

8222

Original

Diag'd on Diag. Ch. No. 1110

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey Air Photo Compilation

Field No. _____ Office No. T-8222

LOCALITY

State South Carolina

General locality Georgetown County

Locality Olin

Photos Taken 1 4/6/42, Scale: 1/25000

194 3

CHIEF OF PARTY

Lieut. Comdr. Kenneth G. Crosby

" " F. L. Gallen

LIBRARY & ARCHIVES

DATE July 1943

B-1870-1 (1)

8222

DATA RECORD

T- 8222

Quadrangle (II): Olin

Project No. (II): CS 285

Field Office: Myrtle Beach, S.C. Chief of Party: F. L. Gallen

Compilation Office: Tampa, Fla. Chief of Party: K. G. Crosby

Instructions dated (II III): 7-15-42

Copy filed in Descriptive
Report No. T- 8222 (VI)Completed survey received in office: *July 19, 1943*Reported to Nautical Chart Section: *July 20, 1943*Reviewed: *Oct. 12, 1943* Applied to chart No.

Date:

Redrafting Completed: *Dec. 16, 1943*Registered: *3/46*

Published: 1944

Compilation Scale: 1:20,000

Published Scale: 1:20,000

Scale Factor (III): 1.00

Geographic Datum (III): N.A 1927

Datum Plane (III): M.S.L.

Reference Station (III): G-204, (S.C.G.S.), 1934

Lat.: 33°22'55.534" (1710.9M) Long.: 79°25'16.975" (438.8M)
 ~~Unadjusted~~ ^{Adjusted}

State Plane Coordinates (VI): (S. Zone)

South Carolina System of Plane Coordinates, South Zone

X = 2,481,885.09 ft.

Y = 567,085.06 Ft.

Military Grid Zone (VI) "B"

PHOTOGRAPHS (III)

<u>Number</u>	<u>Date</u>	<u>Time</u>	<u>Scale</u>	<u>Stage of Tide</u>
8348	4-6-42		1:20,000	Inshore sheet
8349	"		"	
8366	"		"	
8367	"		"	
8368	"		"	

Tide from (III): None (inshore sheet)

Mean Range:

Spring Range:

Camera: (Kind or source) U.S.C & G.S. 9 lens (8 $\frac{1}{4}$ " Focal length)

Field Inspection by: Gordon Bowker, Morris W. Burr date: Mch.-Apr. 1943
and Loren W. Hallam

Field Edit by: *Donald Filippo* date: *Aug 1943.*

Date of Mean High-Water Line Location (III):

Projection and Grids ruled by (III) J.O.N. & H.K.B. date: 1-16-43

" " " checked by: J.O.N. date: "

Control plotted by: W.E. Snyder, Photo Aid date: 2-4-43

Control checked by: V. F. Simmons, Photo Aid date: 2-5-43

Radial Plot by: Tampa office personnel date: 2-16-43
" " re-run " " " " 6-14-43.

Detailed by: E. A. Worrell, Jr. Engr. Draftsman date: Feb.-June 1943

Reviewed in compilation office by: A.L. Kidwell, Jr. Topo Engr. date: July 1943
J.H.S. Billmyer, Asst. Photo Engr.

Elevations on Field Edit Sheet
checked by: *D. Filippo* date: *Aug. 1943.*

STATISTICS (III)

Land Area (Sq. Statute Miles); 61.8

Shoreline (More than 200 meters to opposite shore);

Shoreline (Less than 200 meters to opposite shore); 43.5

Number of Recoverable Topographic Stations established;

Number of Temporary Hydrographic Stations located by radial plot;

Leveling (to control contours) - miles;

Roman numerals indicate whether the item is to be entered by,

(II) Field Party, (III) Compilation Party, or, (VI) the Washington Office.

When entering names of personnel on this record give the surname

and initials (not initials only).

Remarks:

General Procedure in the Production of Topographic Quadrangles for the War Department

This quadrangle, together with similar adjoining maps produced under Project C.S. 285, was prepared by the Coast and Geodetic Survey for the War Department under "General Specifications for War Department Mapping Program" issued about December 1941, in which is incorporated the "Standard of Accuracy for a National Map Production Program" issued by the Bureau of the Budget under date of June 10, 1941.

The general procedure in the production of this and the adjoining quadrangles was:

FIELD SURVEYS

Aerial photography with the Coast and Geodetic Survey nine-lens camera, with airplane and flight crew furnished by the U. S. Coast Guard. The photographs were taken to the scale of 1:20,000.

Ground inspection of the photographs for identification of control points, and classification and clarification of planimetric details on the photographs.

Contouring by planetable directly on the photographs. Supplementary vertical control was established by means of an extensive subordinate level net, furnishing unmarked elevations at road intersections, drive-ways, and numerous other points identifiable on the photographs.

COMPILATION OF MANUSCRIPT

Compilation on the map manuscripts by radial plot methods (celluloid hand templates) of all planimetry and contours. These manuscripts were drawn on the scale of 1:20,000 on celluloid sheets on which polyconic projections had been ruled with the Projection Ruling Machine in the Washington Office. Compilation was accomplished in the ~~Baltimore~~ Tampa Photogrammetric Office.

FIELD EDIT

Comparison of a copy of the manuscript with the ground. This included inspection for completeness and accuracy as well as the location by planetable methods of additional details, checking of nautical and aeronautical aids to navigation, etc.

Accuracy Tests - Application of systematic horizontal and vertical accuracy tests to check the maps for conformity with the specifications. These tests consisted of comparison of the map position and elevation of selected random points with the true position and elevation as independently determined by standard survey methods.

PROCESSING IN THE WASHINGTON OFFICE

Review - Examination of the manuscript for accuracy and completeness of compilation and compliance with specifications, correcting where necessary; addition of military and state grids and other special features; and verification of the general adequacy of the manuscript as a basis for the production of a finished map.

Drafting and Reproduction - Preparation of smooth color separation drawings on 1:20,000 scale on metal-mounted "blue-line" copies of the manuscript. From these drawings, negatives and printing plates were prepared for reproduction of the finished map on the scale of 1:31,680 or 1:25,000.

FIELD INSPECTION REPORT
QUADRANGLE T-8222
PROJECT CS-285
F. L. GALLEN, CHIEF OF PARTY

1. Gapway bay lies near the center of the Quadrangle and consists of many adjoining swamps and low ground areas with a dense cover of brush and deciduous trees. Narrow deciduous swamps are found along each side of the Black River. Immediately after leaving the swampy area many sandy ridges are found which vary in elevation from a few feet above sea level to a height of about sixty feet.

The Black River flows through the northwest corner of the Quadrangle. The northern part of the Quadrangle is drained in a northeasterly direction into the Black River and the southern part is drained in a southeasterly direction into the Sampit River. No definite drainage was found in Gapway Bay.

One paved Highway, Route No. 521, runs in a northwest, ^Southeast direction through the southern part of the Quadrangle. The other roads in the Quadrangle are made of sand and clay and are not dependable in wet weather. Some track roads have been built by the lumbermen and can be used only in dry weather.

Some farming is carried on in this Quadrangle especially along Route No. 521 and the better sand-clay roads in the western part of the Quadrangle. In general, the Quadrangle is sparsely populated.

2. See the report for Quadrangle 8221.
3. See the Report for Quadrangles 8237 and 8238.
4. See the Report for Quadrangle 8221.
5. See the Report for Quadrangle 8221.
6. See the Report for Quadrangle 8238.
7. The mean high water line has been indicated on the photographs where it could be determined by this party.
8. The low water line could not be determined by this party.
9. There are no wharves or shoreline structures in this Quadrangle.
10. No offshore details were found in this Quadrangle.
11. There are no landmarks or aids to navigation in this Quadrangle.
12. No hydrographic signals were established.
13. There are no landing fields or aeronautical aids in this Quadrangle.
14. See the Report for Quadrangle 8238.

15. The dimensions and load limits of the bridges have been indicated on the photographs but they have not been classified.
16. See the report for Quadrangle 8238.
17. See the report for Quadrangle 8226.
18. Geographic Names is the subject of a separate report for this project. *LA*
19. All the adjacent Quadrangles join this one on overlapping photographs. The junctions between the photographs were checked in the field and should be satisfactory.

Submitted by,

Gordon Bowker
Gordon Bowker,
Sr. Photogrammetric Aid.

Approved and forwarded:

F. L. Gallen
F. L. Gallen,
Chief of Party.

COMPILATION REPORT
TO ACCOMPANY
SHEET NO. T-8222

Control

Four traverse stations which were used for control fall within the tracing limits of the sheet. These stations, of second order accuracy, were established in 1934 by the South Carolina Geodetic Survey and were held to during the radial plot.

Radial Plot

A continuous radial plot was laid on February 16, 1943, which extended over the area covered by sheets: T-8216, 8217, 8218, 8221, 8222, 8223, 8224. The usual procedure was followed in laying this plot.

The plot consisted of 44 templates. The following table indicates the control density:

No. of Templates.	No. of Control Stations (Triangulation and Traverse)
3	25 Sta. or more
7	20-24 inclusive
6	15-19 "
12	10-14 "
15	5-9 "
1	4 Sta. or less

The above table indicates that there was ample control for the plot as a whole. The table below shows the actual control density for each sheet, and also lists those stations for each sheet which were apparently picked wrong in the field or for which the given geographic positions were in error.

Sheet No.	Number of stations (Triangulation & Traverse)	Stations with apparent errors in location
T-8216	9	
8217	15	G 374-1934-SCGS G 371-1934-SCGS
8218	3	
8221	10	
8222	4	
8223	7	
8224	3	P.T. Sta. 23-U.S.G.S.

Position of this station was incorrectly listed in the Georgetown Co. Publication. New position will be plotted on T-8217, 8218, 10/12/43

A station seems to have been used in plot. It has been left on sheet. No error in position can be found in records available in Washington. 10/18/43

This station was plotted incorrectly in the field office and has been plotted correctly in the Wash. office

Of the 44 templates which made up this plot, 8 had enough tilt to be apparent during the laying of the plot, but in no case was it sufficient to prohibit use of the template.

In laying the plot all of the triangulation stations were held on 31 templates. On the remaining 13 templates the number of stations not held varied from one to a maximum of six. The following table indicates the relative number of stations not held, to the total number on each template. The table also indicates which ones of these templates showed enough tilt to be apparent.

Photo No.	Total No. of Triang. and Trav. Sta.	No. of Triang. and Trav. Sta. not held	Indication of tilt
8260	10	6 (not picked)	None
8261	15	4 (not picked)	"
8262	9	2	"
8263	9	3	Tilted
8264	5	1	None
8335	8	1	"
8336	21	3	Tilted
8337	23	4	"
8338	25	3	None
8339	18	3	"
8345	27	1	"
8344	23	3	Tilted
8346	13	2	None

As indicated above, in general, all templates fitted excellently and good intersections were obtained with the radial lines. In this plot no points were picked in triangles of error and where such occurred the radial lines were transferred to the survey sheets in order to facilitate further investigation of them by the compilers. The greatest difficulty in fitting the templates during the plot was encountered along the eastern edge where this plot joins with the partially detailed sheets of the "1934 Survey".

Due to the fact that there were some errors in the picking of control on the photographs by inexperienced personnel and some geographic positions being in error, the plot was re-run on the 14th. of June. This plot was run under the supervision of a member of the Washington office personnel temporarily transferred to the Tampa office.

The plot was re-run after carefully checking all control and azimuth lines between photograph centers, and selecting certain radial points to be used for supplemental control for "cutting-in" new radials.

After the plot had been re-run the survey sheets were laid on the templates and the selected radial points were re-picked. Most of these points changed less than 0.5 m.m., and a great many checked exactly with the picking on the previous plot. Very few points changed more than 0.75 m.m.

After the selected points were picked, the other radials were "cut-in" again and the drafting was corrected to agree with the revised plot.

Detailing

The photographs and field inspection were satisfactory for detailing, with the exception of photograph 8348 and 8349. These photographs were cloudy and this made the detailing of the north central portion of the quadrangle somewhat difficult.

The scale of the photographs was fair with the exception of 8347 which was poor, but could be used.

Satisfactory junctions were made with the adjoining quadrangles with the exception of the junction with T-8227 on the South. This sheet had been forwarded to the Washington office before the radial plot was revised and there are probably some slight discrepancies along the junction line. This junction should be checked and corrected by the Washington office.

The junction between T-8227 and T-8222 has been checked and corrected in the Washington office.

Supplemental Data

No graphic control surveys by this Bureau, or maps and plans by other organizations were used to supplement the photographs in the detailing.

Comparison with Existing Topographic Quadrangles.

No topographic quadrangle sheets were available in the Tampa office with which to make a comparison with T-8222.

Comparison with Nautical Charts.

The area covered by T-8222 falls too far inland to be covered in detail by any of the published nautical charts.

Respectfully submitted,

Emma A. Worrell
E. A. Worrell,
Jr. Engr. Draftsman.

Forwarded by:

Kenneth G. Crosby,
Chief of Party ...

FIELD EDIT REPORT
QUADRANGLE T-8222
Project CS - 285

46. The field edit was done by visual inspection, making all additions and deletions on the map manuscript, and transferring all the detail to a smooth copy while inking.

The following color scheme was used:

<u>FEATURES</u>	<u>COLORS</u>
Additions, bench marks, wye level elevations and crosses	red
Deletions	green
Drainage features	blue
Contours	brown
Civil Boundaries	violet

47. The position and amount of detail on this map manuscript is believed to be complete and adequate.
48. A horizontal accuracy test was run on Quadrangle No. 8218 and 8227.

The Vertical tests are the subject of a special report for Project CS-285.

The nearest vertical accuracy test was in Quadrangle T-8227.

Respectfully submitted,
Donald Flippo
Donald Flippo,
Engineering Aid.

Approved and forwarded:

F. L. Gallen
F. L. Gallen
Chief of Party

T-8222

No. 1

Remarks

Decisions

1		
2		1943 Railway Guide
3		Road Maps
4	Not found on road maps, but shown on compilation, either 510 or 515	
5		
6		
7		
8		
9	Pending with U.S.G.B.	333793
10		"
11		333794
12		"
13		"
14		"
15		"
16		"
17		"
18		"
19		334794
20		"
21		"
22		"
23		"
24		"
25		333794
26		334794
27		"

GEOGRAPHIC NAMES

Survey No. T-8222

OLIN quadrangle

1 Name on Survey

	A.	B.	C.	D.	E.	F.	G.	H.	K.	
✓ Georgetown County	✓									1
✓ Seaboard Air Line Railway	✓									2
✓ U.S. Highway No. 521	✓									3
✓ State Highway No. 515 (?) (Bethel Road)										4
✓ Black River	✓									5
✓ Andrews (Black River)	Twp 4	✓								6
✓ Sempit (Gourdin)	Twp 2	✓								7
										8
✓ Ports Creek	✓									9
✓ Ports Creek Bridge	✓									10
✓ Spring Gully	(stream)									11
✓ Spring Gully	(settlement)									12
✓ Spring Gully Bridge	✓									13
✓ Halway Bend	✓									14
✓ Oak Grove	✓									15
✓ Britt Branch	✓									16
✗ Bond Swamp	✓	shown in 8223								17
✓ Boggy Swamp	✓									18
✓ Bethel Road	(State No. 515-?)									19
✓ Bethel	✓									20
✓ Kent	✓									21
✓ Olin	✓									22
✓ Olin Bridge	✓									23
✓ Sempit Station	✓									24
✓ Sempit Station Road	✓									25
✓ Gapway Road	✓									26
✓ Gapway Bay	✓									27

T-8222

No. 2

Remarks

Decisions

1		334794
2		"
3		"
4		"
5		"
6		"
7		"
8		335794
9		335793
10		334793
11		334794
12		"
13		"
14		
15		
16		
17		
18		
19		
20		
21		
22		
23		
24		
25		
26		
27		

GEOGRAPHIC NAMES

Survey No. T-8222

2	Name on Survey	A,	B,	C,	D	E	F	G	H	K	
✓	<u>Whiskey Swamp</u>	✓									1
✓	<u>Indian Hut Road</u>	✓									2
✓	<u>Indian Hut Gun Club</u>	✓									3
✓	<u>Indian Hut Swamp</u>	✓									4
✓	<u>Indian Hut Bridge</u>	✓									5
✓	<u>Puncheon Creek</u>	✓									6
✗	<u>Lester Creek</u>	?	no drainage shown					Lb T-8222			7
✓	<u>Brightman Swamp</u>	✓									8
✓	<u>Lanes Creek</u>	✓									9
✓	<u>Greens Creek</u>	✓									10
✓	<u>Pea House Ferry Road</u>	✓									11
✓	<u>Pleasant Grove</u>										12
✓	<u>Forbes Corner</u>										13
		Names underlined in red approved by L. Heck on 11/23/43									14
											15
											16
											17
											18
											19
											20
											21
											22
											23
											24
											25
											26
											27

M 234

RECORDS

Between January, 1942 and July, 1944, this Bureau completed 323 quadrangles. These maps have been published, or are in the process of being published on scales of 1:31,680 or 1:25,000. This series of quadrangles includes a land area of approximately 15,000 square miles. Incident to this work, a considerable volume of survey records and data has accumulated which will be filed for future reference. This material is filed as follows:

Registered and Filed in the Vault

Cloth-mounted copy of the published quadrangle.
published quadrangle at 1:20,000 scale
Black and white cloth-mounted copy of the map manuscript. This copy is filed to preserve original survey detail shown on the manuscript at 1:20,000 scale which may not have been shown on the published sheet. For political boundaries, woodland, marsh, and swamp limits, refer to the published quadrangle for the finally adopted positions. outlines.

Descriptive Report.

Division

Filed in the Photogrammetric Section--Surveys Branch

Field inspection photographs.

Contoured photographs (on which planetable contouring work was performed.)

Field edit sheet.

Descriptions of recoverable topographic stations (Form 524), filed in Reviewing Unit Section.

Supplementary traverse and level records.

Field notes, computations, lists of positions, and tabulations of results of horizontal and vertical accuracy tests.

Reproduction proof.

Correction sheet (copy of quadrangle showing in red changes to be made when next printed.)

Check lists of work performed on each sheet in the Washington Office during review, drafting, edit, and reproduction.

Original celluloid manuscript.

Copies of specifications and all instructions
to field parties and field offices.

Filed in Reproduction Branch

Glass negatives of the color separation drawings.

Filed in the Library

~~Special report on field work by Commander K. T.
Adams, 1944.~~

Special report on office work by B. G. Jones, 1944.

Season's report on field work by Commander F. L.
Gallen, 1944.

Season's report on field work by Commander R. L.
Schoppe, 1944.

Delivered to the Army Map Service in accordance
with the contract

Film negatives and film positives of the color
separation drawings.

All color separation drawings.

~~Original celluloid manuscript.~~

A correction sheet consisting of a copy of the
first edition of the quadrangle with notes in red
indicating changes desirable at the next printing.

DIVISION OF CHARTS

SURVEYS BRANCH

REVIEW OF AIR PHOTOGRAPHIC SURVEY T- 8222

OLIN QUADRANGLE

This quadrangle manuscript has been examined for completeness, accuracy, and conformity with the specifications. It is adequate for smooth drafting, reproduction and publication. Revisions found to be necessary in this office are discussed on the next page.

Horizontal and Vertical Accuracy

The nearest horizontal accuracy tests were run in quadrangles T-8218 and T-8227.

The nearest vertical accuracy test was run in quadrangle T-8227.

Previous Surveys

This manuscript has been compared with the following previous topographic surveys of this Bureau and other agencies. This map is satisfactory to supersede the previous surveys over the common area.

There are no previous topographic surveys in this area.

Comparison with Nautical Charts Nos.

The manuscript has not been applied to the charts at the date of this review. The following comments are pertinent to the compilation and correction of nautical charts:

No nautical charts cover this area.

The following revisions of the map manuscript were found to be necessary and were accomplished as a part of this review:

Only changes of a minor nature were necessary during the review of this map manuscript.

Reviewed Oct. 11, 1943

By Harlan E. Rees
(per H. M.)

under direction of D. H. Benson

Inspected by B. G. Jones

B. G. Jones 3/46

Examined and approved:

K. T. Adams
Chief, Surveys Branch
Division of Photogrammetry

Chief, Topography Section

Robert W. Long
Chief, Div. of Charts
Nautical Chart Branch
Raymond B. Egan
Chief, Div. of Coastal
Surveys