

5393

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

DESCRIPTIVE REPORT

Field 74

Air  
Photo

Topographic

Sheet No. Reg. 5393

~~Hydrographic~~

State South Carolina

LOCALITY  
Vicinity N.E. of Charleston.

~~WANDO RIVER~~

UPPER WANDO RIVER

193 4-5

CHIEF OF PARTY

E. H. Kirsch

U. S. GOVERNMENT PRINTING OFFICE: 1934

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3  
5

Photo Nos.	Date	Time
14 - 27	August 2, 1934	8:20 A.M.
49 - 65	August 2, 1934	8:40 A.M.
PROJECTION BY	<u>L. C. Ripley</u>	12-22-34
PROJECTION CHECKED BY	<u>E. H. Kirsch</u>	12-22-34
CONTROL PLOTTED BY	<u>M. D. Crook</u>	1-8-35
CONTROL CHECKED BY	<u>E. J. Anderson</u>	1-8-35
CONTROL PLOTTED ON PHOTOS BY	<u>J. F. Richardson</u>	1-10-35
CONTROL CHECKED ON PHOTOS BY	<u>W. W. King</u>	1-14-35
TOPOGRAPHY TRANSFERRED BY	<u>J. F. Richardson</u>	2-25-35
TOPOGRAPHY CHECKED BY	<u>L. C. Ripley</u>	3-25-35
✓ SMOOTH RADIAL PLOT BY	<u>E. J. Anderson</u>	1-29-35
Radial Plot Checked by	<u>J. F. Richardson</u>	2-27-35
SCALE PLOT BY	<u>T. P. Mitchell</u>	1-9-35
DETAIL INKED	<u>J. F. Richardson</u>	3-21-35

AREA OF DETAIL INKED: 25.09 Square Statute Miles.

LENGTH OF SHORELINE: None

LENGTH OF STREAMS: 13.5 St. Miles (Less than 200 meters wide)

LENGTH OF COASTLINE: 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. 74

REGISTER NO. 5393

State South Carolina

General locality Wando River Vicinity Northeast of Charleston

Locality Upper Wando River

Scale 1:10,526 Photographs - 8-2-34  
Date of ~~survey~~ Compilation - 3-21-35, 19

Vessel Air Photo Compilation Party No. 21

Chief of party E. H. Kirsch

Surveyed by See data sheet in descriptive report.

Inked by J. E. Richardson

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:

The total area covered by this sheet is 25.09 Square Statute miles. There are no streams on this compilation more than 200 meters wide. There are 13.5 miles of streams less than 200 meters wide.

### Report:

Most of the area covered by this compilation is high ground which is heavily wooded in some sections and sparsely wooded with an undergrowth of brush and grass. A small amount of the high ground has been cleared of trees and is used for farming. Fresh water marsh is found on the banks of the Wando River and salt water marsh along the Intracoastal Waterway. In general this area is of the low coastal plain type with slight relief.

### Photographs:

Two lines of flight were made to secure the photographs to be used in this compilation. The center of flight 14-27 follows a straight line from Lat.  $32^{\circ} 56'$  and Long.  $79^{\circ} 45'$  to Lat.  $32^{\circ} 58'$  and Long.  $79^{\circ} 41'$ . The center of flight 49-65 follows a straight line from Lat.  $52^{\circ} 53'$  and Long.  $79^{\circ} 45'$  to Lat.  $32^{\circ} 56'$  and Long.  $79^{\circ} 41'$ .

These photographs in general, were fairly good as to scale and tilt, but were not so clear as to detail in the area around Glaucon Creek. They were taken by the Aero Service Corp., of Philadelphia on August 2, 1934 at 8:20 A.M. and 8:40 A.M. the stage of tide being one hour and 18 minutes after low tide. Low tide at Charleston S. C. was at 7:21 A.M. on August 2, 1934.

### CONTROL

#### Sources:

The control used in this compilation was established by R.F.A. Studds 1928, Lt. C.D. Meaney 1932, and Lt. B.H. Rigg, 1934. In addition to this control a traverse along highway 701 was established by the State of S.C., and is known as the State P.W.A. Traverse.

The control established by Lt. R.F.A. Studds, and Lt. C.D. Meaney is adjusted to N.A. 1927 datum, the control established by Lt. B.H. Rigg and the State Traverse is unadjusted on N. A. 1927 datum.

#### Errors:

No errors in control were found.

Discrepancies:

No discrepancies were found between the control established by this organization and the P.W.A. Traverse.

COMPILATION

Method:

The standard radial line method was used as described in the U. S. C. & G. S. Notes on the Compilation of Planimetric Line Maps from 4-lens Aerial Photographs.

Adjustment of Plot:

It was found necessary to adjust or radial plot over again the section around triangulation station U.S.E.D. Clauson. A minor adjustment was also made at triangulation station CT 176 (P.W.A.)

Interpretation:

All topographic symbols were taken from the topographic manual.

The compiler visited the location of the drainage canal at the northern end of the Wando River, and secured information which enabled him to compile the canal even though only one side of the canal is visible on the photographs. This canal is no longer in use because the farm across which it runs is no longer in cultivation. This particular locality was once cultivated rice fields.

The spoil banks along the Intracoastal Waterway were simply sanded in because according to field inspection men they are changing in shape.

The photographs were dim, but the scale along the intra-coastal waterway was good and checked closely with the G.C.S. covering that area.

Information from other Sources:

A field inspection trip was made by the compiler. Field inspection by Lt. B. H. Rigg, 1935, G.C.S. No. "DD" Reg. No.

Conflicting Names:

No conflicting names were found.

Remarks:

Wards Bridge is a fixed wooden bridge which is elevated in the center to allow passage for small boats.

COMPARISON WITH OTHER SURVEYS

Junctions:

Satisfactory junctions were made with the following:  
Sheet No. 5392 on the East, No. 5548 on the West and No. 5394 on the South. On the North the compilation was carried to the limit of the photographs.

RECOMMENDATION FOR FURTHER SURVEYS

This compilation is believed to be accurate to within .3 mm. in well defined detail of importance for charting and not more than .6mm in other detail.

It is my opinion that this sheet is complete and correct in all detail of importance within the accuracy stated above and no additional surveys are required.

Assisted by:

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

Submitted by:

*J. F. Richardson*  
J. F. Richardson,

## REVIEW OF AIR PHOTO COMPILATION NO. 5393

Chief of Party: E. H. Kirsch

Compiled by: J.F. Richardson

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)
- ✓ 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 attached*
- ✓ 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 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)
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)  
*None submitted*
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) *only of importance*
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)
13. The geographic datum of the compilation is *N.A. 1927* and the reference station is correctly noted.  
*The plot is based on both adjusted and unadjusted control. The reference station has been 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. Kusch  
Chief of Party

19. Remarks after review in office:

Reviewed in office by: *Frank T. Estline* *W. B. Jones*

Examined and approved:

E. H. Green  
Chief, Section of Field Records  
L. O. Solbert  
Chief, Division of Charts

F. Borden  
Chief, Section of Field Work  
G. H. Gude  
Chief, Division of Hydrography  
and Topography.

REVIEW OF AIR PHOTO COMPILATION T-5393

Scale 1:10,000.

Comparison with Graphic Control Surveys.

(a) T-6290b (1935) scale 1:10,000. <sup>Only the southeast corner of T-5393 is covered by T-6290a</sup> No discrepancies. All detail on T-6290b within the area of this compilation is now shown on the compilation except the magnetic declination and temporary plane table station.

Comparison with Previous Topographic Surveys.

(a) T-1400b (1875) scale 1:20,000. T-1400-b includes the south-east one-third of T-5393.

The general topography, marsh, <sup>wood</sup> road-land, farm-land, etc. of T-1400b compares fairly well with T-5393.

A bluff along the edge of the salt water marsh (in the south-east corner of T-5393) and also a small bluff or knoll ( $32^{\circ}54.8'$ ,  $79^{\circ}43.5'$ ) are shown on T-1400b, but are not shown on T-5393.

The road scheme as shown on T-1400b has changed considerably with the construction of new roads and the abandoning of old ones.

T-5393 is adequate to supersede T-1400b for the area covered by T-5393 except for the bluffs noted above.

Comparison with Contemporary Hydrographic Surveys.

(a) H-5804 (1935) scale 1:10,000. This hydrographic survey covers only a small portion in the southeast corner of T-5393 but includes all of the intracoastal waterway appearing on T-5393.

Two small islands appearing on T-5393 were missing on the hydrographic sheet. They have been added. No other conflicts between T-5393 and the hydrography were noted.

Comparison with Charts.

(a) Chart 681 scale 1:20,000. The area covered by the east one-quarter of this chart includes all of Wando River shown on T-5393.

Several small islands in Wando River as shown on this chart have been washed away and appear as sanding on T-5393.

The tramway, including the dock at its western end, along lat.  $32^{\circ}55'$  is no longer in existence and appears on T-5393 only as a trail.

The pile at lat.  $32^{\circ}55.3'$ , long.  $79^{\circ}43.9'$  can neither be proved nor disproved from the photographs, and is not shown on this compilation.

(b) Chart 1238 scale 1:80,000 and Chart 3255 scale 1:80,000.  
These charts cover only a small portion of the southeast corner of T-5393.

No accurate comparison with these two charts can be made because of the great differences in scale. However, the general detail as shown on the charts compares well with T-5393.

Aids to Navigation.

One light (Lt. Bn. 97) and one channel marker (Bn. 92) marking the intracoastal waterway appear on this compilation as plotted from chart letter 459, 1935.

Landmarks.

No landmarks are shown (within the area of this compilation) on either of charts 681, 1238 or 3255 and none have been recommended by the new graphic control surveys or by this compilation.

July 25, 1935

Frank E. Ekins

T. Goshen

B. G. Jones

Survey No. T-5393

Date. Sept. 24, 1935

## GEOGRAPHIC NAMES

Chart No. 1238

Diagram No. 1238

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

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

Under investigation. Q

[illegible]

Applied to chart 837 Oct. 3, 1935 H.C.  
" " " 681 April 1937 J.M.A.  
" " " 1239 " " J.M.A.  
" " " 1238 Oct. 18, 1937 J.H.S.