

9216

Diag. Cht. No. 1288

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey TOPOGRAPHIC & PLANIMETRIC

Field No. Ph-36(48)F Office No. T-9216

LOCALITY

State TEXAS

General locality LAGUNA MADRE

Locality CALLO ATASCOSO

1945

CHIEF OF PARTY

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

A.L. Wardwell, Tampa Photogrammetric Office

LIBRARY & ARCHIVES

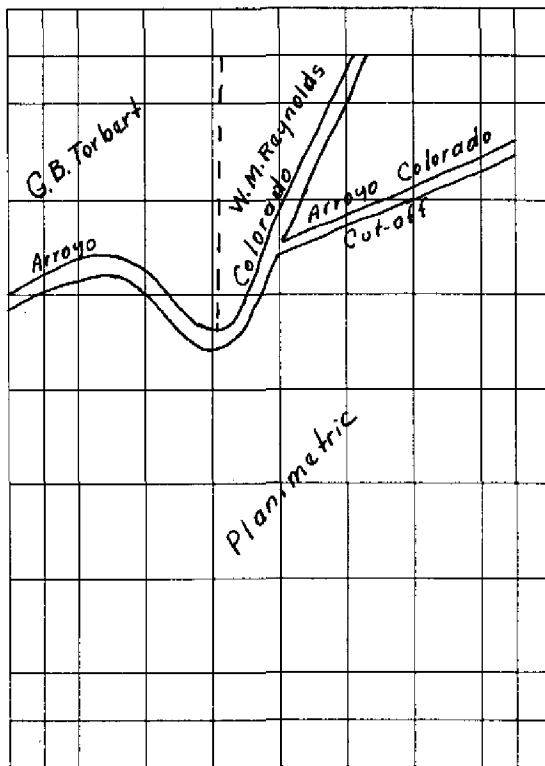
DATE Oct 5-1953

9-1870-1 (1)

9216

26° 22' 30"

97° 30' 00"



26° 15' 00"

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

97° 22' 30"

DATA RECORD

Field Inspection by (II): **W. M. Reynolds**
W. H. Nelson
G. B. Torbert
B. F. Lampton, Jr.
 Planetable contouring by (II): **W. M. Reynolds**
G. B. Torbert

Dec 1949, Jan to Apr
 Date: & July 1950.
 April 1950
 July 1950
 February 1950.
 Date: July 1950.
 July 1950.

Completion Surveys by (II): *J. A. Clark, Jr*
W. H. Shearouse

Date: *March, 1952*

Storn

~~Manograph~~ Water Location (III) (State date and method of location):

Air Photo Compilation; *checked during field edit*

14 July 1950

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

Date: 18 July 1950

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

Date: 18 July 1950

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

Date: 3 Jan. 1951

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

Date: 17 Jan. 1951

Radial Plot ~~to stereoscopic~~

~~to stereoscopic~~ by (III):

M. M. Slavney

Date: 28 Feb. 1951

Stereoscopic Instrument compilation (III):
 Planimetry **Inapplicable**
 Contours

Date:

Date:

Manuscript delineated by (III): **R. E. Smith Jr.**

Date: 5 Oct. 1951

Photogrammetric Office Review by (III): **M. M. Slavney**

Date: 1 Nov. 1951

Elevations on Manuscript
 checked by (III): **R. E. Smith**

Date: 5 Oct. 1951

Camera (kind or source) (III):

Fairchild Cartographic - 6" Metrogon Lens

Number	Date	PHOTOGRAPHS (III) Time	Scale	Stage of Tide
48-0-1292- 1297 Incl.	12-8-48	12:45	1:20,000	* No periodic tide
48-0-1322- 1326 Incl.	12-8-48	13:00	"	"
48-0-1425- 1430 Incl.	12-8-48	14:30	"	"
48-0-1455- 1460 Incl.	12-8-48	14:30	"	"

Tide (III)

Reference Station:
Subordinate Station:
Subordinate Station:

Inapplicable *

Ratio of Ranges	Mean Range	Spring Range

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

Date: *25 June 1952*

Final Drafting by (IV): *Jones*

Date: *Dec. 52*

Drafting verified for reproduction by (IV): *Vanisher*

Date: *" "*

Proof Edit by (IV): *W. Streifler*

Date: *2/17 53*

Land Area (Sq. Statute Miles) (III): *64*

Shoreline (More than 200 meters to opposite shore) (III): *52*

Shoreline (Less than 200 meters to opposite shore) (III): *20*

Control Leveling - Miles (II): *14.7*

Number of Triangulation Stations searched for (II): *19 (12)* Recovered: *6 (8)* Identified: *5 (8)*

Number of BMs searched for (II): *18 (7)* Recovered: *13 (5)* Identified: *13 (5)*

Number of Recoverable Photo Stations established (III): *4*

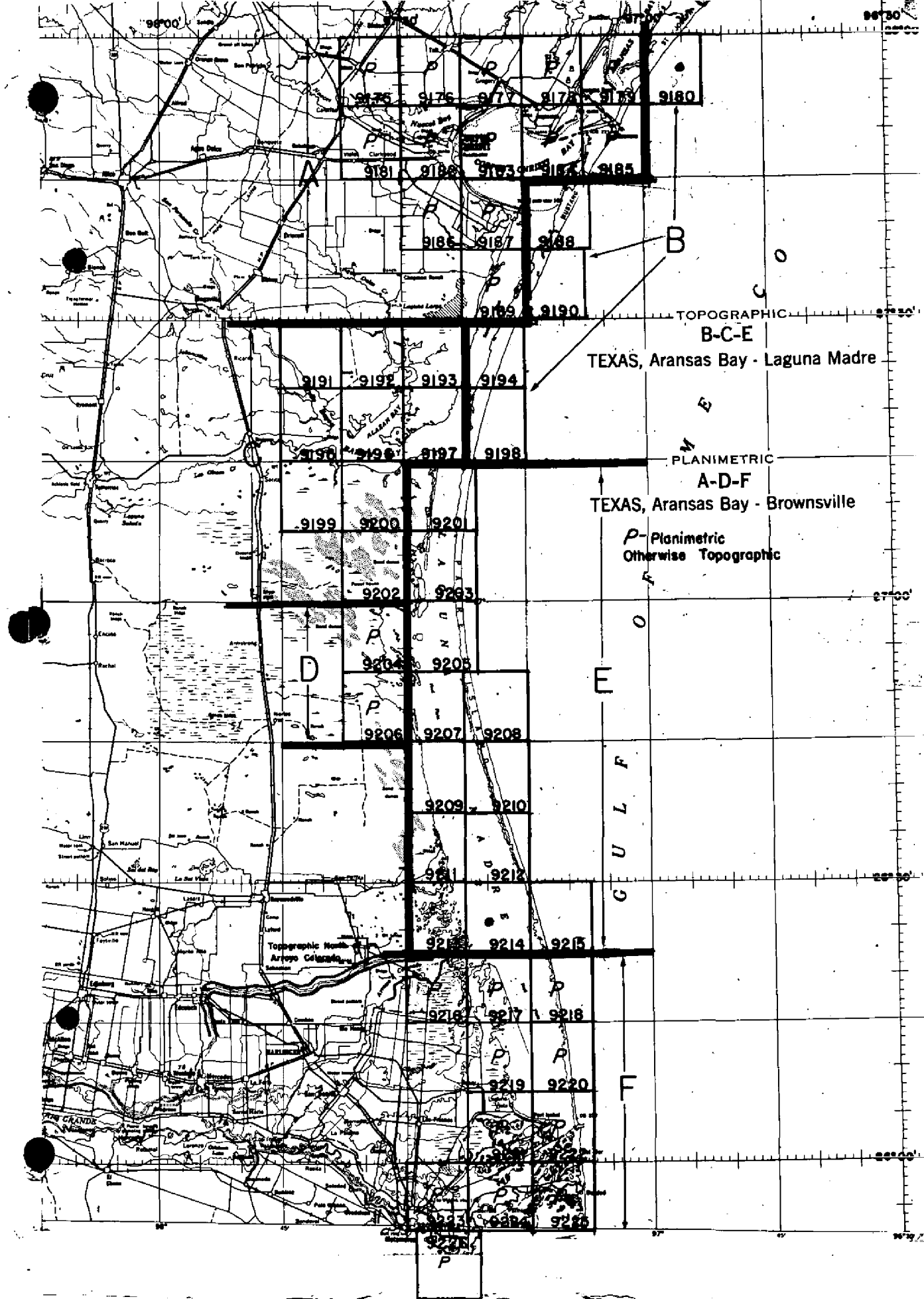
Number of Temporary Photo Hydro Stations established (III): *none*

Remarks:

Number in parenthesis are triangulation stations or bench marks immediately south or west of the quadrangle.

** Range of tide is less than 1/2 foot.*

TOPOGRAPHIC AND PLANIMETRIC MAPPING PROJECT PH-36 (48)



Summary T- 9216

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 Geographic Names Report will be filed in the Project Completion Report.

2. AREAL FIELD INSPECTION

This quadrangle is located in Cameron and Willacy Counties, Texas, with approximately four-fifths of the area being in Cameron County.

The area north of Arroyo Colorado and Arroyo Colorado Cutoff is a part of the Lincoln Ranch and is devoted mainly to cattle grazing, except for an occasional small area which has been cleared and is used for cotton growing.

The western part of the area, south of the Arroyo Colorado, is devoted principally to agriculture with cotton being the chief crop. The eastern part of this area is covered with dense grass and is devoted to cattle grazing.

Field inspection was done on 1:20,000 scale, single lens, ratio prints 48-0-1293 through 48-0-1296 and 48-0-1426 through 48-0-1429.

The photography was of fairly recent date and no difficulty was encountered interpreting the photographs. The photograph tones are from white to gray to black. The white tones along the eastern part of the quadrangle are low areas of sand and mud, which have bleached white by the sun. The gray areas are covered with grass and the cultivated areas are also of a grayish tone. The black areas are a dense growth of scrub trees, mainly mesquite. Some of the ponds and intermittent ponds also photographed black.

3. HORIZONTAL CONTROL

Previous to this survey, two stations of this bureau were located in the quadrangle, HODGE 1947 and WATER 1913. These stations were recovered and identified.

During the course of field work, a triangulation party of the Division of Geodesy executed a scheme of second-order triangulation. One station, COLORADO 1949, was established within this quadrangle and was identified by the field inspection party.

Four traverse stations of the USGS were recovered and three identified within the quadrangle.

In addition to the above, the field party occupied the steel towers and located R.G.SMITH RANCH TANK 1949, *Champerado Windmill, 1949;* KIPP RANCH WINDMILL 1949, and R.G.SMITH GIN TANK 1949. These stations are third-order intersection stations and have been identified on the photographs. The two latter stations were outside the project.

The following stations were reported lost: JBL 15 1929 USGS; JBL 30 1929 USGS; JBL 31 1929 USGS; NO 22H 1929 USGS; NO 24H 1929 USGS; NO 26H 1929 USGS; NO 145 USE; NO 149 USE; NO 156 USE; RL 4 ARROYO COLORADO USE 1947; MARKER USE; WREN USE 1947; and TTS NO 1 L 1929 USGS. *JBL 18, USGS, 1929; and NO 162, USE, 1932.*

Horizontal control was identified on the following photographs: 48-0-1294, 48-0-1295, 48-0-1324, 48-0-1325, 48-0-1426, and 48-0-1429.

4. VERTICAL CONTROL

The following C&GS second-order bench marks were recovered: M 675; N 675; ~~P 675~~; R 675; S 675; T 675; U 675; V 675; ~~J-676~~; K 676; L 676; M 676; JBL 30(USGS); JBL 17(USGS). *Note: stations indicated with an asterisk (*) were found to be destroyed or lost by the Field Editor.*

The recovered bench marks of the USGS, ~~██████████~~ which are in the quadrangle are as follows: NO 23H; JBL 16, *and 25 H.*

In addition to the bench marks, approximately 12.0 miles of fly levels were run to control the contours. Fly level points 16-01 through 16-21 were established.

The following 1:20,000 scale, single lens ratio field photographs were used for vertical control: 48-0-1293 through 48-0-1295; 48-0-1325; 48-0-1426; and 48-0-1429.

5. CONTOURS AND DRAINAGE

The only area contoured within this quadrangle was that part which is north of the Arroyo Colorado. Contouring was done by standard planetable methods on 1:20,000 scale, ratio field photographs. The contours are shown on photographs 48-0-1293, 48-0-1426, and 48-0-1427. *(in accordance with the project instructions)*

The only perennial drainage within the area are the Arroyo Colorado and Cayo Atascosa. These streams are large enough to be readily visible on the photographs.

The Arroyo Colorado Cutoff has been dredged recently across the north-east corner of the quadrangle. A floodway has been dredged across the north side of the quadrangle. These cuts are easily seen on the photographs.

6. WOODLAND COVER

Most woodland cover is readily discernible on the photographs and consists mainly of mesquite. Where the limits of the scrub area would be in doubt to the compiler, these limits have been indicated by a dashed or dotted red line on the photographs. All woodland areas have been classified according to Photogrammetry Instructions No. 15, dated 16 June 1947.

7. SHORELINE AND ALONGSHORE FEATURES

See "Special Report, Identification and Delineation of the Shoreline of Laguna Madre, Project Ph-36(48)."

There are no alongshore features within the area.

8. OFFSHORE FEATURES

There are no offshore features within the area.

9. LANDMARKS AND AIDS

There are no landmarks for nautical charts or aeronautical aids within the area.

Four fixed aids to navigation are within this quadrangle. They are Harlingen Entrance Lights 34, 45, 54, and 67. Lights 34 and 45 were located by planetable cuts ^{on the photos of 1948} from identifiable photo points. Lights 54 and 67 were located by identifying direct on the photographs. The above lights were not in place at the time of photography but Light 54 is located on the extreme point of the first oxbow curve of the Arroyo Colorado, west of Arroyo Colorado Cutoff entrance. Light 67 is located beside a bush, which was identified on the photographs.

positions verified during field edit.

The position for Harlingen Entrance Lt 73 has been abstracted on Form 567, which is enclosed within this report.

10. BOUNDARIES, MONUMENTS AND LINES

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

11. OTHER CONTROL

WATER AZ MK (1943), 1950; COLORADO AZ MK (1949), 1950; and HODGE AZ MK (1949), 1950

HARLINGEN ENTRANCE LIGHTS 34, 45, 54, and 67, were located by photogrammetric methods as recoverable topographic stations.

12. OTHER INTERIOR FEATURES

All roads have been classified according to Photogrammetry Instructions No. 10, dated 14 April 1947, as amended 24 October 1947. All roads north of the Arroyo Colorado are private.

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

There are no bridges over navigable waters within the quadrangle.

There are no submarine cables, airports or landing fields within the quadrangle.

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, Supplemental Third Order Control and Aids to Navigation, Project Ph-36(48), Baffin Bay to Arroyo Colorado", forwarded to Washington Office 13 March 1950.

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

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

Data, original, Supplemental Third Order Control and Aids to Navigation, Baffin Bay to Arroyo Colorado, to Washington Office on letter of transmittal Ph-36 Field 56, 13 March 1950.

Data, duplicate, Supplemental Third Order Control and Aids to Navigation, Baffin Bay to Arroyo Colorado, to Baltimore Office on letter of transmittal Ph-36 Field 59, 27 March 1950.

Data, Quadrangle T-9216(), forwarded to Baltimore Office on letter of transmittal Ph-36 Field 79, 14 August 1950.

Submitted
26 July 1950

William M. Reynolds
William M. Reynolds
Cartographer (Photo)

Approved
14 August 1950

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

COMPILATION REPORT T-9216

PHOTOGRAMMETRIC PLOT REPORT.

Submitted with T-9220.

31. DELINEATION.

Compiled by graphic methods. No unusual method of compilation was employed. Field inspection was adequate except for the shoreline, reference Item 35.

32. CONTROL.

Inapplicable.

33. SUPPLEMENTAL DATA.

None.

34. CONTOURS AND DRAINAGE.

No difficulty was encountered in compiling the contours and drainage.

35. SHORELINE AND ALONGSHORE DETAILS.

The shoreline inspection was inadequate. The storm water line as sketched by the field inspector on field print 25738 did not appear to follow a line of equal elevation. The storm water line was compiled after a thorough stereoscopic study. Verification of the shoreline in this vicinity has been requested on the discrepancy overlay.

verified during field edit.

36. OFFSHORE DETAILS.

No statement.

37. LANDMARKS AND AIDS.

No unusual methods were employed.

38. CONTROL FOR FUTURE SURVEYS.

Four (4) recoverable topographic stations are being submitted on Form 524 with this report. The stations are listed under Item 49.

39. JUNCTIONS.

T-9213 on the north. Discrepancy in compilation of the storm water line between Longitude $97^{\circ} 22' 30''$ and $97^{\circ} 25'$.

Resolved.

T-9217 on the west in agreement.

Geological Survey PASO REAL, scale 1:31,680, date 1929, on the east.

Geological Survey LAGUNA ATASCOSA, scale 1:31,680, date 1930 on the south.

40. HORIZONTAL AND VERTICAL ACCURACY.

No statement.

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 this office by the field party. This reduction was controlled by recovered monuments and features such as fences and roads identified on the photographs.

46. COMPARISON WITH EXISTING MAPS.

Comparison has been made with U. S. G. S. Quadrangle LA LEONA, scale 1:31,680, 1929. The Intracoastal Waterway shown on this survey was dredged after the Geological Survey quadrangle was compiled.

47. COMPARISON WITH NAUTICAL CHARTS.

A comparison has been made with U. S. C. & G. S. Nautical Chart No. 1288, scale 1:80,000, published September 1941, (3rd edition) and corrected to March 1950. They were found to be in fair agreement.

ITEMS TO BE APPLIED TO NAUTICAL CHARTS IMMEDIATELY.

None.

ITEMS TO BE CARRIED FORWARD.

None.

Rexford E. Smith, Jr.
Rexford E. Smith, Jr.
Carto. Photo. Aid

APPROVED AND FORWARDED:

Arthur L. Wardwell
Arthur L. Wardwell
Chief of Party

48. GEOGRAPHIC NAME LIST.

- ✓ ARROYO COLORADO
- ✓ BOCA CHICA RANCH
- ✓ CALLO ATASCOSO
- ✓ GAMERON COUNTY
- ✓ COMMISSIONERS PRECINCT NO. 1
- ✓ COMMISSIONERS PRECINCT NO. 4
- ✓ EL SAUZ RANCH
- ✓ FERNANDO EAST ROAD
- ✓ INTRACOASTAL WATERWAY
- ✓ LAGUNA ATASCOSA NATIONAL WILDLIFE REFUGE
- ✓ LA LEONA
- ✓ LA LEONA RANCH
- ✓ LINCOLN RANCH
- ✓ LOS COYOTES RANCH
- ✓ NUEVO RANCH
- ✓ OLMITO NORTH ROAD
- ✓ PAREDES LINE ROAD
- ✓ TEXAS
- ✓ WILLACY COUNTY

} precincts are not shown.
~~this is in accord with~~
~~these geographic instructions.~~

Names underlined in
 red are approved on
 basis project names
 report. 6-25-52
 L. Heck

49. NOTES FOR THE HYDROGRAPHER:

The following topographic stations may be useful for the hydrographer:

HARLINGEN ENTRANCE LIGHT 34, 1950

HARLINGEN ENTRANCE LIGHT 45, 1950

HARLINGEN ENTRANCE LIGHT 54, 1950

HARLINGEN ENTRANCE LIGHT 67, 1950

WATER AZ MK (1913), 1950

COLORADO AZ MK (1949), 1950

Harlingen Ent. Lt 73

Field Edit Report, T-9216

51. Methods.--All roads and trails were ridden out to check their classification, to answer questions asked by the reviewer and to verify the delineation and classification of all features. Where necessary, the planetable was used to locate new roads and buildings. A number of local residents were questioned regarding such matters as the storm water line, geographic names, areas that flood, and the Laguna Atascosa National Wildlife Refuge boundary.

Corrections, additions and deletions are shown on the Field Edit Sheet, photographs 48-0-1293, 1294, 1295, 1296, 1426, 1427, 1428, 1456, 1457, and 1458. The Discrepancy Print was also used for some information along the east limit where the Field Edit Sheet was trimmed to fit the planetable board. Where information is to be taken from a photograph its number has been listed on the Field Edit Sheet or the Discrepancy Print.

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

52. Adequacy of compilation.--Field edit brought to light a large number of small changes and additions. Some were omissions by the draftsman and some caused by changes on the ground. In general the map manuscript is well-compiled and will be complete after application of field edit information.

53. Map accuracy.--No accuracy tests were made. However, the planetable was used to locate a road and other developments along the Arroyo Colorado and a road in the southeast corner. Ties were made at recoverable topographic features which indicate the horizontal position of the map details to be within accuracy requirements.

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, San Benito, Texas, for examination.

Geographic names.--Placement of the name LOS COYOTES RANCH was corrected on the Field Edit Sheet.

* The name CALLO ATASCOSO should be CAYO ATASCOSA. The reason for this recommended change in spelling is discussed on the Field Edit Sheet for quadrangle T-9217.

56. Boundary of Wildlife Refuge.--The west boundary of the refuge is in error on the map manuscript. There is a plat, covering another area to the west, in the Boundary Report. It is titled Continental Oil Company Tract No. 144. The fence marking the boundary has been indicated on the photographs.

Correction made

Respectfully submitted,
20 March 1952

William H. Shearouse

William H. Shearouse,
Cartographer

* The name underlined in red above has been retained by the Geographic Names Section. HRB.

PHOTOGRAMMETRIC REVIEW SECTION

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

NONFLOATING AIDS FOR SEASIDE MARKS FOR CHARTS

TO BE CHARTED
OR TO BE DELETED

STRIKE OUT ONE

Tempe Florida

17 August 1950

I recommend that the following objects which have 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

Restford E. Smith, Jr.

Tempe Photogrammetric Office

Arthur L. Wardwell

Chief of Party

STATE	CHARTING NAME	T. I. A. O.	DESCRIPTION	SIGNAL NAME	POSITION				METHOD OF LOCATION AND SURVEY NO.	DATE OF LOCATION	HARBOR CHART	INSHORE CHART	OFFSHORE CHART	CHARTS AFFECTED	
					LATITUDE		LONGITUDE								DATUM
					°	'	°	'							
	LT. 34		HARKINGEN ENTRANCE. Red triangular daymark on skeleton tower		26 20	100 4	97 25	11 66	N.A. 1927	22 JULY 1950	X			1288	
	LT. 45		HARKINGEN ENTRANCE. Black square daymark on dolphin		26 19	84 8	97 26	13 06	"	"	X			1288	
	LT. 54		HARKINGEN ENTRANCE. Red triangular daymark on skeleton tower		26 19	164 1	97 27	15 35	"	"	X			1288	
	LT. 67		HARKINGEN ENTRANCE. Black square daymark on skeleton tower		26 20	227	97 29	10 97	"	"	X			1288	

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.

50.

PHOTOGRAMMETRIC OFFICE REVIEW

T-9216

1. Projection and grids M.M.S. 2. Title M.M.S. 3. Manuscript numbers M.M.S. 4. Manuscript size M.M.S.

CONTROL STATIONS

5. Horizontal control stations of third-order or higher accuracy M.M.S. 6. Recoverable horizontal stations of less than third-order accuracy (topographic stations) M.M.S. 7. Photo hydro stations M.M.S. 8. Bench marks M.M.S.
~~9. Plotting of vertical lines~~ 10. Photogrammetric plot report W.A.R. 11. Detail points M.M.S.

ALONGSHORE AREAS

(Nautical Chart Data)

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

PHYSICAL FEATURES

20. Water features M.M.S. 21. Natural ground cover M.M.S. 22. Planetable contours M.M.S. ~~stereoscopic~~
~~instrument contours~~ /////// 24. Contours in general M.M.S. 25. Spot elevations M.M.S. 26. Other physical features M.M.S.

CULTURAL FEATURES

27. Roads M.M.S. 28. Buildings M.M.S. ~~Highways~~ /////// 30. Other cultural features M.M.S.

BOUNDARIES

31. Boundary lines M.M.S. 32. ~~Highways~~ ///////

MISCELLANEOUS

33. Geographic names M.M.S. 34. Junctions M.M.S. 35. Legibility of the manuscript M.M.S. 36. Discrepancy overlay M.M.S. 37. Descriptive Report M.M.S. 38. Field inspection photographs M.M.S. 39. Forms M.M.S.

40. Milton M. Slavney William A. Rasure
Reviewer Supervisor, Review Section or Unit

Milton M. Slavney

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:

REVIEW REPORT
Topographic and Planimetric Map T-9216
25 June 1952

62. Comparison with Registered Topographic Surveys:

T-1476b (1879-80) 1:20,000

The Intracoastal Waterway has been constructed since the old survey.

The old topographic survey is superseded by the new map (T-9216) for nautical charting.

63. Comparison with Maps of Other Agencies:

La Leona Quadrangle, USGS, Edition 1936, Reprint 1945,
1:31,680

64. Comparison with Contemporary Hydrographic Surveys:

None.

65. Comparison with Nautical Charts:

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

66. Adequacy of Results and Future Surveys:

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

Calle Atascoso

In the ~~Sayo Atascosa~~ and a portion of the Arroyo Colorado areas, the water stages 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 encountered in identifying the MHW line from photographs of this as well as other similar areas throughout the project.
- (2) It was considered impractical to resolve this problem 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 correspondence and instructions attached to the

Descriptive Report for T-9214.

Reviewed by:

Charles Hanavich
Charles Hanavich

Approved:

S. J. Giffith
Chief, Review Section B
Division of Photogrammetry

J. P. Edman
Chief, Nautical Chart Branch
Division of Charts 67

R. W. Lawson
Chief, Div. of Photogrammetry
acting

Carl O. Henton
Chief, Div. of Coastal Surveys
X 7

