

5783

U. S. COAST & GEODETIC SURVEY
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Form 504
Ed. June, 1928

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY
R. S. Patton, Director

State: Florida

DESCRIPTIVE REPORT

Topographic } Sheet No. 4
Hydrographic }

LOCALITY

SHELL St. Andrew Bay
~~West Bay Point to Davis Point~~
~~New Entrance Cut to Prebby Bayou~~

1935

CHIEF OF PARTY

Wm. D. Patterson

5783

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

U. S. COAST & GEODETIC SURVEY
LIBRARY AND ARCHIVES

MAY 15 1935

REG. NO.

Acc. 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. 4

REGISTER NO. **5783**

State Florida

General locality St. Andrew Bay

Locality ~~West Day Point to Davis Point~~
~~New Entrance Cut to Pretty Bayou~~

Scale 1:10,000 Date of survey Jan. - Mar., 19 35

Vessel Field Party No. 5

Chief of Party Lieut. Wm. D. Patterson

Surveyed by Wm. H. Jennings and A. C. Van Horn, Jr. & G. K. Elderkin

Protracted by J. C. McIlwaine

Soundings penciled by J. F. Merritt

Soundings in ~~fathoms~~ feet

Plane of reference M. L. W.

Subdivision of wire dragged areas by _____

Inked by J. Honick and H. V. Bennett

Verified by W. L. Mullen

Instructions dated November 30, 19 34

Remarks: _____

DESCRIPTIVE REPORT

To Accompany

HYDROGRAPHIC SHEET NO. (field) 4

ST. ANDREW BAY, FLA.

NEW ENTRANCE CUT TO PRETTY BAYOU.

Project HT-195 Wm. D. Patterson Chief of Party

DATE OF INSTRUCTIONS:

Director's Instructions for Project HT-195 dated
November 30, 1934.

SURVEY METHODS:

Standard methods of hydrographic surveying were followed. Positions were obtained for the most part by three point sextant fixes taken on objects located by triangulation or topography. In places where it was impossible to take a three point fix, one angle and a distance perpendicular to the shore were used.

Depths were measured in the deeper parts of the bay from a small launch with a phosphor bronze stranded-wire center mahogany tiller lead line marked in fathoms and feet, and in the shoal parts of the bay and in the bayous from a large flat-bottomed skiff with a sounding pole marked in fathoms and feet.

No attempt was made to survey the new St. Andrew Bay cut as it is quite frequently dredged by the U. S. Engineers to maintain a project depth of twenty-seven feet.

DISCREPANCIES:

No discrepancies were noticed in cross lines and soundings.

Any discrepancies found in the soundings along the edge of the cut are due to the dredged sand being dumped there by the dredge boat.

See Rev. 11/13/34
H. M. P.

DANGERS:

The shoal water near shore and in the bayous is strewn with fallen trees and sunken logs. In general shoals make well out from points of land.

There is a shoal located at Latitude 30° 07'.1 and Longitude 85° 42'.0 with a least depth of two feet.

There is a long narrow shoal made by the dumping of dredge boats 230 meters south-east of the cut from Latitude 30° 07'.7, Longitude 85° 42'.8 to Latitude 30° 08'.0, Longitude 85° 42'.5.

There is a large shoal located at Latitude 30° 09'.0 and Longitude 85° 41'.8 with a least depth of six feet.

There is shoal water extending from Courtney Point to the black beacon (Signal URK), Latitude 30° 09'.0, Longitude 85° 41'.5, therefore it is not advisable for any boat of any size to pass to the westward of this beacon.

Vessels should pass at least 150 meters west of the buoy off Buena Vista Point. (N^o 2)

CHANNELS:

The controlling depth of the new cut is twenty-seven feet and is maintained by the U. S. Engineers. The cut is well marked with beacons and buoys. The true heading entering the cut is 52° 20' and after passing the end buoys a heading half-way between the red beacon at Latitude 30° 07'.7, Longitude 85° 41'.8 (Signal GUG) and the black beacon at Latitude 30° 09'.0, Longitude 85° 41'.5 (Signal URK) should be used.

The channel entering Grand Lagoon is very narrow, not more than 100 meters in width, and has a least depth of thirteen feet. This does not run all the way in Grand Lagoon but is very twisting and not marked.

The general location of the deepest water going into West Bay is approximately in the center of the bay and the points of the shoals are well marked.

ANCHORAGES:

Anywhere in the bay except the extreme ends of the bayous and the small bayous which contain too many sunken logs are suitable for an anchorage.

Grand Lagoon is used by many small fishing boats as a suitable anchorage. The U. S. Engineers have several dredges anchored here near the entrance.

Hydrographic statistics, Sheet 4, St. Andrew Bay,
Florida.

Day Letter	Date 1935	Color	Vol.	Number of Soundings	Number of Positions	Statute miles of Soundings
A	Jan. 26	Red	1	658	115	15.1
B	Jan. 28	"	1	606	123	20.8
C	Jan. 29	"	1	608	134	19.3
D	Jan. 30	"	2	697	144	19.4
E	Feb. 8	"	3	816	170	24.4
F	Feb. 9	"	3	761	177	30.5
G	Feb. 14	"	3	181	40	7.0
H	Mar. 5	"	3	237	35	4.2
		*	4	597	96	13.4
J	Mar. 6	"	4	618	109	14.7
K	Mar. 7	"	4	245	48	8.9
L	Mar. 8	"	4	341	78	12.0
M	Mar. 9	"	4	264	56	9.3
		"	5	580	126	20.4
N	Mar. 11	"	5	747	162	25.8
P	Mar. 13	"	5	690	152	21.6
R	Mar. 14	"	6	895	199	28.4
S	Mar. 15	"	6	165	35	5.0
T	Mar. 18	"	6	587	128	12.9
U	Mar. 19	"	6	264	41	5.8
		"	7	463	81	10.2
V	Mar. 20	"	7	609	119	15.8
W	Mar. 21	"	7	667	128	16.6
X	Mar. 11	"	7	240	48	6.2
		"	8	454	85	12.0
Y	Mar. 25	"	8	244	47	5.5
Z	Mar. 26	"	8	650	138	14.8
AA	Mar. 27	"	8	350	76	8.8
Totals				14,234	2,890	408.8

Area 15 square statute miles.

COMPARISON WITH
PREVIOUS SURVEYS:

A close check of the charted depths in this area was made as the survey progressed.

No comparison could be made in the vicinity of the new cut and channel since it had not yet been cut there at the time of the last survey.

The charted one-foot shoal located at Latitude $30^{\circ} 07.1$; Longitude $85^{\circ} 42.0$ ' now has a least depth of two-feet. The shoal was plainly visible and the least depth easily obtained. It is recommended that the depth on the chart be changed to the new depth.

The charted ten-foot shoal located at Latitude $30^{\circ} 09'.8$, Longitude $85^{\circ} 43'.3$ now has a least depth of seven-feet. The shoal was plainly visible and the least depth easily obtained. It is recommended that the depth shown on the chart be changed to the new depth.

OYSTERS:

A special effort was made to locate the oyster beds in the area covered by this sheet but few could be found, due no doubt, to the fact that the depth of the water prohibits dredging there.

In the upper end of Grand Lagoon there are a few scattered beds of small area.

Oysters are quite prominent along the shores of Pretty Bayou located at Latitude $30^{\circ} 12'.0$ and Longitude $85^{\circ} 42'.3$.

GEOGRAPHIC NAMES:

The geographic names for places on this sheet are listed under the topographic sheets of this area.

Respectfully submitted,

Wm. H. Jennings

Wm. H. Jennings,
Surveyor.

Approved and forwarded;

Wm. D. Patterson
Wm. D. Patterson, Lieut.,
Chief of Field Party No. 5.

HYDROGRAPHIC SURVEY NO. ~~5783~~

Smooth Sheet 1 ✓

Boat Sheet 1 ✓

Sounding Records 8 ✓ Vols. _____

Descriptive Report Yes ✓

Title Sheet Yes ✓

List of Signals Filed in Vol. 1 ✓

Landmarks for Charts (Form 567) Yes ✓

Statistics Filed in D.R. ✓

Approved by Chief of Party Yes ✓

Recoverable Station Cards (Form 524) None Rec'd.

Special Chart for Lighthouse Service ~~None Rec'd.~~ Yes
(Circular Nov. 30, 1933)

Remarks _____

Field Records Section (Charts)

HYDROGRAPHIC SHEET NO. **..5783**

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

Number of positions on sheet	<i>2890</i>
Number of positions checked	<i>232</i>
Number of positions revised	<i>48</i>
Number of soundings recorded	<i>14,234</i>
Number of soundings revised
Number of signals erroneously plotted or transferred	<i>None</i>

Date: *July 26, 1935*

Verification by *W. L. Muller*
Inked by Miss Bennett
Review by *J. Honick* *H. W. Murray*

Verifiers Corrections by " "

Time: *107 1/2 hr*

24 hr
Time: *6 1/2 hrs.*

4 1/2 "

TIDE NOTE FOR HYDROGRAPHIC SHEET

May 31, 1935.

Division of Hydrography and Topography:

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

Tide Reducers are approved in
8 volumes of sounding records for

HYDROGRAPHIC SHEET 5783

Locality West Bay Point to Davis Point, Florida

Chief of Party: W. D. Patterson in 1935
Plane of reference is mean low water reading
0.0 ft. on tide staff at St. Andrew Bay Entrance
10.1 ft. below B.M. 7 USED

-0.1 ft. on tide staff at Panama City
5.8 ft. below B. M. 2 USED

1.8 ft. on tide staff at West Bay Creek
3.7 ft. below B. M. 1

Height of mean high water above plane of reference is 1.3 feet at

St. Andrew Bay Entrance; 1.3 feet at Panama City; 1.2 feet at West
Bay Creek.

Condition of records satisfactory except as noted below:

When tide was below datum reducers were entered with a minus (-)
sign instead of a plus (+) sign as called for in Special Publication #143,
paragraph 134.

Chief, Division of Tides and Currents.

July 23, 1935

Report on H-5783

- 1- While the records in general conform to the requirements of the Hydrographic Manual, there is one exception which should be noted. In the recording of fixes in some instances the position number is correctly placed, and in others incorrectly. An example of this will be found in Volume 6, page 26 of the records.
- 2- The usual depth curves can be drawn.
- 3- The field plotting was complete, and accurate.
- 4- Practically no additional drafting was required in the office.
- 5- At the time of the completion of this sheet only one junction was available. This has been added.
- 6- The shore lines have been checked with the air photo sheets both visually and by means of proportional dividers and found to be substantially correct. There were a number of small pieris found on one of the air photo sheets which did not appear on the Hydrographic Sheet. These have been added to the Hydrographic Sheet.

Respectfully submitted

W. L. Muller

Section of Field Records

REVIEW OF HYDROGRAPHIC SURVEY NO. 5783 (1935) - FIELD NO. 4

West Bay Point to Davis Point, St. Andrew Bay, Florida
Surveyed in 1935
Instructions dated November 30, 1934 (C. A. Egner)

Hand Lead and Pole Soundings.

3 Point Fixes on Shore Signals.

Chief of Party - W. D. Patterson.
Surveyed by - W. H. Jennings, A. C. Van Horn, Jr., and G. K. Elderkin.
Protracted by - J. C. McIlwaine.
Soundings penciled by - J. F. Merritt.
Verified and Inked by - W. L. Mullen, J. Honick and H. V. Bennett.

1. Condition of Records.

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

- a. The tide reducers were entered with a minus (-) sign instead of a plus (+) sign when the tide was below the plane of reference. (Par. 134).
- b. A number of topographic details such as piers, piles and features on which topographic signals were located were not shown on the smooth sheet. These were added in the office.

The "Descriptive Report" is clear and comprehensive and satisfactorily covers all matters of importance.

2. Compliance with Instructions for the Project.

The plan, character and extent of the survey satisfy the instructions for the project.

3. Sounding Line Crossings.

Sounding line crossings are in general, satisfactory. However, a number of sounding lines did not agree closely with adjacent lines. The differences were due, in most cases, to incorrectly recorded fixes and to soundings incorrectly spaced with respect to time interval. Wherever possible, these differences were improved in the office.

4. Depth Curves.

Within the limits of the survey, the usual depth curves may be satisfactorily drawn.

5. Junctions with Surveys.

- a. The junction on the north with H-5812 (1935) will be considered in the review of that survey.
- b. The junction on the east with H-5782 (1935) is satisfactory except that a 16 foot sounding on H-5782 (1935) in lat. $30^{\circ} 08.8'$, long. $84^{\circ} 41.55'$ falls close to a 23 foot sounding on the present survey. However, a possible shoal is indicated here on the present survey by an undeveloped 18 about 130 m. to the westward and the 16 has been retained.
- c. The junction on the southeast with H-5024 (1930) is satisfactory except that in the vicinity of lat. $30^{\circ} 07.0'$, long. $85^{\circ} 42.3'$; a number of soundings on the 1930 survey caused unnatural protrusions in the depth curves and were therefore not transferred to H-5783 (1935). Most of the positions of these omitted soundings were questioned in the original records by the field party. In charting the overlapping area of the two sheets, the soundings should be taken from H-5783 (1935).
- d. There are no contemporary surveys to the southwestward of the present survey, however for charting purposes, a fair junction may be made with H-1373b (1877).

6. Comparison with Prior Surveys.

H-514 (1855), ~~H-1374b (1877)~~,
H-1373b (1877), H-1375 (1877).

A comparison between the above surveys and the present survey reveals numerous changes in depths, as well as new dredged channels and resultant shoreline changes. In view of the fact that the above surveys contain no important shoals not fully covered by the present survey, a detailed comparison will serve no useful cartographic purpose. The present survey should supersede the above surveys for charting purposes.

7. Comparison with Chart No. 184 (Corrected to June 1, 1935).

a. Hydrography.

Soundings shown on the chart originate with surveys discussed in preceding paragraphs of this review and numerous U. S. Army Engineers surveys, the more important of which are Bps. 24853 (1931) and 24854 (1931). These surveys covering the area eastward of long. $85^{\circ} 42'$ are generally in good agreement with the present survey. Within the area covered, the present survey should super-

sede previous chartings from the above blueprints. Bp. 28412 (Feb., 1935) covering the vicinity of St. Andrews' dredged channel is contemporary with the present survey. Soundings are generally in good agreement with the present survey. Wherever necessary, the present survey may be used to supplement the Engineers' survey for charting purposes.

A portion of the present charted detail in the vicinity of St. Andrew dredged channel originates with Field Examination No. 1 (1935), which is an advance tracing of the present survey forwarded to this office. No further consideration is necessary.

b. Controlling Depths in Channels.

- (1) The charted controlling depth in St. Andrews' dredged channel is $26\frac{1}{2}$ feet as of February, 1935. The hydrography on the present survey within the channel is too sparse for comparative purposes.
- (2) The charted controlling depth in St. Andrew Bay East Entrance Channel is $22\frac{1}{2}$ feet as of September, 1934, which compares favorably with 23 feet on the present survey.

c. Aids to Navigation.

- (1) Buoys and beacons located on the present survey are in practically the same positions as charted and correctly mark the features intended except Buoy N "12" in lat. $30^{\circ} 09.7'$, long. $85^{\circ} 42.5'$. This buoy was located about 220 m. farther south and more safely marks the outer limit of the shoal area shown here on the present survey. However, depths on H-5783 (1935) indicate that the buoy should be placed an additional 100 m. or more farther offshore. (See D. R., page 2). (*Photostat furnish. B.L.H., 8th Dist. Oct 15 1935*)
- (2) In St. Andrews dredged channel the aids located on T-6303 (1935) are transferred to the present survey and are accompanied by both beacon and buoy notations, such as Beacon "5" and C "5". The reason for this is that the character of the aids was changed during the progress of the survey from beacons to buoys. The buoys replacing beacons "3" and "6" have been relocated by the hydrographic party and found to be about 20 meters from the original beacon positions. The other buoys were not re-located and are assumed to be in the same position as the original beacons. (Authorities: Descriptive Report of T-6303 (1935), page 3; Field Examination No. 1 (1935) and sounding records).

8. Field Plotting.

Field protracting and plotting were accurate and conform to the requirements of the Hydrographic Manual with the exception that a number of soundings were incorrectly spaced with respect to timing interval. These were corrected in the office.

9. Additional Field Work Recommended.

With the exception of the 16 foot sounding discussed in paragraph 5b of this review, which should have been further developed, this survey is complete and no additional field work is required.

10. Note to Compiler.

Attention is called to paragraph 7c(2) of this review regarding the changed character of the aids to navigation in the St. Andrews dredged channel and also to paragraph 5c regarding the charting of soundings in the area common to the present survey and H-5024 (1930).

11. Superseding Previous Surveys.

Within the area covered, H-5783 (1935) supersedes the following surveys for charting purposes:

H- 514 (1855) in part.
H-1373b (1877) " "
~~H-1374b (1877) " "~~
H-1375 (1877) " "

12. Reviewed by - Harold W. Murray, September 11, 1935.

Inspected by - A. L. Shalowitz.

Examined and approved:

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

F. S. Borden
Chief, Section of Field Work.

L. O. Tolbut
Chief, Division of Charts.

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

applied to chart 1263 - March 1938 - J.K.S.

applied to chart 489 Feb. 16, 1943 J.H.S.

applied to chart 868 Sept. 1946 W.A.B.
" " " 869 Oct. 1946 G.H.
" " H.O. Misc. 15,708 R.D.G. 1953