U. J. BUNGT & GEODETIC SURVEY LIBRADO AND ARCHIVES

APR 19 1935

Form 504
Rev. Dec. 1933
DEPARTMENT OF COMMERCE U.S. COAST AND GEODETIC SURVEY

REPORT

Topographic Air Pho to

Field 66

Hudrographic

Sheet No. 5385

U. S. COAST & GEODETIC SURVEY LIBRARY AND ARCHIVES

JUL 18 1935

State South Carolina

LOCALITY

WINYAH BAY ENTRANCE

SOUTH ISLAND.

193 4-5

CHIEF OF PARTY

applied to Short 1238 Oct. 1, 1937 9: N.S.

PHOTOS NO. 691 - 704	DATE August 25, 1934	TIME 5:00 P.M.
PROJECTION BY	L. C. Ripley	11-26-34
PROJECTION CHECKED BY	T. B. Nutting	11-26-34
CONTROL PLOTTED BY	M. L. Smith	11-26-34
TROL CHECKED BY	W. W. Johnson	11-26-34
CONTROL PLOTTED ON PHOTOS BY	g. J. Auchardson	
CONTROL CHECKED ON PUOTOS BY	W. W. Langley H. W. Langley	
RADIAL PLOT BY	W. Langley H. W. Langley	12-4-34
RADIAL PLOT CHECKED BY	M. L. Smith	12-5-34
TOPOGRAPHY TRANSFERRED BY	M. L. Smith	3-5-35
TOPOGRAPHY CHECKED BY	L. C. Ripley	3 - 9-35
SCALE PLOT BY	J. P. Mitchell T. F. Witchell	
DETAIL INKED BY	M. L. Smith	3 - 6-35

AREA OF DETAIL LNKED: 4.5 Sq. Statute Miles.

LENGTH OF COASTLINE: 5.0 Statute miles.

LENGTH OF SHORELINE: None (more than 200m wide)

LENGTH OF STREAMS: 10.4 Statute Miles.

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. 66

REGISTER NO. 5385 5385

State South Carolina

General locality Winyah Bay Entrance

SOUTH (SLAND)
Locality Photographs Aug. 25, 1934

Scale 1:10,526 Date of Burvey 19 19 Compilation March 6, 1935

Vessel Air Photo Combilation Party No. 21,

Chief of party E. H. Kirsch

Surveyed by See data Sheet in Descriptive report.

Inked by M. L. Smith

Heights in feet above ----- to ground to tops of trees

Contour, Approximate contour, Form line interval --- feet

Instructions dated Nevember 19, 1933 19

Remarks: None

JENERAL INFORMATION

Remort:

This sheet covers the coastline between Santee Point, at the entrance to North Santee Bay, and Winya Bay South Jetty. Iractically the entire coastline is sand beach, the remainder of the sheet consisting mainly of marshland, with scattered he vily wooded areas. The marshland is considerably cut up by duck ponds, canals, ditches, and dyres.

Photo Numbers:

This sheet was compiled from five lens photographs taken by the Aero Service Corporation of Philadelphia, with a U.S. Army Air Corps type camera.

The single flight used for the compilation begins at latitude 33°08' and runs north between meridians 79°13' and 79°14'. The photographs, 691 - 704, were taken on August 25, 1934, at 5:00 Tells hours and 6 minutes after low tide.

C TOROL

Sources:

Triangulation by Lt. K. G. Crosby, 1934.
G.C.S. "PP" Reg. No. 762956, Lt. B. H. Rigg, 1935.
G.C.S. "A" Reg. No. 7-62486, Lt. H. Odessey, 1935.

The control established by Crosby has been adjusted to N. A. 1927 datum. Other control used in this compilation is unadjusted to N. A. 1927 datum.

Errors:

No errors were found in the plotting of control.

Discremancies:

To Control established by other organizations was used.

C. DPILATION

Wethod:

The radial line method of plotting as described in U. S. C. & G. S. "Notes on the Compilation of Planimetric Line Mans from Five-lens Aerial Photographs" was used.

Adjustment of Plot:

The photographs were comparatively free from tilt and scale fluctuations, and no unusual adjustments of the radial plot were necessary.

Interpretation:

Only the usual graphic symbols as approved by the Board of Surveys and Maps were used.

The road on the east bank of the canal in the northern portion of the sheet has been shown by a single dashed line, although it is a second class motor road of the type usually shown by a double dashed line. This was done because the road runs along an earth dyke, and in some places one edge of the road was on the edge of the canal, making it impossible to show the proper symbols. The dyke was not shown, due to limited space, but it has been labeled as such.

*This has been changes in the workington of the type. Furn.

The water areas in the central portion of the sheet are

The water areas in the cantral portion of the sheet are duck ponds, with marsh islands scattered in them.

The dashed lines represent shoal areas.

INFORMATION FROM OTHER SOURCES

Additional information was obtained from the field party and from G.C.S. "PP" Reg. No. 7-62956, Lt. B. H. Rigg, 1935.

The sand bars shown on the sheet were taken from G.C.S.
"A" Reg. No. 7-6248 b, Lt. H. Odessey, 1935. Of the two northernmost bars, only the H.W.L. is shown, as they fall off the photographs, and no information could be obtained from photographs to supplement the plane table survey.

Winyah Bay South Jetty was also taken from G.S.S. "A", as was the high ground line of the island shown at the east end of the jetty.

CONFLICTING NAMES

No conflicting names were reported by the field inspection carty.

COMPARISON WITH OTHER SURVEYS

Satisfactory junctions were made with the following sheets:

North - Reg. No. 5381 West - Reg. No. 5384 East and South by the Atlantic Ocean

LANDMARKS

Landmarks and marked topographic stations are submitted with G.C.S. "PP" Reg. No. 7-62955, Lt. B. H. Rigg, 1935 and with G.C.S. "A" Reg. No. 7-62486, Lt. H. Odessey, 1935.

REMARKS (a)

Mosquito Creek canal, part of which is shown on this sheet, is no longer navigable.

RECOMMENDATIONS FOR FURTHER SURVEYS

The compilation of this sheet is believed to have a probable error of not more than 0.3 millimeters in position of well defined detail of importance for charting and of not more than 0.6 millimeters for other data.

To the best of my knowledge this sheet is complete in all detail of importance for charting purposes, within the accuracy stated above, and no additional surveys are required.

Assisted by:

Chief of Party.

Submitted by:

M. L. Smith.

REMARKS (b)

Winyah Bay South Jetty is submerged from the sand bar just west of Longitude 79 10 except for two mounds not shown on the compilation. The jetty bares at 1/4 tide. The entire length of the jetty could not be shown on the compilation due to the photographs and available G.C.S. not extending so far to the east. Lt. Herman Odessey is at present making a sheet covering both jetties which will be submitted at a later date.

GEOGRAPHIC NAMES Date. May 14, 1935.

Survey No. 7-5385				
Object Alle	1238,	428		

Diagram No. _____/23 8 ______

Approved by the Division of Geographic Names, Department of Interior. *\frac{\times}{2} \text{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
	South Island.	saure			/
	Santee Point	Same		,	/
	Beach Creek	Same			
	Wheeler Basin				/
	Mosquito Creek	sauc		, b	/
	Mosquito Creek Cons	/ same			
	Sand Creek Basin				
			<u> </u>		
				7	
					· · · · · · · · · · · · · · · · · · ·
· 					
					
			· 		
	<u> </u>				
	,				
	. !		· 		
	 	Names underlined in red approved	 		
		Names underlined in red approved H.L. Flemer.		-	(M-136)
	· ·				

REVIEW OF AIR PHOTO COMPILATION T-5385

Scale 1:10,000

Comparison with Graphic Control Surveys:

(a) T-6248b (1935)(1:10,000)

The sand bar shown by a solid line on T-6248b, longitude 79°11' and noted: "Probably covered at most high waters", has been transferred to this compilation and is shown by the sand symbol only.

No discrepencies except as noted above.

(b) T-6295b (1935)(1:10,000)

T-6295b covers only the tip of Santee Point. A small discrepency of HWL of Santee Point is due to a plane table error. The compilation has not been changed.

(c) All detail on T-6295b and T-6248b within the area of this compilation is now shown on the compilation except/plane table contemporary stations.

Comparison with Previous Topographic Surveys:

T-527 (1857)(1:10,000) scale.

T-527 covers the HWL only in the vicinity of Winyah Bay entrance, and is incomplete insofar as names and projection lines are concerned. T-527 is superseded by this compilation, which is adequate.

T-834 (1858)(1:20,000)

T-834 covers the shoreline of Winyah Bay and adjacent topography. Only a small portion of T-834 is common to this compilation. The coastline of South Island between latitude 33° 10° and the upper limits of the compilation has become very irregular and the sandbeach here is gone. These changes are probably due to the recent construction: of the Winyah Bay jettles and the consequent shoaling of the adjacent waters off the coast of South Island.T-834 is superseded by this compilation over the common area.

T-4164 (1925)(1:20,000).

T-4164 covers the coastline from the Winyah Bay Jetties to South Santee River and the adjacent shoreline of Santee River delta. Only detail adjacent to the high water lines is shown. The shoal areas south of the Winyah Bay South Jetty have undergone a complete change. The long narrow marsh and sand island off the coast of South Island between latitude 33° 08' and 33° 09', and longitude 79° 13' and 79° 14' is now joined to the mainland, T-4164 is superseded by the compilation over the common area.

Review of Air Photo Compilation T-5385 -- 2

Comparison with Charts:

Two wrecks shown on Charts 428 and 1238, one near South Jetties and the other at longitude 79°09.8° cannot be seen on the photographs and are not shown on this compilation. These wrecks appear on H-4522(1925).

New hydrographic surveys of this area are not yet in the office.

Remarks:

The projection has been tested and is accepted as satisfactory.

Leonard a hubane. July 6. 1935.

REVIEW OF AIR PHOTO COMPILATION NO. 5385

Chief of Party: E. H. Kirsch

Compiled by: M. L. Smith

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 frausurited
 - 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 saud beach and sand bars was transferred from 7-6248 b to the compilation.

 Laru. 5/14/35.

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 reeks, 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 stations are filed under survey no T-62486

 / recoverable sta
- 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 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 outhis 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 USGS quadrangles of this area are available for geographic names comp.
- 13. The geographic datum of the compilation is NA1927 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.
- 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;

6.7. Kusch Chief of Party

19. Remarks after review in office:

- flaving J

Reviewed in office by: Lined a hubance, July 6.1935.

Examained and approved:

Chief, Section of Field Records

Chief, Division of Charts.

Chief, Section of Field Work

Chief, Division of Hydrography and Topography.

applied & new dat # 187 may 1, 1937 JSL.

Check list for Air Photo Consilation of 5385

- 1. Sheet Indexed.
- 2. Detum Note correct and marked adjusted or unadjusted degrees and minutes correctly marked on projection.
- and results.
- 4. Check geographic names against standards and make name
- 5. Lights and Beacons checked against local light lifes and corrections and omissions noted in review. Consult Aid Standards or U.S. T.H. Bureau in case of doubt as to when the sid was rebuilt.
- 6. Descriptions on Form 524 energies against compilation and corrected where necessary. Corrections noted in the review and cross references made where filing was changed. File list by sheet numbers made in the review.

5384 7. Comparison with other ourveyer and charts

- a. Charts for omissions and changes in
- b. Old Warrand
- o. Her Hydnographic surveys none available
- d. Plane-table control surveys all detail on the plane-table control surveys is shown on the compilation except as noted in the review. Differences are discussed.

Blane-table control surveys reviewed in connection with the compilation review and a reference note made at back of the plane-table report. Copy of the compilation review attached at back of the plane-table report if necessary. Notes made in green directly on the planetable sheet where needed.

/a. Projection.

b. Quality of the plane-table works

o. Differences.

d. U.S.E. Stations and grids.

Landmarks and aids.

Datum note - adjusted or unadjusted.

g. Stations described on Form 524 marked (d).

Put date and initials on notes made on plane-table surveys.

Differences or new data of importance called to attention of Cartographic, Field Records, or Coast Pilot Sections.

Junctions noted on side of this form and checked be-

_ Overlay complete:

- a. Limits of sheet with % enlargement or reduc-
- b. Photo numbers and flight lines
- s. Title note

12. Review complete:

a. Accuracy of location.

b. Bridge data frome

o. Landmarks. noue except light

d. File list of descriptions on Form 524.

Method of location of H.W. line on sand beach.

f. Any additional data to make the descriptive report complete for future reference