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

DESCRIPTIVE REPORT

Air
Photo

Topographic } Field 63
~~Hydrographic~~ } Sheet No 5382

State South Carolina

LOCALITY

INTRACOASTAL WATERWAY
~~SOUTH SANTAL RIVER~~

~~SOUTH SANTAL RIVER TO CASINO CREEK~~

VICINITY OF CASINO CREEK

1934

CHIEF OF PARTY

E. H. Kirsch

Applied to chart 836 Feb. 3, 1936
applied to ^{new} chart 787 April 5, 1937
applied to chart 1238 Oct. 20, 1937

R.H.E.
J.O.
g.H.S.

FIELD NO. 63
REG. NO. 5382

PHOTOS NO.
93 - 113
287 - 291

DATE
August 4, 1934
August 5, 1934

TIME
7:45 A.M.
8:05 A.M.

PROJECTION BY	<u>L. C. Ripley</u>	11-24-34
PROJECTION CHECKED BY	<u>E. H. Kirsch</u>	11-24-34
CONTROL PLOTTED BY	<u>F. H. McBeth</u>	11-26-34
CONTROL CHECKED BY	<u>M. L. Smith</u>	11-27-34
CONTROL PLOTTED ON PHOTOS BY	<u>J. F. Richardson</u>	12-4-34
CONTROL CHECKED ON PHOTOS BY	<u>Transferred</u>	12-7-34
TOPOGRAPHY TRANSFERRED BY	<u>J. F. Richardson</u>	12-8-34
TOPOGRAPHY CHECKED BY	<u>Hubert W. Langley</u>	3-5-35
SMOOTH RADIAL PLOT BY	<u>E. J. Anderson</u>	12-20-34
RADIAL PLOT CHECKED BY	<u>J. F. Richardson</u>	1-5-35
SCALE PLOT BY	<u>T. P. Mitchell</u>	11-30-34
DETAIL INKED BY	<u>J. F. Richardson</u>	2-9-35

AREA OF DETAIL INKED: 20.0 Square Statute miles.

LENGTH OF SHORELINE: 4.57 St. miles (Over 200m wide).

LENGTH OF STREAMS: 6.5 St. Miles (less than 200 m. 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. 63

REGISTER NO. 5382

5382

State South Carolina

General locality Intracoastal Water Way
~~South Santos River~~

Vicinity of Casino Creek, vicinity of
Locality ~~South Santos River to Casino Creek~~
Photographs- 8-4-34 & 8-5-34

Scale 1:10,526 Date of survey, 19

Vessel Air Photo Compilation Party No. 21
Compilation- 2-9-35

Chief of party E. H. Kirsch

Surveyed by See data sheet in descriptive report.

Inked by J. F. 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 20.0 Sq. St. miles. The South Santee River is the only stream more than 200 meters wide, of which 4.57 St. miles of shoreline appear on this compilation. There are 6.5 St. miles of streams less than 200 meters wide.

Report:

Most of the area covered by this compilation is high ground and heavily wooded. A great portion of the area included in this compilation is owned by the Atlantic Coast Lumber Corporation; this fact accounts for the numerous sawdust piles and sparse areas of trees. A small amount of the high ground has been cleared of trees and is used for farming. Rice is found growing on the Wedge Plantation near triangulation station WEDGE. Fresh water marsh is found on the banks of the South Santee 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 the flight 93-113 follows along and parallel 1.25 miles east of U. S. Highway 701. The center of the flight 287-291 following the parallel to the flight 93-113 about 3.3 mi. east thereof.

These photographs 93-113 and 287-291 were in general, fairly good as to scale and tilt, but were not so clear as to detail in the area around Casino Creek. They were taken by the Aero Service Corp. of Philadelphia, on August 4, 1934 and August 5, 1934 at 7:45 A.M. and 8:05 A.M. respectively.

CONTROL

Sources:

All the control used in this compilation was established or cut-in by Lt. Crosby 1934 except a traverse along highway 701 which was established by the State of S. C., and is known as the P.W.A. traverse.

The control established by Lt. Crosby is adjusted to N. A. 1927 datum. The P.W.A. State Traverse is unadjusted on North American 1927 datum. *△ Casino Creek Fm "4", 1934, Casino Creek Br "5", 1934, Casino Creek Br "6", 1934, are gone. These beacons have been removed. See remarks on page 3.*

Errors:

No errors in control were found.

Discrepancies:

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

COMPILATIONMethod:

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 5-lens aerial photographs."

Adjustment of Plot:

No unusual adjustments were necessary in making the plot or compiling this sheet.

Interpretation:

All topographic symbols were taken from the topographic manual, with the exception of the rectangular ink spots used for fire breaks on the wooded trestle between the South Santee and North Santee Rivers. These fire breaks are concrete.

It was difficult in some cases to determine the highwater line along the banks of the South Santee River because of overhanging cypress trees. However, since most of these areas were covered by G.C.S. there are no variations from actual conditions, because the pictures covering the area along the Intracoastal Waterway were dim and bad as to scale, the G.C.S. covering this area were closely adhered to. It is also well to note that dredging has been done in this area since the pictures were taken and that the topography has changed a great deal.

The spoil banks along the Intracoastal Waterway were simply "sanded in" ^{because} ~~because~~ according to field inspection~~men~~, they are changing in shape.

Information from other sources:

Field inspection by B. H. Rigg, 1934, G.C.S. No. "SS" Reg. No. *T-62966*, "MM" Reg. No. *T-62946*, "KK" Reg. No. *T-62936*.

Conflicting Names:

No conflicting names were found.

Remarks:

The bridge over the South Santee River is a fixed span,

x. The following clearances were taken from Lt. Kigg's 1920 field notes on this bridge:-

S.W. span-	15 ft vert. clearance above M.H.W.
S.W. center span-	14 ft " " " "
N.E. center span-	13 ft " " " "
N.E. span-	12 ft. " " " "

L.W. McSweeney

Note This bridge is not listed in the U.S. E 1927 List of Bridges and no information has been given in this compilation report T 5382 or in the graphic control survey report as to how the clearance values were obtained. The lower values on the opposite page have been corrected to M.H.W. by applying a mean tide range of 4 ft and are given in this compilation for the center spans.

B.G. Jones
7/11/55

steel truss bridge with wooden floor and concrete piers. This bridge joins a wooden trestle on the North end of the bridge and the concrete roadway of highway 701 on the South.

The bridge consists of four spans: * See opp page

SPAN	VERTICAL CLEARANCE	HORIZONTAL CLEARANCE
S. W.	11 Ft. mean low water	26.6 meters
S. I. Center	11 Ft. " " "	26.6 meters
N.E. Center	10 Ft. " " "	26.6 meters
N.E.	9 Ft. " " "	26.6 meters

COMPARISON WITH OTHER SURVEYS

Junctions:

Satisfactory junctions were made with the following:

Sheet No. 5380 on the North; 5383 on the East, 5387 on the Southeast and 5386 on the Southwest. On the west the compilation was carried to the limit of the photographs.

Landmarks:

There are no landmarks in this area of any value to navigation. *Note: A old chimney, NW of Station 5, 134, is noted on the 1934 recovery card of HGC as a prominent mark about 25 ft high. 7/3/36 pgg.*

RECOMMENDATION FOR FURTHER SURVEYS

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

It is my opinion that this sheet is complete in all detail of importance for charting 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.

REMARKS: Triangulation Station CASINO CREEK BN. 4, Bn. 5, Bn. 7 were plotted on the celluloid sheet, but since these beacons were removed before the photographs were taken they could not be located on the photographs and consequently could not be used for control and should be deleted from Chart No. 1238. *These Beacons are not shown on the compilation.*

Bgg

Note A number of the lights shown
on the graphic control surveys are designated
as Beacons on this compilation. At the
time of the graphic control surveys these
lights had not been completed but the
positions were marked by piles or by the
incomplete structure. ^{See page 5 Report R6295b} The lights are most
in operation according to aerial proof examined
this date 2/17/36 J.B.G. Jones

REVIEW OF AIR PHOTO COMPILATION NO. T-5382

Scale 1:10,000

Comparison with Graphic Control Surveys.

- a. T-6296b (1934) (1:10,000) scale. No discrepancies.
- b. T-6294b (1934) (1:10,000) scale. No discrepancies.
- c. T-6293b (1934) (1:10,000) scale. The position of Beacon "35" on T-6293b does not agree with the position of this beacon on T-6294b or on the compilation within 3 meters. This position is in error on T-6293b. This decision was made after calling this discrepancy to the attention of the surveyor of T-6293b and T-6294b. A note has been made in green on T-6293b. *P* All detail shown on T-6296b, T-6294b, and T-6293b within the area of this compilation is also shown on this compilation with the exception of non-recoverable plane table positions and the magnetic declination. *See opposite page.*

For a general description ~~a purpose~~ of the U. S. E. stations see the descriptive report for T-6295b, p.3., under the article "Permanent Hydrographic Stations".

Comparison with Previous Topographic Surveys.

a. T-1308 (1873) (1:20,000) scale. T-1308 covers North and South Santee River delta. Only a small portion of T-1308 is common to the compilation. The greater portion of the ~~rice~~ field area is no longer cultivated. Where the dikes have been broken the area is partially flooded, and is marsh as shown on this compilation. The roads are ~~aligned~~ in essentially the same position today as in 1873. U. S. Highway No. 701 is a new road. T-1308 is superseded by this compilation over the common area.

b. T-1347 (1874) (1:20,000) scale. T-1347 covers an area in the vicinity of Cape Romain. U.S. Highway No. 701 is a new road not in existence at the time T-1347 was made. Some roads shown with a double full line on T-1347 are shown by a single broken line on this compilation. T-1347 is superseded by the compilation for the area in common.

Comparison with Chart No. 1238.

Changes to be made to this chart as a result of this compilation are discussed under the comparisons with other surveys. See bottom of Page 3 regarding deletion of Beacons.

Remarks.

The projection of this compilation was tested roughly by checking long diagonals and found to be satisfactory.

See Page 3 regarding bridge clearance for Highway Bridge over Santee River.

Leonard A. McGann
Leonard A. McGann
July 2, 1935.

W.B.G. Jones

REVIEW OF AIR PHOTO COMPILATION NO. 5382

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 transmitted.
- ✓ 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)
Descriptions of recoverable topo stations are filed under numbers for graphic control surveys of this area

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)
No landmarks in this area of importance to navigation.

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)

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)
No U.S. G.S. quadrangles of this area are available for geographic name comparison.

13. ✓ The geographic datum of the compilation is *NA 1927* and the reference station is correctly noted.

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. Kirsch
Chief of Party

19. Remarks after review in office:

See following pages.

Reviewed in office by: Leonard A. Nelson July 2, 1935.
V. B. Jones

Examined and approved:

C. K. Green
Chief, Section of Field Records
L. O. Lobel
Chief, Division of Charts

J. S. Borden
Chief, Section of Field Work
G. H. Hude
Chief, Division of Hydrography
and Topography.