Form 504 Ed. June, 1928					
DEPARTMENT OF COMMERCE					
U. S. CÓAST AND GEOD					
R.S. Patton	, Director				
State: Georgia					
DECCDIDENT					
DESCRIPTIVE	REPORT				
Topographic   Sheet No. 6 Hydrographic					
LOCALITY					
Doboy Sound					
and Tributaries, Georgia					
Mud River to South River					
Project No. HT-167					
	· ·				
1934					
I .					

### DEPARTMENT OF COMMERCE

U. S. COAST AND GEODETIC SURVEY JAN 27 1935

### 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. \_\_\_\_ 5632 REGISTER NO. State .... Georgia b General locality Doboy Sound 10 Locality Doboy Sound and Tributaries Mud River to South River Scale 1:10000 Date of survey March - April , 19 34 Vessel \_\_\_\_ Launch MIKAWE Chief of Party John A. Bond, H, & G. Engr. Surveyed by F. R. Gossett & D. E. Sturmer Soundings penciled by N.J.P. Soundings in trakhomer feet Plane of reference .... Mean low water Subdivision of wire dragged areas by \_\_\_\_\_ Inked by IRVIN MICHAELSON Verified by LRVIN MICHAELSON Instructions dated December 5, 1933. 19

Remarks: Soundings for SubSheet 5 are contained in

volume 11 Sheet H 5631

#### DESCRIPTIVE REPORT

To Accompany Hydrographic Sheet No. 6

Doboy Sound and Tributaries, Ga.

PROJECT No. HT-167

### **EUTHORITY**

The work on this sheet was executed in accordance with Director's Instructions dated Dec. 5, 1934.

### SURVEY METHODS .

Standard Coast Survey methods of hand-lead sounding in accordance with the Hydrographic Manual were used throughout the sheet. The lead-line was standard, mahogany colored, wire centered line, marked to feet and using 8 and 12 pound leads. The boat used was a 24 ft. 2 cylinder hired launch equipped with a sounding chair and plotting table. The work through "m" day was done with Lieut. (j.g.) F. R. Gossett in charge. After "m" day Ensign C. F. Chenworth was in charge. All lines were run using natural ranges, buoy and target ranges; except in the small creeks where the lines followed the streams. When the current was too strong to take accurate soundings against it, lines were run with it only. Control consisted of cloth signals and natural objects located by standard Coast Survey methods of triangulation and planetable topography. The work was done without definite shoreline. Approximate shoreline was taken from old surveys and preliminary photo sheets and is shown in pencil.

### DISCREPANCIES

This report is written from the boat sheet. Soundings on the boat sheet are from predicted tides. Small discrepancies in depth curves and cross-lines are expected to check in smooth plotting using gage tides. No discrepancies requiring field examination are known to exist.

#### DANGERS

There are no dangers except sand bars which are well defined by depth curves.

#### CHANNELS

Channels are well defined by depth curves. The Intracoastal Waterway channel is marked by day beacons and ranges and project depth is maintained by the U. S. Army Engineers.

### COMPARISON WITH PREVIOUS SURVEYS

The only previous survey available is a bromide of 4471. The present survey is much more detailed. However, general depths and curves check very well with the boat sheet.

### GEOGRAPHIC NAMES

No new place names were used.

Note: This report is written from the boat sheet. Sheets and records are being transferred to Lieut. Egner in accordance with Director's letter to Lieut. C. A. Egner dated April 2, 1934.

Respectfully submitted:

F. R. Gossett Jr. H. & G. Engineer

Approved & Forwarded:

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

### REPORT FOR SHEET 5a 5632

### AUTHORITY:

This sheet is a small sub-plan sounded as part of sheet 5 (MIKAWE) under instructions dated April 2, 1934.

### MISCELLANEOUS:

This sub-plan was sounded as a part of sheet 5 and the record will be found in volume 11 for that sheet.

The sheet is projected as part of sheet 6 (MIKAWE).

Tides are taken from the Sapelo gage.

Tidal data and statistics are included in the report for sheet 5 (MIKAWE). 5631

Respectfully submitted,

George Fortune, Surveyor.

Approved and forwarded;

C. A. Egner, Chief of Party.

### STATISTICS FOR SHEET NO. 6

Date		Day etter	Volume	Positions	Soundings	Statute Miles	
Mar.	28 29	a b	I	60 <b>3</b> 4	278 142	7.1 3.3	
Apr.	30 2 3	c d e	I & II II	132 203 183	615 9 <b>7</b> 8 8 <b>7</b> 7	16.0 27.3 23.9	
	2 3 4 5 6 9	f g h	III & III VI & III	199 184 138	918 760 584	25.0 23.8 16.1	
	10 11	j k 1	IV IV V	159 192 178	612 757 721	16.6 22.5 20.0	
	12 13 16	m n P	V & VI V & VI	186 158 165	639 676 679	19.2 17.8 16.6	
	17 18 19	q r s	VI & VII VII VII	127 108 40	492 414 140	13.1 10.8 3.6	-
			TOTALS	2446	10282	282.7	1034
					11,435	3158	

### HYDROGRAPHIC SHEET NO. 6

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. Rond

Lieut. U.S.C.& G.S.

Chief of Party

#### SUPPLEMENTAL REPORT

#### TO ACCOMPANY

### HYDROGRAPHIC SHEET NO. 6 (MIKAWE)

### AUTHORITY:

This sheet was received from Lieut. J. A. Bond on April 25, 1934 and was finished under instructions dated April 2, 1934.

## ADDITIONAL WORK:

When this sheet was received by Field Party No. 23 Dauplin River and three small side creeks were yet to be sounded. This work required no additional topography but several signals were built on Duplin River and located by sextant fixes. The additional sounding was done from the launch OGLETHORPE using the usual hand line method. No dangers, other than those mentioned in the regular report, were discovered. There are no buoys within the sounded area of this sheet.

### TIDAL DATA:

In order to complete this work it was necessary to put in a new staff at Sapelo Lighthouse. The MIKAWE staff had been washed out.

Sapelo Lighthouse, M.L.W. on Staff -

### STATISTICS:

Da	a to	Day	Vøl.	Miles	Snd'gs.	Pos.
Nov.	13 14 26	a b c	la la la	9.7 1.7 21.7	315 72 766	79 19 199
		Totals		33.1	1153	297

### SIGNALS:

List of signals are shown on accompanying table.

Respectfully submitted,

Senge Fortune
George Fortune
Surveyor.

Approved and forwarded;

C. A. Egner; Chief of Party

# Signals on Sheet #6 (MIKAWE)

### Triangulation

ROCKde	edundy Rive	r Bn "l"	Old	Pet	Nit
DoBOY	·		Kru	Gri	D <b>ye</b>
	Island WES	T House	How	Gem	Far
	outh chimne		It	Ever	Dad
	Island Eas		Chy	Jul	Iso
	orth chimne		Bee	Var	Hum
		ກ້ຽກ	Glu	Fab	Ear
ATWOO		~	Cub	Blo	Amy
		eek F.R. Bn	Tog	Sip	Rim
	iver R.R.#5		Pit	0ft	Nap
1-A 1			Nib	Lim	Key
	eakettle Cr	eek Bn. 1	Jay	Ima	Hoe
	eakettle Cr		Get	Fla	Eat
	eakettle Cr		Den	Col	Bar
Mary	Dake bule of	OOK DIE O	Aro	Vid	Tar
	eakettle Cr	eek Bn 5	Sue	Oh	Pri
	e Sapelo	OOR DIE	Gas	Rug	Una
	ns DOCk		Now	Mix	Lum
	ns Dook n River Lig	h+	Kra	Jim	Ira
	o L.H. (New		Нор	Ken	Job
		tower)	He	Elm	Cop
SPERT	O T.H. (O.G	COMOLI	Bed	Ula	Tuf
0	xtant locat	ione	Pla	Ode	Low
56.	YOUTH TOCAL	10119	Jan	Hal	Fie
Dom	m	South	And	Bun	Cay
Den	Trap	Ea <b>st</b>	Doc	Ear	Gat
North	Mid	White	Ite	Kit	Mon
West	MIG	4111.00	Nip	Raw	Sut
			Ave	Tal	Doe
m <sub>e</sub> .	hd- 1	one tions	Fry	Gis	In
10	pograph <b>ic</b> l	enorus soo.	Leg	Mol	Not
1	D	C4 ~	Oto	Pay	Ray
Ano	Buz	Sig	Ded	Bit	Ham
Tot	Urn	Vim	Lux	Ask	0 <b>1</b> 1
Gay	Eze	Fat Vex	Tux	Dim	Sli
You	Who		Fly	Nor	Out
Ute	T1d	Say Ink	Wik	Yar	Zus
Rus	Med-		Ate	Bur	Cut
Hix	Eel Bot	Dam Fin	End	Dut	Fre
Caj	Bat	· · · · · · · · · · · · · · · ·	<b>S</b> ab	By	Sac
Era	Dik	Chu	Abe		Eli
Ben	Air	Gin	Far	Dig Go	Pax
His	Imp	Me	Net	Mar	
Lew	Kid	Joy			Lec
Phi	Rob	<b>D</b> wl	Jit	Hig	Tup
Nap	Jab	Ked	Dug Now	Git	Fet
Liz	Mix	Nut	· · · · · · · · · · · · · · · · · · ·	Us 715	Tel
Yea	Oat	Pal	Unk	Zin	Web
Quo	Rex	Rat	Sky	Tan	Erg
The	Up	Ven	Why	Zee	Kak
Wig	Sam	Dog	La	Mun	Nix
Feb	Jak	Law	Oar	Pad	Qui
Abu	Bab		Rut	Win	Yes

### Field Records Section (Charts)

# HYDROGRAPHIC SHEET NO. 5632

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

Number of positions on sheet	2999
Number of positions checked	231
Number of positions revised	. 26
Number of soundings recorded	127122
Number of soundings revised	924
Number of signals erroneously	
plotted or transferred	• • • • • •

Date:

Verification by IRVIN MICHAELSON

Review by Any T. Kolsh

Time: 81 hrs.

Time: 19 4 hrs.

### H-5632 (1934)

1 a to 1294 - Yoll 1304 to 125f - Vol 2 126f to 126h - Vol. 3 1276 to 1924 - Vol 4 5n - Val 5 45q - Val 6 40s - Val 7 199c - Val 8 12 to 60 to 469 to (red) 1-a to

Report on H-5632 (1934)
chief of Party - J. A. Bond

Surveyed in Mar. - April, 1934 Surveyed by F.R. Gossett D.E. Sturmer

Protracted and Plotted by N.J.P. Verified and inked by Irvin Michaelson

- i. The records are nest, logible and complete. They conform to the general requirements of the Mydrographic Manual.
- 2. The usual depth curves may be completely drown.
- 3. Soundings were correctly plotted with some exceptions.

  Spacing of sounding while fairly well done-could have been improved upon. The protracting was good.
- 4. Field drafting was good. Junctions with adjoining sheets were noted in black ink giving field numbers.

  This was corrected. Low water line was inked with a black dashed line. This also was corrected.

  with a black dashed line. This also was corrected.

  and adjust ments made where modified by hydrography.
- 5. This sheet was compared with the air-photo compilations.

  A few topo. Stations in the water areanstakes or
  Stumps. Some have not been described.
- 6. Junctions.

At north with H-5633

" West with H-5634 (At one junction, no work was done on H5634).

" South " H-5631

No overlap was made since these sheets have not get been verified.

Respectfully Submitted, Inn. Kuchulan 5/6/35.

Survey	No.	п	 5632

GEOGRAPHIC NAMES

Date. Feb. 7, 1935

Chart No. 1242

Thames underlined in red
GEORGIA Diagram No. 1241-2 & 1242

Approved March 19,1935

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

Survey No. 1242

Chart No. 1242

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

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

Under investigation. Q

Status	Name on Survey	Name on Chart	New Names in local use	Names assigned by Field	Location
4	Wolf Creek	Same	,	/	
V	South River	•1			
V	Sapelo Island		·		
* 	Back River			/	
	Commodore Island	11		/	
V	Doboy Island	"	,	/	
* V	North River	11			·
V	Wolf Island			/	•
	Beacon Creek	" nzh "1/1/A)	Beaver Cre	ok on Daries	1_PMM
V	Duplin River	. ••	Dec 71114, 37	4122 "	
1/	Little Sapelo Ist	and			
V	Connegon River	••	Connegan	on Darren	PMM
√_	Hudson River				- 14-13.
<u> </u>	New Teakettle Cre	ek ''			
	Teakettle Creek	Old Teakettle Creek		/	
	Atwood Creek	Same		<b>V</b>	
V	Mud River			/	
	Note;				
** <u>}</u>		es on the Survey were	inked in	by the Fie	1d.
	ADDENDA: Doboy S	mund is indicated and	Reneated		
	Insert	"Old" before Teakettl	e Creek.	hart 574	
		*.			

Division of Hydrography and Topography:

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

Tide Reducers are approved in volumes of sounding records for

#### HYDROGRAPHIC SHEET 5632

Locality Mud River to South River, Georgia.

John A. Bond and C. A. Egner in 1934. Chief of Party: Plane of reference is mean low water reading

3.3 ft. on tide staff at Sapelo Lighthouse

ft. below B.M. 9 9.9

3.5 ft. on tide staff at Hudson River

6.9 ft. below B. M. 1

0.4 ft. on tide staff at Mud River

8.1 ft. below B.M. 1

Height of mean high water above plane of reference is 6.8 feet at Sapelo Lighthouse; 7.2 feet at Hudson River; 0.4 feet at Mud River.

Condition of records satisfactory except as noted below: It was necessary to smooth out some of the reducers and in Vol. 8 the plane of reference used was on the old staff at Mud River, while the observations were on the new staff increasing the reducers 2.8 feet.

Acting Chief, Division of Tides and Currents.

#### Section of Field Records

### REVIEW OF HYDROGRAPHIC SURVEY NO. 5632 (1934)

Mud River to South River, Doboy Sound, Georgia Surveyed in March - April, 1934 Instructions dated December 5, 1933 (NATOMA)

### Hand Lead Soundings

3 Point Fixes on Shore Signals

Chief of Party - J. A. Bond.
Surveyed by - F. R. Gossett, D. E. Sturmer.
Protracted and Soundings Plotted by - N. J. P.
Verified and Inked by - I. Michaelson.

### 1. Condition of Records.

- a. The records are neat and legible and conform to the requirements of the Hydrographic Manual except as follows:
  - (1) A number of signals on which no topographic features were shown, fall outside high water line but within the low water curve. These signals were not described but were assumed to be of a temporary nature.
  - (2) No list of landmarks for charts on Form 567 accompanied this particular sheet.
  - (3) Junctions with adjoining sheets were shown in black ink giving field numbers instead of leaving such information in pencil, and the low water line was shown with a black dashed line instead of a dotted line. These were corrected in the office.
- b. The descriptive report is clear and comprehensive and adequately 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, except that the work in Hudson River was not carried to the head of navigation.

### 3. Sounding Line Crossings.

Cross lines are in good agreement, as are adjacent lines.

### 4. Depth Curves.

Depth curves can be completely drawn including the low water line where it does not practically coincide with the banks of the stresms.

### 5. Junctions with Contemporary Surveys.

Junctions with H-5633 on the north, H-5634 on the west, and H-5631 on the south will be considered in the reviews of those sheets. There is no contemporary offshore survey but the present survey is in fair agreement at its limits with the last previous survey, H-4471 (1924-5).

### 6. Comparison with Prior Surveys.

### a. H-461 (1854).

This survey, on a 1-20,000 scale, is a reconnaissance survey in the mouth of Doboy Sound as far north as lat. 31°25'.

General average depths agree with the present survey but the channel has cut more towards the west bank with a general small shoaling along the east shore.

The large shoal cyster bank at lat. 31°23.8', long. 81°17.5' remains practically unchanged.

Off the south point of Commodore Island the low water flat is now covered at all tides but the general shoal area remains.

At lat. 31°24.05', long. 81°18.6' the same flat exists.

North River, probably through dredging, is considerably deeper. The extensive area of shoal water on the south side of the mouth of the river remains about the same.

Duplin River has apparently been dredged, but the area off the point of Little Sapelo Island (lat. 31°24.9°, long. 81°18°) is in general about the same.

#### ъ. H-957 (1868).

This survey, on a 1-20,000 scale, covers the entrance to Doboy Sound only. In comparison with the present survey it indicates that the deep channel has narrowed somewhat, and the deepest part is now more nearly midway between the two shores.

### c. H-959 (1868), H-964 (1868), H-1146 (1872).

These surveys, covering collectively the area of the present survey, are in substantial agreement with the present work with such changes as would be expected in such an area considering the elapsed time since the former surveys. The most important changes are as follows:

The tide flat at lat. 31°27.7°, long. 81°19.4° in Old Teakettle Creek is gone and the flat just west of it is now barely awash at low water.

Slightly shoaler water is now found in the upper reaches of Atwood Creek and the island at lat. 31°27.4°, long. 81°20.5° is becoming somewhat larger.

In the New Teakettle Creek the small bar at lat. 31°27.15', long. 81°18.2' is gone.

In the North River the critical depth is now 11 feet, about 4 feet less than at the time of these former surveys.

The small shoal in south shore of South River at lat. 31°22.0', long. 81°18.2' with  $l_{\mathbb{Z}}^{\frac{1}{2}}$  feet (charted) is gone, and just north of this the two cuts have changed considerably, the west cut being much shoaler and the east cut deeper.

Slightly greater depths are found in the entrance to Beacon Creek.

### d. H-4099 (1920).

This survey, on a 1-20,000 scale, covers the entrance to Doboy Sound as far north as lat. 31°23.6°.

The general channel depths average about the same as compared with the present survey, but H-4099 (1920) also agrees with the prior surveys, indicating that the main channel is cutting towards the west side with consequent general, although small, shoaling along the east shore.

A 12 foot shoal is now located at lat. 31°22.9°, long. 81°17.2° which showed 15 feet before.

A somewhat doubtful 12 foot sounding appears on the present survey at lat. 31°22.8', long. 81°18.05' in the mouth of Back River. This sounding also appears on H-4099 (1920) at this place and it is possible that in the general deepening in the area that this shoal spot still persists.

### e. H-4471 (1924-5).

This survey, on a 1-20,000 scale, covers about the same area as H-4099 (1920) and in general agrees with it.

### 7. Comparison with Chart No. 574.

### a. Hydrography.

Within the area of the present survey the chart is based on surveys discussed in the foregoing paragraphs with the exception of the dredged channel at lat. 31°27.5°, long. 81°19.5°. This was charted under authority of B. P. 19655, January, 1925.

Latest Engineer's Blue Print 27553 (May 18, 1934), giving controlling depth of 9.7 feet, agrees with the critical depth developed by the present survey of 9.5 feet.

### b. Aids to Navigation.

Locations of day beacons and ranges on the present survey check with the charted positions.

### c. Charted Island.

No authority could be found for the small island charted in lat. 31°27.9', long. 81°19.6'. It is not shown on the air photo compilation and the present hydrography disproves its existence. This island should be deleted from the chart.

### 8. Field Plotting.

The field protracting and plotting was good and conforms to the requirements of the Hydrographic Manual.

### 9. Additional Field Work Recommended.

This sheet is a fine example of a well developed area. The straightness of the lines and the uniformity of the spacing show excellent boat control.

The upper reaches of Hudson River west of long. 81°21.8' has not been surveyed. This area is covered by H-959 (1868) and the agreement is generally good. Because of the relative unimportance of the unsurveyed area, no additional work is considered necessary.

### 10. Note to Compiler.

Because of the general good agreement between the present survey and H-959 (1868) in the upper reaches of the Hudson River west of long. 81°21.8', the latter survey may be used to supplement the present survey in the area not covered by H-5632 (1934).

### 11. Superseding Old Surveys.

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

H- 461	(1854)	in	part
H- 957	(1868)	11	#
H- 959	(1868)	#	11
H- 964	(1868)	11	17
H-1146	(1872)	Ħ	Ħ
H-4099	(1920)	Ħ	Ħ
H-4471	(1924-5)	11	Ħ

12. Reviewed by - H. T. Kelsh and R. L. Johnston, May, 1935.

Inspected by - A. L. Shalowitz.

### Examined and approved:

C. K. Green, T. Freen. Chief, Section of Field Records.

Chief, Division of Charts.

Chief, Section of Field Work.

Chief, Division of H. & T.

applied to new compilation brawing of that 5 74 - Nov, 3,1936 - gow.

applied to new compiletion cht-575 Jul 1937 PBC.

applied to Chart 1242, Man. 16, 1939 g. K.S.

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