

16
5163

1934 DEC 18 - 11:47

Form 504
Rev. Dec. 1933
DEPARTMENT OF COMMERCE
U.S. COAST AND GEODETIC SURVEY
R. S. PATTON, DIRECTOR

DESCRIPTIVE REPORT

Air
Photo

Topographic
~~Hydrographic~~

Field 11,
Sheet No. Reg. 5163

U. S. COAST & GEODETIC SURVEY
LIBRARY AND ARCHIVES

MAY 28 1935

Acc. No. _____

State South Carolina

LOCALITY

ST HELENA SOUND

~~Combahee River, Chehaw River and~~

~~Wimbee Creek~~

COMBAHEE And CHEHAW RIVERS

1934

CHIEF OF PARTY

E. H. KIRSCH

U. S. GOVERNMENT PRINTING OFFICE: 1934

5163

Applied to Chart Comp. 793 1/21/36 H. M. MacEwan

SHEET NO. 11
REG. NO. 5163

PHOTOS NO.
828 - 830 ✓
1200 - 1208 ✓
919 - 925
1105 - 1120 ✓

DATE
September 29, 1933
October 12, 1933
September 29, 1933
October 10, 1933

TIME
1:15 P.M.
11:05 A.M.
2:35 P.M.
12:10 P.M.

PROJECTION BY

L. C. Ripley 4-10-34

PROJECTION CHECKED BY

J. H. Wulbern 4-10-34

CONTROL PLOTTED BY

M. L. Smith 4-16-34
M. L. Smith

CONTROL CHECKED BY

E. S. Ethridge 4-16-34
E. S. Ethridge

CONTROL PLOTTED ON PHOTOS BY

F. H. McBeth
F. H. McBeth

CONTROL CHECKED ON PHOTOS BY

J. F. Richardson
J. F. Richardson

SMOOTH RADIAL PLOT BY

L. C. Lande 7-1-34
L. C. Lande

RADIAL PLOT CHECKED BY

W. W. Johnson
W. W. Johnson

SCALE PLOT BY

L. C. Ripley 3-15-34
L. C. Ripley

TOPOGRAPHY TRANSFERRED BY

W. W. Johnson
W. W. Johnson

TOPOGRAPHY CHECKED BY

E. H. Kirsch
E. H. Kirsch

DETAIL INKED BY

W. W. Johnson 8-13-34
W. W. Johnson

AREA OF DETAIL INKED: 110.4 Sq. St. Miles.

LENGTH OF COASTLINE: None

LENGTH OF SHORELINE: 15.0 St. Miles (200 m or more from opposite shore)

LENGTH OF STREAMS: 67.3 St. Miles (Less than 200m wide)

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. 11

REGISTER NO. 5163

5163

State South Carolina

General locality ST HELENA SOUND
Combahee River, Chehaw River and Wimbee Creek

Locality Combahee River and Chehaw Rivers

Scale 20,000 Photographs- Sept. 29, 1933
Oct. 12, 1933
Date of survey Oct. 10, 1933, 19.....

Compilation- Aug. 13, 1934
Vessel Air Photo Compilation Party No. 21, Charleston, S. C.

Chief of party E. H. Kirsch

Surveyed by See data sheet in descriptive report.

Inked by W. W. Johnson

Heights in feet above ----- to ground to tops of trees

Contour, Approximate contour, Form line interval ----- feet

Instructions dated November 10, 1933, 19.....

Remarks: None.

GENERAL DESCRIPTION OF TOPOGRAPHY

The southern end of the sheet is almost entirely marsh land, broken by numerous tidal creeks, and having very little relief.

The area south of South Wimbee Creek was compiled with difficulty due to its position with respect to the photo flights, to the distance from their centers, and to the indistinct wing prints.

Marsh areas north of the S.A.L.R.R. and along the Combahee River are abandoned rice fields, portions of which are flooded at high water as in the case of the area just south of the Charleston - Beaufort Highway and east of the Combahee. This area is shown by broken marsh lines. Similar areas may be found in the same vicinity.

The area (shown as marsh and bushes) at the extreme northern end of the Chehaw River is questionable. However, since a great part of this area is evidently old rice fields, it is believed that at certain seasons of the year it is wet, marshy ground. Hence the symbol shown. ⁷

The water area north of 32° 37' and crossing 80° 42' is probably very shallow along the borders with a sort of channel through the center. This channel is shown between ~~dotted~~ broken lines as far as the broken down dike near the center of the area. The solid line across the northern end of the area represents a dike.

The line extending from North of 32° 37' just west of the Combahee, Southeastward to the S.A.L.R.R. is believed to be a dike which was used when the rice fields were under cultivation.

Due to heavily wooded sections several of the roads could not be traced.

GENERAL INFORMATION:

General Report:

The field inspection report covering all sheets will be furnished by Lt. B. H. Rigg, submitted with sheet No. 1, Reg. No. 5153. Additional information will be found on A.G.S. "N", "M", "J", and "K" R. P. Eyman, Chief of Party 1934.

(J.K. is 6095 a, 6095 b; M.N. is 6096 a, 6096 b.)

Photographs:

All photos were taken by the U. S. Army Air Corps' 5-lens Camera. The compilation of this sheet was made from portions of five flights.

Of the first flight, photo 828 was badly out of scale. The others were marred by clouds.

Photo 1208 in the second flight, was out of scale. The

two pictures mentioned above were the connecting photos of two flights, and there was an interval of approximately thirty two hundred meters between their centers. Therefore, a great deal of adjustment between radial points was necessary to compile that interval.

Photos 1105 through 1120, as a whole, were out of scale due to tilt. It was noticed that the "skew" pictures were more nearly to scale than the straight.

Little difficulty was encountered in using the remaining two flights.

CONTROL

Sources:

Triangulation by C. A. Egner 1933; E. B. Roberts 1924, C. D. Meaney 1932. Traverse from Station Green Pond to Gardner by Lt. B. H. Rigg, 1933. All control reduced to N. A. 1927 datum. The traverse stations are shown on the celluloid by blue triangles. *These latter stations are not recoverable and are not shown on the printed copies of the compilation.* *Lum*

LIST AND POSITIONS OF TRAVERSE STATIONS

STATION	LATITUDE	LONGITUDE
T.P. 4	32° 42' 1380.9	80° 36' 695.0
T.P. 4 + 4327.0	32 40 1722.2	80 38 302.0
T.P. 5 + 1510.0	32 40 80.2	80 39 51.7
T.P. 5 + 1951.0	32 39 1584.2	80 39 337.8
T.P. 6 + 273.5	32 39 298.8	80 40 1483.0
T.P. 9	32 38 1095.7	80 42 724.9
T.P. 9 + 716.2	32 38 594.5	80 42 1240.8
T.P. 10	32 37 1065.7	80 43 1149.9 (off the sheet)

The following Topo stations, established by R. P. Eyman, were spotted on the photos and used as additional control for sheet 11 (Reg. No. 5163):

A.C. Sheet "J" (T-6095 a)

Kil	32° 32'	1812.0m	Yam	32° 34'	858.0
	80 36	1332.0		80 34	- - - (343.0)
Zev	32 32	266.0	Off	32 33	378.0
	80 34	- - - (343.0)		80 37	886.0

Miss 32° 32' 0.0
80 34 - - (1227.0)

Sam 32° 34' 753.0
80 37 254.0

If 32 33 1611.0
80 34 - - - (178.0)

Rum(d) 32 35 853.0
80 36 915.0

Nan (d) 32 33 1674.0
80 35 939.0

reconformable
Only the described stations are shown on copies
of the compilation, but all stations remain
on the celluloid *printed*

A.C. Sheet "K" (T-6095 b.)

Bug. 32° 33' 1566.0
80 33 504.0

A.C. Sheet "M" (T-6096 a.)

Tug 32° 33' 642.0
80 38 310.0

Mit 32° 34' 736.0
80 38 64.0

A.C. Sheet "N" (T-6096 b.)

Pete 32° 38' 1372.0
80 39 1168.0

Raz 32° 37' 1823.0
80 39 1347.0

Par 32 37 844.0
80 39 1347.0

Uno 32 36 1605.0
80 39 1042.0

Ful 32 36 584.0
80 39 521.0

Pig 32 37 1796.0
80 40 646.0

Las 32 37 1099.0
80 40 912.0

Errors:

No errors were found in the control stations on sheet 11, Reg. No. 5163. However, three radial points had to be replotted.

Discrepancies:

No control stations established by other organizations were used in the compilation of this sheet.

Compilation

Method:

Only the standard method as described in "Notes on the Compilation of Planimetric Line Maps from Aerial Photographs" was used in this compilation.

Adjustment of Plot:

No unusual adjustment of the plot was necessary.

Interpretation:

This heading was discussed under "General Description of Topography".

Only the graphic symbols were used as approved by the Board of Surveys and Maps.

Information from other Sources:

Other information was furnished by Lt. B. H. Rigg regarding roads, etc.,

Names of roads, railroads, streams, settlements, and islands were taken from the U. S. Geological ~~Chart of S. C.~~ ^{Survey}, covering "Green Pond quadrangle."

Conflicting Names:

No conflicting names occur on this sheet. *New names are submitted for approval on the form for geographic names attached. L.A.M.*

Comparison with other Surveys:

Satisfactory junctions were made with sheet No. 5162 on the East, sheet No. 5156 on the Southeast, sheet No. 5186 on the Extreme Southeast, sheet No. 5189 on the Southwest, and sheet No. 5190 on the Northwest. Sheet No. 11, Reg. No. 5163 joins the Savannah sheet on the South - along Lat. $32^{\circ} 42'$, the Reg. Nos. of which are 5208, 5207, and 5206 - in the order named from left to right.

Landmarks:

Landmarks for this sheet will be furnished by R.P. Eyman, Chief of Party, on A.C. Sheet "N", "M", "J", and "K".

RECOMMENDATIONS FOR FURTHER SURVEYS

This compilation is believed to have a probable error of 0.3 millimeters for well defined detail of importance for charting, and of not more than 0.6 millimeters for other detail.

Remarks:

The S.A.L.R.R. Bridge crossing the Chehaw River:

Fixed Girder type, Ver. Clearance at M.H.W. 13.0'
Hor. clearance 40.0'

The S.A.L.R.R. Bridge crossing the Combahee River:

Swing span, vertical clearance when closed 3.75' at M.H.W. Hor. clearance when open 41'

The S.A.L.R.R. Bridge crossing ^(North) Wimbee Creek: swing span. Hor. Clearance 44', Ver. Clearance above M.H.W. when closed 13' Ver. clearance above mean high water when open 80' due to Western Union wires.

The highway bridge crossing the Combahee River: swing span, Hor. clearance when open 102', Ver. Clearance at M.L.W. 14.7' Ver. Clearance at H.W. (River flooded with rains) 3.4' (Same as U.S. Engineers clearances given in "List of Bridges").

Assisted by:

E. H. Kirsch
E. H. Kirsch,
Chief of Party.

Submitted by:

W. W. Johnson, Jr.
W. W. Johnson, Jr.

*Engineers Bridge list of Apr 1927
gives H.W. clearance 5.5' and #5722 (1934)
Vol. 2, Page 43 gives M.H.W. clearance 6.9 ft.
The above value of 3.75' is obviously
wrong and has been corrected ~~there~~
on the compilation T 5163 this date
to read M.H.W. clearance 6.9 ft.*

7/18/35

B. G. Jones

GEOGRAPHIC NAMES

Survey No. T-5163Date. Dec. 27, 1934Chart No. 436, 1240Diagram No. 1240

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

Ø, 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>Green Pond</u>	_____	✓	(Green Pond Quad)	
	<u>Combahee River</u>	name			
	<u>Hickory Hill</u>	_____	✓	"	
	<u>New Chehaw River</u>	_____	✓	(Green Pond Quad)	
	<u>Wiggins</u> ✓	_____	✓	"	
	<u>Buzzard Island</u>	_____			
	<u>Cuckold's Creek</u> ✓	_____	Cuckold Cr.	("	
	<u>Horse Island</u>	_____			
	<u>Folly Creek</u>	_____	✓		
	<u>Oak Island</u> *	_____		move name.	
	<u>Schooner Channel</u> ✓	_____	-		
	<u>South Wimbee Creek</u>	_____			
	<u>Brañford Creek</u>	_____	✓		
	<u>Williman Islands</u>	Williman Island			
	<u>True Blue Creek</u>	_____	✓		
	<u>Hickory Hill Lane</u>	_____	✓	(Green Pond Quad)	
	<u>Gunboat Island</u>	_____	✓	"	
	<u>Folly Creek</u>	_____	✓	"	
	<u>Fields Point</u>	_____	✓	"	
	<u>Social Hall Creek</u>	_____	✓	"	
	<u>Keams Neck</u>	_____	✓	"	
	<u>Old Combahee Island</u>	_____	✓	"	

Survey No. 7-5163

Chart No. 436, 1240

Diagram No. 1240

- [illegible]

REVIEW OF AIR PHOTO COMPILATION NO. T 5163

Topographic Stations

The following recoverable topographic stations are described on Form 524 and shown on the compilation with the conventional circle:

	Nan (d)
Descriptions filed under T 6095a	Rum (d)
	Rat (d)
Description filed under T 6095b	Mo. (d)

Stations transferred by Leonard A. McGann, <i>LM</i>	December 26, 1934
Stations checked by Douglas H. Benson, <i>DB</i>	December 26, 1934

Comparison with other contemporary surveys

1. Graphic Control Surveys (plane table) T 6095a, T 6095b (1934) are on a 1:10,000 scale. The small isolated areas in the vicinity of triangulation or topographic stations which were surveyed on T 6095a and b have been reduced to the scale of the compilation by pantograph. Comparison shows the following differences:

- (a) A number of buildings are on T 6095a which were not included on the compilation. These have been added to the compilation.
- (b) Near \triangle Repeal 1934 (lat. $32^{\circ} 32.1'$, long. $80^{\circ} 35.4'$) the broken line on T 6095a corresponds to the high water line as shown on the compilation by a heavy solid line. The solid line on T 6095a represents the edge of high ground or fast land which is shown on the compilation by a light solid line.
- (c) Near \triangle Bold, 1934 (lat. $32^{\circ} 32.8'$, long. $80^{\circ} 31.3'$) the broken line on T 6095b corresponds to the high water line as shown on the compilation by a heavy solid line. This is the edge of the marsh grass.
- (d) Other differences noted between the compilation and T 6095b are minor and are probably due to sketching between rod readings on T 6095b and to differences in interpretation of detail. The compilation has not been changed for (b), (c) or (d).

2. Graphic Control Surveys (plane table), T 6096a and b, 1934. Control points only were located on these surveys. There is no shoreline or topographic detail.

Comparison with Earlier Surveys : H 1084 (1871) and T 1307 (1873).

H 1084 (1871) includes shoreline in addition to hydrography. Comparison discloses some differences in topographic detail, particularly in the marsh areas along North Wimbee and Williman Creeks. The compilation includes accurate, recent topographic delineation and is adequate to supersede H 1084 and T 1307 in so far as topography is concerned.

McGann

DB Jones

REVIEW OF AIR PHOTO COMPILATION NO. *T-5163.*

Chief of Party: E. H. KIRSCH

Compiled by: W.W. JOHNSON

Project: HT 162

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)
graphic control sheets No T-6095, T-6096.
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 submitted ✓*
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~~ ^{it.} 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)
Descriptions furnished with T-6095. filed under survey no. T-6095.
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)
*descriptive
Furnished with T-6095, T-6096. reports.*
- ~~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)~~
All bridges over navigable waters are accompanied by a note giving type of bridge, and vertical clearance above M.H.W.
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)
U.S.G.S. "Green Pond" Quadrangle used. ~~in securing names~~ for a geographic name comparison.
13. The geographic datum of the compilation is *N.A. 1927* and the reference station is correctly noted. *Datum station is adjusted.*
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;

E. H. Kirsch
Chief of Party

19. Remarks after review in office:

See following pages

Reviewed in office by: *Sam. B. Jones*

Examined and approved:

K. T. Adams
Asst Chief, Section of Field Records
L. O. Solball
Chief, Division of Charts

J. S. Borden
Chief, Section of Field Work
G. Wade
Chief, Division of Hydrography
and Topography.