

6707

T-6707

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6707

Form 504 Rev. April 1935 DEPARTMENT OF COMMERCE U. S. COAST AND GEODETIC SURVEY	
DESCRIPTIVE REPORT	
Topographic <del>Hydrographic</del>	Sheet No. T-6707
U. S. COAST & GEODETIC SURVEY LIBRARY AND ARCHIVES JUL 24 1940 Acc. No. ....	
State TEXAS	
LOCALITY	
WEST GULF of Mexico	
PORT ISABEL	
193 9	
CHIEF OF PARTY	
G. C. MATTISON	

U. S. GOVERNMENT PRINTING OFFICE

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DEPARTMENT OF COMMERCE  
U. S. COAST AND GEODETIC SURVEY

REG. NO.

## TOPOGRAPHIC TITLE SHEET

The Topographic Sheet should be accompanied by this form, filled in as completely as possible, when the sheet is forwarded to the Office.

Field Letter <sup>TV</sup> T - 5

REGISTER NO. 6707

T6707

State TEXAS

General locality West Gulf of Mexico

Locality Port Isabel

Scale 1:10,000 Date of survey June, 19 39

Vessel HYDROGRAPHER

Chief of Party G.C. Mattison

Surveyed by P.A. Weber

Inked by P.A. Weber

Heights in feet above M.H.W. to ground ~~to tops of trees~~

Contour Approximate contour Form line interval feet

Instructions dated February 17, 1937

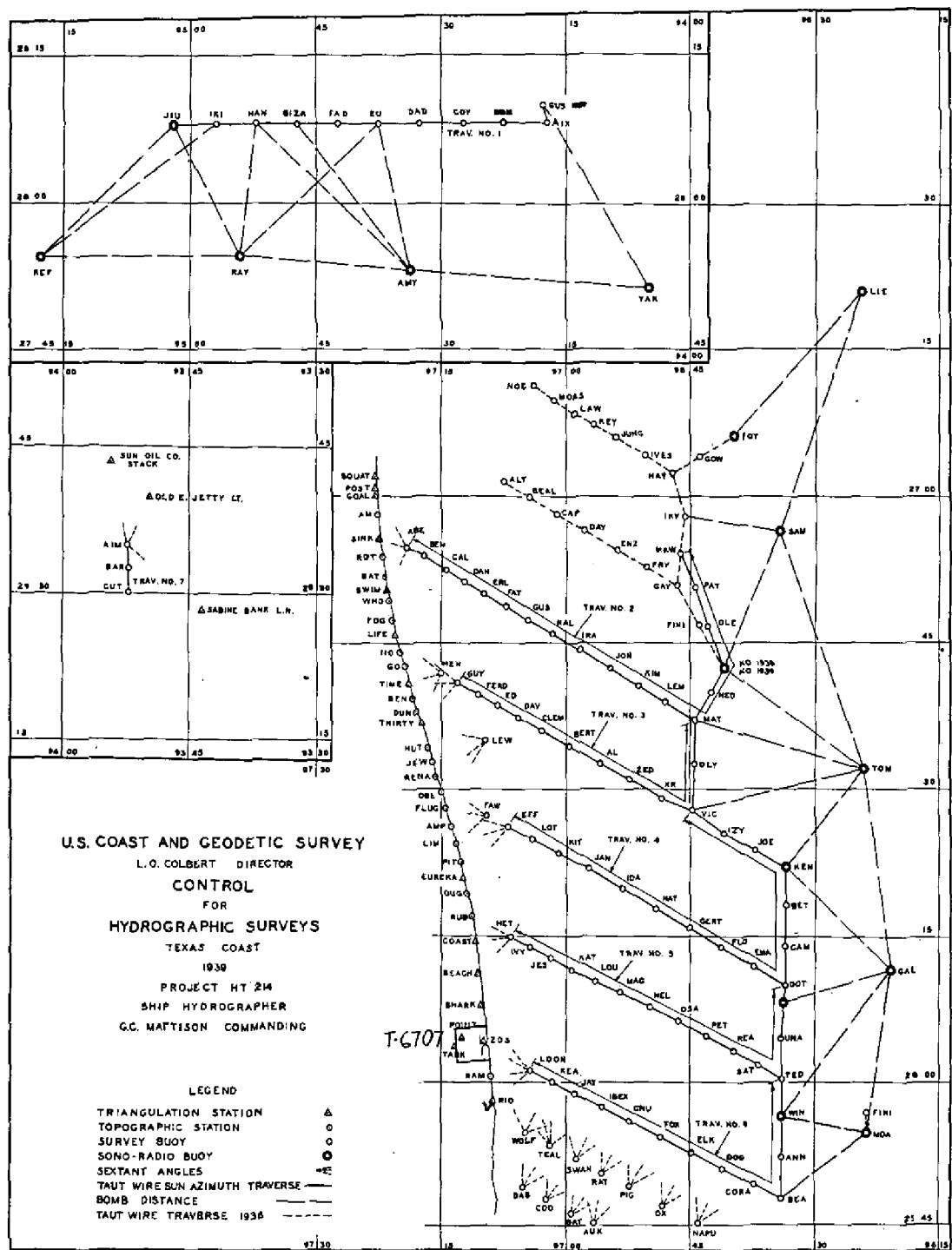
Remarks: Project HT 214

DEPARTMENT OF COMMERCE  
U. S. COAST AND GEODETIC SURVEY  
L. O. COLBERT, DIRECTOR

DESCRIPTIVE REPORT  
TOPOGRAPHIC SHEET NO. 6707  
WEST GULF  
PORT ISABEL  
TEXAS

SHIP HYDROGRAPHER  
GALVESTON, TEXAS

G.C. MATTISON  
CHIEF OF PARTY



M-968

DESCRIPTIVE REPORT TO ACCOMPANY

TOPOGRAPHIC SHEET 6707

AUTHORITY

Instructions dated February 17, 1937.

GENERAL

Topographic Features:

The sheet embraces the southern tip of Padre Island, the northern end of Brazos Island, Clark Island, and the town of Port Isabel.

Padre Island and Brazos Island are sand islands containing dunes of varying heights up to about 20 or 30 feet; these dunes, however, are shifting in position and are not useful as landmarks. Except on the clearest days there is a light haze over the islands that cuts down the visibility and makes objects on the islands indistinct.

Brazos Coast Guard Station, a surf station, is on the south end of Padre Island; besides the men at the station there are a few people living near the jetty, who operate a small store where bait can be bought and fishing tackle rented; there is also a hotel, of sorts, on the island for the accommodation of fishing parties.

There are a few people on Brazos Island at the jetty, who operate small stores where bait can be bought and fishing tackle rented.

The town of Port Isabel is a small fishing community and tourist center; there are a number of tourist camps and hotels here, which do a thriving business during the season because of the excellent fishing grounds in the vicinity. There is a deep water channel to the port, which can accommodate ocean going freighters, the maximum draft being about 30 feet. The port has warehouse facilities and an oil dock.

Clark Island is a small mud and sand island, with no vegetation except as shown along the southeast side. There are a few spoil banks to the southwest of Clark Island made up of mud from dredging.

The large island south of Port Isabel is bare mud with no vegetation except as noted, and was originally part of the mainland but became separated when the channel was dug. All areas outlined in pencil are mud mounds built up by spoil from dredging. The elevations shown were those that existed at the time of this survey; subsequent dredging will change these elevations.

The four steel towers, two on Padre Island; and two near the west edge of the sheet, are dredging ranges and have no bearing on the navigation of the channel. They are about 30 ft. high.



## GENERAL(Cont'd)

### Hydrographic Features:

The area between the jetties is known as Brazos Santiago, which is a dredged area leading into the dredged channel to Port Isabel and Brownsville. There are lighted entrance ranges for the pass and numerous day beacons on the NW side of the channel to aid in navigation. Ships, however, do not enter the channel after dark as it is very narrow.

Laguna Madre is a large body of shallow water lying west of Padre Island, with depths in places up to about six feet. It is navigable by shallow draft boats with experienced guides.

The small channel south of Port Isabel is used by fishing boats, which enter it from the main ship channel at the west end. The east end of this channel is very shallow and used only by small boats. From observation it appears that this channel is filling up at the east end.

The yacht basin is used by small yachts that enter from the north; there is no outlet to the south as both highway and railroad bridges are fixed.

### LANDMARKS

The only useful landmark on the sheet is Pt. Isabel L.H. a day beacon. It has already been reported.

### CONTROL

The sheet is well controlled by numerous triangulation stations, visible over the entire area.

Standard methods were used; where visibility was poor a 300 foot steel tape was used to measure to planetable setups.

### GEOGRAPHIC NAMES

All names shown in ink on the sheet are well established and were verified in the field.

South Bay, the name given to the body of shallow water south of Clark Island is part of Laguna Madre and became partially separated from the main body when the ship channel was dredged and the spoil banks thrown up. This name is well established locally, it is based on information received from the Officer in Charge at the Coast Guard Station, he has been in this area for 27 years; also from "Uncle Jim" a well known local character who lives on Padre Island at the jetty.

### MISCELLANEOUS

While the topography was being done, the Army Engineers

MISCELLANEOUS (Cont'd)

had commenced dredging operations in the channel; it was planned to make some changes in the area around the docks at Port Isabel.

The low water line on the Gulf side of Padre Island and Brazos Island is not over ten meters from high water line and is indicated approximately by sand symbol.

The low water line on the west side of Padre Island is definite and is shown as such.

All other low water lines are approximate or indefinite as the slope of the beaches is so gradual and water so shoal as to make definite determination almost impossible.

Respectfully submitted

*Philip A. Weber*

Philip A. Weber  
Topographer

Forwarded Approved:

*G.C. Mattison*  
G.C. Mattison  
Chief of Party.

WAR DEPARTMENT  
U. S. Engineer Field Office  
Brownsville, Texas

April 29, 1940

Department of Commerce,  
U. S. Coast & Geodetic Survey,  
Pensacola, Florida.

Dear Mr. Weber:

The two steel towers on Padre Island and the two on the prolongation of the Port Isabel Channels mark the center line of the channel across the bay and to Port Isabel, respectively. We designate them as center line channel ranges and use them for making surveys, soundings in the channels and for dredging purposes.

Padre Island Ranges

Front Range

Height above ground, 24.0 feet  
Height above mean low tide, 27 feet

Rear Range

Height above ground, 33.5 feet  
Height above mean low tide, 39.9 feet

Port Isabel Channel Ranges

Front Range

Height above ground, 25.0 feet  
Height above mean low tide, 27.0 feet

Rear Range

Height above ground, 33.1 feet  
Height above mean low tide, 40.0 feet

The steel storm signal tower at Port Isabel extends 48 feet above the ground and the flag staff extends 25 feet higher or a total of 73 feet above the ground. The total height above mean low tide is 82 feet.



**Monuments**

**North Zero**

7" x 7" perpendicular concrete shaft extending 39" above the ground with a U.S.E.D. brass cap setting flush in top of shaft. Monument is used for triangulation purposes.

**Padre**

Concrete cast around a 2 $\frac{1}{2}$ " pipe, on top of a sand dune, with a 9" x 9" top and mushroom bottom. A U.S.E.D. brass cap is set in top of monument. The monument is used for triangulation purposes. Due to shifting sand the monument protrudes about 2 feet above the sand, being held in place by the 2 $\frac{1}{2}$ " pipe, which was originally driven to a depth of 10 feet in the sand dune.

**No. 6**

A flat mushroom type concrete monument setting flush with the ground and having a reinforcing bar in the center. The number 6 is written in the concrete thusly: "6". This monument is one of the government property markers.

You asked for Monument No. 9 but we believe you might have mistaken Monument No. 6 for 9.

The channels across the bay and to Port Isabel and Brownsville was dredged to a required depth of 30.0 feet below mean low tide. The project depth calls for 28.0 feet. The Port Isabel Turning Basin has not as yet been enlarged and probably will not be for at least a year or so unless the pending bill in Congress is approved before the dredge leaves this vicinity. The bill includes the proposed enlargement of the turning basin to 1,000 by 1,300 feet.

I am sorry we did not get this information to you at an earlier date however we hope it will be of some service to you. Thank you for the information concerning the topographic sheet.

Very truly yours,

Wayne M. Murphy.  
Asst. Engr.

Statistics for Topographic Sheet T-6707.

41.6 Statuate miles Shoreline.

0.95 Statuate miles docks and bridges.

2.3 Statuate miles Highways.

1.2 Statuate miles Railroads.

## Remarks

## Decisions

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## GEOGRAPHIC NAMES

Survey No. **T6707**

Name on Survey	On Chart No.	On previous survey No.	On U. S. quadrangle Maps	From local information	On local Maps	P. O. Guide or Map	Rand McNally Atlas	U. S. Light List	
	A.	B.	C.	D.	E.	F.	G.	H.	K.
<u>Brazos Island</u>									1
<u>Brazos Santiago</u>									2
<u>Brownsville Channel</u>									3
<u>Clark Island</u>									4
<u>Gulf of Mexico</u>									5
<u>Laguna Madre</u>									6
<u>Padre Island</u>									7
<u>Port Isabel</u>									8
<u>Port Isabel Channel</u>									9
<u>South Bay</u>									10
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Names underlined in red approved

by L. Heck on 10/14/40

# MEMORANDUM

## IMMEDIATE ATTENTION

SURVEY  
DESCRIPTIVE REPORT  
PHOTOSTAT OF

~~No. 100~~

No. T T6707

{ received July 24, 1940  
registered July 27, 1940  
verified  
reviewed  
approved

This is forwarded in order that your attention may be directed to the matters as indicated below. Please initial in column 3 as an acknowledgement that your attention has been thus directed. The complete original records are available if desired. If you cannot give this your immediate attention, please initial, note, and forward to the next section marked, calling for the records at your convenience.

ROUTE		Initial	Attention called to
20			
22			
24			
25	✓	HBC	Pages 1-3
26			
30			
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62			
63			
82			
83			
88			
90			

RETURN TO

82	T. B. Reed
----	------------

✓ HBC

DEPARTMENT OF COMMERCE  
U. S. COAST AND GEODETIC SURVEY

TO BE CHARTED }  
TO BE DELETED } STRIKE OUT ONE

**BEYOND THE BORDER CHARTER  
NON-FLOATING AIDS TO NAVIGATION  
Pensacola, Florida**

COAST PILOT SECTION

~~March 23, 1940~~ 193

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

The positions given have been checked after listing.

**G. C. Mattison**

Chief of Party.

GENERAL LOCALITY		NAME AND DESCRIPTION	POSITION							METHOD OF LOCATION	DATE OF LOCATION	HARBOR CHART	INSHORE CHART	OFFSHORE CHART	CHARTS AFFECTED
			LATITUDE		LONGITUDE			DATUM							
			°	'	°	'	D. P. METERS								
									D. M. METERS						
"	Brazos West Gulf--Texas	Bn. 4 (day marker)	26	03	1383 ✓	97	10	581 ✓	N.A.	Topo.	1939	*		1288	
"	"	Bn. 6 ( " " )	26	03	1224 ✓	97	10	820 ✓	"	"	"	*		1288	
"	"	Bn. 10( " " " )	26	03	897 ✓	97	10	1315 ✓	"	"	"	*		1288	
"	"	Bn. 12(light)	26	03	737 ✓	97	10	1556 ✓	"	"	"	*		1288	
"	"	Bn. 14(day marker)	26	03	571 ✓	97	11	138 ✓	"	"	"	*		1288	
"	"	Bn. 16( " " " )	26	03	413 ✓	97	11	375 ✓	"	"	"	*		1288	
"	"	Bn. 18( " " " )	26	03	249 ✓	97	11	622 ✓	"	"	"	*		1288	
"	"	Bn. 20( " " " )	26	03	90 ✓	97	11	862 ✓	"	"	"	*		1288	
"	"	Bn. 22( " " " )	26	02	1778 ✓	97	11	1104 ✓	"	"	"	*		1288	
"	"	Bn. 24(light)	26	02	1609 ✓	97	11	1358 ✓	"	"	"	*		1288	
Secs															

This form shall be prepared in accordance with 1934 Field Memorandum, "LANDMARKS FOR CHARTS." 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.

# DIVISION OF CHARTS

## Section of Field Records

### REVIEW OF TOPOGRAPHIC SURVEY NO. 6707 (1939) FIELD NO. T-5

Texas, Gulf of Mexico, Port Isabel  
Surveyed in June 1939, Scale 1:10,000  
Instructions dated February 17, 1937, and the Director's  
letter dated January 5, 1939.

#### Plane Table Survey

#### Aluminum Mounted

Chief of Party - G. C. Mattison.  
Surveyed by - P. A. Weber.  
Inked by - P. A. Weber.  
Reviewed by - Leo S. Straw, October 2, 1940.  
Inspected by - H. R. Edmonston.

#### 1. Junctions with Contemporary Surveys.

The junctions on the north and south with T-6706 (1939) are satisfactory.

#### 2. Comparison with Prior Surveys.

T-453 (1854), 1:20,000; T-1045 (1867) 1:20,000;  
T-3673 (1917).

Sections of these surveys cover the area of the present survey. The natural and artificial changes have been so extensive in this area that a detailed comparison between the old and new surveys is unwarranted. Radical changes in the shoreline have occurred, due to the construction of jetties at Brazos Santiago, harbor improvements in and south of Port Isabel, and the dredging of the Brownsville channel. These operations have formed several sand and mud islands and have altered the shape of other islands - Clark Island and Long Island are good examples.

There is no information of current charting value on these old surveys and they should be disregarded.

#### 3. Comparison with Chart No. 1288 (New print dated Nov. 3, 1939)

##### a. Topography.

The topography on the chart is based principally on Port Isabel Quadrangle, 1929, U. S. Geological



Survey, reported information and U. S. Engineers' surveys.

b. Aids to Navigation.

The charted aids to navigation are in substantial agreement with the present survey, except that day beacon No. 8 is missing on the present survey.

c. Geographic Names.

Because of the construction of Port Isabel channel and consequent filling in of the area to the east, thus changing the shape of Long Island, it is recommended that the name "Long Island" be removed from the chart.

4. Condition of Survey.

- a. The present survey shows the completed jetties above high water, the ends of which are 130 meters for the north, and 75 meters for the south, shorter than the outer limits on the U. S. Engineers' survey blue print No. 27894 (1934). It is recommended that the dashed portions of these jetties on the chart be made solid to the limits on the present survey and that beyond those limits they be retained dashed as from blue print No. 27894 (1934).
- b. The black line in lat. 26°03.83', long. 97°09.9' marked abandoned represents an abandoned railroad.

5. Compliance with Instructions for the Project.

Satisfactory.

6. Additional Field Work Recommended.

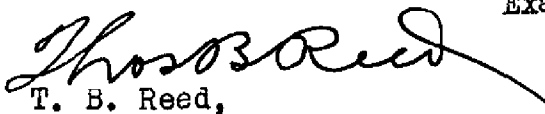
No additional field work is required.


7. Superseded Surveys.

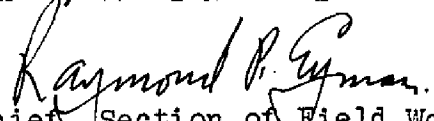
T-453 (1854) in part  
T-1045 (1867) in part


T-3673 (1917) entirely

Examined and approved:

  
T. B. Reed,  
Chief, Section of Field Records.

  
J. S. Borden,  
Chief, Division of Charts.

  
Raymond P. Egan,  
Chief, Section of Field Work.

  
G. H. Wade,  
Chief, Division of H. & T.