U. S. COAST AND GEODETIC SURVEY
DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey PLANIMETRIC
Field No. Ph-96(14) Office No. T-9224

LOCALITY
State TEXAS
General locality TEXAS-MEXICO GULF COAST
Locality RIO GRANDE

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

DATE Dec 19-1953
DATA RECORD

T-9224

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 Copy filed in Division of

Photogrammetry (IV) Office Files

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): 2-26-1951 Date reported to Nautical Chart Branch (IV): 12-11-51

Applied to Chart No. Date: Date registered (IV): 11-20-53

Publication Scale (IV): Not to be published Publication date (IV):

Geographic Datum (III): N. A. 1927

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

Mean level except as follows:

Elevations shown as (25) refer to mean high water
Elevations shown as (3) refer to sounding datum
i.e., mean low water or mean lower low water

Reference Station (III): No. 80 (U.S.E.) 1939

Adjus 27 27.503 (767.9M)

Lat.: 25° 57' 33.413 (1028.2M) Long.: 97°22' 27.503 (767.9M)

Adjusted

Plane Coordinates (IV):

Y =

X =

Zone:

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): C. A. Navin
B. F. Lampton, Jr.
C. H. Baldwin

Date: Oct & Nov 1949
March 1950
July 1950

Planetable contouring by (II): Inapplicable

Date: 

Completion Surveys by (II): Will Shearouse

Date: 9 Apr. 1952

Mean High Water Location (III) (State date and method of location): Air Photo Compilation
Supplemented by field inspection location.

Date: July 1950

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

Date: 21 Sept. 1950

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

Date: 26 Sept. 1950

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

Date: 19 Mar. 1951

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

Date: 9 Apr. 1951

Radial Plot/Planimetry:

Date: 

Stereoscopic Instrument compilation (III): Inapplicable

Date: 

Contours

Manuscript delineated by (III): R. Dossett

Date: 1 Oct. 1951

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

Date: 14 Nov. 1951

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

Date: 8 Nov. 1951

not applicable
### PHOTOSHOPS (III)

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#### Ratio of Ranges
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**Reference Station:** Inapplicable

**Washington Office Review by (IV):** C. Hanarich

**Final Drafting by (IV):** L. R. Hunter

**Drafting verified for reproduction by (IV):** W. P. Hall

**Proof Edit by (IV):**

| Land Area (Sq. Statute Miles) (III): | 36 |
| Shoreline (More than 200 meters to opposite shore) (III): | 41 |
| Shoreline (Less than 200 meters to opposite shore) (III): | 28 |
| Control Leveling - Miles (II): | 0.0 |
| Number of Triangulation Stations searched for (II): | 9 | Recovered: 3 | Identified: 3 |
| Number of BMs searched for (II): | 37 | Recovered: 32 | Identified: 32 |
| Number of Recoverable Photo Stations established (III): | 0 |
| Number of Temporary Photo Hydro Stations established (III): | 0 |

**Remarks:**
Project Ph-36(48) 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(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-9181, T-9189, T-9204, 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 quadrangle is located in Cameron County with the Rio Grande as its south border.

There is but one good road, Texas State Highway No. 4, running east and west through the quadrangle. The larger portion of the area to the south of this highway is under cultivation. The area to the north is principally grazing land with some marsh and mud and a small cultivated area on the west.

The photography was of recent date and no difficulty was encountered interpreting the photographs. The photographic tones are from white to black. The white and light gray tones are sand and mud, with some of the pond areas showing light gray; the gray tones are grass flats and some cultivated areas; the black tones are dense brush and scrub trees.

Field inspection is believed to be complete and adequate.

Field inspection was performed on single lens ratio prints, 1:20,000 scale, Nos. 48-0-1446 through 48-0-1448, 48-0-1478, and 48-0-1479.

3. **HORIZONTAL CONTROL**

The following third-order traverse stations, established by USGS, were recovered: CAMERON CO BM ELEV 9.0, and IBC RP 52.

The following stations were reported lost: IBC RP 51 USGS, NO 13 H USGS, NO 21 H USGS, REF POST 50(IBC) 1939, TTS 4L USGS, and U.S.-MEXICO BDY MON RP NO 53 1913.

Horizontal control was identified on the following single lens ratio prints: 48-0-1447 and 48-0-1478.

4. **VERTICAL CONTROL**

The following USGS second-order bench marks were recovered: RANGE AZ MK, V 679, W 679, X 679, Y 679, Z 679, A 776, B 776, F 776, H 776, J 776, and K 776.

The following are bench marks established by the Cameron County Engineer and believed to be of third-order accuracy. The elevation for each individual bench mark is noted on Form 638. The field records were not obtained from the County Engineer, except the elevations: J 21, J 22, J 23, J 24, J 27, J 28, J 29, J 31, J 33, J 34, J 36, J 37, J 38, J 39, J 42, J 43, J 44, and J 45. Bench marks were identified on the following single lens ratio prints: 48-0-1446 and 48-0-1478.
5. **CONTOURS AND DRAINAGE**

   The only perennial drainage in this area is the Brownsville Ship Channel and the Rio Grande, evident on the photographs. All other drainage is intermittent.

6. **WOODLAND COVER**

   All woodland areas have been classified according to Photogrammetry Instructions No. 15, dated 16 June 1947.

7. **SHORELINE AND ALONGSHORE FEATURES**

   The Brownsville Ship Channel runs through this quadrangle. It is a dredged canal through fast land and the high and low water lines coincide with the cut banks.

   There are no alongshore features.

8. **OFFSHORE FEATURES**

   There are no offshore features.

9. **LANDMARKS AND AIDS**

   There are no fixed aids to navigation or landmarks for charts.

   One aeronautical aid, a C.A.A. omni-station, was identified on photograph No. 43-0-1446. See Form 567.

10. **BOUNDARIES, MONUMENTS, AND LINES**

    See "Special Report, Boundaries, Project Ph-36(43), Baffin Bay to the Rio Grande."

11. **OTHER CONTROL**

    Two topo stations were established. They are:

   - Range Az wifi (1939), 1930
   - C.A.A. omni directional station, 1930

12. **OTHER INTERIOR FEATURES**

    All roads have been classified according to Photogrammetry Instructions No. 10, dated 14 April 1947, as amended 4 October 1947.

    All buildings have been classified according to Photogrammetry Instructions No. 29, dated 1 October 1948.

13. **GEOGRAPHIC NAMES**

    See "Special Report, Geographic Names, Project Ph-36(43), Port Mansfield (Red Fish Landing) to the Rio Grande."
14. SPECIAL REPORTS AND SUPPLEMENTAL DATA


Form 567, Aeronautical Aids, Project Ph-36(48)F, to be submitted at a later date.

Data, Quadrangle T-9224( ), forwarded to Baltimore Office 15 August 1950, on letter of transmittal Ph-36 Field 87.

Submitted
11 August 1950

Charles H. Baldwin
Cartographic Survey Aid

Approved
15 August 1950

George E. Morris, Jr.
Chief of Party
COMPILATION REPORT T-9224.

PHOTOGRAMMETRIC PLOT REPORT.

Submitted with T-9220.

31. **DELINEATION.**

Compiled by the graphic method.

Field inspection north of the Mexican border was adequate. No field inspection was made south of the Rio Grande and the compiler has classified no roads nor shown any geographic names other than three village names taken from the USCGS Sectional Aeronautical Chart, Corpus Christi (N-5).

32. **CONTROL.*** See T-9220 for listing of control.

Horizontal control was satisfactory with respect to identification, placement and density.

33. **SUPPLEMENTAL DATA.**

None.

34. **CONTOURS AND DRAINAGE.**

Inapplicable.

35. **SHORELINE AND ALONGSHORE DETAILS.**

The shoreline of this map manuscript is confined to the Rio Grande, Brownsville Ship Canal, lakes and ponds. No special details other than levees were visible on the photographs.

Shoreline inspection was adequate.

36. **OFFSHORE DETAILS.**

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

None. See item 9, page 8.

38. **CONTROL FOR FUTURE SURVEYS.**

None. See item 11, page 8.

39. **JUNCTIONS.**

Joins Survey T-9222 on the north, T-9225 on the east, T-9223 on the west and T-9224 ext. on the south. Junctions are satisfactory.

40. **HORIZONTAL AND VERTICAL ACCURACY.**

No statement.

46. **COMPARISON WITH EXISTING MAPS.**

Comparison was made with U. S. Geological Survey Quadrangle "PALMITO HILL, TEXAS", scale 1:31,680, edition of 1936, reprinted 1945. The outstanding difference noted is the Brownsville Ship Canal, which has been constructed since the publication of the above quadrangle.

47. **COMPARISON WITH NAUTICAL CHARTS.**

Comparison has been made with Nautical Chart 1288, scale 1:80,000, edition of 1941, corrected to 13 October 1950. Comparable shorelines north of the Rio Grande are in agreement.
ITEMS TO BE APPLIED TO NAUTICAL CHARTS IMMEDIATELY.

None.

ITEMS TO BE CARRIED FORWARD.

None.

APPROVED AND FORWARDED:

Rudolph Dossett
Carto. Photo. Aid

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

- BOCA CHICA ROAD
- BROWNSVILLE SHIP CHANNEL
- CAMERON COUNTY
- CAJA PINTA BANCO NO. 80 COMMISSIONERS PRECINCT NO. 2 (precincts not shown on this project)
- EL RINCON BANCO NO. 126
- GOOSE ISLAND
- GOOSE ISLAND TURNING BASIN

- LA BURRITA
- LA CARRERA
- LOMA A LOS LEJOS — correct — Loma de Lejos
- LOMA DE LAS YEGUAS
- LOMA DEL DIVISADERO
- LOMA DEL CENISAL — correct to — Loma del Cenizal
- LOMA DE LA ESTRELLA
- LOMA DE LOS LOBOS
- LOMA DE LA MADRIGUERA
- LOMA DE LA MONTUCOSA
- LOMA DE LA MONTUCOSA CHICA
- LOMA DE LA JAUJA
- LOMA DEL MUERTO
- LOMA DEL MACHO
- LOMA PELONA
- LOMA TIA TULES
- LOS SAUCES RANCH

- MEXICO
- OLD PALMETAL RANCH
- OLD TULOSA RANCH

- PALMITO
- PALMITO HILL
- PALMITO HILL BATTLEFIELD
- PALMITO RANCH
- RIO GRANDE
- SAN MARTIN LAKE
- SAN MIGUEL BANCO NO. 88
- STATE 4

- TAMALIPAS
- TEXAS
- UNITED STATES

**Geographic Names underlined in red are approved.**

10-14-52
PHOTOGRAMMETRIC OFFICE REVIEW

T-9224


CONTROL STATIONS


ALONGSHORE AREAS

(Nautical Chart Data)


PHYSICAL FEATURES


CULTURAL FEATURES


BOUNDARIES

31. Boundary lines J.G. ___________.

MISCELLANEOUS


40. Jesse A. Giles,Reviewer

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:

Compiler _______________ Supervisor _______________

William A. Hudson

M 2623-12
Field Edit Report, T-9224

51. **Methods.**—All roads were travelled by truck to check their classification and to answer questions asked by the reviewer. At the same time all other planimetric features were verified as to their existence and classification. A thorough investigation of the "grass-in-water" in the San Martin Lake area was made and found to be partly true marsh. The planimeter was used to locate all new roads. Some old roads not previously shown by the field inspector were delineated on the photographs and cross-referenced on the Field Edit Sheet. Neat delineated as intermittent pool areas.

Additions, corrections and deletions were made on the Field Edit Sheet, Discrepancy Print and photographs 49-C-1445, 1446, 1447, 1448, 1477, 1478, 1479, 2099, and nine-lens photograph 25503.

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

52. **Adequacy of compilation.**—The map manuscript is well-compiled and will be complete after application of field edit information.

53. **Map accuracy.**—No tests were made.

54. **Recommendations.**—None offered.

55. **Examination of proof copy.**—It is recommended that the proof copy of the map be sent to Mr. F. L. Rockwell, City Hall, Brownsville, Texas, for examination. Mr. Rockwell is City Engineer of Brownsville and a lifelong resident of the area. He is intimately acquainted with the area and qualified to make the examination.

**Geographic names.**—No discrepancies were noted in charted names. Spelling of two names was questioned by the reviewer. Local citizens who are familiar with the Spanish language were contacted and the correct spelling follows: Incorrect - Loma del Genisal

Correct - LOMA DEL GENIZAL.

Incorrect - Loma A Los Lejos

Correct - LOMA A LO LEJOS.

The first is translated Hill of the Purple Sage. The second Hill at a distance, lo being singular.

Respectfully submitted,
7 April 1952

*William H. Shearouse*

William H. Shearouse, Cartographer
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 C. Hanavich.

S. V. Griffith
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 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

Rudolph Possett, Chart Photo Aid

Waugh

Chief of Party.

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|       |      | 53.13 | 19.13 | E.A. | Theod. 2-225h | 1952 |
|       | 62   | 57  | 1625 | 97  | 21  | 1367 | 1227 |
|       |      | 53.10 | 19.11 | E.A. | Theod. 2-225h | 1952 |
|       | 61   | 54  | 1515 | 97  | 19  | 1339 | 1110 |
|       |      | 59.30 | 19.13 | E.A. | Theod. 2-225h | 1952 |
|       | 60   | 57  | 1525 | 97  | 19  | 1339 | 1110 |
|       |      | 53.30 | 19.13 | E.A. | Theod. 2-225h | 1952 |
|       | 62   | 58  | 1515 | 97  | 18  | 1375 | 1110 |
|       |      | 50.38 | 21.57 | E.A. | Theod. 2-225h | 1952 |
|       | 63   | 59  | 1464 | 97  | 17  | 1265 | 1110 |
|       |      | 50.21 | 22.05 | E.A. | Theod. 2-225h | 1952 |
|       | 37   | 59  | 1464 | 97  | 17  | 1265 | 1110 |
|       |      | 50.21 | 22.05 | E.A. | Theod. 2-225h | 1952 |
|       | 37   | 59  | 1464 | 97  | 17  | 1265 | 1110 |

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.
62. Comparison with Registered Topographic Surveys.- None

63. Comparison with Maps of Other Agencies.
   Palmito Hill Quadrangle, USGS, Ed. 1936, Reprint 1945, 1:31,680
   The Brownsville Ship Channel is not shown 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
   Nine fixed aids to navigation, listed on Form 567, are not shown on the chart.

66. Adequacy of Results and Future Surveys.- The compiled portion of the map, which lies north and west of the Rio Grande River (in the U.S.) complies with the National Map Accuracy Standards. A definite statement on the accuracy of the map (sheets 1 and 2) south and east of the Rio Grande River cannot be made; however, it is believed to be satisfactory. For additional information refer to the Descriptive Report for T-9220, page 13, side heading 23. No field inspection or field edit of the area south of the Rio Grande in Mexico was made; this is in accordance with the instructions.

   Water stages in the vicinity of Brownsville Ship Channel 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 stead 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 the area.
   (2) It was considered impractical to resolve this problem by extensive leveling.

   For a more detailed study and investigation of this matter, refer to the correspondence and sundry reports to be attached to the completion report which will be submitted when the reviewers of all the surveys on this project are 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