

5220

U. S. COAST & GEODETIC SURVEY
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DEPARTMENT OF COMMERCE

U. S. COAST AND GEODETIC SURVEY
U. S. COAST & GEODETIC SURVEY
LIBRARY AND ARCHIVES

AUG 1 1935

State. Georgia

DESCRIPTIVE REPORT

Photo
Topographic
~~Hydrographic~~

Sheet No. 5220

LOCALITY

Sapelo Island, southeast coast
of Georgia.

Doboy. Sound
Little Sapelo Island

1934

CHIEF OF PARTY

Lieut.(j. g.) S. B. Grenell

applied to new compilation drawing of chart 574 from
chart 840 - Oct. 26, 1936 J.T.W.

applied to chart 1272 Mar. 16, 1939 J.H.S.

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

REG. NO.

TOPOGRAPHIC TITLE SHEET

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

Field No.

REGISTER NO. 5220

5220

State Georgia

General locality South-east coast of Georgia Doboy Sound DOBOYSOUND

Locality " Little Sapelo Island

Scale 1:10,000 Date of photographs 11/24/33
Date of ~~survey~~ Comp. May, 1934

Vessel

Reviewed and recommended for approval:

Chief of party Lieut. (j. g.) S. B. Grenell

Photographs plotted by: F. B. Hickman
~~Survey Party~~

Inked by J. B. Williams Jr.

Heights in feet above to ground to tops of trees

Contour, Approximate contour, Form line interval feet

Instructions dated November 10, 1933, 19

Remarks: Compilation of aerial photographs Nos. (789)M14 to M21
(789)M47 to M59

NOTES ON COMPILATION

One copy of this form must accompany each chart from beginning to completion. The last draftsman, whose name appears on this form, is responsible for it and all personnel will endeavor to keep these forms up to date and correctly posted. This form is very important inasmuch as the final Descriptive Report of the Chart compiled is based upon the information contained herein.

SHEET NO. 5220
 (789)M17 M59
 PHOTO NO. (789)M14 TO PHOTO NO. M21

	BY	START	FINISH
ROUGH RADIAL PLOT			
SCALE FACTOR()			
SCALE FACTOR CHECKED	<i>S. B. Grenell</i>		
PROJECTION	<i>A. A. Futral</i>	<u>3/13/34</u>	<u>3/13/34</u>
PROJECTION CHECKED	<i>F. B. Hickman</i>	<u>3/30/34</u>	<u>3/30/34</u>
CONTROL PLOTTED	<i>F. B. Hickman</i>	<u>3/31/34</u>	<u>3/31/34</u>
CONTROL CHECKED	<i>A. A. Futral</i>	<u>4/2/34</u>	<u>4/2/34</u>
TOPOGRAPHY TRANSFERRED			
TOPOGRAPHY CHECKED			
SMOOTH RADIAL LINE PLOT	<i>F. B. Hickman</i>	<u>4/5/34</u>	<u>4/13/34</u>
RADIAL LINE PLOT CHECKED	<i>S. B. Grenell</i>	<u>4/14/34</u>	<u>4/14/34</u>
DETAIL INKED	<i>J. B. Williams, Jr.</i>	<u>5/4/34</u>	<u>6/7/34</u>

AREA DETAIL INKED 29.9 sq. Statute Miles

LENGTH OF SHORELINE OVER 200 m. 50.7 Statute Miles

LENGTH OF SHORELINE UNDER 200 m. 50.1 Statute Miles

GENERAL LOCATION Southeast coast of Georgia

LOCATION Sapelo Island

DATUM STATION Mary 1933 Latitude 31° - 26' + 1260.0 m
1927 datum Longitude 81° - 18' + 324.6 m unadjusted

INSPECTION REPORT

(1)

Sheet No. 5220

REFERENCE:

In reviewing this sheet, reference should be made to the General Report for all single lens sheets which is attached to sheet No. 5206.

GENERAL INFORMATION:

The area included in this sheet consists primarily of salt marsh with the exception of a few small wooded islands and hammocks and the edge of Sapelo Island along the east border of the sheet. There are no unusual topographic features and the symbols used are standard.

The land is all very low and where wooded is covered by a mixed growth of oak, pine, palm and deciduous undergrowth. The oak predominates and the palm appears as an occasional palmetto palm on the fringe of some small hammock.

With few exceptions, the shoreline is clear and sharp on the photographs and the stream lines and channels well defined.

CONTROL:

All of the control used on this sheet was included in the revision triangulation of C. M. Durgin, 1932-33. The radial plot carried through roughly from sheet No. 5219 did not check along Mud River on the northern limit of the sheet so a new field inspection was made of the beacons in Mud River and it was found that many of the beacons had been moved since the photographs were taken. Information relative to the new positions of these beacons was obtained from the aluminum mounted topographic sheets executed by the party of H. Odessey and the new locations checked the revised plot in that section. These beacons have not been shown on the photo compilation because the survey was not completed at the time the radial plot was made.

LANDMARKS FOR CHARTS:

Form 567 covering the area has been submitted by either H. Odessey or J. Bond.

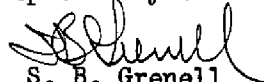
COAST PILOT NOTES:

Coast pilot notes have been submitted by the parties mentioned in the preceding paragraph.

LIST OF NAMES:

All names appearing on this sheet were taken directly from current issues of charts.

Respectfully submitted,


S. B. Grenell,
Chief of Party.

REPORT OF COMPILATION

COMPILATION METHOD:

This sheet was compiled by the standard radial plot method.

ADJUSTMENT OF PLOT:

A slight correction was necessary on the junction of this sheet and sheet #5219 due to the re-inspection of Mud River beacons. This change was made after the radial points had been pricked and circled, so it was necessary to change some of these points. The remainder of the plot was satisfactory.

INTERPRETATION:

The photographs were clear and no great difficulty was experienced in the interpretation of photographic detail. Only the usual graphic symbols were used in the compiling of this sheet.

The stereoscope was used to pick up as near as possible a definite line between the marsh and the higher land, and to locate as accurately as possible roads, ditches, and houses.

INFORMATION FROM OTHER SOURCES:

The photographs were the only source of information available.

COMPARISON WITH OTHER SURVEYS:

Junctions with all adjoining sheets are complete and satisfactory.

ACCURACY AND COMPLETENESS:

The area covered on this sheet is complete in every detail, as nearly as can be determined from the photographs. All well defined detail is located with a probable error of not more than 4 meters; less well defined detail with an error of not more than 10 meters.

PHOTOGRAPHS:

No.	to	No.	Date	Time	Stage of tide
(789)M14	-	M21	11/24/33	11:00	4/6
(789)M47	-	M59	11/24/33	11:15	4/6

J. B. Williams Jr.
J. B. Williams, Jr.,
Draftsman.

Approved:

S. B. Grenell
S. B. Grenell,
Chief of Party

REVIEW OF AIR PHOTO COMPILATION NO. 5220

Chief of Party: S.B. GRENELL

Compiled by: J.B. Williams, Jr.

Project: F.P. 4-Ga. Party #18

Instructions dated: Nov. 10, 1933.

1. The charts of this area have been examined and topographic information necessary to bring the charts up to date is shown on this compilation. (Par. 16a, b, c, d, e, g and i; 26; and 64) ✓
2. Change in position, or non-existence of wharfs, lights, and other topographic detail of particular importance to navigation which affect the chart, is discussed in the descriptive report. (Par. 26; and 66 g, n) ✓
3. Ground surveys by plane table, sextant, or theodolite have been used to supplement the photographic plot where necessary to obtain complete information, and all such surveys are discussed in the descriptive report. (Par. 65; and 66 d, e) ✓
None used
4. Blue-prints and maps from other sources which were transmitted by the field party contain sufficient control for their application to the charts. (Par. 28) ✓
None
5. Differences between this compilation and contemporary plane table and hydrographic surveys have been examined and rectified in the field before forwarding the compilations to the office and are discussed in the descriptive report. *No topographic or hydrographic sheets for this area have been received at this office.*
6. The control and adjustment of the photo plot are discussed in the descriptive report. Unusual or large adjustments are discussed in detail and limits of the area affected are stated. ✓ (Par. 12b; 44; and 66 c, h, i)
7. High water line on marshy and mangrove coast is clear and adequate for chart compilation. (Par. 16a, 43, and 44) ✓

NOTE: Strike out paragraphs, words or phrases not applicable and modify those requiring it. Paragraph numbers refer to those in the Topographic Manual. Refer also to the pamphlet "Notes on the Compilation of Planimetric Line Maps from Five Lens Air Photographs."

8. The representation of low water lines, reefs, coral reefs and rocks, and legends pertaining to them is satisfactory. (Par. 36, 37, 38, 39, 40, 41) ✓
9. Recoverable objects have been located and described on Form 524 in accordance with circular 30, 1933, circular letter of March 3, 1933, and circular 31, 1934. (Par. 29, 30, and 57)
Form 524 turned in by Field Party - H. Odyssey or J. Bond.
10. A list of landmarks was furnished on Form 567 and instructions in the Director's letter of July 16, 1934, Landmarks for Charts, complied with. (Par. 16d, e; and 60)
Form 567 Submitted by field parties - see #9.
11. All bridges shown on the compilation are accompanied by a note stating whether fixed or draw, clearance, and width of draw if a draw bridge. Additional information of importance to navigation is given in the descriptive report. (Par. 16c) *No bridges*
12. Geographic names are shown on the overlay tracing. The accepted local usage of new names has been determined and they are listed in the report, together with a general statement as to source of information and a specific statement when advisable. Complete discussion of place names differing from the charts and from the U. S. G. S. Quadrangles is given in the descriptive report, together with reasons for recommendations made. (Par. 64, and 66k)
No new names. ✓
13. The geographic datum of the compilation is *N.A. 1927* and the reference station is correctly noted. ✓
14. Junctions with adjoining compilations have been examined and are in agreement. (Par. 66f) ✓
15. The drafting is satisfactory and particular attention has been given the following:
 1. Standard symbols authorized by the Board of Surveys and Maps have been used throughout except as noted in the report. ✓
 2. The degrees and minutes of Latitude and Longitude are correctly marked. ✓

3. All station points are exactly marked by fine black dots. *Many points cannot be marked on celluloid because of large holes pricked.* ✓
4. Closely spaced lines are drawn sharp and clear for printing. ✓
5. Topographic symbols for similar features are of uniform weight. ✓
6. All drawing has been retouched where partially rubbed off. ✓
7. Buildings are drawn with clear straight lines and square corners where such is the case on the ground. ✓

(Par. 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 48)

16. No additional surveying is recommended at this time. ✓

17. Remarks:

The buckling on the NE corner of this sheet was caused by some unknown agency. It is thought that possibly a flatter partly saturated with Duco Household Cement was left on the sheet overnight.

18. Examined and approved;

8/23/34

J. B. Linnell

Chief of Party

19. Remarks after review in office:

See following pages.

Reviewed in office by: *Douglas H. Benson*

B. G. Jones

Examined and approved:

K. T. Adams

Asst Chief, Section of Field Records

L. O. Colbert

Chief, Division of Charts

J. B. Borden

Chief, Section of Field Work

G. H. Hulse

Chief, Division of Hydrography and Topography.

Review of Air Photo Compilation T-5220

Comparison with Contemporary Surveys.

Contemporary plane table surveys of the area of the compilation (except for the northeast corner) were made for the purpose of establishing ~~temporary~~ topographic stations for the control of the hydrography and air photo compilation. This control was not used by the compilation party as the plane table sheets were not available at the time the compilation was made.

1. The following described recoverable stations have been added to the compilation from the plane table sheets listed. Some of the shoreline references in the descriptions did not check the compilation and necessary corrections were made to both the compilation and the descriptions. ~~as:~~

Bluff (d)	T-6168
Mud (d)	"
New (d)	"
Nor (d)	"
Hop (d)	T-6195 (a)
Fla (d)	"
Amy (d)	"
Dead (d)	T-6195 (b)
Folly (d)	"
Rag (d)	"
Junk (d)	"
Iso (d)	T-6196 (a)
Chy (d)	"
Pet (d)	T-6196 (b)

Stations plotted by: *D. H. Benson*
D. H. Benson.

Checked by:

L. A. McGann
Leonard A. McGann

2. Comparison with plane table sheet T-6168.

(a) Short stretches of shoreline rodded in on this sheet did not check the compilation shoreline by from one to fifteen meters. The photographs were examined at these points with the following results:

(1) The rodded shoreline on both sides of the entrance of Shellbluff Creek into old Teakettle Creek was about 10 meters south of ^{the} compilation shoreline except in spots which touched. The compilation was retraced and the resulting shoreline agreed except for minor differences.

(2) At the entrance of New Teakettle Creek into Mud River the shoreline on the southwest touched in spots

This has been called to attention of Mr. Sutcliffe - good.

and was all right allowing for differences in interpretation. The northeast shoreline near station New Teakettle Beacon No. 1 did not check by 15 meters. No description of this station is available and as the photographs confirmed the compilation, the shoreline was not changed. This difference depends on the location of H.W. line with reference to Triangulation Station New Teakettle Creek Beacon No. 1. This station was not spotted exactly on the compilation and was not used for control. The compiler shows the H.W. line inshore of the Beacon. The planetable shows the Beacon on the H.W. line. No description of the Beacon is available except that the Light List states it to be on east side of the channel. The smooth Hydrographic Sheet shows the compilation shoreline and in the absence of additional information the compilation is accepted, since the compilation checks the plane table with reference to Hydrographic Station Mud on the opposite side of the creek.

(3) At the junction of old Teakettle Creek and New Teakettle Creek the plane table shoreline checks in spots. The photographs confirm the compilation, so there was no change made. Again differences in interpretation ~~may have been~~ the cause of the differences.

(4) The compilation shoreline was changed at the entrance of Shoal Creek into old Teakettle Creek after determining that the compilation was in error at this point. The new shoreline agrees closely with the shoreline references given in regard to Station NOR (d).

(b) ~~These ranges are shown on this sheet as listed below:~~

(1) Mud River Range 5. The beacons for this range were moved October 18, 1933 according to Notice to Mariners No. 46. They are referred to in the paragraph under "Control" in the front part of the report. They could not be picked up on the photographs and are not shown on the compilation. They are shown on the plane table sheet as 1932 triangulation stations and the range azimuth lettered on the sheet as $225^{\circ} 16'$ from north, determined from a point on the extension of the range. The azimuth as scaled by protractor in the office is $225^{\circ} 20'$.

(2) Creighton Narrows Range azimuth is lettered on the plane table sheet as $168^{\circ} 16'$ from north, determined by locating a point on the extension of the range line. The azimuth as scaled in the office by protractor is $168^{\circ} 15'$.

(3) Old Teakettle Creek range azimuth is lettered on the sheet as $161^{\circ} 03'$, probably determined by locating a point on range, although this point cannot be picked up on the plane table sheet. As scaled in the office the azimuth is

4. (a) The projection on T6195(b) is in error for meridian $81^{\circ}21'$ and parallel $31^{\circ}24'$. Correct portions of these lines have been drawn in green on T6195(b) in this office. Δ Fox 2, 1932. as plotted on T61956 by the field party checks with the green line for $81^{\circ}21'$ and detail north of $31^{\circ}24'$ and east of $81^{\circ}22'$ which should be transferred from T6195(b) by using the green line. The error in $81^{\circ}22'$ was apparently caused by not inking the original pencil line and occurred after the field survey.

Δ Aikens 2, 1932 as plotted by the field party checks the black or incorrect line for parallel $31^{\circ}24'$ and the black line should be used in creating portions from the planotable west of $81^{\circ}22'$.

161° 08' from north.

(c) All information and detail on this plane table sheet is shown on the compilation except as noted above and except the magnetic meridian and temporary topographic stations. Close examination of the differences noted above does not indicate any considerable differences in location between the compilation and the planetable. Small changes have been made in the compilation but no replotting was necessary.

3. Comparison with plane table sheet T-6195 (a).

(a) The short stretches of rodded shoreline shown on this sheet differ from those shown on the compilation by from one to ten meters. Careful inspection of the photographs seems to confirm the compilation except around the northern part of the point between the Hudson and Connegon Rivers where it was found necessary to replot the shoreline. The resulting shoreline still failed to check the plane table work by about 9 meters in spots, probably due to differences in interpretation and sketching between rod readings.

(b) A small marsh island in Atwood Creek was added to the compilation from the photographs. The plane table shows a temporary station on this island.

(c) The compilation shows all detail shown on the plane table sheet except the magnetic meridian and temporary topographic stations.

4. Comparison with plane table sheet T-6195 (b)

(a) ^{T-6195(b)}
~~The projection on this sheet was found to be in error and the correct projection was shown in green in this office. as noted on the sheet. Triangulation Station Fox 2, 1932 as plotted by the field party checks the green or correct meridian 81° 21'. Triangulation Station Atkins 2, 1932 checks on the black line. The error in meridian 81° 21' is therefore not an error in the original projection on which the field work was done. Positions north of 31° 24' and east of 81° 22' should be scaled or plotted using the green line.~~ *See opposite page*

(b) No rodded shoreline falling within the area of the compilation is shown on this sheet.

(c) Four described stations were plotted from this sheet as noted above. The shoreline references of these stations did not all check and the photographs were examined with the result that the compilation shoreline was changed near RAG (d) and to the eastward of JUNK (d). At the latter point an error in location of shoreline of from 10 to 15 meters was found and corrected. The reference distance of 25 meters on description of JUNK (d) has been changed to 9 meters after a careful check of the compilation. The planetable and photo plot agree.

5. (c) ~~the~~ new beacon "No. 7," on the
west side of Little Popple Island
is not shown on T 6196 (a) and does
not show on the photographs.

for other stations in this vicinity and this difference seems more likely to be an error in the description.

(d) All detail appearing on this sheet is shown on the compilation except for temporary topographic stations and the magnetic meridian.

5. Comparison with Plane Table Sheet T-6196 (a).

(a) When the compilation was layed over this sheet for comparison several temporary topographic stations for hydrographic control were found to be outside the highwater line of the compilation. The photographs were examined with the result that some mud flats were added to the compilation outside the highwater line, the edge being indicated by a dotted line. One Station "BEE" was found to be a beacon, showing clearly on two photographs. The radial plot of this beacon did not check the plane table by 10 meters, but as there were only two cuts available, the plane table position was scaled and the beacon added to the compilation accordingly. This beacon is the new location of the Duplin River Light which is shown as a triangulation station at its former location across Doboy Sound. ~~There is a new beacon No. 7 on the west side of Little Sapelo Island not shown on the compilation.~~

Both the new and light and the old light structures shown on the 1933 photographs and Duplin R. L. 1933 has been left in the compilation.

(b) The sections of shoreline rodded in near stations Hydrographic CHY (d) and Triangulation DOBOY 1933 did not check the compilation as to shape or position. Inspection of the photographs revealed that the shoreline at these points should be replotted. The resulting shoreline agreed much more closely with the plane table work especially as to shape, there still being differences in spots of 10 meters probably due to differences in interpretation and sketching between rod readings. The shoreline near CHY (d) as formerly shown on the compilation was almost a straight line, whereas the shore-line actually is quite irregular. Two small piers were added to the compilation on the west side of Doboy Island.

(c) See opposite page

6. Comparison with Plane Table Sheet T-6196 (b).

(a) No shoreline falling within the area of the compilation is shown on this sheet. Several temporary topographic stations fall outside the highwater line but none could be picked up under the stereoscope. They are all in shallow water, as shown on the hydrographic sheet. ~~Two~~ ^{Five} small low water islands on the edge of Doboy Sound were added to the compilation by dotted lines. All detail on the plane table sheet is shown on the compilation except temporary topographic stations and the magnetic meridian. One described station was added to the compilation from this sheet, PET (d), described as on the highwater line but appearing on the lowwater line on the compilation, probably due to difference of interpretation.

7. Comparison with H-5632.

Comparing the compilation with this sheet by laying the celluloid

over the hydrographic sheet no conflict was found at any point between the two sheets.

8. Comparison with H-5634.

The shore-line in the S. E. Section of H-5634 does not check with the compilation and was evidently sketched in roughly from the photographs before the compilation was completed. Stations O AMY and O JUNK are incorrectly plotted on H-5634 by 9 and 5 meters respectively. This has been called to the attention of the verifier.

9. Comparison with H-5633.

No conflict between this sheet and the compilation could be found.

Comparison with Old Surveys.

Comparing the compilation with T-1080 (1868) shows that there are no great changes in the topography of this area. There are some changes due to shifting of the streams and sloughs in the marsh areas, but in general no important changes can be noted. The principal change shown is that the northern extension of Shoal Creek is now filled up where it was formerly open. The old sheet, while probably not as accurate in the interior of the marshes, gave a better interpretation of actual conditions than the compilation as all the sloughs and breaks in the interior of the marshes were not traced on the compilation.

Comparison with T-4122 (1924) covering Doboy Sound revealed no important changes. Comparison with Chart 1574 showed no important changes except in regard to Shoal Creek as noted above, and several small marsh islands which ~~are~~ no longer ~~present~~. *Col. S. F.*

Remarks.

A number of triangulation stations shown on this compilation were not spotted on the photographs and were not available for control.

The shore-line is rather heavy and in a number of places small sloughs and indentations have been left off the compilation. By careful tracing these could have been shown with little additional time, some were traced in the office, as well as numerous single line sloughs running into the main streams. The marsh areas were broken up to some extent in the office to show the broken character of the marshes.

All detail important to navigation was shown by the compiler but character of the marshes was not well illustrated due to omission of detail in the interior of the marshes; namely, small sloughs and breaks in the marsh.

Respectfully submitted,

Douglas H. Benson

Douglas H. Benson.

Approved
K.T. Adams

V.B.G. Jones

Date March 14, 1935

GEOGRAPHIC NAMES

Survey No. T-5220Chart No. 574

Diagram No. _____

*, 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
	<u>MOD RIVER</u>	"	✓	✓	
	<u>New Teakettle Creek</u>	"	✓		
	<u>Old Teakettle Creek</u>	"	✓		
	<u>Shell ^{bluff} Creek</u>	"	✓	<u>Shell bluff</u>	
	<u>Shoal Creek</u>	"	✓		
	<u>Marsh Creek</u>	"	✓		
	<u>Atwood Creek</u>	"	✓		
	<u>Hudson River Creek</u>	"	✓		
	<u>Connegon River</u>	"	✓		
	<u>Folly River</u>	?	✓		
	<u>Dead River</u>	?	✓		
	<u>Fox Creek</u>	(T 1080)	✓	Add the following from (T 1080)	
	<u>North River</u>	"	✓	<u>Jack Hammock</u>	
	<u>Duplin River</u>	"	✓	<u>Pumpkin Hammock</u>	
	<u>Back River</u>	"	✓	<u>Fishing Hammock</u>	
	<u>Doboy Sound</u>	"	✓	<u>Barn Creek</u>	
	<u>Sapelo Island</u>	"	✓	<u>Sapelo</u>	(from P.O. Rand McNally etc)
	<u>Little Sapelo Island</u>	"	✓	<u>Patterson I.</u>	(approved on T 5121)
	<u>Mary Hammock</u>	"	✓	<u>Delete</u>	
	<u>Doboy Island</u>	"	✓	<u>South Sapelo River</u>	
	<u>Commodore Island</u>	"	✓		
	<u>Mary Creek</u>	"	✓		
	<u>Dark Creek</u>	T-1080 ✓	✓	names approved 10/24/35	
	<u>Branch Creek</u>	"	✓	K.T.A.	