

5145

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. 5145
~~Hydrographic~~

State Georgia

LOCALITY

Georgia Coast

Savannah Harbor

1935

CHIEF OF PARTY

S. B. Grenell

U. S. GOVERNMENT PRINTING OFFICE: 1934

5145

Applied to chart 440. Sept. 25, 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. 5145

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

General locality.....

Locality.....Savannah.....

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

Vessel.....Aerial Photo Compilation Party No. 13.....

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

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

Inked by.....D. B. Gaines.....

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. 1161 to 1170,
1176 to 1194.

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. 5145 (West Half)

State Georgia

General locality Georgia East coast

Locality Savannah vicinity

Scale 1:10,000 Date of photographs: 10-11-33
survey Comp., 19

Vessel Aerial Photo Compilation Party #18

Reviewed and recommended for approval:

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

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

Inked by D. B. Gaines

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.: 1176 to 1182

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. 5145 (East Half)

State Georgia

General locality Georgia East Coast

Locality Savannah

Scale 1:10,000 Date of survey photographs; 10-11-33
Comp.: , 19

Vessel Aerial Photo Compilation Party No. 18:

Reviewed & recommended for approval:

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

Photographs plotted by:

~~Surveyed by~~ R. D. Cross

Inked by D. B. Gaines

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.: 1482 to 1494;

1461 to 1470

--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. 511⁵ (West Half)

PHOTO NO. 1476 to PHOTO NO. 1482

BY	START	FINISH
ROUGH RADIAL PLOT <u>Warren Fitch</u>	<u>12-19-33</u>	<u>12-19-33</u>
SCALE FACTOR (.940) <u>S. B. Grenell</u>	<u>1-5-34</u>	<u>1-5-34</u>
SCALE FACTOR CHECKED <u>S. B. Grenell</u>		<u>1-5-34</u>
PROJECTION <u>J. C. Partington</u>	<u>1-25-34</u>	<u>1-25-34</u>
PROJECTION CHECKED <u>R. D. Cross</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 <u>D. B. Gaines</u>	<u>Various Times</u>	
TOPOGRAPHY CHECKED <u>S. B. Grenell</u>	"	"
SMOOTH RADIAL LINE PLOT <u>R. D. Cross</u>	<u>2-1-34</u>	<u>2-23-34</u>
RADIAL LINE PLOT CHECKED <u>S. B. Grenell</u>	<u>2-1-34</u>	<u>2-23-34</u>
DETAIL INKED <u>D. B. Gaines</u>	<u>9-6-34</u>	<u>12-1-34</u>
AREA DETAIL INKED <u>8.7</u>	Square Statute Miles	
LENGTH OF SHORE LINE OVER 200m. -----	Statute Miles Roads 10.5	
LENGTH OF SHORE LINE UNDER 200m. -----	Statute Miles R. R. 9.4	
GENERAL LOCATION <u>Georgia East Coast</u>		
LOCATION <u>Savannah vicinity</u>		
DATUM STATION <u>Cloud, 1932</u>	LATITUDE <u>32°-00'-20.846" (642.1M)</u>	
DATUM <u>N. A. 1927</u>	LONGITUDE <u>81°-08'-55.303 (1451.5M)</u>	
	<i>Preliminary Adjustment</i>	

REPORT OF COMPILATION:-

RADIAL LINE PLOT:-

The standard radial line plot was used in making the plot for this compilation.

No difficulties were encountered in the radial plot. All triangulation stations held.

All common points held between the two 1400 flights over this compilation.

The scale factor of this and all other ^{5-lens 1:20,000} sheets is about .940. The northern and eastern junctions with compilations 5142(W) and 5145(E) were made direct being of the same scale factor. The western and southern junctions of this compilation were made with compilation 5114 (scale 1:20,000) five lens. This junction was made with the projector.

ADJUSTMENT OF PHOTOGRAPHS:*

The two 1400 flights on this compilation were run through by R. D. Cross. Some difficulty was encountered in adjusting the photographs because there were not enough radial points, although this was corrected by cutting in additional points along road intersections where they were most needed.

Tilt was excessive in some cases but by using adjoining photographs it was possible to cover badly tilted areas. In some cases pictures from the next flight were used to cover badly tilted areas.

Additional points were pricked and this was done by pricking in the desired area a point common to three or more photographs and drawing radial lines through these points from their respective center points. By making three cuts on the compilation additional points were added.

INTERPRETATION:-

The photographs were on an average clear. The detail was sharply defined, particularly in the "B" prints.

The only particular difficult feature was interpreting the railroad tracks and yards at the Atlantic Coast Line R.R. shops. A railroad blueprint was used in interpreting the tracks at the A.C.L. R.R. shops.

COMPARISONS WITH CONTEMPORARY SURVEYS:-

The northern and eastern junctions (with compilations 5142(W) and 5145(E)) were made direct, being the same scale factor. The southern and western junctions of this compilation were made with compilation 5114, five lens, 1:20,000 scale. This compilation is part of another radial plot and the junction was made with the projector.

COMPARISONS WITH OTHER SURVEYS:-

This compilation agrees in general with the U. S. Army Tactical map of South Carolina and Georgia (Savannah quadrangle). This compilation agrees with all detail from the former City Map drawn in the City Engineer's office in 1931.

All railroads were drawn in after a close study of local railroad blue prints. This was necessary because railroads were difficult to follow on the photographs.

Other sources of information used in compiling this sheet were field inspection notes made by parties from this office.

ACCURACY AND COMPLETENESS:-

It is felt that the required accuracy and completeness are obtained in the compilation of this sheet; namely: probable error in well defined detail not more than four meters, and probable error in less well defined detail not more than 10 meters.

PHOTOGRAPHS:-

No.	to	No.	Date	Time	Stage of Tide
1476		1482	10-11-33	11:25AM	3/5
1471		1475	10-11-33	11:25AM	3/5

D. B. Gaines

D. B. Gaines,
Draftsman.

Approved:

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

--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. 5145 (East Half)

PHOTO NO. ¹⁴⁸²
1461 to PHOTO NO. ¹⁴⁹⁴
1470

BY	START	FINISH
ROUGH RADIAL PLOT <u>Warren Fitch</u>	<u>12-19-33</u>	<u>12-19-33</u>
SCALE FACTOR (.940) <u>S. B. Grenell</u>	<u>1-5-34</u>	<u>1-5-34</u>
SCALE FACTOR CHECKED <u>S. B. Grenell</u>	<u>1-5-34</u>	<u>1-5-34</u>
PROJECTION <u>J. C. Partington</u>	<u>1-27-34</u>	<u>1-27-34</u>
PROJECTION CHECKED <u>F. B. Hickman</u>	<u>1-28-34</u>	<u>1-28-34</u>
CONTROL PLOTTED <u>F. B. Hickman</u>	<u>1-28-34</u>	<u>1-28-34</u>
CONTROL CHECKED <u>R. D. Cross</u>	<u>1-28-34</u>	<u>1-28-34</u>
TOPOGRAPHY TRANSFERRED <u>D. B. Gaines</u>	<u>Various times</u>	
TOPOGRAPHY CHECKED <u>S. B. Grenell</u>	<u>" "</u>	
SMOOTH RADIAL LINE PLOT <u>R. D. Cross</u>	<u>2-1-34</u>	<u>2-23-34</u>
RADIAL LINE PLOT CHECKED <u>S. B. Grenell</u>	<u>2-1-34</u>	<u>2-23-34</u>
DETAIL INKED <u>D. B. Gaines</u>	<u>5-2-34</u>	<u>9-5-34</u>
AREA DETAIL INKED <u>9.2</u>	Square Statute Miles	
LENGTH OF SHORE LINE OVER 200m. -----	Statute Miles <u>Streets 100.9</u>	
LENGTH OF SHORE LINE UNDER 200m. -----	Statute Miles <u>Roads 26.7</u>	
GENERAL LOCATION <u>Georgia, off coast</u>	Statute Miles <u>R. R. 7.1</u>	
LOCATION <u>Savannah area</u>		
DATUM STATION <u>Waters, 1933</u>	LATITUDE <u>32°-00'-38.001" (1170.5M)</u>	
DATUM <u>N. A. 1927</u>	LONGITUDE <u>81°-06'-01.116" (29.3M)</u>	

Preliminary Adjustment

REPORT OF COMPILATION:-

RADIAL LINE PLOT:-

The standard radial line plot method was used in making the plot for this compilation.

No difficulties were encountered in the radial plot. All triangulation stations held.

All common points held between the two 1400 flights over this compilation.

The scale factor of this and all other ^{single lens 1:10,000} atlas sheets is ^{about} 1:940. The western and northern junctions (compilations 5145(W) & 5142(E)) was made direct, being of the same scale factor. The southern flight over the city (photographs 1476 through 1494) ends on this compilation. The eastern junction is made with compilation 5146A single lens, 1:10,000 scale with a reduced photostat. The southern junction is made with compilation 5114. This compilation is part of another radial plot (scale 1:20,000) and the junction was made with the projector.

ADJUSTMENT OF PHOTOGRAPHS:-

The two 1400 flights on this compilation were run through by R. D. Cross. Some difficulty was encountered in adjusting the photographs because there were not enough radial points, although this was corrected by cutting in additional points along road intersections, where they were most needed.

Tile was excessive in some cases but by using adjoining photographs, it was possible to cover badly tilted areas. In some cases pictures from the next flight were used to cover badly tilted areas.

Additional points were pricked and this was done by pricking in the desired area a point common to three or more photographs and drawing radial lines through these points from their respective center points. By making these cuts on the compilation additional points were added.

INTERPRETATION:-

The photographs were, ^{on} the average clear. The detail was sharply defined, particularly in the "B" prints.

The only difficult feature was an over abundance of trees in the city, making it difficult to trace street intersections and it was necessary to use a former city map to interpret the various street intersections.

COMPARISONS WITH CONTEMPORARY SURVEYS:-

The western and northern junctions with compilations 5145(W) and 5142(E) were made direct, being of the same scale factor. The southern flight over the city (photographs 1476 through 1494) ends on this compilation. The eastern junction is made with compilation 5146A, single lens, 1:10,000 scale with reduced photostats. The southern junction is made with compilation 5114.

This compilation covers another radial plot (scale 1:20,000) and the junction was made with the projector.

COMPARISONS WITH OTHER SURVEYS:-

This compilation agrees in general with the U. S. Army Tactical map of South Carolina and Georgia (Savannah Quadrangle.)

This compilation agrees with all detail from former city map drawn in City Engineer's office in 1931.

All railroads were drawn in after a close study of local railroad blue prints. This was necessary because railroads were difficult to follow on the photographs.

Other sources of information used in compiling this sheet were the field inspection notes made by members of the field party from this office.

ACCURACY AND COMPLETENESS:-

It is felt that the required accuracy and completeness are obtained in this compilation; namely: probable error in well defined detail not more than 4 meters; less well defined detail not more than 10 meters.

PHOTOGRAPHS:-

No.	to.	No.	Time	Date	Stage of Tide
1482		1494	11:30AM	10-11-33	4/5
1461		1470	11:15AM	10-11-33	4/5

D. B. Gaines,
D. B. Gaines,
Draftsman

Approved:

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

GEOGRAPHIC NAMES

Survey No. T-5145

Date. 5-17-35

Chart No. U.S.E. Savannah Quad.

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]

REVIEW OF AIR PHOTO COMPILATION NO. T-5145

Chief of Party: S. B. Grenell

Compiled by: D. Gaines

Project: FP4 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)~~ None
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.~~ None
There are no contemporary plane table or hydrographic surveys in this area. U.S.S.
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)~~ None

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)~~ *None*
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)~~ *None*
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) *None*
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)~~ *None*
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 Longi- ✓ tude are correctly marked.

There are no contemporary graphic control or hydrographic surveys covering this area. T-992 (1:20,000) 1865-67 is the only previous survey by this bureau. There is little comparison possible between the compilation and T-992 because of the changes which have taken place. The fortifications shown on T-992 have disappeared and the city of Savannah has increased in size. The compilation is complete and adequate to supersede that part of T-992 which it covers.

V. K. Sobieralski

8-2-35

This sheet was compiled as two sheets, T 5145 East and T 5145 West, which have been joined into one sheet before printing in this office
B. G. J.

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 opposite page.*

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

Examined and approved:

K. T. Adams
Asst Chief, Section of Field Records
L. O. Solbert
Chief, Division of Charts

F. B. Borden
Chief, Section of Field Work
G. H. Hulse
Chief, Division of Hydrography
and Topography.