

4475

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Form 504
DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

State: Georgia

11-5613

DESCRIPTIVE REPORT.

Hydrographic Sheet No. 4475

LOCALITY:

Georgia Coast

Ossabaw Sound & Vicinity

1925

CHIEF OF PARTY:

F. S. Borden

DESCRIPTIVE REPORT

to accompany

HYDROGRAPHIC SHEET

NO.....

(Field Sheet "K")

OSSABAW SOUND AND

APPROACHES

GEORGIA.

STEAMER BACHE

F.S. BORDEN, COMDG.

DESCRIPTIVE REPORT
to accompany
HYDROGRAPHIC SHEET
NO.....
(Field Sheet "K")
OSSABAW SOUND AND
APPROACHES
GEORGIA.

STEAMER RACHE

F.S. BORDEN, COMDG.

EXTENT

This sheet embraces a survey of Ossabaw Sound and Approaches, Georgia. It joins sheet "L" to the northward, sheet "J" to the southward and the offshore hydrographic sheet to the eastward. Work was carried up the inlet until a junction had been made with the older surveys, although this junction was not entirely satisfactory due to lack of time available to complete the survey. This circumstance is explained in a later paragraph.

CHANGES

The entire area covered by this sheet has undergone extensive changes since it was last surveyed. The position of the outer bar as well as the depths over it have changed. In general the entrance is more free from shoals than it was at the time the last survey was made. Thirteen feet can be carried over the bar into the Vernon River but only about 10 or 11 feet can be carried into the Ogeechee River. The critical depth in entering the Ogeechee River is on the inner bar. The sheet shows approximately 4 miles of the inside route. This entire section has undergone extensive changes and the Coast Pilot should be rewritten from information obtained by this survey.

ACCURACY AND COMPLETENESS

Although the crossings are, in general good, attention is called to the following which show a disagreement of from 2 to 3 feet:

98 - 99 L	54 - 55 H	52 - 53 M
90 - 91 J	87 - 88 Q	56 - 57 M
115 - 116 Q	133 B	3 D - 639

Attention is called to critical soundings on 105 M, between 155-156 E and between 106-107 M all of which are in the locality of a 12 foot lump in the Vernon River about one fourth mile northeast of H.S. buoy. Soundings between 61 and 62 G and a 29 foot sounding between 57-58 G were not plotted on account of lack of space.

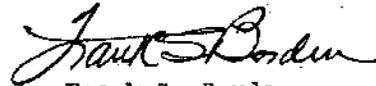
The positions of the three buoys are shown in the record under position numbers 199 D, 200 D, and 201 D.

This sheet was the last to be completed in the field on this particular project. Due to the necessity of closing work by a certain date in order that the vessel might reach Norfolk before a specified time and also due to the detachment of the MIKAWA before work was finished, the sheet lacks the completeness that it otherwise would have.

Time was not available to complete the sheet in the following particulars:

1. Depth through the slue channel along the south end of Wassaw Island was not ascertained and enough lines were not run in this locality to definitely determine the edge of the shoal outside the slue channel.
2. The inner bar in the entrance to the Ogeechee River was not developed as it should have been.
3. The entrance to the small creek just inside of the south entrance point of the sound was not surveyed.
4. Work should have been carried up the Ogeechee and Vernon Rivers somewhat farther than it was, in order to effect a better junction with the older surveys.

Respectfully submitted


Frank S. Borden.

Statistics Sheet No.

(Field Sheet No. "K")

Date, 1925	Letter	Volume	Positions	Soundings	Miles Statute	Vessel
May 21	A	1	79	425	24.0	Mikawo M.S.
" 22	B	1	152	768	40.0	" " " "
" 25	C	1	65	262	15.5	" " " "
" 25	C	2	43	168	8.8	" " " "
" 27	D	2	201	585	35.8	" " " "
" 28	E	2	86	337	18.0	" " " "
" 28	E	3	73	259	14.0	" " " "
" 29	F	3	16	82	5.0	" " " "
June 1	G	3	63	234	12.5	" " " "
" 2	H	3	116	583	32.0	" " " "
" 2	H	4	29	161	9.7	" " " "
" 3	J	4	137	541	35.0	" " " "
" 4	K	4	77	277	16.5	" " " "
" 5	L	4	25	96	7.0	" " " "
" 5	L	5	81	428	22.2	" " " "X
" 9	M	5	151	572	28.0	" " " "
" 10	N	5	37	205	11.0	MIKAWO " "
" 11	P	6	131	489	24.5	Mikawo M. S.
" 16	Q	7	137	548	23.3	Lch. No. 1
" 17	R	7	24	94	5.5	SHEP
TOTAL			1223	7114	388.0	

October 12, 1925.

Division of Hydrography and Topography:

✓ Division of Charts:

Tide reducers are approved in volumes of sounding records for

HYDROGRAPHIC SHEET NO. 4475.

Locality: Georgia Coast - Ossabaw Sound and Approaches.

Chief of Party: F. S. Borden in 1925.

Plane of reference is mean low water, reading
3.3 ft. on tide staff at Dock at Torey Estate, Ossabaw Sound, Ga.
0.0 " " " " " Fort Screven, Tybee Island, Ga.

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 in 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.

Hannamer
Acty Chief, Division of Tides and Currents.

Hyd. Sheet No 4475

The development is inadequate on this sheet in several places, most of which are mentioned in the descriptive report. More lines are needed off the south end of Massaw Island and in the entrance to the Odingsell River.

With the exception of the crossings which are listed in the descriptive report, the soundings agree fairly well.

The smallest time interval used on this work was thirty seconds.

The records are satisfactory.

The protracting was well done and the soundings were fairly well plotted.

R. L. Johnston

2:08.

ADDRESS THE DIRECTOR
U. S. COAST AND GEODETIC SURVEY

AND REFER TO No. 4-DEM

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

WASHINGTON

February 3, 1926.

SECTION OF FIELD RECORDS

Report on Hydrographic Sheet No. 4475

Ossabaw Sound, Georgia

Surveyed in 1925

Instructions dated May 8, 1924 and Jan. 20, 1925.

Chief of Party, F. S. Borden.

Surveyed by F. S. B., L. C. Wilder and I. Rittenberg.

Protracted and soundings plotted by G. M. Marchand.

Verified and inked by R. L. Johnston.

1. The records conform to the requirements of the General Instructions except for the failure to describe beginnings and endings of sounding lines.
2. The plan and character of the survey conform to the requirements of the General Instructions except that the time intervals between soundings are greater than called for in Paragraph 225 of the General Instructions. The intervals used throughout the whole sheet were 30 and 45 seconds although the depths varied from about 3 feet to over 7 fathoms.

An examination of the sheet shows that a better development of the bottom would have been obtained had many of the lines been run at right angles to the direction in which they were run. This may have meant a little more time and perhaps accompanied with greater difficulties on account of the shoals, but the placing of the depth curves would have been more rigid.

3. The plan and extent of the survey satisfy the specific instructions except as follows:
 - a. More soundings should have been taken on the outer bar for entering the Ogeechee River. ✓
 - b. The inner bar for entering the Ogeechee River was inadequately developed. ✓
 - c. The area in the vicinity of Bradley River should have been surveyed. ✓

d. The channel into Odingsell River was insufficiently surveyed. ✓

e. The area along the south end of Wassaw Island was left incomplete. There appears to be a slue channel through here so additional lines will be necessary. ✓

f. Lines should have been run closer in the vicinity of lat. $31^{\circ} 49 \frac{1}{2}'$, long. $81^{\circ} 01 \frac{1}{2}'$. ✓

g. More lines should have been run in the mouths of the Vernon and Ogeechee Rivers better to define the channel limits. ✓

It is to be remarked that most of the above deficiencies were due to the necessity for termination of the work at a certain date. ✓

4. The sounding line crossings are generally adequate.
5. The information is sufficient for drawing the usual depth curves except for the limitations mentioned in Paragraph 2 as well as the incompleated areas mentioned in Paragraph 3.
6. The usual field plotting was done by the field party and was fairly well executed. The plotter seemed to have entirely overlooked Paragraph 326 of the General Instructions requiring each position to be numbered.

Only about every fifth position was numbered.

7. The junctions with H. 3560 on the eastward is satisfactory. ✓

The junctions with the contemporary surveys H. 4481 on the north and H. 4472 on the south are adequate. ✓

The junction with the old survey H. 733 in Ogeechee and Vernon Rivers is not entirely satisfactory. On account of the changes that have taken place here the work should have extended further up the two rivers. A 17 ft. spot now charted in Vernon River in lat. $31^{\circ} 52' 1550$ meters, long. $81^{\circ} 04' 1380$ meters should have been investigated. The old survey, H. 733, which was a somewhat closer survey in this particular vicinity than the present one, clearly shows it as a lump. Therefore without any further development there would hardly be sufficient justification for removing it from the charts. ✓

8. This sheet can not satisfactorily be considered as complete although there is nothing that needs immediate attention. If work is done again in this locality, consideration should be given to some of the points mentioned in the preceding paragraphs. ✓

9. The low water line shown on this sheet marking extensive shoal areas was transferred from the boat sheet and modified to agree with the soundings. ✓

10. Attention is called to the critical 12 ft. shoal in the Vernon River in lat. 31° 52' 500 meters, long. 81° 03' 850 meters, where the present chart shows 4 1/4 fathoms. There appears to be no doubt as to the existence of this shoal inasmuch as it was found on two different systems of lines. ✓

Owing to the extensive changes that have taken place in the area covered by this survey, the coast pilot should be revised.

11. The character and scope of surveying and the field drafting are good.

12. Reviewed by A. L. Shalowitz.

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

REG. NO. 4475

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. Sheet 021

REGISTER NO. 4475

State Georgia

General locality Coast of Georgia Coast

Locality Ossabaw Sound and Vicinity

Scale 20,000 Date of survey May²¹ - June 17, 1925

Vessel Steamer BACHE (Launch MIKAWA)

Chief of Party Frank S. Borden

Surveyed by L. C. Wilder

Protracted by G. M. Marchand

Soundings penciled by G. M. Marchand

Soundings in fathoms feet

Plane of reference M.L.W.

Subdivision of wire dragged areas by

Inked by R.L.G.

Verified by R.L.G.

Instructions dated June 24, 1924

Remarks: