

5224

U. S. COAST & GEODETIC SURVEY
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Ed. June, 1928

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

_____, Director

State: Georgia

DESCRIPTIVE REPORT

Topographic } Sheet No. 5224
Hydrographic }

LOCALITY

~~Coast of Georgia~~
ATLANTIC COAST
St. Simon Sound

1934

CHIEF OF PARTY

S. B. Grenell

Applied to Chart 1242, Mar. 16, 1939 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. 5224 5224

State Georgia

General locality ~~Coast of Georgia~~ ATLANTIC COAST

Locality St. Simon Sound

Scale 1:10,000 Date of photographs: 11-21-33; 12-18-33.
Date of ~~survey~~ Comp. 1934

Vessel Aerial photo compilation party 18

Reviewed and recommended for approval:

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

Photographs plotted by: F. B. Hickman

~~Surveyed by~~

Inked by J. W. Griffith, 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-214 to 217;

(789) M-82 to 85; also (789) M-132.

...

--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. 5224

PHOTO NO. (789) M-211 to PHOTO NO. 217
(789) M-82 86
Also, (789) M-132

BY

START

FINISH

ROUGH RADIAL PLOT	_____	_____	_____
SCALE FACTOR ()	_____	_____	_____
SCALE FACTOR CHECKED	<u>S. B. Grenell</u>	_____	_____
PROJECTION	<u>A. A. Futrel</u>	<u>3-19-34</u>	<u>3-19-34</u>
PROJECTION CHECKED	<u>F. B. Hickman</u>	<u>4-23-34</u>	<u>4-23-34</u>
CONTROL PLOTTED	<u>F. B. Hickman</u>	<u>4-23-34</u>	<u>4-23-34</u>
CONTROL CHECKED	<u>Warren Fitch</u>	<u>4-23-34</u>	<u>4-23-34</u>
TOPOGRAPHY TRANSFERRED	_____	_____	_____
TOPOGRAPHY CHECKED	_____	_____	_____
SMOOTH RADIAL LINE PLOT	<u>F. B. Hickman</u>	<u>5-3-34</u>	<u>5-10-34</u>
RADIAL LINE PLOT CHECKED	<u>S. B. Grenell</u>	_____	_____
DETAIL INKED	<u>J. W. Griffith, Jr.</u>	<u>5-14-34</u>	<u>5-25-34</u>
AREA DETAIL INKED	<u>5.8</u>	Square Statute Miles	
LENGTH OF SHORE LINE OVER 200m.	<u>10.2</u>	Statute Miles	
LENGTH OF SHORE LINE UNDER 200m.	<u>13.3</u>	Statute Miles	
GENERAL LOCATION	<u>Coast of Georgia</u>		
LOCATION	<u>St. Simon Sound</u>		
DATUM STATION	<u>St. Simon Island L.H., 1932</u>		
	<u>ATITUDE 31-08-01.989 (61.3M)</u>		
DATUM	<u>N. A. 1927</u>		
	<u>LONGITUDE 81-23-37.555 (901.9M)</u>		

(ADJUSTED)

INSPECTION REPORT

Sheet #5224

REFERENCE:

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

GENERAL INFORMATION:

This sheet was made as a "fill-in" between regulation size sheets of the single lens system. It covers St. Simon Sound entrance and the mouth of the Brunswick River.

The marsh areas in this section are bordered in places by narrow bands of mud flats supporting a sparse marshy growth. The berm of the solid marsh area is well defined by a wall of dense grass in which considerable drift has become entangled and which shows as a definite line on the photographs. This line has been shown as the true high water line with a secondary dashed line outside to indicate the edge of the mud and grass border.

The outer coast of the north tip of Jekyll Island has been badly eroded by heavy storms and the true high water line is at the foot of a low bluff. The beach is characterised by a secondary beach or bar about 50 meters outside of the H. W. L. which bares at low water and leaves a shallow pool behind.

The outer coast of the south end of St. Simon Island east of the Light House is also eroding rapidly as indicated by the abandoned roads. In the past ten years a great many houses have been undermined and destroyed in this section.

CONTROL:

This sheet was controlled entirely by triangulation. The control came principally from the revision scheme of C. M. Durgin, 1932-33 and first order intersection stations of C. D. Meaney, 1932.

LANDMARKS FOR CHARTS:

Landmarks have been submitted by H. A. Paton and J. A. Bond, on form 567, 1934.

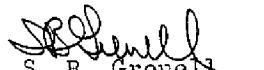
COAST PILOT NOTES:

Coast Pilot Notes have been submitted by H. A. Paton and J. A. Bond, 1934.

NAMES:

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

Respectfully submitted,


S. B. Grenell
Chief of Party

REPORT OF COMPILATION:

COMPILATION METHOD:

This sheet was compiled by the standard radial line plot method. The control on this sheet was easy to hold and consequently the plot ran through with no difficulty at all.

ADJUSTMENT OF PHOTOGRAPHS:

Very little trouble was experienced in adjusting photographs through this sheet. The radial points were well fixed and the photographs contained the minimum of tilt.

INTERPRETATION:

The photographs were unusually clear causing no great difficulty in interpretation of the detail. The stereoscope was used to pick up as accurately as possible the detail having elevation or was partly obscured by trees.

INFORMATION FROM OTHER SOURCES:

The photographs and field sketches were the only sources of information used on this sheet.

COMPARISON WITH OTHER SURVEYS:

Junctions with adjoining sheets compiled in this office are complete and satisfactory.

ACCURACY AND COMPLETENESS:

The area covered on this sheet is complete in every detail. As nearly as can be determined from the photographs; all well defined detail is located with a possible 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) 214		217	12-18-33	11:00A	6/9
(789) 82		85	11-24-33	11:45A	4/6

Also, (789) M-132

J. W. Griffith, Jr.
Draftsman

J. W. Griffith Jr.

Approved:

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

REVIEW OF AIR PHOTO COMPILATION NO. 5224

Chief of Party: S. B. GRENELL

Compiled by: J. W. Griffith, Jr.

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) *No supplemental surveys* ✓
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 H.A. Pofon + J.A. Bond, 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 H.A. Pofon + J.A. Bond, 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) ✓
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; *Dec. 13, 1934*

S. B. Howell
Chief of Party

19. Remarks after review in office:

See following pages.

Reviewed in office by:

D. H. Benson ✓ *B. G. Jones*

Examined and approved:

Ast *K. T. Adams*
Chief, Section of Field Records
L. O. Colburn
Chief, Division of Charts

F. S. Borden
Chief, Section of Field Work
G. H. de
Chief, Division of Hydrography
and Topography.

REVIEW OF AIR PHOTO COMPILATION T-5224.

Replot ^{of} ~~to~~ Jekyll Island.

- (a) The graphic control surveys in this area were not available when the photo plot was made and were not used for control. Comparison with the graphic control surveys in this office shows errors in the compilation and the entire area of Jekyll Island has been replotted.

The replot of Jekyll Island includes, in addition to the sections shown on this compilation, the entire eastern half of compilation T-5227 and the northeastern section of compilation T-5228.

The differences between the compilation as replotted and the original plot amount to 15 to 20 meters.

The error in the original plot was apparently caused by a small error in the identification of triangle K, 1933, latitude $31^{\circ} 03.2'$, longitude $81^{\circ} 24.5'$, and to lack of control on which to close the photo plot at the north end of Jekyll Island. ^{Eight} triangulation stations and 6 recoverable plane table stations which had not been used by the field party were added to the compilation in this office and used for control of the new plot.

Comparison with graphic control surveys 1934 (1:10,000).

(a) T-6172.

Several temporary plane table stations on T-6172 fall outside of low water line and are not described. These stations do not appear on the photographs. A note on H-5579 states that temporary station CAP at latitude $31^{\circ} 06.6'$, longitude $81^{\circ} 27.4'$ is located on a pile of rocks and gravel. These rocks do not show on the photographs and are not shown on this compilation.

(b) T-6161b.

Comparison with T-6161b shows the omission of the following detail which has been added to the compilation from the photograph: at the south end of St. Simon Island; buildings, and a sand bar.

(c) T-6171.

No discrepancies.

- (d) All detail on the above listed graphic control surveys within the area of this compilation is now shown on the compilation except for temporary plane table stations, the magnetic meridians and azimuths of ranges listed as follows:

Range	Amimuth lettered on graphic control survey	Azimuth scaled in office as measured from north looking from front to rear range.	Graphic control survey number.
Cedar Hammock Range	⁵ 225° 16'	⁵ 225° 21'	T-6172
Jekyll Isl. Range	217° 07'	217° 11'	"
Jekyll Creek Jetty Range	182° 35'	182° 45'	"
St. Simon Range	123° 17'	123° 41'	T-6171
Rantation Creek Range	285° 03'	284° 53'	"

No evidence on the plane table surveys that the azimuths of these ranges were determined by location of a point on the extension of the range.

Scaled in the office by *Douglas H. Benson* and checked by *Leonard A. McSauer*

Recoverable stations shown on the graphic control surveys have been transferred to this compilation by *Douglas H. Benson* and checked by *Leonard A. McSauer*. and descriptions are filed under T-6171, T-6161b, and T-6172.

Comparison with contemporary hydrographic surveys.

(a) H-5590.

No discrepancies noted.

(b) H-5579.

A pencil note on H-5579 states that a telephone line crosses the mouth of Parsons Creek. This line does not show on the photographs which are indistinct in this area.

(c) H-5685.

Shore line on H-5685 was transferred from the original compilation for the area in the vicinity of Jekyll Island. This section of the compilation has been replotted as stated in preceding paragraphs. This fact has been called to the attention of Field Records Section.

Comparison with Previous Surveys.

(a) Comparison with T-4118 (1924).

This sheet is on a 1:20,000 scale. Comparing shore line by means of proportional dividers shows that the high-water line around the Atlantic side of Jekyll Island has receded approximately 40 meters, but that there has been little change elsewhere.

The sheet shows positions of the telephone line following along the shore line of Brunswick Point to a point opposite the tip of Jekyll Island where it crosses over to the island by means of a submerged cable just south of the mouth of Clam Creek. This is the same line mentioned on H-5579.

This sheet does not show roads on Jekyll Island, but refers to Blue Print 19722 as showing the roads. Many of the roads are only bridle paths, portions of which appear through the trees on the photographs but which could not be delineated in their entire length.

The compilation is complete and of sufficient accuracy to supersede T-4118 except for the telephone line noted above.

Comparison with Charts 1242, 447 and 3257.

Two lights are shown on the charts which are not on the compilation or plane table sheets having been placed since the date of the survey. These lights are (1) Brunswick Point Lighted Buoy '20'; (2) Brunswick Point Cut Range Front Beacon.

Remarks.

All recoverable stations on the graphic control surveys in this area have been transferred to the compilation by *Douglas H. Benson* and checked by *Leonard G. McSweeney* and descriptions are filed as listed below:

Review of Air Photo Compilation T-5224 - page 4.

<u>Station</u>	<u>Description</u>
GLU	T-6172
VEX	T-6171

The projection on the compilation was checked in this office and is correct.

Douglas H. Benson
B. G. Jones

Approved
K.T. Adams

Applied to chart 447
2/28-36 J.H.S.

Survey No. T-5224

Chart No. 1242 - 447

Diagram No. _____

Date. April 24, 1935

GEOGRAPHIC NAMES

*. Approved by the Division of Geographic Names, Department of Interior.

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

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

[illegible]

Check list for Air Photo Compilation 1-5224

1. Sheet Indexed. ✓
2. Latitudinal data correct and marked adjusted or unadjusted; degrees and minutes correctly marked on projection. ✓
3. Note in review as to whether projection was checked and results. ✓
4. Check geographic names against standards and make name list. ✓
5. Lights and Beacons checked against local light lists and corrections and omissions noted in review. ✓
Sight aid standards of U.S. L.M. Bureau in case of doubt as to when the aid was reliable.
6. Descriptions of Form 524 checked against compilation and corrected where necessary. Corrections noted in the review and cross references made where filing was changed. Note list by sheet numbers made in the review. ✓
7. Comparison with other surveys:
 - a. Charts - Descriptions and survey as in landmarks and other important detail. ✓
 - b. Old surveys. ✓
 - c. New hydrographic surveys. ✓
 - d. Plane-table control surveys - all detail on the plane-table control survey is shown on the compilation sheet as noted in the review. Differences are discussed. ✓
8. Plane-table control surveys reviewed in connection with the compilation. Corrections and reference notes made at back of the plane-table report. Copy of the compilation review attached at back of the plane-table report if necessary. Notes made directly on the plane-table sheet where needed.
 - a. Projection. ✓
 - b. Quality of the plane-table work. ✓
 - c. Differences. ✓
 - d. U.S.D. stations and grids. ✓
 - e. Landmarks and aids. ✓

7. Data notes - all data to be unadjusted. ✓
8. Stations described on Form 524 marked (d). ✓
9. Put date and initials on notes made on plane-table surveys. ✓
10. Differences or new data of importance called to attention of Cartographic, Field Records, or Coast Plane Sections. ✓
11. Functions noted on side of this form and checked by 5113 5126 5127
12. Overlay complete:
a. Limits of sheet with enlargements or reduction. ✓
b. Photo numbers and flight lines. ✓
c. Title notes. ✓
13. Review complete:
a. Accuracy of location. ✓
b. Field data. ✓
c. Landmark. ✓
d. File Form of description on Form 524. ✓
e. Review of location of line on sand beach. ✓
f. Any additional data to be reported please for further assurance.