DEPARTMENT OF COMMERCE
U. S. COAST AND GEOETIC SURVEY

State: South Carolina

DESCRIPTIVE REPORT

Topographic Sheet No. 5134

Locality
South Carolina Sound
Calibogue Sound
Upper Reaches of May River

Chief of Party
D. A. Grenell
Applied to Ch tile 571, Nov. 11, 1935  K. Reynolds
Cf. plaque to chile 837 Oct. 1, 1935  T.N.E.

Applied to chile 440, June 25, 1936  J. N. S.
DEPARTMENT OF COMMERCE
U.S. COAST AND GEODETIC SURVEY

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. .......................... 5134

REGISTER NO. 5134

State. South Carolina

General locality. Calibogue Sound

Locality. Upper Reaches of May River

Scale. 1:20,000

Date of compilation. 1933

Vessel. Aerial Photo. Compilation Party No. 19

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

Photographs plotted by:
Surveying. J. C. Farthing & R. D. Cross

Inked by. A. M. Grubor

Heights in feet above ground to tops of trees

Contour. Approximate contour, Form line interval _______feet

Instructions dated. November 10, 1933

Remarks. Compilation of aerial photographs Nos.: 963 to 981; 877 to 977; 1003 to 1022
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. | 5134 |
| PHOTO NO. 983 | to PHOTO NO. 987 |
| START | FINISH |
| ROUGH RADIAL PLOT | J. C. Partington | 2-27-34 | 3-1-34 |
| SCALE FACTOR (.935) | J. C. Partington | 2-27-34 | 3-1-34 |
| SCALE FACTOR CHECKED | B. Grenell | 3-1-34 |
| PROJECTION | A. A. Futral | 3-2-34 | 3-3-34 |
| PROJECTION CHECKED | B. Grenell | 3-3-34 |
| CONTROL PLOTTED | A. A. Futral | 3-5-34 | 3-6-34 |
| CONTROL CHECKED | J. C. Partington | 3-6-34 | 3-7-34 |
| TOPOGRAPHY TRANSFERRED | A. M. G. & S. B. G. | various times |
| TOPOGRAPHY CHECKED | | |
| SMOOTH RADIAL LINE PLOT | J. C. P. & R. D. C. | 3-7-34 | 3-15-34 |
| RADIAL LINE PLOT CHECKED | B. Grenell | 3-15-34 |
| DETAIL INKED | A. M. Gruber | 6-7-34 | 2-5-34 | (Intermittent) |
| AREA DETAIL INKED | 85.1 | Square Statute Miles |
| LENGTH OF SHORE LINE OVER 200m. | 42.4 | Statute Miles |
| LENGTH OF SHORE LINE UNDER 200m. | 80.7 | Statute Miles |
| GENERAL LOCATION | Calibogue Sound | South Carolina Coast |
| LOCATION | Upper Reaches of May River |
| DATUM STATION | Box 1933 | LATITUDE 32°12'53.237" (1639.84m) |
| DATUM | N. A. 1927 | LONGITUDE 80°55'11.311" (296.2m) |
INSPECTION REPORT

COMPILATION No. 5134
Scale 1:20,000

REFERENCE:

In reviewing this sheet in the Washington office reference should be made to the General Report forwarded with compilation No. 5114.

GENERAL INFORMATION:

The information furnished in the compiler's report together with the notes on topographic formation in the General Report of above reference cover the general features of the compilation. There are no particular features worth of note and the careful use of symbols has indicated the extent and characteristic of vegetation.

The blank area extending across the central portion of the compilation is covered by single lens 1:10,000 compilation as noted on the overlay sheet.

CONTROL:

The radial plot of the compilation was controlled entirely by triangulation from the following sources: Second order break down scheme by C. M. Durgin, 1933 Third order scheme by C. A. Egner, 1931 Third order scheme by H. A. Saran, 1920

COMPARISON WITH CONTEMPORARY SURVEYS:

Junctions with all adjoining sheets have been completed except as noted in the compilers report relative to the junction with 5213. The shoreline on this compilation has been checked against the fixed hydrography executed by C. A. Egner and found to be in agreement. There were also several small sections of shoreline rodded in on the aluminum control sheets which have been checked against the compilation.

LANDMARKS FOR CHARTS:

A list of landmarks for this area has been submitted by C. A. Egner on form 567.

COAST PILOT NOTES:

Notes for this section have been submitted by C. A. Egner and copies turned over to E. A. Deily who is making coast pilot revision.

NAMES ON OVERLAY SHEETS:

All names appearing on the overlay sheet were taken from current issues of charts and from U. S. Army Tactical Maps of this section.

Respectfully submitted,

S. B. Grenell, Chief of Party No. 18
REPORT OF COMPILATION:

RADIAL LINE PLOT:

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

The 800 and 900 flights on this compilation were run through by K. D. Cross and J. C. Partington. The 1000 flight was run through by F. E. Nickman. No particular difficulty was experienced and all junctions were complete and satisfactory.

ADJUSTMENT OF PHOTOGRAPHS:

Quite a bit of difficulty was experienced in adjusting the pictures of the 800 and 900 flights, especially in the waterways between flights, due to tilt in necessary pictures. It was necessary in a number of cases to reach far out on the wings of the 900 flight for the shoreline. This, because of the dark pictures of the 800 flight and shoreline appearing too dim.

The radial points as a whole were well distributed and with these interlaced it is felt that adequate guide points were obtained to keep accuracy within allowable limits.

No unusual difficulty was experienced with the 1000 flight, except a little tilt. When necessary, radial points were interlaced to break down areas.

INTERPRETATION:

The pictures of the 800 flight were generally dark, with the waterways between the 800 and 900 flight, dim and indistinct in places. Vegetation was clear enough. The pictures of the 900 flight were generally too light, without enough contrast in color between marsh and water. In many instances a broken shoreline was used to show highwater line. This condition is especially true around stations ULMER, MARTIN, PETTIGREW and BLUFFTON.

The swamp area bordering the upper regions of the New River between Lat. 32°-11' and 32°-13' is doubtful when considering exact shape, but it is felt that the delineation is a close interpretation of existing conditions.

In the center area of the compilation (Lat. 32°-12'; 80°-55') the method of showing wooded areas has been changed. In this area the densely wooded sections have been filled in, while the surrounding areas of medium dense growth have been left blank. This was done to emphasize the tree formation.

COMPARISONS WITH CONTEMPORARY SURVEYS:

The shoreline of this compilation was checked with the controlled hydrographic sheets of C. A. Egner, 1934, except the upper reaches of the New River. In this area the compiled shoreline was used as the basis of control for hydrography. Where comparison was made with hydro sheets any errors noted were investigated and corrections made so that the compilation is now in agreement. With the exception of the junction between this compilation and compilation 5213, junctions with adjoining sheets have been made and are complete and satisfactory.
In reference to junction between this compilation and compilation 5213, the following should be noted:

A photostat copy of 5213 was furnished this office for use in making the junction. After shoreline junctions were made the photostat was lost. It is therefore requested that particular attention be given the junction of detail between this compilation and compilation 5213.

COMPARISONS WITH OTHER SURVEYS:

Attention is called to differences in shoreline from about Crane Island near station BLUFFTON, when this compilation is checked with chart 1240 - USC & G Jan. 1933.

No dock can be found on photograph to check dock shown on chart 1240 at Bluffton (village) (Lat. 32°-13.8'; Long 80°-51.8')

The name Gooch Landing appearing on U. S. Army Tactical Map (Savannah & Bluffton quadrangles) 1920 was incorrect marked on overlay sheet of this compilation (Lat. 32°-11.8'; Long 81°-00.1')

The upper reaches of the New River on compilation does not agree with U. S. Army Tactical Maps (Savannah & Bluffton quadrangles) 1920.

The bluff which is indicated around the point in vicinity of station BIGHOUSE on U.S. Army Tactical Map referred to above, is omitted on this compilation because none was apparent under stereo-scope. Then too, the contours drawn on the above map does not justify a bluff of sufficient height to be delineated on this compilation since it is generally recognized that an appreciable in ground elevation is always present where marsh meets hard land.

Other sources of information used in compiling this sheet were the 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 4 meters, and probable error in less well defined detail not more than 10 meters.

PHOTOGRAPHS:

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<thead>
<tr>
<th>No.</th>
<th>to No.</th>
<th>Time</th>
<th>Date</th>
<th>Stage of Tide</th>
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<td>878</td>
<td>890</td>
<td>2:00PM</td>
<td>9-29-33</td>
<td>3/6</td>
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<td>965</td>
<td>977</td>
<td>10:20AM</td>
<td>10-10-33</td>
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<td>1005</td>
<td>1019</td>
<td>10:50AM</td>
<td>10-10-33</td>
<td>4/5</td>
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Approved:

S. B. Grenell, Chief of Party

A. M. Gruber, Surveyor
<table>
<thead>
<tr>
<th>Status</th>
<th>Name on Survey</th>
<th>Name on Chart</th>
<th>New Names in local use</th>
<th>Names assigned by Field</th>
<th>Location</th>
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<tr>
<td></td>
<td>New River</td>
<td>USC+GS #1240</td>
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<td></td>
<td>Cook Landing</td>
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<td>Seaboard Air Line Ry</td>
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<td></td>
<td>State Highway Route #33</td>
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<td>Turtle Island</td>
<td>USC+GS #1240</td>
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<td></td>
<td>Bloody Point</td>
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<td>Daufuskie Island</td>
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<td>Calibogue Sound</td>
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<td></td>
<td>Braddock pt</td>
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<td>Hilton Head Island</td>
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<td></td>
<td>Bluffton</td>
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<td>Palm tree Landing</td>
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<td>Savage Island</td>
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<td>Crane Island</td>
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<td>Bull Creek</td>
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<td>Bull Island</td>
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<td>Cooper River</td>
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<td>May River</td>
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<td>Long Island</td>
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<td></td>
<td>Long Island Ferry</td>
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</tbody>
</table>

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

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

R, Referred to the Division of Geographic Names, Department of Interior.
REVIEW OF AIR PHOTO COMPILATION T-6134 (1935)

Projection:

The projection diagonals have been checked in this office and were found correct. No further check is deemed necessary.

Comparison with Other Surveys and Charts:

1. The contemporary plane table surveys show only short sections of shore line being primarily for hydrographic and air photo control.

   (a) T-6138a, 1934 (1:10,000). At lat. 32° 12.8', long. 80° 52.8'; lat. 32° 13.5', long. 80° 52.8'; and lat. 32° 12.8', long. 80° 52.8' there are short sections rodded in and are labeled High Water line and a check of the photos reveals this to be the high ground line and agrees with the compilation high ground line. Other sections of shore line agree with that shown on the compilation. All described stations fell in true relation with the descriptions of these positions. All information and detail on this plane table sheet is included in the compilation except the magnetic meridian and temporary topographic stations.

   (b) T-6138b, 1934 (1:10,000). At lat. 32° 12.8', long. 80° 50.8' by the aid of additional radial points it was found that this dock could be shifted approximately 10 meters west and is now in agreement with the plane table survey. There are two triangulation stations plotted in error on the plane table sheet, (see review T-6138b), but the portion of the plane table survey included in this compilation is not affected to any appreciable amount as the portion is not in the vicinity of the triangulation stations that are in error.

   All information and detail shown on that part of the plane table survey covered by this compilation is included in the compilation except temporary topographic stations and the magnetic meridian.

   (c) T-6139a, 1934 (1:10,000). At lat. 32° 13.2', long. 80° 52.8' the dock and shore line differs with compilation by 0 to 20 meters; by adding additional radial points it was found that the dock could be brought in agreement with the plane table survey. There is a difference of meters in location of H. W. line at this point which is due to a difference in interpretation. The compilation is accepted after checkings against the photo in this office.

   All information and detail shown on that part of the plane table survey covered by this compilation is included in the compilation except temporary topographic signals and the magnetic meridian.

   (d) T-6139b, 1934 (1:10,000). The coastline shown on the plane table survey at station ERAD at Braddock Pt. does not agree with the compilation by 30 to 80 meters. This is due to a shift in the H. W. line between the date of the photos in September 1933 and the date of
the table survey in July 1934. Because the plane table survey shows only a short section of H. W. L, the compilation has not been changed, and shows H. W. line as of the date of the photos.

All information and detail shown on that part of the plane table survey covered by the compilation is included in the compilation except temporary topographic stations and the magnetic meridian.

(e) T-6140a, 1934 (1:10,000). At lat. 32° 08.2', long. 80° 55.7' differs with compilation by 0 to 15 meters. By the addition of radial points it was found that the H. W. L. could be shifted so that it is now in agreement with the plane table survey.

All information and detail shown on that portion of the plane table survey covered by the compilation is included in the compilation except temporary topographic stations and the magnetic meridian.

(f) T-6140b, 1934 (1:10,000). The shore line shown on this plane table survey that is included in the compilation is in agreement with the compilation.

All information and detail shown on that part of the plane table survey covered by the compilation is included in the compilation except temporary topographic stations and the magnetic meridian.

Examination of the following Hydrographic Surveys shows the compilation to be in agreement with the Hydrography: H-5549 (1934); H-5558 (1934); E-5570 (1934); and H-5571 (1934).

Comparison with Former Surveys:

(a) T-803 (1859); T-1196 (1870); and T-3821 (1920) covering this compilation shows no important change. The compilation is complete and adequate to supersede the sections T-803, T-1196, and T-3821 which it covers.

Recoverable Stations:

Recoverable topographic stations transferred to the compilation in the office from plane table surveys are listed below:

<table>
<thead>
<tr>
<th>BOY (d)</th>
<th>T-6138a</th>
<th>KEY (d)</th>
<th>T-6138a</th>
<th>HUB (d)</th>
<th>T-6139a</th>
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</thead>
<tbody>
<tr>
<td>TUG (d)</td>
<td>&quot;</td>
<td>DOE (d)</td>
<td>&quot;</td>
<td>LAST (d)</td>
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<tr>
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<td>SAP (d)</td>
<td>&quot;</td>
<td>IN (d)</td>
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<td>OUT (d)</td>
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<td>DEN (d)</td>
<td>&quot;</td>
<td>NEW (d)</td>
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<td>PAY (d)</td>
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<td>GLAN(d)</td>
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<td>WAY (d)</td>
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<tr>
<td>MIL (d)</td>
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<td>TRE (d)</td>
<td>&quot;</td>
<td>MUD (d)</td>
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<td></td>
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<td>CAL (d)</td>
<td>T-6139b</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>FAT (d)</td>
<td>T-6140b</td>
</tr>
</tbody>
</table>
PEAK (d) T-6138a  FAT (d) T-6138a
CUP (d) "  DIG (d) "
ANT (d) "  BLACK(d) T-6138b
CHIM (d) "  CENT (d) "
EAST (d) "  WAT (d) "
PIL (d) "  JOY (d) "

Stations plotted on the compilation in this office are:

BULL (1934)
CULE (1934)
VARN (1934)

\(L. C. \text{ Lande}\)
\(M. D. \text{ Crook}\)

Plotted by - L. C. Lande - - Checked by - M. D. Crook -

Remarks:

The interior of the marsh areas have in a number of cases been
generalized and all the small sloughs and streams have not been shown.

The accuracy of location of 4 to 10 meters given on page 2 is high
for work on this scale though the compilation is well controlled. A
better estimate is an accuracy of location of 6 to 8 meters for inter-
sected points and 6 to 15 meters for other detail.

Bloody Point R. R. Was plotted incorrectly and has been
replotted in this office. The station was not used for control of the
plot. When he could not hold to this station the compiler assumed that it
had been incorrectly spotted on the photos.

Comparison with the U. S. E. Progressive Military Map shows the
roads on the compilation to be incomplete for the secondary roads in this
area. This is due to the fact that many of the narrow minor roads are
obscured by trees. The compilation shows the more important roads.
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. 18a, 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) No supplementary 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 37)

Form 524 by C.H. 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 by C.H. 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. 16e)

One bridge on S.A.L. R.R. across New River.

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; Feb. 8, 1935

[Signature]
Chief of Party

19. Remarks after review in office:

Reviewed in office by: L. C. Hanks

Examined and approved:

L. K. Green
Chief, Section of Field Records

L. D. Borden
Chief, Division of Charts

Tom G. Jones
Chief, Section of Field Work