Form 504

U. S. COAST AND GEODETIC SURVEY
DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey PLANIMETRIC

Field No. Ph-36(48)F Office No. T-9219

LOCALITY

State TEXAS

General locality LAGUNA MADRE

Locality STOVER COVE TO LAGUNA VISTA COVE

19452

CHIEF OF PARTY

G.E.Morris, Jr., Chief of Party.
A.L.Wardwell, Tampa Photogrammetric Office.

LIBRARY & ARCHIVES

DATE NOV 3 - 1953
DATA RECORD

T-9219

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

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 1950

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 (III): Nov 14 1951 Date reported to Nautical Chart Branch (IV): Nov 20 1951

Applied to Chart No. 897 Date: 898 Date registered (IV): 7-30-53

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

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

Reference Station (III): BAYVIEW 1947

Lat.: 26° 09' 07".677 (236.3M) Long.: 87° 21' 01".095 (30.4M) Adjusted

Plane Coordinates (IV):

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.
Areas contoured by various personnel
(Show name within area)

(II) (III)
DATA RECORD

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

Date: July 1950  
Dec 1949.  
May-June 1950.

Planetable contouring by (II): Inapplicable

Date:

Completion Surveys by (II): W. H. Shearouse

Date: 21 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): T. L. J. (W.O.)

Date: 18 Sept. 1950

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

Date: 20 Sept. 1950

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

Date: 24 Jan. 1951

Control checked by (III): M. M. Slavney

Date: 8 Feb. 1951

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

Date: 23 Mar. 1951

Planimetry

Stereoscopic Instrument compilation (III): Inapplicable

Contours

Date:

Manuscript delineated by (III): R. R. Wagner

Date: 26 Oct. 1951

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

Date: 6 Nov. 1951

Elevations on Manuscript

checked by (IV) (III): R. R. Wagner

Date: 26 Oct. 1951
U.S.C.&G.S. Nine-Lens Camera 8½'' focal length
Fairchild Cartographic 6'' Metrogon lens, Camera "O"

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Tide (III):

- No-Tide

Reference Station:
Subordinate Station:
Subordinate Station:

Washington Office Review by (IV): C. Hanavich

Final Drafting by (IV): G. M. Greene 10/1952

Drafting verified for reproduction by (IV): Vander

Proof Edit by (IV): M. Hagenfeld

Land Area (Sq. Statute Miles) (III): 37
Shoreline (More than 200 meters to opposite shore) (III): 23
Shoreline (Less than 200 meters to opposite shore) (III): 5
Control Leveling - Miles (II): 0.0
Number of Triangulation Stations searched for (II): 21 (2) Recovered: 12 (2) Identified: 8 (2)
Number of BMs searched for (II): 29 (2) Recovered: 14 (2) Identified: 14 (2)
Number of Recoverable Photo Stations established (III): 2
Number of Temporary Photo Hydro Stations established (III): none

Remarks: Number in parenthesis indicates number of stations or bench marks outside quadrangle area.
Project Ph-36(48) consists of fifty-two quadrangles at 1:20,000, 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(48) 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.

Twenty-six of the quadrangles in this project are topographic surveys and are to be published at 1:24,000 scale by the Geological Survey. The other twenty-six quadrangles are planimetric 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 planimetric maps. The remaining seven, T-9175, T-9176, T-9177, T-9161, T-9169, T-9201, and T-9206, will be published as planimetric maps.

Cloth-backed lithographic prints of the original map manuscripts at compilation scale and the descriptive reports for all maps in this project will be filed in the Bureau Archives. Cloth-backed copies of the published topographic quadrangles at 1:24,000 scale will also be filed.

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

This area lies near the south end of the Laguna Madre, and on the west side of that body of water. Slightly more than half of the area is land, the balance being a part of the Laguna Madre.

Cattle raising, and some agricultural pursuits are to be found, the chief crops being cotton, citrus fruits, and flax.

Photographic interpretation was fairly easy, the various photographic tones being quite clear. Tones are graduated, through white to black. White areas are spoil dumps, sand areas, sand and mud flats, and, at the Laguna Madre Airbase, the concrete runways show up white. Light gray tones are sand and mud flats having a larger proportion of mud, light grassy areas, and some cultivated fields. The darker gray areas are usually grass covered, both near the shoreline and farther inland, certain other cultivated areas and some ground covered with low mesquite scrub. Black tones include water, low areas covered with water at the time of photography, individual trees, as in the citrus groves bordered by palm trees, and huisache.

Field inspection was accomplished on the following seven single lens ratio prints: 48-0-1452 through 48-0-1455, and 48-0-1471 through 48-0-1473.

3. HORIZONTAL CONTROL

The following additional horizontal control was established by this party as supplemental control and aids to navigation: WINDMILL SW OF LUTTES 1949, HARLINGEN-PORT ISABEL LIGHT 59 1950, HARLINGEN-PORT ISABEL LIGHT 69 1950, HARLINGEN-PORT ISABEL LIGHT 79 1950, and HARLINGEN-PORT ISABEL LIGHT 89 1950.


The following nine stations are reported lost: BANK 1913, JBL 9 USGS, JBL 10 USGS, JBL 12 1929 USGS, JBL 18 1929 USGS, JBL 22 USGS, JBL 23 USGS, JBL 24 USGS, and NO 2H 1929 USGS.

There are two remaining traverse stations established by USGS, JBL 13 USGS, and JBL 19 USGS. No datum adjustments were made; these stations were transferred from the N.A. Datum to the N.A. 1927 Datum by applying a datum correction. One station was identified on single lens contact print No. 48-0-1984. Other stations were identified on the following single lens ratio prints, 1:20,000 scale: 48-0-1431, 48-0-1433, 48-0-1453, 48-0-1455, and 48-0-1472.

* Port Isabel Municipal Airport
4. VERTICAL CONTROL

The following second order bench marks of the C&GS were recovered by this field party: JBL 13 1929(USGS), S 676, T 676, U 676, V 676, W 676, X 676, F 677, and G 677.

The following bench marks of the USGS, accuracy unknown, were recovered: JBL 19 USGS, U 16(C.Co.)USGS, U 17(C.Co.)USGS, U 18(C.Co.)USGS, and U 20(C.Co.) USGS. No datum adjustments were made.

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

Bench marks are identified on the following single lens ratio prints: 48-0-1452, 48-0-1453, 48-0-1454, 48-0-1455, and 48-0-1472.

5. CONTOURS AND DRAINAGE

No contouring was performed as this is a planimetric quadrangle.

Some irrigation is accomplished in the area by pumping water from the resacas into the numerous ditches. Actual drainage, as such, can be construed to exist only during the storm, or flood season. That season is relatively short in duration, and at such times, the drainage is taken care of by those same ditches and resacas. The photographs show quite clearly those resacas, reservoirs, and small portions of other resacas which contain water permanent-

ly. The permanently standing water shows smooth, without grass. Some resacas are so filled with grass as to show they are dry much of the time. None of the resacas in this area are flowing streams. Their stream beds, in most cases, are intermittent, covered with grass, and classified as marsh.

6. WOODLAND COVER

Except for the citrus groves and bordering palm trees, all trees in the area are of the low, mesquite scrub variety. These areas, where dense enough, are designated by the symbol "S". Some clearing of the scrub has been done since photography in the northwest portion of the area.

7. SHORELINE AND ALONGSHORE FEATURES

For shoreline information in the north portion of the quadrangle, see "Special Report, Identification and Delineation of the Shoreline of Laguna Madre, Project Ph-36(48)."

In the southern portion of the quadrangle, delineation of the shoreline is shown on the SW quarter of nine lens photograph No. 25735. The mean high water line is so close to the mean low water line that they are indicated on the photographs as being identical. The storm water line is also shown, in blue ink.

A comparatively steep bank varying in height from 3 feet to a bluff of 25 feet extends along most of the shoreline.
8. OFFSHORE FEATURES

There are no offshore features.

9. LANDMARKS AND AIDS

See copies of Figs. 567 in this report.

One landmark in the area is recommended for charts.

For fixed aids to navigation, see "Special Report, Aids to Navigation, Project Ph-36(48), Arroyo Colorado to Brazos Santiago."

10. BOUNDARIES, MONUMENTS, AND LINES

See "Special Report, Boundaries, Project Ph-36(48), Baffin Bay to the Rio Grande."

One boundary monument of a U. S. Fish and Wildlife Service Game Refuge was recovered in the area, and identified on photograph No. 48-0-1455.

11. OTHER CONTROL

Two recoverable topographic stations, GULL and TERN, were established and identified on photographs 48-0-1471 and 48-0-1473 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.

There is one airfield in the area, Port Isabel Municipal Airport. This is shown on photograph 48-0-1453.

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, Landmarks, to be forwarded at a later date.


"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-9219( ), forwarded to Baltimore Office 15 August 1950, on letter of transmittal Ph-36 Field 83.

Submitted
7 August 1950

James H. Clark
Cartographic Survey Aid

Approved
15 August 1950

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

Submitted with T-9220

31. DECLINATION.

The graphic method of compilation was used.

The field inspection was good. A few discrepancies were noted on the discrepancy overlay.

32. CONTROL.

A sufficient number of secondary control points was established by the radial plot and no difficulty was encountered in cutting in additional detail points.

33. SUPPLEMENTAL DATA.

None.

34. CONTOURS AND DRAINAGE.

Contours are inapplicable.

No difficulty was encountered in the delineation of drainage.

35. SHORELINE AND ALONGSHORE DETAILS.

No difficulty was encountered in delineation of the shoreline or the adjacent area.

36. OFFSHORE DETAILS

No statement.
37. **LANDMARKS AND AIDS.**

No statement.

38. **CONTROL FOR FUTURE SURVEYS.**

Two (2) recoverable topographic stations have been shown on the manuscript and Form 524 submitted for each.

A list of these stations has been prepared for the hydrographer and included in Item 49.

39. **JUNCTIONS.**

T-9217 - to the north; in agreement.
T-9220 - to the east; in agreement.
T-9221 - to the south; in agreement.
To the west, Laguna Atascosa, scale 1:31,680, dated 1929.

Due to the date of the quadrangle, a junction could not be made.

40. **HORIZONTAL AND VERTICAL ACCURACY.**

No statement.

46. **COMPARISON WITH EXISTING MAPS.**

Comparison was made with La Coma, Texas. Quadrangle scale 1:31680, dated 1929. The agreement was good with respect to major features.
47. **COMPARISON WITH NAUTICAL CHARTS.**

Comparison was made with U. S. C. & G. S. Nautical Chart No. 1288, scale 1:80,000, edition of 1941, and corrected to 13 October 1950. The manuscript and chart are in reasonably good agreement.

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

None.

**ITEMS TO BE CARRIED FORWARD.**

None.

![Signature]

Robert R. Wagner  
Carto. Photo. Aid

**APPROVED AND FORWARDED:**

![Signature]

Arthur L. Wardwell  
Chief of Party
48. GEOGRAPHIC NAME LIST.

ABNEY

BARCLAY ISLAND
BEUNA VISTA ROAD
BEUNA VISTA SCHOOL
BOX RANCH

CAMERON COUNTY
COMMISSIONERS PRECINCT NO. 1
COYOTE POINT

EAST PASTURE

GABRIELSON ISLAND
GRANLENO RANCH

HOLLY BEACH
HORSESHOE LAKE

INTRACOASTAL WATERWAY

LA COMA RANCH
LAGUNA ATASCOSA
LAGUNA ATASCOSA NATIONAL WILDLIFE REFUGE
LAGUNA DE LOS PATOS
LAGUNA MADRE
LAGUNA VISTA COVE
LOMA LA JAUJA

MISSOURI PACIFIC R. R.
MORANCO BLANCO

PORT ISABEL MUNICIPAL AIRPORT
RESACA DE LOS GUATES
RESACA DE LA GRINGA

STATE 510
STOVER COVE
STOVER POINT

TEXAS

Names underlined in red are approved.
8-11-52
L. Heek
49. NOTES FOR THE HYDROGRAPHER

The following are topographic stations which may be useful to the hydrographer:

GULL 1950
TERN 1950
PHOTOGRAMMETRIC OFFICE REVIEW

T-9219


CONTROL STATIONS

5. Horizontal control stations of third-order or higher accuracy M.M.G.  6. Recoverable horizontal stations of less than third-order accuracy (topographic stations) J.G.  7. Bench marks J.G.


ALONGSHORE AREAS

(Nautical Chart Data)


PHYSICAL FEATURES


CULTURAL FEATURES


BOUNDARIES

31. Boundary lines J.G.  32. J.G.

MISCELLANEOUS


40. Jesse A. Giles  William A. Ramirez

Review  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.

43. Remarks:
51. Methods.--All roads were travelled by truck to check their classification and to answer questions asked by the reviewer after a thorough investigation or study of the feature in question. At the same time all other planimetric features were verified as to their existence and classification. Boundaries and geographic names were checked with the local manager of the Laguna Atascosa National Wildlife Refuge.

Corps of Engineers reference line piles along the Intracoastal Waterway were plotted on the Field Edit Sheet by plotting the southern 5-pile cluster from the sextant fix, then plotting the pile at lights No. 69 and 79 and drawing a line from the 5-pile cluster through the piles at the lights. (Those piles at the lights are 25 feet northeast of the light and at right angles to the centerline of the Intracoastal Waterway.) These piles are at 1,000 foot intervals from Pile No. 60 to Pile No. 78. The piles on the curve were plotted at 200 foot intervals after the southern cluster had been plotted from the sextant fix. A blueprint was obtained from the Corps of Engineers and is transmitted to assist in plotting these piles, which affect quadrangles T-9219, T-9220 and T-9222.

Deletions, additions and corrections are shown on Field Edit Sheet No. 1 (Field Edit Sheet No. 2 was used for the piles and sextant fixes), Discrepancy Print and photographs 49-0-1453, 1455, 1471, 1472, and 1473.

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

52. Adequacy of compilation.--The quadrangle is well-compiled and will be complete after application of field edit information.

53. Map accuracy.--No test was specified. From visual inspection and use of planelable "take-off" and "tie-in" points, the horizontal accuracy appears good.

54. Recommendations.--No recommendations are offered.

55. Examination of proof copy.--It is recommended that Mr. Luther C. Goldman, Manager, Laguna Atascosa Wildlife Refuge, be sent a proof copy of the map for examination. He is intimately acquainted with the area and has agreed to make the examination. His address is Post Office Building, San Benito, Texas.

Geographic names.--One geographic name--GATLIN ISLAND--is recommended. This island is located at approximate latitude 26 degrees 12.5 minutes, longitude 97 degrees 18.1 minutes. The naming of this small island has been requested by the Wildlife Refuge manager who says it is becoming well established in local usage and by Refuge personnel.

A discrepancy in the spelling of the name GRANJENO RANCH was noted. According to local information it should be GRANJENO RANCH and is so recommended.

Above approved by Geographic Names Section.
56. Boundary of Wildlife Refuge.--The plat of a part of the Laguna Atascosa National Wildlife Refuge is being submitted with the data for this quadrangle to clarify its eastern boundary. The legal description states the boundary follows the "ordinary high tide line". This line is shown on the plat as determined at the time the boundary survey was made. As we have compiled the storm water line along most of this boundary the approximate high water line has been delineated on photographs 48-O-1455, 1471 and 1472. It is recommended that the Refuge boundary be taken from one of the above sources or a label be placed on the map manuscript to the effect that the boundary follows the high water line.

Refer to side heading 67 of the Review Report.

Respectfully submitted,
21 March 1952

William H. Sheercouse,
William H. Sheercouse, 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

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<th>DESCRIPTION</th>
<th>SIGNAL NAME</th>
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This form shall be prepared in accordance with Hydrographic Manual, pages 800 to 804. Positions of charted landmarks and nonfloating
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

Robert R. Wagner
Tampa Photogrammetric Office

Arthur L. Cardwell
Chief of Party

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This form shall be prepared in accordance with Hydrographic Manual, pages 800 to 804. Positions of charted landmarks and nonfloating...
REVIEW REPORT
Planimetric Map T-9219
12 August 1952

62. Comparison with Registered Topographic Surveys:

T-1046  (1867)  1:20,000
T-1176a  (1879-80)  1:20,000

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

The old topographic surveys are superseded by the new map (T-9219) for nautical charting.

63. Comparison with Maps of Other Agencies:

La Coma Quadrangle, USGS, Edition 1931, Reprint 1945, 1:31,680

New cultural features, which do not appear on the USGS map, are the Intracoastal Waterway and Port Isabel Municipal Airport.

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 found 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 correspondence and sundry reports to be attached 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 corres-
pendsence and instructions attached to the Descriptive Report for T-92h.

67. Boundary of Laguna Atascosa National Wildlife Refuge:

The legal description describes the east boundary line of the Refuge as following the approximate high-water line of the Laguna Madre.

In this area, however, where for the most part the storm high-water line was delineated, the boundary line was indicated as following the low-water line. Since the tide is almost nil, the low-water line is in close incidence to the MEW line.

Reviewed by:

Charles Hanavich

Chief, Division of Photogrammetry

Approved:

S. L. Griffith
Chief, Review Section, Division of Photogrammetry

H. E. Edmonson
Chief, Nautical Chart Branch, Division of Charts

Earl O. Hartman
Chief, Div. of Photogrammetry

Chief, Div. of Coastal Surveys
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<td>898</td>
<td>Henderson</td>
<td>Before - After Verification and Review</td>
</tr>
<tr>
<td>11-15-55</td>
<td>897</td>
<td>Allatore</td>
<td>Before - After Verification and Review</td>
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</tbody>
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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.