

6703 a&b
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Form 504 Rev. April 1935 DEPARTMENT OF COMMERCE U. S. COAST AND GEODETIC SURVEY	
DESCRIPTIVE REPORT	
Topographic } Hydrographic }	T-6703 Sheet No. 1. T-6704 T-6705
U. S. COAST & GEODETIC SURVEY LIBRARY AND ARCHIVES JUL 24 1940 Acc. No.	
State TEXAS	
LOCALITY WEST GULF of Mexico PADRE ISLAND	
1939 CHIEF OF PARTY G.C. MATTISON	

6703 art 6704 art

Applied to Chs 1287 - Oct. 1940 - J.S.S.

6704 art

6705 art	"	"	1288	Nov.	"	J.S.S.
"	"	"	"	"	"	J.S.S.
"	"	"	1117	"	"	J.S.S.

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 T-1-A-B

REGISTER NO. 6703 a & b

T6703 a & b

State TexasGeneral locality West Gulf of MexicoLocality Padre IslandScale 1:20,000 Date of survey May, 1939Vessel HYDROGRAPHERChief of Party G.C. MattisonSurveyed by E.C. BaumInked by E.C. Baum and P.A. Weber

Heights in feet above _____ to ground to tops of trees

Contour Approximate contour Form line interval _____ feet

Instructions dated February 17, 19 37Remarks: Project HT-214

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 T-2-A-B

REGISTER NO. 6704 a & b

T6704 a & b

State TEXASGeneral locality West Gulf of MexicoLocality Padre IslandScale 1:20,000 Date of survey May, 19 39Vessel HYDROGRAPHERChief of Party G.C. MattisonSurveyed by E.C. BaumInked by E.C. Baum and P.A. Weber

Heights in feet above _____ to ground to tops of trees

Contour Approximate contour Form line interval _____ feet

Instructions dated February 17, 19 37Remarks: Project HT-214

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 T-3-A-B

REGISTER NO. 6705 a & b

T6705 a & b

State TEXASGeneral locality West-Gulf of MexicoLocality Padre IslandScale 1:20,000 Date of survey May, 1939Vessel HYDROGRAPHERChief of Party G.C. MattisonSurveyed by E.C. BaumInked by E.C. Baum and P.A. Weber

Heights in feet above _____ to ground to tops of trees

Contour Approximate contour Form line interval _____ feet

Instructions dated February 17, 1937Remarks: Project H.T.-214

DEPARTMENT OF COMMERCE

U. S. COAST AND GEODETIC SURVEY

L. O. COLBERT, DIRECTOR

DESCRIPTIVE REPORT

TOPOGRAPHIC SHEETS 6703, 6704, 6705

WEST GULF

PADRE ISLAND

TEXAS

SHIP HYDROGRAPHER
GALVESTON, TEXAS

G.C. MATTISON
CHIEF OF PARTY

DESCRIPTIVE REPORT TO ACCOMPANY
TOPOGRAPHIC SHEETS 6703, 6704, 6705

AUTHORITY

Instructions dated February 17, 1937.

GENERAL

This report covers three sheets extending from latitude 27-00 to latitude 26-13. All three sheets are on Padre Island, which is in general, a low sandy island, with dunes of varying height scattered over its length. These are not prominent as landmarks, and shift position constantly. ✓

There are no settlements of any kind on this part of the island. ✓

Hydrographic Features:

The Gulf of Mexico lies to the east of all the land area on these sheets. ✓

LANDMARKS

The only landmark is the boiler of a grounded boat in latitude 26 degs. 41 mins. 1257 meters; longitude 97 degs. 19 mins. 230 meters, which lies about 30 meters outside the high water line. ✓

CONTROL

The sheets are controlled by triangulation stations spaced at convenient intervals. ✓

Standard methods were used; along the beach where the visibility was poor due to haze caused by the wind blowing the sand, a 300 foot steel tape was used to measure between stations. ✓

GEOGRAPHIC NAMES

All names on the sheet are well established. ✓

CONCLUSION

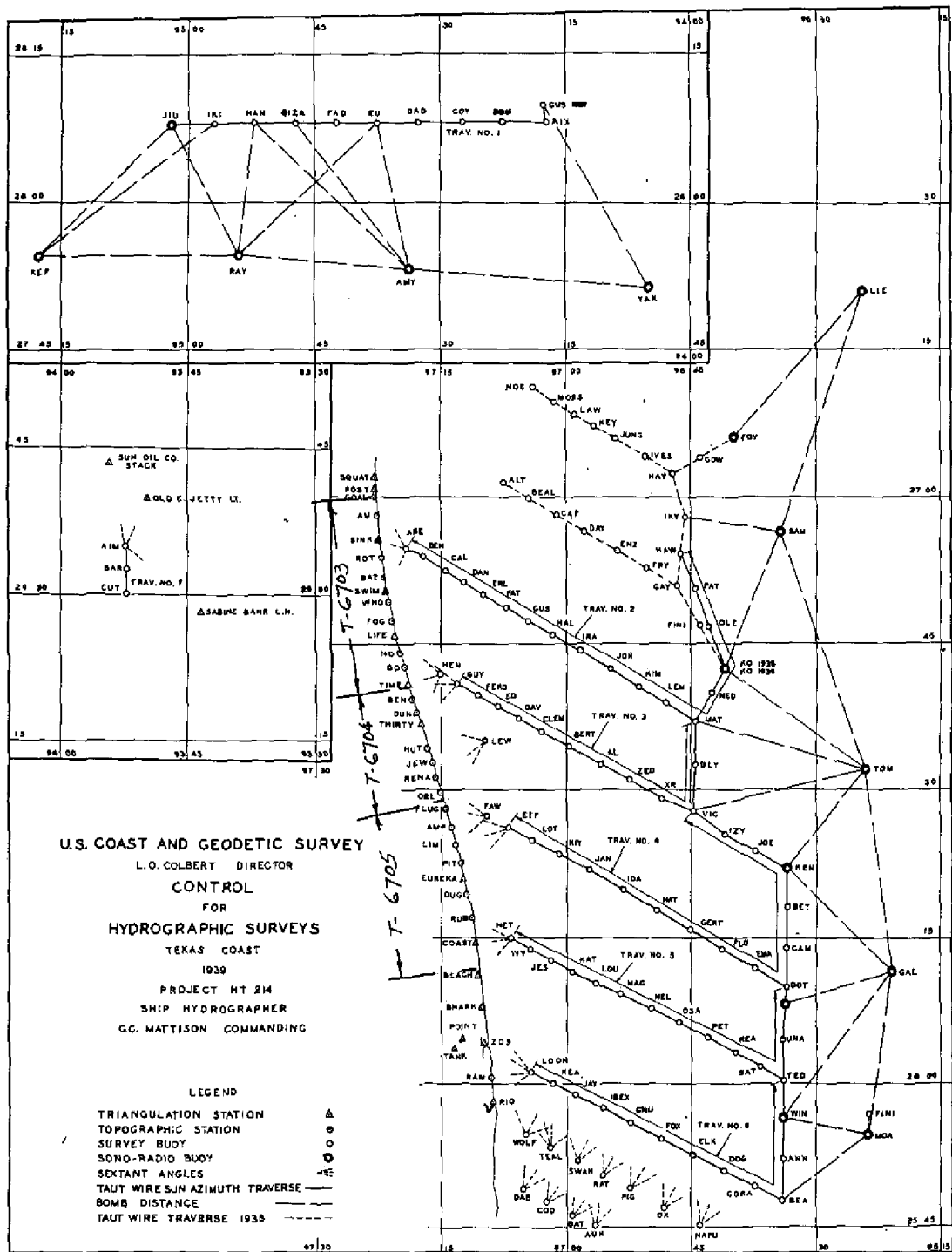
Magnetic declinometer observations were taken at all stations marked magnetic. ✓

Only the high water line on the Gulf side of the island was located; see Director's letter of January 5, 1939 copy attached. ✓

Philip A. Weber

Forwarded Approved:

GE Matteson



POST-OFFICE ADDRESS:

TELEGRAPH ADDRESS:

EXPRESS ADDRESS:

Refer to: 22/MEK

1995 HY 4

DEPARTMENT OF COMMERCE

U. S. COAST AND GEODETIC SURVEY

January 5, 1939.

To: Commanding Officer,
U. S. Coast and Geodetic Survey
Ship HYDROGRAPHER,
P. O. Box 565,
Galveston, Texas.

From: The Director,
U. S. Coast and Geodetic Survey.

Subject: Topography of Padre Island.

Your letter of December 6, 1938 has received careful consideration. It has been decided that air photographic surveys of the barrier islands between Corpus Christi Pass and the Rio Grande are not necessary at this time and that, owing to the pressure for work in other localities, the expense involved is unwarranted. The air photographic surveys of this area are accordingly being deferred until some future date. However, in view of the conditions mentioned in your letter, paragraph 8 of the instructions for Project HT-214, dated February 17, 1937, is hereby modified to the extent that for the remainder of your topographic work along these barrier islands a delineation of the shore line on the Gulf side of these two islands is all that is desired except that in the case of indentations or breaks in the shore line the shore line at such places shall be surveyed a reasonable distance back from the general trend of the coast line.

(Signed) L. O. Colbert
Director.

Statistics for Topographic Sheets T-6703a & b, T-6704a & b
and T-6705a & b.

T-6703a	-----	8.4	statuate	miles	shoreline.
T-6703b	-----	9.1	"	"	"
T-6704a	-----	9.1	"	"	"
T-6704b	*-----	9.7	"	"	"
T-6705a	-----	9.3	"	"	"
T- <u>67</u> 05b	-----	9.0	"	"	"

Remarks

Decisions

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GEOGRAPHIC NAMES

Survey No. **T6703**
a & b

Name on Survey	A. On Chart No.	B. On previous survey No.	C. On U. S. quadrangle Maps	D. From local information	E. On local Maps	F. P. O. Guide or Map	G. Rand McNally Atlas	H. U. S. Light List	K.
<u>Gulf of Mexico</u>									1
<u>Padre Island</u>									2
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Names underlined in red approved
by L. Heck on 9/9/40

Remarks

Decisions

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GEOGRAPHIC NAMES

Survey No. **T6704**
a & b

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>Gulf of Mexico</u>																1
<u>Padre Island</u>																2
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Thomas Jefferson National Monument
by L. Heck on 9/9/40

Remarks

Decisions

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GEOGRAPHIC NAMES
Survey No. **T6705**
a & b

Name on Survey	A, On Chart No.	B, On previous survey No.	C, On U. S. quadrangle Maps	D, From local information	E, On local Maps	F, P. O. Guide or Map	G, Rand McNally Atlas	H, U. S. Light List	K	
<u>Gulf of Mexico</u>										1
<u>Padre Island</u>										2
										3
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"L. Hack" 9/9/40

MEMORANDUM

IMMEDIATE ATTENTION

SURVEY
DESCRIPTIVE REPORT
PHOTOSTAT OF

~~No. T~~

T6703 a & b
No. T T6704 a & b
T6705 a & b

received July 24, 1940
registered July 26, 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
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25	✓	<i>HR</i>	Page 1
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RETURN TO

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

✓ *TBR*

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

LANDMARKS FOR CHARTS

TO BE CHARTED }
TO BE DELETED }

STRIKE OUT ONE

Pensacola, Florida

March 23, 1940 193

I recommend that the following objects which have (~~have not~~) 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.

G. C. Mattison

Chief of Party.

[illegible]

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 SURVEYS NO. 6703a to 6705b (1939)
FIELD NO. T-1A to T-3B

Texas, Gulf of Mexico, Padre Island
Surveyed in May 1939, Scale 1:20,000
Instructions dated February 17, 1937 (HYDROGRAPHER)

Plane Table Survey

Aluminum Mounted

Chief of Party - G. C. Mattison.
Surveyed by - E. C. Baum.
Inked by - E. C. Baum; P. A. Weber.
Reviewed by - J. A. McCormick, August 16, 1940.
Inspected by - H. R. Edmonston.

1. Junctions with Contemporary Surveys.

T-6703a (1939), most northerly of the six surveys, joins satisfactorily with the tape traverse shoreline plotted directly on H-6397 (1938). The junction of T-6705b (1939) with T-6706a (1939) on the south is also satisfactory. The six subject surveys are in excellent agreement where they join each other.

2. Comparison with Prior Surveys.

T-1476a & b (1879-80) 1:20,000; T-1477a & b (1879-80), 1:20,000; T-1676 (1879-81) 1:20,000; T-1677 (1879-81), 1:20,000; T-1678 (1881), 1:20,000.

Shoreline changes in varying amounts have taken place in the interim between old and new surveys. South of latitude $26^{\circ} 25'$, the recession averages about 200 meters. North of latitude $26^{\circ} 25'$ the recession gradually decreases to good agreement at latitude $26^{\circ} 45'$. Thence northward begins an advance which increases to a maximum of 70 meters at the limits of T-6703a. The 200 meter recession in latitude $26^{\circ} 20'$ places the Gulf coast of the island back of the 1879-81 determination of the Laguna Madre side. Geological Survey maps (Padre Island quadrangles 1 to 3) show a considerable widening of the barrier beach at this point since 1879-81. It is interesting to note that the Geological Survey maps, which were compiled in 1930 from aerial photographs, show the shoreline on the Gulf side of the island differing in some places from that of the present surveys by amounts approaching those between the present surveys and the surveys of 1879-81. This might indicate that the changes have been most pronounced since 1930 but it

is also probable that advances and recessions are more or less periodic. The present survey satisfactorily delineates the Gulf shoreline of the island and supersedes the surveys of 1879-81 in the common area.

3. Comparison with Chart 1287 (New Print of Feb. 4, 1935)
Chart 1288 (New Print of Nov. 3, 1939).

Topography charted in the area covered by the present survey is from surveys of 1879-81 discussed in the preceding paragraph. It is noted that the buff color has been omitted on both charts from form lines indicating sand dunes, thus giving the impression of innumerable small lakes on the barrier island.

4. Condition of Survey.

Satisfactory.

5. Compliance with Instructions for the Project.

Strict compliance with instructions for the project and with those contained in the Director's letter of January 5, 1939 (copy attached to descriptive report) would have required resurvey of the Laguna Madre shoreline in the vicinity of latitude 26° 20' but Geological Survey maps discussed in paragraph 2 supply sufficient information for present chart compilation. It is evident, however, that the deferred air photographic surveys (Director's letter) will reveal extensive changes in the unsurveyed area.

6. Additional Field Work Recommended.


See preceding paragraph.

7. Superseded Surveys.

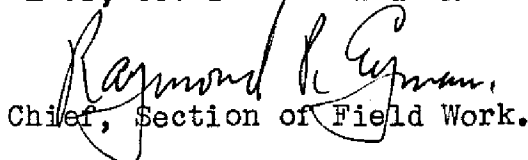
T-1476a & b in part
T-1477a & b in part
T-1676 in part

T-1677 in part
T-1678 in part

Examined and approved:



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



Chief, Section of Field Work.



Chief, Division of Charts.



Chief, Division of H. & T.