

5781

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. 2
Hydrographic }

LOCALITY

East
St. Andrew Bay

East Bay, Richard Bayou to Long Pt.

193 5

(25)

CHIEF OF PARTY

Wm. D. Patterson

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

U. S. COAST & GEODETIC SURVEY
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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. 2

REGISTER NO. **5781**

State Florida
General locality East
~~St. Andrew Bay~~
Locality East Bay, Richard Bayou to Long Point
Scale _____ Date of survey Jan. - Mar., 1935
Vessel Field Party No. 5
Chief of Party Lieut. Wm. D. Patterson
Surveyed by Wm. H. Jennings, A. C. Van Horn, Jr. & G. K. Elderkin
Protracted by J. C. McIlwaine
Soundings penciled by C. R. Smith
Soundings in ~~fathoms~~ feet
Plane of reference Mean Low Water
Subdivision of wire dragged areas by _____
Inked by J. E. Lynch & L. E. Boyce
Verified by J. E. Lynch
Instructions dated November 30, 1934
Remarks: _____

DESCRIPTIVE REPORT

To Accompany

HYDROGRAPHIC SHEET NO. (field) 2

ST. ANDREW BAY, EAST BAY

RICHARD BAYOU TO LONG POINT (East Bay Bridge).

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

DATE OF INSTRUCTIONS:

Director's Instructions, 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 deeper parts of the bay from a small launch with a phosphor bronze stranded-wire center mahogany tiller rope 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.

DISCREPANCIES:

No discrepancies were noticed in cross lines and soundings.

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 the points of land.

Beacon "59" off Goose Point is not located at the outer edge of the shoal water. For that reason, vessels should pass at least 300 meters north-east of it.

Beacon "57" at Latitude $30^{\circ} 03'.1$, Longitude $85^{\circ} 30'.2$ is not located at the outer edge of the shoal water. For that reason, vessels should pass at least 580 meters north-east of it.

There are several small oyster mounds in the deep water between Latitude $30^{\circ} 03'.6$ and $30^{\circ} 04'.5$, and Longitude $85^{\circ} 30'.1$ and $85^{\circ} 31'.0$. These mounds rise as much as 8 feet from the general depth. They vary in size and according to local oystermen are constantly shifting in location caused, no doubt, by the tonging activities of the oystermen. The oystermen generally have them marked by small stakes.

There is an oyster mound located at Latitude $30^{\circ} 05'.4$, and Longitude $85^{\circ} 32'.0$ with a least depth (position 83 Z) of seven feet.

There is an oyster mound located at Latitude $30^{\circ} 05'.5$ and Longitude $85^{\circ} 32'.5$ with a least depth (position 72 H) of six feet.

There is a shoal located at Latitude $30^{\circ} 06'.5$ and Longitude $85^{\circ} 34'.6$ with a least depth (position 8 Y) of five feet.

CHANNELS:

There is no defined channel in this bay. It would not be advisable for any vessel with a draft exceeding fourteen feet to pass thru into the east end of St. Andrew Bay.

The deepest water is	160 meters	south of	Beacon	"8"
"	"	"	"	"63"
"	"	"	north	"
"	"	"	"	"61"
"	"	"	120	"
"	"	"	south	"
"	"	"	"	"6"
"	"	"	410	"
"	"	"	north-east	"
"	"	"	"	"59"
"	"	"	600	"
"	"	"	"	"
"	"	"	"	"57"

ANCHORAGES:

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

Callaway Bayou is used by many of the fishermen as an anchorage because of its accessibility by automobile.

COMPARISON WITH PREVIOUS SURVEYS:

A close check of the charted depths and shoals were made as the survey progressed. Several exceptions considered in Reu. Map

After 20 minutes of drift sounding a depth of five feet was found on the charted four and one-half foot sounding at Latitude $30^{\circ} 06'.5$ and Longitude $85^{\circ} 34'.7$. It is recommended that the five foot sounding replace the four and one-half foot.

OYSTERS:

A special effort was made to locate the oyster beds in the area covered by this sheet. The beds are so scattered and so limited in size that it was only by observing the local oystermen could they be found. None of the beds are more than a few hundred square feet in area and the location of them is constantly shifting due to the action of the oystermen.

The local oystermen report that the fresh water is rapidly killing off the oysters and unless the salt water of the Gulf is brought in through a new cut near the vicinity of Farmdale Bayou, the extermination of the oyster in this area will happen in the near future.

GEOGRAPHIC NAMES:

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

STATISTICS, HYDROGRAPHIC SHEET NO. 2

Area in square Statute Miles, 17.5

Day	Color	Date 1935	Statute miles of soundings	Number of Soundings	Number of Positions
A	Red	Jan. 3	12.5	581	103
B	"	Jan. 4	17.0	723	122
C	"	Jan. 7	20.0	856	146
D	"	Jan. 8	15.6	530	89
E	"	Jan. 9	27.0	822	140
F	"	Jan. 10	32.1	1146	214
G	"	Jan. 11	16.2	703	126
H	"	Jan. 12	15.0	619	120
J	"	Jan. 14	21.8	780	142
K	"	Jan. 15	17.6	750	132
L	"	Jan. 16	8.0	362	63
M	"	Jan. 21	4.5	277	42
N	"	Jan. 25	11.6	519	105
P	"	Jan. 31	13.7	604	117
R	"	Feb. 1	1.0	46	10
S	"	Feb. 4	10.0	388	79
T	"	Feb. 5	14.2	542	101
U	"	Feb. 6	23.8	754	154
V	"	Feb. 7	12.8	395	89
W	"	Feb. 18	8.6	489	70
X	"	Feb. 19	11.2	610	113
Y	"	Feb. 20	10.7	550	98
Z	"	Feb. 21	10.6	478	98
AA	"	Feb. 25	11.8	530	96
BB	"	Feb. 26	3.0	167	24
CC	"	Feb. 28	8.7	459	72
DD	"	Mar. 1	8.0	299	54
EE	"	Mar 15	9.2	340	74
Totals.			376.3	15,319	2793

RAC

TIDE NOTE FOR HYDROGRAPHIC SHEET

May 31, 1935

Division of Hydrography and Topography:

1 / Division of Charts: Attention Mr. E. P. Ellis

Tide Reducers are approved in
10 volumes of sounding records for

HYDROGRAPHIC SHEET 5781

Locality Richard Bayou to Long Point, Florida

Chief of Party: W. D. Patterson in 1935.

Plane of reference is mean low water, reading

3.5 ft. on tide staff at Lairds Bayou

3.2 ft. below B.M. 1

2.4 ft. on tide staff at Parker

4.5 ft. below B. M. 1

2.9 ft. on tide staff at Farmdale

3.4 ft. below B. M. 1

Height of mean high water above plane of reference is 1.6 feet at

Lairds Bayou; 1.4 feet at Parker; 1.6 feet at Farmdale

Condition of records satisfactory except as noted below:

When tide is 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.

Field Records Section (Charts)

HYDROGRAPHIC SHEET NO. **.5781**

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

Number of positions on sheet	2793
Number of positions checked	..389
Number of positions revised	...12.
Number of soundings recorded	15,319
Number of soundings revised	..75.
Number of signals erroneously plotted or transferred	None

Date: **Aug. 13, 1935**

Verification by **J.E. Lynch**
Inked " **L.E. Boyce**

Review by **H.W. Murray**

Verifiers Corrections by " **R.L. Johnston**

Time: **75 hrs.**
" **62 "**

Time: **14 "**

5 "

7 "

HYDROGRAPHIC SURVEY NO. 5781

Smooth Sheet 1

Boat Sheet 1

Sounding Records 10 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) See T 6282 & 6284 & 6285

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

Remarks _____

7/13/35-

Verifiers Report Sheet 5781

The records conform to the requirements of the General Instructions ^{except as noted in the review.} ~~exam.~~

The depth curves penciled by the field plotter were generally satisfactory.

No transfers were made as the adjacent sheets are being worked on at the present time.

The coast line was checked against Topographic survey sheets 6282 + 6283

The air photo sheets T 5515 + 5516 ^{Inspected, exam.} were in the hands of the reviewers and finished prints were not available.

J. E. Lynch.

Section of Field Records

REVIEW OF HYDROGRAPHIC SURVEY NO. 5781 (1935) - FIELD NO. 2

Richard Bayou to Long Point, East Bay, Florida
Surveyed in 1935
Instructions dated November 30, 1934 (W. D. Patterson)

Hand Lead and Pole Soundings. 3 Point Fixes on shore signals.

Chief of Party - W. D. Patterson.
Surveyed by - W. J. Jennings, A. C. Van Horn, Jr., and G. K. Elderkin.
Protracted by - J. C. McIlwaine.
Soundings penciled by - C. R. Smith.
Verified and inked by - J. E. Lynch and L. E. Boyce.

1. Condition of Records.

The records are neat and legible and conform to the requirements of the Hydrographic Manual except that when the tide was below the plane of reference, the reducers were entered with a minus (-) sign instead of a plus (+) sign. (Par. 134).

The Descriptive Report is clear and exceptionally 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, except that it was necessary to carry forward several soundings from previous surveys.

3. Sounding Line Crossings.

Sounding line crossings are in general, satisfactory. However, several soundings of line 29 to 30' E (red) in latitude 30° 05.25', longitude 85° 31.4', which appear to be 1 fathom too shoal are nevertheless, confirmed by a single 7-1/4 on H-1374b (1877) which survey is discussed in paragraph 6 of this review.

4. Depth Curves.

Within the limits of the survey, the usual depth curves may be satisfactorily drawn including portions of the low water curve.

5. Junctions with Contemporary Surveys.

The junctions on the southeast with H-5780 (1935) and on the west with H-5782 (1935) will be considered in the review of those surveys.

6. Comparison with Prior Surveys.a. H-1374b (1877) and H-1375 (1877)

Soundings of the above 1:20,000 scale surveys are generally in close agreement with the present survey. A number of shoals (oyster mounds) with least depths varying from 2 to 8 feet have changed in position and depth but are indicated on the present survey by similar depths obtained close by. In several cases, depths on the old surveys vary 1 to 2 feet shoaler than the present survey. These changes are due to operations of the oyster men. (See Descriptive Report, page 3), and the present survey is considered correct. In several cases, however, the hydrography on the present survey is not sufficiently close to indicate changes in depth or to disprove shoal spots characterized by such notations as "hard and shells". These have been carried forward on the present survey.

The more important of those carried forward is the single 6-1/2 foot sounding obtained on line on H-1374b (1877) in latitude 30° 04.9', longitude 85° 30.3'. Soundings in the immediate vicinity on the present survey are in good agreement with those of the 1877 survey and in view of the failure to specially investigate this spot on H-5781 (1935) the 6-1/2 foot sounding has been carried forward.

In connection with H-1375 (1877), the shoal awash at low water (charted) on H-1374b (1877) in latitude 30° 06.1', longitude 85° 36.0', and consisting of soundings of line 7 to 13t (blue) falls in depths of about 36 feet on the present survey. The shoal is incorrectly plotted due to an error in recording signal "Shoal Bayou Pt." for "East Point". Correct plotting places the shoal approximately 450m. to the northwestward where it is in good agreement with depths on the present survey.

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

Within the area of the present survey, the chart is based on surveys discussed in the foregoing paragraphs and contains no additional information that needs consideration in this review.

b. Aids to Navigation.

Beacons shown on the chart and originating with LHN to M No. 46 (1932) are located on the present survey

in position varying 120 to 570 m. from those charted except Beacon No. "59". The charted position of Beacon "6", latitude 30° 05.14', longitude 85° 31.60' from the above authority is borne out by the 1935 Light List, but is about 1/3 mile northwest of the present location on T-6282 (1935). This matter has been referred to the Lighthouse Bureau, and the chart should be corrected accordingly. The beacons within this area, with the exception of Beacon "8" and Beacon "63", do not appear to be in the most advantageous positions to mark the best water, particularly in view of the new 6 foot shoal found in latitude 30° 05.5', longitude 85° 32.5'. Beacons "57" and "59", should probably be moved in a northeasterly direction to about the edge of the 12 foot curve, and Beacon "6" to the 6 foot shoal discussed above. This has also been referred to the Lighthouse Bureau.

8. Field Plotting.

Field protracting and plotting are excellent and conform to the requirements of the Hydrographic Manual.

9. Additional Field Work Recommended.

This survey is complete, except that a verification of the 6-1/2 foot sounding discussed in paragraph 6a of this review, (latitude 30° 04.9', longitude 85° 30.3') is desirable.

10. Superseding Previous Surveys.

Within the area covered, H-5781 (1935) with the indicated additions from prior surveys, supersedes the following surveys for charting purposes:

H-1374b (1877) In part.
H-1375 (1877) In part.

11. Reviewed by - Harold W. Murray and R. L. Johnston, Sept. 9, 1935.

Inspected by - A. L. Shalowitz.

Examined and approved:

C. K. Green

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

F. O. Robert

Chief, Division of Charts.

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

G. H. ...
Chief, Div. of ...

Applied to Chart 1263. March 1938 - J.H.S.

Applied to Chart 489 Feb. 19, 1943 J.H.S.

Hydro applied to I.W.W. Chart #868, May, 1946 C.H.