td>
<td>BUOY 118</td>
<td></td>
<td></td>
<td>28 27</td>
<td>624</td>
<td>96 21</td>
<td>1384</td>
<td></td>
<td>x x x</td>
</tr>
<tr>
<td></td>
<td>BUOY 119</td>
<td></td>
<td></td>
<td>28 27</td>
<td>356</td>
<td>96 22</td>
<td>203</td>
<td></td>
<td>x x x</td>
</tr>
<tr>
<td></td>
<td>BUOY 120</td>
<td></td>
<td></td>
<td>28 27</td>
<td>421</td>
<td>96 22</td>
<td>156</td>
<td></td>
<td>x x x</td>
</tr>
<tr>
<td></td>
<td>BUOY 121</td>
<td></td>
<td></td>
<td>28 27</td>
<td>178</td>
<td>96 22</td>
<td>636</td>
<td></td>
<td>x x x</td>
</tr>
<tr>
<td></td>
<td>BUOY 122</td>
<td></td>
<td></td>
<td>28 27</td>
<td>251</td>
<td>96 22</td>
<td>607</td>
<td></td>
<td>x x x</td>
</tr>
<tr>
<td></td>
<td>BUOY 124</td>
<td></td>
<td></td>
<td>28 27</td>
<td>97</td>
<td>96 22</td>
<td>1051</td>
<td></td>
<td>x x x</td>
</tr>
<tr>
<td></td>
<td>BUOY 125</td>
<td></td>
<td></td>
<td>28 26</td>
<td>1744</td>
<td>96 22</td>
<td>1345</td>
<td></td>
<td>x x x</td>
</tr>
<tr>
<td></td>
<td>BUOY 127</td>
<td></td>
<td></td>
<td>28 26</td>
<td>1439</td>
<td>96 23</td>
<td>516</td>
<td></td>
<td>x x x</td>
</tr>
<tr>
<td></td>
<td>BUOY 128</td>
<td></td>
<td></td>
<td>28 24</td>
<td>1837</td>
<td>96 23</td>
<td>934</td>
<td></td>
<td>x x x</td>
</tr>
<tr>
<td></td>
<td>BUOY 129</td>
<td></td>
<td></td>
<td>28 24</td>
<td>1467</td>
<td>96 22</td>
<td>1158</td>
<td></td>
<td>x x x</td>
</tr>
<tr>
<td></td>
<td>BUOY 130</td>
<td></td>
<td></td>
<td>28 24</td>
<td>1439</td>
<td>96 23</td>
<td>516</td>
<td></td>
<td>x x x</td>
</tr>
<tr>
<td></td>
<td>BUOY 131</td>
<td></td>
<td></td>
<td>28 26</td>
<td>1439</td>
<td>96 23</td>
<td>516</td>
<td></td>
<td>x x x</td>
</tr>
</tbody>
</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 Lena T. Stevens.

<table>
<thead>
<tr>
<th>STATE</th>
<th>CHARTING NAME</th>
<th>DESCRIPTION</th>
<th>SIGNAL NAME</th>
<th>LATITUDE</th>
<th>LONGITUDE</th>
<th>DATUM</th>
<th>METHOD OF LOCATION AND SURVEY NO.</th>
<th>DATE OF LOCATION</th>
<th>CHARTS AFFECTED</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Daybn. h1</td>
<td>Espiritu Santa Bay Ferry Channel</td>
<td></td>
<td>28.21</td>
<td>203.6</td>
<td>96.28</td>
<td>1379.7</td>
<td>1927</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Lt. h3</td>
<td></td>
<td></td>
<td>28.20</td>
<td>1778.6</td>
<td>96.28</td>
<td>1100.0</td>
<td>&quot;</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Daybn. h5</td>
<td></td>
<td></td>
<td>28.20</td>
<td>1518.7</td>
<td>96.28</td>
<td>859.6</td>
<td>&quot;</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Daybn. h7</td>
<td></td>
<td></td>
<td>28.20</td>
<td>1259.2</td>
<td>96.28</td>
<td>573.3</td>
<td>&quot;</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Daybn. h9</td>
<td></td>
<td></td>
<td>28.20</td>
<td>1005.6</td>
<td>96.28</td>
<td>316.4</td>
<td>&quot;</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Lt. 51</td>
<td></td>
<td></td>
<td>28.20</td>
<td>792.0</td>
<td>96.28</td>
<td>105.2</td>
<td>&quot;</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Daybn. 53</td>
<td></td>
<td></td>
<td>28.20</td>
<td>601.5</td>
<td>96.27</td>
<td>1541.5</td>
<td>&quot;</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Buoy 1</td>
<td>Pass Cavallo Lighted Whistle</td>
<td></td>
<td>28.19</td>
<td>100.2</td>
<td>96.23</td>
<td>1016.2</td>
<td>(T-9295)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Daybn. 39</td>
<td>Espiritu Santa Bay Ferry Channel</td>
<td></td>
<td>28.21</td>
<td>175.9</td>
<td>96.29</td>
<td>21.0</td>
<td>(T-9295)</td>
<td></td>
</tr>
</tbody>
</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 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 K. N. Maki

S. V. Griffith  
Chief of Party

<table>
<thead>
<tr>
<th>STATE</th>
<th>CHARTING NAME</th>
<th>DESCRIPTION</th>
<th>SIGNAL NAME</th>
<th>LATITUDE</th>
<th>LONGITUDE</th>
<th>DATUM</th>
<th>METHOD OF LOCATION AND SURVEY NO.</th>
<th>DATE OF LOCATION</th>
<th>CHARTS AFFECTED</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Lt. Matagorda Bay Range D Rear</td>
<td></td>
<td></td>
<td>38 27</td>
<td>37 96 21</td>
<td>54 1927</td>
<td>T-9264 Feb 1931</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* 4th ORDER CUTS FROM Δ STATIONS.

# Computations to be verified by Geodesy.

This position supersedes the position for the same light in Chart Letter No. 150 (1948) p. 20.

(Chart Lt. C-182 (1951))

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.
NONFLOATING AIDS OR LANDMARKS FOR CHARTS

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 S. J. Hathorn

<table>
<thead>
<tr>
<th>CHARTING NAME</th>
<th>DESCRIPTION</th>
<th>SIGNAL NAME</th>
</tr>
</thead>
<tbody>
<tr>
<td>BN &quot;1&quot;</td>
<td>PORT O'CONNOR DUMP DAY BEACON</td>
<td>L</td>
</tr>
</tbody>
</table>

This form has been

Demantd see A.P. No. 20

CHART LTR 66 (1952)

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 ________________________________

George E. Morris, Jr.

<table>
<thead>
<tr>
<th>STATE</th>
<th>TEXAS</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHARTING NAME</td>
<td>DESCRIPTION</td>
</tr>
<tr>
<td></td>
<td>MATAGORDA BAY BUOY 60,61,62,63,64, 65,67,68&amp;69.</td>
</tr>
<tr>
<td>SIGNAL NAME</td>
<td></td>
</tr>
<tr>
<td>POSITION</td>
<td></td>
</tr>
<tr>
<td>LATITUDE</td>
<td>LONGITUDE</td>
</tr>
<tr>
<td>0</td>
<td>D. M. METERS</td>
</tr>
<tr>
<td>1927</td>
<td>T-9284</td>
</tr>
</tbody>
</table>

OVERLAY WITH CHART LTR 66 (1952)

CHART LTR 66 (1952)

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
To:     Lieut. Comdr. George E. Morris  
U. S. Coast and Geodetic Survey  
N.A.S.  
Corpus Christi, Texas

Subject: Matagorda Island Army Air Base

In connection with the revision of T-5045 in project Ph-14, a question has come up as to whether the buildings are still in existence at Matagorda Island Army Air Base about 5 miles southwest of Pass Cavallo. We have information that the buildings at Matagorda Peninsula Airport have been dismantled and thought the same condition may be true at the Matagorda Island Base as it is listed as inoperative.

I thought perhaps you could obtain this information locally without too much trouble. It isn't important enough for anyone to make a trip up there.

We have completed the radial plot of the six sheets in the northwest part of Ph 36A and a started compilation on T-5175 and T-9168 and will started compilation on the others in a short time. The radial plot of the next four sheets to the eastward is also about completed. The plots have laid down very nicely with very little trouble with control.

Thos. E. Reed  
Officer in Charge  
Baltimore Photogrammetric Office

n/k
DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY
Airport Branch Post Office
Brownsville, Texas

6 October 1949

Mr. E. W. Wehmeyer,
State Game Supervisor,
Palacios, Texas

Dear Sir:

In connection with the revision of maps of Matagorda Island, a question has come up as to whether the buildings at the Matagorda Island Army Air Base are still standing. We have been informed that the buildings at Matagorda Peninsula Airport have been dismantled and this makes us wonder if the same is true at the Matagorda Island Base.

We will appreciate any information you may be able to give us concerning the conditions at the Matagorda Island Base.

Very truly yours,

/s/ George E. Morris, Jr.
Chief of Party

Corpus Christi, Texas
October 19th, 1949.

Gentlemen:

With reference to the above letter I understand that most of the buildings on Matagorda Island are still there.

However, the buildings have been moved from Matagorda Peninsula and at the present time there is an elaborate clubhouse built by a group of sportsmen near the old Tom Cherry place. There are a number of small buildings in connection with the clubhouse.

Yours very truly,

/s/ E. F. Wehmeyer, Supervisor,
Game, Fish & Oyster Commission.

W:K/k
To: The Director
U. S. Coast and Geodetic Survey
Washington 25, D. C.

Subject: Investigation of Aids to Navigation

Reference: Letter 76-rr dated 17 May 1950

A field investigation of aids to navigation was made from 12 June to 19 June 1950.

Existing Bureau triangulation stations were recovered and occupied with theodolite. Non-floating aids and landmarks were cut in from these stations. In a few instances where Bureau stations were not available, stations established by the U.S.E. were occupied. Stations were observed from either a ground set-up, or from a portable twelve foot tower.

In order to get third order positions of all fixed aids, it will be necessary to build towers, averaging 20 feet high, at all C&GS triangulation stations occupied. Some night observations will be needed in locating the U.S.E. stations used for control.

It is recommended that the present work be evaluated, and if additional work be required the entire party stop at Port Lavaca enroute to Mississippi to accomplish the work.

A rough plot on the U.S.E. "hard sheet" of Lavaca Channel indicates that our observations check U.S.E. positions of the lights. Of course, we depend on their positions of "DODO 2" and "1/27.6".

Floating aids and daybeacons have been located by sextant positions. This type of aid changes position frequently because of damage by heavy barge traffic. Daybeacons are knocked out and replaced in approximate position. Floating aids are often dragged off station. Many charted aids were not there at the time of field work.

The Aluminum Company of America has built a large plant at Point Comfort and a housing project called Point Comfort Village. Local authorities would not release plans showing building locations. These can be obtained only from the Pittsburg headquarters. The Point Comfort Works Tank and the Point Comfort Village Tank have been cut in by theodolite and are recommended for charting.
The Central Power and Light Company has constructed a 69,000 volt transmission line across Lavaca Bay at a location northwest and approximately parallel to the State Highway No. 35 causeway and approximately three miles northeast from Port Lavaca. The line has a 70 foot clearance above low tide opposite the draw span of the bridge. On demand from the U.S.E. District Engineer or his authorized representative the owner shall at his own expense remove or raise the lines to allow vessels to pass through the proposed channel over which the lines are placed.

This power line has been located by theodolite cuts and sextant fixes. It is sketched on the Port Lavaca aluminum mounted sheet.

All aids and landmarks north of Port Lavaca Channel Light 41 have been sketched on the Port Lavaca aluminum mounted sheet.

All aids and landmarks in Matagorda Bay have been sketched on double weight prints of T-9285 and T-9284.

Duplicate copies of recovery notes, form 526, are included for all stations searched for.

Original copies of descriptions of triangulation intersection station, form 525b, are included for all stations for which positions can be computed.

The wells and header platform in Matagorda Bay could not be seen from our ground stations. The Lavaca Pipe Line Company field engineer says that the header platform has a light on it. Platforms over the wells do not have lights. More wells are being drilled. A platform is built over each well and an underwater pipe laid to the header platform. An underwater pipe line has been laid from this header platform to the Point Comfort Works of the Aluminum Company of America. Piling are being driven along this pipe line. They will not be numbered but will have green reflectors on them. The geographic position of the header platform shown on one of the three blueprints showing this pipe line has been obtained from cuts taken from G&GS triangulation stations.

On one print we have identified piling along this pipe line with letters A through Q to clarify our theodolite and sextant cuts. Further work was not done because some of the beacons may be moved. They will be privately maintained.

Two plats showing the fence layout and pipe line right-of-way for the Point Comfort Works are included. No other plans could be obtained locally.

Lambert coordinates for U.S.E. stations and aids are included. If it is possible, the Resident Engineer of the Port Lavaca Field Office would like the positions of all aids computed from our field observations.

/S/ George E. Morris, Jr.
Commander, U.S.C.&G.S.
Chief of Party
48. **GEOGRAPHIC NAMES**

- Army Slip
- Barroom Bay
- Bayucos Island
- Bayucos Point
- Big Bayou
- Big Pocket
- Bill Days Reef
- Blackberry Island
- Cross Reef
- Decros Point
- Devils Elbow
- Espiritu Santo Bay
- Everett Reef
- Farwell Island
- Ferry Channel
- First Cut
- Fish Pond
- Grass Island
- Gulf of Mexico
- Intracoastal Waterway
- Lighthouse Cove
- Little Mary's Bayou
- Mailboat Channel
- Mailboat Point
- Matagorda Bay
- Matagorda Island
- Matagorda Peninsula
- Mule Slough
- Matagorda Island Field (Army)
- Pass Cavallo
- Pelican Island
- Port O'Connor
- Saluria Bayou
- Saluria Island
- Teller Point
- Teller Reef
- Whittaker Bayou

Names approved

1-12-51

A. J. W.

Geographic names were taken from names standards furnished by the Washington Office.
* Feature does not appear on the manuscript
** Feature appears not to exist on it is the same as Ferry Channel.
This name is not shown on the manuscript.
Review Report
Shoreline Manuscript T-9284
12 January 1951

62. Comparison with Registered Surveys.-

T-644 1:20,000 1857-59
T-6660 1:20,000 1938
T-5045 1:20,000 1934 (Used as base for T-9284)

T-9284 supersedes the above listed surveys for charting purposes.

63. Comparison with Maps of Other Agencies.-

USE Port O'Connor (tactical) 1:125,000, 1912-13,
rev. 1929, rep. 1942.
Not comparable as to date or scale.

64. Comparison with Contemporary Hydrographic Surveys.- None

65. Comparison with Nautical Charts.-


A. Charted obstructions not appearing on T-9284:
   1. Various pipes and piles in Espiritu
      Santo Bay, between Matagorda Island
      and the mainland, and east of Ferry
      Channel. No field verification was
      made.

B. Important changes made during review:
   1. Ferry Channel aids and Pass Cavallo
      Whistle buoy were relocated. A new
      form 567 was forwarded to Nautical
      Charts.

C. See Supplementary Review Report following this Report.

66. Accuracy.- This map manuscript is adequate for charting
purposes.

Reviewed by:

[Signature]
 Lena T. Stevens

APPROVED

[Signature]
 S. V. Giffin
 Chief, Review Section
 Div. of Photogrammetry

[Signature]
 Chief, Nautical Chart Branch
 Division of Charts

[Signature]
 O. S. Reading
 Chief, Div. of Photogrammetry

[Signature]
 Chief, Div. of Coastal Surveys
SUPPLEMENT TO REVIEW REPORT
for
SHORELINE MANUSCRIPT T-9284
18 February 1952

This supplement covers a field investigation of aids to
navigation made by George E. Morris, Jr., in June 1950.
This investigation was subsequent to the original field work,
reported in Chart Letter 150(1948) by Ross A. Gilmore, and
was necessitated because the original planestable location of
aids in 1948 at 1:40,000 scale did not agree with the charted
channels or with the radially plotted positions of aids from
photographs.

67. LANDMARKS AND AIDS

Matagorda Bay Range "D" Rear Light was located by
4th-order theodolite observations from triangulation stations,
computed on the Texas South Central State Coordinate System,
and plotted on the manuscript after construction of a 10,000-
foot interval grid. The geographic position was reported in
Chart Letter 182(1951).

Port O'Connor Dump Daybeacon 1 and Matagorda Bay Buoys
60 to 65 and 67 to 69, incl., were located by sextant positions
and plotted on the manuscript with a three-arm steel protractor.
All fixes were reasonably strong and at least one check angle
was provided for each aid. Positions for these aids were
reported in Chart Letter 66 (1952).

The light buoys located in Matagorda Bay falling on
this page are numbers 60, 61, 62, 63, 64, 65, 67, 68 and 69.
No mention was made of a light number 66. The

Submitted by: [Signature]

Stanley J. Hathorn
Reviewer

Shirley V. Griffith
Chief, Review Section
Division of Photogrammetry
## Record of Application to Charts

<table>
<thead>
<tr>
<th>DATE</th>
<th>CHART</th>
<th>CARTOGRAPHER</th>
<th>REMARKS</th>
</tr>
</thead>
<tbody>
<tr>
<td>8-7-51</td>
<td>889</td>
<td>D. Henderson</td>
<td>Before Verification and Review</td>
</tr>
<tr>
<td>8-12-53</td>
<td>1294</td>
<td>Henderson</td>
<td>Before  After  Verification and Review</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Before  After  Verification and Review</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Before  After  Verification and Review</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Before  After  Verification and Review</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Before  After  Verification and Review</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Before  After  Verification and Review</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Before  After  Verification and Review</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.