

5877

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

DESCRIPTIVE REPORT

~~Hydrographic~~ } Sheet No. 9

5877
2285

State Texas

LOCALITY

Espiritu Santo Bay

~~Barroon Bay~~ Intracoastal Waterway

1934 & 5

CHIEF OF PARTY

Earl O. Heaton & E. P. Roberts.

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

REG. NO.

HYDROGRAPHIC TITLE SHEET

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

Field No. 9

REGISTER NO.

State Texas

General locality ~~Espiritu Santo Bay~~ Intracoastal Waterway

Locality ~~Espiritu Santo Bay & Barroon Bay~~

Scale 1:20,000 Date of survey Oct. 1934 to June, 1935

VESSEL Project H. T. 118.

Chief of Party Earl O. Heaton & E. B. Roberts.

Surveyed by W. R. Helm, Surveyor, & J. L. Hale observer.

Protracted by Warren L. Moore, Surveyor.

Soundings penciled by Warren L. Moore, Surveyor.

Soundings in ~~FATHOMS~~ feet

Plane of reference M. L. W.

Subdivision of wire dragged areas by

Inked by James Cornick

Verified by James Cornick

Instructions dated Nov. 5, 1932. Nov. 16, 1933. Mar. 5, 1934
May, 17, 1934. and letter dated April 18, 1934.

Remarks:

DESCRIPTIVE REPORT TO ACCOMPANY

HYDROGRAPHIC SHEET NO.9

Espiritu Santo Bay

Date of Instructions:

Instructions for this work were dated Nov. 5, 1932, with supplemental instructions dated Nov. 16, 1933, Mar. 5, 1934, May 17, 1934, and letter dated April 18, 1934. ✓

Survey Methods:

Most of the sounding for this sheet was done from a launch, using a pole graduated in feet and having a thin perforated plate about six inches in diameter on the bottom to prevent its sinking in soft mud. For inshore work the pole was used from a skiff propelled by an outboard motor. ✓

The numerous cuts to locate signal "Mill" (a windmill) in the record books did not give a satisfactory intersection. Ensign T.M.Price, in charge of aerial photo compilation for Project HT-118, made a field inspection and examined the photos carefully in the correct vicinity after which he spotted the windmill on photo-topo sheet Register No. 5364 and reported the coordinates to this office. This is taken as the correct position of "Mill". The cuts are thought to be reasonably good checks on this position. Angles were finally obtained at "Mill" and checked the above very well. See Page 73, Sounding vol. 6, this sheet, for a summary of all information used in locating "Mill". This signal is useless as a landmark and therefore was not reported as such on photo-topo sheet No. 5364. ✓

Hydrographic signal "West" was located on Sheet No. 8 adjoining this sheet. It was first plotted on this sheet (#9) by transfer from boat sheet #8 after careful checking. (Smooth Sheet No. 8 was not yet made). The final position proved too far from the boat sheet position to accept the latter and consequently positions on "B"&"C" days, green, and "A" & "B" days, brown, have been changed to correspond to the correct position of "West" in all cases where the error in plotting is appreciable. (See foot-note.) ✓

Depth curves in Barroom Bay were not shown as the bottom is very irregular. Sufficient development to delineate the curves is not warranted in this area due to rapid changes and to the fact that boats stick close to the marked channels. ✓

Since only short segments of the low water line have been drawn (small tidal range prevents getting zero soundings) they may be confused with dotted lines indicating reef areas in some cases. However, the low water line segments in general parallel the adjacent shoreline and the reef areas are so indicated by notes. *Notes on the smooth sheet are sufficient to avoid confusing the symbols.* ✓

Sand flats and reef area in Latitude 28° 25' between Longitude 96° 25' and 96° 27' were not transferred to the smooth sheet from the photo-topo sheet inasmuch as the hydrography shows considerable change to have taken place in this area. ✓

*Air photos
O.K.
Dan*

* Position of "West", Lat 28°17'+1083 meters, Long 96°37'+1128 meters Scaled from Sheet 8 by W.L.Moore, Checked by C.R.Reed. ✓

Discrepancies:

There are occasional notations in red in the record books for this sheet of "apparent increase in speed not noted" or "apparent decrease in speed not noted". This explanation was used wherever a spacing for a continuous line could not be made to check all positions within 10 seconds of the recorded time. This notation was probably used in many places where there was not an omission in recording, but changes of speed actually occurred without the recorders knowledge. These changes of speed may have been due to the boat dragging bottom or to changes in force and direction of wind and currents.

These notes unnecessary in most cases. Jan

In some cases of speed changes between positions it was impossible to plot the soundings in their true relation due to uncertainty as to just when the speed change took effect. In these cases the soundings were spaced as though the speed had been constant.

Some of the apparently poor estimations of distance to shore from the end positions of the lines of soundings are thought to be due to the stage of tide when the photos of shoreline for this sheet were taken and to actual changes caused by erosion, etc., especially in the hurricane of July 25, 1934. Positions 48 and 49 "d" day (red) appear to fall on the shore of an island and some of the estimated distances in this vicinity appear to be faulty but it is thought that the above mentioned hurricane caused sufficient erosion to account for these apparent discrepancies.

discrepancy small

Position 88d (red) was apparently plotted wrong on the boat sheet. (Lat $28^{\circ} 18.2'$, Long $96^{\circ} 33'$)

Sheets 9 and 15 fail to join by about an inch in Barroom Bay Cut due to lack of control in the area. The depths in the cut at the time of the survey were greater than the minimum depth of 4 feet at the west end of the cut according to W.R.Helm, Surveyor, in charge of hydrography in Barroom Bay. The least depth on the east end of the cut was 5 feet (see Sheet 15).

Improved channel maintained by U.S. Engineers

The soundings immediately after position 115F day (red) would check better if the position occurred at 3:50:50 instead of 3:50:30. Confusion as to time by the recorder seems to bear this out. Inasmuch as the soundings on this line are deeper than the surrounding ones they are left as recorded.

It will be noted that the smooth sheet protracting does not check the boat sheet protracting where "Sal" was used in the fixes until after a certain undetermined date.* This discrepancy was due to "Sal" (Triangulation station "Saluria Coast Guard Station cupola, 1934") being plotted 100 meters too far west on the boat sheet until the mistake was discovered and rectified.

* 12/25/34 see boat sheet.

There are numerous short segments of dashed pencil lines on this sheet, especially in the eastern portion and Barroom Bay, which represent the distances estimated by the hydrographer to bars, reefs, etc. Due to errors of estimation and various stages of tide when estimations were made this information is that to be insufficient to warrant sketching a low water line from it.

air photo accepted

At Lat $28^{\circ} 22.2'$, Long $96^{\circ} 29.0'$ a 7 foot sounding occurs on check line near 6 foot soundings at position 6 A (red). The soundings on the check line here are apparently too deep.

actual difference = .7 foot. 6 1/2 foot adv. on check line closely.

Dangers:

The "remains of old beacon" located from line 55 a - 56a (red), bare 1 1/2 ft. at M.L.W. and shown on the smooth sheet at Lat 28° 25.1', Long 96° 26.5' *Post have 1 1/2 M L W* may be considered dangerous to boats off course in Barroom Bay channel in thick weather.

Dangers to boats unfamiliar with these waters exist in the form of a 2 inch iron pipe bare 1 1/2 ft. at M.L.W. at Lat 28° 21.8', Long 96° 28.5' (23-24f day green) and a 3 inch iron pipe (height not recorded) at Lat 28° 21.1', Long 96° 27.6' (44-45f day green). These pipes are evidently intended as markers for boats going to the Lighthouse dock at Lat 28° 20.7', Long 96° 26.3'. ✓

Boats passing thru Barroom Bay must stick fairly close to the marked channel to avoid shoals and reefs which are near the traveled route. An example is the small reef about 200 meters WNW of Beacon 7 which bares 1/2 foot at M.L.W. ✓

The large shoal surrounding signal "Bean" (Dewberry Island Shoal Bn 2) has a general depth over it of 3 to 4 feet at M.L.W. Depths of 3 ft. will be noted at Lat 28° 21.35', Long 96° 31.25' (35-36F day, red). ✓

A tree top bare 1 1/2 ft. at M.L.W. in 6 feet of water at Lat 28° 22.7', Long 96° 29.9' is dangerous to boats in thick weather or at night. *Plotted away.* ✓

Channels:

There are three channels connecting Espiritu Santo Bay and Matagorda Bay. *See Review part 8 b*

- 1) Barroom Bay Cut is suitable for boats drawing up to 4 feet and is marked (for the part on this sheet) by Bns 1,3,5,7,& 9. Least depths of 4 feet at M.L.W. were observed on the channel line between 90 & 91a (red) at Lat 28° 25.9', Long 96° 24.8'. *See Review part 8 b*
- 2) The Big Bayou channel line showed a least depth on this sheet, of 3 feet at M.L.W. at Lat 28° 25.3', Long 96° 24.9', (20-21b day, red). *See Review part 8 b*
- 3) Saluria Bayou, is used extensively by small fishing boats as an anchorage. Its use is limited by the entrance bar depth on the east, of 5 ft. at M.L.W. and on the west about 2 or 3 ft. on either side of Grass Island. Development does not show the best water thru these passages on either side of Grass Island but the route is devious and changeable and cannot be navigated without local knowledge. *See H-5864* ✓

There is no dredged channel thru the length of Espiritu Santo Bay but it connects at its western end to San Antonio Bay by two channels, Steamboat Pass and First Chain of Islands Cut known locally as South Pass. South Pass is the most used of the two and shows a least depth of 4 feet at M.L.W. at Lat 28° 17.7', Long 96° 37.4' (43-44C green). Steamboat Pass has depths of 3 feet and more. *See Review Part 8 c* ✓

No attempt was made to show depth curves on this sheet in the vicinity of Steamboat Pass, Barroom Bay Cut, Big Bayou or Saluria Bayou as there were such steep slopes at edges of channels as to make it impossible.

Three 8 inch cedar posts mark the entrance to Port O'Connor where 3 feet can be carried up to the docks. The posts are located at Lat 28° 25.9', Long 96° 24.83'; Lat 28° 25.97', Long 96° 24.83'; and Lat 28° 26.02', Long 96° 24.75'. (signal North) ✓

Comparison with Previous Surveys:

1 This sheet was compared with U.S.C. & G.S. chart 1284. ✓
As noted under "Discrepancies" it is thot that there
2 have been some small changes of shoreline due to the hurricane ✓
of July 25, 1934, since the air-photos for this sheet were taken ✓
in the spring of 1934. Hence there is some inaccuracy in the
present comparison.

3 The south shore of Espiritu Santo Bay appears to have
retained its general location but on the north shore, Long Island
and the Southwest end of Dewberry Island appear to have receded
100 to 200 meters. Also Long Island seems to have been broken up
into a sort of chain of islands. The east end of Espiritu Santo
Bay shows numerous small and unimportant changes of shoreline
the most noteworthy probably being the erosion of the island
which extends on the chart east from Lat 28° 25.2', Long 96° 26.3'
to Lat 28° 25.4', Long 96° 24.6'. This island has been changed
to an area of a few small islands and an expanse of submerged or
awash at M.L.W. sand flats.

4 Dewberry Island Shoal Bn 2 (signal "Bean") is now
about 150 meters SE x E of its charted position and Bn 2' at
South Pass (signal "Tide") is now about 100 meters SE x E of its
charted position. ✓

5 The present positions of the Barroom Bay channel beacons
are related to their charted locations as follows: Bn 1, 130 meters
west; Bn 3, 625 meters WSW; Bn 7, approx. same as charted; Bn 9,
300 meters NE. Bn 5, now located at Lat 28° 25.30', Long 96° 26.25', ✓
is in approximately the same position as an unnumbered beacon on
Chart 1284. The Chart also shows day beacons at Lat 28° 24.6',
Long 96° 27.7'; Lat 28° 24.9', Long 96° 27.1'; and Lat 28° 25.3',
Long 96° 26.1' which have evidently been removed or destroyed.
Signal "West" is only a stump remnant of a beacon and is about
50 meters south of charted Bn 4 and 60 meters WNW of charted Bn 3. ← South Pass

6 Dewberry Island Shoal (near signal "Bean") has deepened
from minimum depths of 3/4 ft. and 1 ft. to depths of 3 feet. The ✓
5 ft. spot at Lat 28° 21.5', Long 96° 30' has evidently deepened
to the surrounding depths of about 7 feet. Traces of the long
shoal nearly parallel to the south shore and about 1 mile off of
it remain in a few scattered 5 ft. soundings and numerous 6 ft.
ones, but it has evidently been broken up and deepened slightly.
The hydrography shows the 6 ft. spot at Lat 28° 19.3', Long 96° 33.2', ✓
to be 7 ft.; shows the 6 ft. spot at Lat 28° 18.8', Long 96° 33.9',
to be 7 ft.; shows the 6 ft. spot at Lat 28° 19.5', Long 96° 33.9',
to be 6 1/2 ft.; and shows the 6 foot depths to still exist at
Lat 28° 19.1', Long 96° 34.1', at Lat 28° 19', Long 96° 35', and at
Lat 28° 18.8', Long 96° 34.7'.

7 In general the 6 foot curve has receded shoreward in
the western part of the bay making an opening of over 6 ft. depth
to the First Chain of Islands. A considerable area of 6 foot depth
remains about 1 mile northeast of signal "Tide". The general depth ✓
of the body of the bay is about the same as shown on the chart. It
is evident that a broad bar is beginning to form across the north-
eastern section of Espiritu Santo Bay from the northeast end of
Dewberry Island to the southwest end of Bayucos Island.

8 The extreme eastern end of San Antonio Bay, which shows ✓
on the western end of this sheet, has an irregular 6 ft. curve
which shows a deepening of 1/2 to 1 foot.

Geographic Names:

The dredged cut thru First Chain of Islands should be called South Pass in conformity with well established local usage. The Coast Pilot calls this "First Chain of Islands Cut". ✓

The following changes in names are recommended:

McHenry Bayou should be named Saluria Bayou in conformity with well established local usage. ✓

Pringe Lake (Lat 28° 19', Long 96° 31' 0) should be spelled Pringle Lake. ✓

Saluria should represent the name of a locality and the village symbol should be removed. ✓

Statistics for Sheet 9:

Number of Positions - - - - - 2,037 ✓
Number of Soundings - - - - - 16,544 ✓
Statute Miles of Sounding Lines - - 525.6

Men in Charge of Hydrography:

W.R.Helm, Surveyor, J.L.Hale, Observer, W.H.White, Observer, and L.D.Williams, Recorder, had charge of the hydrographic parties which did the field work for this sheet. ✓

Respectfully submitted,

Warren L. Moore

Warren L. Moore,
Surveyor, C. & G. Survey.

Examined & Approved,

C.R. Reed

C.R. Reed, Aid,
C. & G. Survey.

Note to Cartographer:

Topography from the photo-topo sheet should be used in the area mentioned in the last paragraph, page 1, insofar as it does not conflict with the hydrography. Where it conflicts an adjustment should be made. It was considered advisable to have this done in Washington office where the complete photo-topo data are available. ✓

Hydrographic Sheet No. 9 and the accompanying
records have been inspected and are approved.

C.R. Reed

C.R. Reed, Aid,
Coast & Geodetic Survey.

KCC

TIDE NOTE FOR HYDROGRAPHIC SHEET

March 19, 1936.

Division of Hydrography and Topography:

✓ Division of Charts: **Attention: Mr. E. P. Ellis**

Tide Reducers are approved in
12 volumes of sounding records for

HYDROGRAPHIC SHEET 5877

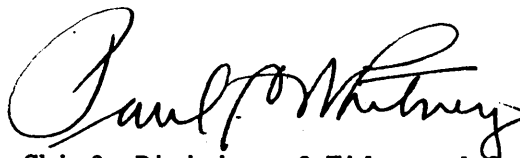
Locality **Espiritu Santo Bay, Texas.**

Chief of Party **E. B. Roberts** in 1934-1935.
Plane of reference is **mean low water reading**
1.5 ft. on tide staff at **Espiritu Santo**
-- ft. ~~below B.M.~~ **No bench marks.**
2.0 ft. on tide staff at **Barroom Bay***
-- **No bench marks.**

There is practically no periodic tide in this locality and the plane of reference was taken half a foot below mean water level.

Condition of records satisfactory except as noted below:

***The only staff readings available for checking reducers were found recorded in the sounding volume.**



Chief, Division of Tides and Currents.

GEOGRAPHIC NAMES

Date. Oct. 26, 1935

Survey No. 5877

Chart No. 1284, 1285

Diagram No. 1285

Approved by the Division of Geographic Names, Department of Interior. *

Referred to the Division of Geographic Names, Department of Interior. R

Under investigation. Q

Status	Name on Survey	Name on Chart	New Names in local use	Names assigned by Field	Location
✓	<u>Matagorda Island</u>	same		✓	
✓	<u>Espiritu Santo Bay</u> ✓	"		✓	
✓	<u>Grass Island</u>	"			
✓	<u>Shoalwater Bay</u> ✓	"		✓	
✓	<u>Long Island</u> ✓	"		✓	
✓	<u>Dewberry Island</u> ✓	"		✓	
	<u>Blackberry Island</u> ✓	"		✓	
	<u>Barroom Bay</u> ✓	"		✓	
	<u>Big Bayou</u> ✓	"		✓	
✓	<u>Bayucos Island</u> ✓	"		✓	
	SALURIA	"	<i>delete</i>		
✓	<u>Saluria Bayou</u> ✓	McHenry Bayou		✓	
✓	<u>Grass Island</u>	same			
✓	<u>Farwell Island</u>	"			
✓	<u>Vanderveer I</u> <u>Vanderveer Island</u>	"			
✓	<u>First Chain of Islands</u> ✓	"		✓	
✓	<u>South Pass</u> ✓	"		✓	
✓	<u>San Antonio Bay</u> ✓	same		✓	
✓	<u>Steamboat Pass</u> ✓	"		✓	
	<u>Port O'Connor</u> ✓			✓	
		<i>names approved 11/8/35</i>			
		KTA			

Field Records Section (Charts)

HYDROGRAPHIC SHEET NO. ..5877

The following statistics will be submitted with the cartographer's report on the sheet:

Number of positions on sheet	...2037
Number of positions checked	...23.
Number of positions revised0
Number of soundings recorded	..16544
Number of soundings revised0
Number of signals erroneously plotted or transferred0

Date: April 7, 1936

Verification by J. A. Mc Cormick

Time: 36 hr.

Review by R. J. Christman

Time: 2 1/2

HYDROGRAPHIC SURVEY NO. 5877

Smooth Sheet Yes

Boat Sheet 1

Sounding Records Yes Vols. 12

Descriptive Report Yes

Title Sheet Yes

List of Signals Vol. 1

Landmarks for Charts (Form 567) Yes

Statistics Yes

Approved by Chief of Party No

Recoverable Station Cards (Form 524) No

Special Chart for Lighthouse Service (Circular Nov. 30, 1933) No *No floating aids*

Remarks _____

Verifier's Report on H-5877

Records: Records are complete. They are cluttered up by superfluous notes made by field draftsman who attempted to ~~adjust~~ explain minor changes in time and angles which should be expected on any hydrographic survey.

Drafting: Drafting was excellent. ✓

Control: Shoreline and topographic signals are from T-4903, T-5045, T-5364 and T-5363. Comparison was made with air photo compilations. ✓

Junctions: This sheet is joined on the east by H-5864 and H-5866. It is joined on the southwest by H-5917. Junction with H-5917 will be made when that sheet is verified. ✓

Remarks: Verifier has taken exception to several paragraphs in the descriptive report and noted them on the margin. ✓

In paragraph 1 under "Channels", field party claims a least depth of 4 feet on the channel line in Barroom Bay Cut. They have ignored a crossline (1 3g green) which crosses this channel with 1 and 2 feet. The cut may be so narrow that the crossline failed to get the deeper soundings. The soundings on the crossline were not plotted on the boat sheet.

The line 1-2g (green) is in a branch of the Big Bayou channel.

April 7, 1936.

Submitted,

J.A. McCormick

J.A. McCormick.

Section of Field Records

REVIEW OF HYDROGRAPHIC SURVEY NO. 5877 (1934-5) FIELD NO. 9

Espiritu Santo Bay, Intracoastal Waterway, Texas.

Surveyed in October 1934 to June 1935

Instructions dated Nov. 5, 1932, Nov. 16, 1933, Mar. 5, 1934,

May 17, 1934, and letter Apr. 18, 1934 (E. O. HEATON).

Pole Soundings.

3 Point fixes on shore signals.

Chief of Party - E. O. Heaton.

Surveyed by - W. R. Helm, J. L. Hale.

Protracted by - Warren L. Moore.

Verified and inked by - J. A. McCormick.

1. Condition of Records.

The records are neat and legible and conform to the requirements of the Hydrographic Manual except as follows:

- a. In Vol. 1, page 2, of the sounding records, "Cuts to locate Beacon No. 1," a 2 is superimposed on the 1. This is signal "Tide" in the records. An examination of the sketch accompanying the tide records shows that it should be an odd numbered beacon and, therefore, the 1 has been used on the sheet as the number for the beacon.

The Descriptive Report fails to account for all of the charted beacons in South Pass but satisfactorily covers all other items of importance.

2. Compliance with Instructions for the Project.

The plan and character of the development are in accordance with the instructions for the project.

3. Shoreline and Signals.

The shoreline originates with air photo compilations T-5045 (1933-4), T-5351 (1933), T-5363 (1933), and T-5364 (1933).

Topographic signals are from plane table survey T-4903 (1934) and one (O Barn) from air photo compilation T-5351 (1933).

Hydrographic signals are located by sextant fixes recorded in the sounding records, (see List of signals, Vol. I, page, 1, for index of cuts).

4. Sounding Line Crossings.

The sounding line crossings are satisfactory, the depths generally agreeing within 1 foot or less.

5. Depth Curves.

Within the area covered, the usual depth curves may be satisfactorily drawn.

6. Junction with Contemporary Surveys.

The junction with H-5917 (1935) to the west is satisfactory.

The junctions with H-5864 (1935) and H-5866 (1934-5) to the east are satisfactory, except that a portion of the dredged channel at Port O'Connor was not sounded to a junction with H-5866 (1934-5). The Descriptive Report, page 2, par. 5, states "The depths in the cut at the time of the survey were greater than the minimum depth of 4 feet at the west end of the cut". The dredged channel is a part of the Intracoastal Waterway maintained by the U. S. Engineers and is reported on periodically.

7. Comparison with Prior Surveys.a. T-720 (1858) (contains hydrography).

This survey is on a scale of 1:50,000 and shows a hydrographic reconnaissance of the area under consideration. There has been a general shoaling over the area and details vary greatly. All important details are covered by a later survey on a larger scale and the above survey need not be considered in future charting.

b. H-1096 (1873), H-1097 (1871).

These surveys on a scale of 1:20,000 are the basis for the present charting of the area under consideration. The present survey indicates a general shoaling of 1/2 to 2-1/2 feet, except on the middle ground marked by Beacon 2, (latitude 28°21.4', longitude 96°31.2') and the area to the northwest of it where there has been some deepening. The hydrography in the area to the eastward of the middle ground was executed in two different years, 1871 and 1873. Apparently an attempt was made to harmonize the two seasons' work by applying corrections to the soundings, the adjusted soundings being shown on a subsheet which was used for charting. The corrections, however, do not appear to follow any fixed rule, but the result of the plotting is to show about 1 foot less water in the deeper areas than was found during the 1871 survey.

Special attention is directed to the following features:

- (1) A detached 5-1/2 foot sounding (charted 5) in latitude 28°21.55', longitude 96°29.95', comes from the above subsheet of H-1096 (1873). It is plotted on the main sheet as 6-1/2 but an examination of the original records shows an even bottom of 8 to 8-1/2 feet on the sounding line and the 6-1/2 is evidently an error in plotting. The present surveys shows an even bottom of 7 to 7-1/2 feet in the vicinity. The 5 should be expunged from the chart.
- (2) A deepening of about 2 feet has taken place over the entire middle ground marked by Beacon 2 (latitude 28°21.4', longitude 96°31.2'). The 3/4 foot depth (charted from H-1096 (1873) falls in depths of 3 feet (the least depth from the present survey) about 60 meters north of the beacon. Because of the general change on the shoal the 3/4 has not been carried forward.

Because of the general change in the area, the time elapsed since the surveys were made and the closer development of the present survey, H-5877 (1934-5) should supersede the above surveys for charting purposes.

8. Comparison with Chart 1284 (New Print dated March 1, 1935)
Chart 1285 (New Print dated May 1, 1935).

a. Hydrography.

Within the area covered by the present survey, the chart is based on surveys discussed in the foregoing paragraphs and contains no other information that needs discussion in this review, except as follows:

- (1) The 6 foot spot charted in latitude 28°19.3', longitude 96°33.25', comes from blue print 18247 (1922) where it is shown as a 5.8 foot sounding. It falls in depths of 7 to 7-1/2 feet on the present survey. As the U. S. Engineer survey does not give any other indication of the long 5 foot shoal to the northward, it probably should plot on that shoal and the blue print must be considered as of reconnaissance accuracy only. The 6 should no longer be charted. The information on the charts from both the above blue prints should be superseded by the present survey.

b. Controlling Depths.

The controlling depths in the improved channel through Barroom Bay and also through South Pass at the western end of the sheet, are charted as "3 feet August 1934" from Chart Letter 597/1934. A later U. S. Engineer report (Chart letter 630/15 of 1935) gives the same depths for June 1935. The present survey shows a possibility of depths of 4 feet being carried through both these channels. However, in view of the shoal cross line

in the Barroom Bay Channel (latitude 28°25.9', longitude 96°24.8') 3 feet should be charted as the controlling depth.

c. Aids to Navigation.

The following aids to navigation were located by sextant angles recorded in the sounding records. They differ from their charted positions as follows:

- (1) Barroom Bay Channel Beacon 1 (latitude 28°26.0', longitude 96°24.62', is located about 100 meters west of its charted position. This beacon was also located by plane-table on T-4903 (1934) and is shown on the sheet with a red circle.
- (2) Barroom Bay Channel Beacon 3 (latitude 28°25.6', longitude 96°25.66', is located about 500 meters WSW of its charted position.
- (3) Barroom Bay Channel Beacon 5 (latitude 28°25.3', longitude 96°26.26') is in approximately the position of one of the unnumbered beacons on the chart.
- (4) Blackberry Island Channel Beacon 7 (latitude 28°25.1', longitude 96°26.52') is in agreement with the charted position.
- (5) Blackberry Island Channel Beacon 9 (latitude 28°24.85', longitude 96°27.25') is located about 200 meters NE of its charted position.
- (6) Dewberry Island Shoal Beacon 2 (latitude 28°21.36', longitude 96°31.14') is located about 150 meters SE by E of its charted position.
- (7) Chain of Islands Beacon 1 (latitude 28°17.97', longitude 96°36.84') is located about 100 meters SE by E of the charted position.
- (8) Chain of Islands Beacon 3 (28°17.60', longitude 96°37.70') is in the position of signal West on the present survey and is noted as "Stub of old Beacon bare 6' at MLW".

All the foregoing beacons are listed in the "Local Light and Buoy List, Gulf Coast". They adequately mark the features on the ground and because of the small scale of the chart, the difference in charted position does not constitute a menace to navigation. Beacons 1, 3, 5, 7 and 9 (par. (1) to (5) C), were charted from Lighthouse Notice to Mariners 3 of 1925. The other three beacons (par. (6) (7) and (8) C) were charted from blue print 18247 (1922).

The following beacons were not located by the present survey:

- (9) Chain of Islands Beacons 2 and 4 are in the local light and buoy list and were charted on the opposite side of the channel from beacons 1 and 3.
- (10) The three day beacons charted in latitude $28^{\circ}24.6'$, longitude $96^{\circ}27.7'$; latitude $28^{\circ}24.9'$, longitude $96^{\circ}27.1'$; and latitude $28^{\circ}25.3'$, longitude $96^{\circ}26.1'$, are not in the light and buoy list. They were charted from blue print 18246 and 18247 of 1922. As the present survey found no evidence of their existence they are assumed to have been removed or destroyed (Descriptive Report page 4, par. 5), and should be expunged from the charts.

9. Field Plotting.

The field plotting was excellent.

10. Additional Field Work Recommended.

The survey is satisfactory and no further work is required.

11. Superseding Old Surveys.

Within the area covered the present survey supersedes the following survey for charting purposes:

T-720	(1858)	hydrography in part
H-1096	(1873)	in part
H-1097	(1871)	" "

12. Reviewed by - R. J. Christman, May 19, 1936.

Inspected by - A. L. Shalowitz.

Examined and approved:

C. K. Green
C. K. Green,
Chief, Section of Field Records.

K. T. Adams
K. T. Adams
Chief, Division of Charts.

Fred. L. Peacock
Fred. L. Peacock
Chief, Section of Field Work.

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

applied to chart 1284 - Feb. 14, 1938
" " " 1117 May, 1940
Applied to chart (new) 1285 - May 1940 -

J S L
g. H. S.
P. B. C.

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