<table>
<thead>
<tr>
<th>Field No.</th>
<th>Office No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ph-36(48)F</td>
<td>T-9217</td>
</tr>
</tbody>
</table>

**Type of Survey**  
PLIMETRIC

**State**  
TEXAS

**General Locality**  
LAGUNA MADRE

**Locality**  
THREE ISLANDS TO ARROYO COLORADO CUTOFF

**1947 52**

**CHIEF OF PARTY**  
G.E. Morris, Jr. Chief of Field Party.  
A.L. Wardwell, Tampa Photogrammetric Office

**DATE**  
Dec 17-1953

**LIBRARY & ARCHIVES**
DATA RECORD

Project No. (II): Ph-36(48)F     Quadrangle Name (IV):

Field Office (II): Brownsville, Texas     Chief of Party: George E. Morris, Jr.
Photogrammetric Office (III): Tampa, Florida     Officer-in-Charge: Arthur L. Wardwell
Instructions dated (II) (III): 14 February 1949

Method of Compilation (III): Graphic

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

Scale Factor (III): None

Date received in Washington Office (IV): 9 March 1951    Date reported to Nautical Chart Branch (IV): NOV 15 1951

Applied to Chart No. 877    Date:    Date registered (IV): 8-18-53

Publication Scale (IV): Not to be published Publication date (IV):

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

Reference Station (III): LUTTIS, 1939

Lat.: 26°15'37.856 (1165.0M)    Long.: 97°19'40.965 (1136.7M)    Adjusted

Plane Coordinates (IV):    State:    Zone:

Y =    X =

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.

Form T- Page 1
Areas contoured by various personnel
(Show name within area)
(II) (III)
DATA RECORD

Field Inspection by (II): W. H. Nelson
J. H. Clark
W. M. Reynolds

Date: April - June 1950
July 1950
July 1950

Planetable contouring by (II): Inapplicable

Completion Surveys by (II): W. M. Sheardose

Date: 18 March 1952

Storm and Mean High Water Location (III) (State date and method of location):

Air Photo Compilation

Date: 14 July 1950

Projection and Grids ruled by (IV): S. R. (W.O.)

Date: 18 Sept. 1950

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

Date: 18 Sept. 1950

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

Date: 19 Jan. 1951

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

Date: 30 Jan. 1951

Radial Plot by (III): M. M. Slavney

Date: 22 Mar. 1951

Stereoscopic Instrument compilation (III): Inapplicable

Date:

Contours

Date:

Manuscript delineated by (III): R. Dossett

Date: 20 Aug. 1951

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

Date: 31 Oct. 1951

Elevations on Manuscript checked by (III): J. A. Giles

Date: 30 Oct. 1951
<table>
<thead>
<tr>
<th>Number</th>
<th>Date</th>
<th>Time</th>
<th>Scale</th>
<th>Stage of Tide</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>25736</td>
<td>May 4, 1950</td>
<td>1406</td>
<td>1:20,000</td>
<td>No tide</td>
<td></td>
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<tr>
<td>25737</td>
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<td>1407</td>
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<td>25738</td>
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<td>1408</td>
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<td></td>
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<td>48-0-1425</td>
<td>Dec. 8, 1948</td>
<td>1426</td>
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<tr>
<td>1426-1427</td>
<td></td>
<td>1427</td>
<td></td>
<td></td>
<td>Range of tide is less than 1/2 foot</td>
</tr>
<tr>
<td>1428</td>
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<td>1469-1470</td>
<td></td>
<td>1509</td>
<td></td>
<td>Tide (III)</td>
<td></td>
</tr>
</tbody>
</table>

Reference Station: Inapplicable
Subordinate Station: Subordinate Station: Washington Office Review by (IV): C. Hanovich
Final Drafting by (IV): E. C. Hanover
Drafting verified for reproduction by (IV): W. A. Thomas
Proof Edit by (IV): L. S. Thomas

Land Area (Sq. Statute Miles) (III): 14
Shoreline (More than 200 meters to opposite shore) (III): 39
Shoreline (Less than 200 meters to opposite shore) (III): 0.0
Control Leveling - Miles (II): 0.0
Number of Triangulation Stations searched for (II): 20 Recovered: 20 Identified: 13
Number of BMs searched for (II): 14 Recovered: 13 Identified: 11
Number of Recoverable Photo Stations established (III): 2.0
Number of Temporary Photo Hydro Stations established (III): 0.0

Remarks:

Date: 31 July 1952
Date: 6-11-53
Date: 6-10-53
Date: 7-6-53
Project Ph-36(46) consists of fifty-two quadrangles at 1:24,000, each 7.5 minutes in latitude and longitude, covering the Gulf Coast of Texas and the Intracoastal Waterway from Aransas Bay to Brownsville and the Mexican Border. Adjoining the project to the north is a series of shoreline surveys in Part IV of Project Ph-14(46).

Information concerning Ph-36(46) in its broader aspects will be included in a project completion report to be compiled at the conclusion of the review of all surveys in this project.

Topographic of the quadrangles in this project are topo graphic surveys and are to be published at 1:24,000 scale by the Geological Survey. The other twenty-six quadrangles are photometric surveys. Of these, nineteen are to be used as bases by the Geological Survey for the compilation of 7.5 minute topographic quadrangles and will not be published as photometric maps. The remaining surveys, T-9127, T-9128, T-9129, T-9131, T-9169, T-9204, and T-9206, will be published as photometric maps.

The published lithographic prints of the original topographic quadrangles at compilation scale and the descriptive materials for all maps in this project will be filed in the bureau archives. Cloth-bound copies of the published topographic quadrangles at 1:24,000 scale will also be filed.

All special reports, except the Geographic Names Report, will be filed in the Project Completion Report.
2. **AREAL FIELD INSPECTION**

This area lies in the southern portion of Laguna Madre and just south of the mouth of Arroyo Colorado.

The greater part of the area is the Laguna Madre. The remainder is mud and sand flats, a few islands, and a narrow band of the mainland.

Cattle ranching, vegetable and cotton farming, are the chief industries, with cotton being the most important crop.

No difficulty was encountered when interpreting the photographs. Tone graduations vary from white to black. The white tones are spoil dumps, sand areas, and sand and mud flats; light gray tones are sand and mud flats with mud predominating, and light grassy areas; dark gray tones are grass covered areas which are flooded at times, areas of low mesquite and huisache and some intermittent ponds; the black tones are water or low grassy areas which contained water at the time of photography.

Interior field inspection was done on nine lens photograph No. 25737 and single lens photograph No. 48-0-1469.

3. **HORIZONTAL CONTROL**

The following are triangulation stations established by this party as supplemental control, aids to navigation, or supplemental stations needed to locate aids to navigation, using third-order methods: HORSE (USE) 1950; BUENA VISTA WINDMILL 1949; HARLINGEN ENTRANCE LIGHT 10 1950; CORPUS CHRISTI-PORT ISABEL LIGHT 326 1949; HARLINGEN-PORT ISABEL LIGHT 2 1949; HARLINGEN-PORT ISABEL LIGHT 9 1950; HARLINGEN-PORT ISABEL LIGHT 19 1950; HARLINGEN-PORT ISABEL LIGHT 29 1950; HARLINGEN-PORT ISABEL LIGHT 39 1950; HARLINGEN-PORT ISABEL LIGHT 49 1950.


Two stations, COLORADO 1879 and ARMADILLO 2 1913, were reported lost. The reference mark at each of these stations was recovered and identified for control of the radial plot.

The following traverse stations were established by the agencies as indicated. No datum adjustments of any kind were made: DOVE USE 1947; RLL ARROYO COLORADO USE 1947; RLL ARROYO COLORADO USE 1947; JBL 14 USGS; JBL 25 USGS; JBL 26 USGS; JBL 27 USGS.

Horizontal control was identified on the following single lens 1:20,000 scale, field photographs: 48-0-1456, 48-0-1457, 48-0-1458, 48-0-1459, and 48-0-1469.

Datum corrections were applied to the stations underlined in red to transpose them from the N.G. to the N.A. 1927 datum.
4. VERTICAL CONTROL

The following are second-order bench marks established by the G&GS which were recovered: X 675, Y 675, Z 675, N 676, P 676, Q 676, LUTTES TRIANGULATION STATION, LUTTES RM NO 1, LUTTES RM NO 2, JBL 14(USGS), JBL 26(USGS).

The following are bench marks of the USGS, accuracy unknown, which were recovered: JBL 25 1929, JBL 27 1929.

As this is a planimetric quadrangle, no additional levels were run.

Bench marks were identified on the following 1:20,000 scale, single lens, ratio field photographs: 48-0-1456 through 48-0-1459.

5. CONTOURS AND DRAINAGE

No contouring was done as this is a planimetric quadrangle.

There is no prominent drainage system. All drainage is intermittent.

6. WOODLAND COVER

There are a few small areas of growth classified as "TM". Along the Laguna Madre a few areas are covered by mesquite, cactus, and huisache, and was classified "Scrub". Otherwise, the area is either under cultivation or is grass covered.

7. SHORELINE AND ALONGSHORE FEATURES

For mean high water line and mean low water line, see "Special Report, Identification and Delineation of the Shoreline of Laguna Madre, Project Ph-36(48)."

For practically the entire length, an earth bank parallels the Laguna Madre, and varying in elevation from 4 to 15 to 20 feet at the top edge.

8. OFFSHORE FEATURES

There are no offshore features.

9. LANDMARKS AND AIDS

There are no landmarks for nautical charts or aeronautical aids.

For fixed aids to navigation, see "Special Report, Supplemental Third Order Control and Aids to Navigation, Project Ph-36(48), Baffin Bay to Arroyo Colorado", and "Special Report, Aids to Navigation, Project Ph-36(48), Arroyo Colorado to Brazos Santiago."
10. BOUNDARIES, MONUMENTS, AND LINES

Seven boundary monuments of a U. S. Fish and Wildlife Service Game Refuge were recovered and identified on photographs as follows:

<table>
<thead>
<tr>
<th>MONUMENT</th>
<th>PHOTOGRAPH NO.</th>
</tr>
</thead>
<tbody>
<tr>
<td>NO 5 TRACT 48A</td>
<td>48-0-1456</td>
</tr>
<tr>
<td>NO 7 TRACT 48</td>
<td>48-0-1456</td>
</tr>
<tr>
<td>NO 16</td>
<td>48-0-1459</td>
</tr>
<tr>
<td>NO 17</td>
<td>48-0-1458</td>
</tr>
<tr>
<td>NO 18</td>
<td>48-0-1458</td>
</tr>
<tr>
<td>NO 19</td>
<td>48-0-1458</td>
</tr>
<tr>
<td>NO 20 COR 2 TRACT 48</td>
<td>48-0-1458</td>
</tr>
</tbody>
</table>

11. OTHER CONTROL

Two recoverable topographic stations, U. S. Fish and Wildlife Service Boundary Monument No. 18 and SLAM 1950, were identified on photographs 48-0-1458 and 48-0-1470, respectively.

12. OTHER INTERIOR FEATURES

All roads are classified according to Photogrammetry Instructions No. 10, dated 14 April 1947, as amended 24 October 1947.

Buildings are classified according to Photogrammetry Instructions No. 29, dated 1 October 1948.

13. GEOGRAPHIC NAMES

See "Special Report, Geographic Names, Project Ph-36(48), Port Mansfield (Red Fish Landing) to the Rio Grande."

14. SPECIAL REPORTS AND SUPPLEMENTAL DATA


Form 567, forwarded to Baltimore Office 17 July 1950 on letter of transmittal Ph-36 Field 71.


"Special Report, Identification and Delineation of the Shoreline of Laguna Madre, Project Ph-36(48)", to be forwarded at a later date.

Data, Quadrangle T-9217( ), forwarded to Baltimore Office 28 July 1950, on letter of transmittal Ph-36 Field 78.

Submitted
26 July 1950

James H. Clark
Cartographic Survey Aid

Approved
28 July 1950

George E. Morris, Jr.
Chief of Party
PHOTOGRAHMETRIC PLOT REPORT.

Submitted with T-9220.

31. DELINEATION.

The graphic method was used. The scale of the single-lens photographs was good. The scale of the nine-lens photographs was poor and the projector was used in the delineation of the shoreline which was taken from them.

The field inspection was adequate.

32. CONTROL.

Sufficient secondary control was established and placement was such that no difficulty was encountered in securing detail points. 2 Form N-2389-12 for T-9217 are enclosed in the Descriptive Report for T-9220.

33. SUPPLEMENTAL DATA.

None.

34. CONTOURS AND DRAINAGE.

The drainage was delineated as shown by field inspection on the photographs.

Contours are inapplicable.

35. SHORELINE AND ALONGSHORE DETAILS.

The shoreline inspection was adequate.

All shoreline and alongshore details have been shown according to field inspection.

Reference is made to Item 7 for further information relative to shoreline.

36. OFFSHORE DETAILS.

None.
37. **LANDMARKS AND AIDS.**

No statement required.

38. **CONTROL FOR FUTURE SURVEYS.**

Two (2) topographic stations are being submitted on Form 524. These topographic stations have been listed and included under Item 49.

39. **JUNCTIONS.**

A satisfactory junction has been made with T-9214 on the north, T-9216 on the west, T-9218 on the east and T-9219 on the south.

40. **HORIZONTAL AND VERTICAL ACCURACY.**

No statement required.

41. **BOUNDARIES.**

The limits of LAGUNA ATASCOSA NATIONAL WILDLIFE REFUGE were reduced by pantograph from a plat made by the Department of the Interior and furnished the Tampa Office by the field party. This reduction was controlled by recovered monuments and features such as roads, fences and the like, visible on the photographs.

46. **COMPARISON WITH EXISTING MAPS.**

A comparison was made with topographic quadrangle BUENA VISTA, TEXAS, U. S. GEOLOGICAL SURVEY scale 1:31,680, edition of 1935, reprinted 1945. No comparison with the M. H. W. L. was made because the storm water line has been shown on the manuscript in its stead. Otherwise no outstanding differences were noted.
47. COMPARISON WITH NAUTICAL CHARTS.

Comparison was made with U. S. C. & G. S. Nautical Chart No. 1288, published September 1941 and corrected to 13 October 1950.

The shoreline as shown on the chart compares favorably with the storm water line except for a small area just north of "Arroyo Colorado Cutoff" which seems to have filled.

ITEMS TO BE APPLIED TO NAUTICAL CHARTS IMMEDIATELY.

None.

ITEMS TO BE CARRIED FORWARD.

None.

APPROVED AND FORWARDED:

[Signature]
Rudolph Dossett
Carto. Photo. Aid

[Signature]
Arthur L. Wardwell,
Chief of Party
48. GEOGRAPHIC NAME LIST.

- ARROYO COLORADO CUTOFF
- BUENA VISTA RANCH
- CALLO ATASCOA
- CAMERON COUNTY
- COLORADO ISLAND
- COMMISSIONERS PRECINCT NO. 1
- EAST PASTURE
- EL MORRO
- HERON ISLAND
- HOBNAIL ISLAND
- HORSE ISLAND
- INTRACOASTAL WATERWAY
- LAGUNA MADRE
- LAGUNA ATASCOSA
- LAGUNA ATASCOSA NATIONAL WILDLIFE REFUGE
- MG GILVERI ISLAND
- RATTLE SNAKE ISLAND
- RED HEAD BLUFF
- RED HEAD COVE
- RESACA DE LOS CUATES
- RINCON BUENA VISTA
- RINCON DE GUAJARDO

TEXAS
THREE ISLANDS
TOWN SITE POINT

NORTH POINT (names report has North Pt.)

Names underlined in red are approved. 7-31-52
L. Heck
49. NOTES FOR THE HYDROGRAPHER.

Following is a list of topographic stations that may be useful to the hydrographer:

SLAM, 1950

U. S. FISH & WILDLIFE SERVICE

BOUNDARY MON. NO. 18, 1950

LUTTES AZ MK (1939), 1950 (Form 529 was not submitted for this star).
51. Methods.—All roads were travelled by truck to check their classification and to answer questions raised by the reviewer. At the same time all other planimetric features were verified as to their existence and classification. Boundaries and Geographic Names were checked with the manager of the Wildlife Refuge.

Deletions, additions and corrections were made on the Field Edit Sheet, Discrepancy Print and photographs 48-0-1456, 1457 and 1458.

Violet ink was used for additions and corrections; green for deletions.

52. Adequacy of compilation.—In general the compilation appears to be very good and will be complete after application of field edit information.

53. Map accuracy.—No accuracy test was specified. From visual inspection only, the horizontal accuracy of the map details appears good.

54. Recommendations.—None offered.

55. Examination of proof copy.—It is recommended that the proof copy of the map be sent to Mr. Luther C. Goldman, Manager, Laguna Atascosa National Wildlife Refuge, U. S. Post Office Building, San Benito, Texas, for examination.

Geographic names.—Two discrepancies in charted names were noted.

It is recommended that the name WORTH POINT be changed to NORTH POINT. It applies to an entire peninsula, not one point of land as shown on the map manuscript. The name has been correctly placed on the Field Edit Sheet. The authority for this correction is the Manager of the Laguna Atascosa National Wildlife Refuge and other local citizens. It is also noted that NO. PT. is recorded on name sheet No. 1 of the Geographic Names Report (Fort Mansfield to the Rio Grande).

The name mapped CALLO ATASCOSO should be changed to CAYO ATASCOSA. Local authorities agree that CAYO more nearly fits the feature, as it is translated "shoal" whereas CALLO means "callus", "corn" or "bunion". The final letter "A" is recommended instead of "O" to agree with the spelling of Laguna Atascosa and Laguna Atascosa National Wildlife Refuge.

Respectfully submitted,
19 March 1952

William H. Shearouse
Cartographer
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

Rudolph Dossett, Tampa Photogrammetric Office

Arthur L. Wardwell Chief of Party

<table>
<thead>
<tr>
<th>STATE</th>
<th>TEXAS</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHARTING NAME</td>
<td>DESCRIPTION</td>
</tr>
<tr>
<td>LT. 10</td>
<td>HARLINGEN ENTRANCE - red triangular daymark with yellow borders on four pile dolphin, 20 ft. high</td>
</tr>
<tr>
<td>T. 326</td>
<td>CORPUS CHRISTI - PORT ISABEL. Red triangular daymark with yellow border on 3 pile dolphin 17 ft. high</td>
</tr>
<tr>
<td>T. 2</td>
<td>HARLINGEN-PORT ISABEL. Red triangular daymark with yellow border on 3 pile dolphin 17 ft. high</td>
</tr>
<tr>
<td>T. 9</td>
<td>HARLINGEN-PORT ISABEL. Black square daymark with yellow borders on a pile dolphin 17 ft. high</td>
</tr>
<tr>
<td>T. 19</td>
<td></td>
</tr>
<tr>
<td>T. 29</td>
<td></td>
</tr>
<tr>
<td>T. 39</td>
<td></td>
</tr>
<tr>
<td>T. 49</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...
PHOTOGAMMETRIC OFFICE REVIEW


CONTROL STATIONS


ALONGSHORE AREAS

(Nautical Chart Data)


PHYSICAL FEATURES


CULTURAL FEATURES


BOUNDARIES

31. Boundary lines J.G.

MISCELLANEOUS


40. Jesse A. Giles

Reviewer

William A. Rasure

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

43. Remarks:
62. Comparison with Registered Topographic Surveys:

T-1476 A & B  
(1879-80)  
1:20,000

The Intracoastal Waterway, including other cultural features, have been constructed since the old surveys.

The old topographic surveys are superseded by the new map (T-9217) for nautical charting.

63. Comparison with Maps of Other Agencies:


The Intracoastal Waterway does not appear on the USGS map.

64. Comparison with Contemporary Hydrographic Surveys:

None

65. Comparison with Nautical Charts:

Chart No. 1288, 15 January 1951, 1:80,000

(See Item 47.)

66. Adequacy of Results and Future Surveys:

This map complies with the project instructions and the National Map Accuracy Standards.

Water stages in this area vary widely with meteorological conditions. In view of this, it was decided to omit the high-water line where it is indefinite and unmarked by visible evidence on the ground, and in its place to indicate by a broken line symbol the approximate limits of areas which were subject to inundation. This decision was arrived at mainly for these reasons:

(1) The difficulty encountered in identifying the MHW line from photographs of this area as well as other similar areas throughout the project.

(2) It was considered impractical to resolve this situation by extensive leveling.

For a more detailed study and investigation of this problem, refer to the completion report which will be submitted when the review of the surveys on this project has been completed.

The reasons and the decision reached in adopting the special treatment accorded to the shoreline delineation are discussed in the pages of correspondence and instructions attached to the Descriptive Report for T-9214.

Reviewed by:

Charles Hanavich
Approved by:

[Signature]  [Signature]
S.J. Sheffield  H. Elderston
Chief, Review Section  Chief, Nautical Chart Branch
Division of Photogrammetry

[Signature]  [Signature]
D.J. Kennedy  Earl O. Hutton
Chief, Div. of Photogrammetry  Chief, Div. of Coastal Survey
## NAUTICAL CHARTS BRANCH

**SURVEY NO. T-9217**

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></td>
<td>897</td>
<td>GEARHART</td>
<td>Before ** After** Verification and Review</td>
</tr>
<tr>
<td>5-18-59</td>
<td>1288</td>
<td>A.J. Hoffman</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.