

5146

U. S. COAST & GEODETIC SURVEY  
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Form 504  
Ed. June, 1923

DEPARTMENT OF COMMERCE  
U. S. COAST AND GEODETIC SURVEY

\_\_\_\_\_, Director

State Georgia

DESCRIPTIVE REPORT

*Topographic* } Sheet No. 5146  
*Hydrographic* }

LOCALITY

Georgia

Vicinity of Savannah

Wilmington River

1934

CHIEF OF PARTY

S. B. Grenell

U. S. GOVERNMENT PRINTING OFFICE: 1923

5146

Applied to chart 837 Nov. 1935 F.H.C.

Applied to chart 440 June 17, 1936 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. 5146--

State..... Georgia .....

General locality..... *Atlantic Coast*  
..... *Vicinity of Savannah* .....

Locality..... *Wilmington River to Savannah, Ga.* .....

Scale *1/10,000* ..... Date of photographs: 12-17-33  
Date of ~~survey~~ *comp.* 12-18-33, 19.....

Vessel..... *Air Photo Compilation Party #18* .....

Reviewed and recommended for approval:

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

Photographs plotted by: .....

~~Surveyed by~~..... *R. D. Cross* .....

Inked by..... *B. B. Lewis, Jr.* .....

Heights in feet above..... to ground to tops of trees .....

Contour, Approximate contour, Form line interval..... feet .....

Instructions dated..... November 10, 1933 .....

Remarks:..... *Compilation of aerial photos Nos.: (789) M-3 to M-8* .....

*(789) M-172 to 175* .....

...

--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. T5146

PHOTO NO. <sup>M-1</sup> <del>M-71</del>	to PHOTO NO.	M-8 inc. (788 flight) M-175 inc. (789 flight)
BY <u>S. B. Grenell</u>	START	FINISH
ROUGH RADIAL PLOT <u>S. B. Grenell</u>		
SCALE FACTOR ( )		
SCALE FACTOR CHECKED <u>S. B. Grenell</u>		
PROJECTION <u>A. A. Futral</u>	<u>3-21-34</u>	<u>3-21-34</u>
PROJECTION CHECKED <u>S. B. Grenell</u>	<u>3-21-34</u>	<u>3-21-34</u>
CONTROL PLOTTED <u>Warren Fitch</u>	<u>3-27-34</u>	<u>3-28-34</u>
CONTROL CHECKED <u>R. D. Cross</u>	<u>3-38-34</u>	<u>3-38-34</u>
TOPOGRAPHY TRANSFERRED		
TOPOGRAPHY CHECKED		
SMOOTH RADIAL LINE PLOT <u>R. D. Cross</u>	<u>3-29-34</u>	<u>4-2-34</u>
RADIAL LINE PLOT CHECKED <u>S. B. Grenell</u>		
DETAIL INKED <u>B. B. Lewis, Jr.</u>	<u>April 13, 1934</u>	<u>May 29, 1934</u>
AREA DETAIL INKED <u>17.8</u>	Square Statute Miles	
LENGTH OF SHORE LINE OVER 200m. <u>38.1</u>	Statute Miles	
LENGTH OF SHORE LINE UNDER 200m. <u>18.6</u>	Statute Miles	
GENERAL LOCATION <u>Georgia - Vicinity of Savannah</u>		
LOCATION <u>Wilmington River</u>		
DATUM STATION <u>Causton '32</u>	LATITUDE <u>32 - 03 + 1614.7</u>	
DATUM <u>N. A. 1927</u>	LONGITUDE <u>81 - 01 + 1026.0</u>	

# INSPECTION REPORT

Sheet T-5746.

## REFERENCE:

In reviewing this sheet in the Washington office, reference should be made to the General Report for Single Lens Sheets forwarded with sheet #5206

## GENERAL INFORMATION:

This sheet covers the tributaries and upper branches of the Wilmington River and extends as far north as the south channel of the Savannah River. The greater part of the area covered by this sheet was also covered by 1:10,000, 5 lens photographs of the Savannah River flight but it was decided to plot the sheet from the single lens photographs because of the greater clearness of detail and the resulting accuracy. The sheet was well controlled and no difficulty was experienced in checking the shoreline detail with the hydrography.

The marsh areas and general vegetation features of the fast land presented no unusual features worthy of special note. At Thunderbolt and again at Causton Bluff there are prominent eroded banks which were studied under the stereoscope and indicated on the sheet by symbol.

The Central of Georgia R. R. has removed the structures and track on the branch line to Tybee since the photographs were taken. The old railway embankment still remains as a double row of sand dots. The embankment is, in most part, only three or four feet high, hence the use of sand dots rather than hachures. Extra high tide floods all but the top of the embankment where it passes through the marsh.

## CONTROL:

This sheet was controlled entirely by triangulation; either from the coordinating scheme of C. M. Durgin, 1932-33 or from stations established by C. A. Egner, 1934. Numerous marked topographic stations were located by C. A. Egner subsequent to the compilation of the sheet, but were not used to control or check the plot. Sections of shoreline rodged in on aluminum mounted control sheets were checked against this sheet.

## LANDMARKS FOR CHARTS:

A list of landmarks has been submitted on form 567, by C.A. Egner, 1934.

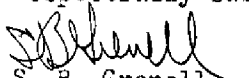
## COAST PILOT NOTES:

Coast pilot notes have been submitted by C. A. Egner, 1934.

## LIST OF NAMES:

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

Respectfully submitted,

  
S. B. Grenell

Chief of Party #8

REPORT OF COMPILATION:

COMPILATION METHOD:

This sheet was compiled by the standard radial line plot method.

The control for this sheet was adequate and no trouble was experienced in carrying the plot through.

ADJUSTMENT OF PHOTOGRAPHS:

The pictures of this area had about the average amount of tilt and as sufficient radial points were picked, no trouble was experienced in adjusting the photographs to the radial plot.

INTERPRETATION:

The photographs as a whole were very clear and the detail well defined.

In the northern portion of the sheet there are some abandoned rice fields. The ditches and dikes still intact definitely located from the pictures and were shown just as they appeared on the pictures. A staggered row of dots was used to denote the embankments and the conventional ditch symbol was used. No marsh symbol was used in the area covered by these old rice fields although they are reverting back to marsh land.

Mud banks as shown by the pictures were denoted by ~~a broken~~ <sup>symbols</sup> line outside the high water line.

The abandoned Tybee railroad, a branch of the Central of Georgia R. R. was shown by two dotted lines.

INFORMATION FROM OTHER SOURCES:

Information regarding the removal of structures on the abandoned Tybee railroad was obtained from the Central of Georgia railroad offices.

All other information was obtained from the pictures and the discussion with field men.

COMPARISON WITH OTHER SURVEYS:

~~The Tybee railroad bridge structures across the Wilmington River and Habersham creek have been removed. On T-5143~~

The north part of this sheet <sup>joins</sup> overlaps the atlas sheet layout of the Savannah River and as much detail as possible was taken from the single lens pictures on this sheet as the detail on these pictures was clearer than on the five lens.

All junctions have been made and are satisfactory.

---2---

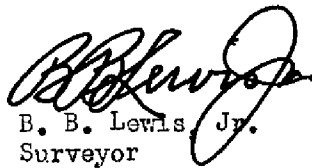
ACCURACY AND COMPLETENESS:

The error in well defined detail is less than four meters  
and in less well defined detail the error is less than ten meters.

The detail within the area covered is complete.

PHOTOGRAPHS:

No.	to	No.	Time	Date	Stage of Tide
M1		M-8 (788)	11:40 AM	12/17/33	4/9
M-172		M-175 (789)	11:10 AM	12/18/33	2/9

  
B. B. Lewis Jr.  
Surveyor

Approved:   
S. B. Grenell

REVIEW OF AIR PHOTO COMPILATION T-5146 (1934)

August 1935.

1. Projection.

The projection has been checked in the office. There are no errors.

2. Comparison with Contemporary Graphic Control Surveys.

(a) T-6165 (1:10,000) Sept. 1934

At latitude  $32^{\circ}03.8'$ , longitude  $81^{\circ}01.5'$ , the compilation shore line falls from 0 to 30 meters inside the shore line on T-6165. This difference can not be accounted for. The shore line is clear on the photographs, and the area is well controlled. The compilation has not been changed.

The graphic control survey shows short sections of grass line at:

Latitude $32^{\circ}01.4'$	Longitude $81^{\circ}02.0'$
$32^{\circ}02.2'$	$81^{\circ}02.7'$
$32^{\circ}02.7'$	$81^{\circ}02.4'$
$32^{\circ}03.1'$	$81^{\circ}01.7'$ and
$32^{\circ}03.8'$	$81^{\circ}01.5'$

These sections of grass line correspond to low water lines on the compilation. The compilation high water line is from 0 to 15 meters inside the edge of the grass, traced along the berm of the marsh. The compilation high water line is accepted as correct.

Details appearing on T-6165 which are not shown on the compilation are temporary topographic stations and the magnetic meridian.

(b) T-6166 (1:10,000) May 1934.

At latitude  $32^{\circ}00.9'$ , longitude  $81^{\circ}01.2'$ , the compilation shore line is from 10 to 15 meters inside the high water line shown on T-6166. This may be a difference in interpretation where the edge of a mud bank has been rodged in on T-6166. The photographs are clear and well controlled. No reason can be found to change the compilation.



At latitude 32°00.2', longitude 81°00.1', and at latitude 32°01.1', longitude 81°01.1', the high water line shown on T-6166 follows the high ground line on the compilation. The compilation shows the high water line at the edge of the marsh. This interpretation is accepted as correct.

At latitude 32°00.2', longitude 81°00.9', the graphic control survey shows the edge of the grass. This corresponds to the compilation low water line. The shore line as shown on the compilation is accepted as correct.

Details appearing on T-6166 above latitude 32°00.0' which are not shown on the compilation are temporary topographic stations.

3. Comparison with Previous Topographic Surveys.

T-992 (1:20,000) 1805-67

In general, there has been little change in the topography of this area. The fortifications shown on T-992 are no longer in evidence. Three docks at Causton Bluff and obstructions at the junction of Wilmington and Herb Rivers, which are shown on T-992, have been destroyed or otherwise removed.

The compilation is complete and adequate to supersede that portion of T-992 which it covers.

4. Comparison with Contemporary Hydrographic Surveys.

H-5550 (1:10,000) 1934 and H-5574a (1:10,000) 1934.

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

5. Comparison with Charts

This area is covered on charts 440, 1240 and 1241. The pier shown on chart 1240 on the west side of Wilmington River just below Causton Bluff <sup>see</sup> can not be located on the photographs. It is not shown on the compilation. Several piers along Wilmington River, Turners Creek, and Richardsons Creek are on the compilation and should be shown on the charts.

6. Recoverable Stations

All recoverable stations on the compilation were plotted in the office by *V. R. Sobieralski* and checked by *L. H. Benson*. Descriptions of recoverable stations marked (d) are filed under T-6165 and T-6166.

7. Landmarks and Beacons.

No landmarks are shown on the charts covering this area. Landmarks recommended by the graphic control party and listed in the descriptive report T-6165 are on the compilation. All beacons shown on the charts and listed in the Light list are on the compilation.

Respectfully submitted,

*V. R. Sobieralski*

*8-6-35*

*B. J. Jones*

Date July 11, 1935

## GEOGRAPHIC NAMES

Survey No. T-5146Chart No. 440, 1240 & 1241

GEORGIA

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

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
	<del>* Mackey Island</del>				
	<del>* Elba Island</del>				
	<del>* Savannah River (South Channel)</del>				
	<del>* Macpherson Creek</del>				
	<del>* Macpherson Island</del>				
	<u>Causton Bluff</u>				
	<del>* St. Augustine Creek</del>				
	<u>Oatland Island</u>				
	<u>Richardson Creek</u>				
	<u>White Marsh Island</u>	(one word)			
	<u>Grays Creek</u>				
	<u>Thunderbolt</u>				
	<u>Wilmington River</u>				
	<u>Bradley Creek</u>				
	<u>Herb River</u>				
	<u>Dutch Island</u>				
	<u>Skidaway River</u>				
	<u>Plantation Harbor</u>				
	<u>Skidaway Island</u>				
	<u>Turners Rock</u>				
	<u>Turner Creek</u>				
	<u>Wilmington River</u>				

\* These names refer to detail which has been transferred to T-5143 & T-5144 U.S.

Names underlined in red approved.

J. H. Vogel

## REVIEW OF AIR PHOTO COMPILATION NO. T-5146

Chief of Party: *S.B. Shnell*Compiled by: *B.B. Lewis, Jr.*Project: *F.P. 4 Co, Party #18*Instructions dated: *11-10-33*

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. ✓
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 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;

12/7/34

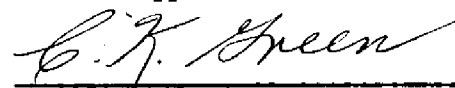
  
Chief of Party

19. Remarks after review in office:

*See following pages review*

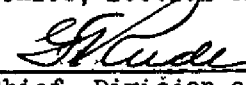
Reviewed in office by: V. R. Sobieralski ✓ B.G. Jones

Examined and approved:

  
Chief, Section of Field Records

  
Chief, Division of Charts

  
Chief, Section of Field Work

  
Chief, Division of Hydrography  
and Topography.