

8220

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey Air Photographic

Sheet

Field No. T-8220 Office No.

LOCALITY

State South Carolina

General locality Georgetown County

Locality Waverly Mills Quadrangle

194 2

CHIEF OF PARTY

Wm. D. Patterson

LIBRARY & ARCHIVES

DATE October 1, 1943

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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. 275-1 Waverly Mills Quadrangle

REGISTER NO.

State South Carolina

General Locality Georgetown County

Locality Waverly Mills Quadrangle

Scale 1:20,000 Date of survey Feb. 10 to Mar. 24, 1942

~~Vessel~~ Defense Mapping Field Party No. 2

Chief of party Wm. D. Patterson

Surveyed by Joe N. Henningsen, Sr. Photogrametric Aid.

Inked by Joe N. Henningsen, Sr. Photogrametric Aid.

Heights in feet above M. S. L. to ground ~~to tops of trees~~

Contour, ~~Approximate contouring of terrain indicated~~ 20 feet

Instructions dated January 23, 1942

Remarks: Contouring, revision and completion surveys

of air-photographic compilations.

DESCRIPTIVE REPORT TO ACCOMPANY WAVERLY MILLS QUADRANGLE

DEFENSE MAPPING PROJECT CS 275-1

Wm. D. Patterson, Chief of Party

Instructions for this project were dated January 23, 1942

SURVEY METHODS:

Plane table and stadia traverse were used to locate all detail added to the sheet. A line of magnetic declination was placed on the sheet by orienting the sheet on a long, straight stretch of road and the declinoire was used to orient the sheet on traverse and set-ups for location of detail. Traverses were run by setting the table up on alternate points on the line. Whenever possible the table was oriented on long straight stretches of road previously located. All traverses were closed with a horizontal error of less than 10 meters, and where well defined detail had been located the traverses were adjusted by the graphic method. Elevations were carried in the regular differential level system except in few cases when contouring vertical angles and the step up system were used.

CONTROL:

Plane table positions were located from identifiable planimetric detail appearing on the sheet and a check obtained where the identification was doubtful. Control was not taken from detail which was obscured by foliage and might be inaccurately shown. No detail added to the sheet was located from positions of a less degree of accuracy than the classification of the points located.

Vertical control was taken from third order level circuits run over roads on this quadrangle.

REVISION WORK:

All road revisions on this quadrangle are shown. In most cases the actual road course had been changed, the original road being apparent and overgrown with brush or located in a more logical place. One main change of this kind is where the road that runs to Pawleys Island has been changed. This road has been straightened out and the proper revision is made on the sheet. Numerous other changes and deletions have been made in trails and roads over the entire sheet.

Houses on the sheet were checked for location by inspection and also by actual survey where suspected of being misplaced. Those deleted are shown with a small red cross over them. Any detail on this sheet crossed out in red is to be deleted. All roads on the south side of a fence and property line marked "Vanderbilt Line" are private roads, but have not been separately designated as such on the sheet. All roads have been classified according to the instructions. Power lines have

✓ Except U.S. Route 17

been shown, and additional intermittent drainage shown where encountered. All roads shown as Class 5 are roads over which a standard gauge vehicle may pass but are unimproved trails. All Class 5 roads on the east side of the Waccamaw River are bad in wet weather, due to the lack of sufficient drainage and the light, sandy soil, which will not stand up in wet weather.

ACCURACY OF WORK:

With the exception of the discrepancies mentioned above, which were rectified, the detail shown on the blue line print appears to be within the limits of accuracy listed in the instructions. All detail added to the sheet is believed to be within the allowable limits of error and no further work on this quadrangle is recommended.

JUNCTIONS:

Satisfactory junctions were made with ~~all adjoining~~ quadrangles, 2, 4, and 17. Quadrangle 12 has not been completed.

SHORELINE:

A field examination of the shoreline on this sheet necessitated a change in the vicinity of Pawleys Inlet. This change was made by plane table and stadia traverse and is shown according to the instructions on the completed quadrangle.

LANDMARKS:

There are no additional landmarks on this quadrangle.

GEOGRAPHIC NAMES:

A list of geographic names in this area is covered in a special report. The main highway numbers are shown on the sheet.

MARSH AREAS:

All marsh area shown on the blue line print is wet tidal marsh. The wet weather swamp areas are shown enclosed by the blue dashed line. The limits of these areas were found to be very indefinite but it is believed that those shown will be most nearly correct. They are called "wet weather swamps" because they dry out during the summer but have all of the appearance of a swamp during wet weather. This is especially true on the east side of Waccamaw River where the soil was such that a definite wet weather swamp area could not be identified in most cases. Therefore, a statement that all area east of the Waccamaw River is very wet and partly under water in wet weather would most clearly describe it.

PHOTOGRAPHS:

Photographs of this area were used wherever possible to locate additional drainage and culture if possible. They were also used to locate limits of wet weather swamps where clearly defined.

BOUNDARIES:

The only boundary of any consequence shown on this sheet is the Vanderbilt property line which is clearly defined and fenced on the east side of Highway No. 17. It is a well defined landmark and is, therefore, shown.

BRIDGES:

All bridges are shown where they are considered more than a culvert. The ones shown are light bridges and the capacity is not thought to be over seven tons for any of them.

BEACONS AND LIGHTS:

All beacons and lights were corrected and deletions or discrepancies noted. Additional ones were added.

This report submitted by

Joe N. Henningsen (Sen Eng aid)
Joe N. Henningsen
Topographer, U.S.C. and G.S.

Approved and forwarded:

Wm. D. Patterson
Wm. D. Patterson
Lieut. Comdr., U.S.C. and G.S.
Defense Mapping Field Party No. 1

ADDITIONAL NOTES OF CHIEF OF PARTY

WAVERLY MILLS QUADRANGLE PROJECT CS-275-1

SURVEY METHODS:

Station recovery parties, operating by truck and leased launch, first recovered all marked stations in the quadrangle. Beacons and lights were located by sextant fixes, plotted on compilation sheets with scale 1:10,000, scaled for "Landmarks for Charts," and were then replotted by Dm. and Dp. on the 1:20,000 topographic sheet. These special recovery parties submitted Recovery Notes and descriptions of Stations for all marked stations in the area. //

Level parties operating at the same time, ran closed loops of levels along all roads where desirable, and even cross-country between roads where the topography of the country indicated that additional levels were necessary. Leveling by wye level is much faster than by planetable and saved considerable planetable work. The leveling party left temporary bench marks at all road intersections, and at various intervals along the lines of levels, for use by the topographic party.

Topographic parties were then able to complete the contouring and planimetric revision with a minimum of delay.

Geographic Names were investigated by a separate party and a separate report will be submitted on this subject.

CONTOURS - VERTICAL ACCURACY

Although the instructions for the project provide that 90% of the contours shall be within an accuracy of one-half contour interval (10 feet), it is believed that 90% of the contours are within an accuracy of 1 foot. The terrain is comparatively flat so that an error of one foot would move a contour for a considerable distance, yet all contours adjoining other quadrangles agreed within a few meters in horizontal position.

Due to the extensive network of levels which had been previously furnished the topographer, no tests for vertical accuracy were made other than the checks furnished by the tie-in with contours on adjoining sheets. For example, the 11-foot elevation shown on the sheet in Lat. 33° 28.6', Long. 79° 08' had been erroneously transferred from the level book as 13 feet. The topographer began a traverse from this temporary BM. and the resulting contour 1/2 mile to eastward was therefore 2 feet in error. This was immediately evident when comparison was made with the adjoining sheet and an extensive

investigation was made before the source of the discrepancy was discovered. This was the only instance on the entire project where contours failed to check with those on adjacent sheets.

PLANIMETRIC DETAIL

Extensive changes had taken place since August 1934 when the area was photographed and a large amount of revision work was necessary. We have since learned that the area was photographed by the nine-lens camera since the date of this survey. Had we known that this was to have been done, we could have completed the contouring alone in less than one-half of the time actually consumed.

Wm. D. Patterson

Wm. D. Patterson,
Lieut. Comdr., U.S.C. & G. S.
Chief of Party.

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

Page 1

TO BE CHARTED } STRIKE OUT ONE
~~TO BE DELETED~~

LANDMARKS FOR CHARTS

Georgetown, S. C. April 2, 1934

I recommend that the following objects which have ~~(been deleted from)~~ been inspected from seaward to determine their value as landmarks, be charted on ~~(deleted from)~~ the charts indicated.

The positions given have been checked after listing.

Wm. D. PATTERSON

Chief of Party.

GENERAL LOCALITY	WACCAMAW RIVER	NAME AND DESCRIPTION	POSITION						METHOD OF LOCATION	DATE OF LOCATION	HARBOR CHART	INSHORE CHART	OFFSHORE CHART	CHARTS AFFECTED
			LATITUDE		LONGITUDE		DATUM							
			°	'	°	'								
								D. M. METERS						
		Little River - Winyah Bay Beacon 124	33	29	1761	79	08	870	NA 1927	Sextant	3/26/42			836
		Little River - Winyah Bay Beacon 125	33	29	1155	79	08	1036	"	"	3/26/42			836
		Little River - Winyah Bay Beacon 126	33	29	570	79	08	1454	"	"	3/26/42			836
		LITTLE RIVER - WINYAH BAY LIGHT 127	33	28	1598	79	09	229	"	"	3/25/42			836
		Little River - Winyah Bay Beacon 129	33	28	667	79	09	530	"	"	3/25/42			836
		LITTLE RIVER - WINYAH BAY LIGHT 130	33	27	1844	79	09	805	"	"	3/24/42			836
		Little River - Winyah Bay Beacon 132	33	27	1020	79	09	1324	"	"	3/24/42			836
		LITTLE RIVER - WINYAH BAY LIGHT 133	33	27	376	79	09	1465	"	"	3/23/42			836
		Little River - Winyah Bay Beacon 134	33	26	1836	79	10	463	"	"	3/23/42			836
		Little River - Winyah Bay Beacon 135	33	26	741	79	10	1202	"	"	3/23/42			836
		LITTLE RIVER - WINYAH BAY LIGHT 137	33	25	1639	79	11	480	"	"	3/23/42			836
		SIGL, (Esso, visible from north)	33	25	1060	79	11	1005	"	"	3/21/42			836
		LITTLE RIVER - WINYAH BAY LIGHT 139	33	25	926	79	11	1061	"	"	3/21/42			836

This form shall be prepared in accordance with 1934 Field Memorandum, "LANDMARKS FOR CHARTS." The data should be considered for the charts of the area and not by individual field survey sheets. Information under each column heading should be given.

SCALED BY: L. G. CHAMBERS

U. S. GOVERNMENT PRINTING OFFICE 80675

CHECKED BY: C. SUPP

Waverly Mills Quads

~~Revised T-5256, No. 1~~

	Remarks	Decisions
1		333792 U.S.G.B.
2	Application of Pee Dee or Great Pee Dee River, as well as modified application of Black River, marked on name sheet No. 1, will have to await action by	" U.S.G.B.
3	U.S.G.B. In its decision for Pee Dee River, the	334792
4	form GREAT PEE DEE River was one of those rejected by Board. Therefore leave Waccamaw River, Pee Dee	333792
5	River, and Black River as on old T-5256.	333791
6		335790
7		334791
8		"
9		"
10		"
11		"
12		"
13	Caledonia in Names Report; not Calendonia as on name sheet No. 1	"
14		334792
15		334791
16		"
17		"
18		"
19		"
20		"
21		"
22		"
23		"
24		"
25		"
26		"
27		"

GEOGRAPHIC NAMES

Survey No.

Waverly Mills quadrangle
Revised T-5256, No. 1

Name on Survey

	A	B	C	D	E	F	G	H	K	
✓ <u>Waccamaw River</u> ✓										1
✓ <u>Pee Dee River</u> ✓										2
<u>Black River</u> ✓										3
✓ <u>Arcadia Plantation</u> ✓										4
✓ <u>Debidue Beach</u> ✓										5
✓ <u>Long Bay</u> ✓										6
✓ <u>Pawleys Inlet</u> ✓										7
✓ <u>Pawleys Island</u> ✓										8
✓ <u>Simmons ville</u> ✓										9
✓ <u>Marysville</u> ✓										10
✓ <u>Fraserville</u> ✓										11
✓ <u>Duncan Creek</u> ✓										12
✓ <u>Caledonia Creek</u> ✓										13
✓ <u>Butler Island</u> ✓										14
✓ <u>Hagley (Plantation)</u> ✓										15
✓ <u>Parkersville</u> ✓										16
✓ <u>Waverly Mills</u> ✓										17
✓ <u>Waverly Creek</u> ✓										18
✓ <u>Oatland Creek</u> ✓										19
<u>Holly Hill</u> ✓										20
✓ <u>Bullins Creek</u> ✓										21
✓ <u>Rabbit Island</u> ✓										22
✓ <u>Woodville Island</u> ✓										23
✓ <u>Butler Creek</u> ✓										24
✓ <u>Schooner Creek</u> ✓										25
✓ <u>Little Carr Creek</u> ✓										26
✓ <u>Big Carr Creek</u> ✓										27

Revised T-5256, No. 2

	Remarks	Decisions
1		334791
2		"
3		"
4		"
5		"
6		334792
7		"
8	Note extended application of this name on name sheet No. 1, at east end near Waccamaw River	"
9		"
10		"
11		"
12		"
13		"
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GEOGRAPHIC NAMES

Survey No.

Revised T-5256, No. 2.

Name on Survey

	A	B	C	D	E	F	G	H	K	
✓ <u>Squirrel Creek</u> ✓	✓									1
✓ <u>Arundel (Plantation)</u> ✓	✓									2
✓ <u>Darlington (Plantation)</u> ✓	✓									3
✓ <u>Benvenue (Plantation)</u> ✓	✓									4
✓ <u>Jackson</u> ✓	✓									5
✓ <u>Gatson Bay</u> ✓	✓									6
✓ <u>Longwater Swamp</u> ✓	✓									7
✓ <u>Jericho Creek</u> ✓	✓									8
✓ <u>Middleton Cut</u> ✓	✓									9
✓ <u>Kiethfield (Plantation)</u> ✓	✓									10
<u>Wedgefield (Plantation)</u> ✓	✓									11
✓ <u>White House (Plantation)</u> ✓	✓									12
✓ <u>Nightingale (Plantation)</u> ✓	✓									13
✓ <u>Kings Highway</u>										14
										15
										16
										17
										18
										19
										20
										21
										22
										23
										24
										25
										26
										27

Name unchanged from [unclear]
by L. Heck 5/5/42

DIVISION OF CHARTS :

SURVEYS BRANCH

Review of Air Photographic Survey T-8220
(Waverly Mills Quadrangle) February 1942

This quadrangle was surveyed, drafted, and published for the War Department as a part of the War Mapping Program. The field and office work were accomplished as follows:

FIELD WORK

Air photographic surveys were made and planimetric maps published of this area by the Coast and Geodetic Survey in 1935. These planimetric maps were assembled into quadrangle form and copies printed. All surveying was then accomplished on the printed planimetric base. The field survey included contouring and corrections and additions to planimetric details.

WASHINGTON OFFICE

Review: Subsequent to the field work the entire areas of projects 275, 284, and 285 were photographed with the nine-lens camera and this quadrangle was included. These photographs were not furnished to the field party, but were used in the office to check the completeness of the field surveys.

Blue lines for color separation drawings were printed from the same negatives from which the planimetric base for the field survey was made. All corrections and additions, including contouring, shown on the planetable sheet were then transferred to the color separation drawings by means of the projector.

The check list containing a record of all work in the Washington Office is filed in the Photogrammetric Section. The original planetable sheet, together with a cloth back copy of the published quadrangle, will be registered in the vault.

Contemporary Hydrographic Surveys

None

Comparison with Previous Surveys

Refer to the comparisons made in the reviews of the 1935 air photographic surveys.

Nautical Charts

T-8220 had not been applied to the nautical charts at the date of this review. T-8220 shows changes in shoreline at Pawley Inlet and numerous additions and corrections to interior details. Aids to navigation shown in the Waccamaw River were located between February and April, 1942.

The field surveys were complete except for the junction of details with T-8216 and T-8221 in the northwest corner of the quadrangle and with the exception of the classification of wooded areas.

The green overprint has been outlined from the new photographs in this office. The contour and details shown in green on the planetable sheet at the northwest corner of the quadrangle were added in this office to complete the junction with adjoining quadrangles.

These details have not been shown on the published quadrangle. They will be added to the negative so as to appear when the quadrangle is reprinted.

Reviewed by F. H. McBeth

Inspected by B. G. Jones *MBJ*

Robert W. Knapp

Chief, Surveys Branch

J. S. Gordon

Chief, Division of Charts

K. T. Adams

Chief, Section of Topography

G. H. Rude

Chief, Division of Coastal
Surveys