

5162

U. S. COAST & GEODETIC SURVEY
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Air
Photo

Topographic
~~Hydrographic~~

Field No. 10,
Sheet No. Reg. No. 5162
5162

State _____ South Carolina

LOCALITY

EDISTO RIVER

SNUGGEDY SWAMP

1934

CHIEF OF PARTY

E. H. Kirsch

U. S. GOVERNMENT PRINTING OFFICE: 1934

5162

Applied to Chart 793 Jan. 23, 1936. Helmer Evers
" " " 1239 April, 1937 J. M. A.

PHOTOS NO.
1116 through 1133
1187 through 1200

DATE
October 10, 1933
October 12, 1933

TIME
12:00 Noon
11:05 A.M.

PROJECTION BY

L. C. Ripley 4-9-34
L. C. Ripley

PROJECTION CHECKED BY

E. H. Kirsch 4-9-34
E. H. Kirsch

CONTROL PLOTTED BY

E. S. Ethridge 4-17-34
E. S. Ethridge

CONTROL CHECKED BY

M. L. Smith 4-17-34
M. L. Smith

CONTROL PLOTTED ON PHOTOS BY

H. H. McBeth
H. H. McBeth

CONTROL CHECKED ON PHOTOS BY

J. F. Richardson
J. F. Richardson

TOPOGRAPHY TRANSFERED BY

W. W. Johnson 5-10-34 - 6-20-34
W. W. Johnson

TOPOGRAPHY CHECKED BY

E. J. Anderson 6-20-34
E. J. Anderson

SMOOTH RADIAL PLOT BY

E. S. Ethridge 5-9-34
E. S. Ethridge

SMOOTH RADIAL PLOT CHECKED BY

L. C. Lande 5-9-34
L. C. Lande

SCALE PLOT BY

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

DETAIL INKED BY

W. W. Johnson 6-20-34
W. W. Johnson

AREA COVERED BY SHEET: 97 Square Statute Miles

LENGTH OF STREAMS: 55.2 St. Miles (less than 200 meters wide).

LENGTH OF SHORELINE: 2.5 St. Miles (More than 200 meters wide).

LENGTH OF COASTLINE: None.

The length of streams less than 200m wide does not include the ditches and canals located in abandoned rice fields along these streams.

DEPARTMENT OF COMMERCE
U.S. COAST AND GEODETIC SURVEY

REG. NO. 5162

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. 10

REGISTER NO. 5162 5162

State South Carolina

General locality Edisto River

Locality Snuggedy Swamp

~~10,000~~ 20,000
943 Scale 1:21,209 Photographs - October 10, 1933
Date of survey October 12, 1933, 19

Compilation - June 20, 1934
Vessel Air Photo Compilation Party No. 21,

Chief of party E. H. Kirsch

Surveyed by See data sheet in descriptive report.

Inked by W. W. Johnson, 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: None. Compilation made on a scale of 1:21,209
and enlarged to 1:20,000 by photography

GENERAL INFORMATION

Report:

The area covered by this sheet consists of marsh, which was largely rice fields, now abandoned except for very small areas. These small fields are kept under cultivation by the owners who use the locality as a game preserve. One of these fields is located just north of $32^{\circ} 40'$ and east of $80^{\circ} 26'$, represented by a clear space on the sheet. Another is located at $32^{\circ} 43'$ and slightly west of $80^{\circ} 31'$, represented by ditches surrounded by marsh. The remainder of the sheet consists of timber and cleared land, a small percentage of which is under cultivation.

The marsh area between the Edisto and Ashepoo rivers, on the south of the sheet, is largely covered by bushes and tall marsh grass, the boundaries of which are very indefinite on the pictures - hence the indefinite line between marsh and brush.

The marsh area just north of $32^{\circ} 40'$ and west of $80^{\circ} 31'$ is largely covered by water with small areas of grass scattered through it. Since this water does not form a permanent pond, the area was shown as marsh.

Other information is furnished by Lt. B. H. Riggs' General Field Inspection Report, submitted with sheet No. 1, Reg. No. 5153.

At one time there was a road extending from south of $32^{\circ} 42'$ and east of $80^{\circ} 27'$, running in a south-easterly direction to a canal just south of the Seaboard Air Line R. R. This road is now impassable, having been abandoned more than a decade ago, and though the remains can be seen on the photographs it was not traced on the celluloid sheet. The above information was furnished by the caretaker of the Hope Plantation located in the vicinity of the area under discussion.

The spur track which leaves the Seaboard Air Line main track at Lat. $32^{\circ} 39'$ and Long. $80^{\circ} 27'$ has been abandoned at approximately the point shown. This spur is shown on the Geological Survey ^{maps} charts of the area in question. It has been shown on this sheet as a dashed line, representing the old road bed.

Photographs:

Photographs from two flights were used in the compilation of this sheet. Photos 1118 through 1131, taken at approximately 12:00 Noon October 10, 1933, were used. This was about 15 minutes before a high of 5.1'. Photos 1187 through 1200, taken at approximately 11:05 A.M. October 12, 1933 were used. This was about 3 hours and 10 minutes before a high of 5.0'. All photographs were taken with a standard U. S. Army Air Corps' 5-lens camera.

CONTROL

Sources:

C. A. Egner, triangulation station HURST, PECK, HOS, and SON, 1933.

K. G. Crosby, triangulation station WILLTOWN, RAIL
BRIDGE, CRANE, and BOWMAN, 1933

C. D. Meaney, triangulation station PADGETT, GREEN POND, 1932.

E. B. ROBERTS, triangulation station ZIP, TANK, ZEB, 1924.

The blue triangles are stations on a traverse - ZIP to GREEN POND - run by Lt. B. H. Riggs' Party. This traverse starts at triangulation station ZIP and runs along an improved dirt road to the Atlantic Coast Line Railroad - thence to GREEN POND. *Traverse points were not marked and will not show on the further printed copies.*

The following list of geographic positions were used in controlling the plot and are shown on the compilation with blue triangles. They are NOT marked stations. ** These will not show on printed copies of the compilation*

	Lat.		Meters		Long.		Meters	
TP - 1	32° 38'		271.9 (1576.3)	:	80° 29'		1474.0 (90.0)	<i>Bgg</i>
TP - 2	32	38	401.7 (1446.5)	:	80	29	1542.4 (21.6)	
TP - 4	32	39	410.2 (1438.0)	:	80	30	1198.8 (364.9)	
TP - 6	32	39	1394.7 (453.5)	:	80	31	581.1 (982.6)	
TP - 7	32	40	201.9 (1646.3)	:	80	32	738.8 (824.6)	
TP - 10	32	41	1488.8 (359.5)	:	80	33	670.1 (893.0)	
TP - 11	32	42	1774.1 (74.2)	:	80	34	772.2 (790.6)	
TP - 12	32	43	762.4 (1085.9)	:	80	34	999.4 (563.1)	
TP - 14	32	43	1532.8 (315.5)	:	80	34	826.2 (736.3)	
TP - 15	32	44	388.6 (1459.7)	:	80	34	743.9 (818.4)	

Errors:

No errors were found in the plotting of control.

Discrepancies:

No control stations established by other organizations were used.

COMPILATION

Method:

The standard radial line method described in the U. S. C. & G. S. Notes on the Compilation of Planimetric Line Maps from Aerial Photographs was used.

Ad Adjustment of Plot:

No unusual adjustment of the plot was required. Scale fluctuations due to tilt were not excessive except at the extreme northern edge of the sheet where the detail was taken from the outer half of the wing prints.

Interpretation:

Interpretation of the marsh area between the Edisto and the Ashepoo, south of Lat. $32^{\circ} 42'$ was very difficult. Personal field inspection was necessary to ascertain whether the area was marsh or brush. (see "general Report," above).

Canals running through the old rice fields usually have dikes along-side them. Two canals close together have a dike between. These features were not shown because of the "Crowded" appearance they give.

Only the graphic symbols shown in the U.S.C. & G.S. topographic manual were used.

Information from other Sources:

Field inspection furnished by Lt. B. H. Rigg.

Field inspection by the compiler.

Conflicting Names:

There are no conflicting names on this sheet.

COMPARISON WITH OTHER SURVEYS

Junctions:

Satisfactory junctions were made with the following sheets:

Sheet No. 4,	Reg. No. 5156	on the South
7,	5159	East
16,	5168	Southeast
11,	5163	West

Landmarks:

R. P. Eyman Commanding Motor Vessel Natoma, will no doubt have A.C.S. along the Ashepoo River. Reference is made to those sheets for landmarks. *No planetable surveys have been received in the area of this compilation. 9/20/34 Bgg.*

No outstanding landmarks were found on the photographs along the Edisto River.

Remarks:

The small black circles along the Edisto River show the position of hydrographic signals established by Lt. B. H. Riggs' Party.*

The Seaboard Air Line R. R. Bridge crossing the Edisto river is of the steel truss, swinging type having a horizontal clearance of 61 ft. on each side of the center pier of the main span, and a vertical clearance of 15 ft., on each side of the main draw are spans for small boats, the horizontal clearance is 19 ft. and the vertical clearance 17.5 ft. All measurements were taken at 1:45 P.M. June 26, 1934. Information obtained from Lt. B. H. Riggs' Party. The clearance was given on the sheet by the compiler as 17.5 ft. above M.H.W.

RECOMMENDATIONS FOR FURTHER SURVEYS

The compilation of this sheet is believed to be accurate within the allowable variation of three meters for detail of importance for charting, and six meters for all other well defined detail. +

No further surveys are necessary.

Assisted by:

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

Submitted by:

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

* These are temporary stations. They will remain on the celluloid sheet but will not be shown on the printed copies.

+ The value of 3 to 6 meters given above is high for work on this scale. a better estimate is an accuracy of location of about ~~3 to 5~~ 5 to 8 meters for intersected points and 5 to 20 meters for other detail.

B. G. Jones

REVIEW OF PHOTO TOPOGRAPHIC SURVEY NO.

Title (Par. 56) Edisto River

Chief of Party E. H. Kirsch

Compiled by W. W. Johnson, Jr.

Project HT - 162

Instructions dated November 10, 1933

- ✓ 1. The survey and preparation for it conform to the requirements of the Topographic Manual. (Par. 8; and 16, a, b, c, d, e, g and i.)
- ✓ 2. The character and scope of the compilation satisfy the instructions and the "Notes on the Compilation of Planimetric Line Maps from Five Lens Aerial Photographs".
- ✓ 3. The control and adjustment of the radial plot were adequate. (Par. 12, 29.)
- ✓ 4. There is sufficient control on maps from other sources that were transmitted by the field party for their application to the charts. (Par. 28.) No information taken from outside source.
- ✓ 5. High water line on marshy and mangrove coast is clear and adequate for chart compilation. (Par. 16a, 43, 44.)
- ✓ 6. 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.)
- ✓ 7. Important details shown on previous surveys and on the chart have been compared with this sheet and a statement has been entered in the report regarding the removal from the chart or change in position of important detail such as rocks, lights, beacons, prominent objects, bridges, docks, and structures along the water front. *Only very little of this area covered by charts*
- ✓ 8. The span, draw and clearance of bridges are shown. (Par. 16c.) *No data furnished for the bridges on the Ashepoo River*
- ✓ 9. The data furnished by the Field Inspection is adequate.

NOTE: Strike out paragraphs, words or phrases not applicable and modify those requiring it. Paragraph numbers refer to those in the Topographic Manual. Use reverse side for extending remarks.

Names ^{Three} ~~Two~~ new names are shown
and were added in this office from the
U.S. G. S. Maps of this area, Horseshoe Creek
and Ashepoo River, at the top of the
sheet, and Jacksonboro in Lat $32^{\circ}44'$, Long $80^{\circ}28'$.
Names shown within the
area covered by chart 1239 B. G. Jones
agree with that chart. The names
shown outside the area of chart 1239
agree with the U.S. G. S. Maps except
for the name pine island which
is not on the U.S. G. S. Maps
or on chart 1239 and is not mentioned
in the report.

- ✓10. The descriptive report covers all details listed in the Manual, ✓
so far as they apply to this survey. (Par. 64, 65 and 66.)
- ✓11. The descriptive report also contains all additional information
required in photo topography as prescribed in the instructions ✓
and in the "Notes on the Compilation of Planimetric Line Maps
from Five Lens Aerial Photographs".
- ✓12. ^{No} The descriptions of recoverable stations and references to shore
line were accomplished on Form 524, and scaling of positions
checked. (Par. 29, 30 and 57.) Submitted with A.C.S. *No plane table
surveys have yet been received 9/20/34*
- ✓13. A list of landmarks for charts was furnished on Form 567 and scal-
ing of positions checked. (Par. 16d, e, 60.)
Submitted with A.C.S.
- ✓14. The geographic datum of the sheet is N. A. 1927 ^{adjusted} and
the reference station is correctly noted. (Par. 34.)
- ✓15. Junctions with contemporary surveys are adequate.
- ✓16. Geographic names are shown on the sheet and are covered by the ✓
Descriptive Report. (Par. 64, 66k.)
See opposite page
- ✓17. The quality of the drafting is good. (Par. 31, 32, 33, 35, 36,
37, 38, 39, 40, 41, 42, 45, 46.)
- ✓18. No additional surveying is recommended.
- ✓19. Remarks:

20. Examined and approved:

E. H. Kirsch

E. H. Kirsch, Chief of Party

21. Remarks after review in office: *Very little detail is shown on the charts
in this area and the diagrams show no previous topographic surveys by
this Bureau.*

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

Examined and approved:

K. T. Adams

Chief, Section of Field Records

R. O. Zolbert
Chief, Division of Charts

J. S. Borden

Chief, Section of Field Work

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