6611 Graphic Control

6612 Graphic Control

U. S. COAST & GEODETIC SURVEY
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6611
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Form 504
Rev. Dec. 1933

DEPARTMENT OF COMMERCE
U.S. COAST AND GEODETIC SURVEY
R. S. PATTON, DIRECTOR

DESCRIPTIVE REPORT

Topographic / ~~*Hydrographic*~~ *Sheet No.* C and D

State TEXAS

Texas Coast

Vicinity of LOCALITY

C San Bernard River

D. Cany Creek and Matagorda Peninsula.

1937

CHIEF OF PARTY

F. S. Borden

U. S. GOVERNMENT PRINTING OFFICE: 1934

3.

Graphic Control

Graphic Control

6611

6612

T. 6111-6112

applied to Cht 1283 April 1937. N.S.B.

T.6611 " " " 593 Aug. 1939 F.M.A.

Form 537a
Ed. Nov. 1929

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 No. C

REGISTER NO. T6611

State TEXAS

General locality TEXAS COAST

Locality VICINITY OF SAN BERNARD RIVER

Scale 1:20,000 Date of survey June - September, 1937

Vessel HYDROGRAPHER (launch FARIS)

Chief of party F. S. BORDEN

Surveyed by ROSS A. GILMORE

Inked by ROSS A. GILMORE

Heights in feet above _____ to ground to tops of trees

Contour, Approximate contour, Form line interval _____ feet

Instructions dated February 17, 1937

Remarks: Project No. H.T. 214

GPO

Form 537a
Ed. Nov. 1929

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 No. D

REGISTER NO. T6612

State TEXAS

General locality TEXAS COAST

Locality CANY CREEK AND MATAGORDA PENINSULA

Scale 1:20,000 Date of survey September, 1937

Vessel HYDROGRAPHER (Launch FARIS)

Chief of party F. S. BORDEN

Surveyed by ROSS A. GILMORE

Inked by ROSS A. GILMORE

Heights in feet above _____ to ground to tops of trees

Contour, Approximate contour, Form line interval _____ feet

Instructions dated February 17, 1937

Remarks: Project No. H.T. 214

GPO

DESCRIPTIVE REPORT

TO ACCOMPANY

TOPOGRAPHIC SHEETS NOS. T-6611 "C" AND T-6612 "D" (1937)

INSTRUCTIONS

These surveys were made in accordance with the Director's Instructions dated February 17, 1937, for Project H.T. 214.

LIMITS AND GENERAL STATEMENT

These surveys embody the immediate shoreline area from the southwestern limits of the 10,000 scale survey (sheet T-6610 "B", ~~Brazos River Entrance~~ Freeport Entrance) of the same season, to the vicinity of ~~E.~~ East POINT, 1883-1934 on Matagorda Peninsula. Sheets T-6611 "C" and T-6612 "D" were originally intended as graphic control sheets for hydrographic work. However, as considerable change was noted in the topography in places, it was considered justifiable to spend a little more time and revise the shoreline and locate any additional data near at hand as a supplement to the air photo topographic maps of this area.

LANDMARKS

No new landmarks of sufficient importance to be shown on Chart 1283 were located on these sheets. Several objects already shown on this chart were relocated on these sheets as hydrographic signals and their geographic position is shown in the "List of Recoverable Plane Table Positions"*. The Intracoastal Waterway beacons at the N.E. endof Matagorda Bay were located from good intersecting cuts and appear on Chart 1283.* These beacons were not visited and the numbers used on the sheet are those that appear on the chart. Beacons "3" and "15" are evidently gone or possibly missed in the survey. (noted as gone in des. report H-5858 (1935) and not charted)

* No difference plottable on chart between new positions and those already available in office.

CONTROL

Sufficient triangulation stations, close at hand, were recovered to give adequate control to the survey.

SURVEY METHODS AND CLOSING ERRORS

Standard plane table survey methods were used, except in traversing where a hundred meter length of wire was used for measuring distances instead of using stadia distances. This method was adopted because of the extreme flatness of the country and the excessive heat wave action encountered. Stranded wire, as used on the ship's wire sounding machines, was found to be very satisfactory for this purpose. The above method proved very expeditious in as much as most of the traverses were from four to five miles long and set-ups were about 1500 meters apart. Particular care was taken to keep the measuring party (two men) on line. Detail was rodded-in in the usual manner by stadia.

No traverse adjustments were necessary on these sheets.

COMPARISONS WITH PREVIOUS SURVEYS

Numerous changes were observed in the shoreline both where the beach has cut back and also filled in. These changes can readily be seen on air photo topographic maps T-5362, T-5361 and T-5359 which are submitted with sheets "C" T6611 and "D" T6612. The shoreline and any other changes noted have been transferred to the topographic maps and are shown in red.

RECOVERABLE PLANE TABLE POSITIONS

A list of recoverable plane table positions for each sheet is appended. Objects of a more permanent nature have been described on Form 524. Filed under No. T 6611 and T 6612.

MAGNETIC MERIDIANS

Magnetic meridians were obtained at several triangulation stations as depicted on the sheets.

NEW NAMES

The cut shown as "CEDAR CUT" on T-5361 and Chart 1283 no longer exists but the cut about 0.9 mile S.W. of it now acts as the sole outlet for Cedar Lakes. This place is shown as "CEDAR CUT" on sheet "C". No other new place names have been assigned to these sheets.

T-6611

STATISTICS

Sheet "C" T-6611

Statute miles of shoreline	24.6
Area, square statute miles	5.8

Sheet "D" T6612

Statute miles of shoreline	12.8
Area, sq uare statute miles	3.3

Respectfully submitted,

Ross A. Gilmore

Ross A. Gilmore,
Jr. H. & G. Engineer.

Approved and forwarded:

G. C. Mattison

G. C. Mattison,
Comdg. HYDROGRAPHER.

T.M.P. sept. 1 1938

RECOVERABLE PLANE TABLE POSITIONS - SHEET "C"

Object & Description	Lat.	D.M.	Long.	D.M.	Height	Remarks
		meters		meters	feet	
"Wee" small wooden water tank	28°54'	1081	95°20'	1457	(12)*	Elevated tank, center.
"Tank", large black wooden water tank (d)	28 54	801	95 21	228	(30)	elevated tank, center.
Chimney on large house (d)	28 54	809	95 21	144	(30)	Bryan house at Bryan Beach.
"East", eastern of four beach houses	28 54	170	95 21	1172	(18)	east gable.
Western of four beach houses in row	28 54	115	95 21	1256	(15)	west gable.
East stack of twin stacks	28 55	615	95 22	859		at Bryan Mound Sulphur Mines.
West stack of twin stacks	28 55	615	95 22	945		at Bryan Mound Sulphur Mines.
"Lone", lone high stack	28 54	1355	95 22	922		south of Bryan Mound Mines.
"Tra", (U.S.E.#267) (d)	28 53	1110	95 23	182	4	copper plug in concrete.
"Up", central axis bridge structure (d)	28 52	238	95 26	1278		
Bridge tender's house (d)	28 52	164	95 26	1237		N.E.gable, green roof.
"Win", windmill (d)	28 49	1434	95 29	1564	(18)	top, center.
Chimney, elevated black shack	28 49	166	95 31	1308		
Pole on long shed	28 49	226	95 32	47		on S.E. gable.
Windmill (d)	28 48	1671	95 31	1532	(18)	top, center.
Windmill (d)	28 48	1684	95 33	920	(18)	top, center.

*()Estimated.

RECOVERABLE PLANE TABLE POSITIONS - SHEET "D"

Object & Description	Lat.	D.M.	Long.	D.M.	Height	Remarks
		meters		meters	feet	
Cany Creek Bridge (d)	28°46'	500	95°36'	1612		central axis of superstructure.
Bridge tender's house (d)	28 46	524	95 36	1587		S.E.gable.
House	28 46	215	95 37	390		S.W.gable.
New Shack	28 45	1583	95 37	1048	(10)*	S.W.gable
White house	28 45	1744	95 38	1517		S.W.gable
Beacon "5"	28 45	379	95 40	864	(10)	top, center.
Beacon "7"	28 45	129	95 40	1506	"	"
Beacon "9"	28 44	1488	95 41	757	"	"
Beacon "11"	28 44	1091	95 41	1465	"	"
Beacon "13"	28 44	662	95 42	605	"	"
Beacon "17"	28 44	02	95 43	143	"	"
Beacon "19"	28 43	1381	95 43	994	"	"
Beacon "21"	28 43	922	95 44	186	"	"
Beacon "23"	28 43	283	95 44	1356	"	"
Aermotor (d)	28 42	340	95 45	936	(18)	"

*( )Estimated

Section of Field Records

REVIEW OF GRAPHIC CONTROL SURVEYS T-6611 and T-6612 (1937)
FIELD LETTERS C AND D
T-6611 Vicinity of San Bernard River
T-6612 Cany Creek and Matagorda Peninsula
Gulf Coast, Texas.
Surveyed June - September 1937, Scale 1:20,000
Instructions dated February 17, 1937, (HYDROGRAPHER)

Plane Table Survey — Aluminum Mounted

Chief of Party - F. S. Borden.
Surveyed by - R. A. Gilmore.
Inked by - R. A. Gilmore.

1. Condition of Records.

The records are neat and legible and conform to the requirements of the Topographic Manual except for a few small matters.

2. Compliance with Instructions for the Project.

The scale, character, and extent of the survey satisfy the instructions for the project except as noted in the descriptive report (p. 1).

3. Junctions with Contemporary Surveys.

All junctions are satisfactory.

4. Comparison with Prior Surveys.

T-5359	(1933)	1:20,000
T-5361	(1933)	1:20,000
T-5362	(1933)	1:20,000

The above recent phototographic surveys which cover the area included in T-6611 and T-6612 were at the time of their review closely compared to and found to entirely supersede all previous surveys for the area covered. Therefore no surveys previous to these need be considered in this comparison.

(1) Shoreline Detail.

Only the shoreline of the outer coast, and a short section of the south shore of the Intracoastal Waterway, was located by the new surveys. Large natural changes have occurred in the outer coast and inlets. No change was found in the shoreline of the Intracoastal Waterway.

(2) Other Topographic Detail.

Various new topographic detail of minor importance was located. In addition, the following features which are shown on the prior surveys, were found by the new survey to have changed:

Various new features of minor importance were located by the new survey and changes located in the position of the following features shown on the 1933 surveys:

a. Dim trail near Cany Creek. (b) 10 m. change in position of a short section of road near Cany Creek. (c) 15 m. difference in position of center of Cany Creek Bridge draw span.

The last mentioned difference, which is the only one of any importance, is due to the center of the superstructure of the swing span of the bridge not being in the center of the waterway, whereas a standard swing bridge symbol was used on T-5359.

(3) Signals and Prominent Objects.

Nine topographic stations located by the present planetable survey were the same points as topographic stations or other objects shown on the phototographic map. In eight cases there was no plottable difference between the location as given by the two surveys. The one case of difference was in the position of the center of Cany Creek bridge, a discussion of which is given in the preceding paragraph.

Two triangulation stations have been washed out since 1934. Recovery cards for these stations were submitted to the Division of Geodesy from the field

5. Comparison with Chart 525 (New print Feb. 16, 1937). Chart 1283 (New print April 11, 1938).

(1) Topography.

Chart 525 has not yet been completely revised for the 1933 and later surveys. When this is done, the additional features located on T-6611 and T-6612 (1937) should be applied.

Chart 1283 need only be revised for change in the outer coast shoreline and inlets, and the addition of a 12 in. pipe located offshore near the low water line.

(2) Magnetic Declination.

The magnetic declination given for the coast between the Brazos River and Brown Cedar Cut in 1937:

Chart 1283 - - - - - - - - - - - - - - - - 8°45' to 9°00'E.
On the present survey the values obtained by declinatoire vary between:
Tri. station Keg,1934 (on the N.E., near Bryan Beach)- - - - - - - - 7°38' E
to
Tri. station East Point 1883 (on the S.W., at Long. 95°46') - - - - - 8°14' E

Four intermediate values were obtained by the present survey between these limits.

(3) Landmarks and Aids to Navigation.

Three charted landmarks and nine charted beacons were relocated by this survey. No new landmarks or aids to navigation were recommended.

Form 567 was not submitted for the above landmarks; this was unnecessary because a comparison between the positions obtained by this survey and those already available in this office from previous surveys shows no difference which would require a correction on the 1:80,000 scale chart which covers this area. It should be noted, however, in case the exact position of these beacons is desired for any purpose other than charting, that the position of Beacon 23 as located by planetable intersection on this survey, differs 20 m. in longitude from the sextant fix location of H-5858 (1935).

6. Comparison with Contemporary Hydrographic Surveys.

The comparison between this survey and contemporary hydrographic surveys has not been made. The review of the hydrographic surveys has not been made at this date and the comparison between the two surveys should be made at that time.

7. Field Drafting.

The inking and lettering is excellent.

8. Additional Field Work Recommended.

No additional field work is recommended.

9. Superseded Old Surveys

For the detail which it shows, the present survey supersedes all prior topographic surveys for charting purposes.

10. Corrections Applied to the Existing Phototopographic Maps.

No changes will be made to the existing phototopographic maps from the information contained in these new surveys except where the new surveys show that an error was made in the previous surveys. The new shoreline and other new information will not be applied to the supplementals for the phototopographic surveys but will be noted on the supplementals as a matter of record.

11. Reviewed by - T. M. Price, September 1, 1938.

Inspected by - B. G. Jones. B.G. Jones 9/1/39

Examined and approved:

T. B. Reed
Chief, Section of Field Records

K.T. Adams
Chief, Division of Charts

Fred. L. Peacock
Chief, Section of Field Work

Chief, Division of H. & T.

FORM M-238

MEMORANDUM

IMMEDIATE ATTENTION

SURVEY
DESCRIPTIVE REPORT
~~PHOTOSTAT~~

~~No.~~

No. T-6611(Graphic)
T-6612(Controls)

received June 7, 1938
registered July 22, 1938
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			
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RETURN TO

82	T. B. Reed

✓ JBR