

5134

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

DEPARTMENT OF COMMERCE  
U. S. COAST AND GEODETIC SURVEY

\_\_\_\_\_, Director

State: South Carolina

DESCRIPTIVE REPORT

Topographic } Sheet No. 5134  
~~Hydrographic~~

LOCALITY

South Carolina Coast

Calibogue Sound

Upper Reaches of May River

185

CHIEF OF PARTY

S. B. Grenell

Applied to Cht. 571, Nov. 11, 1935 K. Reynolds  
Applied to chart 839 Nov. 1935 H.V.C.

Applied to chart 440. June 28, 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. ....

5134

REGISTER NO. 5134

State South Carolina

General locality Calibogue Sound  
South Carolina Coast

Locality Upper Reaches of May River  
Calibogue Sound

Scale 1:20,000 Photographs: 10-10-33; 9-29-33  
Date of ~~survey~~ comp., 19

Vessel Aerial Photo. Compilation Party No. 18

Reviewed and recommended for approval:

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

Photographs plotted by: J. C. Partington & R. D. Cross

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, 19

Remarks: Compilation of aerial photographs Nos. 963 to 981;

877 to 897; 1003 to 1022

--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. 5134

	963 PHOTO NO <u>877</u> 1003	to PHOTO NO. <u>897</u> 1022	
BY		START	FINISH
ROUGH RADIAL PLOT	<u>J. C. Partington</u>	<u>2-27-34</u>	<u>3-1-34</u>
SCALE FACTOR (.935)	<u>J. C. Partington</u>	<u>2-27-34</u>	<u>3-1-34</u>
SCALE FACTOR CHECKED	<u>S. B. Grenell</u>		<u>3-1-34</u>
PROJECTION	<u>A. A. Futral</u>	<u>3-2-34</u>	<u>3-3-34</u>
PROJECTION CHECKED	<u>S. B. Grenell</u>		<u>3-3-34</u>
CONTROL PLOTTED	<u>A. A. Futral</u>	<u>3-5-34</u>	<u>3-6-34</u>
CONTROL CHECKED	<u>J. C. Partington</u>	<u>3-6-34</u>	<u>3-7-34</u>
TOPOGRAPHY TRANSFERRED	<u>A. M. G. &amp; S. B. G.</u>		<u>various times</u>
TOPOGRAPHY CHECKED	<u>S. B. Grenell</u>		<u>"</u>
SMOOTH RADIAL LINE PLOT	<u>J. C. P. &amp; R. D. C.</u>	<u>3-7-34</u>	<u>3-15-34</u>
RADIAL LINE PLOT CHECKED	<u>S. B. Grenell</u>		<u>3-15-34</u>
DETAIL INKED	<u>A. M. Gruber</u>	<u>6-7-34</u>	<u>2-5-34 (Intermittent)</u>
AREA DETAIL INKED	<u>85.1</u>	Square Statute Miles	
LENGTH OF SHORE LINE OVER 200m.	<u>42.4</u>	Statute Miles	
LENGTH OF SHORE LINE UNDER 200m.	<u>80.7</u>	Statute Miles	
GENERAL LOCATION	<u>Calibogue Sound</u> <u>South Carolina Coast</u>		
LOCATION	<u>Upper Reaches of May River</u> <u>Calibogue Sound</u>		
DATUM STATION	<u>Box 1933</u>	LATITUDE <u>32°-12'-53.237" (1639.8m)</u>	
DATUM	<u>N. A. 1927</u>	LONGITUDE <u>80°-55'-11.311" (296.2m)</u>	

(unadjusted)

# 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. Seran, 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 rodged 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.

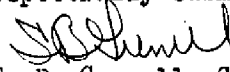
## COAST PILOT NOTES:

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 R. D. Cross and J. C. Partington. The 1000 flight was run through by F. B. Hickman. 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 water ways 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 ~~and~~ 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 water ways, 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 region of the New River between Lat. 32°-11' and 32°-13' is doubtful when considering exact shape, but it is ~~not~~ 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 Gook Landing appearing on U. S. Army Tactical Map (Savannah & Bluffton quadrangles) 1920 was ~~marked~~ 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 <sup>difference</sup> in ground elevation is always present where marsh meets ~~fast~~ 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. *See Review*

#### PHOTOGRAPHS:

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

*A. M. Gruber*  
A. M. Gruber,  
Surveyor

Approved:

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

# GEOGRAPHIC NAMES

Survey No. 5134

Date. 3-27-35

Chart No. 1240

Diagram No. \_\_\_\_\_

\* 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.

Status	Name on Survey	Name on Chart	New Names in local use	Names assigned by Field	Location
	<u>New River</u>	U.S.C. & G.S. # 1240			
	<u>Cook Landing</u>	Controlled Reconnaissance sheet 2641:5050;			Savannah 199 Quad
	<u>Seaboard Air Line Ry</u>				
	<u>State Highway Route #33</u>				
	<u>Turtle Island</u>	U.S.C. & G.S. # 1240			
	<u>Bloody Point</u>	" "			
	<u>Daufuskie Island</u>	" "			
	<u>Calibogue Sound</u>	" "			
	<u>Braddock pt</u>	" "			
	<u>Hilton Head Island</u>	" "			
	<u>Bluffton</u>	" "			
	<u>Palmetto Landing</u>	" "			
	<u>Savage Island</u>	" "			
	<u>Crane Island</u>	" "			
	<u>Bull Creek</u>	" "			
	<u>Bull Island</u>	" "			
	<u>Cooper River</u>	" "			
	<u>May River</u>	" "			
	<u>Long Island</u>	" "			
	<u>Long Island Ferry</u>	" "			
		APPROVED NAMES UNDERLINED IN RED H. L. Flower			



## REVIEW OF AIR PHOTO COMPILATION T-5134 (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.  $32^{\circ} 12.8'$ , long.  $80^{\circ} 52.3'$ ; lat.  $32^{\circ} 13.5'$ , long.  $80^{\circ} 52.8'$ ; and lat.  $32^{\circ} 12.8'$ , long.  $80^{\circ} 52.8'$  there are short sections rodged 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.  $32^{\circ} 12.8'$ , long.  $80^{\circ} 50.8'$  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.  $32^{\circ} 19.2'$ , long.  $80^{\circ} 52.8'$  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 BRAD 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.  $32^{\circ} 08.2'$ , long.  $80^{\circ} 55.7'$  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-5568 (1934); H-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:

RAY (d)	T-6138a	KEY (d)	T-6138a	HUB (d)	T-6139a
TUG (d)	"	DOE (d)	"	LAST (d)	"
FLYN(d)	"	SAP (d)	"	IN (d)	"
OUT (d)	"	DEN (d)	"	NEW (d)	"
PAY (d)	"	CLAN(d)	"	WAY (d)	"
MIL (d)	"	TRE (d)	"	MUD (d)	T-6139b
				CAL (d)	T-6139b
				FAT (d)	T-6140b

PEAK (d)	T-6138a	FAT (d)	T-6138a
COP (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. Lande*                      *M. D. 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 intersected 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. ✓

*L. C. Lande*  
*B. G. Jones*  
*7/15/35*

## REVIEW OF AIR PHOTO COMPILATION NO. 5134

Chief of Party: S.B. GRENELL

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)
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 applica-  
tion 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 ade- ✓  
✓ quate 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 by C.A. Egnor 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.A. Egnor 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)  
*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 (unadjusted)* 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: *The projection has not uniformly drawn.*  
*CKG*
  - ✓ 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

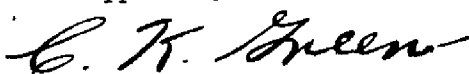
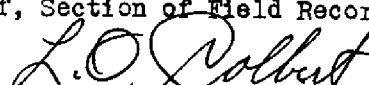
  
Chief of Party


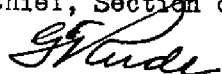
19. Remarks after review in office:

Reviewed in office by: *L. C. Lande*

*V. B. Jones*

Examined and approved:

  
Chief, Section of Field Records  
  
Chief, Division of Charts

  
Chief, Section of Field Work  
  
Chief, Division of Hydrography  
and Topography.