

5384

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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 65
~~Hydrographic~~ } Sheet No. Reg. No. 5384

State SOUTH CAROLINA

LOCALITY

~~NORTH & SOUTH SANTEE RIVERS~~

~~ENTRANCE NORTH & SOUTH SANTEE RIVERS~~

INTRACOASTAL WATERWAY

CEDAR ISLAND

1934

CHIEF OF PARTY

E. H. Kirsch

Applied to chart 836 Feb. 5, 1936 H.R.E.
applied to new Chart 787 May 1, 1937 J.S.L.
applied to chart 1238 Oct. 2, 1937 G.H.S.

Sheet Field No. 65

Register No. 5384

Photos No.

691 to 703

466 to 483

Date

August 25, 1934

August 12, 1934

Time 5:00 P.M.

Time 7:50 A.M.

PROJECTION BY

P. W. Hund
P. W. Hund

11-24-34

PROJECTION CHECKED BY

L. C. Ripley
L. C. Ripley

11-24-34

CONTROL PLOTTED BY

W. W. Johnson
W. W. Johnson

11-26-34

CONTROL CHECKED BY

F. H. McBeth
F. H. McBeth

11-26-34

CONTROL PLOTTED ON PHOTOS BY

Transferred
M. D. Crook

Oct. & Nov. 1934

CONTROL CHECKED BY

E. J. Anderson
E. J. Anderson

Oct. & Nov. 1934

TOPOGRAPHY TRANSFERRED BY

H. W. Langley
H. W. Langley

TOPOGRAPHY CHECKED BY

P. W. Hund

SMOOTH RADIAL LINE PLOT BY

H. W. Langley
H. W. Langley

12-12-34

RADIAL PLOT CHECKED BY

E. J. Anderson
E. J. Anderson

12-12-34

SCALE PLOT BY

T. P. Mitchell
T. P. Mitchell

DETAIL INKED BY

H. W. Langley
H. W. Langley

1-8-35

AREA COVERED BY SHEET: 24.5 Square Statute Miles

LENGTH OF SHORELINE: 30.5 St. Miles (More than 200m from nearest opposite shore)

LENGTH OF STREAMS: 12.0 Statute Miles (Less than 200m wide)

LENGTH OF COASTLINE: 4.5 St. Miles.

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. 65

REGISTER NO. 5384

State South Carolina

General locality Intracoastal Waterway
~~North and South Santee River~~

Locality Cedar Island
~~Entrance North and South Santee River~~

Scale 1:10,000 Photographs - Aug. 12, 1934
Date of survey Aug. 25, 1934, 19

Compilation - Jan. 8, 1935

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 high spots, ditches and dykes of abandoned rice fields are being used now as duck-hunting preserves.

The light spots in the marsh on the photos are places where grass, corn or other feed for ducks have been planted in the marsh. The ditches have a system of dykes along them so that the area can be flooded?

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

Photos:

Photos No. 691 to 703 taken August 25, 1934 at 5:00 P.M. 3 hours and 56 minutes before a high tide of + 4.5

Photos No. 466 to 483 taken August 12, 1934 at 5:50 A.M. 1 hour 36 minutes before a high tide of + 3.1

CONTROL

Sources:

The following sources of control were used in the compilation of this sheet;

Triangulation by K. G. Crosby, 1934, E. B. Roberts 1924, and E. H. Rigg 1934.

Aluminum Control sheets NN Reg. No. *T-6295a*, and PP Reg. No. *T-6295b*, by Lt. B. H. Rigg, Chief of Party 1934-5.

Control established by Lt. K. G. Crosby: field positions were used. The Office adjusted values were not available when the sheet was started. The difference between the field values and adjusted values seldom exceeded .1 meter.

Topo stations PRANT, FLUTO, CEDAR, MEUM, and BAT were recoverable on the photos and were used in the control of this sheet. The above names are shown on the overlay sheet, and on the celluloid sheet with a black circle. *These stations are described on Form 524.*

Errors:

No errors were discovered in the control of this sheet, with the exception of triangulation station WALKER which is spotted wrong on all the photos on which it appears.

Discrepancies:

No control stations established by other organizations

were used in this compilation.

COMPILATION

Method:

The usual radial line method of plotting as described in the U.S.C. & G.S. "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.

Triangulation station WALKER was disregarded in making the smooth radial plot. Otherwise the plot was run through with no difficulty.

Interpretation:

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

Information from other Sources:

That part of the Intracoastal waterway which crosses this sheet was taken from aluminum control sheets PP Reg. No. *T-6295 b* and NN, Reg. No. *T-6295a*. The canal had not been dredged when these photos were taken. The beach high water line, and the points of land at the entrances of the south and north Santee Rivers were taken from aluminum control sheets NN Reg. No. *T-6295a*, and PP Reg. No. *T-6295 b*.

Conflicting Names:

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

Comparison with other Surveys:

Satisfactory junctions were made with sheet 5385 on the east, sheet 5383 on the west and with sheets 5380 and 5381 on the North.

The stream high water line on the A.C.S. agrees with the celluloid topographic sheet.

The beach high water line on the A.C.S. differed from 2 to 10 meters with that compiled from the photographs. The H.W.L. on the A.C.S. was transferred to the celluloid as it is a more recent survey of a changeable coastline.

Landmarks:

The landmarks for charts and marked topographic stations included in this area have been submitted with Graphic Control sheets "NN" Reg. No. *T-6295 a*, and PP Reg. No. *T-6295 b*, Lt. E.H. Rigg, 1934-5.

RECOMMENDATIONS 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 of 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.

GEOGRAPHIC NAMES

Date. May 15, 1935Survey No. T-5384Chart No. 1238Diagram 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

Status	Name on Survey	Name on Chart	New Names in local use	Names assigned by Field	Location
	<u>Cedar Island</u>	1238 Same			✓
	<u>Cane Island</u>	Same			✓
	<u>Cat Island</u>	Same			✓
	<u>North Santee River</u>	Same			✓
	<u>South Santee River</u>	Same			✓
	<u>Crow Island</u>	Same			✓
	<u>Santee Point</u>	Same 428			✓
	<u>Duck Creek</u>	Same			✓
	<u>Little Duck Creek</u>	Same			✓
	<u>Little Crow Island</u>	Same			✓
	<u>Minim Creek</u>	Same			✓
	<u>Minim Island</u>	Same			✓
	<u>Mosquito Creek</u>	Same			✓
	<u>Mosquito Creek Canal</u>	Same 428			✓
	<u>Beach Creek</u>	Same Ch. 428			✓
	<u>Big Duck Creek</u>	Same			✓
	<u>Cork Creek</u>	Same			✓
	<u>North Santee Bay</u>	Same			✓
	<u>South Island</u>	Same			✓
	<u>Murphy Island</u>	chart 3255, A card No. 1095A station Block 1994			✓
		Names underlined in red approved by <u>C. E. Knight</u> on 1-30-36			

Note A number of the lights shown on the graphic control surveys are designated as beacons on this compilation ~~but the positions~~ at the time of the graphic control surveys these lights had not been completed but the positions were marked by poles or by the incomplete structures. See page 5 report T62956. The lights are not yet in operation according to aid proof examined this date 2/17/36.

B. J. Jones.

REVIEW OF AIR PHOTO COMPILATION NO. T-5384

Scale 1:10,000

Comparison with Graphic Control Surveys.

(a) T-6295a (1934) 1:10,000. Parallel of latitude $33^{\circ}10'$ has been inked three meters in error on T-6295a. Triangulation stations plotted in the field on T-6295a check the correct projection latitude *line* which was inked in green on T-6295a in this office. Transfer of detail from T-6295a to the compilation has been made by using the green line. A note has been placed directly on T-6295a.

(b) T-6295b (1934) 1:10,000. U. S. E. stations 1190 + 41.43 N-A and 1190 + 41.43 N-B were transferred from T-6295b to the compilation in this office by *L. G. Ingram* and checked by *R. M. Berry*

See opposite page.
(c) All detail appearing on T-6295a and T-6295b within the area of this compilation is in agreement with the compilation and is shown on the compilation except for non-recoverable plane table stations and the magnetic declination.

For a detailed description and discussion of U. S. E. stations along the intracoastal waterway refer to report T-6295b paragraph "permanent hydrographic stations".

Comparison with Previous Topographic Surveys.

(a) T-1308 (1873). Large changes have occurred at Santee Point. There have also been numerous changes in the small marsh islands and marsh points in the interior water ways. The rice plantations on T-1308 have been abandoned and the fields have reverted to marsh.

(b) T-4164 (1925). The largest change has occurred in Santee Point which has receded about 350 meters since 1925.

(c) The compilation is complete and adequate to supersede the areas on T-4164 and T-1308 which it covers.

Comparison with Chart No. 1238.

The following beacons shown on chart No. 1238 have been removed during January 1935 according to notes on graphic control survey T-6295b:

Little Crow Island, Front Range Beacon

" " " , Rear Beacon

Duck Creek , Beacon No. 2.

Continued on following page.

Comparison with H-5785 (1935).
H-5785 shows a number of small piers in the South Santee and North Santee Rivers. A number of them were added to the compilation, their locations were obtained from the photos in this office. The photos of this area are distinct and those piers which are not shown on the compilation were not in existence at the time the photos were taken or did not show on the photographs.

L.A.M. 6/5/35.

The following beacons listed in the 1935 light list do not appear on the new graphic control survey nor on the photographs:

Minim Creek Canal, Beacon "1"
Little Crow Island, Beacon "3"
Crow Island, Beacon "5".

Remarks.

~~The new hydrographic surveys have not yet been received in this office.~~

Leonard A. McManis
May 10, 1935.

B. J. Jones

REVIEW OF AIR PHOTO COMPILATION NO. 5384

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) *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)

The high water line on sand beach was transferred from the graphic control sheets of this area to the compilation form.

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 are filed under survey no.

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)
Furnished with Desc. Reports for graphic control surveys.

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. quadrangles of this area are available.

13. The geographic datum of the compilation is *N.A. 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. Busch
Chief of Party

19. Remarks after review in office:

Reviewed in office by:

Leonard C. McKame
May 10, 1935. B. G. Jones

Examined and approved:

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

T. S. Gordon
Chief, Section of Field Work
G. W. Wade
Chief, Division of Hydrography
and Topography.