

5164  
SUPPLEMENTAL T

U. S. COAST & GEODETIC SURVEY  
LIBRARY & ARCHIVES

AUG 9 1934

Acc. No. \_\_\_\_\_

Form 504  
Ed. June, 1928

DEPARTMENT OF COMMERCE

U. S. COAST AND GEODETIC SURVEY

R. S. Patton, Director

State: S. Carolina

DESCRIPTIVE REPORT

Topographic

Hydrographic

Field No. 12.

Sheet No. Reg. No. 5164

LOCALITY

~~STONO RIVER - West of Charleston Harbor~~

~~3 miles W. of Buzzards Roost Pt.~~

~~to Rantowles Creek~~

~~West of Buzzards Roost Pt.~~

East of Rantowles Creek

1934

CHIEF OF PARTY

E. H. Kirsch

U. S. GOVERNMENT PRINTING OFFICE: 1928

5164

SUPPLEMENTAL T

# J O B S H E E T

TO

ACCOMPANY SHEET NO. 12

REG. NO. 5164

PROJECTION BY	<u>L. C. Ripley</u> L. C. Ripley	Jan. 3, 1934
PROJECTION CHECKED BY	<u>J. H. Walbern</u> J. H. Walbern	Jan. 4, 1934
TRIANGULATION PLOTTED BY	<u>L. C. Ripley</u> L. C. Ripley	Jan. 9, 1934
TRIANGULATION CHECKED BY	<u>T. P. Mitchell</u> T. P. Mitchell	Jan. 9, 1934
TRIANGULATION PLOTTED ON PHOTOS BY	<u>F. H. McBeth</u> F. H. McBeth	
TRIANGULATION CHECKED ON PHOTOS BY	<u>J. F. Richardson</u> J. F. Richardson	
SCALE PLOT BY	<u>J. H. Walbern</u> J. H. Walbern	Dec. 27, 1933
RADIAL PLOT BY	<u>J. H. Walbern</u> J. H. Walbern	Jan. 24, 1934
DETAIL BY	<u>A. E. Nowell</u> A. E. Nowell	Started: Jan. 25, 1934 Finished: Mar. 1, 1934.

PHOTOS NOS.  
M93 through M100 - 807M-8

DATED  
November 25, 1933

TIME  
1:05 PM

AREA DETAIL INKED: 15.746 Square Statute Miles (Land Area)

LENGTH OF SHORE LINE: 12 Statute miles (More than 200 meters from nearest shore)

LENGTH OF STREAMS: 26 Statute miles of rivers and sloughs less than 200 meters wide.

LENGTH OF COASTLINE: None

AREA DETAIL INKED: (Shoals in water area) None.

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. 12 1239-2

REGISTER NO. 5164 5164

State South Carolina

General locality Stono River  
~~West of Charleston Harbor~~  
~~1/2 mile W. of Buzzardroost Pt.~~ EAST OF RANTOWLES CREEK

Locality Stono River ~~to Rantowles Creek~~ ~~W. of Buzzardroost Pt.~~

November 25, 1933

Scale 1:10,000 Date of survey 1:05 PM 19  
1 hr. 8 min before high tide.

Vessel Air Photo Party No. 21.

Chief of party E. H. Kirsch

Surveyed by Army Air Corp.

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: Single lens pictures No. M93 - 807-M-8 through

M100 - 807 - M - 8

## GENERAL INFORMATION

### Statistics:

The area covered by this sheet is 15.746 square statute miles. There are 12 statute miles of shoreline as measured along streams the width of which is more than 200 meters wide as measured from nearest opposite shoreline. There are 26 statute miles of rivers and sloughs (less than 200 meters wide) shown on this sheet.

### General Reports:

The area covered by this sheet consists of low marsh land, cultivated, uncultivated, and wooded lands.

The marsh area shown north of the Stono River between Long. 80° 03' and 80° 06' has been turned over or dug up in mining for phosphate rock.

### Photo Numbers:

The flight covering this area includes photos No. M-93 through M-100 - 807M-8. The pictures were taken on November 25, 1933 at 1:05 P.M., 1 hour and 48 minutes before high tide.

## CONTROL

### Sources:

Triangulation by G. D. Cowie and R. L. Shoppe - 1933.

Aluminum control sheets "F" Reg. No. <sup>7</sup>6072, "I" Reg. No. <sup>7</sup>6056, by Lt. B. H. Rigg, Chief of Party, 1933-34.

No control from other sources was used. U.S.E.D. stations were tied in by Mr. G. D. Cowie.

Control has been field reduced to 1927 N. A. datum.  
*Datum Station "Bradley" is unadjusted. Lam.*

### Errors:

Intersection station 81 WINDMILL and main scheme station CHUCK failed to fit into the plot by 6 to 8 meters. There are many tree shadows in the photo around these stations and it is felt that these stations were incorrectly spotted on the photo. 81 WINDMILL was located by three cuts with good intersections.

Intersection station 82 NORTH GABLE OF HOUSE is not shown on the sheet, as Mr. W. N. Martin reports this building has been torn down.

## COMPILATION

### Method:

The standard radial line method which is described in 1933 U.S.C. & G.S. notes for compilation of planimetric line maps from 5-lens aerial photographs was used for the compilation of this sheet.

### Adjustments of Plot:

No unusual adjustment was necessary.

### Interpretation:

No difficulty was experienced in interpreting the pictures.

### Information from other Sources:

Aluminum control sheets, "F" Reg. No. 7-6072, and "I" Reg. No. 7-6056, by Lt. B. H. Rigg, Chief of Party, 1933-34.

### Conflicting Names:

No conflicting names were recorded by the field inspection party. *One new name, "River Road", has been submitted.*

## COMPARISON WITH OTHER SURVEYS

### Junctions:

Junction with sheet No. 13, Reg. No. 5165 on the West is satisfactory.

Junction with Sheet Nos. 27 Reg. No. 5179 and 30, Reg. No. 5182 on the East is satisfactory.

Sheet No. 1, Reg. No. 5153 on the South.

Sheet No. 5, Reg. No. 5157 on the North.

### Landmarks:

Landmarks for charts and a list of marked stations are being submitted with aluminum control sheets "F" Reg. No. 7-6072 and "I" Reg. No. 7-6056, by Lt. B. H. Rigg, Chief of Party, 1933-34.

RECOMMENDATIONS FOR FURTHER SURVEYS

It is believed that the compilation has a probable error of not more than 3 meters in position of well defined detail of importance for charting and of not more than 6 meters for other data.

*See below*  
It is believed that the compilation is complete and reliable and that no further examination of this area is necessary.

Assisted by:

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

Submitted by:

*A. E. Nowell*  
A. E. Nowell.

\* The value of 3 to 6 meters given above is probably a little high and is better expressed as follows: "an accuracy of location of 3 to 4 meters for interested points and 3 to 8 meters for other detail"

*B. G. Jones*

*See chart letter 402-1934 for landmarks*

BRIDGE NOTES:

TOPO SHEET 1

1st S.A.L. Railroad Bridge - Stono River- single track-swing type. Horizontal clearance between fenders- East channel 65.6'. West channel 65.9'. Vertical clearance - Bridge Closed 6.3' at Mean High Water. *USE. gives minimum clearance = 13.5 ft above high water.*

*Larn*  
*1394*  
Johns Island Highway Bridge - Swing type 14' Roadway. Horizontal clearance between fenders North Channel 55.8'. South Channel 56.7'. Vertical clearance - Bridge closed 7.3' at Mean High Water. *There is no bridge listed in the USE "List of Bridges." which coincides with its position on this compilation. Larn.*

## REVIEW OF PHOTO TOPOGRAPHIC SURVEY NO. T-5164.

Title (Par. 56) Stono River  $\frac{1}{2}$  mile W. of Buzzardroost Pt. to Rantowles Creek.

Chief of Party E. H. Kirsch

Compiled by A. E. Nowell

Project F. P. -13- S.C. 1933-35

Instructions dated November 10, 1933

Air Photo Compilation Party No. 21.

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.S. Sheets.  
*Plotted in office by O.H.B.*
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.S. Sheets.
14. The geographic datum of the sheet is N. A. 1927 and the reference station is correctly noted. (Par. 34.)  
*Ref. Station is undjusted. ~~undjusted~~*
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.) ✓
17. The quality of the drafting is good. (Par. 31, 32, 33, 35, 36, 37, 38, 39, 40, 41, 42, 45, 46.) ✓  
*Shoreline for heavy line.*
18. No additional surveying is recommended. ✓

19. Remarks:

*See following pages.*

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. McKinnis* ✓ *B.G. Jones*

Examined and approved:

*E.H. Green*  
Chief, Section of Field Records

*L.O. Lobell*  
Chief, Division of Charts

*T.S. Borden*  
Chief, Section of Field Work

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

REVIEW OF AIR PHOTO COMPILATION T-5164 (1934)

Topographic Stations:

The following recoverable topographic are described on Form 524, and shown on this compilation with the conventional circle.

Descriptions filed under T-6072  
(Air Photo Control)

U. S. E. 23 (d)  
Black Beacon No.1 (d)  
Prop. Cor. 13 (d)

Descriptions filed under T-6056  
(Air Photo Control)

Rock Cut Rear Range Beacon (d)  
Johns I. Rear " " (d)  
U.S.E. 6 (d)  
U.S.E. Marsh (d)  
U.S.E. Block (d)  
U.S.E. 2 (d)  
U.S.E. Canal (d)

Stations noted above transferred in the office and checked by--

Plotted by D.H.B. Checked by Sam.

Comparison with other Surveys.

There is satisfactory agreement with T-6072 and T-6073 contemporary air photo control surveys. Comparison was also made with H-1639 (1885). Combined hydrographic and topographic survey; which this compilation is adequately detailed to supersede.

*B. G. Jones*

SOUTHCAROLINA

Diagram No. 1239-2

Under investigation. Q

M-136

Applied to chart 837 Oct 1935 H.C.

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

List showing the discrepancies between the geodetic and the Engineer.

Corps' Plain Coordinate Position

Sheet No. 12; Reg No 5164

Origin A#1 32-46-1476.6 (371.7) N.A. 1927  
80-06-871.9 (689.8)

Stations	Geographic Positions		Engineers	Co-ordinates	G.P. from Origin A#1		Correct to	Corrected to
	meters		Lat.	Dep.	Through Engineers	Co-ordinates	Engineers	Engineers
					Lat.	Long.	Co-ordinates	Co-ordinates
							According to	NA. 1927
							Sign	datum
USED.								
Front-Range	32 47	436.3 (142.0)	2649.96 <sup>N</sup>	3115.39 <sup>E</sup>	436.0	1483.7	+0.3	808.0 <sup>N</sup>
(Topo ACS)	80 05	1483.7 (76.2)	807.7m	949.6m			0.0	949.6 <sup>E</sup>
USED.								
Rear-Range	32 47	469.0 (179.3)	2764.73 <sup>N</sup>	3762.20 <sup>E</sup>	471.0	1286.6	-2.0	840.7 <sup>N</sup>
(Topo ACS)	80 05	1285.7 (273.0)	842.7m	1146.7m			-0.9	1145.8 <sup>E</sup>
Front-Range	32 47	40.2 (1808.1)	1351.96 <sup>N</sup>	3630.10 <sup>E</sup>	40.3	1326.9	-0.1	412.0 <sup>N</sup>
G.D. Cowie 1933	80 05	1325.7 (234.7)	412.1m	1106.4m			-1.2	1105.2 <sup>E</sup>
NA. 1927								
Field reduced								
Rear-Range	32 47	88.6 (759.7)	1509.54 <sup>N</sup>	3390.18 <sup>E</sup>	88.4	1400.0	+0.2	460.3 <sup>N</sup>
G.D. Cowie 1933	80 05	1399.1 (162.3)	460.1m	1033.3m			-0.9	1032.4 <sup>E</sup>
NA. 1927								
Field reduced								
USED.								
Canal	32 46	1795.0 (53.3)	1045.44 <sup>N</sup>	1123.74 <sup>E</sup>	1795.3	529.4	-0.3	318.4 <sup>N</sup>
(Topo ACS)	80 06	530.4 (1031.3)	318.7m	342.5m			+1.0	343.5 <sup>E</sup>
USED.								
Block	32 46	1778.3 (100)	992.45 <sup>N</sup>	6326.01 <sup>E</sup>	1779.1	505.1	-0.8	301.7 <sup>N</sup>
(Topo ACS)	80 05	503.5 (1058.2)	302.5m	1928.2m			-1.6	1926.6 <sup>E</sup>
USED.								
Marsh	32 46	1601.5 (246.8)	412.39 <sup>N</sup>	3663.85 <sup>E</sup>	1602.3	1316.6	-0.8	124.9 <sup>N</sup>
(Topo ACS)	80 05	1316.7 (245.0)	125.7m	1116.7m			+0.1	1116.8 <sup>E</sup>
USED.								
NO. 2	32 46	1325.3 (523.0)	487.82 <sup>N</sup>	1096.34 <sup>W</sup>	1327.9	1206.1	-2.6	146.1 <sup>S</sup>
(Topo ACS)	80 06	1206.9 (354.8)	148.7m	334.2m			+0.8	335.0 <sup>W</sup>

Continued.

Origin A #1 32-46-1476.6 (371.7)  
80-06-871.9 (689.8)

G.D. Cowie, 1933  
N.A. 1927  
Field reduced

List showing the discrepancies between the geodetic and the Engineers

Corps' Plain Co-ordinate Position.

Sheet No. 12; Reg No. 5164.

Origin  $\Delta^{\#}1$  - This station is located at the Charleston Harbor entrance to Wappoo Cut. A thorough search was made but could not be found.

Stations	Geographic Positions			Engineers Co-ordinates		G.P. from Origin $\Delta^{\#}1$		Correct to	Corrected to
	0	1	meters	Lat.	Dep.	Co-ordinates	Lat. Long.	Engineers Co-ordinates According to Sign	Engineers Co-ordinates According to NA 1927 datum
USED. <b>XX</b> G.D. Corrie 1933 80-00 NA 1927 Field reduced	32	45	1466.0	26256.4 <sup>S</sup> <sub>ft</sub> 800.3 <sub>m</sub>	16569.6 <sup>N</sup> <sub>ft</sub> 5050.4 <sub>m</sub>				
USED. <b>XXI</b> G.D. Corrie 1933 80-00 NA 1927 Field reduced	32	45	1711.5	803.38 <sup>N</sup> <sub>ft</sub> 244.9 <sub>m</sub>	589.95 <sup>W</sup> <sub>ft</sub> 179.8 <sub>m</sub>				
U.S.E.D. <b>XIX</b> (Topo. ACS)	32-46	416.4	2621.22 <sup>N</sup> <sub>ft</sub> 798.9 <sub>m</sub>	1213.49 <sup>E</sup> <sub>ft</sub> 369.9 <sub>m</sub>					
U.S.E.D. M <sup>c</sup> Leod (Topo ACS)	32-46	2189.3	2195.71 <sup>N</sup> <sub>ft</sub> 669.3 <sub>m</sub>	10473.09 <sup>E</sup> <sub>ft</sub> 3192.2 <sub>m</sub>					
U.S.E.D. #7 Topo ACS	32-46	70.5							

## Report for Supplemental T 5164

1. Supplemental filed 1/27/36

added citations

2. Persons marked out which have been moved. 1/27/36

3. Corrections to mark areas 4/22/37