

5383

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

Air
Photo

Topographic
~~Hydrographic~~

Field 64

Sheet No. 5383

U. S. COAST & GEODETIC SURVEY
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JUN 25 1935

Acc. No. _____

State SOUTH CAROLINA

LOCALITY

~~NORTH & SOUTH SANTEE RIVERS~~

~~CASINO CREEK TO MINIM CREEK~~

INTRACOSTAL WATERWAY

~~NORTH AND SOUTH SANTEE RIVERS~~

1934-5

CHIEF OF PARTY

E. H. Kirsch

Applied to chart 836 Feb. 1, 1936 H.C.C.
applied to new chart 787 April 20, 1937 J.G.L.
applied to chart 1238 Oct. 2, 1937 J.H.S.

SHEET NO. 64
REG. NO. 5383

PHOTOS NO.
106 to 113
466 to 483
287 to 309

DATE
August 4, 1934
August 12, 1934
August 5, 1934

TIME
7:45 A.M.
7:50 A.M.
8:05 A.M.

Sc. Fact. $\frac{10000}{10526}$

PROJECTION BY	<u>J. B. Nutting</u> T. B. Nutting	11-24-34
PROJECTION CHECKED BY	<u>E. H. Kirsch</u> E. H. Kirsch	11-24-34
CONTROL PLOTTED BY	<u>M. L. Smith</u> M. L. Smith	11-26-34
CONTROL CHECKED BY	<u>W. W. Johnson</u> W. W. Johnson	11-26-34
CONTROL PLOTTED ON PHOTOS BY	<u>Transferred.</u> M. D. Crook	November 1934.
CONTROL CHECKED ON PHOTOS BY	<u>E. J. Anderson</u> E. J. Anderson	November 1934.
TOPOGRAPHY CHECKED BY	<u>Transferred.</u> R. G. Hickson	
TOPOGRAPHY TRANSFERRED BY	<u>H. W. Langley</u> H. W. Langley	1-21-35
SMOOTH RADIAL LINE PLOT BY	<u>E. J. Anderson</u> E. J. Anderson	12-20-34
RADIAL PLOT CHECKED BY	<u>H. W. Langley</u> H. W. Langley	12-21-34
SCALE PLOT BY	<u>T. P. Mitchell</u> T. P. Mitchell	
DETAIL INKED BY	<u>H. W. Langley</u> H. W. Langley	1-21-35

AREA OF DETAIL INKED: 30.0 Sq. St. Miles.

LENGTH OF SHORELINE: 19 St. Miles (More than 200m wide)

LENGTH OF STREAMS: 31.2 St. Miles (less than 200m wide)

LENGTH OF COASTLINE: 1 st. mile.

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. 64

REGISTER NO. 5383 **5383**

State South Carolina

General locality Intracoastal Waterway.
~~North and South Santee Rivers~~

Locality Casino Creek to Minim Creek
~~North and South Santee River.~~

Scale 1/10,000 Photographs - 8-4-34; 8-5-34
~~1/20,000~~ Date of ~~survey~~ 8-12-34, 19
Compilation - 1-21-35

Vessel Air Photo Compilation Party No. 21

Chief of party E. H. Kirsch

Surveyed by See data sheet in descriptive report

Inked by H. W. Langley

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

Almost the entire sheet is marsh bordering the north and south Santee Rivers.

A few abandoned rice fields are being used as duck hunting preserves.

Photographs:

This sheet was compiled from photographs taken by a standard U. S. Army Air Corps 5-lens camera No. H U I 33 operated by the Aero Service Corp. of Philadelphia, P.A.

Photos No. 106 to No. 113 taken August 4, 1934 at 7:45 A.M., 2 hours 19 minutes before a low tide.

Photos No. 466 to No. 483, taken August 12, 1934 at 7:50 A.M. 2 hours 05 minutes before a high tide.

Photo No. 287 to No. 309, taken August 5, 1934 at 8:05 A.M., 2 hours 53 minutes before a low tide.

The tide time for these flights were calculated from the Santee Club Wharf Gauge, established by Lt. B. H. Rigg, 1934.

CONTROLSources:

The following sources of control were used: Triangulation by Lt. K. G. Crosby, 1934, Lt. E.B. Roberts, 1924 and Lt. C.D. Meany, 1932.

Graphic control sheets "RR" Reg. No. *T-6296a*, and "MM" Reg. No. *T-6294b*, "NN" Reg. No. *T-6295a*, and "SS" Reg. No. *T-6296b*, *B.H.Rigg C.P. 1934*

The Geographic positions established by Crosby and Meany have been adjusted to N. A. 1927 datum. Other control is unadjusted to N. A. 1927 datum.

Topo stations TEAL, BROWN, and BELLA were recoverable on the photos and were used in the control of this sheet. *These stations were established by triangulation for local control. Descriptions are filed with on Form 524 and computations are filed under Field Data*

Errors:

in the air photo section. B.H.R.

No errors were discovered in the control of this sheet.

Discrepancies:

No control stations established by other organizations were used in this compilation.

COMPILATIONMethod:

The usual radial line method of plotting as described in the U.S.C. & G.S. Survey Notes on the Compilation of Planimetric Line Maps from 5-lens Aerial Photographs, 1933 edition.

Adjustment of Plot:

No unusual adjustment was required in the radial plot. The photos were free of excessive tilt and scale fluctuations.

Interpretation:

The graphic symbols as approved by the Board of Surveys and Maps (1932) were used. No difficulty was experienced in the interpretation of the photographic detail.

The broken marsh lines in the southeast part of this sheet represent marsh with open water patches.

Information from other sources:

Graphic Control sheets "MM" Reg. No. *T-6294b*, and "RR" Reg. No. *T-6296a*, Lt. B. H. Rigg, 1935, also "RR" Reg. No. *T-6295a* and "SS" Reg. No. *T-6296b*.

That part of the Intracoastal Waterway which lies between the North and South Santee Rivers was taken from Graphic Control sheets "RR" Reg. No. .

Conflicting Names:

There are no names on the sheet conflicting with names shown on the U.S.C. & G. Survey Charts of this area.

Comparison with other Surveys:

Satisfactory junctions were made with sheet 5384 on the east, Sheet No. 5382 on the West, Sheet 5380 on the North and with sheet No. 5387 on the South.

The ~~stream high water line on the G.C.S. agrees with the celluloid topographic sheets~~ *compilation.*

Landmarks:

The landmarks for charts and marked topographic stations included in this area have been submitted with Graphic Control sheets "MM" Reg. No. *T-6295a*, "SS" Reg. No. *T-6296b*, "MM" Reg. No. *T-6294b* "RR" Reg. No. *T-6296a*, Lt. B. H. Rigg, 1934-5. *all landmarks and recoverable relations shown on these graphic control surveys within the area of the compilation have been transferred to the compilation B.G.J.* *Not landmarks in these reports.*

RECOMMENDATION FOR FURTHER SURVEYS

The compilation of this sheet is believed to have a probable error of not more than .3 mm in well defined detail of importance for charting and not more than .6 mm for other data.

Assisted by:

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

Submitted by:

H. W. Langley
H. W. Langley.

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 their positions were marked by piles on the incomplete structures. See page 5 report T 6295 b. The lights are not yet in operation according to aid proof examined this date 2/11/36

B.G. Jones

REVIEW OF AIR PHOTO COMPILATION NO. T-5383

1:10,000

Comparison with Graphic Control Surveys.

T-6296a (1934) 1:10,000. T-6296a covers a portion of the North Santee River. The total area of T-6296a is included within the limits of this compilation. There is perfect agreement between T-6296a and this compilation, and all detail shown on T-6296a is also shown on the compilation with the exception of non-recoverable plane table survey and the magnetic declination.

T-6296b (1934) 1:10,000. There is good agreement between T-6296b and the compilation. In the common area all detail shown on T-6296b is also shown on the compilation with the exception of non-recoverable plane table positions.

T-6295a (1934) 1:10,000. Small errors in the plotting of Beacons 19, 21, and 6 and U. S. E. stations 1107 + 42.34N-B, 1091 + 78.22N-A(d), 1076 + 64.37 NA(d) were corrected. ^{on the compilation.} There is now satisfactory agreement between T-6295a and the compilation for the common area. All detail shown on T-6296a is also shown on the compilation with the exception of non-recoverable plane table positions.

T-6294b (1934). This is a graphic control survey on 1:10,000 scale. A discrepancy of about 1 millimeter was found in the line of the intracoastal waterway opposite Light "23". The tie given in the description of the U. S. E. station 937 + 27.52 N-A(d) checks the rodding of the shoreline on the plane table in this area. The shoreline of the compilation was changed here to agree with T-6294b in the absence of the photographs. There is now good agreement between T-6294b and this compilation for the common area where all detail shown on T-6294b is also shown on the compilation with the exception of non-recoverable plane table positions and the magnetic declination.

See opposite page
Comparison with Previous Topographic Surveys.

T-1308 (1873). This is a topographic survey on 1:20,000 scale made 62 years ago. It covers the North and South Santee Rivers and vicinity. There are no large changes of shoreline over the area common to T-1308 and the compilation. At the time of T-1308 the marshed area of the compilation was an area cultivated in rice. These ~~were~~ ^{were} fields then outlined by the dikes which limit them. Today these dikes are broken, though, the area is partially flooded and consists of marsh. All of the numerous groups of dwellings and other buildings shown on T-1308 in the rice field area are now abandoned. T-1308 is superseded by the compilation for the common area.

T-1347 (1874). This is a topographic survey on 1:20,000 scale made 61 years ago. It covers an area in the vicinity of Cape Romain, from Cape Romain to long. 79° 30' from Raccoon Key to lat. 33° 10'. The rice areas have changed as described above under the comparison with T-1308. A hachure symbol is shown along the high ground lines on

Murphy Island whereas on this compilation the high ground line is shown by a fine solid line. T-1347 is superseded by the compilation for the common area except for the hachures.

T-4160 (1925). This is a topographic survey on 1:20,000 scale covering the coast from South Santee River to Bull Bay along the short length of coast which is common to T-4160 and the compilation there is a large change of the H. W. L.

T-4160 is superseded by the compilation over the common area.

Comparison with the Charts.

Chart No, 1238. Beacons 1, 2, and 3 as shown on this chart in Alligator Creek and Fourmile Creek Canal are not shown on the compilation. They cannot be seen on the photos and have not been located by the field parties working in this area at the time of the compilation. Beacons 2 and 3 are in the Local Light and Buoy List for 1935. Beacon 1 is not listed. Other changes to be made to the chart as a result of this compilation are discussed above under comparison with other surveys.

General.

For a detailed description and purpose of the U. S. E. stations along the intracoastal waterway refer to the descriptive report T-6295b under the article "Permanent hydrographic Stations".

Leonard A. McGann
Leonard A. McGann
June 14, 1935.

B. G. Jones

Approved
K.T. Adams

REVIEW OF AIR PHOTO COMPILATION NO. 5383

Chief of Party: E. H. Kirsch

Compiled by: H.W. Langley

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) *now*
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)
High water line on sand beach transferred from graphic control survey T-6294 b.

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~~ ^{it.} 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 are filed under survey no. T-6294 b, T-6296 a
T-6296 b T-62959*
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)
Submitted with graphic control sheets.
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)
No bridges on this compilation.
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. quarangles of this area are available for a 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. Kusch
Chief of Party

19. Remarks after review in office:

~~See following pages.~~

Reviewed in office by: Lionard Whitehead B. Jones
June 15, 1935.

Examined and approved:

K. T. Adams
Asst Chief, Section of Field Records
Division of Charts
L. O. Tolbert
Chief, Division of Charts

J. S. Borden
Chief, Section of Field Work
Glade
Chief, Division of Hydrography
and Topography.