

5182

2481

5182

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5324

Air
Photo

Topographic
Hydrographic

Sheet No. Field No. 30
Reg. No. 5182

LOCALITY 5182

STONO RIVER

ELLIOTT CUT to LAT. 32° 42' 15"

1934

CHIEF OF PARTY

E. H. Kirsch

U. S. GOVERNMENT PRINTING OFFICE: 1931

Form 504
Ed. June, 1928
DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY
R. S. Patton, Director

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JUL 17 1984

State: South Carolina

DESCRIPTIVE REPORT

PHOTOS NO.
M-112 to M-115 - 823B-8
M-116 to M-118 - 823A-8
M-6 to M-14 - 823A-8

DATE	TIME
December 21, 1933	12:50 P.M.
December 21, 1933	12:50 P.M.
October 25, 1933	1:15 P.M.

PROJECTION BY:	<u>L. C. Ripley</u> L. C. Ripley	2-13-34
PROJECTION CHECKED BY	<u>J. H. Wulbern</u> J. H. Wulbern	2-13-34
CONTROL PLOTTED BY	<u>M. L. Smith</u> M. L. Smith	2-15-34
CONTROL CHECKED BY	<u>E. S. Ethridge</u> E. S. Ethridge	
CONTROL PLOTTED ON PHOTOS BY	<u>J. F. Richardson</u> J. F. Richardson	
CONTROL CHECKED ON PHOTOS BY	<u>F. H. McBeth</u> F. H. McBeth	
TOPOGRAPHY TRANSFERRED BY	<u>A. E. Nowell</u> A. E. Nowell	
TOPOGRAPHY CHECKED BY	<u>M. R. Donaldson</u> M. R. Donaldson	
SMOOTH RADIAL PLOT BY	<u>J. H. Wulbern</u> J. H. Wulbern	
RADIAL PLOT CHECKED BY	<u>E. H. Kirsch</u> E. H. Kirsch	
SCALE PLOT BY	<u>J. H. Wulbern</u> J. H. Wulbern	
DETAIL INKED BY	<u>A. E. Nowell</u> A. E. Nowell	5-10-34

AREA OF DETAIL INKED: 14.4 Square statute miles (Land area)

LENGTH OF SHORELINE: 10.9 statute miles (more than 200 meters from nearest opposite shore)

LENGTH OF STREAMS: 13.8 statute miles (Rivers and sloughs 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. 30

REGISTER NO. 5182 5182

State South Carolina

General locality Stono River

Locality Elliott Cut to Lat. 32° 42' 15"

Photographs - December 21, 1933

Scale 1:10,000 Date of ~~survey~~ October 25, 1933, 19

Compilation - May 10, 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 A. E. Nowell

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 INFORMATION

Statistics:

This sheet covers an area of 14.4 square statute miles of land with 10.9 statute miles of shore line (of rivers more than 200 meters to the nearest opposite shore) and 13.8 statute miles of rivers, sloughs and waterways (less than 200 meters wide).

The area covered by this sheet consists of marsh, timber lands, cultivated and uncultivated fields.

The field inspection report of 1933-34 for this area is to be supplied by Lt. B. H. Rigg - additional field inspection of the area covered by this sheet was made by the compiler.
For Lt. Rigg's Report see Desc. Report for T-5153.

This sheet was compiled from photographs taken by the U. S. Army Air Corps' single lens camera.

The following photographs were used:

M-112 to M-115 - 823B-8
M-116 to M-118 - 823A-8
M-6 to M-14 - 823A-8

This sheet is bounded on the East by Long. $79^{\circ} 58' 45''$, on the West by Long $80^{\circ} 01' 00''$, on the South by Lat. $32^{\circ} 42' 15''$, and on the North by Lat. $32^{\circ} 46' 00''$.

Sources:

The following sources of control were used in the compilation of this sheet:

Triangulation by - L. P. Raynor, 1924
- R. F. A. Studds, 1928
- G. D. Cowie and R. L. Shoppe 1933
- C. D. Meaney, 1932

Aluminum control sheets "F" Reg. No. *T-6072*, by Lt. B. H. Rigg, Chief of Party, 1934 and "G" Reg. No. *T-6073*, by Lt. M. O. Witherbee, Chief of Party, 1934.

The field partys' geographic positions have been reduced to the 1927 datum. The differences between the unadjusted and the final positions would be unplotable at the scale of compilation.

Triangulation station WINDMILL SOUTH BANK was not used in making the radial plot.

Errors:

No errors were discovered in the position of the aluminum control sheet signals.

Triangulation station CUT has been lost.

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

There was no inspection on triangulation station WIND-MILL, SOUTH BANK.

COMPILATIONMethod:

The usual radial line method plotting as described in the U.S.C. & G. Survey Notes for the Compilation of Planimetric Line Maps from 5-lens Aerial Photographs, was used in this compilation.

Adjustment of Plot:

The photographs used appear to be free of excessive tilt and scale fluctuation and no unusual adjustments were necessary in making the radial plot.

Interpretation:

The usual graphic symbols, as approved by the Board of Surveys and Maps 1932 were used.

The shore line, on the East side of the Stono River just South of Elliott Cut does not agree with the shore line shown on Topo Sheet "F" Reg. No. 7-6072. The Topo sheet uses the foot of the cliff as the shore line, where as the compiler of this sheet has shown a narrow strip of marsh at this point. Pictures M-117 and M-118 - 823A-8 were used for this detail.

James Island Creek connects with marsh area along the Stono River through two ditches as shown in the compilation just South of Lat. 32° 44'.

The shore line between Lat. 32° 44' and Lat. 32° 42' 14" differs slightly, in places, from the shoreline as shown on Topo sheet "G" Reg. No. 7-6073. This discrepancy is due to interpretation of the photographs, and I believe my interpretation is correct. *See review at back. The difference is only about 5 meters. B.G.J.*
Double lines have been used to indicate first order roads - double broken lines to indicate second order or graded dirt roads, and single broken lines have been used to indicate trails and private roads.

Δ King is shown on the Compilation as the reference station. The pos. given is field ~~reduced~~ reduced to N. A. 1927 and may vary a few tenths of a meter from the final adjusted position.
E.H.K.

accuracy. The control was adequate and the compilation has been carefully made but the value of 3 to 6 meters given on the opposite page is a little high. a better estimate is an accuracy of location of 3 to 5 meters for intersected points and 3 to 10 meters for other detail.
B.G. Jones

Information from other Sources:

No information from other sources has been used in the compilation of this sheet.

Conflicting Names:

There are no names on this sheet conflicting with the names shown on the U.S.C. & G.S. Charts of this area. *New names appearing on this compilation have been submitted for approval. Lam.*

COMPARISON WITH OTHER SURVEYS

Junctions:

The junctions with adjoining sheets are satisfactory:

North - Reg. No. 5179
East - Reg. No. 5181
South - Reg. No. 5185
West - Reg. Nos. 5164 and 5153

The Stono River, swing type draw bridge at approximately Lat. $32^{\circ} 45' 10''$ and Long. $80^{\circ} 00' 30''$ does not appear on chart 1239 but has been shown on this sheet.

Landmarks:

The list of landmarks on form 567 for this area was submitted by Lt. B. H. Rigg and Lt. M. O. Witherbee with aluminum control sheets "F" Reg. No. *T-6072*, and "G" Reg. No. *T-6073*.

Recommendation for Further Surveys:

The compilation of this sheet is believed to have a probable error of 3 meters in well defined detail of importance for charting and of 6 meters for other data. It is understood that the width of roads, bridges, and similar objects may be slightly expanded in order to keep the detail clear and to keep it from photographing as a solid area in the photo lithographic process.. *See opposite page.*

Draw Bridges:

Stono River Toll draw bridge, swing type, 18' roadway - Horizontal clearance West channel 60' feet - East channel 56' Vertical clearance at mean high water bridge closed 8.5'.
U.S.E. gives clearance above high water = 8.0 ft. for this bridge Lam.

Wappoo Creek drawbridge swing type - 18' roadway - Horizontal clearance between fenders, South channel 83', North channel 80.5' - Vertical clearance at mean high water 11.5'.
U.S.E. gives clearance above high water = 12.5 ft. for this bridge Lam.

Assisted by:
E. H. Kirsch
E. H. Kirsch,
Chief of Party.

Submitted by:
A. E. Nowell
A. E. Nowell.

Title (Par. 56) Elliott Cut to Lat. 32° 42' 15"

Chief of Party E. H. Kirsch

Compiled by A. E. Nowell

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 sources.
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. ✓
8. The span, draw and clearance of bridges are shown. (Par. 16c.) ✓
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.

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. 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. Sheets.
Transferred to the compilation Plotted in office July 21, 1934. Nov. 27, 1934.
13. A list of landmarks for charts was furnished on Form 567 and scaling of positions checked. (Par. 16d, e, 60.)
Submitted with A. C. Sheets.
14. The geographic datum of the sheet is N. A. 1927 and the reference station is correctly noted. (Par. 34.)
Reference station is field reduced to N.A. 1927 datum but not office adjusted.
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.) *Page 3* ✓
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:

Reviewed in office by:

Leonard A. Hubert B.G. Jones

Examined and approved:

E.H. Green

Chief, Section of Field Records

L.O. Robert
Chief, Division of Charts

F.B. Borden
Chief, Section of Field Work

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

REVIEW OF AIR PHOTO COMPILATION NO. T-5182 (1934)

Topographic Stations:

Temporary topographic stations appearing on the celluloid will not appear on the printed copies of this compilation. They are retained on the original for reference in hydrographic verification. Recoverable topographic stations shown with a small circle, described on Form 524, are listed as follows:

Filed under T-6072 (Air Photo Control)	Cut Reference No. 2 (d)
Filed under T-6073 (Air Photo Control)	Shack (d)

Comparison with Other Surveys:

There is satisfactory agreement with T-6072 and T-6073 (1934), Air Photo Control Surveys. The differences mentioned on Page 2, Descriptive Report under "Interpretation" have been further examined. The one difference, namely, on the west side of the Stono River in latitude 32° 44' just north of topographic station Shack (d) has been changed about $\frac{1}{2}$ mm. on the celluloid after examining the photographs. Agreement was made with T-6073 here. The other difference, on the east side of the Stono River, just south of Elliott Cut has not been changed on the compilation. The field photographs show the H. W. line around the offshore edge of the marsh and on this authority the compilation is ~~correct~~ *accepted as correct.*

Comparison was also made with the following surveys: H-1639 (1885) combined topographic and hydrographic survey; T-1604 (1876, 1879); T-4432 (1928). All of these surveys cover only a small corner of this sheet. *compilation.*

There are no previous topographic surveys covering the control part of this compilation. The compilation is detailed and adequate to supersede the older surveys.

B.G. Jones

Survey No. T-5182

Date, March 27, '35

Chart No. 1239

Names underlined in red approved May 27, 1935

Diagram No. 1239

Harlow Bacon

Referred to the Division of Geographic Names, Department of Interior. R

Under investigation. Q

Status	Name on Survey	Name on Chart	New Names in local use	Names assigned by Field	Location
	Buzzardroost Point ^Q	Same (Buzzards Roost Pt ON PMM)	Buzzards Roost Pt (V.S. 6-8)		slit unless corrected
	Elliott Cut	" 1239 - 470 - PMM			
	Riverland Terrace	" 470.			
	Wappoo Creek	" 1239 - 470 - PMM			
	James Island Creek	" 1239 - PMM			
	Centerville	" 1239 - PMM			
	James Island	" 1239 - PMM			
	Stono River	" 1239 - 470 - PMM			
	Stono	" 1239 - PMM			
	Dill Cr	ch Dill (KTA)		See PMM Charleston Quad. 32°45'N 79°54'W	
The following names appear on the map. There is no supporting evidence for their accuracy. Several are evidently new features. See Dist. Report T5153, p. 3					
	Stono River Bridge				
	Stono Road				
	Municipal Golf Course				
	Folly Beach Road				
	Charleston Country Club				
	King's Highway				

Applied to drawing of chart #470. April 11, 1935
g. H. S.

Applied to chart 837 Sept. 30, 1935, H.R.C.

Applied to Chart 792 October 10, 1936. H. MacLennan

Additional area applied to ch. 470 J. M. A. Dec. 1936

applied to chart 1239 J. M. A. Apr. 1937