

5580

U. S. COAST & GEODETIC SURVEY
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Form 504
Rev. Dec. 1933
DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY
R. S. PATTON, DIRECTOR

DESCRIPTIVE REPORT

~~Hydrographic~~ } Sheet No. 5580
Hydrographic } Field # 27

State Georgia

LOCALITY

Sapelo Sound

Sapelo River

1934

CHIEF OF PARTY

C. A. Egnar

5580

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

HYDROGRAPHIC TITLE SHEET

U. S. COAST & GEODETIC SURVEY
LIBRARY AND ARCHIVES
DEC 28 1934
NO. 5580
Acc. No.

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. 27

REGISTER NO. 5580

State Georgia

General locality Sapelo Sound

Locality Sapelo River

Scale 1/10,000 Date of survey Oct. - Nov., 19 34

Vessel Party No. 23

Chief of Party C. A. Egner, H & GE

Surveyed by C.A.B. Burmeister

Protracted by W.F. Kiley

Soundings penciled by J.G. Pappas

Soundings in fathoms feet

Plane of reference M.L.W.

Subdivision of wire dragged areas by

Inked by P.H. Scherr

Verified by P.H. Scherr

Instructions dated Dec. 5, 19 33

Remarks:

DESCRIPTIVE REPORT
TO ACCOMPANY
HYDROGRAPHIC SHEET NO. 27

AUTHORITY:

This sheet was executed under Instructions dated December 5, 1933 covering operations of Party No. 23 on the Georgia Coast. ✓

PURPOSE:

To provide a more comprehensive survey than has before been available. ✓

LIMITS
AND JUNCTIONS:

The northern limit of this sheet is the junction of the Broro and Julinton Rivers. The southern limit is the junction of Front and Sapelo Rivers and the most northern reaches of the Mud River. The eastern limit is the Front River-Sapelo River junction. The sheet extended westward to include the entire length of Sapelo River. ✓

Sheet 27 joins sheet 26 at the northeast corner, sheet 14 at the east, and sheet 7 (MIKAWÉ) at the south. ✓

CHARACTER
OF LOCALITY:

The land within the immediate vicinity of the water areas is flat open marsh. The wooded areas set back some distance from the river except in spots where they come to the rivers edge. ✓

METHODS:

The usual standard methods were used working from the launch AGLETHORPE. All positions are controlled by sextant fixes from either triangulation or topographic signals. ✓

CONTROL
HORIZONTAL:

In order to properly control this sheet it was necessary to establish some fifteen new triangulation stations. The tree covered ground at Harris Neck and Creighton Island shuts out of view the established scheme to the east. This triangulation was broken down from the 1932 coastal coordinating scheme. In addition only a few topographic signals were necessary to permit rigid control by sextant fixes.

CONTROL
VERTICAL:

Tidal reducers were obtained from the plane of four gages, Pine Harbor, Julienton River, Sapelo Quarantine, and Mud River. The division of the areas is indicated on the boat sheet.

COMPARISON
WITH PREVIOUS SURVEYS:

There exists no satisfactory basis for comparison since the upper reaches of the rivers on this sheet have had no previous survey.

DANGERS AND
CONTROLLING DEPTHS:

No dangers will be encountered by anyone familiar with the navigation of tidal rivers. Channels are not marked but they follow the ebb tide bends. There are two large bars in the area of Julienton River appearing on this sheet. Parts of these bars are as much as three feet above water at low tide and the channel follows very close to the bank on the ebb flow.

*Sdgs obtained on line
indicate 1 to 2 ft. only.
X40741.*

GEOGRAPHIC
NAMES:

Those charted have been retained as the most desirable.

TIDAL
DATA:

Pine Harbor	1.1
Julienton River	-1.0
Sapelo Quarantine Tank	2.0
Mud River (MILLER Staff)	0.36

STATISTICS:

Shown on accompanying table.

Respectfully submitted,

George Fortune

George Fortune
Surveyor

Approved and forwarded;

C. A. Egner, Chief of Party

Signals on
Sheet No. 27

Topographic Stations

Front	Pelxo	Grass
Crescent	Gun	Turk
Center of	Boathouse	
Open	Point	Bridge
Piney	Fairhope	Fair
River	Southerland	
Four	Harris	Neck
Thorpe		

Topographic Stations

Car	Bar	Gar
Kit	Crow	Hen
Star	Five	Lust
Dock	Joe	Jerry
Tom	Rye	End
Mid	Bee	Dance
Corn	One	Julie
En	Ace	Bob

STATISTICS SHEET NO. 27

Date	Day	Vol.	Miles.	Snd'gs.	Pos.
10/25/34	a	1	4.3	104	54
26	b	1	6.0	145	37
27	c	1	11.2	251	69
29	d	1	37.8	917	239
30	e	1	9.0	223	58
30	e	2	27.5	713	194
31	f	2	37.5	986	242
11/10/34	g	3	1.5	73	19
11	h	3	4.0	82	22
15	j	3	<u>14.3</u>	<u>480</u>	<u>186</u>
Totals			153.1	3974	1060

Section of Field Records

Report on H-5580

Chief of Party - C. A. Egner

Protracted by - W. F. K.

Surveyed in October, November, 1934.

Surveyed by C. A. Burmeister

Soundings plotted by J. G. P.

Verified and inked by P. H. Scherr.

1. The records conform to the requirements of the General Instructions with the following exceptions - in the majority of positions at the top of each page the names were not noted but carried over ^{in the letter "S"} from the preceding page. Changes in course are not mentioned in that column, which might have been helpful in many doubtful points in this sheet. Bottom characteristics are not noted consistently as called for by the manual.

- 2. The depth curves were drawn. Single lines of soundings did not have curves inked, as per Standard practice.
- 3. The field plotting was complete to the extent prescribed in the General Instructions with the exception that Station "NOW" was not inked on the sheet, but had been pricked through. This was checked + inked.
- 4. The office draftsman changed a few portions of the shore line after the aero. photo sheets were examined.
- 5. No junctions were made as none of the adjoining sheets had been completely verified.

6. Remarks.

Notes and sketches of islands, snags, are found on the boat sheet, of which no other indication is found. These, listed below, were not transferred to the smooth sheet, pending the review of the sheet.

		<u>LATITUDE</u>	<u>LONGITUDE</u>	
Island	at	31° 32.9	81° 19.1	} Inhab from Air Photos
Island	.	31° 31.8	81° 20.1	
spit	"	31° 31.6	81° 20.3	} Inhab from P.S.
island	"	31° 30.3	81° 21.5	} Inhab from photos
snags	"	31° 34.0 ^{33.8}	81° 21.6	} Inhab from P.S.
"	"	31° 32.0	81° 22.9	} " " "
"	"	31° 31.6	81° 24.0	} " " "
"	"	31° 32.8	81° 19.8	} supported by -2 and -3 says. No note necessary

Note - BARE at L.W.

H.W.M.

The triangulation station Sutherland², 1932 (the datum station) is given the designation of Sutherland "2" on the smooth sheet. The adjusted files list this same station without the "2." (original station 1852)

All the geographic names on the smooth sheet were lettered by the field party.

The aero-photo sheets covering this area was examined and the topography compared with that of the smooth sheet. Some discrepancies were changed by us and others referred to B. J. Jones in Aero-photos. The high water line and dashed line at latitude 31° 31.5; longitude 81° 18.0 were taken from aero-photos

sheet # 5219 and changed on the smooth sheet. Discrepancies concerning the 3 docks and the conflict between hydrography and topography at latitude $31^{\circ}30.5$; longitude $81^{\circ}21.6$; and 2 docks at latitude $31^{\circ}32.7$; longitude $81^{\circ}22.5$; the inking of the shore line north of topo. station GAR which appears as a single line on the aero-photo sheet, were all referred to Jones. Above discrepancies disposed of. 9/19/35 N.W.M.

Topography for Brovo and Julinton Rivers, NE corner of sheet, and that, south of latitude $31^{\circ}31'$, east of longitude $81^{\circ}21'$ could not be compared with the smooth sheets as sheet covering this is not in the office. Topos compared. 9/19/35 N.W.M.

The character of work was only fair, the protracting had a number of errors, spacing of soundings were poor. The smooth sheet plotter made the error consistently of plotting $-\frac{1}{2}$ soundings, which were greater than -1 , to the next whole foot. The verified inked $-\frac{1}{2}$ soundings on the sheet. These were not changed, but referred to Mr. Skalawitz.

Respectfully submitted

Paul H. Scherr.

March 2, 1935.

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

Survey No. H 5580

GEOGRAPHIC NAMES
 GEORGIA

Chart No. 1241

Date. Jan. 17, 1935

Names approved Jan. 30, 1935 *Helen M. Strong*

Diagram No. 1241-2

* 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.

Harlow Bacon

Status	Name on Survey	Name on Chart	New Names in local use	Names assigned by Field	Location
	<u>Harris Neck</u> ✓	Same		✓	
	<u>Julinton River</u> ✓	"		✓	
	<u>Broro River</u> * ✓	"		✓	
	<u>Four Mile Island</u>	" <u>Fourmile Island</u> ✓		✓	
	<u>Sapelo River</u> ✓	"		✓	
	<u>Back River</u> ✓	"		✓	
	<u>Front River</u> ✓	"		✓	
	<u>Creighton Island</u> ✓	"		✓	
	<u>Mud River</u> ✓	"		✓	
	Note:				
	The Names on this Sheet were inked on the Sheet by the Field				
				✓	<u>White Chimney River</u> U.S. Engrs.
	*Brewer River U.S. Engrs.				

Field Records Section (Charts)

HYDROGRAPHIC SHEET NO. 5580

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

Number of positions on sheet	.....	1060
Number of positions checked	.....	47
Number of positions revised	.....	22
Number of soundings recorded	.....	3974
Number of soundings revised	.....	152
Number of signals erroneously plotted or transferred	.....	✓

Date: *Mar. 2, 1935*

Verification by *Paul H. Scherr*

Time: *42 1/2 hrs.*

Review by *Harry T. Kelsch and H. W. Murray*

Time: *13 hrs*

" *7 1/2 "*

Verifications Correction by ..

" *5 "*

Section of Field Records

REVIEW OF HYDROGRAPHIC SHEET NO. 5580 (1934) - FIELD NO. 27

Sapelo River, Sapelo Sound, Georgia

Surveyed October - November, 1934

Instructions dated December 5, 1933 (C. A. Egner)

Hand Lead Soundings.

3 Point Fixes on Shore Signals.

Chief of Party - C. A. Egner.
Surveyed by - C. A. Burnmeister.
Protracted by - W. F. Kiley.
Soundings Plotted by - J. G. Pappas.
Verified and Inked by - P. H. Scherr.

1. Condition of Records.

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

- a. On the cover label and title page of the sounding records, the position numbers and day letters were in black ink. These were changed to the proper color in the office. (Par. 138).
- b. The names of signals were not consistently entered at the top of each page of the sounding records.
- c. Bottom characteristics were not entered consistently as called for in the Hydrographic Manual.
- d. Geographic names were inked on the sheet by the field party instead of being left in pencil as required by Par. 160. Names of islands were inked in slanting lettering instead of vertical lettering, the accepted standard practice. These were not changed in the office.
- e. The character of topographic signal "Rock" (lat. $31^{\circ} 32.0'$, long. $81^{\circ} 22.2'$) originating with T-6160b (1934) and falling outside the high water line is not known. The signal falls near the mouth of a small stream and if established on a natural feature, such feature would be of navigational importance. This matter has been referred to the field party.

Signal on tree
at H.W. mark.
See letter dated
Oct. 14, 1935
attached to D.R.

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

2. Compliance with Instructions for the Project.

The plan, character, and extent of the survey satisfy the instructions for the project. Some reference, however, should have been made in the sounding records or descriptive report regarding the degree of navigability of several small creeks not entered and not closed off by shoal soundings.

3. Sounding Line Crossings.

No general system of cross lines was run but those that were, as well as the adjacent lines, show good agreement.

4. Depth Curves.

The usual depth curves may be satisfactorily drawn within the limits of the survey, including a large percentage of the low water line.

5. Junctions with Contemporary Surveys.

- a. The junctions with H-5586 (1934) on the north and H-5633 (1934) on the south are entirely satisfactory.
- b. The junctions on the east with H-5583 (1934) is satisfactory except that the 11 and 13 foot soundings (line 36 - 37f, red) on the present survey in lat. $31^{\circ} 31.9'$, long. $81^{\circ} 17.8'$ fall in general depths of about 18 feet on H-5583 (1934). While there are indications of rapid changes in bottom here, additional development should have been made in the field in order to clearly define the hydrographic features in this vicinity.

6. Comparison with Prior Surveys.

a. H-660 (1858).

This is the only prior survey, and covers the general Sapele River area as far west on the river as long. $81^{\circ} 20.8'$. A study of this survey shows a close agreement in some areas but general changes in others and a detailed comparison will serve no useful cartographic purpose. In addition, this survey contains no important information that is not adequately covered on the present survey. The only exceptions are two shoal soundings obtained on oyster rocks; one with a least depth of 11 feet (charted) in lat. $31^{\circ} 32.4'$, long. $81^{\circ} 18.5'$ and one with 10 feet (not charted) in lat. $31^{\circ} 32.2'$, long. $81^{\circ} 18.2'$. The first sounding falls close to similar depths on the present survey and should be superseded by depths on that survey. The other sounding is not borne out by depths on the present survey and may be 1 fathom too shoal. In view of the lapse of time between the 1858 survey and the present survey, together with the uncertainty regarding the accuracy of the 10 foot sounding, the latter should be disregarded in future charting.

7. Comparison with Chart No. 547 (Corrected to January 19, 1934).

a. Hydrography.

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.

- b. The source of the charted feature in lat. $31^{\circ} 33.6'$, long. $81^{\circ} 18.8'$ is not known. It was first shown on Standard 574 (1927) but not on the preceding superseded Standard 444 (1921) and furthermore, has never been charted on the small scale chart No. 1241 covering the same area. A line of 5 foot soundings was run very close to the feature on the present survey and no mention made in the sounding records. The feature is probably non-existent at the present time and should be disregarded in future chartings.

8. Field Plotting.

The field protracting and plotting ~~were accurate and~~ conform to the requirements of the Hydrographic Manual, except that a number of positions were incorrectly protracted and numerous soundings were incorrectly spaced with respect to time interval. These were corrected in the office.

9. Additional Field Work Recommended.

This survey is complete and no additional field work is required.

10. Superseding Previous Surveys.

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

H-660 (1858) in part.

11. Reviewed by - Harry T. Kelsh, March, 1935, and Harold W. Murray, September 19, 1935.

Inspected by - A. L. Shalowitz.

Examined and approved:

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

J. S. Borden
Chief, Section of Field Work.

L. O. Gilbert
Chief, Division of Charts.

G. W. Harde
Chief, Division of H. & T.

POST-OFFICE ADDRESS: U. S. Coast and Geodetic Survey Ship "HYDROGRAPHER",
Station F, New Orleans, Louisiana.
TELEGRAPH ADDRESS:
EXPRESS ADDRESS:

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

October 14, 1935.

TO: The Director,
Coast and Geodetic Survey,
Washington, D. C.

FROM: Clarence A. Burmister, Lieut. (jg)
Coast and Geodetic Survey
Ship HYDROGRAPHER.

SUBJECT: Signal "ROCK", H-5580(Field 27)
Sapelo River.

REFERENCE: Director's letter 80-DRM - Sept. 30, 1935.

Signal "ROCK" was a small pine tree growing on an out-cropping of very hard mud which on first sight appeared to be rock. This out-cropping was about at the ordinary high water mark, of fairly large extent, but not particularly conspicuous. It was not considered of value as either a land mark or as a land feature worthy of charting.

Clarence A. Burmister
Clarence A. Burmister,
Lieutenant (j.g.)
Coast and Geodetic Survey.

Information applied to sheet

80 KTR
1935 OCT - 17 - AM 11:46

CKG
KTA
S

80-DRM

September 30, 1935.

To: Lieutenant Commander C. A. Egner,
U. S. Coast and Geodetic Survey,
P. O. Box 908,
Tallahassee, Florida.

From: The Director,
U. S. Coast and Geodetic Survey.

Subject: Signal "Rock", H 5580 (field number 27), Sapelo River.

There is inclosed a photostat of a section of your survey H 5580 (field number 27), Sapelo River, on which is indicated in yellow signal "Rock". Since the records contain no information regarding the feature on which signal "Rock" is located, you will please advise as to whether there is a natural feature at this location in order that it may be properly charted.

(Signed) R. S. PATTON

Inclosure.

Director.

Reply attached to D.R.

January 29, 1935.

Division of Hydrography and Topography:

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

Tide Reducers are approved in
3 volumes of sounding records for

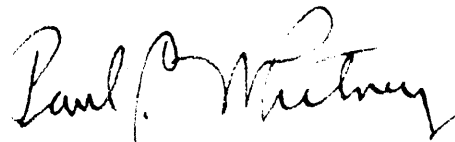
HYDROGRAPHIC SHEET 5580

Locality Sapelo River, Georgia

Chief of Party: C. A. Egner in 1934
Plane of reference is mean low water, reading
2.0 ft. on tide staff at Sapelo Sound Quarantine
8.4 ft. below B.M. 1
1.1 ft. on tide staff at Pine Harbor
17.7 ft. below B.M. 1
0.4 ft. on tide staff at Mud River
8.1 ft. below B.M. 1
-1.0 ft. on tide staff at Julienton River
18.3 ft. below B.M. 1

Height of mean high water above plane of reference is 6.9 feet at Sapelo Sound Quarantine; 8.0 feet at Pine Harbor; 8.1 feet at Mud River; 7.5 feet at Julienton River.

Condition of records satisfactory except as noted below:



Chief, Division of Tides and Currents.

Applied to Chart 840, Dec. 1935 W.A.B.

Applied to drawing of new compilation of Chart 574 - Nov. 2, 1936 - J.F.W.