

5218  
5218a

U. S. COAST & GEODETIC SURVEY  
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U. S. COAST & GEODETIC SURVEY  
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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

Photo

Topographic

~~Hydrographic~~

Sheet No. 5218

LOCALITY

Coast of Georgia,

Sapelo Sound

Mouth of South Newport River

193 4

CHIEF OF PARTY

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

U. S. GOVERNMENT PRINTING OFFICE: 1923

5218  
5218a

Applied to chart 839 Nov. 7, 1935 H.N.E.

Applied to new compilation drawing of Chart 574 - Oct. 9, 1936 - J.F.W.

Applied to chart 573 Nov. 18, 1936 G.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. 5218

State Georgia

General locality ~~Coast of Georgia~~ Mouth of Sapelo Sound

Locality ~~Sapelo Sound~~ Mouth of South Newport River

Scale 1:10,000 Date of Photos. 11/24/33, 12/17/33  
Date of ~~survey~~ Comp. April, 1934

Vessel .....

Reviewed and recommended for approval:  
Chief of party Lieut. (j. g.) S. B. Grenell

Photographs plotted by: R. D. Cross  
~~Surveyed by~~

Inked by A. M. Gruber

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) M26 to M28,  
M133 to M140.

# 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. 5218  
 (789)M26 to M28  
 PHOTO NO. M133 TO PHOTO NO. M140

	BY	START	FINISH
ROUGH RADIAL PLOT			
SCALE FACTOR( )			
SCALE FACTOR CHECKED	<i>S. B. Grenell</i>		
PROJECTION	<i>A. A. Futral</i>	<u>3/9/34</u>	<u>3/10/34</u>
PROJECTION CHECKED	<i>S. B. Grenell</i>	<u>3/10/34</u>	<u>3/10/34</u>
CONTROL PLOTTED	<i>R. D. Cross</i>	<u>3/16/34</u>	<u>3/16/34</u>
CONTROL CHECKED	<i>A. A. Futral</i>	<u>3/16/34</u>	<u>3/16/34</u>
TOPOGRAPHY TRANSFERRED			
TOPOGRAPHY CHECKED			
SMOOTH RADIAL LINE PLOT	<i>R. D. Cross</i>	<u>3/22/34</u>	<u>3/26/34</u>
RADIAL LINE PLOT CHECKED	<i>S. B. Grenell</i>	<u>3/26/34</u>	<u>3/26/34</u>
DETAIL INKED	<i>A. M. Gruber</i>	<u>3/26/34</u>	<u>4/30/34</u>

AREA DETAIL INKED 13.8 sq. Statute Miles  
 LENGTH OF SHORELINE OVER 200 m. 25.5 Statute Miles  
 LENGTH OF SHORELINE UNDER 200 m. 41.2 Statute Miles

GENERAL LOCATION Coast of Georgia  
 LOCATION Northern Sapelo Sound; Mouth of S. Newport River  
 DATUM STATION Newport 1933 Latitude 31-35+94.4  
N.A. 1927 datum Longitude 81-10+149.5

COMPILATION METHOD:

This sheet was compiled by the standard radial line plot method. No difficulty was experienced in the adjustment of the plot with the control available on this sheet.

ADJUSTMENT OF PHOTOGRAPHS:

Adjustment of photographs was easily accomplished due to radial points being well placed and the amount of tilt very small.

INTERPRETATION:

With the exception noted below, the pictures used on this sheet were clear and no difficulty was experienced in tracing detail. Interpretation of the exact position of high water line along the wind- and tide-swept shoreline bordering the mouth of South Newport River and Sapelo Sound is doubtful. The shoreline as indicated on this sheet is the result of careful study under the stereoscope, also questioning of field party men and men of the hydrographic party. Shell rakes and sand deposits along the shoreline have been shown with sand dots. Bars of mud and shell outside of water line have been shown with a <sup>dotted</sup> dash outline and <sup>or</sup> plain broken marsh lines.

The tree formation on St. Catherines Island is of particular interest in showing changes in beach line, and attempt has been made to follow closely the photographic representation. With exceptions as noted above, the standard topographical symbols were used for detail.

INFORMATION FROM OTHER SOURCES:

The photographs and field inspection sketches form the only source of information used on this sheet.

COMPARISON WITH OTHER SURVEYS:

Junctions with adjoining sheets compiled in this office are complete and satisfactory. There are no details appearing on charts that should be removed.

ACCURACY AND COMPLETENESS:

As ne As nearly as can be determined from the photographs, and with exceptions as noted in paragraph 3, this sheet is complete in every detail. 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)	M26	M28	11/24/33	11:05	3/6
"	M133	M140	12/17/33	11:00	5/9

*A. M. Gruber*  
A. M. Gruber,  
Draftsman

Approved:

*S. B. Grenell*  
S. B. Grenell

# INSPECTION REPORT

Sheet No. 5218

## REFERENCE:

In reviewing this sheet in the Washington office, reference should be made to the General Report for single lens sheets filed with Sheet No. 5206.

## GENERAL INFORMATION:

The bulk of the area covered by this sheet is the usual type of salt marsh found along this section of the coast. The stream lines are well defined through the marshy sections and the sand bars and shell rakes in the vicinity of Sapelo Sound are discussed in the Compilers Report.

The mainland of St. Catherines Island is heavily wooded and presents no unusual topographic features as viewed from the water. However, the aerial photographs bring out sharply the variations in vegetation distribution which in turn indicate clearly the old beach line formations. This feature, if carefully studied from the photographs, may give some information concerning the trend of erosion along the coast.

## CONTROL:

With the exception of station Rack-1916, all of the triangulation control on this sheet is included in the revision survey of C. M. Durgin, 1932-33. There were no topographic stations used for control on this sheet.

## LANDMARKS FOR CHARTS:

Form 567 for this area has been submitted by the Commanding Officer, Gilbert, 1934.

## COAST PILOT NOTES:

Notes for this area have been submitted by the Commanding Officer, Gilbert, 1934.

## NAMES:

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

Respectfully submitted,

  
S. B. Grenell.

REVIEW OF AIR PHOTO COMPILATION T-5218 (1934)  
June 1935

1. Comparison with Contemporary Graphic Control Surveys

a. T-6158b (1:10,000), March 1934

At lat.  $31^{\circ} 35.4'$ , long.  $81^{\circ} 11.8'$ , the compilation shore line falls 0 to 14 meters inside the shore line on T-6158b. This is probably due to different interpretations of the high water line. The compilation has been compared with the photographs and appears to show a better interpretation than T-6158b. The compilation has been accepted as correct.

At lat.  $31^{\circ} 37.4'$ , long.  $81^{\circ} 12.2'$  and lat.  $31^{\circ} 37.9'$ , long.  $81^{\circ} 11.2'$ , the compilation shore line differed from the shore line on T-6158b by 10 to 15 meters. This appeared to be a difference in location as the compilation shore line on both sides of Mollclark River and Johnson Creek fell east of the shore line on T-6158b. The original radial points were used to run a new photo plot with a projection made on the projection machine. The new plot was found to agree more closely with T-6158b. Detail from lat.  $31^{\circ} 36'$  to the top of the compilation has been replotted in the office. The compilation now agrees closely with T-6158b except for a short section of shore line at lat.  $31^{\circ} 38.3'$ , long.  $81^{\circ} 11.4'$ . This difference (0 to 20 meters) appears to be caused by sketching on T-6158b. The compilation is accepted as revised.

Temporary topographic stations appearing on T-6158b are not shown on the compilation.

b. T-6159a (1:10,000), March 1934, and T-6175 (1:10,000), Feb. 1934

Only a small part of each of these graphic control surveys is covered by the compilation. There is no shore line on these surveys in the compilation area. Topographic stations on T-6159a and T-6175 fall well inside the compilation high water line.

Temporary topographic stations shown on T-6159a and T-6175 are not shown on the compilation.

2. Comparison with Previous Topographic Surveys

T-721 (1:20,000), 1857-8, T-3411 (1:20,000), 1913, and T-4121 (1:20,000), 1924-25.

In general, extensive changes in this area are confined to the marshy areas. The southern end of St. Catherine's Island has cut back about 100 meters in the past ten years. The compilation is complete and adequate to supersede the areas covered on T-721, T-3411 and T-4121.

3. Comparison with Contemporary Hydrographic Surveys

H-5582 (1:10,000), 1934 and H-5583 (1:10,000), 1934.

The shore line on these hydrographic surveys was transferred from the compilation in the field. There are no conflicts between the hydrography and the compilation shore line.

The revision made in the upper part of the compilation has been brought to the attention of the hydrographic reviewer. The soundings nearest the shoreline in this area were far enough out so that the error did not cause a conflict.

4. Comparison with charts

The compilation area is covered on charts 574 and 1241. There are only minor changes in shore line detail. Changes in landmarks are discussed in paragraph 8.

5. Projection

The projection has been checked in the office. It is correct within two meters.

6. Recoverable Stations

All recoverable stations shown on the compilation have been plotted in the office by *V. R. Sobinowski* and checked by *D. H. Benson*.

Descriptions on Form 524 are filed under T-6158b, T-6159a and T-6175.

7. Additions and corrections.

The following triangulation stations have been transferred to the compilation in the office by *V. R. Sobinowski* and checked by *D. H. Benson* :

English Cut, 1858  
 Half Tide Rock, 1912  
 Tall Pine Tree, 1912  
 Johnson Creek Bn. No. 3, 1932  
       "      "      "      " 5, 1932  
       "      "      "      " 7, 1932  
       "      "      , Old Sawmill Boiler, 1932  
 Johnson, 1933.

The revised portion of the compilation has been drawn on a blue line print on aluminum mounted bristol board.

8. Landmarks, Lights and Beacons

All landmarks shown on the charts are included on the compilation with the exception of the dune at lat.  $31^{\circ} 34.6'$ , long.  $81^{\circ} 09.4'$ . Inspection of the photographs under the stereoscope shows no distinct



dune in this location, although there is a small elevation covered with trees. This high ground is not distinct enough to locate definitely. It does not appear high enough to show above the trees further inland. The dune has not been shown on the compilation. There are no landmarks on the compilation which are not on the charts.

Respectfully submitted,

*V. Ralph Sobierulski*

10-22-35

*B. G. Jones*

Survey No. T-5218

Chart No. 1241-574

Diagram No. \_\_\_\_\_

⚡, Not Approved by the Division of Geographic Names, Department of Interior.

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

[illegible]

## REVIEW OF AIR PHOTO COMPILATION NO. 5218

Chief of Party: S.B. GRENELL

Compiled by: A.M. Gruber.

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) *No changes.* ✓
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* ✓
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. *Shoreline comparisons with hydrographic and topographic sheets completed to date have been made and adjustments made.* ✓
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)~~ *No unusual adjustments.* ✓
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 submitted by Commdg. Officer "Gilbert" - 1934*
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 C.O. "Gilbert" - 1934*
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 *M.A. 1927* and the reference station is correctly noted. ✓
14. Junctions with adjoining compilations have been examined and are in agreement. (Par. 66j) ✓
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. ✓
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. ✓

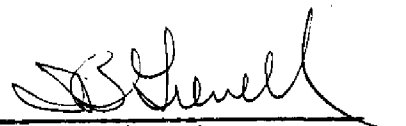
(Par. 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 48)

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

17. Remarks:

18. Examined and approved;

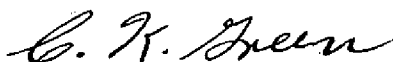
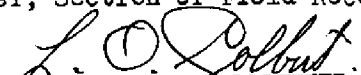
9/15/34


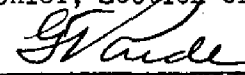
  
Chief of Party

19. Remarks after review in office: *See review pages.*

Reviewed in office by: *V. R. Sobieralski* *B. G. Jones*

Examined and approved:

  
Chief, Section of Field Records  
  
Chief, Division of Charts

  
Chief, Section of Field Work  
  
Chief, Division of Hydrography  
and Topography.

DESCRIPTIVE REPORT, T-5218A

T5218a

T-5218A is identical with the original T-5218 except for corrections to the roads in the northeast quarter of the sheet. The roads have been corrected from the original photographs.

The original T-5218 is a chart paper copy, no Whatmans copy having been made.

The corrections noted above as shown on T-5218A were made prior to publication.

August 25, 1937.

*R. G. Jones*  
R. G. JONES