

5207

U. S. COAST & GEODETIC SURVEY
LIBRARY AND ARCHIVES

SEP 26 1934

Acc. No. _____

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. 5207

LOCALITY

Vicinity South Carolina

Vicinity of Coosaw River

Coosaw Island

1934

CHIEF OF PARTY

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

applied to chart 794 Sept. 28, 1935. H. E. MacEwen
Applied to chart 838 Nov., 1935 W. A. Brander

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. 5207

5207

State South Carolina

General locality Vicinity of Coosaw River
~~South coast of South Carolina~~

Locality Vicinity of Coosaw Island

Scale 1:10,000 Date of photographs. 10/25/33
Date of ~~survey~~ comp. June 1934, 19

Vessel

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

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

Inked by J. W. Osteen, Jr.

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. (807)M43 to M49
(807)M31 to M37

Refer to descriptive report T5206 for
the general report on Field Inspection and
compilation in this area.

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. 5207
(807M)43 (807m)49
PHOTO NO. (807M)31 TO PHOTO NO. (807M)37

BY START FINISH

ROUGH RADIAL PLOT _____

SCALE FACTOR() _____

SCALE FACTOR CHECKED S. B. Grenell _____

PROJECTION A. A. Futral 2/27/34 2/27/34

PROJECTION CHECKED J. B. Hickman 3/6/34 3/6/34

CONTROL PLOTTED J. B. Hickman 3/13/34 3/13/34

CONTROL CHECKED R. D. Cross 3/13/34 3/13/34

TOPOGRAPHY TRANSFERRED _____

TOPOGRAPHY CHECKED _____

SMOOTH RADIAL LINE PLOT J. B. Hickman 3/13/34 3/17/34

RADIAL LINE PLOT CHECKED S. B. Grenell 3/17/34 3/17/34

DETAIL INKED J. W. Osteen Jr. 6/7/34 7/14/34

AREA DETAIL INKED 17.3 sq. Statute Miles

LENGTH OF SHORELINE OVER 200 m. 20.3 Statute Miles

LENGTH OF SHORELINE UNDER 200 m. 46.7 Statute Miles

GENERAL LOCATION South Coast of S. C.

LOCATION Vicinity of Coosaw Island

DATUM STATION Love 1933 Latitude 32°-28'+ 55.1 m

N. A. 1927 Datum Longitude 80° -35'+ 32.5 m

unadjusted

FIELD INSPECTION REPORT

Sheet # 5207

REFERENCE:

A general report of field inspection and topographic information is filed with Sheet #5206 and should be referred to in reviewing this sheet.

GENERAL INFORMATION:

This sheet covers the area on both sides of the Coosaw River in the vicinity of Coosaw Island and shows a variety of topographic detail. The north bank of the Coosaw River is bordered by the usual type of salt marsh but the southern bank has considerable fast land to the waters edge. This land is low and sandy and at one time was mostly under cultivation but most of the area is now abandoned and the cultivation consists mainly of scattering truck garden patches.

The wooded areas consist mostly of oak and other deciduous growth with a scattering of pine and a few palmetto-palms along the waterways.

Along the Lucy Point Creek there is some eroded bank varying from five to fifteen feet high which is shown with hatchures. This area is the highest on the sheet.

All of the roads on Coosaw Island are of such poor quality that they have been shown on the compilation with a single dash line. The Ladies Island roads are of better class and have been shown in their relative importance on the sheet.

Along some sections of the marsh it was impossible to follow a continuous high water line due to the broken character of the marsh bern. In these places the edge has been traced as closely as possible and the resulting broken lines carry the main outline of the channels.

Refer to general report filed under T 5206 for description of this area. Bgg.
CONTROL:

The greater part of the control on this sheet was triangulation executed by C. A. Egner, Natoma, 1933. Stations Repeal and Buzzard Island F. P. were secured from R. P. Eyman, Natoma 1934. Station Chisholm is on the first order arc, C. D. Meaney, 1932.

There were no topographic control stations on this sheet.

LANDMARKS FOR CHARTS:

Landmarks on form 567 were submitted for this area by I. Rittenburg and R. P. Eyman.

COAST PILOT NOTES:

Coast pilot notes for this area are being submitted by I. Rittenburg and R. P. Eyman.

LIST OF NAMES:

All names appearing on this sheet were taken from charts of current issue. *No new names are shown*

B. G. J.

Note:

This sheet joined a 1:20,000 sheet compiled by the Charleston, S. C. party and all junction points were perfect.

Respectfully submitted.



S. B. Grenell,
Chief of Party.

REPORT OF COMPILATION

COMPILATION METHOD *

This sheet was compiled by the radial plot method.

ADJUSTMENT METHOD -

On this sheet the radial control plot was good and there was no difficulty encountered in adjusting the detail to fit the radial plot.

INTERPRETATION -

The photographs were reasonably clear and no great difficulty was experienced in interpretation of the photographic detail.

Only the usual graphic symbols were used with the exception of lines of sand dots which were used to indicate enbankments at the abandoned phosphate mines on the north extremity of this sheet.

INFORMATION FROM OTHER SOURCES-

The only information available was from the photographs.

COMPARISON WITH OTHER SURVEYS -

All junctions with adjoining sheets are accurate and satisfactory.

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. *see below*

PHOTOGRAPHS:	No.	to	No.	Date	Time	Stage of tide
	(807) M31	=	M37	10/25/33	11:00	3/7
	(807) M43	=	M49	10/25/33	11:00	3/7

Approved:

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

J. W. Osteen Jr.
J. W. Osteen Jr.,
Draftsman.

The statement as to accuracy is better stated as "an accuracy of location of about 4 meters for interested points and 4 to 10 meters for other detail."
B. G. Jones

Survey No. T-5207

Chart No. 1240-435-437

Diagram No. _____

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

[illegible]

REVIEW OF AIR PHOTO COMPILATION T-5207 (1934)

Comparison with other Surveys:

1- The contemporary plane table surveys of this area show only short sections of shore line, and the locations of signals for hydrography and air photo control. However, it is apparent that the compilation party did not use the plane table control nor make a comparison between the compilation and the plane table surveys.

(a) T-6093a, 1934 (1:10,000). This survey shows a short stretch of shore line at latitude $32^{\circ}27.8'$, longitude $80^{\circ}33.6'$, which differs up to 23 meters from the compilation. This is probably due to differences in interpretation. A small patch of marsh is shown outside the high water line on the compilation, while the plane table survey shows it inside the HWline. The photographs have been inspected, and the compilation seems to give the better interpretation. It has not been changed.

(b) T-6094a, 1934 (1:10,000). At latitude $32^{\circ}30.7'$, longitude $80^{\circ}35.9'$, this survey shows a difference in location of the HW line of 23 meters at one place at the east side of the mouth of the creek, but otherwise agrees closely. This is probably due to differences in interpretation and sketching between rod readings. After inspection of the photographs, the compilation has been accepted as correct.

At latitude $32^{\circ}28.9'$ ^{29.6}, longitude $80^{\circ}36.4'$, the plane table location of the remains of an old dock have been added to the compilation in this office. This detail cannot be seen distinctly on the photographs, but it is apparent that there is an obstruction at this point.

At latitude $32^{\circ}29.1'$, longitude $80^{\circ}36.1'$, three small buildings which are obscured by trees on the photographs, and a slight projection on the south end of the wharf were not shown on the compilation. These details have been added to the compilation from the plane table survey.

At latitude $32^{\circ}29.0'$, longitude $80^{\circ}35.1'$, a short section of bluff line was added to the compilation from the plane table survey. There is a difference of 40 meters in the shore line location for a short distance, but the plane table shore line is not carried far enough to make a junction with the compilation. Inspection of the photographs shows this to be a difference in interpretation. The compilation has not been changed.

OPile, at latitude $32^{\circ}28.8'$, longitude $80^{\circ}36.8'$, plots about 10 meters out from the shore line. This station is not described, but the name implies the nature of the station. The photographs show an object at this point which has the appearance of an abandoned dock. There is no recent hydrography in this area, but

the station is probably a pile. It has been added to the compilation and so labeled.

⊙Bek, at latitude $32^{\circ}29.3'$, longitude $80^{\circ}35.7'$ on the plane table survey, also lacks a description. Sams Point Beacon can readily be seen on the photographs and checks the location of Bek. The beacon has been added to the compilation in the office.

(c) T-6094b, 1934 (1:10,000). At latitude $32^{\circ}30.1'$, longitude $80^{\circ}33.7'$, there are small differences in the location of the HW line at the end of the point. These are due largely to sketching between rod readings and differences in interpretation. The compilation has not been changed.

At latitude $32^{\circ}31.7'$, longitude $80^{\circ}34.5'$, the section of HW line as shown on T-6094b agrees very closely with the compilation. However, plane table control survey T-6095a shows an entirely different ^{location of the} shore line here, probably due to differences in interpretation. From the photographs it would seem that T-6094b and the compilation give the better interpretation. The compilation has not been changed.

At this same location, T-6094b shows the remains of two old docks and T-6095a shows the remains of one old dock which seems to be the inshore extension of the westerly dock shown on T-6094b. Chart 435 shows a dock which plots about 60 meters NW of the ruins shown on T-6094b. Inspection of the photographs shows that the locations of the docks as shown on T-6094b is correct. However, it is impossible to accurately determine the limits of the ruins from the photographs. The remains of the two docks have been transferred to the compilation from T-6094b, and a note has been placed on T-6095a referring to the compilation and this review.

In comparing the photo compilations of this area with the plane table surveys, other differences in shore line location have been noted. In general, they are due to differences in interpretation; probably in some cases to erroneous rod readings. The compilations give the more consistent interpretation for the whole area. However, it is evident that the photographs were not used to the greatest advantage. In many places, the marsh is broken up by small sloughs and open spaces. These have not all been shown on the compilations.* As the photographs for this area were not received in the office until after the compilations were printed, and since these small sloughs are not important the detail has not been added at this time.

2- T -996, 1865 (1:20,000) and T-1257, 1871-72 (1:20,000). Comparison with these surveys shows minor changes in the marshy shore line, but the outline of the high ground remains practically the same. The compilation is complete and adequate to supersede these surveys.

* The small sloughs mentioned are the upper ends in the interior of the marsh areas. The marsh is more broken than shown.
B.g.g.

3- Charts 1240 and 435. Comparison with the charts for this area shows minor changes in the shore line. The marshy point at the junction of Bull R. and Coosaw R. has been worn away, as has the island in Bull R. at latitude $32^{\circ}31.9'$, longitude $80^{\circ}34.5'$.

Recoverable Stations:

Recoverable stations transferred to the compilation are described on Form 524 and filed as follows:

<u>STATION NAME</u>	<u>FILED UNDER</u>
GIN (d)	T -6093a
FISH (d)	T -6094a
NER (d)	"
ON (d)	"
SANG (d)	"
SIX (d)	"
SONG (d)	"
TIP (d)	"
POY (d)	T -6094b

Plotted by (s) *V. R. Sobieralski*
V. R. Sobieralski

D. H. Benson
Checked by (s) D. H. Benson

V. R. Sobieralski
B. G. Jones

REVIEW OF AIR PHOTO COMPILATION NO. 5207

Chief of Party: S.B. GRENNELL

Compiled by: J.W. Osteen, 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) *See review at back* ✓
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 used* ✓
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. *Adjustments made with photo compilations from the Charleston Office - E.H. Kirsch. No field topographic sheets were received for this area. See review at back* ✓
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 the Hydrographic Parties - Rittenburg & Matoma
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 field parties noted PP "9."
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 on this sheet
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 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;

8/21/34



Chief of Party

19. Remarks after review in office:

See review on next page.

Reviewed in office by:

U. R. Sobieski
B. G. Jones

Examained and approved:

K. T. Adams
Asst Chief, Section of Field Records
Le O. Pollet

Chief, Division of Charts

J. B. Gorden
Chief, Section of Field Work

G. H. Hude
Chief, Division of Hydrography
and Topography..

2-24-35

No information as to the nature of ~~Q Two~~ and ~~Q Pile~~ has been received to date. As there is no recent hydrography in this area, it has been decided to remove ~~Q Two~~ from the compilation. ~~Q Pile~~ has been left as its name implies the nature of the station.

~~Q Bet~~ does not plot in the exact location as shown on the chart, but agrees more closely with the Lighthouse Service location. The beacon has been left on the compilation.

V.R.S.