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Form 504 Ed. June, 1928				
DEPARTMENT OF COMMERCE • U. S. COAST AND GEODETIC SURVEY R. S. Patton Director				
State: Georgia				
DESCRIPTIVE REPORT				
Hydrographic Sheet No. 145 (field)				
LOCALITY				
Sapelo Sound and				
vicinity.				
,				
19\$4				
CHIEF OF PARTY				
C. A. Egner				

DEC 28 1934

HYDROGRAPHIC TITLE SH

REG. NO5583

The Hydrographic Sheet should be accompanied by this form, filled in as completely as possible, when the sheet is forwarded to the Office.

DEPARTMENT OF COMMERCI U. S. COAST AND GEODETIC SURVEY

Field No. 14

REGISTER NO 5583

StateGeorgia
General locality Sapelo Sound
Locality
Scale 1/10,000 Date of survey Mar. & Nov., 19 34
Vessel Party No. 23
Chief of Party C. A. Egner, H.& G.E.
Surveyed by H.O., J.M., C.A.B.
Protracted by G.R.D., V.F.S.mmore
Soundings penciled byV.F.S.
Soundings in /a/t/h/s/s feet
Plane of reference .M.L.W.
Subdivision of wire dragged areas by
Inked by M. Silverley Inspection by R. B. Krum Verified by M. Silverley
Instructions dated Mec. 5 , 1933
Remarks:

U. S. GOVERNMENT PRINTING OFFICE: 1931

DESCRIPTIVE REPORT

TO ACCOMPANY

HYDROGRAPHIC SHEET NO. 14

INSTRUCTIONS:

This sheet was executed under Instructions dated December 5, 1933, covering combined operations of Party No. 23 in conjunction with those for the Tender GILBERT, on the inside passage of the Georgia coast.

PURPOSE:

The work was done to provide a comprehensive survey of the inland waterway for navigational purposes, there being no up-to-date survey available.

LIMITS AND JUNCTIONS:

This sheet includes Sapelo Sound and the junctions therewith of the South Newport, Sapelo, Mud, and Julienton Rivers. The northern limit is the junction of the Wahoo and South Newport Rivers and the southern limit is the junction of Mud River and Sapelo Sound. The sheet extends eastward to include all inland area of Sapelo Sound and westward to the junction of Front River and Sapelo River.

Sheet 14 joins sheets 13 and 26 to the north, sheet 27 to the west, and sheet 7 (MIKAWEE) to the south.

CHARACTER OF LOCALITY:

In general the water areas of this sheet are included in a flat grass-covered marsh area broken only by small clumps of trees and scrub growths, located between the high tree covered ground on St. Catherines and Sapelo Islands to the east and the tree covered areas of Creighton Island and Harris Neck to the west. Tides from Sapelo Sound are the controlling tides for the area covered by this sheet.

OVERLAPS IN SUPERVISION OF THIS SURVEY:

The main body of the Sound was completed under the supervision of Lieut. Odessey and when received by Field Party No. 23 all side creeks and rivers remained to be sounded, together with numerous split lines and the Sapelo Sound-Sapelo River junction. This additional work amounted to about 72 miles of sounding lines and and required the re-erection of many of the old signals and the building and locating of a few new ones.

METHODS:

Sufficient control was established to permit all sounding to be controlled by fixed positions with a sextant. The main body of the sounding was done by a dinghy, the launch PATSY, and the Tender GILBERT, The additional work done after the sheet was received by Field Party No. 23 was done by the launch OGLETHROPE. All sounding was done by hand line using the standard 8-pound lead.

Control Horizontal:

The Coastal Co-ordinating Scheme of 1932 was found to be sufficient for the control of the topography except at the western extremity of the sheet where four additional third order stations were established by breaking down the 1932 scheme. Sufficient topographic signals were then established to give proper control for the hydrography.

CONTROL VERTICAL:

All sounding on this sheet is controlled by one gage - the Sapelo Quarantine gage. The general open water area permits the use of one gage without time or height corrections. It is believed no appreciable error results from this pratice even in the side creeks and rivers. The Sapelo Quarantine gage is a portable automatic gage well compared by simultaneous observations with the Fort Screven gage.

COMPARISON WITH PREVIOUS SURVEYS:

No satisfactory basis exists for comparison.

DANGERS AND

CONTROLLING DEPTHS: Controlling depth is 7 feet wishing this survey. Hum.

The only danger on this sheet is in the vicinity of Beacon No. 1 at the mouth of Mud River. The controlling depth is 5 feet and the channel is very narrow. It is marked by a range and boats drawing near the limiting depth should stay on the range because the channel is less than 100 meters wide at a point 250 meters northeast of Beacon No. 1. Boats traveling the inland waterway will have no other difficulties than the one mentioned since the channels are well marked by unlighted beacons and buoys. Good anchorages are available anywhere on this sheet in proper depths of water.

GEOGRAPHIC NAMES:

Old retained names and local names as charted are considered the best ones available.

AIDS TO NAVIGATION:

The channels of the inside route are well established by ranges, day beacons and buoys.

COAST PILOT INFORMATION:

Any information not here recorded will be found in the season's report covering the entire project.

TIDAL DATA
AND STATISTICS:

Are shown on separate sheets forming a part of this ν report.

Respectfully submitted,

Singe Fortune

Approved and forwarded;

C. A. Egger, Chief of Party.

Hydrographic statistics to accompany Sheet No. 14

Field Party No. 23, C. A. Egner, Chief of Party

Date	Volume	Day	Boat	Miles	Snd 'gs	. Pos.
Mar. 8, 1934		A	GILBERT	29.0	554	143
11	la	В	, " n	23.7	604	126
<u></u> 2	la	C	11	26.9	55 5	137
13	2a	D	11	26.4	818	145
14	. 2a	E	11	19.5	596	112
15	2a	F	11 -	6.3	200	41
Mar.20, 1934	1b	а	PATSY	10.9	355	64
21	1b	ъ	11	26.0	823	185
22	lb - 2b	C	11	26.5	8 5 5	171
22	lc	а	Dinghy	21.1	966	148
23	1c	Ъ	n	20.5	867	137
23	೭೬	đ	PATSY	24.9	827	183
24	2b	е	11	6.3	205	5 5
24	20	е	Dinghy	11.1	432	84
28	2 d - 3c	f	ii	30.2	1167	200
Oct.25, 1934	ld	a	OGLETHROPE	29.8	695	195
26	1 d	Ъ	11	12.0	320	80
27	ld	C	n	11.5	255	74
31	ld	đ	11	1.8	47	14
Nov. 8, 1934	. 2đ	е	#	2.3	6 1	18
10	2d	f	11	14.3	408	105
Mar.24, 1934	. 2c	C	Dinghy	10.3	404	71
25	<u> 2c</u>	đ	17	4.7	162	30
•	· Γ	tels		396.0	12176	2518

Signals on Sheet 14

Triangulation Stations

Point	Quarantine	Tank
Chim	Sap 2	Sap 1
North U.S.E.	•	Coffin U.S.E.
Bn. "l" Mud	River	Shell
Front	Thorpe	Monk
Mud	Cedar Hamme	oek
Barbour	Oldnor	Bn. "7"
Newport	St. Cathrin	ne 2

Topographic signals

Did Al Dim Sid In Bit Bum Up Let Nut Job But An Ale Dim Ton Chic Ago Mis Sam Bit Mac New Wil	Ex Tip Well Pan Tel Pole Jane End Toe May Wet Lit Beh Bob Liz En Peg Ill Got Ted Cal Jo Bronx Fit	Bo Ban Bain Pot Witty Rear Dell Can Kid Ned Lot Zoe Car Cat Tem Julie Flag Mond Low Doe Dot York Sam Ink
Bad	Bin	Low or Law
Dan	Al	Tom
Die	Cone	Sing
West	East	Dog
Cal	Hot	Ant
Win	Sit	Doll
Hill		- +

Cartal, Verification Report 14. 5583

Je records are legible, and with the exception of four volumes, they are meat. In these four volumes it is not possible to translate many of the hattom characteristics.

hotracting:

So far as can be seen from a visual inspection, the spratracting is of good quality. The writer made a careful visual companion between the boat sheets and. The smooth sheet- some so positions where the agreement between the two sheets appeared saustful, were noted for future protracting.

The field drafting is of poor quality and in general shows careless workmanship. It appears as though the soundings thoughout the solet had been spaced by eye without the aid of spacing dividue atthough the winter cannot be certain of this until the inking is completed.

Comparison with other Data:

The smooth select has been compared with an photo compilation sheets 5218 and 5219 (these numbers refer to an photo section files) Corrections to topography have been indicated on the smooth sheet an pencil the low water lines have been transferred from these compilation sheets and infect by the field draftman in a dash line these should be changed to datted lines wherever the hydrography is insufficient to define a yellow curry.

The smooth sheet was compared with T. 6158 b, T. 6189 a and T-6189 b (all 1934 work) and found in agreement. No identifications is made of the topographic detail upon which many stations outside the high water line are located, especially the station in lat. 3'30.7' long 81'15'91 the afare mentioned compilation sheets and air photo control sheets as well as the hoat sheets were searched for this data. There is one after air photo I compared in sheet and one at two ather are photo au photo control sheets converg the area that have not been compared with this amount abert since they were not available at the time of their winting the wind the time of their winting the wind the time of their winting the wind the time. How

Gemarks:

The names were inked in the field. Exprographie names appear in slant letters whereas it is general practice to show them in vertical letters. The overlap natis, inked in black I by the field draftsman must be removed and inked in color.

The writer completed inking the soundings of A day (red)

Respectfully submitted

Feb. 12. 1935

Postum

Completed Verification Report H-5583 (This report covers only points not before mentioned)

I. Conformity to Hydrographic Manual

The day letters in Vol. 16 were changed from red to blue to conform with smooth steet, also in Vol. 1c. They were changed from blue to green in Vol 26. and from black to green in Vol ZC. Vol. 6 was numbered mionestly, being 3 and 3 should have been 6. The position numbers and day letters on the Vol. covers did not agree with adors in records. To retarge were reall at but of f (grown) day in the 24. on he smooth sheet, The names of signals were not listed at top & each page in records no chart for the U.S. Sighthense Service was found by the verifier, and the topographic reports covering the area were not grailable to assertain whether the Landmarks for cliente were submitted. the notes on the smooth sheet decibing the projection colors used were wrong and had to be reversed.

I slepth aures

the low water line lead to be removed where superseded by the hyphography and the remainder change from a dealed black line to a dotted one. The six, twelve, eighten and thirty fout were are complete within the limits of the sheet.

The soundings about without exception had "
to be respaced. Several dangers were not

transfered from the boot sheet. The field plotting was however correct to the extent required for the soundings. The triangulation states at the mouth of Mod River (much Brien, Front Range No"1" 1932) was plotted but not indicated mor described.

I Office Plotting

transfered from the boot sheet, but could not be verified from any topographic surveyor water.

3 51° 44.9') the rock pile or old dock (Nat 31°- 32.25, doing. 12.45) was taken from the book alect and verified by note in the records appoints position.

reduce was left in plucial to await the reviewer's electricism. - nome inkel- Hum.

Pos. 68 c (red) (dat 31-33.35, doing 81-17.8) - Right angle changes 1° to compour with this, comes and book sheet.

The same for positions 71 c + 72 c (red) (bat. 31-33.5', doing 81-17.5') but it. angle changes 2:

Ale following positions were rescribed, plotted:
Por 1a (red) (dat. 31°-33.2 dang 81° 18')

Por 99a (red) (" 31°-33.8 " 81° 15.3')

Por. 25426 (a) (green) (" 32°-31.75 " 81° 16.75')

Por 121(a) (green) (" 31°-32.2 " 81° 16.1') 180 m. M

Por 26(d) (") (" 31°-31.4 " 81° 14.98') plotted

by left angle, course and time. Right angle probably

NO 5°

I Junctions

The juntion with H-5582 (1934) to the NE is satisfactory with the possible exception of four soundings (Lot 31-34.7' Long 81°11.2) where a 3 ft discrep any is noted. He lines on both suveys were checked carefully but no justifiable changes could be made. accepted - 1 mm. the prinction with H 5586 (1934) to the North is satisfactory, with the exception of a 32' and 33' source (Lot 31-34.55, Long 810148) Nese Cooker cloudiffee but we sharps could be made

the junctions with H-5580 (1934) to the East and mufas will in the review. with H-5575 (1934) to the south were satisfactory. No junction with H- 5633(1934) would be made since the survey has not been verified.

VI Remarks

no further air- pluto compilation sheet on contine survey, other than before mentioned in freceeding report were available.

DALE changed an smooth sleet to ACE to agree a with boot sheet and sounding records. the attention of the reviewer is called to the following discopanie: -

I change in left L -a 15 ft sounding between a 5'ame 4' (bat. 31°-31.8, Long 81°-16.3)

Discussed in Rev. - a 13 ft " " 20' " 21' (" 31° - 1. " 20' " 21' (" 31°-32.4, "81°.15.6) Probably a hand start and 11 ft. " 15" " 16" (" 31° - 33.1, " 81°-10.6)

Respectfully submitted,

Mouton Silvatery

Field Records Section (Charts)

HYDROGRAPHIC SHEET NO. 5583

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

Number of positions on sheet	2518
Number of positions checked	60
Number of positions revised	9
Number of soundings recorded	12176
Number of soundings revised	52
Number of signals erroneously	
plotted or transferred	

Date: 3/13/34	tion by R.B.Krum	_Time_	20 hrs.
Verification by	M. Silverborg	Time:	103 hrs.
Review by	Harold W. Murray	Time:	25 "

January 14, 1935.

Division of Hydrography and Topography:

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

Tide Reducers are approved in 9 volumes of sounding records for

HYDROGRAPHIC SHEET 5583

Locality Sapelo Sound, Georgia

Chief of Party: Herman Odessey in 1934
Plane of reference is mean low water reading
2.0 ft. on tide staff at Sapelo Sound Quarantine Dock
8.4 ft. below B.M. 1

Height of mean high water above plane of reference is 6.9 feet.

Condition of records satisfactory except as noted below:

Chief, Division of Tides and Currents.

To;	H.M.	Strong
From	n: Cal	T.M.

GEOGRAPHIC NAMES GEORGIA

Survey No	H 5583	
Chart No	1241	

Date.	Jan.	17;	1935

Names approved Fab. 1, 1935. Helen M. Strong

1241-2

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

 \rlap/c , 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
	Little Mud River	Same			
	Julienton River	H			
	Four Mile Island shaule	Four Mile the Formule Island			
	Dog Hammock	33 m e			(
	Front River	Ħ			
	Creighton Island	19			<i>a</i>
	Mud River		/		
- , · 	Sapelo Island	H			
	\	77			-
	High Point				
	Blackbeard Island				
	Barbour Island River OK	TI .	1		
····		#	Todd River		
	Todd River				· ·
	Oldnor Island OK	Same	<u> </u>		•
***	South Newport River	*			
	Brunsen Creek	17	<u> </u>		
!	St. Catherines Island	PF .			
	Note:				
		Sheet were inked in by	v the Field.		
	Sapelo "iver				
	Sapela Sound		V		
					(M

Section of Field Records

REVIEW OF HYDROGRAPHIC SURVEY NO. 5583 (1934)

Sapelo Sound, Georgia
Surveyed in 1934
Instructions dated December 5, 1933 (NATOMA)

Hand Lead Soundings - 3 Point Control on Shore Signals.

Chief of Party - C. A. Egner.
Surveyed by - H. Odessey, J. Morton and C. A. Burmeister.
Protracted by - G. R. Dietz and V. F. Simmons.
Soundings plotted by - V. F. Simmons.
Verified and inked by - R. B. Krum and M. Silverberg.

1. Condition of Records.

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

- a. Names of topographic features were inked in slanting letters by the field party instead of vertical letters which is in accordance with the usual practice.
- b. 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).
- c. No chart containing objects for locating Aids to Navigation for use by the Lighthouse Bureau was submitted.
- d. Two complete projections were shown on the smooth sheet as received from the field; one representing the "North American Datum" (in red) and the other the "North American 1927 Datum" (in black). Two full projections on a sheet are always confusing, and where the values on the 1927 Datum are available (as appears to be the case on this sheet) there is no necessity for showing the N.A. Datum. The latter projection has been retained on the smooth sheet although it is inaccurately drawn; its distance from the 1927 projection varying from 2 to 8 meters on the parallels.

2. Compliance with Instructions for the Project.

The plan, character and extent of the survey satisfy the instructions for the project, except as noted in paragraphs 9 and 10 of this review.

3. Sounding Line Crossings.

Sounding line crossings are satisfactory; general agreement of soundings being within 1 to 2 feet.

4. Depth Curves.

Within the limits of the survey, the usual depth curves may be satisfactorily drawn including the major portion of the low water curve.

5. Junctions with Contemporary Surveys.

- a. The junction on the northeast with H-5582 (1934), on the north with H-5586 (1934) and on the south with H-5575 (1934) is satisfactory.
- b. The junction on the west and northwest with H-5580 (1934) is satisfactory except that in the vicinity of lat. 31°31'.9, long. 81°17'.8, the 11 and 13 foot soundings of the latter survey fall in depths of about 18 feet on the present survey. 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.
- c. The junction on the south and southwest with H-5633 (1934) will be considered in the review of that survey.
- d. There are no contemporary surveys to the eastward of long. 81°10'.5 in Sapelo Sound, however a fair junction may be made with H-4470 (1924-25) in this vicinity. In the area south of red buoy N6 the two surveys are in good agreement but the area northward of the buoy appears to have changed radically.

6. Comparison with Prior Surveys.

a. H-659 (1858) and H-660 (1858).

Soundings of the above surveys vary 1 to 12 feet deeper in some areas and 1 to 7 feet shoaler in others than those of the present survey, however a few spots are unchanged. In addition, marked changes in shoreline have taken place the more important of which is the point in approx. lat. 31°33', long. 81°11' which according to the present survey has receded nearly 1/3 of a mile northward from its 1858 location.

b. H-2752 (1902) and H-2753 (1902).

Soundings of the above surveys vary from 1 to 10 feet shoaler than those of the present survey. However, in depths of 35 to 40 feet and deeper, little change has taken place. Several prominent shoal spots were obtained on the above surveys, but comparison of soundings in the immediate vicinity with those of the present survey indicates general changes, making it inadvisable to carry forward any critical depths from the 1902 survey.

c. H-4470 (1924-25).

Soundings of this survey are in fair agreement with those of the present survey in the deeper areas but marked changes have taken place in the shoaler areas, amounting in some cases to as much as 6 feet. A number

of shoals were obtained on this survey, soundings of which vary 1 to 2 feet shoaler than those of the present survey. However, in view of the changeability of the areas involved, no soundings were carried forward except the 23 foot sounding (charted) in lat. 31° 32'.6, long. 81°12'.8 and the 12 foot (uncharted) in lat. 31°32'.9, long. 81°10'.5. Although changes of 1 to 3 feet are noted here, the development on the present survey is not considered sufficient for their disproval.

Of the soundings which were not carried forward the most important is a 14 foot spot (charted) in lat. 31°32'.57, long. 81°10'.6 which falls in depths of 23 feet on the present survey. The adjacent area has changed radically, the present survey showing depths of 12 feet about 100 meters north of the 14 where the old survey showed 31 feet.

7. Comparison with Chart No. 574.

a. Hydrography.

Soundings shown on the above chart originate with surveys discussed in the foregoing paragraph. The U. S. Army Engineers' survey of 1929 (B.P. 23,138 and 23,139) in the vicinity of the dredged channel at the mouth of Mid River has not been applied to the chart due to lack of sufficient control, however, depths on the present survey show a general shoaking of from 1 to 3 feet. The Engineers' survey will be superseded by the present survey.

b. Aids to Navigation.

Buoys N, N4, N6, and C and C5 were located on the present survey in practically the same positions as charted. The remaining aids were located in positions varying 110 to 250 meters from their charted positions, however, with the exception of red buoy N6, (lat. 31° 32'.4, long. 81°15'.8) the positions as determined on the present survey adequately mark the features intended. The shoaling, which was formerly west of Buoy N6, has extended approximately 250 meters eastward and the buoy should be moved in that direction a corresponding distance.

c. Controlling Depths in Channels.

- (1) Soundings on the present survey in that portion of Mud River Channel which falls within its limits show a controlling depth of 7 feet which compares favorably with the charted depth of $5\frac{1}{2}$ feet as of May, 1933.
- (2) The charted depth in Front River Channel is $9\frac{1}{2}$ feet as of May 1933 whereas 11 feet is the controlling depth determined on the present survey. In addition, Chart Letter No. 475 (1934) states that the controlling depth as determined by the U. S. Engineers is $10\frac{1}{2}$ feet (actually 10.7 feet) as of May, 1934 which determination was made at least a month later than the hydrography done on the present survey in this vicinity.

8. Field Plotting.

Field protracting and plotting were satisfactory except as follows:

- a. Soundings were not consistently plotted with respect to course and time intervals and in many cases varied as much as 50m. from their correct positions. (Par. 147). All soundings so plotted were revised in the effice.
- b. Notes indicating junctions with contemporary surveys were shown in black ink instead of pencil. These were revised in the office in accordance with the usual practice.

9. Doubtful Soundings.

The 13 foot sounding (line 58 to 59A, red) falling in depths of around 20 feet in lat. 31°32.4°, long. 81°15.6° is probably a leadsman's error and should have been investigated in the field. No indication of shoaling was found on the present survey nor on H-4470 (1924-25) which also shows depths of 20 feet.

10. Additional Field Work Recommended.

- a. The doubtful IS foot sounding, described in the preceding paragraph should be verified or definitely disproved. Its importance lies in its proximity to the channel into Front River.
- b. A closer development of some of the shoal spots off St. Catherines Island in the general vicinity of lat. 31°33', long. 81°10.5' out to the 30 foot curve, particularly the undeveloped shoal area in lat. 31°32.6', long. 81°10.8'.
- c. Hydrography should be carried to the head of navigation in Brunsen Creek, if the latter is sufficiently important.

11. Note to Compiler.

The charted rock piles and old dock in lat. 31°32.2', long. 81°12.5', as well as the old dock in lat. 31°32.0', long. 81°12.3', are noted in the sounding records and generally verify the delineation shown on T-4121 (1924-25). Owing to the failure of the present field party to definitely outline the limits of the old docks and rock piles, the delineation from T-4121 (1924-25) has been transferred to the present survey and is shown in black. The charted pile in lat. 31° 32.2', long. 81°12.4' which originates with T-4121 (1924-25) was not located on the present hydrographic nor contemporary topographic survey and has been carried forward on H-5583 (1934).

12. Superseding Previous Surveys.

Within the area covered, the present survey, with the indicated additions from previous surveys, supersedes the following surveys for charting purposes:

	H-659	(1858)	In	Part.
	H-660	(1858)	*	*
	H-2572	(1902)	11	#
	—H-2573		11	**
	H-4470	(1924-25)	12	11

13. Reviewed by - Harold W. Murray and R. L. Johnston, April, 1935.

Inspected by - A. L. Shalowitz.

Examined and approved:

C. K. Green, J. Sylly Chief, Section of Field Records.

Chief, Division of Charts.

Chief, Section of Field Work

Chief, Division of H. & T.

applied to new chart 574 - Oct, 30, 1936 - JTW.