

9224

Diag. Cht. No. 1288

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-9224

LOCALITY

State TEXAS

General locality TEXAS-MEXICO GULF COAST

Locality RIO GRANDE

194

CHIEF OF PARTY

G.E.Morris, Jr., Chief of Field Party

A.L.Wardwell, Tampa Photogrammetric Office

LIBRARY & ARCHIVES

DATE Dec 19 - 1953

9224

17

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): **DEC 4 - 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Publication Scale (IV): **Not to be published**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 sea~~ level except as follows:  
Elevations shown as (25) refer to mean high water  
Elevations shown as (5) refer to sounding datum  
i.e., mean low water or mean lower low water

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

Lat.: **25° 57' 33".413 (1028.2M)**

Long.: **97° 22' 27".603 (767.9M)**

Adjusted  
~~Unadjusted~~

Plane Coordinates (IV):

State:

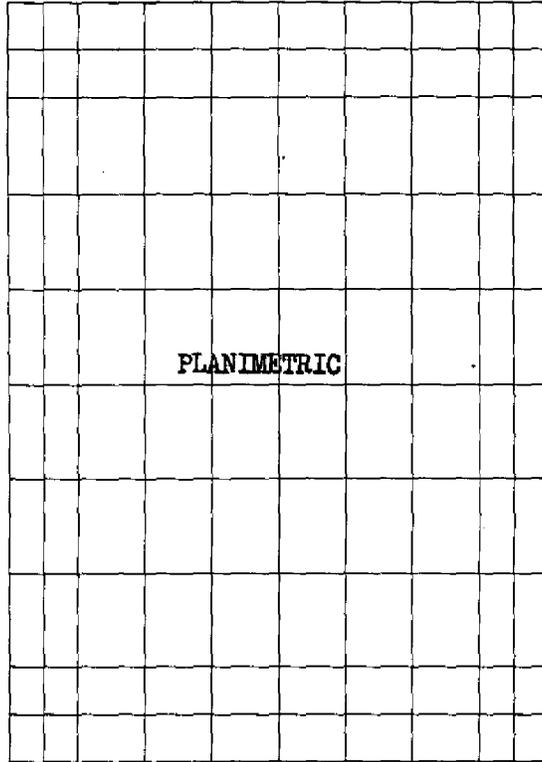
Zone:

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.



Areas contoured by various personnel  
(Show name within area)  
(I) (II)

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): *W. H. Shearouse*

Date: *7 APRIL 1952* ✓

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

Air Photo Compilation  
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 ~~or Stereoscopic~~

~~Control extension~~ by (III): M. M. Slavney

Date: 8 June 1951

Stereoscopic Instrument compilation (III):  
Planimetry Inapplicable  
Contours

Date:

Date:

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~~ *not applicable*

Date:

~~8 Nov. 1951~~

Camera (kind or source) (III):

PHOTOGRAPHS (III)

Number	Date	Time	Scale	Stage of Tide
48-0-2099	12-10-48	1033	1:20,000	No Tide
48-0-2100&2102	"	1034	"	"
48-0-2103	"	1035	"	"
48-0-1477-78	12-8-48	1514	"	"
48-0-1479	"	1515	"	"
48-0-1480	"	1516	"	"
48-0-1481	"	1517	"	"
48-0-1444	"	1442	"	"
48-0-1445	"	1443	"	"
48-0-1446-47	"	1444	"	"
48-0-1448-49	"	1445	"	"
48-0-1436-40 incl.	"	1433-36	"	"
25802	5-4-50	1537	"	"
25803	"	1538	"	"

Tide (III)

Ratio of Ranges	Mean Range	Spring Range

Reference Station: **Inapplicable**  
 Subordinate Station:  
 Subordinate Station:

Washington Office Review by (IV): *C. Harvick*  
 Final Drafting by (IV): *E. C. Hunter*  
 Drafting verified for reproduction by (IV): *W. D. Hallum*  
 Proof Edit by (IV):

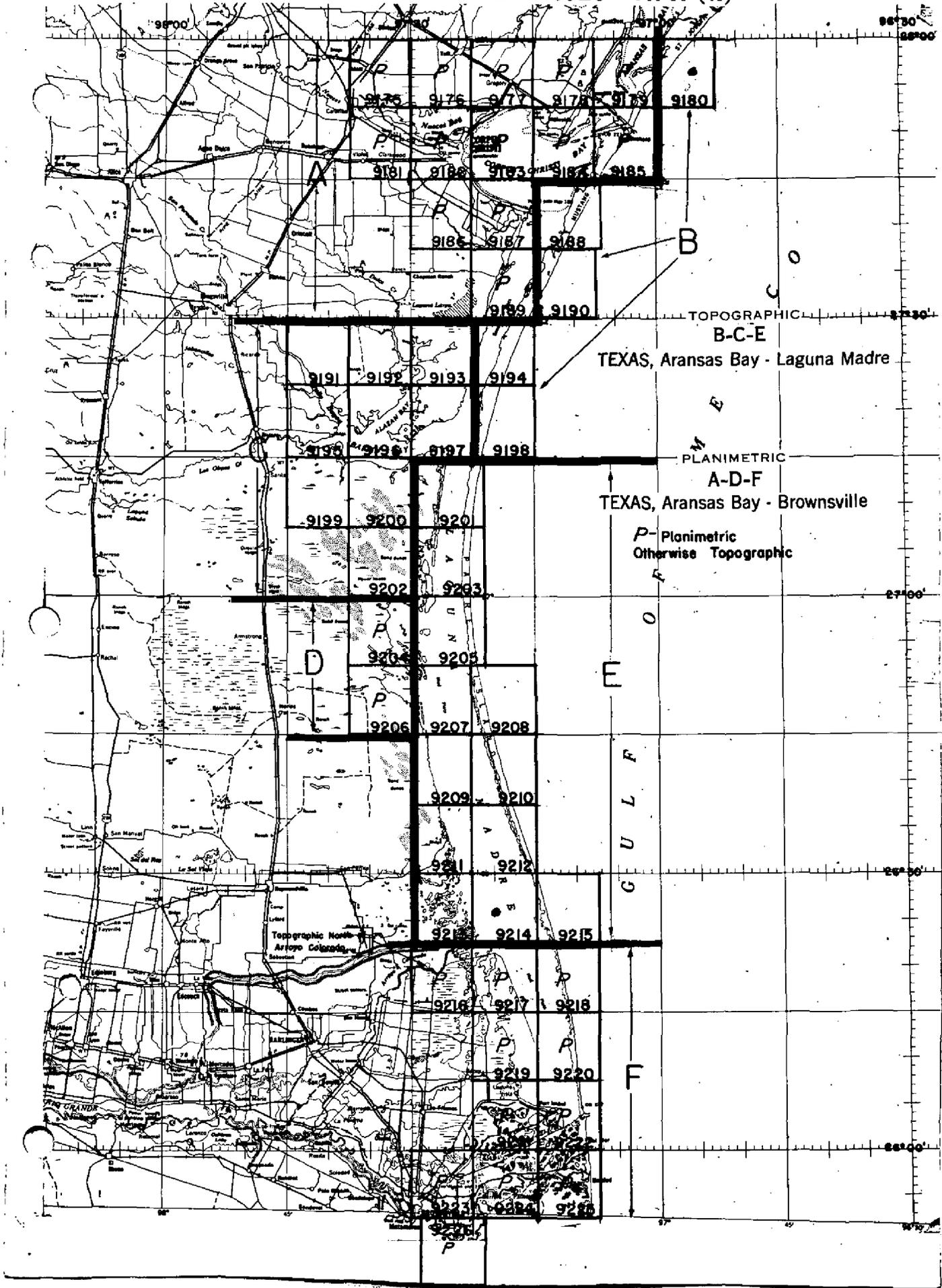
Date: *15 Oct. 1952*  
 Date: *8-25-53*  
 Date: *8-26-53*  
 Date:

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**  
 Number of BMs searched for (II): **37**  
 Number of Recoverable Photo Stations established (III): ~~0~~ **11**  
 Number of Temporary Photo Hydro Stations established (III): **0**

Recovered: **3** Identified: **3**  
 Recovered: **32** Identified: **32**

Remarks:

# TOPOGRAPHIC AND PLANIMETRIC MAPPING PROJECT PH-36 (48)



Summary T- 9224

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-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 USC&GS 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, only 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 <sup>9</sup> ~~no~~ fixed aids to navigation <sup>There are no</sup> ~~or~~ landmarks for charts.

One aeronautical aid, a C.A.A. omni-station, was identified on photograph No. 48-0-1446. See Form 567.

10. BOUNDARIES, MONUMENTS, AND LINES

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

11. OTHER CONTROL

~~None was established.~~ *Two topo stations were established. They are: Range Az MK (1939), 1950 CAA omni directional station, 1950*

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(48), Port Mansfield (Red Fish Landing) to the Rio Grande."

14. SPECIAL REPORTS AND SUPPLEMENTAL DATA

"Special Report, Geographic Names, Project Ph-36(48), Port Mansfield (Red Fish Landing) to the Rio Grande", forwarded to Washington Office 6 June 1950.

"Special Report, Boundaries, Project Ph-36(48), Baffin Bay to the Rio Grande", forwarded to Washington Office 8 June 1950.

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*  
Charles H. Baldwin  
Cartographic Survey Aid

Approved  
15 August 1950

*George E. Morris, Jr.*  
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 USC&GS 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.

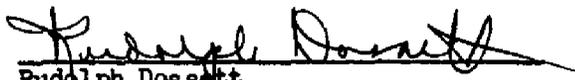
Comparison has been made with Nautical Chart 1288, scale 1:80,000, edition of 1941, corrected to 13 October 1950. Comparable shorelines north of the Rio Grande are in agreement.

ITEMS TO BE APPLIED TO NAUTICAL CHARTS IMMEDIATELY.

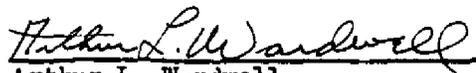
None.

ITEMS TO BE CARRIED FORWARD.

None.

  
Rudolph Dosselt  
Carto. Photo. Aid

APPROVED AND FORWARDED:

  
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 MONTUOSA •
- LOMA DE LA MONTUOSA 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 •
- TEXAS STATE 4 •

GEOGRAPHIC NAMES  
underlined in red  
are approved.

10-14-52

Hug

50.

PHOTOGRAMMETRIC OFFICE REVIEW

T-9224

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

CONTROL STATIONS

5. Horizontal control stations of third-order or higher accuracy M.M.S. ~~6. Rectifiable horizontal stations of first/~~  
~~third order accuracy (topographic stations)~~ 7. Photo hydro stations J.G. 8. Bench marks J.G.  
~~9. Plotting of sextant fixes~~ 10. Photogrammetric plot report J.G. 11. Detail points J.G.

ALONGSHORE AREAS

(Nautical Chart Data)

12. Shoreline J.G. 13. Low-water line J.G. ~~14. Rocks/shoals/etc.//////~~ ~~15. Bridges ////~~ ~~16. Aids~~  
~~to navigation ////~~ ~~17. Landmarks ////~~ 18. Other alongshore physical features J.G. 19. Other along-  
shore cultural features J.G.

PHYSICAL FEATURES

20. Water features J.G. 21. Natural ground cover J.G. ~~22. Perspective contours ////~~ ~~23. Stereoscopic/~~  
~~instrument contours ////~~ ~~24. Contours in general ////~~ ~~25. Spot elevations~~ 26. Other physical  
features J.G.

CULTURAL FEATURES

27. Roads J.G. 28. Buildings J.G. ~~29. Railroads~~ 30. Other cultural features J.G.

BOUNDARIES

31. Boundary lines J.G. ~~32. Public lands/roads~~

MISCELLANEOUS

33. Geographic names J.G. 34. Junctions J.G. 35. Legibility of the manuscript J.G. 36. Discrepancy  
overlay J.G. 37. Descriptive Report J.G. 38. Field inspection photographs J.G. 39. Forms J.G.  
40. Jesse A. Giles Jesse A. Giles William A. Rasire  
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

43. Remarks:

## 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 plane-table 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.

*Areas delineated as intermittent road areas.*

Additions, corrections and deletions were made on the Field Edit Sheet, Discrepancy Print and photographs 48-C-1445, 1446, 1447, 1448, 1477, 1478, 1479, 2099, and nine-lens photograph 25803.

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 life-long 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 Cenisal  
Correct - LOMA DEL CENIZAL.

Incorrect - Loma A Los Lejos  
Correct - LOMA A LO LEJOS.

*Loma de Lejos - approved  
by Geographic Names Section.*

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



NONFLOATING AIDS OR LANDMARKS FOR CHARTS

TO BE CHARTED  
~~TO BE OMISSIONED~~

STRIKE OUT ONE

Tempa Photogrammetric Office, Tampa, Fla., 14 Aug. 19 52

I recommend that the following objects which have ~~been~~ been inspected from seaward to determine their value as landmarks be charted on ~~(delete)~~ the charts indicated.

The positions given have been checked after listing by

Rudolph Donnett, Carte Photo Aid  
J. E. Waugh

J. E. Waugh  
Chief of Party.

CHARTING NAME	DESCRIPTION	SIGNAL NAME	POSITION						METHOD OF LOCATION AND SURVEY NO.	DATE OF LOCATION	HARBOR CHART	INSHORE CHART	OFFSHORE CHART	CHARTS AFFECTED
			LATITUDE *		LONGITUDE *		DATUM							
			° ' "	° ' "	° ' "	° ' "								
· BROWNSVILLE CHANNEL LIGHT 42			25 57	53.13 1635	97 21	19.13 1367	N.A. 1927	1952	X			1288		
· BROWNSVILLE CHANNEL LIGHT 41			25 58	14.62 150	97 20	35.94 1000	"	"	X					
· BROWNSVILLE CHANNEL, RANGE D, REAR LIGHT			25 50	6.50 200	97 20	11.85 886	"	"	X					
· BROWNSVILLE CHANNEL, RANGE D, FRONT LIGHT			25 58	30.97 953	97 19	108.13 1339	"	"	X					
· BROWNSVILLE CHANNEL LIGHT 40			25 58	40.91 1259	97 19	37.42 1011	"	"	X					
· BROWNSVILLE CHANNEL, RANGE O, FRONT LIGHT			25 50	43.06 1325	97 19	21.57 600	"	"	X					
· BROWNSVILLE CHANNEL, RANGE O, REAR LIGHT			25 58	54.30 1671	97 18	19.43 1375	"	"	X					
· BROWNSVILLE CHANNEL LIGHT 38			25 59	21.58 664	97 18	22.07 611	"	"	X					
· BROWNSVILLE CHANNEL LIGHT 37			25 59	50.21 1545	97 17	22.65 630	"	"	X					

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.

Review Report T-9224  
Planimetric Map  
15 October 1952

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 review 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

*S. V. Griffith*  
Chief, Review Section  
Div. of Photogrammetry *B*

*H. Edmonstone*  
Chief, Nautical Chart Branch  
Division of Charts *CFU*

*O. S. Reading*  
Chief, Div. of Photogrammetry  
*MS*

*Carl O. Keston*  
Chief, Div. of Coastal Surveys  
*JK 7*