

9290

Diag. Cht. Nos. 1283 & 1284

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey SHORELINE-PHOTOGRAMMETRIC

Field No. Ph-14(46) Office No. T-9290

LOCALITY

State TEXAS

General locality MATAGORDA PENINSULA

Locality MATAGORDA BAY TO CANEY CREEK

1947

CHIEF OF PARTY

R. A. Gilmore, Chief of Field Party

T. B. Reed, Baltimore Photogrammetric Office

LIBRARY & ARCHIVES

DATE Jan - 15 - 1953

9290

# DATA RECORD

T - 9290

Project No. (II): PH-14(46)

Quadrangle Name (IV):

Field Office (II): Port Lavaca, Texas

Chief of Party: Ross A. Gilmore

Photogrammetric Office (III): Baltimore, Md.

Officer-in-Charge: Thos. B. Reed

Instructions dated (II) (III): (no date); Supplement 1, 22 July 1947  
Letters dated 5 June 1947, 29 July 1947, 4 February 1949. Copy filed in Division of Photogrammetry (IV)

Method of Compilation (III): Graphic

Manuscript Scale (III): 1:20,000

Stereoscopic Plotting Instrument Scale (III):

Scale Factor (III): 1.000

Date received in Washington Office (IV): 10-19-49 Date reported to Nautical Chart Branch (IV): 10-27-49

Applied to Chart No.

Date:

Date registered (IV): 19 Nov. 1952

Publication Scale (IV):

Publication date (IV):  
(Date of issue July 1927)

Geographic Datum (III): N.A. 1927

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

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): MARIE, 1934

Lat.: 28° 43' 53.172" (1636.9m) Long.: 95° 41' 02.084" (5666m)

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)  
 (II) (III)

Shoreline

# DATA RECORD

Field Inspection by (II): John S. Dowell  
William M. Reynolds

Date: Nov. 1947

Planetable contouring by (II):

Date:

Completion Surveys by (II):

Date:

Mean High Water Location (III) (State date and method of location): Same as date of photographs  
supplemented by field data.

Projection and Grids ruled by (IV): On original manuscript.

Date: 1934

Projection and Grids checked by (IV): "

Date: "

Control plotted by (III): "

Date: "

Control checked by (III): "

Date: "

Radial Plot on Stereoscope  
~~Control extension by (III)~~ Leroy A. Senasack

Date: 28 July 1949

Planimetry

Date:

Stereoscopic Instrument compilation (III):

Contours

Date:

Manuscript delineated by (III): Leroy A. Senasack

Date: 6 July 1949 to  
19 August 1949

Photogrammetric Office Review by (III): R. Glaser

Date: 30 Sept. 1949 to  
10 October 1949

Elevations on Manuscript  
checked by (II) (III):

Date:





Summary to Accompany T-9290

Shoreline survey T-9290, scale 1:20,000, (Latitude 28° 35' to 47'; Longitude 95° 36' to 96° 00') is one of 76 maps in Project Ph-14(46), Intracoastal Waterway, which consists of four parts.

This project was planned to furnish data for a new series of Inland Waterway charts at 1:40,000 scale.

T-9290 is one of the Part IV group, which consists of 14 maps (T-9284 to T-9297, inclusive), Vicinity of Matagorda Bay, Texas.

Field Report  
Shoreline Manuscript T-9290

For field data covering survey T-9290, refer to Special Report for Project Ph-14(46), Gulf Intracoastal Waterway, Cedar Lake, Texas, to Aransas Pass, Texas, submitted by Ross A. Gilmore, Chief of Party, January 1948.

Chart Letter No. 150 (1948). Filed in Nautical Chart Branch, Division of Charts.

PHOTOGRAMMETRIC PLOT REPORT

21. AERA COVERED:

This radial plot covers that part of Surveys Nos. T-9285, T-9286, T-9289 and T-9290 which lies along the Colorado River from Matagorda, Texas to the Gulf of Mexico and Matagorda Peninsula between Colorado River and Greens Bayou.

22. METHOD:

This radial plot was run graphically with vinylite templets.

Radial Plot: The radial plot was run on red line prints of Surveys Nos. T-5359 (1934), T-5358 (1934), T-5353 (1934) and T-5352 (1934), scale 1:20,000 on acetate. All control was on the manuscript except sub-stations located by the field inspection party in 1947. These were plotted graphically on the map manuscript.

The photographs used in this radial plot are 1:20,000 scale reduction of 1:10,000 scale nine-lens photographs, taken with the U. S. C. & G. S. camera focal length  $8\frac{1}{4}$  inches. Nineteen (19) photographs were used, numbered as follows:

18326 to 18340 incl.

18354 to 18357 incl.

It is believed that several of the photographs were tilted in the process of reduction.

All identified control centers and conjugate centers and pass points were identified on the photographs prior to reduction. Three additional control stations, two of which were church spires and one a chimney on a house, were identified in this office. The symbols used in the preparation of the photographs are in accordance with Topographic Manual, Part II, Chapter V and VII.

While laying the plot the need arose for additional pass points so several points common with the old surveys were pricked, circled and used.

To correct for paper distortion and transforming errors, the Washington Office furnished a master templet No. 1666 dated Sept. 1948, scale 1:10,000.

In order to run this plot with templets adjusted for correction of paper distortion and transforming errors at a scale of 1:20,000 it was necessary to make a reduction of the 1:10,000 scale master templet. Vinylite templets of the 1:20,000 photographs were made using the reduced master templet.



22. RADIAL PLOT (cont'd)

The plot was first run starting from a strongly controlled area and attempted to extend through to the opposite end which was also controlled. A good tie was not obtained because only a single flight of photographs was available and the central area was weakly controlled. The plot was then relaid starting at each end and tying in both ends with the templet for photograph No. 18336. With some slight adjustments of the templets a good plot resulted.

During the plot a radially plotted position of Mon REF I C (USE) was established. After the plot was run a coordinate position of this station was received from the District Engineer at Galveston, Texas. The geographic position was then computed in this office and the station plotted. When the position of this station was pricked on the manuscript it coincided with the radially plotted position.

After completing the plot, the red line prints were carefully turned over and the photograph centers, pass points, aids to navigation etc., were pricked and circled directly on the back of the manuscript. The size of photo centers and pass points shown on the manuscripts are not to the size specified in the Topographic Manual, 1949. The size of photograph centers and pass points were made one-half specified dimensions in order that these circles would coincide with the circles on the reductions of the 1:10,000 scale photographs.

23. ADEQUACY OF CONTROL:

The horizontal control identified by the field party complied with project instructions.

The radially plotted position of DOG ISLAND REEF BN. 3, 1934 falls 1.0 mm. northeast of its plotted position. The radially plotted position of DOG ISLAND REEF BN. 5, 1934 as identified by the field party in 1947 falls 22 mm. to the southwest of its plotted position and 0.8 mm. northeast of Matagorda Middle Channel Lt. No. 3 as shown on the red line survey No. T-5358 (1934). It is believed these beacons have been moved, and that the stations should be considered lost.

See  
Review  
Report  
7-9289

24. SUPPLEMENTAL DATA:

Several Range Lts. located by planetable survey on Topographic Sheet B, 1947 were used as supplemental control near Greens Bayou just north of Matagorda Peninsula.



25. PHOTOGRAPHY:

The coverage and definition of photographs were adequate. Photograph No. 18340 appeared excessively tilted. The degree of tilt was not computed for this photograph since the area was sufficiently covered to complete the plot. Photograph No. 18340 was laid last. Photograph No. 18336 was badly stained in the photographic laboratory causing difficulty in pricking pass points and control.

26. PURPOSE OF PLOT:

Due to insufficient detail, common to both the photographs and the red line acetate surveys (1934), to orientate the photographs, it was necessary to run this plot.

1. MATAGORDA LONGITUDE STATION, 1911
2. EPISCOPAL CHURCH SPIRE, 1906 \*
3. METHODIST CHURCH SPIRE, 1906 \*
4. DEVIL, 1934
5. MATAGORDA CO. RECLAMATION STATION D, 1934
6. DOG ISLAND REEF BN 3, 1934
7. DOG ISLAND REEF BN 5, 1934
8. IDOL, 1934
9. SLED, 1934
10. CHIMNEY PHILIP HOUSE, 1934 \*
11. SULA, 1934
12. POE, 1934
13. COTTON, 1934
14. GORDA, 1934
15. MATAGORDA BAY RANGE B REAR LT. +
16. " " " B FRONT LT. +
17. " " " C FRONT LT. +
18. " " " C REAR LT. +
- \* IDENTIFIED IN OFFICE
- + PLANETABLE POSITION
- 8A MON REF IC (USE)

# LAYOUT SKETCH

PROJECT NO. PH-14(46)

SURVEYS NOS. T-9288

T-9289, T-9285, T-9286

- FIELD & OFFICE PHOTOGRAPHS
- △ CONTROL HELD IN RADIAL PLOT
- ▲ CONTROL NOT HELD IN RADIAL PLOT

T-9285

*fas.*



MAP T-9290

PROJECT NO. PH-14(46)

SCALE OF MAP 1:20,000

SCALE FACTOR 1.000

STATION	SOURCE OF INFORMATION (INDEX)	DATUM	LATITUDE OR $y$ -COORDINATE LONGITUDE OR $x$ -COORDINATE		DISTANCE FROM GRID IN FEET. OR PROJECTION LINE IN METERS FORWARD (BACK)	DATUM CORRECTION	N.A. 1927 - DATUM DISTANCE FROM GRID OR PROJECTION LINE IN METERS FORWARD (BACK)		FACTOR DISTANCE FROM GRID OR PROJECTION LINE IN METERS FORWARD (BACK)
IDOL, 1934 <i>r.1947</i>	G-2874 Pg.65	N.A. 1927	28 36	54.368			1673.7	173.4	
			95 58	51.558			1400.6	229.4	
CRAB, 1934	"	"	28 38	20.880			642.8	1204.3	
			95 54	30.845			837.8	791.8	
WEST POINT, 1883	"	"	28 39	52.077			1603.2	243.9	
			95 50	13.528			367.3	1261.9	
EAST POINT, 1883	"	"	28 41	18.469			568.6	1278.5	
			95 46	22.225			603.4	1025.5	
MATAGORDA PENINSULA	"	"	28 40	56.245			1731.5	115.6	
NORTH BASE, 1883	Pg.74		95 48	52.880			1435.6	193.3	
			28 38	27.011			831.5	1015.6	
ROW, 1934	"	"	95 52	07.816			212.3	1417.3	
HOUSE 1 1/2 MILES NE OF A WEST POINT, 1934	Pg.88	"	28 40	08.86			272.8	1574.3	
			95 48	48.92			1328.3	300.9	
B.M. 754 (U.S.E.) 1934 <i>r.1947</i>	"	"	28 45	52.593			1619.1	228.0	
	Pg.73		95 37	53.217			1443.7	183.9	
	"		28 43	53.172			1636.9	210.2	
MARIE, 1934 <i>r.1947</i>	Pg.66	"	95 41	02.084			56.6	1571.6	
			28 46	03.911			120.4	1726.7	
AERMOTOR, 1934 <i>r.1947</i>	"	"	95 36	38.639			1048.2	579.4	
HUEBNER HOUSE WEST END, 1934									
MON REF 1C (USE) <i>r.1947</i>		"	28 35	51.899			1597.7	249.4	
			95 58	41.741			1134.1	496.1	F

1 FT. = 3048008 METER

COMPUTED BY L.A. Senasack

DATE

June 28, 1949

CHECKED BY: R. Glaser

DATE 10/10/49

M-2388-12





COMPILATION REPORT T--9290

This manuscript is one of a series of surveys in Project No. Ph-14(46), Gulf Intracoastal Waterway. Survey No. T-9290 is a revision of Survey No. T-5359(1934).

FIELD INSPECTION REPORT

Refer to the Special Report for Project Ph-14(46), Gulf Intracoastal Waterway, Cedar Lakes, Texas, to Aransas Pass, Texas, submitted by Ross A. Gilmore, Chief of Party, January 1948.

PHOTOGRAMMETRIC PLOT REPORT

Refer to the radial plot report attached to the Descriptive Report for Survey No. T-9292, also see the radial plot, pages 7 to 9, attached to this report.

31. DELINEATION

The manuscript was delineated by graphic methods only.

The compilation was accomplished by holding detail, common to the red line print of T-5259 (1934) and the photographs, and the radially plotted position of pass points. This was most difficult, especially in the Caney Creek area where pass points would not hold with the identified location of station BM 754 (U.S.E.), 1934 (see Radial Plot Report for T-9292).

The area of Matagorda Peninsula between Spring Bayou and Brown Cedar Cut was not delineated since no photographs are available. It is believed this area has also changed since the shoreline in the area covered by photographs has moved as much as 1.5 mm. - *The shore line of the outer coast has changed.*

A purple line was drawn on the manuscript to show the limits of revision.

32. CONTROL

See Radial Plot Report, also refer to copy of letter from District Engineer's Office, Port Lavaca, Texas, attached to this report.

33. SUPPLEMENTAL DATA

The following were submitted as geographic name standards:

Lithographic copy of T-5359 (1934)

War Department, Army Map Service, Texas Sheet 536 N.

Matagorda, scale 1:125,000.

34. CONTOURS AND DRAINAGE

Contours - inapplicable

Drainage - no comment

35. SHORELINE AND ALONGSHORE DETAILS

The revised mean high water line southeast of Brown Cedar Cut could not be joined with the originally surveyed shoreline on the red line print since it had moved approximately ~~80~~ mm north. *- 3 mm or 60 meters by*

The shoreline inspection is considered adequate, although in some areas the shoreline required considerable office interpretation.

All shallow and shoal lines were delineated from office interpretation of the photographs.

36. OFFSHORE DETAILS

Inapplicable.

37. LANDMARKS AND AIDS

Forms 567, one for a landmark and one for a non-floating aid to navigation have been submitted in January 1948. Their positions are being submitted on forms 567 with this report.

38. CONTROL FOR FUTURE SURVEYS

One recoverable topographic station identified by the field party was radially plotted. Form 524 is being submitted with this report. A recoverable topographic station "Southeast Peak of Shed Roof" shown on the original survey was deleted during the revision. No information was furnished by the field party for this station, nor could the shed be identified by examination of the photographs. *P 49*

39. JUNCTIONS

Junctions to the east with Survey No. T-9292, to the north with Surveys Nos. T-9291 and T-9289, to the west with Survey No. T-9286 have been made and are in agreement. The Gulf of Mexico is to the south.

40 through 45

Inapplicable.

46. COMPARISON WITH EXISTING MAPS

No maps were available to this office with a more recent date than the planimetric survey which we are revising.

47. COMPARISON WITH NAUTICAL CHARTS

Comparison was made with the following charts:

<u>No.</u>	<u>Scale</u>	<u>Published</u>	<u>Reprinted</u>	<u>Corrected to</u>
1283	1:80,000	May 1940	May 1949	Oct. 1949
1284	1:80,000	Jan. 1945	Sept. 1947	Oct. 1949

The manuscript shows that some shoreline changes have taken place at and near the mouth of the Colorado River. Several earth dams appear on the manuscript that are not charted. One of these dams has closed the Tiger Island Channel entrance. It is also noted that some minor changes of shoreline have occurred at Brown Cedar Cut.

Items to be applied to nautical charts immediately:  
None

Items to be carried forward  
None

Respectfully submitted

Leroy A. Senasack  
Cartographic Aid

Approved and forwarded  
18 October 1949

Thos O. S. Smith  
Officer in Charge  
Baltimore Photo. Office

49. NOTES FOR THE HYDROGRAPHER

One recoverable topographic station, House, 1947, was radially plotted on this manuscript. Form 524 is being submitted with this report for Survey No. T-9290.

## PHOTOGRAMMETRIC OFFICE REVIEW

T. 9290

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

## CONTROL STATIONS

5. Horizontal control stations of third-order or higher accuracy B 6. Recoverable horizontal stations of less than third-order accuracy (topographic stations) B 7. Photo hydro stations B 8. Bench marks B  
9. Plotting of sextant fixes B 10. Photogrammetric plot report B 11. Detail points B

## ALONGSHORE AREAS

(Nautical Chart Data)

12. Shoreline B 13. Tide Computations B 14. Rocks, shoals, etc. B 15. Bridges B 16. Aids to navigation B 17. Landmarks B 18. Other alongshore physical features B 19. Other along-shore cultural features B

## PHYSICAL FEATURES

20. Water features B 21. Natural ground cover B 22. Planetable contours B 23. Stereoscopic instrument contours B 24. Contours in general B 25. Spot elevations B 26. Other physical features B

## CULTURAL FEATURES

27. Roads B 28. Buildings B 29. Railroads B 30. Other cultural features B

## BOUNDARIES

31. Boundary lines B 32. Public land lines B

## MISCELLANEOUS

33. Geographic names B 34. Junctions B 35. Legibility of the manuscript B 36. Discrepancy overlay B 37. Descriptive Report B 38. Field inspection photographs B 39. Forms B  
40. Raymond Blasen Reviewer Joseph Steinberg 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:

M-2623-12



TO BE CHARTED  
TO BE DELETED

Baltimore, Maryland

18 August 1949

The positions given have been checked after listing by R. Glaser

T-9290

[illegible]

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.



TO BE CHARTED  
TO BE DELETED

Baltimore, Maryland

11 October 1949

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

The positions given have been checked after listing by

R. Glaser

T-9290

[illegible]

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.



POST-OFFICE ADDRESS: 518 E. 32nd Street, Baltimore-18, Maryland.

TELEGRAPH ADDRESS:

EXPRESS ADDRESS:

C  
O  
P  
Y

DEPARTMENT OF COMMERCE

U. S. COAST AND GEODETIC SURVEY

14 July 1949

To: The Resident Engineer  
Corps of Engineers  
Port Lavaca Field Office  
Galveston District  
P.O. Drawer AA  
Port Lavaca, Texas.

Subject: Traverse Station Positions

In connection with the compilation of a new series of charts along the Gulf Intracoastal Waterway, Lt. Comdr. Ross A. Gilmore requested by letter dated 26 January 1948, the positions of a number of control stations established by the Corps of Engineers. The positions of these stations were furnished Lt. Comdr. Gilmore by your office in a letter dated 29 January 1948.

These stations have been plotted on our manuscripts and, in so doing, it was noted that stations 490+931 (Mon. 928) and 491+261 (Mon. 928.1) are not in correlation with station 509+019 (Mon. 949), the position of which checks its identified location on our photographs. It is also noted that stations 490+931 and 491+261 as plotted from the coordinates fall well out in the water.

The positions furnished this office of these stations are as follows:

	X	Y
490+931 (Mon 928)	2,952,220	308,328
491+261 (Mon 928.1)	2,951,947	308,142
509+019 (Mon 949)	2,926,592	299,517

It is to be noted that the "X" distance between stations 509+019 and 491+261 is 25,355', whereas, the traverse distance between stations is approximately 17,750'. The "Y" coordinates for the two stations appear to be about correct.

It would be appreciated if the positions of the above three stations be checked and this office be informed of the results.



Thos. B. Reed, Comdr., C&GS  
Officer in Charge  
Baltimore Field Office  
U.S. Coast and Geodetic Survey

C  
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P  
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CORPS OF ENGINEERS  
OFFICE OF THE RESIDENT ENGINEER  
(Galveston District)  
Bay City Field Office  
Bay City, Texas.

29 July 1949.

SUBJECT: Traverse Station Positions

TO: Mr. Thos. B. Reed, Comdr., C&GS  
Baltimore Field Office  
U. S. Coast and Geodetic Survey  
518 E. 32nd Street  
Baltimore 18, Maryland

1. Referring to your letter dated 14 July 1949, above subject, addressed to the Resident Engineer, Port Lavaca Field Office, which was forwarded to this office on 26 July for reply, since the stations in question are in the area under the jurisdiction of this office. The positions were found to be in error.

2. The correct positions are as follows:

Stations	"X"	"Y"
490+931 (Mon 928)	2,942,220	308,328
491+261 (Mon 928.1)	2,941,947	308,142
509+019 (Mon 949)	2,926,592	299,517

3. Below are the positions of two other stations on the east bank, and near the mouth of, the Colorado River which have recently been computed.

Station	"X"	"Y"
REF. 1 C (Mon.)	2,969,566	290,466
Beacon F "2"	2,969,590	290,537

3. It would be appreciated if you would advise this office when these charts you are compiling will be available for our use and on what scales.

I. J. DIVER  
Resident Engineer

48. GEOGRAPHIC NAMES

Boiler Bayou  
 ✓ Brown Cedar Cut  
Burkhart Cove

Caney Creek  
Cleveland Bayou  
Colorado River

Desert Catchall Basin

✓ East Matagorda Bay  
Eidelbach Flat

✓ Greek Island  
Gulf of Mexico

Hog Island

Intracoastal Waterway

Kain Cove

Matagorda Bay  
Matagorda Peninsula

Oyster Farm Drain

Spring Bayou  
Spring Bayou Cove

\* Tiger Island Channel

Geographic names were taken from names standards furnished by the Washington Office.

\* Tiger Island Channel has been dammed at its entrance to Colorado River.

*Names approved*

*1- 3-51*

*a.g.w.*

Review Report T-9290  
Shoreline Survey  
2 January 1950

62. Comparison with Registered Surveys:

T- 642	1:20,000	1855-6-7
T-6612	"	1937
T-6658	"	1938
T-5359	"	1934 (Used as base for T-9290)

63. Comparisons with Maps of Other Agencies:

USE Matagorda 1:125,000 Ed. 1915 rep. 1943

64. Comparison with Contemporary Hydrographic Surveys:

None.

65. Comparison with Nautical Charts:

1283	1:80,000	ed. May 1940	rev. May 1949
1284	"	ed. Jan. 1945	rev. March 1950

A. Charted objects not on T-9290

1. Pipe: 28° <sup>42</sup>35' 38" / 95° 45' 54"

2. Pipe: 28° 41' 50" / 95° 49' 24"

3. Piles: The two most westerly piles along the old channel in East Matagorda Bay leading from Caney Creek. (Not visible on photographs.)

B. Changes made during review:

1. Water channel east of the highway along Colorado River.

2. Trails extending from Colorado River eastward.

66. Accuracy:

The re-delineated areas are of charting accuracy.



Reviewed by:

Lena T. Stevens  
Lena T. Stevens

Approved by:

S. V. Knapp 11/25/52  
Chief, Review Section  
Division of Photogrammetry

H. C. Munster  
Chief, Nautical Chart Branch  
Division of Charts 651

O. S. Reading  
Chief, Division of Photogrammetry

Earl O. Heaton  
Chief, Division of Coastal  
Surveys 817

## NAUTICAL CHARTS BRANCH

SURVEY NO. 9290

### Record of Application to Charts

[illegible]

M-2168-1

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.