

5780

U. S. COAST & GEODETIC SURVEY

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DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

R. S. Patton *Director*

State: Florida

DESCRIPTIVE REPORT

~~Topographic~~ } Sheet No. 1 (Field)
Hydrographic }

LOCALITY

~~St. Andrew Bay, East Bay,~~
Creek
~~Metappo River to Richard Bayou~~

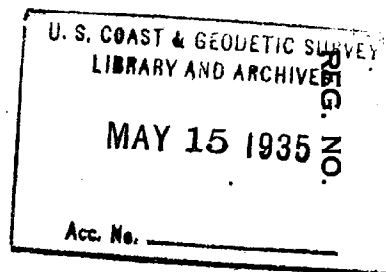
193 5

CHIEF OF PARTY

Wm. D. Patterson

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

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. 1

REGISTER NO. **5780**

State Florida

General locality East
~~St. Andrew Bay~~

Locality ~~East Bay~~, Creek Wetappo River to Richard Bayou

Scale 1/10,000 Date of survey Jan. - Feb., 1935

Vessel Field Party No. 5

Chief of Party Wm. D. Patterson

Surveyed by George E. Morris, Jr.

Protracted by J. C. McIlwaine

Soundings penciled by Charles R. Smith

Soundings in ~~fathoms~~ feet

Plane of reference M.L.W.

Subdivision of wire dragged areas by _____

Inked by John W. Parsons

Verified by John W. Parsons

Instructions dated November 30, 1934

Remarks: _____

DESCRIPTIVE REPORT

to accompany

HYDROGRAPHIC SHEET NO. (Field) 1

ST. ANDREW BAY, EAST BAY,

WETAPPO RIVER TO RICHARD BAYOU.

Project HT-195, 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 by three point sextant fixes taken on objects located by triangulation or topography. Depths were measured in the deeper parts of the bay from a small launch with the 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:

The sounding on position 18 h, latitude $30^{\circ} 01'4$, longitude $85^{\circ} 27'.3$ was recorded as 1 fathom 2 feet. It is believed that the leadsman called it wrongly and that it should be 2 fathoms 2 feet. It is recommended that that change be made.

*changed
2 fms.*

The soundings from position 56 F to the second sounding after position 57 F latitude $30^{\circ} 02'.8$, longitude $85^{\circ} 26'.3$ fail to check the soundings on cross lines by 2 feet. It is recommended that these soundings be rejected and the shoaler depths be charted.

DANGERS:

The shoal water near shore and in the bayous are strewn with fallen trees and sunken logs.

In general shoals make well out from the points of land.

The beacons west of longitude $85^{\circ} 27'$ are not set at the outer edges of the shoal points. For that reason, vessels should not pass too close to the beacons.

The deepest water is 580 meters east of Beacon 57.

The deepest water is 400 meters west of and 350 meters south of Beacon 4.

The deepest water is 100 meters north of Beacon 55.

The deepest water is 300 meters south of Beacon 2.

There are several small oyster mounds between latitude $30^{\circ} 01'$ and $30^{\circ} 03'$ and longitude $85^{\circ} 25'.5$ and $85^{\circ} 28'$. These mounds rise as much as four feet from the general depth. They are small in size and according to local oystermen are continually shifting in location caused, no doubt, by the tonging activities of the oystermen. The oystermen generally have them marked by small stakes. It is understood that the U. S. Engineers will keep the channel clear.

CHANNELS:

The main intracoastal waterway passes thru this bay. A dredged channel is maintained from the canal entrance at the Wetappo River to longitude $85^{\circ} 26'$. This channel is very narrow and has a controlling depth of 7-feet. It is well marked by black day beacons numbered from 1 to 35 (odd numbers) inclusive except 13 which is missing. These beacons are 115 feet to the westward and southward of the center of the channel. Beacons 1 and 11 have arrows pointing to the center of the channel marked "Center of channel 115 ft."

The channel is not dredged west of beacon 35, but it is marked with black day beacons to latitude $30^{\circ} 01'.8$ numbered 37 to 53 (odd numbers) inclusive. These beacons are to the eastward of the center of the channel and 53 has an arrow marked "Center of channel 115 ft." pointing towards the center of the channel. The least depth in this part of the channel is 7-feet, latitude $30^{\circ} 02'.8$, longitude $85^{\circ} 26'.0$. (Second sounding before position 169C, 7 feet; position 46K, 7.5 feet; third sounding after position 78K, 7 feet; all soundings between position's 80K and 81K, 7 feet).

There are several small oyster mounds or bars in this area. There are two, one on either side of the channel, just north of beacon 49. The least depth on them is 5-feet.

See "Dangers" above.

A narrow channel near the east side of Harrison Bayou (Sandy Creek) with a controlling depth of $3\frac{1}{2}$ feet (the sounding before position 127 T) latitude $30^{\circ} 03'.7$, longitude $85^{\circ} 26'.1$, is marked by brush stakes. Any boat that can enter the channel can continue up Sandy Creek to the highway bridge, approximately 3 miles. This is a good fishing ground.

ANCHORAGES:

The small bayou south of Bellisle (latitude $30^{\circ} 01'.9$, longitude $85^{\circ} 30'.0$) is used as an anchorage by small fishing schooners. The controlling depth is 4-feet.

Any where in the bay except Sand River (Horseshoe Bayou) which contains too many sunken logs is suitable for anchorage.

COMPARISON WITH PREVIOUS SURVEYS:

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

OYSTERS:

A special effort was made to locate the oyster beds in the area covered by this sheet. The beds are so scattered and of such limited size that it was only by observing the local oystermen that they could be found. The beds are in the area between latitude $30^{\circ} 01'.0$ and $30^{\circ} 03'.3$ and longitude $85^{\circ} 25'.5$ and $85^{\circ} 29'.0$. None of the beds are more than a few hundred square feet in area. The locations of them are continually changing as the oystermen completely remove them in fishing them.

The local oystermen report that since the intracoastal waterway was dredged, the fresh water is rapidly killing off the oysters. They believe that only a cut thru to the salt water of the Gulf from near Farmdale Bayou will prevent the complete extermination of the oysters.

GEOGRAPHIC NAMES:

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

TIDES:

Portable automatic tide gages were maintained at Farmdale and the south end of the Wetappo River. Tide reducers were obtained from the Wetappo gage for the area north and east of latitude $30^{\circ} 02'.3$ and from the Farmdale gage for the rest of the area.

The mean low water datum of 2.9 on the Farmdale staff was obtained from a series beginning December 17, 1934 and ending February 21, 1935.

The mean low water datum of the Wetappo staff was 1.8, obtained from a series beginning January 9, 1935 and ending February 21, 1935.

STATISTICS:

Day Letter	Date	Color	No. of soundings	No. of positions	Statute miles of soundings	Volumes
A	1/12/35	Red	1059	179	30.4	1
B	1/14	"	1101	209	30.3	1 & 2
C	1/15	"	966	183	24.7	2
D	1/16	"	1187	213	30.5	2 & 3
E	1/17	"	1110	199	29.4	3 & 4
F	1/18	"	574	107	13.2	4
G	1/21	"	675	126	16.7	4
H	1/24	"	873	158	22.1	4 & 5
J	1/25	"	676	133	15.7	5
K	1/28	"	899	171	22.4	5 & 6
L	1/29	"	685	152	12.8	6
M	1/30	"	533	124	11.7	6 & 7
N	1/31	"	704	98	7.8	7
P	2/4/35	"	714	137	17.0	7
Q	2/5	"	701	145	15.4	7 & 8
R	2/6	"	967	159	17.3	8
S	2/7	"	719	129	14.5	8 & 9
T	2/8	"	662	129	14.1	9
U	2/13	"	345	64	7.7	9
V	2/18	"	244	47	4.9	10
W	2/19	"	953	138	14.0	10
X	2/20	"	1017	151	19.3	10 & 11
Totals			17364	3151	391.9	

Area 8.0 Square Miles.

Respectfully submitted,

George E. Morris, Jr.
 George E. Morris, Jr.,
 Lieutenant (j.g.)

Approved and forwarded;

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

Field Records Section (Charts)

HYDROGRAPHIC SHEET NO. **5780**

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

Number of positions on sheet	.3151..
Number of positions checked	.187..
Number of positions revised	.30...
Number of soundings recorded	17,364
Number of soundings revised	.14..
Number of signals erroneously plotted or transferred	...6...

Date: 7/30/35

Verification by J.W. Parsons

Review by H.W. Murray

Verification/Corrections by H.W.M

Time: 22 days = 13 2 hrs

Time: 1 1/2 " = 11 "

5/7 " = 5 "

HYDROGRAPHIC SURVEY NO. 5780

Smooth Sheet 1

Boat Sheet 1

Sounding Records 11 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 6280

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

Remarks _____

7/30/35

Report on H-5780

The records are complete and conform to the requirements of the general instructions ^{except as noted in} the review. ~~sum.~~

The ~~one~~ ^{zero} fathom curve is the only curve that can ^{not} be completely drawn within the limits of this sheet.

A considerable amount of extra work was required on this sheet due to the field man not using spacing dividers to plot the soundings.

At the north end of Sandy Creek the shore line did not check with the Air Photo. So it was changed to conform with it. This difference caused the signals, How, Are, Bat, Car, Fig and Zag to be moved 10 to 20 meters south.

Discussed
in Rev.
PI
sum.

The junction with the adjacent sheet is satisfactory.

The delineation of the depth curves by the field Plotter was satisfactory, but ~~it~~ too hard a pencil was used.

John W. Parsons

Rae

TIDE NOTE FOR HYDROGRAPHIC SHEET

May 29, 1935.

Division of Hydrography and Topography:

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

Tide Reducers are approved in
11 volumes of sounding records for

HYDROGRAPHIC SHEET 5780

Locality Wetappo River to Richard Bayou, Florida

Chief of Party: W. D. Patterson in 1935
Plane of reference is mean low water reading
1.8 ft. on tide staff at Wetappo River
3.6 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 1.4 feet at
Wetappo River; 1.6 feet at Farmdale.

Condition of records satisfactory except as noted below:

Chief, Division of Tides and Currents.

Section of Field Records

REVIEW OF HYDROGRAPHIC SURVEY NO. 5780 (1935) - FIELD NO. 1

Wetappo Creek to Richard Bayou, 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 - G. E. Morris, Jr.

Protracted by - J. C. McIlwaine.

Soundings penciled by - C. R. Smith.

Verified and Inked by - J. W. Parsons.

1. Condition of Records.

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

- a. The shoreline and accompanying signals: Fig, Cur, Bat, How and Zag in Sandy Creek (northward of lat. $30^{\circ} 04'$) originating with the Graphic Control survey, T-6280 (1935) differed by 10 to 20 m. in a north-south direction from that shown on the Air Photo Compilation, T-5515 (1934). The smooth sheet was changed to agree with the Air Photo Compilation, as recommended in the D. R. of T-6280 (1935), page 4. These changes caused similar differences in the plotted field hydrography, but in view of the uniform character of the bottom and comparative unimportance of the area, no changes were made in the hydrography.

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.

3. Sounding Line Crossings.

Sounding line crossings are satisfactory. Several discrepancies noted by the field party have been disposed of in the Descriptive Report (page 1.). In addition, the 16 foot soundings on line 131 to 132B (red) in lat. $30^{\circ} 01.7'$, long. $85^{\circ} 28.4'$ which fall in depths of about $10\frac{1}{2}$ feet are apparently 1 fathom too deep. The 16's have been retained on the smooth sheet but should not be used in charting.

4. Depth Curves.

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

5. Junctions with Contemporary Surveys.

The junction on the west at the outlet of East Bay with H-5781 (1935) is satisfactory.

6. Comparison with Prior Surveys.

a. H-1374b (1877).

Soundings of this sparsely developed 1 to 20,000 scale survey are generally in good agreement with the present survey. However, discrepancies of 1 to 5 feet occur in several small areas with depths on the present survey being deeper in some cases and shoaler in others. Such discrepancies are primarily due to incorrect spacing of soundings on the old survey and not to changes in bottom. A number of shoal spots (usually oyster mounds) located on the 1877 survey are also indicated on the present survey by similar depths or depths not differing by more than 1 or 2 feet. In view of the close development on the present survey there is no necessity for any retention of the 1877 shoal spots which should be entirely superseded by H-5780 (1935).

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 and need no further consideration in this review.

b. Fixed Aids to Navigation.

- (1) Beacons No. 57, 4, 55 and 2 located on the present survey are in practically the same positions as charted. However, beacons 4 and 2 would be of more value to navigation if they were established further offshore. A photostat of the area has been furnished the L. H. Bureau.
- (2) In the area eastward of long. 85° 27', the numerous day beacons marking the Intracoastal Waterway and located on the present survey are not shown on the chart due to the small scale (1 to 80,000). In this connection, Bn. No. 49 would be more valuable to navigation if it were placed near to the western limit of the 5 foot shoal about 100 m. to the northward.

c. Controlling Depth in Channels.

The controlling depth determined on the present survey in the Intracoastal Waterway is 7 feet which is greater than the charted depth of 5 feet as of September, 1934, and which in turn is superseded by 6 feet as of April, 1935 (authority: Chart Letter No. 502 (1935)).

8. Field Plotting.

Field protracting and plotting were accurate and conform to the requirements of the Hydrographic Manual except that numerous soundings were incorrectly spaced with respect to time interval. These were corrected in the office.

9. Additional Field Work Recommended.

This survey is complete and no additional field work is required.

10. Superseding Previous Surveys.

Within the area covered, H-5380 (1935) supersedes the following survey for charting purposes:

H-1374b (1877) in part.

11. Reviewed by - Harold W. Murray, September 14, 1935.

Inspected by - A. L. Shalowitz.

Examined and approved:

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

L. O. D. Colburn
Chief, Division of Charts.

H. B. Borden
Chief, Section of Field Work.

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

Applied to Chart 1763 - March 1938. *OK*
Hydro. applied to I.W.W. Chart # 868 - May, 1946 - CRH.