

5138

U. S. COAST & GEODETIC SURVEY
LIBRARY AND ARCHIVES

U. S. COAST & GEODETIC SURVEY
LIBRARY AND ARCHIVES

SEP 14 1935

Acc. No. _____

5138

Form 504 Rev. Dec. 1933	
DEPARTMENT OF COMMERCE U. S. COAST AND GEODETIC SURVEY R. S. PATTON, DIRECTOR	
DESCRIPTIVE REPORT	
Topographic Hydrographic	Sheet No. 5138
State <u>South Carolina</u>	
LOCALITY <u>North of Savannah</u> South Carolina <u>Wright River</u> East Coast	
NORTH OF SAVANNAH RIVER	
1935	
CHIEF OF PARTY <u>S. B. Grenell</u>	

U. S. GOVERNMENT PRINTING OFFICE: 1934

see Descriptive Report T-5116 for General Report
covering this Area.

Applied to chart 839 Nov. 1935 H.C.

Applied to chart 440 June 12, 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. 5138

State South Carolina

General locality North of Savannah
South Carolina, East Coast

Locality Wright River
North of Savannah River

Scale 1:20,000 Date of photographs: 10-10-33
Date of survey: Comp., 19

Vessel Aerial photo compilation party #18

Reviewed and recommended for approval:

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

Photographs plotted by: F. B. Hickman

Surveyed by: C. E. Helfrich

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.: 976 to 987;

992 to 1006

→ Scale of colored aerial
blueprint 1:21,450
Scale of first prints and
Whitmans copy 1:20,000

--NOTES OF COMPILATION--

One copy of this form must accompany each chart from begining to completion. The last draftsman, whose name appears on this form, is responsible for it and all personnell will ondeavor 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. 5138

PHOTO NO. 976 to PHOTO NO. 987
992 1006

BY	START	FINISH
ROUGH RADIAL PLOT <u>B. B. Lewis</u>		<u>7-10-34</u>
SCALE FACTOR (.935) <u>S. B. G. & B. B. L.</u>		<u>7-10-34</u>
SCALE FACTOR CHECKED <u>S. B. G.</u>		<u>7-10-34</u>
PROJECTION <u>A. M. Gruber</u>	<u>7-14-34</u>	<u>7-14-34</u>
PROJECTION CHECKED <u>W. R. Taylor</u>	<u>7-16-34</u>	<u>7-16-34</u>
CONTROL PLOTTED <u>A. A. Futral</u>	<u>9-10-34</u>	<u>9-11-34</u>
CONTROL CHECKED <u>F. B. Hickman</u>	<u>9-28-34</u>	<u>9-28-34</u>
TOPOGRAPHY TRANSFERRED		
TOPOGRAPHY CHECKED		
SMOOTH RADIAL LINE PLOT <u>F. B. Hickman</u>	<u>9-29-34</u>	<u>10-5-34</u>
RADIAL LINE PLOT CHECKED <u>S. B. G.</u>		<u>10-5-34</u>
DETAIL INKED <u>C. E. Helfrich</u>	<u>10-6-34</u>	<u>10-15-34</u>
AREA DETAIL INKED <u>36.8</u>	Square Statute Miles	
LENGTH OF SHORE LINE OVER 200m. <u>0.0</u>	Statute Miles	
LENGTH OF SHORE LINE UNDER 200m. <u>20.4</u>	Statute Miles	
GENERAL LOCATION <u>South Carolina</u>		
LOCATION <u>(North of Savannah) River Wright River</u>		
DATUM STATION <u>Hudson 1932</u>	LATITUDE <u>32-08-35.245 (1085.6m)</u>	} Adjusted
DATUM <u>N. A. 1927</u>	LONGITUDE <u>81-01-34.000 (891.1m)</u>	

INSPECTION REPORT

COMPILATION No. 5138

Scale 1:20,000

REFERENCE:-

In reviewing this sheet in the Washington office reference should be made to the General Report forwarded with compilation #5114.

GENERAL INFORMATION:-

This compilation was made to fill in a space between the system of 1:20,000 5-lens to the northward, the 1:10,000 single lens strip of the Inland Route and the atlas layout of the Savannah River, 1:10,000, 5-lens.

~~One side only of the U.S. Highway #17 appears on this compilation; the entire highway is shown on No. 5137.~~ The canal and ditch system of the abandoned rice fields and the carefully selected and distributed vegetation symbols show very accurately the various topographic features of the country.

Removed

COMPARISON WITH CONTEMPORARY SURVEYS:

Junctions with all adjoining compilations have been inspected and checked. The only check obtained with the field work of Lieut. C. A. Egner was a comparison with the shorelines and the fixed hydrography in the lower New and Wright Rivers.

See Review

Respectfully submitted,

S. B. Grenell

S. B. GRENELL,
Chief of Party #18

REPORT OF COMPILATION:-

COMPILATION METHOD:

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

The radial plot was carried through holding all the control without difficulty.

Common points between the two flights were held.

The scale and scale factor of this sheet and the adjoining sheets 5137, 5134 are identical. The adjoining sheets 5141, 5140 and 5144 are 1:10,000 (5-lens) and have a scale factor of .940. The other adjoining sheet, 5213, is a true 1:10,000 single lens.

ADJUSTMENT OF PHOTOGRAPHS:

The majority of photographs had a minimum amount of tilt. Photograph 997 was only one that had to be discarded for excessive tilt.

Radial points were well selected and spaced. No extra points were needed.

INTERPRETATION:

The photographs were clear and easily interpreted.

Heavily wooded swamp areas were indicated by broken marsh lines combined with cypress and gum symbols. Abandoned rice fields were indicated by a system of ditches where ever it was possible. In some cases only the main ditches were shown with a broken marsh and grass symbol.

COMPARISON WITH CONTEMPORARY SURVEYS:

All junctions with adjoining sheets have been made.

COMPARISON WITH OTHER SURVEYS:

This compilation is in agreement with the previous charted detail.

ACCURACY AND COMPLETENESS:

Probable error in well defined detail, four meters; less well defined detail, ten meters.

PHOTOGRAPHS:

No.	to	No.	Time	Date	Stage of Tide
976	..	987	10:15AM	10-10-33	4/6
992	..	1006	10:45AM	10-10-33	4/6

Approved:

S. B. Grenell, Chief of Party

C. E. Helfrich, Draftsman

See Review

In Review

REVIEW OF AIR PHOTO COMPILATION T-5137

Scale 1:20,000

1. Comparison with Graphic Control Survey T-6140a (1934)(1:10,000):

T-6140a covers the southeast corner of this compilation including the sections of the Wright River and New River at latitude $32^{\circ} 07'$, longitude $81^{\circ} 57'$. There are differences in location of HWL of 2/10 to 7/10 mm on the scale of this compilation. These differences are due to interpretation of rather indefinite shoreline. The compilation has been checked with the photographs and has not been changed.

Recoverable circle stations were transferred from T-6140a to this compilation in this office by *mdcrook* and checked by *L. C. Landy*

Descriptions on Form 524 were in agreement with the compilation detail and are filed under No. T-6148.

All detail on T-6148 within the area of this compilation is now shown on the compilation except for temporary graphic control stations and the magnetic declination.

2. Comparison with H-5549 (1934)(1:10,000).

H-5549 covers the entire section of Wright River shown on this compilation. There are no discrepancies.

3. Comparison with Previous Topographic Surveys:

(a) T-1196 (1870)(1:20,000).

T-1196 covers sections of Wright River and New River shown on this compilation.

T-1196 shows numerous clumps of brush and trees along both shore lines of these rivers which do not exist as evident from a close examination of the photographs and which have not been shown on this compilation.

The compilation is complete and adequate to supersede the section of T-1196 which it covers.

4. Comparison with Chart 1240:

Chart 1240 shows several small sections of high ground along the Wright River which are not shown on the compilation. Close examination of photograph shows no evidence of high ground. The entire area is marsh.

5. Remarks:

The projection has been checked in this office and found correct. Diagonals over 6 and 8 minute blocks checked 2/10 mm.

within

The northwest corner of this compilation has been revised to perfect the junction with T-5141.

Several small wood areas, unimproved roads and trails have been added in this office.

A dotted line shown by the field draftsman around the limits of high ground has been removed except where the photographs showed sand.

Grass and brush symbols have been added where necessary and the small blank areas shown on the compilation are cultivated fields.

M. D. Crook
Revised
B. G. Jones

Survey No. T-5/38

Chart No. 1240

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

[illegible]

Names underlined in red approved
by C. E. C. C. on 1-29-36

REVIEW OF AIR PHOTO COMPILATION NO. 5138

Chief of Party: S.B. Grenell

Compiled by: C.E. Helfrich

Project: F.P.H. 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)
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)
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)
10. A list of landmarks was furnished on Form 567 and instructions
in the Director's letter of July 18, 1934, Landmarks for Charts,
complied with. (Par. 16d, e; and 60)
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 naviga-
tion 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)
13. The geographic datum of the compilation is *N. A. 1927* and the
reference station is correctly noted. *Adjusted*
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 Longi- ✓
tude 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;

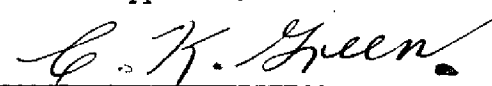
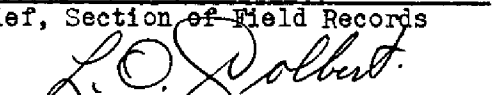
Feb. 9, 1935


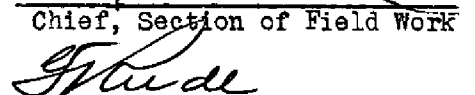

Chief of Party

19. Remarks after review in office:

Reviewed in office by: *W.M. Brook* *July 3, 1935*
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.