

5147

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

Topographic Sheet No. T-5147

~~XXXXXXXXXX~~

State Georgia

### LOCALITY

Georgia Coast

Savannah River

Wilmington Island

1934

### CHIEF OF PARTY

S. B. Grenell

U. S. GOVERNMENT PRINTING OFFICE: 1934

5147

27  
92  
289

Applied to chart 839 Nov. 1995 H.L.

Applied to chart 440 June 17, 1956 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. 5147

State Georgia

General locality Savannah River

Locality Wilmington Island

Scale 1:10,000 photos: 10-11-33  
Date of survey, 19

Vessel Air Photo Compilation Party No. 18

Reviewed and recommended for approval:

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

Photos plotted by:

~~Surveyed by~~ R. D. Cross

Inked by C. E. Helfrich

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 photos Nos. 1126 to 1140;

1353 to 1357

--NOTES OF 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 personnell 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. T-5247

PHOTO NO. 1426 to PHOTO NO. 1440  
1353 1357

BY	START	FINISH
ROUGH RADIAL PLOT <u>Warren Fitch</u>	<u>12-20-33</u>	<u>12-20-33</u>
SCALE FACTOR ( <u>.940</u> <u>S. B. Grenell</u> )	<u>1-5-34</u>	<u>1-5-34</u>
SCALE FACTOR CHECKED <u>(S.B.G.)</u>		
PROJECTION <u>J. C. Partington</u>	<u>1-25-34</u>	<u>1-25-34</u>
PROJECTION CHECKED <u>F. B. Hickman</u>	<u>1-26-34</u>	<u>1-26-34</u>
CONTROL PLOTTED <u>F. B. Hickman</u>	<u>1-26-34</u>	<u>1-26-34</u>
CONTROL CHECKED <u>R. D. Cross</u>	<u>1-27-34</u>	<u>1-27-34</u>
TOPOGRAPHY TRANSFERRED		
TOPOGRAPHY CHECKED		
SMOOTH RADIAL LINE PLOT <u>R. D. Cross</u>	<u>2-7-34</u>	<u>2-27-34</u>
RADIAL LINE PLOT CHECKED <u>(S.B.G.)</u>		<u>2-27-34</u>
DETAIL INKED <u>C. E. Helfrich</u>	<u>7-30-34</u>	<u>8-21-34</u>
AREA DETAIL INKED <u>12.8</u>	Square Statute Miles	
LENGTH OF SHORE LINE OVER 200m. <u>13.3</u>	Statute Miles	
LENGTH OF SHORE LINE UNDER 200m. <u>33.4</u>	Statute Miles	
GENERAL LOCATION <u>Savannah River</u>		
LOCATION <u>Wilmington Island</u>		
DATUM STATION <u>Value 2, 1932</u>	LATITUDE <u>32-03-43.958 (1354.0M)</u>	
DATUM <u>N. A. 1927</u>	LONGITUDE <u>80-56-39.554 (1037.5M)</u>	

REPORT OF COMPILATION:RADIAL LINE PLOT

The standard radial line plot method was used to compile this sheet.

ADJUSTMENT OF PHOTOGRAPHS:

A very small amount of tilt was found in the photographs. Most of the difficulty encountered was due to the lack of well selected and spaced radial points.

INTERPRETATION:

The photographs were cloudy and detail difficult to interpret. This difficulty was overcome by a field inspection by the draftsman.

An abandoned railroad was shown by two rows of sand dots.

COMPARISON WITH CONTEMPORARY SURVEYS:

All junctions were made with adjoining compilations and are complete and satisfactory. Shoreline was checked with hydro sheets of C.A. Egner.

Some difference was found between shoreline on this compilation and that of the hydro sheets of C.A. Egner with special reference around Turner Creek Bridge. The difference was corrected on the compilation after it was found to have been traced from detail too far out on the picture. It was necessary to plot this area from single lens picture and then transpose the radial points thus obtained to this compilation to complete the area up to the highway.

COMPARISON WITH OTHER SURVEYS:

In general the waterways check with waterways shown on current U. S. C & G. Survey charts except the smaller creeks. Some have silted up as at (32-01-.6) (80-57.3) and (32-02.7) (80-58.8) which are now only small creeks not surrounding the islands.

ACCURACY AND COMPLETENESS:

Probable error in well defined detail 3 meters.

Probable error in less well defined detail 10 meters.

PHOTOGRAPHS:

No.	to	No.	Time	Date	Stage of Tide
1126		1140	11:10 AM	10-11-33	4/5
1353		1357	10:40 AM	10-11-33	3/5

*C. E. Helfrich*  
C. E. Helfrich  
Draftsman

Approved: *S. B. Grenell*

S. B. Grenell

REVIEW OF AIR PHOTO COMPILATION T-5147 (1935)

September 1935

1. Comparison with Contemporary Graphic Control Surveys

a. T-6154a (1:10,000), July-Aug. 1934

A field comparison has been made between the compilation and T 6154a. (See page 4 of the combined inspection report filed with descriptive report, T-5141.) This has been checked in the office. There are differences of 0 to 45 meters between the compilation shore line and the graphic control shore line. In general the shore line on T-6154a falls outside the compilation shore line. This probably is due to the fact that the graphic control party rodged in mud banks which are not visible on the photographs. The compilation is accepted as showing the better location for the high water line.

Details appearing on T-6154a which are not included on the compilation are as follows:

- (1) U. S. Engineer sounding ranges.
- (2) U. S. Engineer grid system. (For discussion see descriptive report, T-6154 to T-6156.)
- (3) Magnetic meridian.

b. T-6192 (1:10,000), April-May 1934

At lat.  $32^{\circ} 01.3'$ , long.  $80^{\circ} 59.2'$  the compilation shore line varies 0 to 27 meters from the shore line on T 6192. The compilation has been compiled from 5-lens 1:10,000 scale photographs and the area under discussion falls near the outer edge of the wing prints where the photo plot is weak. However, this is near a junction with T-5146 which has been compiled from single lens 1:10,000 scale photographs. Locations of points along the junction have been accepted as correct. An uncontrolled radialplot along Turners Creek has been made and shore line traced from 5-lens 1:20,000 scale photographs. After enlargement on the projector this checked in general with the compilation. The position of topographic station Tent on T-6192 is doubtful. This station apparently has been cut in from a traverse and the fix is weak. According to descriptive report, T-6192, topographic station Tent is 10 meters from the high water line, but it falls 20 meters outside the compilation shore line. Shore line on T-6192 probably has been located from this station. Due to the weakness of the compilation photo plot

and the lack of control in the area under discussion, there is a possibility of errors in location up to 10 meters on the compilation. However, no better location of the shore line can be determined. The compilation shore line is accepted.

At lat.  $32^{\circ} 02.6'$ , long.  $80^{\circ} 58.1'$ , the compilation shore line falls from 5 to 27 meters inside the shore line on T-6192. The compilation shore line agrees with two other short sections of graphic control shore line in this area. The difference probably is due to sketching on T-6192. The compilation shore line is accepted as correct.

Details appearing on T-6192 which are not shown on the compilation are as follows:

- (1) Temporary topographic stations.
- (2) Magnetic meridian.

## 2. Comparison with Previous Topographic Surveys

### a. T-379 (1:10,000), 1852

This is a plane table survey of part of the Savannah River. In the area covered by the compilation there have been extensive changes, particularly in the marsh separating the South Channel from the Savannah River.

The compilation is complete and adequate to supersede the area on T 379 which it covers.

### b. T-992 (1:20,000), 1865-67.

Except for minor changes in marshy shore lines there is little difference between the compilation and T-992. The compilation is complete and adequate to supersede the area covered on T-992.

### c. T-1348b (1:5,000), 1874

This is a detailed survey of the Savannah River, showing a chain of islands separating the South Channel from the main river. Since T-1348b was completed, these islands have formed into a continuous marsh.

The compilation is complete and adequate to supersede the area covered on T-1348b.

3. Comparison with Contemporary Hydrographic Survey

H-5550 (1:10,000), 1934

There are no conflicts between the compilation shore line and the hydrography.

4. Comparison with Charts

The compilation area is covered by charts 440 and 1240. Training walls and jettys shown along the Savannah River on the charts can not be seen on the photographs. It is assumed that they are submerged and overgrown. They are not shown on the compilation.

The Central of Georgia Railroad has been abandoned from a point east of Savannah (see descriptive report, T-5143) to Tybee Island. The embankment still shows above the level of the surrounding marsh.

5. Projection

The projection has been checked in the office. Due to unequal shrinkage of the poor quality celluloid (no longer in use), the scale along the parallels is about 3 meters in 1000 less than that along the meridians. The distance between parallels  $32^{\circ} 02'$  and  $32^{\circ} 03'$  is short by 3 meters.

6. Recoverable Stations

Recoverable stations transferred to the compilation have been plotted by V. R. Sobieralski and checked by L. C. Lande. Those marked (d) are described on Form 524 and filed under T-6166 and T-6192.

Three undescribed recoverable stations (Sid, Tent, and Ray) have not been transferred from T-6192. Sid and Tent fall outside the compilation high water line. According to descriptive report T-6192, station Ray is a marked pine tree 10 meters from the high water line. When plotted on the compilation the station falls in a marsh area 127 meters from the nearest shore line. These stations have been circled in green on T-6192 and a note has been placed thereon referring to this review.

7. Landmarks, Lights and Beacons

There are no landmarks or beacons in the compilation area. One range light is shown.

Respectfully submitted,

*V. R. Sobieralski*  
10-3-35

October 2, 1935.

*Frank G. Esakus*



Survey No. T-5147

Date. May 26, 1955

Chart No. 440-1240

GEORGIA

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

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

Under investigation. Q

[illegible]

REVIEW OF AIR PHOTO COMPILATION NO. *T-514.7*

Chief of Party: *S.B. Grenell*

Compiled by: *C. Helfrich*

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*
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.
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." M-57

8. The representation of low water lines, ~~reefs~~, ~~coral-reefs~~ and ~~reeks~~, 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 C.A. Egner, 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.A. Egner, 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) ✓
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) ✓
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. 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:

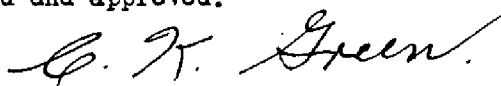
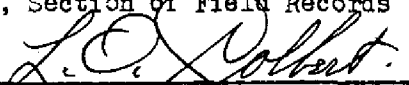
18. Examined and approved;


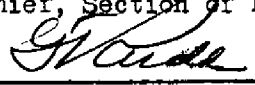
  
Chief of Party

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

Reviewed in office by: *V. K. Sobieralski*  
*Frank G. Eubank*

Examined and approved:

  
Chief, Section of Field Records  
  
Chief, Division of Charts

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