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DEPARTMENT OF COMMERCE

U.S. COAST AND GEODETIC SURVEY R. S. PATTON, DIRECTOR

DESCRIPTIVE REPORT

Field No. 3,

Air Photo

Topographic | Sheet No. Reg. No. 5155

State SOUTH CAROLINA

LOCALITY

S. W. of CHARLESTON HARBOR

1934

E. H. KIRSCH



applied to chart 793 - February A, 1936 NEwselven applied (in part) to Chart 792 October 26, 1936 HEM.

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SHEET NO. 3, REG.NO. 5155

PHOTOS NO. 552 through 566 1221 through 1238	DATE TTO June 22, 1933 October 12, 1933	TIME 2:45 P.M. 10:40 A.M.
PROJECTION BY	L. C. Ripley	7-14-34
PROJECTION CHECKED BY	E. H. Kirson	7-14-34
CONTROL PLOTTED BY	L. C. Ripley	7-15-34
CONTROL BHECKED BY	L. C. Lande	7-16-34
CONTROL PLOTTED ON PHOTOS BY	g. J. Richardson	12-26-33
CONTROL CHECKED ON PHOTOS BY	F. H. McBeth	1.2-26-33
SMOOTH RADIAL PLOT BY	R. C. Lande	12-28-33
RADIAL PLOT CHECKED BY	E. H. Kirsch	12-29-33
Scale PLOT BY	J. H. Wulbern	12-22-33
TOPOGRAPHY TRANSFERRED BY	T. P. Mitchell	1-19-34
TOPOGRAPHY CHECKED BY	E. H. Kirsch	1-20-34
DETAIL INKED BY	M. R. Donaldson M. R. Donaldson	7-17-34
TOPOGRAPHY CHECKEDON PHOTOS BY	E. J. Anderson	7-18-34
SHEET TRACED ON NEW PROJECTION	BY M. R. Donaldson M. R. Donaldson	9-1-34

AREA OF DETAIL INKED: 47.3 Sq. Statute miles (Land Area)

LENGTH OF COASTLINE: 8.6 statute miles

LENGTH OF SHORELINE: 22.0 Statute miles (200m or more from opposite shore)

LENGTH OF STREAMS: 119.0 Statute miles (Rivers and Sloughs less than 200m wide)

DEPARTMENT OF COMMERCE U.S. COAST AND GEODETIC SURVEY

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.

GENERAL DESCRIPTION OF TOPOGRAPHY

The following notes are included as a supplement to the General Field Inspection Report and were made by the compiler from a personal field inspection of rather limited extent.

Edisto Island is one of the important coastal islands near Charleston. One of the earliest settlements at the time of the founding of the colony was made here in approximately 1670; the ruins of a brick building, dating from this time, are still to be seen.

This area is typical of this section of the coast having a very narrow barrier beach on the ocean side, separated from the land proper by marshy creeks. The other borders of the island are heavily broken by numerous tidal creeks, the borders of which are mud covered by salt marsh grass having a distinct berm or edge. This berm is in general the low water line but was inked in as the high water line since at high water the top of the grass is still visible. This is the line shown in This area on The old surveys and the charts as the line of 3.93.

This salt marsh in all cases extends back to the extreme high water line and indicates the area which is flooded periodically by spring tides, and on the photographs this limit was used to indicate as near as possible the border of solid ground with the marsh areas. Numerous small patches of solid ground occur in the marshy areas, covered usually with grass, a few trees or myrtle bushes. The light ink line around such places helps to make them stand out from the marsh.

The island is largely a plantation and farming area and much of the forests have thus been removed. The wooded areas consist almost entirely of pine and oak, the pine predominating except along the borders of streams. The forest adjacent to the beach, and on Botany Bay island especially, is dense and consists largely of palmettos and oaks, the palmettos predominating near the ocean side.

The beach along Botany Bay island and to a lesser extent all along Edisto beach, appears to be rapidly eroding. Numerous palmetto tree trunks and snags are seen, uprooted in the sand, between high and low water lines.

The land is ingeneral low with slight relief, typical of all islands in this area.

From the field inspection made by the compiler one of the highest elevations is thought to be a bluff along the South bank of Store Creek where the Peter's Point road runs tangent to the creek; the elevation of which is estimated to be approximately 15 to 18 feet above mean sea level.

The high water line on the coast was inked in as shown from an estimate made while on the beach, and from study of the photographs, except as is discussed under "adjustment of plot".

On Botany Bay island the beach is fairly narrow and the high water line is practically up to the tree line, there being no expanse of sand dures between the forest and the beach.

Further west, from Frampton's Inlet to Edisto beach, the beach is slightly wider and low dunes are found between beach and forest.

Frampton's Inlet is said by local residents to be closing up or becoming very shallow.

In former times steamboat navigation was carried on through this inlet, there being an old public landing on the creek at the foot of Bay road.

GENERAL INFORMATION

General Report:

The general report is given under "General Description of Topography"

Photographs:

All photos were taken by the U. S. Army Air Corps 5-lens camera.

The compilation was made from portions of two flights. Photos 552 through 566 taken June 22, 1933 at 2:45 P.M. which was 1 hour 17 minutes after low tide, the line of flight being parallel to and about 4600 meters from the coast.

Photos 1224 through 1238 were taken October 12, 1933 at 10:40 A.M. which was 2 hours 38 minutes after low tide. The line of flight being parallel to the first flight and approximately 7000 meters away in a N.E. direction.

The 500 flight was unfortunately made too far from the coast and this important area had to be compiled from wing prints which in nearly all cases were not clear prints and badly out of scale.

Likewise the 1200 flight was too far from the 500, the B prints being off the compilation, thus leaving the area between flights to be compiled from two sets of wing prints, taken months apart, and both sets badly tilted and out of scale.

CONTROL

Source:

The entire control for this sheet was:

Triangulation by G. D. Cowie 1933: Aluminum topographic sheet "M" Reg. No.7608, Lt. B. H. Rigg, 1934 which covered the mouth and portions of the 7608.

North Edisto River.

All control reduced to North American 1927 datum. (adjusted

Errors:

No errors of importance were discovered in the radial plot. A few points were questioned and replotted.

Discrepancies:

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

COMPILATION

Method:

The standard radial line method was used in making the plot.

Adjustment of Plot:

This sheet as submitted represents a tracing of a compilation.

A compilation was originally made by another compiler. Later when certain creeks were traced off by the Hydrographic party, it was found that there were grave errors in shoreline.

The sheet was then given to the undersigned for a thorough checking, and it was found that the compilation was in error throughout with exception of the shoreline taken from topo sheet "M" Reg. No. 6081, and was therefore worthless, both from a standpoint of accuracy and quality of drafting.

An attempt was made to save the celluloid sheet. The old compilation was scraped off as carefully as possible; a large number of additional radial points were plotted, and a very careful and accurate compilation was made. It is believed that this compilation is the best that could be gotten from the photos.

Much difficulty was experienced in compiling this sheet as photographs, with few exceptions, were tilted and had scale fluctuations. The 500 flight was taken too far from the coast and this region, with the creeks back of the coast line, was very indistinct. Also the region midway between the 500 and 1200 flights was very much twisted and had to be compiled from wing prints of the two flights which were taken several months apart.

The photos at the Eastern and Western ends of the sheet were among the best in the lot, such as 1238, 561, 563, 565, 566, and 1221;

553,555.

The large sandbar, Deveaux Bank, was located by tangents drawn to tips of the bank, on photos 561, 563, 566, using an average, as no control could be established. This bank is exposed at low tide and is a prominent feature at the mouth of the North Edisto River. As the above photos were taken at aproximately low tide it is strongly believed that the outline, shown by the dashed line or shoal water line, is actually the low tide line on the bank, as the appearance of breakers similar to those on the coast can be seen on the photos. No visit was made to the bank and the high water line is not known, but a great portion of the bank is exposed at all stages of the tide and on the N.W. end, at least, bushes are growning.

From the appearance on the photo, these darker areas were enclosed by a solid line.

The high water line at the mouth of North Edisto River was taken from aluminum topographic sheet "M" \\TGOS!(1934)

S. E. of station "Edisto" on Botany Bay island this high water line appears to be slightly further out in the water than it would have been judged from the photographs. This was only from the station S.E. to the turn of the beach, about half a mile. On Seabrook Island no discrepancy was noticed.

On the N.W. corner of the sheet at junction with sheet 5168

Pine Landing road crosses the junction. This road is important enough to be shown by a double dash line, but on sheet 5168 it is shown by a single dash line This discrepancy was not known until after sheet 5168 had been shipped.

The road on 5168 will be revised accordingly BGJ.

The following stations were not used as control but were plotted on the sheet when the new projection was made. These stations are at upper end of TSISS in the blank area which is covered by TSIST scale 1:10 000

	7.7	•
Bn. No. 16	Bn. No. 6 .	Gable of Shed
Light No. 9	Bn. No. 2	Dawho Light
Bn. No. 14	Bn. No. 3	USED XLIX
Bn. No. 12	Bn. No. 4	Bn. No. 13
Bn. No. 8	Bight No. 5	Bn. No. $1/4$
Bn. No. 7	Light No. 2	Stevens Tank

The Edisto Beach road in crossing the marsh just back of the beach passes over a small creek. As the photos of this region were very faint and dark, the portion of this creek shown by a solid heavy line is doubtful in regard to its exact shape. It may vary a few meters either way, but as shown, this is the best that can be interpreted from the photos. No other creek was as indistinct as this.

After this new compilation was made the old celluloid sheet looked very badly, and despite all that could be done, much of the old compilation showed up as yellow stains which could not be erased.

A new projection was made on a sheet of the new, thinner celluloid. Laying the new projection over the old, it was found that

between the limits of Lat. 32° 30' and 32° 39' the new projection was about 40 meters less than the old, and between the limits of Long. 80° 10' and 80° 22' the new projection was about 45 meters less than the old. The compilation was then very carefully traced on the new sheet by adjusting and proportioning each rectangle in turn.

Interpretation:

The usual graphic symbols were used as given in the topographic manual and only in a few cases was difficulty experienced in interpreting detail.

One in particular is a region S.E. of and adjacent to Point of Pines road, midway between station "OAK" and the road crossing Store Creek, a region of low, wet, marshy ground, bushes and grass in places. From the photos it was difficult to judge how far the marsh extended into this area.

In cases where the extreme high water or high ground line could not be carried with certainty, it was terminated with bushes, grass or sand symbols.

Here and there in the marshy areas are found open spaces of mud or sandy mud, the surrounding marsh having very indefinite limits. In such cases the marsh was broken off without border line and the mud area covered with a few light dots.

Boundaries of shoal water area were shown by alight dash line, These are shown solely from their appearance on the photos, such as at Frampton Inlet, and may be expected to depart from actual conditions.

Cultivated fields in this area usually have many drainage ditches across them. Where possible to distinguish the ditches they were shown by a light solid line.

Other cultivated areas, where no ditches could be distinguished were indicated by a light broken line. No cross hatching was used.

Road fills were indicated by hachures.

Information from other sources:

No information from other sources was used in the compilation of this sheet except names.

Names of roads and schools were taken from the map of the Sanitary and Drainage Commission of Charleston County. Also "Old Fort", on Horse Island.

The name Deveaux Bank is not given on the U.S.C. & G. S. Chart No.1239 but the bank is well known locally by that name. The spelling as given above is believed to be correct and was obtained from local information.

brigh for work on this real. The control was adopted and the plot mode confully but for graphic plotting a better estimate is an accuracy of location of 3 mm on to 5 mm for interved points and 3 mm to .8 m in for other Dail.

3. g gones

Conflicting Names: See last two paragraphs preceding page for me additional names.

The creek shown on U.S.C. & G.S. Chart 1239 as Pioneer Creek is mishamed. The local residents and the map of the Sanitary and Drainage Commission of Charleston County give the correct name as "Privateer Creek".

The creek shown on chart as Townsend River is misnamed. The correct name given by local residents is "South Creek".

The beach along S.W. end of the sheet is named McConkies
Beach on the chart, but the Sanitary and Drainage map gives the correct
local name as "Edisto Beach".

A small settlement named Freedmans Village on the chart and on the U. S. Geological map, is named Freemans Village on the Sanitary and Drainage map. It is believed however, that Freedman is correct.

The Sanitary & Drainage map shows the name Russell creek is spelled with two 1's whereas the chart gives one 1. It is believed that "Russell" is correct.

See also the review at back of this report in regard to names.

Comparison with U.S.C. & G.S. Charts 1239 and 434 show the following changes.

The inlet or slough shown on Edingsville beach between ? Frampton and Jeremy Inlets, no longer exists.

The slough shown dividing the marsh island S.E. of Wad- ? malaw Point has closed up and is now only a small creek.

A marsh island shown in South Creek no longer exists.

Junctions:

Good junctions were made with the following sheets:

North - 5166 and 5167 (1:10,000)

South - None

East - 5154 (1:20,000

West - 5168 (1:10,000) and 5156 (1:20,000)

Landmarks:

A list of landmarks for this area will be furnished by Lt. B. H. Rigg on aluminum control sheet "M" Reg. No. 76081.

RECOMMENDATIONS FOR FURTHER SURVEYS

This compilation is believed to have a probable error of about .3 mm in well defined detail of importance for charting, and of about 6 mm for other detail.

To the best of my knowledge this sheet is complete in all detail of importance for charting and no further surveys are required.

Assisted by:

p.//.//MACM E. H. Kirsch, Chief of Party.

Submitted by:

M. R. Donaldson

REVIEW OF AIR PHOTO COMPILATION NO.

Chief of Party: E. H. Kirsch

. Compiled by: M.R.Donaldson

Project: HT-162

Instructions dated: NOV. 10, 1933

- 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)
- 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)
- 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)
- 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)
- 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.
- 76. 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) See also the review of the back
- -7. High water line on marshy and mangrove coast is clear and ade- quate 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."

- 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)
- 28. 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)

 Submitted with ACS Sheets. T 6681 and T 6059
- Alist 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 ACS Sheets T6081 and T6059.
- 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) Node for given for the small bridge over Russell Creek, Lat 22°36; Long. Bellio'
- 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) Pages Santh and The Certer.
- 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:
 - Standard symbols authorized by the Board of Surveys and Maps have been used throughout except as noted in the report.
 - 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.
- A. 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;

Chief of Party

19. Remarks after review in office: See following neview.

Reviewed in office by: 139. Aones

Examained and approved:

Ant Chief. Section of Field Records

Actual Chief, Division of Charts

Chief, Section, of Field Work

Chief, Division of Hydrography and Topography.

Descriptions for recoverable topographic stations filed as follows:

Station Name	Filed under Survey No.
Dud	T 6081
Clear	T 6081
Boat	T 6081
Lie	T 6081
Kiawah Clubhouse	T 6081
Spur	T 6059
No	T 6059

Review of Air Photo Compilation T 5155 (1934)

Names. See Page 6 of the descriptive report. The names in question on page 6 have been referred to Mr. Bacon for decision. All other names shown on the compilation are in agreement with the charts. The names listed on page 6 are shown as follows on the compilation pending Mr. Bacon's decision: McConkie Beach, Deveaux Bank, Privateer Creek, South Creek, Russell Creek, Rabbits Point, and Freedmans Village.

Comparison with other surveys: This area is covered in part by planetable control surveys T 6059 and T 6081, 1934. Detail shown on the planetable surveys agrees with the compilation. Recoverable topographic stations shown on the planetable surveys were transferred to the compilation in this office by

Bensen and checked by

L. A. McGann. The filing memorandum is on the preceding page.

The compilation shows a number of temporary topographic stations located for hydrographic signals. These will remain on the celluloid sheet but will not appear on the printed copies.

Shore line was transferred from this compilation to H 5470 (1934) by the field party. Inspection of H 5470 shows no conflict between this shore line and the hydrography.

Comparison with planetable surveys 3844 (1921) and 3816 (1920) shows erosion of about 80 meters on the S.E. end of Botany Bay Island. West of Longitude 80° 12' there have been only small changes except in Frampton Inlet and in the vicinity of Jeremey Inlet. For some distance to either side of Jeremey Inlet erosion amounts to 40 to 50 meters.

Control. See pages 3 and 4 of the descriptive report. Considering the difficulty with this plot due to tilt of the photographs the accuracy of location given at the bottom of page 6 is rather high. However, the field party has made a careful compilation and this has been checked to some extent by comparison with the planetable control surveys and by using the shoreline and signals from the compilation for hydrographic surveys. The compilation is accepted as sufficiently accurate for charting. The actual accuracy of location can be checked only by ground measurements but is estimated to be within 10 meters for intersected points and 10 to 20 meters for other detail except for Deveaux Bank which may exceed these limits somewhat.

B.g.gives

Survey	No	T-5155
SHIVEV	18()	

Date Jan. 31, 1935 GEOGRAPHIC NAMES

Names underlined in red approved War 20,1935 Chart No. 1239 and 434 Approved by the Division of Geographic Names, Department of Interior.

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

Under investigation. Q

Let all names on survey stand till all questions have been decided by DAN HB

Status 1	Name on Survey	Name on Chart	-New Names in local use	Names assigned by Field	Location
****	· peveaux Bank		yes	yes	
	Frivateer Creek K	rioneer Creek	yes Let GN34		
	Privateer Point	" Pt. Townsend Riverend	yes su Let. G	N34	(7.76)
	South Creek Hold	Townsend Riverend.	Hold for DG	N decision	Let GN3
	· Westbank Creek		T6081		
	. Edisto beach	Mc conkies Beach	Hold for D.	G.N. decision	
	Freedman Villege	Freedman VXXX		See Let. 9%	34
7	. Russell creek	/ Russel Creek	Let GN 34		
	kabbits Foint	2255		h h	
	wadmalaw Island /	Same			
	Leadenwah Creek ~	n'			
***	Wadmalaw roint V	(1			
	pohicket Creek v	4			
	dorse Island V	. &	j.M		2.1
~- 	Seabrooks Island R	✓ Seabrook Island		See Let GN	9 4
	Little Edisto Isl	,		-	
	Shingle Creek	- 11			
₹	st. Pierre creek	9			
	Milton Creek	11			
·	Store Creek			-	<u> </u>
	Scanawah Island	Bailey		SwLet. GN 34	
	Bailey Island	vs68 decision			

Page 2 GEOGRAPHIC NAMES

Survey	No.	T-	<u>51</u>	55
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Jan. 31, 1935 Date. ___

Chart No. 1239

Names	approved	J_{an}	31,	1935.	Ne lan	M	Strong Diagram No.	1239	- :	3
					muu	111.		^		

*, Approved by the Division of Geographic Names, Department of Interior Harlow Bacon

 \not CNot Approved by the Division of Geographic Names, Department of Interior.

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

Status	Name on Survey	Name on Chart	New Names in local use	Names assigned by Field	Location
	Murrays Corner /	Same			
	Point of Pines V	n			
	. Edisto Island 🗸	" town			
	Edisto Island Note cha	enge of location of name	·		
	, Fishing Creek	"	·		
•	Adisto Beach R	McCönkies Beach	Edisto Bea	ch DGN is n	ecision of endered
	· Jeremy Inlet		,		
	Edingsville Beach	Same			
	Frampton Inlet VR -	Frampton (Den 435)	Hold for B	FN decision	Let GN34
·	Botany Bay Island	††			
	Pockoy Island	17			
	Freedman 11 Mge	-Freedman VX134e	Repetition		
	South Greek R Repes	ted Townsond River	Hold for De	N-decision	Let; GN 34-
	Ocella Creek	Same			
	Atlantic Ocean				
	Adams Creek	Same			
	The Neck				
		`			
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