

5213

U. S. COAST & GEODETIC SURVEY
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Form 504
Ed. June, 1928

DEPARTMENT OF COMMERCE

U. S. COAST AND GEODETIC SURVEY

R. S. Patton, Director

State: South Carolina

DESCRIPTIVE REPORT

Photo
Topographic

Sheet No. 5213

~~HYDROGRAPHIC~~

LOCALITY

South Carolina

Vicinity of Calibogue Sound

Daufuskie Island to Walls Cut

1934

CHIEF OF PARTY

Lieut.(j. g.) S. B. Grenell

U. S. GOVERNMENT PRINTING OFFICE: 1923

5213

Applied to chart 839 - Nov. 7, 1935 H.H.C.

Applied to chart 440 June 26, 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. 5213

State South Carolina

General locality Vicinity of Calibogue Sound
~~South Coast of South Carolina.~~

Locality Daufuskie Island to Walls Cut.

Scale 1:10,000 Date of Photographs: 12/18/33
Date of ~~survey~~ Comp. March, 1934

Vessel

Reviewed and recommended for approval:
Chief of party Lieut. (j. g.) S. B. Grenell

Photographs plotted by: F. B. Hickman
~~Surveyed by~~

Inked by A. M. Gruber

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 photographs Nos. (807) M134 to 142 inc.

NOTES ON 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 personnel 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. 5213
(807)
PHOTO NO. M134 TO PHOTO NO. M142
BY START FINISH

ROUGH RADIAL PLOT _____
SCALE FACTOR() _____
SCALE FACTOR CHECKED S. B. Hickman _____
PROJECTION A. A. Futral 2/12/34 2/12/34
PROJECTION CHECKED F. B. Hickman 2/13/34 2/13/34
CONTROL PLOTTED F. B. Hickman 2/13/34 2/13/34
CONTROL CHECKED A. A. Futral 2/14/34 2/14/34
TOPOGRAPHY TRANSFERRED _____
TOPOGRAPHY CHECKED _____
SMOOTH RADIAL LINE PLOT F. B. Hickman 2/14/34 2/15/34
RADIAL LINE PLOT CHECKED S. B. Grenell 2/15/34 2/15/34
DETAIL INKED A. M. Gruber 2/20/34 3/19/34

AREA DETAIL INKED 8.1 sq. Statute Miles
LENGTH OF SHORELINE OVER 300 m. 13.0 Statute Miles
LENGTH OF SHORELINE UNDER 300 m. 26.7 Statute Miles

GENERAL LOCATION South coast of South Carolina (Vicinity of Calibogue Sound)
LOCATION Daufuskie Island to Walls Cut
DATUM STATION Cow 1932 Latitude 32-05+1188.2 m
N. A. 1927 datum Longitude 80-54+189.2 m

REPORT OF COMPILATION.COMPILATION METHOD:

The standard radial line method was used in the compilation of this sheet. No difficulty was experienced in carrying the plot through with the available control.

ADJUSTMENT OF PHOTOGRAPHS:

The pictures on this sheet have about the average amount of tilt and no particular difficulty was experienced in adjusting the pictures to the radial points, except the station Fusky. When surrounding radial points are held this station is off about 6 meters parallel to line of flight. It's proximity to the line of flight resulted in weak cuts from Photos #140 and #141. This point was disregarded in drawing shoreline.

More radial points would have helped the rapidity of adjustment on this sheet.

INTERPRETATION:

The pictures for this sheet were very clear and the shoreline clearly defined in most cases. Standard symbols listed in the topographic manual were used throughout the sheet, or such combinations as would give close approximation to existing conditions. Careful study under the stereoscope revealed a bluff along the western edge of Daufuskie Island, and this has been shown with the conventional symbol. This note is made because no bluff is shown on Chart #1240.

INFORMATION FROM OTHER SOURCES:

All information for the compilation of this sheet was obtained from the photographs, observation of same under stereoscope, and discussion with men of the field party.

COMPARISON WITH OTHER SURVEYS:

The junction with sheet #5212 to the north has been made and is satisfactory. The junction with Atlas sheet #5152 (5-lens, 1:10,000) to the southwest has been made and is satisfactory.

Bluff symbols around the high land on the western side of Daufuskie Island should be shown on present charts.

ACCURACY AND COMPLETENESS:

The area covered by this sheet is complete in every detail as nearly as can be determined by the photographs.

All well defined detail is located with a probable 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
(807)M137	-	M142	12/8/33	11:30	6/8

APPROVED:

S. B. Grenell
S. B. Grenell.

18

A. M. Gruber
A. M. Gruber,
Draftsman

INSPECTION REPORT

SHEET NO. 5213

REFERENCE:

When the sheet is reviewed in Washington, reference should be made to the General Report filed with sheet No. 5206.

GENERAL INFORMATION:

This sheet offers few topographic features worthy of special note. The fast land area of Daufuskie Island is slightly higher than the general elevation for this vicinity and the division between marsh and land is definitely marked by a low bluff as indicated on the sheet.

Except where cleared for cultivation, the mainland of Daufuskie Island is heavily wooded with a mixed growth of pine, oak and deciduous brush. The oak and brush predominate along the fringes of the marsh.

In general, the marsh line is clear cut and continuous giving a smooth even, high water line.

CONTROL:

This sheet was controlled entirely by triangulation stations located in 1931 by C. A. Egner and 1932 by C. M. Durgin.

LANDMARKS FOR CHARTS:

Form 567 will be submitted by C. A. Egner, 1934.


COAST PILOT NOTES:

Notes will be furnished 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.

REVIEW OF AIR PHOTO COMPILATION NO. 5213

Chief of Party: S.B. GRENNELL

Compiled by: A.M. Gruber

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) *Beacons cut in on aluminum mounted sheets by C.A. Egner, 1934.*
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 supplementary control.
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.~~ *review. No hydro. or topo. sheets available at date of review 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 will be 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 will be 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)~~ ✓
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)~~ ✓
No New Names
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. ✓

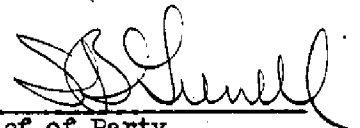
3. All station points are exactly marked by fine black dots. ✓
4. Closely spaced lines are drawn sharp and clear for printing. ✓
5. Topographic symbols for similar features are of uniform weight. ✓
6. All drawing has been retouched where partially rubbed off. ✓
7. Buildings are drawn with clear straight 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; 9-6-34

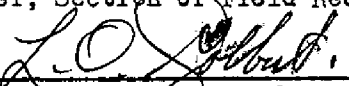

Chief of Party


19. Remarks after review in office: See following pages

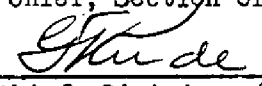
Reviewed in office by: B.G. Jones

Examained and approved:


Chief, Section of Field Records


Chief, Division of Charts


Chief, Section of Field Work


Chief, Division of Hydrography
and Topography.

REVIEW OF AIR PHOTO COMPILATION T-5213 (1934)

Comparison with other Surveys.

The contemporary planetable surveys show short sections of shore line and the locations of signals for hydrography and air photo control. However, it is evident that the planetable surveys were not used by the compilation party, nor was a comparison made in the field between the planetable surveys and the compilation. This was probably due to the fact that the compilation party had to work ahead of the planetable party in order to supply shore line for the hydrography.

1. Planchette control survey T-61406, 1934.

At the S.W. point of Daufuski Island, lat. $32^{\circ}-05'.5$, long. $80^{\circ}-54'.2$, there is a difference in shore line location of 0 to 45 meters, the planetable shore line falling outside of the compilation shore line. Inspection of the photographs, which were flown at 2/3 H.W., shows no indication of shore line outside that shown on the compilation. This area is within 300 meters of Δ COW 1932. The planetable shore line was possibly taken at a lower stage of the tide, and shows the edge of the mud flats. The compilation is accepted as correct, and has not been changed.

At lat. $32^{\circ}-05'.9$, long. $80^{\circ}-53'.9$, planetable stations SOUTH and DOCK are each described in the planetable report as on the S.W. corner of a dock. The planetable positions are 12 meters north of the air photo locations of the S.W. corner of the dock in each case. The photo plot has been carefully checked in this office, and is well controlled. It is accepted as correct. A note has been placed in the planetable descriptive report referring to this review and to the compilation for the correct positions of these stations.

About 800 meters of shore line ^{arc} is shown on the planetable survey at lat. $32^{\circ}-06'.3$, long. $80^{\circ}-53'.7$. This agrees in places with the compilation. Between these points there are differences in location up to 20 meters. This may be due to sketching between rod readings. Inspection of the photographs shows the compilation to be correct, and it has not been changed.

Triangulation station RAMSHORN CUT BEACON NO. 3, 1932, lat. $32^{\circ}-06'.9$, long. $80^{\circ}-53'.9$, was plotted on the compilation, but it was not used for control of the plot and was not inked on the celluloid. There may have been some reason for leaving off this beacon, but it is not mentioned in the report. The station is shown on planetable survey T-61406, 1934, and on hydrographic survey H-5571, 1934. In the absence of any additional information, it is the best available position of the beacon and has been added to the compilation in this office.

WALLS CUT BEACON NO. 6 was plotted on the compilation from the 1932 triangulation position. The descriptive report for planetable survey T-61406 1934, subsequent to the compilation, states that "--- Beacon No. 6 Walls Cut had washed out and had been moved to a new position---." ^{as shown on T-61406} The planetable position for this beacon has been plotted on the compilation in this office, and the triangulation position removed.

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2. Planetable control Survey T-6139a, 1934.

A short section of shore line at Δ Creighton, 1931, lat. $32^{\circ}-07'.8$, long. $80^{\circ}-53'.5$, shows a difference in location of 0 to 15 meters. This is probably due to differences in interpretation, After inspection of the photographs, the compilation is accepted as correct and has not been changed.

Recoverable positions plotted on the compilation are described on Form 524 and filed as follows:

<u>STATION NAME</u>	<u>FILED UNDER</u>
UNE (d), RAMSHORN CR. Bn.No.1--	T- 6139a
AL (d) - - - - -	T- 6140b
BLU(d) - - - - -	T "
LEE(d), S.GABLE OF OYSTER HOUSE-	T "
LEG(d)- - - - -	T "
ROY(d), ON S. EDGE OF DOCK- - -	T "
DEC(s), FIELDS CUT Bn. NO.10- -	T-6140a

Plotted by *J.R. Sobieski*

Checked by *D.H. Benson*

The planetable surveys were not compared with the compilation in the field. All of the stations listed above have been transferred from the planetable surveys in this office.

3. T-803, 1859-60 (1:20,000).

Comparison with this survey shows minor changes in the shore line location. The greatest change is in Ramshorn Creek, lat. $32^{\circ}-06'.9$, long. $80^{\circ}-53'.9$, to lat. $32^{\circ}-07'.8$, long. $80^{\circ}-53'.4$. The creek has been straightened by the U.S. Engineers for the improvement of navigation since the date of T-803. The compilation is complete and adequate to supersede this survey.

Comparison with chart 1240 shows only slight changes in the shore line. All the aids to navigation shown on the chart are plotted on the compilation

J.R.S.
B.G. Jones

Survey No. T-5213

Chart No. 1240-440

Diagram No. _____

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

[illegible]