

5818

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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~~ } Sheet No. 6.  
Hydrographic }

U. S. COAST & GEODETIC SURVEY  
LIBRARY AND ARCHIVES

JUN 27 1935

Acc. No. \_\_\_\_\_

State Florida

LOCALITY

~~Gulf Coast~~

Apalachicola Bay, ~~East Bay~~

East Bay & Vicinity

1935

CHIEF OF PARTY

C. A. Egner.

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. 6

REGISTER NO. **5818**

State Florida

General locality ~~Gulf Coast~~ Apalachicola Bay 15

Locality ~~Apalachicola Bay, East Bay~~ & Vicinity 17

Scale 1/20,000 Date of survey Apr. -- May, 19 35

Vessel Field Party 23.

Chief of Party C. A. Egnor.

Surveyed by C. A. Burmister, Lt. (j.g.) R. E. Dille, Surveyor

Protracted by G. R. Dietz, S. E. Greicus, G. C. McGlasson.

Soundings penciled by G. C. McGlasson, M. C. Burr

Soundings in ~~fathoms~~ feet

Plane of reference M. L. W.

Subdivision of wire dragged areas by \_\_\_\_\_

Inked by J. Honick

Verified by J. Honick + C. Stanley Light Brown

Instructions dated Nov. 30, 1934., 19

Remarks: \_\_\_\_\_  
\_\_\_\_\_

REPORT TO ACCOMPANY  
HYDROGRAPHIC  
SHEET 6.

Instructions

These were dated at Washington, D. C. Nov. 30, 1934 and called for combined operations in the general locality of Apalachicola Bay as a part of the general resurvey of the Gulf Coast, including the Inland Waterways.

Purpose

To provide surveys where none existed before, to revise existing surveys, to provide a comprehensive survey of the Inside Route.

Limits

This sheet consists mainly of the survey of East Bay, joining sheet #4 about one mile northward of the Apalachicola Bay Bridge, and covering the main body and upper reaches of East Bay. Also, it extends the inshore hydrography around the west side of Cat Point overlapping sheets #4 and #5 in this area. Also, it covers the hydrography of East River, which is one of the branches of the Apalachicola River, from its junction with the St. Marks River to its mouth in East Bay.

This latter stream was intended originally for sounding on Sheet 10, but due to the uncertainty of its position from inadequate charting when the shoreline of sheet #10 was drawn in, parts of this stream could not be included. Hence, it became necessary to transfer that part of the work to this sheet.

Methods

All sounding was done with the hand lead operating from an outboard-driven Gondola type of large skiff. The usual methods were employed. In the main body of the Bay where objects were visible, all hydrography was done with fixed position control by sextant. In East River where no objects were visible due to the high trees lining both banks, resort was made to spotting of position from the aerial photographs and by estimation from the photographic shoreline.

Ranges were run where possible; in general, however, lines were run on compass courses.

Control --Horizontal.

### Control--Horizontal

Shoreline was gotten from aerial photographs exclusively, tied down by a scheme of 3-rd order triangulation and from field inspected topographic stations put in expressly for the purpose.

The hydrographic signals were located by intersection on bristol board from the triangulation stations. Many of the signals were placed in range in the upper reaches of the Bay to assist in their location. Due to the construction of the Apalachicola Bay Bridge a few signals placed on the decking were destroyed prior to the hydrography. Replacing these, five signals were thereupon built and cut in by sextant---Mark, Red, Hump, Tar, and Fill--- and used in the sounding.

A few minor signals near Cat Point were located by rod readings from 3-pt. setups---Tree, Black, Bush.

As stated previously, there was no rigid control in East River.

### Control--Vertical

Three tide gauges controlled the sounding reductions. All of the work in East Bay and adjoining arms were referred to the Cat Pt. gauge without time or height correction, except on a and j days which were referred to Apalachicola for convenience. East River was referred to the Cat Pt. gauge for a distance of two miles, above which the Jackson gauge controlled it. A similar arbitrary division was made in the Little St. Marks River.

As the tidal range is very small, it is believed that no appreciable error was introduced by this arbitrary division. Sounding line crossings indicate that this was true, as there are no crossings which disagree more than about a half foot.

### Sheet Layouts

Original plans were to execute this area as a part of a three-section fractional sheet covering East Bay, the Apalachicola River and branches, and the Inside route including Lake Wimico. There were to be called 6 a, b, c, on a scale of 1/20,000. Later advice called for this to be done on a scale of 1/10,000 as far as the Inside Route was concerned; therefore, sheets #11 and #10 were laid out to take the places of 6c and 6b. It was found when the shoreline was put on these sheets that parts of East River would not fit on sheet #10.

The upshot of this confusion was that a new sheet #6 was laid out on a scale of 1/20,000 covering the old area of 6a, but including East River; #10 covers what was 6b; #11 covers what was 6c. All hydrography was done on a boat sheet (fractional) embracing these three areas on a scale of 1/20,000.

In any event, the part which was sheet 6a (Now sheet 6) was relatively unimportant and its execution on a scale of 1/20,000 seems to have given close enough development.

#### Description of the area

Quite flat, shoal and regular. It represents a delta of the Apalachicola River and branches. There are no settlements around this Bay and the water is too shoal for commercial development. There are no channels in the body of the Bay; the entrances to the rivers have formed extensive bars making the value of these streams practically nothing, though good water is found inside the mouths.

#### Changes since last survey

As previous surveys were done without benefit of photography and were correspondingly sketchy, there is insufficient basis for adequate comparison. It is evident that in such a river delta area the Bay would be gradually filling up.

The construction of the Bridge with its hydraulic fills will undoubtedly change the course of the currents and as time goes on alter the depths in the bay. This subject is more fully discussed in the report on sheet 4.

#### Meteorological conditions

Wind has a greater effect on depths in this bay than the tide, often reversing the tide altogether. On strong continuous northerly winds this bay will be as much as 2 ft. shoaler than Mean Low Water.

#### Oyster Beds

This area is not a prolific Oyster Bed locality, though some oysters are taken from it. Instructions called for a large number of bottom characteristics during the sounding in order to assist in the location of these beds. It cannot be said that this object was attained.

#### Controlling depths

The main body of the Bay has a regular sloping depth to about five or six feet in the center. Round Bayou is nearly bare. East Bayou has about 2 ft. The entrance to the St. Marks River has practically zero. The Little St. Marks River has almost zero. East River has about 2 ft. These rivers have moderate depths inside the entrances, which are rendered valueless by the lack of water in the approaches.

Anchorage

This area is too shoal for satisfactory anchorage except for fish boats of shallow draft.

Dangers

None, except extensive bars.

Coast Pilot Notes

Are included in a general report.

Statistics

Herewith.


List of Signals

Original herewith, duplicate under the flyleaf of Vol. 1.

Tidal Data

Appended hereto, including hourly heights, and curves.

Respectfully submitted,

  
C. A. Egner.  
Chief of Party.

Section of Field Records

REVIEW OF HYDROGRAPHIC SURVEY NO. 5818 (1935) - FIELD NO. 6

East Bay and Vicinity, Apalachicola Bay, Florida

Surveyed in 1935

Instructions dated November 30, 1934 (C. A. Egnor)

Hand Lead Soundings.

3 Point Fixes on Shore Signals.  
Estimated Distances and Bearings.

Chief of Party - C. A. Egnor.

Surveyed by - C. A. Burmister and R. E. Dille.

Protracted by - G. R. Dietz, S. E. Greicus, G. C. McGlasson.

Soundings penciled by - G. C. McGlasson and M. C. Burr.

Verified and Inked by - J. Honick and C. S. Lightbown.

1. Condition of Records.

The records are neat and legible and conform to the requirements of the Hydrographic Manual, except that no reference station was placed on the sheet. The field computations have at this writing not been received in the office.

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

2. Compliance with Instructions for the Project.

This survey satisfactorily complies with the instructions for the project.

3. Shoreline and Control Signals.

The shoreline originates with Air Photo Compilation Surveys T-5509 (1934) and T-5510 (1934). The signals for hydrographic control are from Graphic Control Sheet T-6310a (1935) and sextant determination.

4. Sounding Line Crossings.

The cross lines are adequate and the depths check those on the main system of lines excellently.

5. Depth Curves.

The usual depth curves may be satisfactorily drawn including portions of the low water curve.

6. Junctions with Contemporary Surveys.

The junctions with H-5797 (1935) on the west and H-5817 (1935) on the south are satisfactory.

The junction with H-5819 (1935) will be considered in the review of that survey.

7. Comparison with Prior Surveys.

a. H-747 (1860).

Only a few soundings off Godley's Bluff fall within the limits of the present survey. Due to subsequent dredging they are not in agreement with the present survey, and should be disregarded in future charting.

b. H-1092 (1871).

This survey (1 to 20,000 scale) has about one fifth the development on the present survey. Although a close comparison cannot be made, there is evidence that East Bay and the adjacent basins have shoaled generally from 1 to  $1\frac{1}{2}$  feet. Numerous differences are also noted in the shoreline.

Because of the age of the old survey and because of the better development on the present survey, together with the fact that there are no important shoals on the old survey not adequately covered by the present survey, the latter should within the common area, supersede H-1092 (1871) for charting purposes.

c. H-2265 (1895-96).

This survey was made primarily for the location of oyster beds. It is on a 1 to 20,000 scale and, within the limits of the present survey, contains a very sparse development, thus offering little basis for comparing depths. However, it contains no information which is in conflict with the present survey. Because of the completeness of the present survey, this survey, H-2265 (1895-96) need not be used in future charting.

8. Comparison with Chart No's. 182 and 183 (Corrected to April 16, 1934).

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.

9. Field Plotting.

The field plotting was satisfactory.



10. Additional Field Work Recommended.

This survey is satisfactory and no additional work is required.

11. Superseding Old Surveys.

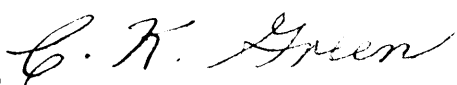
Within the area covered the present survey supersedes the following surveys for charting purposes:

H- 747 (1860)	in part.
H-1092 (1871)	" "
H-2265 (1895-96)	" "


12. Reviewed by - Leo S. Straw, October 2, 1935.


Inspected by - A. L. Shalowitz.

Examined and approved:

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

  
Chief, Division of Charts.

  
Chief, Section of Field Work.

  
Chief, Division of H. & T.

LIST OF SIGNALS USED ON SHEET 6.

Triangulation

Sheips 1935.  
 Bn. I (Ibex) 1935  
 Bn. H (Hare) 1935  
 Godleys 1935 (Ley)  
 Cat Pt. 3 1935 (Cat)  
 Rear Range 1935 (Rear)  
 East Bay 1935 (East)  
 Muni Tank 1935 (Muni)  
 Round 1935  
 Shoal 1935  
 St. Marks 1935 (St)  
 East Bayou 1935 (You)

Topographic

Draw  
 Le  
 Tree  
 Center  
 Bush  
 Pile  
 Dor  
~~KX~~ Tail  
 Con  
 Ex  
 Black  
 Pup  
 Ox  
 Dow  
 Ash  
 Pul  
 Spud  
 Saw  
 Hot  
 But  
 Cake  
 Bay  
 May  
 Sage  
 Gin  
 Pep  
 Vee  
 Gul  
 Noxt  
 To  
 Arc  
 Lo  
 Rye  
 She  
 It  
 Pole  
 Bug  
 Hi  
 Fish

Hydrographic

Hump  
 Tar  
 Red  
 Mark  
 Fill

STATISTICS FOR HYDROGRAPHIC SHEET 6.

Date	Day Letter	Boat	Soundings	Positions	Miles	Volume	
		Gondola					
Apr. 23	a	3	537	102	16.5	1	
24	b	3	1197	216	37.2	1	
24	b	3	39	8	1.2	2	
25	c	3	886	167	30.9	2	
26	d	3	468	83	15.9	2	
29	e	3	118	28	4.2	2	
29	e	3	95	19	2.4	3	
30	f	3	1150	196	35.0	3	
May 1	g	3	392	78	11.8	3	
2	h	3	435	97	11.5	4	
21	j	3	654	101	22.0	4	
May 10	a	2	206	32	6.7	5	
13	b	2	304	43	8.3	5	
Totals:			6481	1170	203.6		

HYDROGRAPHIC SURVEY NO. 5818

Smooth Sheet 1

Boat Sheet 1

Sounding Records 5 Vols. \_\_\_\_\_

Descriptive Report Yes

Title Sheet Yes

List of Signals Yes in Vol. 1

Landmarks for Charts (Form 567) Yes ✓

Statistics Yes

Approved by Chief of Party C. A. Egner

Recoverable Station Cards (Form 524) Yes

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

Remarks \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

REPORT ON H-5818 (1935)

These omissions are not considered serious in this case, and therefore not mentioned in the review. ~~etc~~

- 1.- The records conform to the requirements of the general instructions except in the following: — 1 signal name was omitted from the "List of Signals", + 1 signal name was misspelled. In volumes under soundings, feet, fathoms, tenths, were not marked out as required. 1 signal was recorded wrong in the records. One volume was ~~empty~~ <sup>numbered</sup>.
- 2.- The usual depth curves were completely drawn, except the 2 fathom curve, which was omitted in some places because of limited space.
- 3.- The field plotting was complete to the extent prescribed in the Hydrographic Manual.
- 4.- The office draftsman did ~~not~~ <sup>namely</sup> over a part of the field draftsman's work ~~namely~~ — 3 signal names were misspelled on the smooth sheet + 1 was omitted. Several positions were erroneously plotted. A number of connections were made to the shore-line to check with Air Photo Compilations T-5509-5510.
- 5.- The junction with H-5794 (1935) was satisfactory. Junctions with H-5817 (1935) + H-5819 (1935) were not made, because these sheets had not been verified.
- 6.- Remarks — The positions for green at today, falling in East River, N.W. of Lat.  $29^{\circ}46'$  + Long.  $84^{\circ}57'$  <sup>continued</sup> could not be verified as the boat party referred the smooth plots to

~~the boat sheet furnished with H-  
sheet could not be found in the office. The  
verifier accepted the smooth plotting work, for these  
days, as being correct. 14 positions & 97 soundings were  
revised. Although the smooth plotting does not follow  
the boat sheet as well as might be hoped for, the verifier  
could find no error in smooth plotting or location of  
signals which would cause a consistent deviation from  
the boat sheet plotting. This sheet has been compared  
with advance copy of Air Photo Compilation T-5509-10~~

Respectfully submitted,  
J. Honick.

→ were verified with positions  
shown on boat sheet furnished with  
H 5797.

Field Records Section (Charts)

HYDROGRAPHIC SHEET NO. ..5818

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

Number of positions on sheet	.1170.
Number of positions checked	.14!..
Number of positions revised	..14...
Number of soundings recorded	.648!.
Number of soundings revised	..97...
Number of signals erroneously plotted or transferred	...0...

Date:

Verification by *J. MONICK & C. STANLEY LIGHTBOWER* Time: } 61 hrs.  
inked by " " }  
Review by *W. Straw* Time: Ver. 8½  
Rev. 9½





TIDE NOTE FOR HYDROGRAPHIC SHEET

July 8, 1935.

Division of Hydrography and Topography:

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

Tide Reducers are approved in  
5 volumes of sounding records for

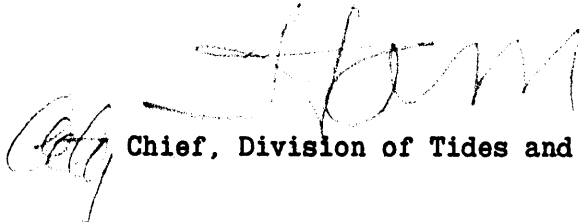
HYDROGRAPHIC SHEET 5818

Locality East Bay and vicinity, Apalachicola Bay, Florida.

Chief of Party: C. A. Egner in 1935  
Plane of reference is mean low water reading  
3.6 ft. on tide staff at Apalachicola  
8.9 ft. below B.M. 2  
2.0 ft. on tide staff at Cat Point  
4.8 ft. below B. M. 1  
2.8 ft. on tide staff at Jackson  
1.9 ft. below B. M. 1

Height of mean high water above plane of reference is 1.0 feet at  
Apalachicola; 1.4 feet at Cat Point; 0.7 feet at Jackson.

Condition of records satisfactory except as noted below:

  
Chief, Division of Tides and Currents.

Applied to Chart Car. 1144 June 18, 1938. H.E. MacEwen  
Partially applied to Chart 183 - Oct 1939 J.H.S.  
Applied to Chart 1262 - Jan, 1940 - J.H.S.  
Applied to Chart 865 6/8/46 W.A.B.  
Applied to 766-50 5-9-69 D.J.K.

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JUN 27 1935

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