

9919

Diag. Cht. Nos. 532 and 1282.

Form 504

U. S. COAST AND GEODETIC SURVEY  
DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey Shoreline

Field No. Ph-76(51) Office No. T-9919

LOCALITY

State Texas

General locality Houston Ship Channel

Locality Hog Island to Goose Creek

19A/51-52

CHIEF OF PARTY

P.L. Bernstein, Chief of Party (Field)

J.E. Waugh, Tampa Photo. Office, Fla.

LIBRARY & ARCHIVES

DATE March 31, 1958

6159

DATA RECORD

1

T-9919

Project No. (II): Ph-76 (51)      Quadrangle Name (IV):

Field Office (II): Houston, Texas

Chief of Party: P. L. Bernstein

Photogrammetric Office (III): Tampa, Florida

Officer-in-Charge: J. E. Waugh

Instructions dated (II) (III): 21 November 1951

Copy filed in Division of  
Photogrammetry (IV)

*28 Dec. 1954 - 2 Febr. 1955*

Method of Compilation (III): Graphic

Manuscript Scale (III): 1:10,000

Stereoscopic Plotting Instrument Scale (III): Inapplicable

Scale Factor (III): None

Date received in Washington Office (IV):

*JAN 5 1954*

Date reported to Nautical Chart Branch (IV): *2-11-54*

Applied to Chart No.

Date:

Date registered (IV): *19 Sept 1957*

Publication Scale (IV):

Publication date (IV):

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 (6) refer to sounding datum  
i.e., mean low water or mean lower low water

Reference Station (III): PELLY MUNICIPAL TANK, 1931 ✓

Lat.: 29°43'21".302 (655.9 m.) Long.: 94°58'32".377 (870.2 m.) ✓

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.


SHORELINE SURVEY

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

## DATA RECORD

Field Inspection by (II): J. A. Clear, Jr.  
W. H. Shearouse  
W. M. Reynolds

Date: June 1952

Planetable contouring by (II): Not applicable.

Date:

Completion Surveys by (II):

*L. F. Woodcock*  
~~Inapplicable~~

Date:

*26 April 1955*

Mean High Water Location (III) (State date and method of location):

Air Photo Compilation  
June 1952

Projection and Grids ruled by (IV): Jack Allen (W.O.)

Date: 30 Oct. 1952

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

Date: 30 Oct. 1952

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

Date: 28 Jan. 1953

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

Date: 28 Jan. 1953

Radial Plot or ~~Stereoscopic~~

~~Control extension~~ by (III):

M. M. Slavney

Date:

18 Sept. 1953

Stereoscopic Instrument compilation (III):

Planimetry

Contours

**Inapplicable**

Date:

Date:

Manuscript delineated by (III): R. A. Reece

Date: 20 Nov. 1953

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

Date: 12 Dec. 1953

Elevations on Manuscript  
checked by (III):

**Inapplicable**

Date:

Camera (kind or source) (III): Fairchild Cartographic Camera "0" 6" focal length

Number	Date	PHOTOGRAPHS (III) Time	Scale	Stage of Tide
51-0-5667	4 May 1951	0908	1:10,000	Inapplicable
5668	"	0909	"	
5669	"	0909	"	
5670	"	0910	"	
51-0-5678	"	0919	"	
5679	"	0920	"	

*Camera "W"*  
*Sta. W - 3199 A, B & C } 19 Oct. 1954 1:30,000*  
*Sta. W - 3209 to 3212 ind.*

Tide (III)

Reference Item 7

Reference Station:  
 Subordinate Station:  
 Subordinate Station:

Ratio of Ranges	Mean Range	Spring Range

Washington Office Review by (IV): *Leo J. Stevens*  
*D. Steifler*

Date: *10 March, 1954*  
*15 April 1957*

Final Drafting by (IV):

Date:

Drafting verified for reproduction by (IV):

Date:

Proof Edit by (IV):

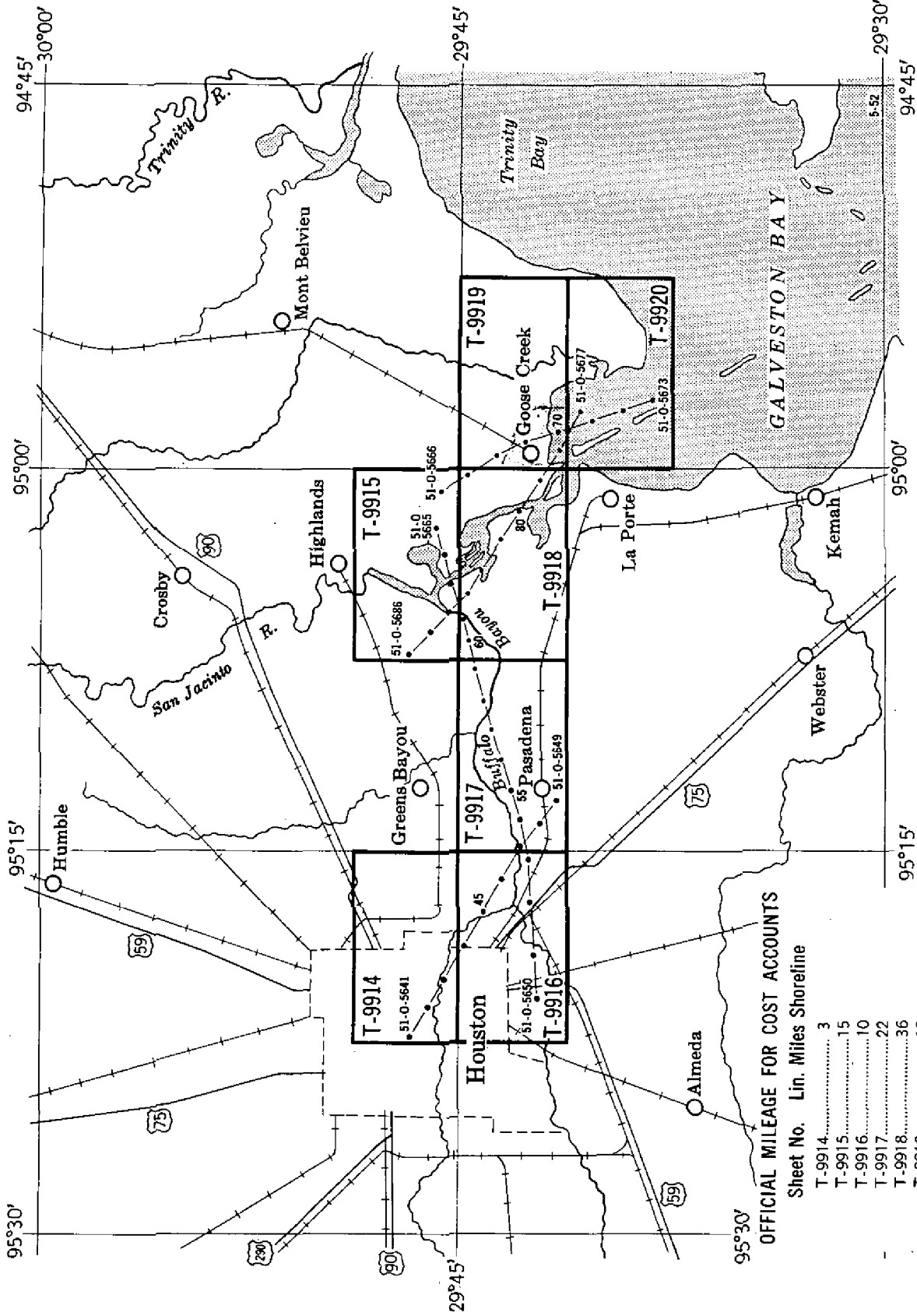
Date:

Land Area (Sq. Statute Miles) (III): **5**  
 Shoreline (More than 200 meters to opposite shore) (III): **10 Statute Linear Miles**  
~~Shoreline (Less than 200 meters to opposite shore) (III):~~  
 Control Leveling - Miles (II): **None**  
 Number of Triangulation Stations searched for (II): **27** Recovered: **6** Identified: **3**  
 Number of BMs searched for (II): **None** Recovered: Identified:  
 Number of Recoverable Photo Stations established (III): **None**  
 Number of Temporary Photo Hydro Stations established (III): **None**

Remarks:

# SHORELINE MAPPING PROJECT PH-76

## TEXAS, Houston to Galveston Bay (Buffalo Bayou)



### OFFICIAL MILEAGE FOR COST ACCOUNTS

Sheet No.	Lin. Miles Shoreline
T-9914	3
T-9915	15
T-9916	10
T-9917	22
T-9918	36
T-9919	10
T-9920	10
<b>TOTAL</b>	<b>106</b>

Compiled at scale 1:10,000 from 1:24,000 scale single-lens photographs taken May 1951  
 (Refer to Air-Photo Indexes 99-E and 99-F)

9919

SUMMARY TO ACCOMPANY T-9920  
HOUSTON SHIP CHANNEL, TEXAS

Project PH-76 (51) consists of seven map manuscripts, 1:10,000 scale, which delineate the shoreline and the inland area for one-half mile each side of the Houston Ship Channel from Galveston Bay to the city of Houston.

T-9920 covers the Houston Ship Channel where it enters Galveston Bay at Morgan Point and Atkinson Island.

After smooth drafting and printing a coronar film positive of the map and the Descriptive report will be registered and filed in the Bureau Archives.

This project was initiated in late 1951 and photographs taken in May 1952. The field inspection was completed in June 1952 and the maps compiled at the Tampa Office in November 1953.

When the maps were applied to the charts in March 1954 it was felt that the photogrammetric location of range lights was not as accurate as desired due to lack of control, consequently additional field work was done and the maps revised as follows:

New photography was taken in October 1954. LT Lorin F. Woodcock as Chief of Party between December 1954 and the early part of 1955 located most of the aids to navigation and field edited the project making notes on the new 1954 photographs.

The maps were then revised at the Tampa Office. All the additional triangulation was plotted and map details corrected from the 1954 photographs and field edit notes made thereon.

When all the maps of the project have been thus registered, and filed in the library, a Completion Report for the project will be written. It will describe the project as to purpose, reports, and records turned in and filed.

FIELD INSPECTION REPORT WAS SUBMITTED

WITH T-9915

*Field Edit Report (with Completion Report)*



COMPILATION REPORT T-9919

PHOTOGRAMMETRIC PLOT REPORT.

This report submitted with T-9915.

31. DELINEATION.

The graphic method of compilation was used.

There are many new subdivisions. All that could be shown, using the photographs available, were delineated.

In some areas, photographic coverage permitted only two cuts on detail points. These have been shown with a green circle.

Photographs were clear and of fairly good scale.

Field inspection was adequate.

32. CONTROL.

An adequate number of well placed pass points were established for the cutting in of detail points.

33. SUPPLEMENTAL DATA.

None.

34. CONTOURS AND DRAINAGE.

Contours are inapplicable.

Drainage was delineated without any difficulty.

35. SHORELINE AND ALONGSHORE DETAILS.

The shoreline inspection was adequate. No difficulty was encountered during the delineation of the shoreline or adjacent areas. The shoreline of SAN JACINTO BAY was not field inspected and is shown according to office photo interpretation.

The low-water line is based on data furnished by the field party. Reference Item 7.

36. OFFSHORE DETAILS.

No unusual problems were encountered during compilation of details offshore from the high-water line.

37. LANDMARKS AND AIDS.

There are no landmarks.

Four (4) nonfloating aids have been listed on Forms 567 and 524. They are also listed under Item 49.

*Aids to navigation were identified on the 1954 photography or located by field methods.*

*See also Special Report "Landmarks for Charts - bound with Completion Report"*

38. CONTROL FOR FUTURE SURVEYS.

None.

39. JUNCTIONS.

A satisfactory junction has been made with T-9918 on the west and T-9920 on the south.

Project limits are to the north and east.

40. HORIZONTAL AND VERTICAL ACCURACY.

Reference Item 31 relative to green circled detail points. Vertical accuracy is inapplicable.

41. BRIDGES.

Five (5) bridges have been shown. Three (3) were inspected in the field and clearances given. These bridges are over water navigable by small craft only.

See Item 14, page 11a. (T-9915)

46. COMPARISON WITH EXISTING MAPS.

Comparison was made with Army Map Service Quadrangle, MORGAN POINT (Sheet 7043 III N.W., Series V882), scale 1:25,000; copied in 1947 from the 1943 edition.

SAN JACINTO BAY has been separated from the HOUSTON SHIP CHANNEL and HOG ISLAND has been enlarged - both by spoil that has been deposited from dredging operations.

Another bridge and road are under construction near the mouth of GOOSE CREEK. No other major changes have taken place.

47. COMPARISON WITH NAUTICAL CHARTS.

Comparison was made with USC&GS Nautical Chart No. 588, published January 1937 and corrected 16 November 1951.

After comparing the maps listed under Item 46, it is believed that much of the planimetry of the nautical chart was taken from it and the same differences appear.

ITEMS TO BE APPLIED TO NAUTICAL CHARTS IMMEDIATELY.

None.

ITEMS TO BE CARRIED FORWARD.

None.

*Richard A. Reece*  
Richard A. Reece  
Carto. Photo Aid

APPROVED AND FORWARDED

*J. E. Waugh*  
J. E. Waugh, Chief of Party

H  
7  
7  
7

DEPARTMENT OF COMMERCE  
U. S. COAST AND GEODETIC SURVEY  
Arabi, Louisiana

POST OFFICE ADDRESS:

TELEGRAPH ADDRESS:

10 July 1952

EXPRESS ADDRESS:

ph-76(51)

To: District Engineer  
Galveston District  
Corps of Engineers, U. S. Army  
606 Santa Fe Building  
Galveston, Texas

Subject: Bridge Data

There is enclosed a list of the bridge clearance data determined by this party.

Percy L. Bernstein  
Commander, U.S.C. & G.S.  
Chief of Party

Encl.  
cc: The Director ✓

TABULATION OF BRIDGE DATA

*Navigable to Skiffs & Small Boats Only*

Name	Type	Horizontal Clearance		Vertical Clearance	
		C&GS Meas.	Br. Book*	C&GS Meas.	Br. Book*
<u>GOOSE CREEK, TEXAS</u>					
Highway	F	56.0	56.0	12.8	8.0 above H.W.
Railroad	F	45.5	45.0	11.0	4.0 " " "

Measurements were made at 1000 and 1015 respectively 3 July 1952.

Winds and rain water strongly influence vertical clearance and accurate comparison cannot be made.

\*List of Bridges Over The Navigable Waters of the United States revised to July 1, 1941 and Supplement thereto.

48. GEOGRAPHIC NAME LIST.BAYTOWN*(Larger type on map, because Baytown now includes both Goose Creek & Pelly)*CALVERT CHURCHCEDAR BAYOU CHANNELDECKER DRIVEEVERGREEN - PELLY ROADEVERGREEN POINTGALVESTON BAYG. W. CARVER HIGH SCHOOLGOOSE CREEK (COMMUNITY)GOOSE CREEK (STREAM)HILL OF REST CEMETERYHOG ISLANDHOUSTON SHIP CHANNELMARKET STREET ROADMEMORIAL STADIUMMISSOURI PACIFIC RAILROADMT ROSE CHURCHNEW HOPE CHURCHPELLYROBERT E. LEE HIGH SCHOOLST JOHN CHURCHST PAUL CHURCHSAN JACINTO BAYSOUTHERN PACIFIC RAILROADSPILMANS ISLANDSPIRITUAL TEMPLE CHURCHSTATE 146TABBS BAYTEXASW. MAIN STREETW. TEXAS AVENUEWOODRUFF STREET

These are sections of Baytown which is the main city.

Names approved  
3-10-54. L. Heck

49. NOTES FOR THE HYDROGRAPHER.

The following topographic stations may be of use to the hydrographer:

HOUSTON CHANNEL, RANGE A REAR LIGHT, 1952, 1955

HOUSTON CHANNEL, RANGE F FRONT LIGHT, 1952, 1955

HOUSTON CHANNEL, RANGE F REAR LIGHT, 1952, 1955

CEDAR BAYOU, CHANNEL LIGHT 14, 1952

TO BE CHARTED  
~~TO BE DELETED~~

STRIKE OUT ONE

NONFLOATING AIDS OR LANDMARKS FOR CHARTS

Tampa Photogrammetric Office, Tampa, Fla. October 1953

I recommend that the following objects which have ~~(been noted)~~ 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 Richard A. Reece, Carto Photo Aid

J. E. Waugh Chief of Party.

CHARTING NAME	STATE	DESCRIPTION	SIGNAL NAME	POSITION				METHOD OF LOCATION AND SURVEY NO.	DATE OF LOCATION	HARBOR CHART	INSHORE CHART	OFFSHORE CHART	CHARTS AFFECTED
				LATITUDE * D. M. METERS	LONGITUDE * D. P. METERS	DATUM	0 /						
<del>X</del> GALVESTON BAY - HOUSTON SHIP CHANNEL, RANGE A, FRONT LIGHT	TEXAS			29 41	21.21 653 94 59	3.61 97	N.A. 1927	Photo Plot T-9919	1952	X			588
<del>X</del> GALVESTON BAY - HOUSTON SHIP CHANNEL, RANGE A, REAR LIGHT	TEXAS			29 41	50.50 1555 94 59	14.99 403	"	"	"	X			"
<del>X</del> GALVESTON BAY - HOUSTON SHIP CHANNEL, RANGE F, FRONT LIGHT	TEXAS			29 41	56.58 1742 94 59	46.76 1257	"	"	"	X			"
<del>X</del> GALVESTON BAY - HOUSTON SHIP CHANNEL, RANGE P, REAR LIGHT	TEXAS			29 41	55.51 1709 94 59	39.62 1065	"	"	"	X			"
GALVESTON BAY - CEDAR BAYOU CHANNEL LIGHT 14	TEXAS			29 41	18.12 558 94 57	53.37 1435	"	"	"	X			"
<i>x for 1955 positions see page 137</i>													
													13

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



U.S. DEPARTMENT OF COMMERCE  
COAST AND GEODETIC SURVEY  
DESCRIPTIVE REPORT  
CONTROL RECORD

MAP T. 9919

PROJECT NO. Ph-76

SCALE OF MAP 1:10,000

SCALE FACTOR

STATION	SOURCE OF INFORMATION (INDEX)	DATUM	LATITUDE OR $\psi$ -COORDINATE OR LONGITUDE OR $x$ -COORDINATE		DISTANCE FROM GRID IN FEET. OR PROJECTION LINE IN METERS		DATUM CORRECTION	N.A. 1927 - DATUM DISTANCE FROM GRID OR PROJECTION LINE IN METERS		FACTOR DISTANCE FROM GRID OR PROJECTION LINE IN METERS
			(BACK)	(BACK)	FORWARD	(BACK)		FORWARD	(BACK)	
EVERGREEN 2, 1955	C-116 HOUSTON SH. CHANNEL, CH. PG 3	N.A. 1927	29 42 02.874	94 57 58.067				88.5 (1758.9)		
<del>HOUSTON SH. CHANNEL, RANGE A, FRONT LIGHT, 1955</del>	" " Pg 5	"	29 41 21.253	94 59 03.644				1561.0 ( 51.9)		
HOUSTON SH. CHANNEL, RANGE A, EXTENSION, 1955	" " Pg 5	"	29 42 39.729	94 59 36.051				654.4 (1193.0)		
<del>HOUSTON SH. CHANNEL, RANGE A, REAR LIGHT, 1955</del>	" " Pg 6	"	29 41 50.492	94 59 15.022				98.0 (1515.2)		
HOUSTON SH. CHANNEL, RANGE B, EXTENSION, 1955	" " Pg 6	"	29 41 44.599	94 59 26.865				1223.3 ( 624.1)		
HOUSTON SH. CHANNEL, RANGE B, EXTENSION, 1955	" " Pg 6	"	29 41 57.545	94 59 46.529				969.0 ( 643.7)		
HOUSTON SH. CHANNEL, RANGE F, FRONT LIGHT, 1955	" " Pg 6	"	29 41 56.574	94 59 46.640				1554.6 ( 292.8)		
HOUSTON SH. CHANNEL, RANGE F, REAR LIGHT, 1955	" " Pg 6	"	29 41 55.438	94 59 39.620				403.8 (1209.1)		
								1373.2 ( 474.2)		
								722.2 ( 890.8)		
								1771.8 ( 75.6)		
								1250.8 ( 362.1)		
								1741.9 ( 105.5)		
								1253.8 ( 359.1)		
								1706.9 ( 140.5)		
								1065.1 ( 547.9)		
									13	
									14	

1 FT. = 3048006 METER

COMPUTED BY **R. S. Tibbetts**

DATE 3-7 Oct. 1955

CHECKED BY **E. R. Ballance**

DATE 17 Oct. 1955

COMM-DC-57843

50.

PHOTOGRAMMETRIC OFFICE REVIEW

T. 9919

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. Recoverable horizontal stations of less than third-order accuracy (topographic stations) J.G. 7. Photo hydro stations XX 8. Bench marks J.G. 9. Plotting of sextant fixes XX 10. Photogrammetric plot report J.G. 11. Detail points J.G.

ALONGSHORE AREAS

(Nautical Chart Data)

12. Shoreline J.G. 13. Low-water line XX 14. Rocks, shoals, etc. J.G. 15. Bridges J.G. 16. Aids to navigation J.G. 17. Landmarks XX 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. Planetable contours XX 23. Stereoscopic instrument contours XX 24. Contours in general XX 25. Spot elevations XX 26. Other physical features J.G.

CULTURAL FEATURES

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

BOUNDARIES

31. Boundary lines XX 32. Public land lines XX

MISCELLANEOUS

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

See also Supplemental Review Report with T-9914

Review Report  
Shoreline Map T-9919  
10 March 1954

62. Comparison with Registered Surveys.-

T-4614	1:5,000	1931	Morgan Point and vicinity
T-4615	"	"	Spilmans Island and vicinity

Except for the contour, these maps are superseded by T-9919 for charting purposes.

63. Comparison with Maps of Other Agencies.-

AMS Quad. Morgan Point, Texas, 1:25,000, 1949

The present survey supersedes the quadrangle for shoreline, aids, and those cultural features one-half mile inland noted by the field inspector.

64. Comparison with Contemporary Hydrographic Surveys.- No hydrographic surveys have been made since the 1931 series H-5121 to 5128 incl. 1:5,000.

65. Comparison with Nautical Charts.-

588 1:10,000 ed. Jan. 1937, rev. June 1951

Atkinson Island to Alexander Island. Because of extensive changes in the area, the present survey supersedes the charts for shoreline, aids, and cultural and physiographic features within the half-mile mainland limit covered by the 1952 field inspection.

The following charted obstructions were not noted by the field inspector, but may still exist.

1. Four piles between Hog Island and the Ship Channel
2. A group of five piles south of the Channel in that area.
3. A group of piles in Tabbs Bay
4. A line of piles at  $29^{\circ} 42'$  /  $95^{\circ} 59\frac{1}{2}'$
5. Two snags north of ~~Cherry~~ <sup>Cedar</sup> Bayou Channel.

66. Accuracy.- The map conforms to project instructions and meets the National Standards of Map Accuracy. *Saint*

Reviewed by:

Lena T. Stevens  
Lena T. Stevens

APPROVED

*L. C. Lande*  
Chief, Review Branch  
Div. of Photogrammetry

*L. W. Swanson*  
Chief, Div. of Photogrammetry

6 March 1958 *[initials]*

*Max B. Kicketts*  
Chief, Nautical Chart Branch  
Division of Charts

*[Signature]*  
Chief, Div. of Coastal Surveys

# NAUTICAL CHARTS BRANCH

SURVEY NO. T9919

## Record of Application to Charts

DATE	CHART	CARTOGRAPHER	REMARKS
3/19/54	588	S. McGinn	<del>Before</del> After Verification and Review <i>Before add. W.H.</i>
8-20-58	588	C.R. Wittman	<del>Before</del> After Verification and Review <i>Part applied.</i>
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
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			Before After Verification and Review
			Before After Verification and Review

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.