

5581

U. S. COAST & GEODETIC SURVEY
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5581

Form 504
Ed. June, 1928

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

State: Georgia

DESCRIPTIVE REPORT

~~Topographic~~ } Sheet No. 4 5581
Hydrographic }

LOCALITY

Intracoastal Waterway, Ga.

St. Simon--Altamaha Sounds

Project No. HT-167

1934

CHIEF OF PARTY

John A. Bond, H. & G. Engr.

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

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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. 5581

State Georgia

Vicinity of Altamaha Sound

General locality From Darien to Frederica River, Georgia

Locality Buttermilk Sound large

Hub. instructions from E.P.C.

Scale 1:10000 Date of survey March - April, 19 34

Vessel Launch MIKAWA & Party No. 23

Chief of Party John A. Bond, H. & G. Engr. & C.A. Egner

Surveyed by D. E. Sturmer & M. G. Elliott

Protracted by F.H.L., D.M.W.

Soundings penciled by F.H.L.

Soundings in ~~#1000#~~ feet

Plane of reference Mean low water

Subdivision of wire dragged areas by _____

Inked by W. R. Jackson

Verified by W. R. Jackson

Instructions dated December 5, 1933, 19

Remarks: _____

DESCRIPTIVE REPORT

To Accompany Hydrographic Sheet No. 4

Intracoastal Waterway

St. Simon - Altamaha Sounds

AUTHORITY

This work was executed in accordance with the Director's Instructions dated Dec. 5, 1933, to the Commanding Officer Launch MIKAWA, Project No. HT-167 ✓

LIMITS SHEET

Sheet 4 joins sheet 5 on the north, sheet 3 on the south both of which were executed by the Launch MIKAWA, this season. ✓

SURVEY METHODS

Standard Coast Survey methods of hand lead soundings and sextant fixes were used. The lead line was No. 8, Samson mahogany tiller rope, graduated in fathoms and feet. The sounding boat was a 22ft. skiff with outboard motor. Sounding lines were run, only with the current, in areas where good soundings could not be obtained running against the current. ✓

DISCREPANCIES

No discrepancies are known to exist. Errors in the sounding records, principally in recording and reading of angles have been adjusted during the smooth plotting and noted in red in the sounding records. ✓

DANGERS

Along the northern and southern shores of Altamaha River, Lat. 31-20 N. between Long. 81-25 W. and 81-26 W. are submerged tree stumps extending 5 to 10 meters into the river. ✓

In the South Altamaha River Lat. 31-~~19.5~~^{18.4} N. Long. 81-25 to 81-26 are three large logs, the upper end of which is afloat and the lower end imbedded in the mud. They are located by positions 39m, 40m, and 50m. ✓

CHANNELS

The channel marked by the ranges, topographic signals, Nut and Say, Lat. 31-18.3 N. Long. 81-24.2 W. is dredged by the U. S. Engineers. Other narrow channels in open water are marked by day beacons. ✓

MISCELLANEOUS

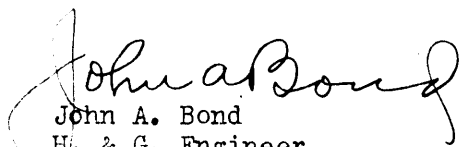
This sheet was executed without definite shore line on the boatsheet.

This report is written from the boatsheet, because the sheet and records are being transferred to Lieut. C. A. Egner for smooth plotting, in accordance with the Director's letter dated April 2, 1933 to Lieut. Egner.

Respectfully Submitted:

D. E. Sturmer
Deck Officer, C. & G. S.
Hydrographer

Approved & Forwarded:


John A. Bond
H. & G. Engineer
Chief of Party

HYDROGRAPHIC SHEET NO. 4

Sheet and records were transferred on April 25, 1934 to Lieutenant C. A. Egner for completion.

Progress on the work on the records at the time of transfer was as follows:

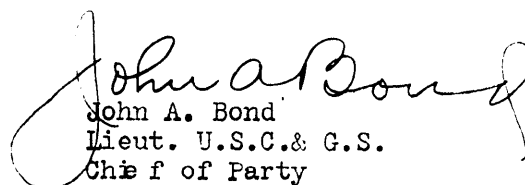
RECORDS

Reducers entered - 0
Reducers checked - 0
Soundings reduced - 0
Soundings checked - 0

SMOOTH SHEET

Projection - Completed and checked
Tri. and Topo stations - Plotted and checked
Protracting - None
Soundings plotted - None

Records and sheet as completed to date of transfer have been inspected by the Chief of Party and are approved. ✓


John A. Bond
Lieut. U.S.C. & G.S.
Chief of Party

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SUPPLEMENTAL REPORT
 TO ACCOMPANY
 SHEET #4 (MIKAWA)

AUTHORITY:

This sheet was received April 25, 1934 from Lieut. J. A. Bond under Instructions dated April 2, 1934.

ADDITIONAL WORK:

A few side creeks were still to be sounded when this sheet was received by Field Party No. 23. A few new topographic signals were established to control this area. An additional 31.6 miles of hydrography was sufficient to complete the sheet. This hydrography was run by the launch OWANEE and is recorded as part of Volume 7. A hand line and 8-pound lead were used. No additional dangers were discovered.

STATISTICS:

<u>Date</u>	<u>Day</u>	<u>Vol.</u>	<u>Miles</u>	<u>Snd'gs.</u>	<u>Pos.</u>
Sept. 14	s	7	11.5	318	80
17	t	7	14.4	394	103
18	u	7	4.7	151	40
19	v	7	1.0	29	8
Totals			31.6	892	231

Respectfully submitted,

George Fortune
 Surveyor

Approved and forwarded;

C. A. Egner
 C. A. Egner, Chief of Party,
 Lieut. C. & G. Survey

List of signals used on Hydrographic Sheet No. 4

Kab	Tub	Rec	Job	Lug	Moe
Nit	Gat-	Oct	Sue	Int	Par
May	Sad	Ham	Tus	Raw	Act
Nab	Mun	Jak	Bey	Pa	Wig
Oak	Ky	Ho	Ter	Ape	But
Fee	Dew	Inn	Def	Wat	Han
Bak	Zav	Gos	Sal	Tru	El
Ill	Hi	Kar	Mid	One	Ver
Yak	Ale	Gro	Mel	Rag	Rob
Say	Axe	Win	Tod	Yen	Has
Nut	Inc	Mac	Tac	Von	Wod
Sag	Us	Hic	Con	Vet	Dix
Ant	Gig	Rot	Sen	Zar	Vow
Up	Pid	Sok	Pal	Wow	Toy
Zov	Boo	Foe	Chi	Pup	Ruf
Ore	Ber	Har	Ink	Lad	Tot
Sod	Bud	Wop	Cow	Est	Gis
Nol	Co	Jop	Cry	Hon	Ula
Jut	Les	Spa	Oto	Mog	Kit
Tin	Bid	Eel	But	Gol	Jog
Lod	Has	Kay	Nix	Lok	Nol
Jar	In	Fag	Mel	Imp	Bal
Sis	Ban	Elf	Kat	Lat	Hal
Man	Tor	Fry	Leo	Wood	Fiz
Gal	Ite	Reo	Ken	Cod	Alt
Beg	Kin	Aid	Mol	Pop	Quo
Zel	Ave	Use	Kiss	Sta	Tal
Lon	Oil	Log	New	Her	Fid
Eve	Jig	Ear	Del	Gor	Cup
Ide	Awl	Be	Ric	Dol	Jul
Ray	Ned	Ex	Ean	Yam	Cal
Vim	Wee	Dub	Jas	Jin	Les
Gater	Zip	Hampton	Rut	Air	Wil
Dot	Mol	Fox	Dos	Cav	Red
Dog	Aryl	Has	Raf	Fin	Fog
Ab	Kit	Hots	Wik	Edo	Fot
Hun	Wat	Egg	Fag	Ale	Sal
Noz	Bal	Rye	Hue	Old	Gum
Bec	Mrs	Pie	Jas	Yen	Zar
Ret	Mil	Ric	We	Do	Sex
Ma	Lus	Joy	Ord	Cat	Vep
Led	Ex	Coy	Jut	Bri	Ver
Sou	Art	Cop	Ray	Gun	Ite
Cen	Jaz	Zell	Doe	Top	Sul
And	Bow	Rad	Toe	Bly	Blu
Hip	Fee	Cas	Ute	Car	Fin
Owe	Cog	Of	Ida	Nut	Pep
Arc	Rex	Tat	Is	Omo	Doc
Cru	Rek	Gin	Nek	He's	Bar
Tux	Vil	Tid			

Field Records Section (Charts)

HYDROGRAPHIC SHEET NO. 5581

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

Number of positions on sheet	.2187.
Number of positions checked	..106.
Number of positions revised	...43.
Number of soundings recorded	!0293.
Number of soundings revised	..1348.
Number of signals erroneously plotted or transferred0.

Date: *Mar. 21, 1935.*

Verification of Protracting

Verification and Inking

Verification by *W. R. Jackson*

Review by

R. J. Christman

Time; 14 hrs.

Time: 68 hrs.

Time: 18¹/₄

Critical Report

Report on H-5581

Surveyed in Mar.-April, 1934.

Chief of Party J.A. Bond-C.A. Egner

Surveyed by D.E. Sturmer-R. Elliot

Protracted by F.H.L. D.M.W.---

Soundings plotted by F.H.L.---

Verified and Inked by W.R. Jackson

1. The records conform to the requirements of the General Instructions, except, (a) the fix was not entered at the top of each page.
2. The usual depth curves can be completely drawn, except, (a) at the junction of "Wood Cut" and "Altamaha River".
3. The field plotting was completed to the extent prescribed in the Hydrographic Manual, except: (a) Too hard a pencil was used, causing indents in the paper, (b) Soundings were not spaced carefully with the spacing dividers, (c) $\frac{1}{2}$ foot soundings were not plotted as "0" feet.
4. No drafting was done over as no comparison with photo compilation was made.
5. Junctions with contemporary surveys have not been made.
6. Remarks:
 - (a) Position "18s" was changed to conform in its general direction with the boat sheet, being taken from the easterly branch of "Walley Leg" and placed in the northerly branch, Lat. 31-17.9 Long. 81-25.5
 - (b) Numerals were not placed on the Boat Sheet in the same direction, or using North as the top of the sheet.

Respectfully Submitted
W. R. Jackson

TO: H.M. Strong
 From C.F.M.

Survey No. H 5581

GEOGRAPHIC NAMES
 Georgia

Date. Jan. 17, 1935

Chart No. 1242

Names approved Jan. 29, 1935. *Helena M. Strong*

Diagram No. 1242-2

* Approved by the Division of Geographic Names, Department of Interior. *Harlow Bacon*

Ø, Not Approved by the Division of Geographic Names, Department of Interior.

R, Referred to the Division of Geographic Names, Department of Interior.

Status	Name on Survey	Name on Chart	New Names in local use	Names assigned by Field	Location
	<u>Butler Island</u> ✓	Same	✓		
	<u>Butler River</u> ✓	"	✓		
	<u>Champney Island</u> ✓	"	✓		
	<u>Wood Cut</u> ✓	"	✓		
	<u>Darien</u> ✓	"	✓		
	<u>Generals Cut</u> ✓	"	✓		
	<u>Snow Creek</u> ✓	"	✓		
	<u>Black Island</u> ✓	"	✓		
	<u>Generals Island</u> ✓	"	✓		
	<u>Altamaha River</u> ✓	"	✓		
	<u>Three Mile Cut</u> ✓	<u>Threemile Cut</u>	✓		
	<u>Broughton Island</u> ✓	Same	✓		
	<u>South Altamaha River</u> ✓	"	✓		
	<u>Buttermilk Sound</u> ✓	"	✓		
	<u>One Mile Cut</u> ✓	<u>Onemile Cut</u>	✓		
	<u>Little St. Simon Island</u> ✓	Same	✓		
	<u>Hampton River</u> ✓	"	✓		
	<u>St. Simon Island</u> ✓	"	✓		
	<u>Wilson Creek</u> ✓	"	✓		
	<u>Wally^s Leg</u> ✓	"	✓	Wallys Leg ^x 11/1/40 USGN.	
	<u>Mackay River</u> ✓	"	✓		

To; H.M. Strong
 From C.F.M.

Survey No. H 5581

GEOGRAPHIC NAMES
 GEORGIA

Chart No. 1242-

Date. Jan. 17, 1935

Diagram No. 1242-2

Names approved Jan. 29, 1935. *Helen M. Strong*

*, Approved by the Division of Geographic Names, Department of Interior.

Harlow Bacon

∅, Not Approved by the Division of Geographic Names, Department of Interior.

R, Referred to the Division of Geographic Names, Department of Interior.

Status	Name on Survey	Name on Chart	New Names in local use	Names assigned by Field	Location
	<u>Frederica River</u> ✓	Same	✓		
	Note:				
	The Names on this Sheet were inked on the Sheet by the Field.				
	<u>Darien River</u> ✓	Same	✓		
	<u>Pico Cut</u> ✓	"	✓		
	<u>Altamaha Sound</u>	"	✓		
	Title of sheet changed from Buttermilk Sound, Altamaha Sound, Ga., to From Darien to Frederica River Vicinity of Altamaha Sound Georgia				
	instructions from Captain Ellis. <i>Helen M. Strong</i>				

STATISTICS FOR SHEET NO. 4

<u>Date</u>	<u>Day</u> <u>Letter</u>	<u>Volume</u>	<u>Positions</u>	<u>Soundings</u>	<u>Statute</u> <u>Miles</u>
Mar. 14	a	I	134	693	15.4
15	b	I	94	510	12.8
16	c	I & II	159	701	15.3
19	d	II	120	609	12.6
20	e	II & III	145	719	17.7
21	f	III	128	690	16.0
22	g	III & IV	194	967	21.0
23	h	IV	205	814	12.9
26	j	IV	112	499	12.0
27	k	V	144	686	18.4
28	l	V	116	600	12.5
29	m	V & VI	60	264	6.6
30	n	VI	147	653	17.5
Apr. 2	p	VI	101	475	10.0
6	q	VI	84	431	8.2
12	r	VII	13	70	1.0
		TOTALS	1956	9381	209.9

1-12 RAC

February 8, 1935.

Division of Hydrography and Topography:

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

Tide Reducers are approved in
7 volumes of sounding records for

HYDROGRAPHIC SHEET 5581

Locality Buttermilk Sound, Altamaha Sound, Georgia

Chief of Party: J. A. Bond in 1934

- Plane of reference is mean low water, reading
- 4.7 ft. on tide staff at Champney I., Altamaha River
- 5.9 ft. below B.M. 1
- 3.5 ft. on tide staff at Darien
- 18.6 ft. below B.M. 1
- 4.7 ft. on tide staff at Wolf Island, Altamaha Sound
- 8.6 ft. below B.M. 1
- 3.3 ft. on tide staff at Frederica
- 14.1 ft. below B.M. 1
- 2.1 ft. on tide staff at Troup Creek
- 7.8 ft. below B.M. 1
- 3.3 ft. on tide staff at Three Mile Cut, Darien River
- 8.3 ft. below B.M. 1

Height of mean high water above plane of reference is 5.2 ft. at Champney Island, Altamaha River; 7.3 ft. at Darien; 6.6 ft. at Wolf Island, Altamaha Sound; 7.2 ft. at Frederica and Troup Creek; 7.1 ft. at Three Mile Cut, Darien River.

Condition of records satisfactory except as noted below:

Some of the tide reducers were entered in the field from predicted tides when observations were available. These were verified and corrected with the observed tides.

In places the reducers were smoothed out where unreasonable jumps in reducers were made in changing from one tide station to another.

Hammer
Acting Chief, Division of Tides and Currents.

Section of Field Records

REVIEW OF HYDROGRAPHIC SURVEY NO. 5581 (1934)

Darien to Frederica River, Vicinity of Altamaha Sound, Georgia
Surveyed March-April 1934
Instructions dated December 5, 1933 (MIKAWA)

Hand lead soundings - 3 point fixes on shore signals.

Chief of Party - John A. Bond, C. A. Egner.
Surveyed by - D. E. Sturmer, M. G. Elliot, George Fortune.
Protracted by - F.H.L. and D.M.W.
Soundings penciled by - F.H.L.
Verified and inked by - W. R. Jackson.

1. Condition of Records.

The records in general conform to the requirements of the Hydrographic Manual except as follows:

- a. Names of signals used were not always entered in the fix at the top of each page, (see par. 74 of the Hydrographic Manual).
- b. The location of a sunken barge was indicated on the smooth sheet by a rock awash symbol (*) instead of by a wreck symbol. This was changed in the office. Lat $31^{\circ}19.9'$ - Long. $81^{\circ}26.8'$
- c. Many topo. signals whose nature is not indicated in the records, fall outside the high water shoreline now shown on the sheet. Information relative to them will be requested from the field party if their nature is not disclosed when the sheet is compared with the air photo compilation, which has not been received at this time.

2. Compliance with Instructions for the Project.

The plan and extent of development are in accordance with the instructions except that not enough cross lines were run "to afford adequate check on the soundings obtained". (Instruction par. 14).

3. Sounding Line Crossings.

Soundings in general are consistent and the depths on the few crossings are in good agreement.

4. Depth Curves.

Within the limits of the survey the usual depth curves can be satisfactorily drawn except at the junction of Wood Cut and Altamaha River (lat. $31^{\circ}20'.3$, long. $81^{\circ}26'.35$) where there is some uncertainty about the exact location of the channel.

5. Junction with Contemporary Surveys.

The survey joins H-5631 (1934) on the north and east, H-5590 (1934) on the south and H-5635 (1934) on the west. Junctions with these sheets will be considered in the reviews of those surveys.

6. Comparison with Prior Surveys.

H-964 (1868), H-1146 (1872).

These two sheets comprise the first survey of the area under consideration. A comparison with the present survey shows that numerous changes have taken place and the entire area must be classed as changeable.

a. The following are some of the more important changes noted:

In Darien River, Pico Cut has widened to about three times its former width and the old bend of the river has filled up until it is almost bare at low water.

b. In Altamaha River, the best channel from the north side to the south side of the river now passes close to the western end of the large island in the middle of the river instead of about 400 meters westward of it. At the east end of this island the shoal area has extended eastward and the present survey shows a spot bare at low water where the former survey shows 7 to 8 feet.

c. A channel has been dredged across the shoal area in Buttermilk Sound (lat. $31^{\circ}18'$, long. $81^{\circ}24'$) as a part of the improvement of the Intracoastal Waterway.

d. The old bend of the river where Hampton River and Wilson Creek join Buttermilk Sound is filling up and now has a depth of only 2 feet in the channel near its western outlet.

7. Comparison with Chart No. 1242.

a. Hydrography.

Within the area of the present survey the chart is based on surveys discussed in the preceding paragraphs and U. S. Engineer's B. P. No. 27555 (1934). This B.P. covers the dredged cut in Buttermilk Sound and the charted controlling depth of 10 feet in this cut does not conflict with the information given on the present survey

b. Aids to Navigation.

The charted beacons originating with Notice to Mariners No. 43 of 1930 are in agreement with the positions given by the present survey.

8. Field Plotting.

Field protracting was not well done. Over 40 positions were revised. The records show, that some of these positions were erroneously changed by the field plotter as the original signals and angles showed good agreement in time, and were supported by the boat sheet.

Penciled soundings were not always accurately spaced, and too hard a pencil was used, causing indents in the paper.

9. Additional Field Work Recommended.

The survey is satisfactory. It is desirable to have a channel line run into the northern entrance to Wood Cut, see paragraph 4 of this review. No other work is deemed necessary within the limits of this survey.

10. Superseding Old Surveys.

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

H-964 (1868) in part.
H-1146 (1872) in part.

11. Reviewed by - R. J. Christman, March 1935.

Inspected by - A. L. Shalowitz.

Examined and approved:

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

L. O. x Dober.
Chief, Division of Charts.

W. Borden
Chief, Section of Field Work.

Glade
Chief, Division of H. & T.

Applied to drawing of Chart 574 (New Compilation) Dec 3, 1936 - J.T.W.

Applied to new compilation Cht 575 July 1937 P.A.C.

Applied to Cht 1242, Mar. 16, 1939 g.H.S.