

# 9198

Diag. Cht. Nos. 1286-2 & 1287

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

## DESCRIPTIVE REPORT

Type of Survey TOPOGRAPHIC

Field No. Ph-36(48)B Office No. T-9198

### LOCALITY

State TEXAS

General locality KLEBERG & KENEDY COUNTIES

Locality PADRE ISLAND

194 51

CHIEF OF PARTY

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

H.A.Paton, Baltimore Photogrammetric Office

LIBRARY & ARCHIVES

DATE Nov-3-1953

0-1870-1 (1)

9198

DATA RECORD

T-9198

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

Field Office (II): Brownsville, Texas

Chief of Party: George E. Morris, Jr.

→ Photogrammetric Office (III): Baltimore, Md.

→ Officer-in-Charge: Hubert A. Paton

Instructions dated (II) (III): 14 February 1949

Copy filed in Division of  
Photogrammetry (IV)

Supplement No. 2 (field) 26 July 1949

Supplement No. 2 (field) 28 July 1949

Office compilation assignment 8 June 1949

Method of Compilation (III): Graphic

Manuscript Scale (III): 1:20,000

Stereoscopic Plotting Instrument Scale (III):

Scale Factor (III): None

Date received in Washington Office (IV): NOV 15 1950      Date reported to Nautical Chart Branch (IV):

Applied to Chart No. 893  
894

Date: 11-19-51  
11-16-51

Date registered (IV): 4-7-53

Publication Scale (IV):

Publication date (IV):

Geographic Datum (III): N. A. 1927

Vertical Datum (III): MHW

Mean sea level except as follows:  
Elevations shown as (25) refer to mean high water  
Elevations shown as (S) refer to sounding datum  
i.e., mean low water or mean lower low water

Reference Station (III): UNION 1939

Lat.: 27° 16' 03.594"      110.6      Long.: 97° 21' 26.150"      719.3

Adjusted  
~~Unadjusted~~

Plane Coordinates (IV):

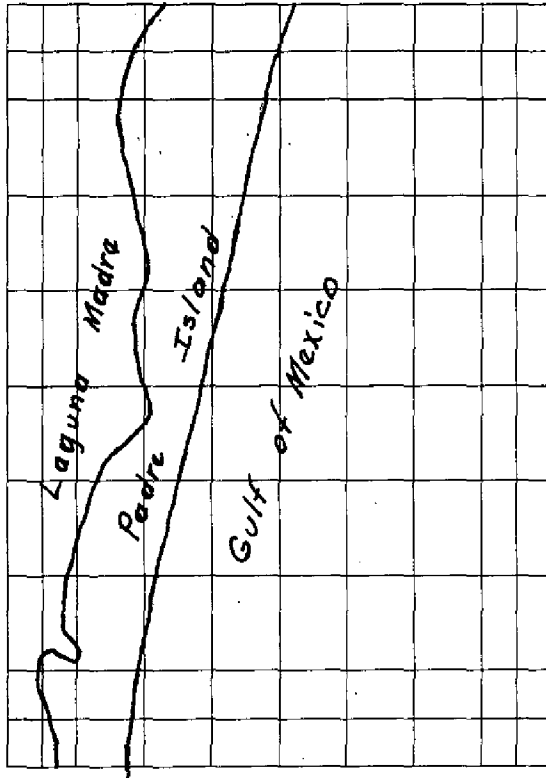
State: Texas      Zone: South

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)

**All contouring done by W. H. Nelson**

DATA RECORD

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

Date: April 1949  
August & September  
1949

Planetable contouring by (II): W. H. Nelson

Date: August & September  
1949

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

Date: 11-6-51

Mean High Water Location (III) (State date and method of location):  
Same as date of field inspection

Projection and Grids ruled by (IV): WEW

Date: 10-19-49

Projection and Grids checked by (IV): HDW

Date: 10-21-49

Control plotted by (III): W. L. Lineweaver

Date: 12-29-49

Control checked by (III): F. J. Tarcza

Date: 12-30-49

Radial Plot ~~for Stereoscopic~~  
~~Control Extension by (III)~~ F. J. Tarcza

Date: Jan. 1950

Stereoscopic Instrument compilation (III):  
Planimetry  
Contours

Date:

Date:

Manuscript delineated by (III): W. L. Bloom

Date: Oct. 9, 1950

Photogrammetric Office Review by (III): M. F. Kirk

Date: 27 Oct. 1950

Elevations on Manuscript  
checked by (II) (III): M. F. Kirk

Date: 27 Oct. 1950

Camera (kind or source) (III):

Number	Date	PHOTOGRAPHS (III) Time	Scale	Stage of Tide
1178 thru 1181	12/8/48	1115	1:20,000	Negligible
1581 thru 1588	12/9/48	1130	1:20,000	negligible
1684 thru 1688	12/9/48	1145	1:20,000	negligible
6343 L thru 6345 L			1:20,000 (approx)	Negligible

Tide (III)

Diurnal

Reference Station: Galveston, Texas.

Subordinate Station: Aransas Pass

Subordinate Station: *The mean range of tide in lagoon  
Matre is less than 1/2 foot.*

Ratio of Ranges	Mean Range	Spring Range
1.0	1.0	1.4
1.1	1.1	1.5

Washington Office Review by (IV): *G.B. Willey*

Date: *5/9/52*

Final Drafting by (IV):

Date:

Drafting verified for reproduction by (IV):

Date:

Proof Edit by (IV):

Date:

Land Area (Sq. Statute Miles) (III): *13*

Shoreline (More than 200 meters to opposite shore) (III): *22*

Shoreline (Less than 200 meters to opposite shore) (III): *2*

Control Leveling - Miles (II): *21.9*

Number of Triangulation Stations searched for (II): *7* Recovered: *1* Identified: *1*

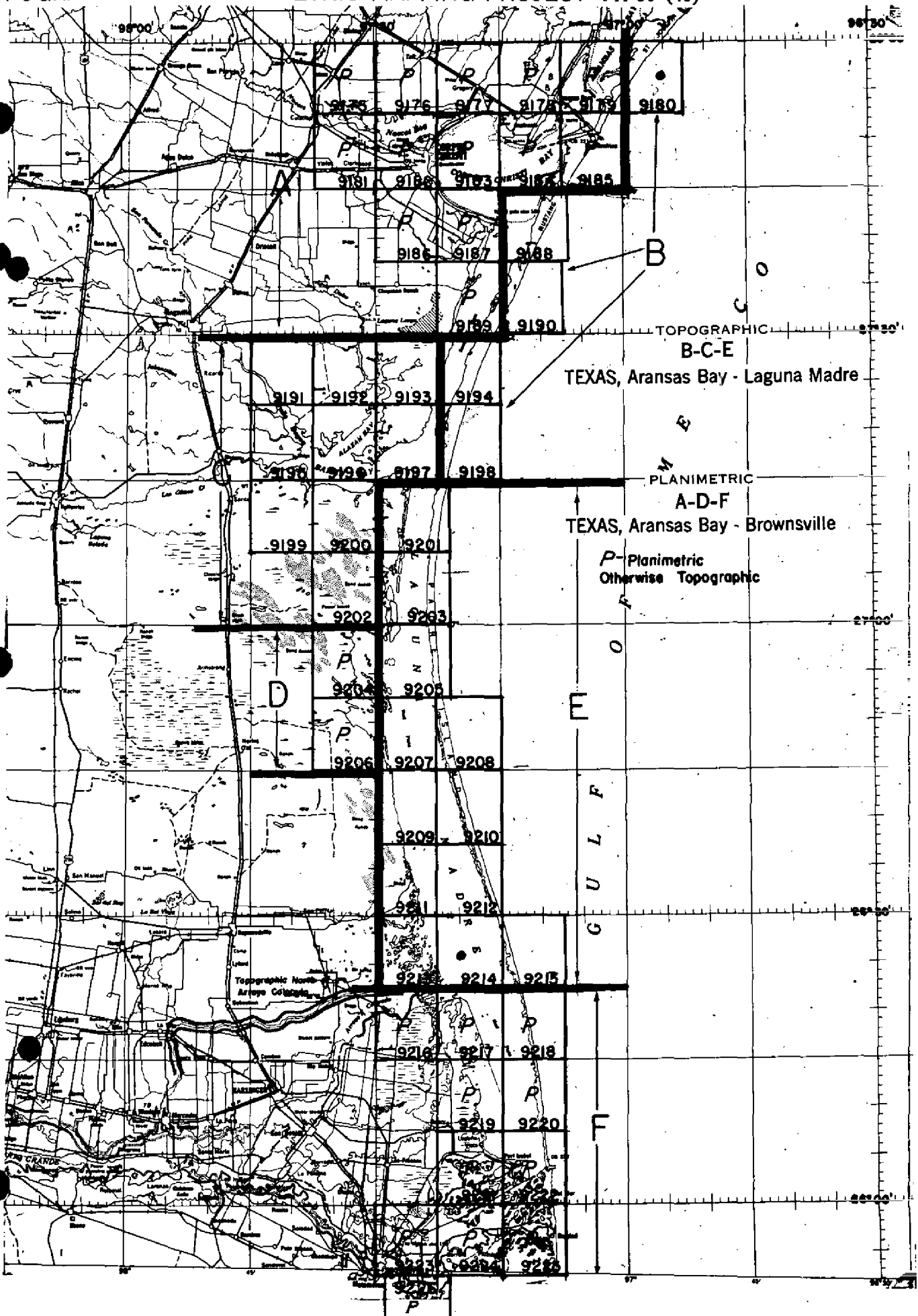
Number of BMs searched for (II): *0* Recovered: *0* Identified: *0*

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

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

Remarks:

TOPOGRAPHIC AND PLANIMETRIC MAPPING PROJECT PH-36 (48)



TOPOGRAPHIC  
B-C-E  
TEXAS, Aransas Bay - Laguna Madre

PLANIMETRIC  
A-D-F  
TEXAS, Aransas Bay - Brownsville

P-Planimetric  
Otherwise Topographic

G  
U  
L  
F

Topographic No. 1  
Arroyo Colorado

Summary T- 9198

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 completed 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

The field inspection was done on photographs 48-0-1178 to 48-0-1181 inclusive, and photograph NA 47-6344-L, furnished by U. S. Navy. The field inspection is believed to be adequate and complete.

The photographs are adequate for the most part. The area along the Gulf beach is lacking in detail, making it difficult to differentiate the dunes from the flat beach. The Gulf side of the island has a series of dunes fairly well covered with grass; on the Laguna side of the Island the dunes are barren, shifting sand. The central portion is fairly flat and grass covered. There is a Navy bombing target along the north limit of the quadrangle. This target was built since the photographs for project Ph-36(48) were taken, therefore, more recent photographs, taken by the Navy, are submitted to show this feature.

The darker tones on the photographs are grass and the light gray tones are shifting sand. There are no trees, intermittent ponds, or marshes within the limits of this quadrangle. The grassy areas are more or less stable while the barren sand dunes are constantly changing. Comparison of the Navy photographs with the USC&GS photographs will show this change.

3. HORIZONTAL CONTROL

The following triangulation stations were reported lost on Form 526: LONE PITA, DOUBLE HIGHEST POINT, 1912; XMAS 1938; SPIRIT 1938; ALSO 1938; VALLEY 1939; LOST 1938.

Horizontal control was identified on photograph 48-0-1180.

4. VERTICAL CONTROL

There are no bench marks within the limits of this quadrangle. A closed loop of fly levels was run from a fly level point in quadrangle T-9194( ) to USE EM 132 on the west side of Laguna Madre.

Fly level points 98-01 through 98-17 were established.

Vertical control was identified on photographs 48-0-1178 to 48-0-1181 inclusive.

5. CONTOURS AND DRAINAGE

Contouring was done by a two man party, using planetable methods, on photographs 48-0-1178 to 48-0-1181 inclusive. Much of the area consists of shifting sand dunes and was not contoured, but high and low elevations are shown at about half-mile intervals.



The sand dunes are steep and on most of them, the highest contour is too small to be shown.

There is no definite drainage pattern.

6. WOODLAND COVER

All vegetation in this quadrangle is grass or low scattered brush and trees and should be shown as "open".

7. SHORELINE AND ALONGSHORE FEATURES

The mean high water line along the Gulf of Mexico is indicated on photographs 48-0-1581 to 48-0-1588 inclusive. The normal water line along Laguna Madre is to be indicated on photographs which are to be taken in January or February 1950.

There are no piers or landings within the limits of this quadrangle.

8. OFFSHORE FEATURES

There are no offshore features.

(Because of high water at the time of field inspection the mean low water line could not be accurately shown. In general, the mean low water line is approximately 5.0 meters offshore of the mean high water line and parallel to it.)

9. LANDMARKS AND AIDS

There are no landmarks in this quadrangle.

Fixed aids to navigation are covered in "Special Report, Location of Aids to Navigation, Project Ph-36(48), Latitude 28°00' to Baffin Bay".

10. BOUNDARIES, MONUMENTS, AND LINES

See "Special Report, Boundaries, Project Ph-36(48), Latitude 28°00' to Baffin Bay".

11. OTHER CONTROL

Four recoverable topographic stations were set and identified on the photographs; they are as follows:

PUNT 1949	-	Photograph	48-0-1180
QUIZ 1949	-	"	48-0-1179
RUFF 1949	-	"	48-0-1178
SUNK 1949	-	"	48-0-1177

12. OTHER INTERIOR FEATURES

There is an abandoned corral, containing two buildings, near the north working limit of photograph 48-0-1181. There are two buildings within the fenced area and two buildings south of the fenced area indicated on photograph NA 47-6344-L.

13. GEOGRAPHIC NAMES *outside 857*

See "Special Report, Geographic Names, Project Ph-36(48), Aransas Bay to Baffin Bay".

14. SPECIAL REPORTS AND SUPPLEMENTAL DATA

"Special Report, Location of Aids to Navigation, Latitude 28°00' to Baffin Bay, Project Ph-36(48)", forwarded to Washington 28 June 1949.

"Special Report, Boundaries, Baffin Bay to Latitude 28°00', Project Ph-36(48)", forwarded to Washington 11 July 1949.

"Special Report, Geographic Names, Aransas Bay to Baffin Bay, Project Ph-36(48)", forwarded to Washington 27 July 1949.

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

Letter of transmittal Ph-36 Field 43, Records, Quadrangle T-9198 ( ), forwarded to Baltimore 8 November 1949.

Submitted  
4 November 1949

*Wilber H. Nelson*  
*SEH*  
Wilber H. Nelson  
Cartographic Survey Aid

Approved  
8 November 1949

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



COMPILATION REPORT

T-9198

PHOTOGRAMMETRIC PLOT REPORT

Refer to the descriptive report of Survey T-9191.

31. DELINEATION

This survey was delineated by graphic methods.

32. CONTROL

Control of points in the southern half of this survey may <sup>be</sup> weak; see Photogrammetric Plot Report. Tie-in with plot to the south strengthened the control of this survey.

33. SUPPLEMENTAL DATA

Three Navy photographs of Target No. 2 were used to locate the details adjacent to same.

34. CONTOURS AND DRAINAGE

See par. 5 of Field Report

35. SHORELINE AND ALONGSHORE DETAILS

The June 1949 field inspection of the shoreline was used where possible. Where this conflicted with the field inspection on the 1950 photographs the latter was used.

36. OFFSHORE DETAILS

No comment.

37. LANDMARKS AND AIDS TO NAVIGATION

None.

38. CONTROL FOR FUTURE SURVEYS

Forms 524 are being submitted for four recoverable topographic stations, QUIZ, 1949; RUFF, 1949; PUNT, 1949; & SUNK, 1949.

39. JUNCTIONS

Junction has been made with T-9194 to the north, T-9197 to the west, and T-9201 to the southwest and all are in agreement. To the east and south is all water area.

40. HORIZONTAL AND VERTICAL ACCURACY

No comment.

41 through 45.

No comment.

46. COMPARISON WITH EXISTING MAPS

Comparison was made with Corps of Engr. quadrangle Point Penescal, scale 1:125,000, 1920 edition, reprinted 1928.

47. COMPARISON WITH NAUTICAL CHARTS

Comparison was made with USC&GS Chart No. 1286, scale 1:80,000, published 1942 (13th edition) corrected to 9 January 1950.

- (a) No comment
- (b) Items to be applied to nautical charts immediately: none
- (c) Items to be carried forward: none
- (d) No comment.

Respectfully submitted  
27 October 1950

Mary L. Bloom  
Mary L. Bloom

Approved and forwarded  
November 1950

Hubert A. Paton  
Hubert A. Paton  
Comdr., C&GS  
Officer in Charge

48. GEOGRAPHIC NAMES✓ Big Ball Hill✓ Boggy Slough✓ Dagger Hill✓ Green HillGulf of MexicoKenedy CountyKleberg CountyLaguna Madre✓ Little ShellPadre IslandIntra-coastal Waterway

(a section of Gulf beach composed of small shells)

Names underlined in red are approved 5-10-51.

L. Heck

Re-checked after Field Edit. 5-5-52. L.H.

49. NOTES FOR THE HYDROGRAPHER

(a) Photo Hydro Stations - None

Topographic Stations

Quiz, 1949

Ruff, 1949

Punt, 1949

Sunk, 1949

(b) No comment

(c) No comment

## Field Edit Report, T-9198

51. Methods.--The Gulf beach was ridden by Jeep and truck and a visual inspection of the topographic features was made at the time. The area inland from the beach was travelled by Jeep to answer the questions raised by the Reviewer.

The planetable was used to locate all additions and corrections on the Field Edit Sheet.

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

Field edit information will be found on the Field Edit Sheet and contact print 48-O-1585.

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

53. Map accuracy.--No accuracy checks were specified. From visual inspection and points used with the planetable, the accuracy appears good.

54. Recommendations.--None offered.

55. Examination of proof copy.--Mr. Conrad M. Blucher, County Surveyor of Nueces County, has agreed to make the examination. His address is County Courthouse, Corpus Christi, Texas.

No discrepancies were noted in geographic names.

Respectfully submitted,  
6 November 1951

*William H. Shearouse*  
William H. Shearouse,  
Cartographer



PHOTOGRAMMETRIC OFFICE REVIEW

T. 9198

- 1. Projection and grids Metc
- 2. Title Metc
- 3. Manuscript numbers Metc
- 4. Manuscript size Metc

CONTROL STATIONS

- 5. Horizontal control stations of third-order or higher accuracy Metc
- 6. Recoverable horizontal stations of less than third-order accuracy (topographic stations) Metc
- 7. Photo hydro stations \_\_\_\_\_
- 8. Bench marks None
- 9. Plotting of sextant fixes None
- 10. Photogrammetric plot report Metc
- 11. Detail points Metc

ALONGSHORE AREAS

(Nautical Chart Data)

- 12. Shoreline Metc
- 13. Low-water line Metc
- 14. Rocks, shoals, etc. Metc
- 15. Bridges None
- 16. Aids to navigation None
- 17. Landmarks None
- 18. Other alongshore physical features Metc
- 19. Other along-shore cultural features \_\_\_\_\_

PHYSICAL FEATURES

- 20. Water features Metc
- 21. Natural ground cover None
- 22. Planetable contours Metc
- 23. Stereoscopic-instrument contours \_\_\_\_\_
- 24. Contours in general Metc
- 25. Spot elevations Metc
- 26. Other physical features None

CULTURAL FEATURES

- 27. Roads Metc
- 28. Buildings Metc
- 29. Railroads None
- 30. Other cultural features None

BOUNDARIES

- 31. Boundary lines Metc
- 32. Public land lines None

MISCELLANEOUS

- 33. Geographic names Metc
- 34. Junctions Metc
- 35. Legibility of the manuscript Metc
- 36. Discrepancy overlay None
- 37. Descriptive Report Metc
- 38. Field inspection photographs Metc
- 39. Forms Metc

40. \_\_\_\_\_  
 Reviewer Metc Supervisor Joseph Steinberg

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 T-9198  
 Topographic Map  
 9 May 1952

62. Comparison with Registered Topographic Surveys:

T-1627	1:20,000	1881-82
T-1628	1:20,000	1881-82

T-9198 supersedes these surveys for nautical charting purposes.

For a discussion of the special treatment of shoreline interpretation and delineation by this survey as compared to the above surveys see Item 66 below.

63. Comparison with Maps of Other Agencies:

Point Penescal, Tex. (U.S.E.) 1:125,000 1909, Revised 1928.

No significant differences are to be noted.

64. Comparison with Contemporary Hydrographic Surveys:

H-9396	1:20,000	1938
H-9397	1:20,000	1938

These sheets cover the Gulf of Mexico shoreline. No discrepancies were noted.

65. Comparison with Nautical Charts:

Chart 1286 1:80,000 13 Edition (1942) 52 - 1/4.

See Item 66 below for a discussion of the special treatment of shoreline interpretation and delineation in the Laguna Madre.

66. Shoreline Interpretation and Delineation:

Water stages in the Laguna Madre vary widely with meteorological conditions. The high-water line has been omitted where it is indefinite and is not marked by visible evidence on the ground. The broken line indicates the approximate inshore limits of areas subject to inundation. The dotted line represents the approximate low-water line.

67. Adequacy of Manuscript:

This topographic map complies with Bureau standards, project instructions and with National Map Accuracy Standards.

Reviewed by:

Gordon B. Willey  
 Gordon B. Willey

Approved:

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

M. Edmister  
Chief, Nautical Chart Branch  
Division of Charts

O. S. Reading  
Chief, Div. Of Photogrammetry

Carl O. Heaton  
Chief, Div. Of Coastal Surveys  
M7

History of Hydrographic Information  
Quadrangle T-9198  
Laguna Madre - Gulf of Mexico, Texas

Hydrography was applied to the manuscript of this quadrangle in accordance with Division of Photogrammetry general specifications dated 18 May 1949.

Soundings and 6, 12, 18, and 30 and 60 foot depth curves at mean low water datum, originate with the following:

USC&GS Hydrographic Surveys

H-6396	(1938)	1:20,000
H-6397	(1938)	1:20,000
H-6403	(1938)	1:40,000

USC&GS Nautical Chart

894 1:40,000 aid proof May 1952  
1286, 1:80,000, latest print date 4/14/52

USE Hydrographic Survey:

Intracoastal Waterway, Sheet 6, 1931-32 BP-31731

Hydrography compiled by K.N. Maki and verified by R. E. Elkins.

*K. N. Maki*  
\_\_\_\_\_  
K. N. Maki  
Div. of Photogrammetry  
22 May 1952

