5596

Form 504
Ed. June, 1928

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

State: Georgia

DESCRIPTIVE REPORT

~~*Topographic*~~
Hydrographic } *Sheet No.* 2 5596

LOCALITY

Ossabaw Sound

1934

CHIEF OF PARTY

C. A. Egner

U. S. GOVERNMENT PRINTING OFFICE: 1928

5596

Form 537
Ed. Dec., 1930

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. 2

REGISTER NO. 5596

State Georgia

General locality Ossabaw Sound

Locality Entrance to Ogeechee and Vernon Rivers Large

Scale 1/10000 Date of survey April, May, 1934

Vessel OWANEE (Field Party #23)

Chief of Party C. A. Egner

Surveyed by M. G. Elliott, Jr.

Protracted by M. C. B., V. F. S., C. A. E.

Soundings penciled by

Soundings in ~~fathoms~~ feet

Plane of reference M. L. W.

Subdivision of wire dragged areas by

Inked by M. Silverberg

Verified by M. S.

Instructions dated December 5, 1933

Remarks:

U. S. GOVERNMENT PRINTING OFFICE: 1933

REPORT TO ACCOMPANY

HYDROGRAPHIC SHEET

NO. 2 (FIELD)

DESCRIPTIVE REPORT TO ACCOMPANY HYDROGRAPHIC

SHEET NO. 2 (FIELD) H-5596

INSTRUCTIONS:

This sheet was executed under instructions dated December 5, 1933, covering combined operations of Party #23.

LOCALITY:

The limits of this sheet cover from part of Bradley River on Ossabaw Island on the south to a line from the outer beaches of Wassaw and Ossabaw Islands, on the east to a northern limit to include the intersection of Odingsell River and Adams Creek, and to a line parallel to the sound side of Raccoon Key on the west.

PURPOSE:

The work was done to provide a comprehensive survey of the sound and side creeks for navigational purposes, no up-to-date survey being available.

CHARACTER OF LOCALITY:

This area covers all of Ossabaw Sound which is all open water with two deep channels passing to north and south of Raccoon Key into the sound. The area between these channels and east of the sound side of the key is all shoal water, with two shoals from N. E. and S. E. points of the key that are dry at low water. To the south of the south channel is Egg Island shoal which is also dry at low water.

The creeks to the north of the sound were later added to be included on this sheet. These were not originally included on the 1/20000 boat sheet as it was extended to include St. Catherine's Sound. Wassaw Creek, of which about half is on this sheet gives a passage from Wassaw Sound to Ossabaw Sound. Adams Creek and the Odingsell River are of no particular importance.

SHEET LAYOUT:

This sheet was originally laid out to a scale of 1/20,000 in order to include the outer coast to the three fathom curve since it was at one time believed that this outer area would also be sounded. The hydrography was done on the 1/20,000 sheet but the work was transferred to a 1/10,000 smooth sheet. The 1/10,000 sheet was made to cover the sounded area when it was learned the outside three fathom curve was not to be determined. Sheet 2 is therefore to be considered along with 2a, b, c. These subsheets cover Delegal Creek, Bradley Creek and the intermediate area between sheet 2 and 3, which has a frequently used through passage via Oddingsell River, Rhodes Creek into Wassaw Sound.

All the topography in this area was done on a 1/20,000 scale.

METHODS:

Practically all of the sounding on this

sheet was done by fixed positions with sextant. All of the sounding was done with the launch OWANEE. She, having high decks, made it easy to see the signals over the long stretch of water.

The shoals in the sound being exposed to the open sea it was impossible to get sounding actually over these areas either in a larger or smaller craft. Sextant positions were taken on the controlling places of these shoals at approximately mean low water. The area inside of these zero curve positions are as much as three feet above low water.

CONTROL--HORIZONTAL:

There was some previously established triangulation control here. These stations with the aid of a few new ones and some large topographic signals afforded control for this sheet.

The shoreline within the limits of this sheet originally came from the first five-lens photos compiled by the photo compilation party. Due to lack of control within the photographed area and inexperience in interpreting aerial photographs, the first shoreline was considerably in error. The photo compilation party later remade the sheet containing the shoreline in this area. This resulted in the necessity of many changes in the shoreline as placed on the smooth sheet.

The hydrographic signals between the triangulation stations JOHN'S Hummock and ADAMS were located by plane table traverses from these two stations--the junction being about midway between them. This traverse required some adjustment and this adjustment was influenced by the supposedly correct shoreline. This combination of errors caused considerable difficulty and was only recently straightened out when the new shoreline was made available.

CONTROL--VERTICAL:

The tidal reductions for this sheet were based on an automatic gauge at Torrey's wharf on Ossabaw Island. This gauge had several months of simultaneous comparison with the Standard Gauge at Fort Screven.

There were no time and height adjustment applied to this sheet, it being deemed unnecessary due to the splendid location of this gauge.

A time and height correction should probably have been applied to Bradley River area, but it's unimportance did not warrant the expenditure of the time and cost.

COMPARISON WITH PREVIOUS SURVEY:

There have been no great changes in the shoreline since the last survey of 1925, with the exception of the outer beaches of Ossabaw and Wassaw Island.

In general the shoals and channels of the sound are practically the same as shown by the previous survey.

DANGERS AND CONTROLLING DEPTH:

There are no dangers on this sheet other than the strong cross current in the north channel on an ebb tide. A vessel with due regard to this would have no trouble in navigating these comparatively narrow channels. It is not advisable for vessels to be in this area in the stormy weather. The controlling depth on this sheet is ample for much larger vessels than those able to navigate the Inland Passage. This depth being approximately twenty feet on mean low water.

The controlling depths in Wassaw Creek are approximately nine feet. Rhodes Creek is very similar in importance to Wassaw Creek in that it is also a passage between the sounds. It's depth is about 5 feet.

Splendid anchorage can be found in any of the creeks, particularly in strong weather.

GEOGRAPHIC NAMES:

Local names as charted, are considered the best ones available.

COAST PILOT INFORMATION:

There are no beacons or bouys on this sheet.

The depths are regular in main channels.

Tide is quite strong on the half tides.

Respectfully submitted

C. H. Egner
Lieut. C & G. S.

Approved and forwarded.

LIST OF SIGNALS USED ON SHEET #2

TRIANGULATION STATIONS

JOHN
LITTLE
WAS
PARSONS
ADAM
BARSONS
CENT
HORSE
LAND
KEY
GREEN

COON

TOPOGRAPHIC SIGNALS

SIG
TRI
LET
TIP
HAL
ARM
NICK
BUM
PAL
TOP
TURN
PEG
PIT
RAG
TAN
BI
SCRAP
POINT
LONE
DOS
POLE
LAY
TRES
DOG
DOT
HIP
NEXT
HOG
LAST
SACK
SAG
TRO
DIM
SIX
END
COR OR COW
UP
US
THE
BEND

TEN
DIME
COP
FOOT
HOW
ARD
TIE
PAL
REC
OAK
TAIL
TAIN
FACT
CON
MAN
MAC
CIG
HER
HAN
PILE
SIS
ARE
BAN
PEN
FLAG
LESS
IN
WE
AT
TREE
TWIN
ASH
SUN
NOR
TALL
FACE
WAX
CED
STAK
EAG
BOX
MUD
BUSH
CAT

PINE
SLAT
GUS
PEN
RAC
DON
NOR
BULL
PIG
POP
BOW
WIL
EM
NAT
JEF
MUT
WIM
BRAD
GABE
WHITE
NIC
AN
TWO

HYDROGRAPHIC SIGNALS

LEAD
CUR
REN
SID

STATISTICS

VOLUME	DAY LETTER	MILES	SOUNDINGS	POSITIONS
1	a	11.3	229	60
1	b	23.2	621	144
1	c	11.5	324	72
1	d	6.9	214	54
1	e	6.7	247	63
2	f	24.5	764	189
2	g	20.3	697	175
2	h			
3	h	16.7	311	75
3	j	21.8	646	165
3	k	7.5	167	64
3	l	11.5	202	100
3	m			
4	m	20.5	633	154
4	n	17.3	475	115
5	p	2.0	155	51
	TOTALS...	195.7	5685	1481
5	a'	5.0	141	23
5	b'	12.7	440	59
5	c'	12.1	424	65
5	d'	4.0	140	28
5	e'	5.1	174	31
5	f'	4.0	139	20
5	g'			
6	g'_8	20.7	629	133
6	h'	7.1	229	41
	Totals	266.4	8001	1881

HYDROGRAPHIC STATISTICS TO ACCOMPANY SHEET #2

VOLUME	DATE	DAY-LETTER	SOUNDINGS	POSITIONS	MILES	BOAT
1	Mar. 14	a	229	60	11.3	OWANEE
	" 15	b	621	144	23.2	"
	" 16	c	324	72	11.5	"
	" 19	d	214	54	6.9	"
	" 20	e	247	63	6.7	"
2	Mar. 21	f	764	189	23.5	"
	" 22	g	697	175	20.3	"
2	Mar. 23	H				
3	" 23	h	311	75	11.0	"
	" 28	j	646	165	21.8	"
	Apr. 2	k	167	6[illegible]	7.5	"
	" 3	l	202	100	11.5	"
3	Apr. 4	m				
4	" 4	m	633	154	20.5	"
	" 5	n	475	115	17.3	"
5	Mar. 19	aa	141	23	5.0	"
	Mar. 20	bb	440	59	12.7	"
	" 27	cc	424	65	12.1	"
	" 30	dd	59	9	1.9	"
	Apr. 3	ee	26	3	0.2	"
	May 22	ff	139	20	4.0	"
5 & 6	" 23	gg	228	51	7.6	"
6	May 29	hh	229	21	7.1	"
7	June 8	p	155	51	2.0	"
		Totals.....7371		1732	245.6	

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

Survey No. H 5596

GEOGRAPHIC NAMES
GEORGIA

Date. Jan. 25, 1935

Chart No. 1241

Diagram No. 1241-2

Names approved Feb. 13,1935 Helen M. Strong. Harlow Bacon

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

¢, 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
	Rhodes Creek ✓	Same			
	Odingsell River ✓	"			
	Wassaw Creek ✓	"			
	Curtis Creek ✓	"			
	Little "assaw Island ✓	"			
	Adams Creek ✓	"			
	Vernon River ✓	"			
	Hell Gate ✓	"			
	Raccoon Key ✓	"			
	Ogeechee River ✓	"			
	Egg Islands ✓	"			
	Ossabaw Island ✓	"			
	~~Bradleys River~~ ✓	Bradley River K TA			
	The Names on this sheet were inked on the sheet by the field.				
	---	Pine Island			
	---	Egg Island Shoal ✓			
	---	Ossabaw Sound			
	----	Horse Hammock ✓			
	----	Flora Hammock ✓			
	----	Wassaw Island ✓			

Field Records Section (Charts)

HYDROGRAPHIC SHEET NO. 5596

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

Number of positions on sheet	1881
Number of positions checked	324
Number of positions revised	9
Number of soundings recorded	8001
Number of soundings revised	78
Number of signals erroneously plotted or transferred	0

Date:

Verification by M. Silverberg Time: 56 hrs.

Review by H. T. Kelsh Time: 16 hrs.

LAC

February 20, 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 5596

Locality **Entrance to Ogeechee and Vernon Rivers, Georgia.**

Chief of Party: **C. A. Egner in 1934**
Plane of reference is **mean low water, reading**
2.9 ft. on tide staff at **Torreys Dock**
16.7 ft. below **B.M. 1**

Height of mean high water above plane of reference is 7.5 feet.

Condition of records satisfactory except as noted below:

In volume 3, pp. 48-53, record incomplete. Times are duplicated without explanation.

Chief, Division of Tides and Currents.

Verification Report H-5596

I. Conformity to Hydrographic Manual

The records are neat and legible and conform to requirements of hydrographic manual with the exception of Vol. 7. Here the signals were not listed at top of each page. The days a' to h' indications did not conform with records, the prime, in use being added by the verifier. The junction notes were in black ink, indicating field numbers, and had to be removed. The low water line from the topo. surveys were dashed. Signal JET was changed to JEF to agree with records. Signals names for LAST, TREE, FLAG, and SIG were duplicated. The dates for WASSAW 2 (1932), JOHNS HUMMOCK (1855) and ADAMS (1932) were wrong and had to be corrected to correspond with Topographic Position records.

II. Depth Curves

The zero curve curve is partially complete and found in a number of localities. The six foot, twelve foot, eighteen foot, and thirty foot curves are complete within the limits of the survey.

III. Field Plotting

The field plotting is complete to the extent required for the soundings. A great many soundings were spaced by eye and had to be relocated. A wreck (Lat. 31°52.5', Long 81°59.6') was shown in the records but not on the boat sheet or smooth sheet. It was spotted by the verifier and the decision as to whether it should be shown is left to the reviewer.

IV. Office Plotting

Pos. 105 m - 113 m, 129 m, 130 m were plotted on H-5598 (1934) since signals locating them came on that survey.

Pos 22c' (lat 31°52.1, long 80°59.9) the right angle changed 20° to check line and hydrography.

The R+B buoy - Pos 51j Vol. 7 was not plotted since the signals are 2 miles off limit of this survey but was verified on H-5528 (1934)

JUNCTIONS

The junction with H-5596 (1934) to the NE is a continuation of this survey but several lines were continued. The handling of H-5598 (1934) has been mentioned before in this report. The junction with H-5528 (1934) is in general satisfactory.

Remarks

The high water line has not been verified since the air-photo compilation surveys for this area are not available. Hydrographic signal LEAD has been used for this survey and apparently has superseded topographic signal LEAD as shown on the air-photo control survey. One conflict between the high water lines at signal NEXT is shown and must wait availability of completion surveys. Attention is called to tide division report on condition of records.

Respectfully submitted,

Morton Silsbee

Discrepancies

a 10' sounding falls between a 15' + 16' (lat 31° 49.4', long 81°02.5) lead line evidently read 1 fathom too shoal.

a 2' sounding falls between a 6' and 6' sounding (lat 31° 51.3, long 81° 01.2) ✓ OK

Section of Field Records

REVIEW OF HYDROGRAPHIC SURVEY NO. 5596 (1934).

Entrance to Ogeechee and Vernon Rivers, Ossabaw Sound, Georgia
Surveyed: April, May, 1934
Instructions dated: December 5, 1933(Natoma)

Hand Lead Soundings - 3 Point Fixes on Shore Signals.

Chief of Party - C. A. Egner.
Surveyed by - M. G. Elliott Jr.
Protracted and soundings penciled by - M.C.B., V.F.S., C.A.E.
Verified and inked by - M. Silverberg.

1. Condition of Records.

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

a. Day letters and position numbers should appear on cover and title page in color to conform with sounding records. This was accomplished in the office.

b. Names of topographic features were inked in both slanting and vertical letters. These were not changed in the office.

c. No topographic features were shown on several signals which fall outside the shoreline.

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.

Cross lines were run as called for in the instructions, and check well with the other lines. Adjacent lines are also in good agreement.

4. Depth Curves.

Within the limits of the survey, except in the smaller creeks, where a considerable development would be required to accurately draw the curves in full, all the usual depth curves may be drawn, including the major portion of the low water line.

5. Junctions with Contemporary Surveys.

The junctions with H-5597 (1934) on the north, H-5528 (1934) on the west, and H-5598 (1934) on the south are satisfactory.

There is no contemporary work on the east, however the present survey is in fair agreement with H-4475 (1925) on its eastern limits.

6. Comparison with Prior Surveys.

a. H-733 (1860).

A study of this work shows a material straightening out of the channels leading into the Vernon and the Ogeechee Rivers with a natural extension of the spit off Raccoon Key, and Egg Island Shoal in a southeasterly direction. The northeast tip of Raccoon Key has been washed away in this process, and the southerly point of Pine Island has been cut away. South of Egg Island Shoal the more constricted channel shows slightly greater depth in mid channel; and 9 feet may be carried into Bradley River, where 7 feet blocked the entrance in 1860. Odingsell River shows a general conformity with present work. Adams Creek is today somewhat shoaler. The other creeks covered in the present work were not run.

b. H-4475 (1925).

This survey on a 1-20,000 scale, covers the area in Ossabaw Sound leading into Ogeechee and Vernon Rivers, but does not extend into the smaller rivers and creeks. A comparison with the present survey shows that the general trend of the depth curves is very much the same but there are enough differences in practically all of them to indicate that the bottom is of a variable and shifting nature. The changes however are not as great as those noted when the present survey was compared with that of 1860.

A 2 foot sounding is shown on the present survey between two 7 foot soundings at Lat. 31°51'.3, long. 81°01'.2, but a check of H-4475 (1925) shows a former small tide flat at this point, now apparently being washed away. In the open area at east end of sheet the same general depths prevail with slight shifting of positions. The bars off Raccoon Key, and Egg Island Shoal are still building up. A small tide flat, lat. 31°51'.0, long. 81°02'.2 appears on present sheet slightly north of old location, but a lack of development on H-4475 (1925) may account for some of the apparent shift.

Because of the general character of the area and the nature of the bottom, it is unnecessary to consider in further detail the various individual changes noted in comparing the present work with both H-733 (1860) and H-4475 (1925). The present survey should supersede these for charting purposes.

c. H-617 (1856) - See addenda, this review.

7. Comparison with Chart No. 440 and 573.

a. Within the area of the present survey these charts are based on surveys discussed in the foregoing paragraphs and contain no additional information that needs consideration at this time.

b. There are no aids to navigation within this area.

8. Field Plotting.

Field protracting and plotting conform in general to the requirements of the Hydrographic Manual, with the following exceptions:

a. The wreck mentioned in sounding record at position 28e, (Wassaw Creek) was not plotted nor referred to in report.

b. The low water line from Topo. sheet was inked with a dashed instead of a dotted line.

c. The field junction numbers were inked on the sheet.

d. There were incorrect dates on 3 triangulation stations.

e. There were numerous instances of soundings that were apparently spaded by eye.

9. Additional Field Work Recommended.

The survey as a whole is considered quite complete and no additional work is necessary.

However, slightly greater development would probably have resulted had the work been done on a 1-10,000 scale, as the smooth sheet is plotted. The bar at the entrance to the Odingsell River (lat. 31° 51'.3, long. 81°00'.1) should have been a little more closely developed as well as the 12 foot bar across the same river. (lat. 31°53'.6 long. 81°00'.45).

10. Superseding Old Surveys.

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

H-733 (1860) in part.
H-4475 (1925) in part.
H-617 (1854) " "

11. Reviewed by - Harry T. Kelsh, March 1935.

Inspected by - R. L. Johnston.

Examined and approved:

K. T. Adams,
Ass't. Chief, Div. of Charts.

Chief, Division of Charts.

Chief, Section of Field Work.

Chief, Division of H. & T.

ADDENDA TO REVIEW H-5596 (1934)

c. H-617 (1856).

This survey, on a 1-5,000 scale, covers the upper ends of Odingsell River and Adams Creek and two of the three creeks leading north from them at lat. 31°54.5', long. 81°01.0' to 01.3'. Considering the elapsed time and the changeable nature of this area, there is a fair agreement with the present survey. The westernmost of the three creeks was not surveyed on H-617 (1856). The 5 foot shoal at lat. 31°54.4', long. 81°01.2' is now gone. The "0" sounding just west of it formerly was the tip of a spit off the point of the creek draining into Adams Creek at this point, but this spit is now covered by ½ foot at low water. The general channels appear somewhat more uniform in depth, with average depths about the same.

Applied to chart 440. Sept. 12, 1936
J. H. S.

Applied to chart 573. Dec. 7, 1936 J. H. S.