5164
SUPPLEMENTAL T

DEPARTMENT OF COMMERCE
U.S. COAST AND GEODETIC SURVEY
R. S. Patton, Director

State: S. Carolina

DESCRIPTIVE REPORT
Topographic | Sheet No. | Reg. No. 5164

LOCALITY
Stone River West Of Lighthouses Pt.
West of Buzzards Bent Pt.
East Of Kantoles Creek

1934

CHIEF OF PARTY
E. H. Kirstch
JOB SHEET

TO

ACCOMPANY SHEET NO. 12
REG. NO. 5164

PROJECTION BY

L. C. Ripley

Jan. 3, 1934

PROJECTION CHECKED BY

H. H. Walbern

Jan. 4, 1934

TRIANGULATION PLOTTED BY

L. C. Ripley

Jan. 9, 1934

TRIANGULATION CHECKED BY

T. P. Mitchell

Jan. 9, 1934

TRIANGULATION PLOTTED ON PHOTOS BY

F. H. McBeth

TRIANGULATION CHECKED ON PHOTOS BY

J. F. Richardson

SCALE PLOT BY

J. H. Walbern

Dec. 27, 1933

RADIAL PLOT BY

J. H. Walbern

Jan. 24, 1934

DETAIL BY

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

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

REGISTER NO. 5164  5164

State. South Carolina

General locality. West of Charleston Harbor

Locality. Stono River to Rantowles Creek

November 25, 1933

Scale. 1:10,000 Date of survey 1:05 PM

Vessel. Air Photo Party No. 21.

Chief of party. E. H. Kirsch

Surveyed by. Army Air Corps

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

Remarks: Single lens pictures No. 93 - 807-M-8 through

M90 - 807 - M - 8
GENERAL INFORMATION

Statistics:

The area covered by this sheet is 15.74 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:


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

Datum Station "Bradley" is unadjusted. Dept. of the Army.

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:


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 "P" Reg. No. T-6072 and "I" Reg. No. T-6054 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.

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

* 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 intermediate points and 3 to 8 meters for other distant points.*

[Signature]

The chart letter 102-1927 for landmarks.
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. U.S.E. gives minimum clearance = 13.5' ft above high water.

Johns Island Highway Bridge - Swing type 1/4' 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 U.S.E. List of Bridges which coincides with its position on this compilation.
Title (Par. 56) Stono River 1/2 mile W. of Buzzardroost Pt. to Rentwolse Creek.

Chief of Party E. H. Kirsch Compiled by A. E. Nowall

Project P. 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 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 on office by: B.N.G.

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 unadjusted.

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, 43, 44.)

18. No additional surveying is recommended.


20. Examined and approved: E.H. Kirsch, Chief of Party

21. Remarks after review in office:

Reviewed in office by: Leonard A. McFee / B.G. Jones

Examined and approved:

E. H. Green
Chief, Section of Field Work

£. O. Roberts
Chief, Division of Charts

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. 15  (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 L.C.W.

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.

[Signature]
GEOGRAPHIC NAMES

Survey No. T-5164
Chart No. 1239
Diagram No. 1239-2

Date: May 6, 1935

SOUTH CAROLINA

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

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

Under investigation. Q

<table>
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<tr>
<th>Status</th>
<th>Name on Survey</th>
<th>Name on Chart</th>
<th>New Names in local use</th>
<th>Names assigned by Field</th>
<th>Location</th>
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<td>River Road</td>
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<td></td>
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<td></td>
<td>Johns Island</td>
<td></td>
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<td></td>
</tr>
<tr>
<td></td>
<td>Stono River</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Rantowles Creek</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>Johns Island</td>
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<td>Nos big</td>
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<td>(see ward)</td>
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<td></td>
<td>Melvin</td>
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<td></td>
<td>Doneman</td>
<td></td>
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<tr>
<td></td>
<td>Dupont</td>
<td></td>
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<tr>
<td></td>
<td>Rhodes</td>
<td></td>
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</tr>
<tr>
<td></td>
<td>Wappoo</td>
<td></td>
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</table>

Names underlined in red approved - May 6, 1935.

[Signature]
Applied to chart 837 Oct 1935 HWC.
Applied to chart 1239 Apr. 1937 J.m.p.
### List Showing the Discrepancies between the Geodetic and the Engineer Corps' Plane Coordinate Position

**Sheet No. 12; Req No. 5164**

- **Origin**: 32 46 1476.6 (3717) N.A. 1927
  - 80 06 8719 (6998)

#### Stations

<table>
<thead>
<tr>
<th>Stations</th>
<th>Geographic Positions</th>
<th>Engineers Coordinates</th>
<th>G.P. from Original A</th>
<th>Corrected to Engineers Coordinates According to N.A. 1927</th>
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<td></td>
<td>0, 0, 0 meters</td>
<td>Lat. Dep.</td>
<td></td>
<td></td>
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<td>U.S.E.D.</td>
<td>Front Range (Topo ACS)</td>
<td>32 47</td>
<td>4363 (420)</td>
<td>2649.96 N</td>
</tr>
<tr>
<td></td>
<td></td>
<td>80 05</td>
<td>483 (76.2)</td>
<td>801.7 m</td>
</tr>
<tr>
<td>U.S.E.D.</td>
<td>Rear Range (Topo ACS)</td>
<td>32 47</td>
<td>4690 (732)</td>
<td>2766.73 N</td>
</tr>
<tr>
<td></td>
<td></td>
<td>80 05</td>
<td>1285 (730)</td>
<td>842.7 m</td>
</tr>
<tr>
<td>Front</td>
<td>Range</td>
<td>32 47</td>
<td>492.1 (730)</td>
<td>1357.96 N</td>
</tr>
<tr>
<td>Range</td>
<td></td>
<td>80 05</td>
<td>1325.7 (736)</td>
<td>412.1 m</td>
</tr>
<tr>
<td>Rear</td>
<td>Range</td>
<td>32 47</td>
<td>885 (730)</td>
<td>1508.54 N</td>
</tr>
<tr>
<td>Range</td>
<td></td>
<td>80 05</td>
<td>1381 (730)</td>
<td>450.1 m</td>
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<td>U.S.E.D.</td>
<td>Canal (Topo ACS)</td>
<td>32 46</td>
<td>17950 (553)</td>
<td>1045.44 N</td>
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<tr>
<td></td>
<td></td>
<td>80 06</td>
<td>530.4 (1013)</td>
<td>318.7 m</td>
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<tr>
<td>U.S.E.D.</td>
<td>Block (Topo ACS)</td>
<td>32 46</td>
<td>17783 (400)</td>
<td>992.45 N</td>
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<tr>
<td></td>
<td></td>
<td>80 05</td>
<td>503.5 (1043)</td>
<td>302.5 m</td>
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<tr>
<td>U.S.E.D.</td>
<td>Marsh (Topo ACS)</td>
<td>32 46</td>
<td>16015 (2468)</td>
<td>149.34 N</td>
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<tr>
<td></td>
<td></td>
<td>80 05</td>
<td>1265 (2450)</td>
<td>125.7 m</td>
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<tr>
<td>U.S.E.D.</td>
<td>No. 2 (Topo ACS)</td>
<td>32 46</td>
<td>1253 (5230)</td>
<td>487.82 N</td>
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<tr>
<td></td>
<td></td>
<td>80 06</td>
<td>1069 (8548)</td>
<td>140.7 m</td>
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**Continued.**
<table>
<thead>
<tr>
<th>Stations Geographic Positions</th>
<th>Engineers Coordinates</th>
<th>G.P. from Origin A*</th>
<th>Corrected to Engineered Coordinates</th>
<th>Corrected to Engineer Coordinates</th>
<th>Corrected to Engineer Coordinates</th>
<th>Corrected to Engineer Coordinates</th>
<th>Corrected to Engineer Coordinates</th>
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</thead>
<tbody>
<tr>
<td>No. 6</td>
<td>32 46 0 4</td>
<td>1544.6(304.2)</td>
<td>230.47 ft</td>
<td>8835.3 ft</td>
<td>1946.8</td>
<td>1301.7</td>
<td>-2.7</td>
</tr>
<tr>
<td>(Rico 105)</td>
<td></td>
<td>1294.4(262.3)</td>
<td>702 m</td>
<td>2693.0</td>
<td>3517.8</td>
<td>2690.7</td>
<td>2.3</td>
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<tr>
<td>North</td>
<td></td>
<td>32 46 0 4</td>
<td>876.9(1074)</td>
<td>1217.9 ft</td>
<td>842.6</td>
<td>576.1</td>
<td>-4.7</td>
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<tr>
<td>G.P. North 1838</td>
<td></td>
<td>5718.8(1253.8)</td>
<td>633.4 ft</td>
<td>9149.3</td>
<td>631.7</td>
<td>3414.8</td>
<td>4.3</td>
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<tr>
<td>North Reduced</td>
<td></td>
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<tr>
<td>South</td>
<td></td>
<td>32 46 0 4</td>
<td>698.8(1495)</td>
<td>196.25 ft</td>
<td>706.9</td>
<td>880.6</td>
<td>-2.1</td>
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<tr>
<td>G.P. South 1838</td>
<td></td>
<td>8839.6(1752.4)</td>
<td>775.2 m</td>
<td>3107.8</td>
<td>773.1</td>
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<td>South Reduced</td>
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</tbody>
</table>
List showing the discrepancies between the geodetic and the engineer's field coordinates.

Sheet No. 23, Reg. No. 5164.

Origin A1 - This station is located at the Charleston Harbor entrance to Wappoo Cut. A thorough search was made but could not be found.

<table>
<thead>
<tr>
<th>Stations</th>
<th>Geographic Positions</th>
<th>Engineer's Coordinates (from Origin A1)</th>
<th>Corrected to Connected Through Engineer's Coordinates</th>
<th>Engineer's Coordinates</th>
<th>Engineer's Coordinates</th>
<th>Lat.</th>
<th>Long.</th>
<th>According to NA 1927</th>
<th>Sign</th>
<th>Datum</th>
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<td>US.E.D.</td>
<td>IX</td>
<td>32.45</td>
<td>14660.0</td>
<td>26256.4 ft</td>
<td>16569.6 ft</td>
<td>-</td>
<td>878.7</td>
<td>890.3 m</td>
<td>50.50</td>
<td>ft 20</td>
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<tr>
<td>G.D. (w)</td>
<td>NS.080.00</td>
<td></td>
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<td></td>
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<tr>
<td>NA 1927</td>
<td>Field reduced</td>
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<td>US.E.D.</td>
<td>XXI</td>
<td>32.45</td>
<td>1711.5</td>
<td>803.8 ft</td>
<td>389.3 ft</td>
<td>-</td>
<td>1058.7</td>
<td>244.9 m</td>
<td>1798</td>
<td>ft</td>
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<td>G.D. (w)</td>
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<td>US.E.D.</td>
<td>III</td>
<td>32.46</td>
<td>416.4</td>
<td>2621.2 ft</td>
<td>1213.4 ft</td>
<td>-</td>
<td>509.3</td>
<td>798.3 m</td>
<td>3639</td>
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<tr>
<td>(Topo. A.C.S.)</td>
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<tr>
<td>US.E.D.</td>
<td>M# Lead</td>
<td>32.46</td>
<td>2189.3</td>
<td>2195.7 ft</td>
<td>10473.0 ft</td>
<td>-</td>
<td>79.58</td>
<td>81.5 m</td>
<td>669.3</td>
<td>m</td>
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<td>(Topo. A.C.S.)</td>
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<td>-</td>
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Report for Supplemental 5164

1. Supplemental filed 1/21/36
added relations

2. Records marked out which have been moved 1/21/36

3. Conditions to Month areas 4/22/37