

4444

Form 504

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

State: Georgia

11-5613

DESCRIPTIVE REPORT.

Hydrog. Sheet No. 4444

LOCALITY:

Georgia Coast

St. Andrew Sd. & Vicinity to

Stafford Shoal

1924

CHIEF OF PARTY:

F. S. Borden

4444

DESCRIPTIVE REPORT

To Accompany

HYDROGRAPHIC SHEET

NO. _____
Field Letter "E"

ST. ANDREW SOUND
and INLET.

GEORGIA.

Str. BACHE

F. S. Borden,
Commanding.

EXTENT:

This sheet comprises the survey of St. Andrew Sound and Inlet. It adjoins the Fernandina sheet (1924) to the southward, the St. Simon sheet (1924) to the northward and sheet No. 3770 (1915) to the eastward. The hydrography was carried up the Cumberland and Satilla rivers and into Jekyl Sound until a satisfactory junction was made with the older surveys. Although not shown on this sheet the work was carried through Jekyl Creek to St. Simon Sound. This area is shown on the next sheet to the northward which as yet has not been submitted.

CHANGES:

While extensive changes have taken place in the shoal areas on each side of the channel and within the inlet, the controlling depth over the bar remains practically the same as shown on the present chart. In addition to the sounding lines shown over the bar several other lines were run on several different days. These could not be plotted as positions could not be obtained on account of poor seeing conditions. These additional lines all verified what the plotted lines show, namely, that the controlling depth over both the outer and inner bars is sixteen feet. It is apparent from a glance at the sheet that two or three additional lines should be shown in the vicinity of the bars in order to properly develop this area. The area in this locality was surveyed while I was on leave of absence and as the field of operations had been changed to a new locality on my return it was not thought practical or economical to again take up work in this locality particularly since there was no question as to the amount of water that could be carried over the bar.

TIDES:

Soundings on the sheet were reduced from observations at Fernandina, Jekyl Sound and St. Simon Island Lighthouse. New tidal stations were established in Cumberland River and on the South end of Jekyl Island. To establish the reference plane at these stations simultaneous observations were made with the gauge at Fernandina. It was found that the range in St. Andrew Sound was 10 % greater than at Fernandina and the time of high water approximately 30 minutes earlier than Fernandina. These corrections were used when soundings were reduced from the Fernandina gauge.

The time of high water on the bar is probably about 15 minutes earlier than in the sound proper but on the other hand the tide at points up each river to which the work was carried is about 15 minutes later. For this

reason the range and time of tide in St. Andrew Sound (Jekyl I. Staff) were used as a basis for work on the entire sheet.

LANDMARKS:

There are no landmarks either natural or artificial other than those shown on the present chart. The greatest natural aid to the mariner within the sound are the points of marsh and the tangents to wood lines. Of particular value is the tangent to the woodline in Cumberland River at the west end of High Bluff. To a vessel either seeking an anchorage in the Sound or making passage Southward through the inside passage this woodline tangent can be used to advantage and should be shown on the charts. The isolated clump of trees on the east entrance point to Dover creek, Satilla River is also conspicuous and should likewise be given prominence on the chart.

Respectfully submitted,

Frank S. Borden.

Frank S. Borden.

Statistics Sheet No:

(Field Sheet " E ")

Date, 1924		Letter	Volume	Positions	Soundings	Miles(St)	Vessel
Sept.	22	A	1	80	434	24.5	Elsie
	23	B	1	117	597	27.3	Launch 2
	24	C	1	15	80	4.0	Elsie
Oct.	1	D	1	25	111	5.0	Elsie
	2	E	2	108	410	19.5	Launch 2
	3	F	2	61	246	12.0	Elsie
	6	G	2	66	268	12.5	Launch 2
	7	H	2	45	216	9.5	do.
	7	H	3	17	87	4.5	do.
	8	J	3	35	165	6.5	do.
	13	K	3	98	475	21.0	do.
	14	L	3	114	425	20.5	do. 1&2
	15	M	4	171	748	36.7	do. 2
	16	N	4	132	572	39.0	do.
	17	P	5	82	374	21.0	do.
	20	R	5	82	357	19.0	do.
	27	T	5	82	458	23.8	do.
	28	S	6	88	456	24.5	do.
	29	T	6	45	265	13.5	do.
Sept.	18	A	7	25	139	6.5	do.
Oct.	14	B	7	10	62	2.3	do. 1
	16	C	7	123	661	27.3	do.
	17	D	7	31	164	6.75	do.
	28	E	8	142	680	33.4	M.S. Mikawe.
Nov.	6	F	8	36	145	7.2	Launch 1
Oct.	17	A	9	30	130	9.0	Ship
	27	B	9	33	167	8.4	do.
	29	C	9	50	213	12.0	do.
TOTAL:				1943	8680	457.15	

April 14, 1925.

~~Division of Hydrography and Topography:~~

Division of Charts:

Tide reducers are approved in
9 volumes of sounding records for

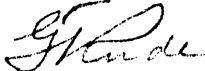
HYDROGRAPHIC SHEET 4444

Locality: **St. Andrew Sound and Approaches, Georgia Coast.**Chief of Party: **F. S. Borden in 1924**

Plane of reference is **mean low water and is**
4.4 ft. on tide staff at North East end of Wharf at Fernandina, Fla.
1.5 " " " " " South end of Jekyll Island, Ga.
1.6 " " " " " Wharf near St. Simon Lighthouse, Georgia.
0.2 " " " " " Cumberland River Wharf, Georgia.

For reduction of soundings, condition of records satisfactory.
except as checked below:

1. Locality and sublocality of survey omitted.
2. Month and day of month omitted.
3. Time meridian not given at beginning of day's work.
4. Time (whether A.M. or P.M.) not given at beginning of day's work.
5. Soundings (whether in feet or fathoms) not clearly shown in record.
6. Leadline correction entered wrong column.
7. Field reductions entered in "Office" column.
8. Location of tide gauge not given at beginning of each day's work.
9. Leadline corrections not clearly stated.
10. Kind of sounding tube used not stated.
11. Sounding tube No. entered in column of "Soundings" instead of "Remarks".
12. Legibility of record could be improved.
13. Remarks: **It is a pleasure to state that the records turned in by this party are in most excellent shape and are very easy to verify. There is never any doubt as to what was done.**


Chief, Division of Tides and Currents.

Report on Verification and Inking Hydrographic Sheet 4444.

Records neatly kept and easily read.

Beginning and ending of lines not shown.

○ No bottom characteristics are given for large areas, and should be shown at the top of the page.

The protracting was carefully and accurately done.

Time interval of sounding is not frequent enough to meet the requirements of General Instructions.

Information sufficient for developing the usual depth curves.

Sounding line crossings check well.

C. Brooks.

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

WASHINGTON July 30, 1925.

SECTION OF FIELD RECORDS

Report on Hydrographic Sheet No. 4444

St. Andrew Sound, Georgia

Surveyed in 1924

Instructions dated May 8, 1924.

Chief of Party, F. S. Borden.

Surveyed by W. D. Patterson, L. C. Wilder, T. B. Reed, I. Rittenberg.

Protracted and soundings plotted by J. A. McCormick.

Verified and inked by C. B. Brooks.

1. The records fail to conform to the requirements of the General Instructions:

The bottom characteristics are omitted from about one-third of the pages and, when given, are seldom at the tops of the pages.

The beginnings and endings of sounding lines are not described.

Time intervals between soundings of 30 seconds or greater were adhered to throughout the survey regardless of the fact that much of the work was in depths of 3 fathoms or less. As many of the lines cross ridges or channels it is practically certain that many important features are incompletely represented. This is true of the soundings on the bar where they average 100 meters apart, as well as that done in less important areas.

2. The plan and character of development conform to the requirements of the General Instructions.
3. The plan and extent of development satisfy the specific instructions.
4. The sounding line crossings are, in general, adequate.

5. The information is sufficient for drawing the usual depth curves.
6. The usual field plotting was done by the field party.
7. The junctions with the adjoining surveys are satisfactory.
8. The area covered by this sheet is sufficiently developed except for the long time intervals between soundings. No further surveying is recommended.
9. The character and scope of the surveying are fair, and the field drafting is excellent.
10. Reviewed by E. P. Ellis, July, 1925.

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

HYDROGRAPHIC TITLE SHEET

The finished Hydrographic Sheet is to be accompanied by the following title sheet, filled in as completely as possible, when the sheet is forwarded to the Office.

U. S. Coast and Geodetic Survey.

Register No. 4444
Field Letter "E"

State . . . GEORGIA.
General locality ~~INCHORE~~ Georgia Coast
Locality ST. ANDREW SOUND AND VICINITY ~~INCHORE~~ Vicinity to Stafford Shoal
Chief of party . . . F. S. Borden.
Surveyed by W. D. Patterson, L. C. Wilder, T. B. Reed, I. Rittenburg.
Date of survey September - October, 1924.
Scale 1:20 000
Soundings in . . Fest
Plane of reference M L W
Protracted by J. A. McCormick Soundings in pencil by J. A. McCormick
Inked by Verified by
Records accompanying sheet (check those forwarded):
Des. ^x report, 3 Tide books, 1 ~~Marine~~ ^{Tidal Data}, 2 Boat sheets,
9 Sounding books, ~~-----~~ Wire-drag books, ~~-----~~ Photographs.
Data from other sources affecting sheet

Remarks: