# 8193

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Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

# DESCRIPTIVE REPORT

Type of Survey Air Photographic Topographic

Field No. Office No. T-8193

LOCALITY

State North Carolina

General locality Brunswick County

Locality Exum, North Carolina

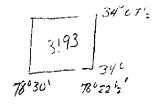
CHIEF OF PARTY

Fred. L. Peacock

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September 19,1946

8103



#### DATA RECORD

T- 8193

Quadrangle (II): Exum 7½ minute Project No. (II): CS 284

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

Compilation Office: Baltimore, Md Chief of Party: Fred. L. Peacock

Instructions dated (II III): Copy filed in Descriptive July 15, Oct. 19, Oct. 23, Oct. 27, 1942 Report No. T-

Completed survey received in office: 6/43

Reported to Nautical Chart Section: 1/45

Reviewed: 9/43

Applied to chart No. Date:

Redrafting Completed: 3/49

Registered:

Published: "//

Compilation Scale: 1:20,000

Published Scale: /:3/660

Scale Factor (III): None

Geographic Datum (III): N.A. 1927 Datum Plane (III): Mean Sea Level

Reference Station (III): Exmm 1942

Lat.: 34° 04' 11.132" Long.: 78° 27' 36.182"

Adjusted

343.0 (1505.8) m.

927.8(610.8) m. Unadjusted

State Plane Coordinates (VI):

NORTH CAROLINA, SINGLE ZONE

x = 2,163,540.80

Y = 116,822.56

Military Grid Zone (VI)

#### PHOTOGRAPHS (III)

Number Date		Time	Scale	Stage of Tide				
8137 to 8139 incl.	4-1-42	1:08 P.M.	1:20,000	There are no navigable				
8147 to 8150 incl.	4-1-42	1:30 P.M.	1:20,000	waters within the limits				
8155 to 8157 incl.	4-1-42	1:30 P.M.	1:20,000	of this quadrangle.				
8436 to 8438 incl.	4-6-42	Not Recorded	1:20,000	•				

Tide from (III): No tide computation required

Mean Range:

Spring Range:

Camera: (Kind or source)U. S. Coast & Geodetic Survey nine lens camera (focal length  $8\frac{1}{L}$ ")

Contouring and

Field Inspection by: J. N. Henningsen

date: Feb. March

1943

Field Edit by: Louis Levin

date: Aug. 1943

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

No navigable waters within the limits of this map manuscript.

Projection and Grids ruled by (III) John C. O'Neill date: Apr. 6, 1943

" checked by: John C. O'Neill date: Apr. 6, 1943

Control plotted by: John M. Reinoldi date: April 8, 1943

Control checked by: Joseph Steinberg date: April 9, 1943

Radial Plot by: Joseph Steinberg & J. Edward Deal, Jr. date: March 1943

Detailed by: Raymond Glaser date: May 8, 1943 to June 14, 1943

Reviewed in compilation office by: Albert C. Rauck, Jrdate: June 14, 1943 to June 16, 1943

Elevations on Field Edit Sheet checked by: Louis Levin

date: 8/3/43

#### STATISTICS (III)

Land Area (Sq. Statute Miles): 61

Shoreline (More than 200 meters to opposite shore): None

Shoreline (Less than 200 meters to opposite shore): None

Number of Recoverable Topographic Stations established:

One azimuth reference mark established by radial resection

Number of Temporary Hydrographic Stations located by radial plot: None

Statute
Leveling (to control contours) -/miles: 34

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. 284, 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, driveways, and numerous other points identifiable on the photographs.

#### COMPILATION OF MANUSCRIPT

Compilation on the map manuscripts by radial plot methods (celluloid hand templets) 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 "blueline" 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.

# FIEID INSPECTION REPORT QUADRANGIE T-8193 PROJECT CS-284 F. L. Gallen, Chief of Party.

#### 1. DESCRIPTION OF AREA:

The area covered by this Quadrangle lies wholly in Brunswick County, North Carolina. It consists of swamp, farmland and higher rolling timberland, with elevations ranging from 30 to 70 feet. The eastern portion of this area is a part of the Green Swamp and is covered with a dense undergrowth of vines, briars, scrub pine and some few deciduous trees. The Green Swamp has water standing in it a large part of the year and is referred to by many local people as "Bay" or "Savanna" land, which is described in report T-8187. It has no definite drainage basin, but drains due to the slight gradient of the land in all directions from the swamp through a system of intermittent swamp branches and creeks that gradually flow into Juniper Creek on the north and the Waccamaw River to the west of the Quadrangle. As one would traverse the Quadrangle from east to west he leaves the swamp and reaches the rolling timberland mentioned above. This timberland is covered with a second growth of pine which grows on a sandy soil not like the boggy sour land found in the swemp. To the west of this timberland and along the western extremities of the survey is found the farmland. This soil is of a sandy texture and is used for raising tobacco and corn. It is easily eroded by the wind and rain and cut up by numerous small creeks and branches which flow into the Waccamaw River to the west and Juniper Creek to the north. The growth in the swamp area along Juniper Creek is mostly cypress and gum trees with a heavy undergrowth of briars and vines. Most of the farmland is small tracts with very few grain crops grown on them.

# 2. COMPLETENESS OF FIELD INSPECTION:

The field inspection is thought to be complete. Buildings, churches, cemeteries, roads and trees have all been classified. Only the buildings circled are to be shown on the map drawing. Those that are only circled and not designated are to be classed as houses or dwellings. Trails are shown with a dashed line, thus -----. Swamp areas are enclosed by a dashed blue line and named swamp. Low ground areas are designated "L.G." and also enclosed by a dashed blue line. The drainage to be shown on the completed sheet is shown on the field sheet. There is one main highway on this Quadrangle, N. C. #130, which has been labeled. It is thought that all necessary information is shown on the field sheet that should be shown on the map drawing. Classification of bridges and culverts which have been designated on the photos or any other small items erroneously omitted will be noted by the field edit party. However, all bridges on this quadrangle, not on #130, are small wooden bridges and not thought to exceed a limit of five tons.

# 3. INTERPRETATION OF THE PHOTOGRAPHS:

See Report for T-8187.

4. HORIZONTAL CONTROL:

See Report for T-8188.

5. VERTICAL CONTROL:

See Report for T-8188.

6. CONTOURS AND DRAINAGE:

See Report for T-8188.

7-13. The items under these headings in the field inspection report do not apply to this area.

14. ROAD CLASSIFICATION:

See Report for T-8188.

15. BRIDGES AND CULVERTS:

See Report for T-8188.

16. BUILDINGS AND STRUCTURES:

See Report for T-8188.

17. BOUNDARY MONUMENTS AND LINES:

This quadrangle lies wholly in Brunswick County, North Carolina. There are no parks or other boundaries on this quadrangle except political ones, which will be added during the time of field edit.

18. GEOGRAPHIC NAMES:

See Report for T-8188.

19. JUNCTIONS:

Junctions with T-8187 on the north, T-8194 on the west, T-8192 on the east and T-8200 on the south have been made and checked.

20. PHOTOGRAPHS USED:

Photographs used in surveying this area were Nos. 8156, 8148, 8149, 8150, 8138 and 8139.

Approved and forwarded:

F. L. Gallen,

Chief of Party.

no al Color

Joe N. Henningsen,

Pr. Photogrammetric Aid.

#### 26 CONTROL:

Three U. S. Coast and Geodetic Survey Triangulation Stations and one U. S. Coast and Geodetic Survey Traverse Station lie within the limits of this map manuscript. They are:

MAKATOKA, 1942
EXUM, 1942
PIVER, 1932
\*W-228, 1942 (No check position) Also U.S.C.&G.S.
Bench Mark.

SHALLOTTE FIRE TOWER, 1942, a U. S. Coast and Geodetic Survey Triangulation Station lies within one minute to the south of this map manuscript. Two U. S. Coast and Geodetic Survey Triangulation Stations, namely ASH, 1942 and BRITTON, 1942, lie approximately two minutes to the west of this map manuscript. DIVIDE, 1942 lies within two minutes to the east and TRAM 1942 lies within two minutes to the north of this map manuscript. Both are U. S. Coast and Geodetic Survey Triangulation Stations.

F. I. stations were established by the field inspection party at a well defined point near the triangulation stations, namely PIVER, 1932 and DIVIDE, 1942. This enabled the compilation office to prick these stations accurately on all the photographs on which they appeared.

#### 27 RADIAL PLOT:

The radial plot for this map manuscript will be described in section 3 of the descriptive report for the radial plots of Projects CS 275 and CS 284, which will be submitted in the near future.

#### 28 DETAILING:

All detailing was done from the nine lens office photographs using the center chambers as much as possible.

From a thorough examination and verification of the picking of the triangulation, it is evident that the radials in chamber No. 4 of the flight 8436 to 8438 inclusive will not orient satisfactorily with the flight 8148 to 8150 inclusive. The respective centers of the individual photographs of each flight are within an average of 1000 meters of each other. Photographs 8148, 8149 and 8150 orient to the triangulation nearly perfectly. This compiler has deleted radials from flight 8436 to 8438 inclusive, and has used these photographs only for delineation of detail.

The field inspection was found to be satisfactory and complete for the areas covered by the field party. The only dis-

#### 28 DETAILING: (Cont'd)

crepancies which occurred were tree classifications by overlapping field inspection units. In several places there were areas which were not covered by field inspection. In these cases, the steresoscope was used to interpret the office photographs. Discrepancies between the field inspection and office interpretation have been indicated on the discrepancy overlay.

All drainage was determined by stereoscopic examination of the office photographs and found to be in good agreement with the field inspection. In certain areas, where the drainage could not be accurately determined at the compilation office, the field inspection interpretation was accepted. In addition, there has been shown on the map manuscript, by the dot-dash symbol, drainage which was not shown on the field inspection, but delineated by stereoscopic examination of the office photographs.

#### 29 SUPPLEMENTAL DATA:

No previous surveys covering the area of this map manuscript are available to this compilation office, except the Brunswick County, North Carolina State Highway and Public Works Commission Map, which was furnished by the field party to show geographic names in this area.

- \*30 MEAN HIGH WATER LINE:
- \*31 LOW WATER AND SHOAL LINES:
- \*32 DETAILS OFFSHORE FROM THE HIGH WATER LINE:
- \*33 WHARVES AND SHORELINE STRUCTURES:
- \*34 LANDMARKS AND AIDS TO NAVIGATION:
- \*35 HYDROGRAPHIC CONTROL:

\*(Not applicable as there are no navigable waters within the limits of this map manuscript.)

#### 36 LANDING FIELDS AND AERONAUTICAL AIDS:

This compilation office has not been furnished any data concerning landing fields or aeronautical aids within the limits of this map manuscript.

#### 37 GEOGRAPHIC NAMES:

A list of undisputed geographic names is attached to this descriptive report. These names were furnished by the field inspection party on a State Highway and Public Works Commission Map of Brunswick County, North Carolina. No disputed geographic names appear in the area of this map manuscript.

#### 38 DISCREPANCY OVERLAY:

A discrepancy overlay has been prepared to accompany this map manuscript. On it are noted discrepancies concerning interpretation of detail and such notes as are deemed likely to be of assistance during the field edit. Also shown, are the names or numbers of all bench marks, for the use of the Baltimore Compilation Office in scaling the geographic positions of these bench marks from the red-line print. In addition, a set of notes has been included to aid in the interpretation of symbols and abbreviations shown on the map manuscript.

#### 39 HORIZONTAL ACCURACY:

Horizontal accuracy of the location of well-defined and less well-defined points of detail is believed to be within the limits set forth in the instructions for Project CS 284, Paragraph 59, dated July 15th, 1942. See Test Traverse #2 filed in 8.6 Jones unit.

#### 40 RECOMMENDATION FOR FUTURE SURVEYS:

The planimetric detail as presented on this map manuscript is believed to be complete but is subject to field edit for corrections, additions, and deletions.

#### 41 JUNCTIONS:

Complete satisfactory control and detail junctions were made with the following quadrangles:

T-8187 to the north T-8192 to the east T-8194 to the west T-8200 to the south

#### 42 REMARKS:

In several instances on Project CS 284 there has appeared on the geographic name map submitted by the field party, names of places and drainage which were not indicated on the field inspection photographs. In some cases these features could not be found on the photographs either by visual or stereoscopic examination. It is believed that field comparison of the field inspection photographs with the geographic name map, on future surveys, would no doubt, help to eliminate this difficulty.

#### 43 AZIMUTH REFERENCE MONUMENTS:

One azimuth reference monument namely "Piver," 1932 R.M.3 has been radially resected and Form 524, showing geographic position and description, is being submitted with this descriptive report.

# 44 COMPARISON WITH EXISTING TOPOGRAPHIC QUADRANGLES:

There are no topographic quadrangles available to this office for comparison; however, comparison was made with the Brunswick County, Third Division, North Carolina State Highway and Public Works Commission map. Scale 1" to the mile. Lack of minute detail on this map made accurate comparison difficult, but roads seemed to be in fairly good agreement with those on T-8193. Definite discrepancies, such as are explained in paragraph 42 of this descriptive report have been indicated on the discrepancy overlay and a check requested during field edit.

#### 45 COLPARISON WITH NAUTICAL CHARTS:

There are no navigable waters within the limits of this map manuscript.

Respectfully submitted, June 16, 1943

Raymond Glaser

Sr. Engineering Draftsman

Map Manuscript, Discrepancy Overlay and Descriptive Report Reviewed by,

Albert C. Rauck, Jr. Photogrammetric Aid

Compilation of Map Manuscript Supervised by,

Joseph Steinberg Asst. Photogrammetric Engineer

and

Asst. Photogrammetric Engineer

Approved and Forwarded, June 18, 1943

Fred. L. Peacock Commander, C & G Survey Officer in Charge

Baltimore Field Office

## List of Geographic Names Undisputed

Alligator Bay Alligator Swamp Alligator Swamp Bridge Bay Branch Bear Pen Islands Bee Island Bay Big Neck Big Neck Road Clayton Bay Exum Greenberry-Edwards Estate Green Swamp Good Luck Bay Head O' th' Forks Honey Pond Horse Pen Bay Horse Pen Ridge Horse Pen Swamp Juniper Bay Juniper Creek

Little Muddy Branch
Ludlums Pasture

Makatoka Makatoka Bridges Makatoka Road Mill Bay Mill Branch Mill Branch (Town) Millikin Swamp Muddy Branch Mulberry Branch Piver Bays
Project Road Prospect Road Ridge Road Shingletree Bay Soldier Bay Road South Prong Wide Bay

#### FIELD EDIT REPORT T-8193 PROJECT CS-284

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

The following color scheme was used:

FEATURES	COLORS
Additions, bench marks, wye level elevations and crosses	RED
Drainage features	BLUE.
Deletions	GREEN
Contours	BROWN
Political boundaries	VIOLET

The position and amount of detail on this map manuscript is believed to be complete and adequate.

A horizontal accuracy test was run in this Quad. 48.

Vertical accuracy tests are the subject of a special report for Project CS-284. Closest test on 7-8188.

Submitted by

Louis Levinber Louis Levin

Photogrammetric Aid

\* Most test bounts were within accuracy requirements

Approved and Forwarded

F. L. Gallen Chief of Party

Remarks

No. 1 Decisions

	Remarks	Decisions
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Big Neck	•									1
Piver Bays	r									2
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Mill Branch	(str	ea )								2
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Little Muddy Branch	· ·				<u> </u>				<u> </u>	20
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#### 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 1:31,650 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 rwamp-limits, refer to the
published quadrangle for the finally adopted
positions.

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.

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- 8193

#### EXUM 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

Horizontal accuracy test No.2 was run in this quad and the test points were within accuracy requirements.

The closest vertical accuracy test is on T-8188.

# 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:

There are no navigable waters within the limits of this map manuscript.

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 Sept. 10, 1943 By Harlan E. Rees under direction of D. H. Benson per W.M.

Inspected by B. G. Jones My Jones 8/46

Examined and approved:

Chief, Surveys-Branch
Division of Photogrammetry

Chief; -Topography -Section

Chief, Div. of Charts

Robert W. Knex Chief, Nautical Chart Branch

Chief, Div. of Coastal Surveys