

# 9155

\*

Diag. Cht. No. 1228-3

Form 504

## U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

## DESCRIPTIVE REPORT

Type of Survey TopographicField No. Ph-45 (49) Office No. T-9155

## LOCALITY

State North CarolinaGeneral locality Albemarle SoundLocality Columbia194 53

## CHIEF OF PARTY

Harry F. Garbar, Chief of Field Party

J. E. Waugh, Tampa Photogrammetric Office

## LIBRARY &amp; ARCHIVES

DATE October 6, 1955

B-1870-1 (1)

9155

# DATA RECORD

T

Project No. (II): **Ph-45(49)** Quadrangle Name (IV):

Field Office (II): **Edenton, North Carolina**

Chief of Party: **Harry F. Garber**

Photogrammetric Office (III): **Tampa, Florida**

Officer-in-Charge: **J. E. Waugh**

Instructions dated (II) (III): **15 Sept. 1949**

**19 Jan. 1950 (Supplement One)**

Copy filed in Division of  
Photogrammetry (IV)

Method of Compilation (III): **Graphic**

Manuscript Scale (III): **1:20,000**

Stereoscopic Plotting Instrument Scale (III): **Inapplicable**

Scale Factor (III): **None**

Date received in Washington Office (IV):

**OCT 6 1952**

Date reported to Nautical Chart Branch (IV): **OCT - 9 1952**

Applied to Chart No.

Date:

Date registered (IV):

**AUG 19 1955**

Publication Scale (IV):

Publication date (IV):

Geographic Datum (III): **N. A. 1927**

Vertical Datum (III): **M. S. L.**

Mean sea level except as follows:

Elevations shown as (25) refer to mean high water

Elevations shown as (5) refer to sounding datum

i.e., mean low water or mean lower low water

Reference Station (III): **DEBT, 1933**

Lat.: **35° 59' 41".471 (1278.2m.)**

Long.: **76° 08' 57".850 (1449.0m.)**

Adjusted

~~Unadjusted~~

Plane Coordinates (IV): **Lambert**

State: **N. Car.**

Zone: **—**

Y=

X=

Roman numerals indicate whether the item is to be entered by (II) Field Party, (III) Photogrammetric Office, or (IV) Washington Office.

When entering names of personnel on this record give the surname and initials, not initials only.


Matthew A. Stewart

Cartographic Survey Aid

36°-00.0'

35°-52.5'

76°-15'

76°-07.5'

Areas contoured by various personnel  
(Show name within area)  
(II) (III)



# DATA RECORD

Field Inspection by (II):	Matthew A. Stewart, Cart. Surv. Aid Henry R. Spies, Cart. Surv. Aid	Date: Feb.-Mar. 1951
Planetable contouring by (II):	Matthew A. Stewart, Cart. Surv. Aid	Date: Feb.-Mar. 1951
Completion Surveys by (II):	<i>James E Hundley</i>	Date: <i>Feb. 1953</i>
Mean High Water Location (III) (State date and method of location):	<i>Identified on 1949 photographs during field inspection</i> <del>March 1952 - Air Photo Compilation</del>	
Projection and Grids ruled by (IV):	L. B. C. (W.O.)	Date: 20 June 1951
Projection and Grids checked by (IV):	L. B. C. (W.O.)	Date: 20 June 1951
Control plotted by (III):	R. J. Pate	Date: 30 July 1951
Control checked by (III):	I. I. Saperstein	Date: 2 August 1951
Radial Plot of Stereoscopic <del>Control extension</del> by (III):	M. M. Slavney	Date: 30 November 1951
Stereoscopic Instrument compilation (III):	Planimetry Contours	Date: Date:
	<b>Inapplicable</b>	
Manuscript delineated by (III):	W. W. Dawsey	Date: 20 May 1952
Photogrammetric Office Review by (III):	J. A. Giles	Date: 19 September 1952
Elevations on Manuscript checked by (II) (III):	J. A. Giles	Date: 16 September 1952



Camera (kind or source) (III): Fairchild Cartographic 6" Metrogon Lens Camera "0"  
USC&GS Nine-lens Camera 8 $\frac{1}{4}$ " focal length

Number	Date	Time	Scale	Stage of Tide
49-0-1856-61 incl.	6 Dec. 1949	11:54-11:59 incl.	1:20,000	None
49-0-1844-48 incl.	"	11:43-11:47 incl.	"	"
49-0-1824	"	11:23	"	"
49-0-1823	"	11:23	"	"
49-0-1822	"	11:21	"	"
49-0-1821	"	11:21	"	"
33201	17 Mar. 1951	13:00	"	"
33213	"	13:07	"	"
33214	"	13:08	"	"

Tide (III)

Reference Station:  
Subordinate Station:  
Subordinate Station:

~~None~~ Less than  $\frac{1}{2}$  foot

Ratio of Ranges	Mean Range	Spring Range

Washington Office Review by (IV):

*Linda T. Stevens*

Date: 17 June 1954

Final Drafting by (IV):

*P.C. Lach*

Date: 3/15/55

Drafting verified for reproduction by (IV):

Date:

Proof Edit by (IV):

Date:

Land Area (Sq. Statute Miles) (III): 49

Shoreline (More than 200 meters to opposite shore) (III): 8

Shoreline (Less than 200 meters to opposite shore) (III): 2.2

Control Leveling - Miles (II): 26.1 Fly Levels

\* Number of Triangulation Stations searched for (II): 11

Recovered: 6

Identified: 3

Number of BMs searched for (II): 9

Recovered: 9

Identified: 9

Number of Recoverable Photo Stations established (III): 3

Number of Temporary Photo Hydro Stations established (III): none

Number of Traverse Stations Established (II): 2

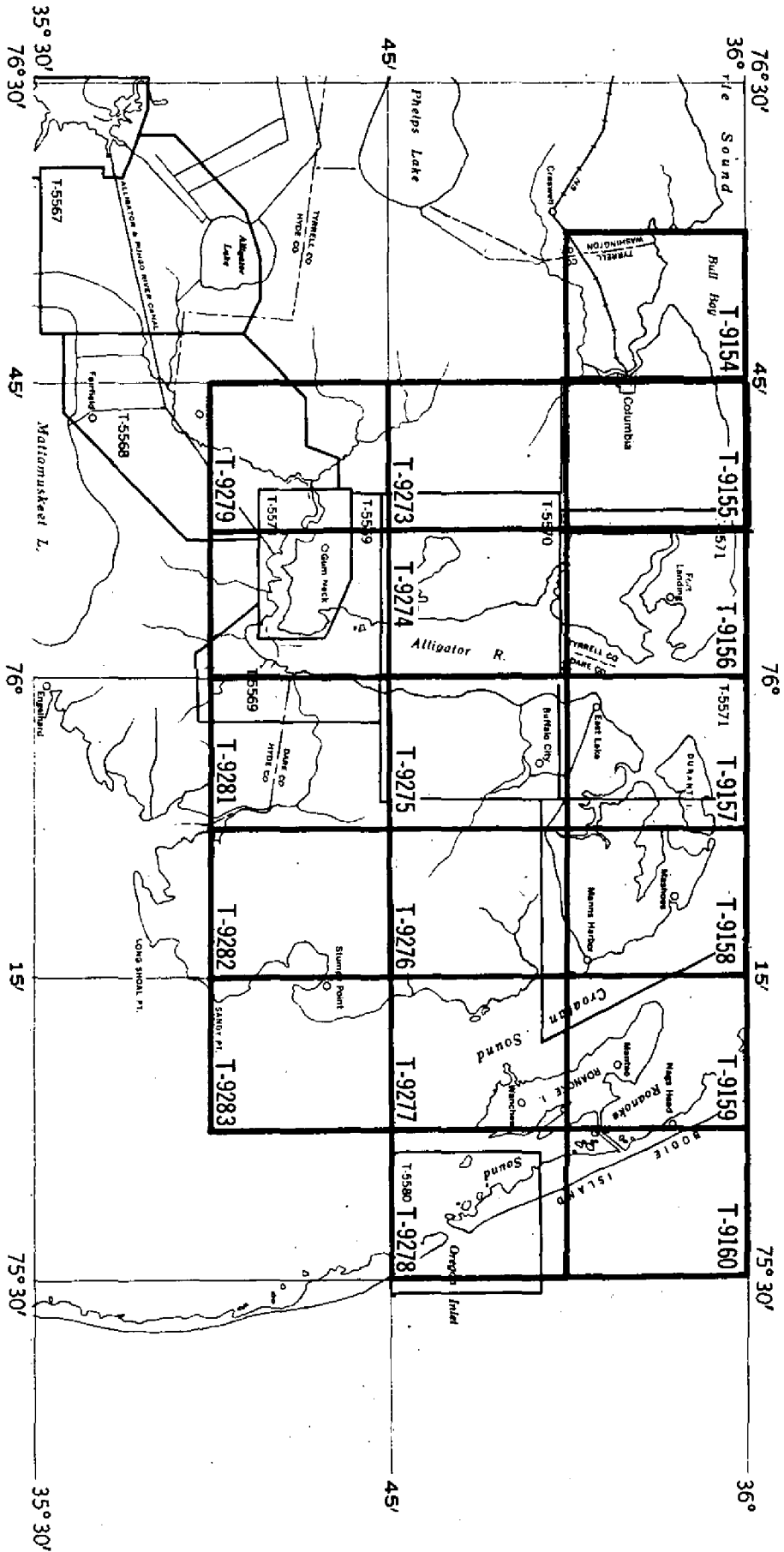
Remarks:

- \* Includes USED Traverse Stations. In addition, one control point was located by traverse and identified on the photographs.

# TOPOGRAPHIC MAPPING PROJECT

PH-45 (49)

NORTH CAROLINA, Vicinity of Albemarle Sound





## Summary to Accompany Topographic Map T-9155

Topographic map T-9155 is one of eighteen similar maps of project Ph-45(49). It covers land area in Tyrrell County, North Carolina, along Albemarle Sound.

Project Ph-45(49) is a graphic compilation project. Field work in advance of compilation included the recovery and identification of horizontal control, the establishment of some vertical control, the inspection of shoreline and interior features, the delineation of 5-foot contours directly on the photographs and the investigation of political boundaries and geographic names.

T-9155 was compiled at a scale of 1:20,000 using single lens photographs taken in 1949 and nine-lens photographs taken in 1951. The map was field edited. With the addition of hydrographic information, the map will be forwarded to the Geological Survey for publication as a standard 7½-minute topographic map at a scale of 1:24,000.

Items registered under T-9155 will include a cloth-mounted print of the map manuscript at a scale of 1:20,000, a cloth-mounted color print of the published map at a scale of 1:24,000, and the descriptive report.

## FIELD INSPECTION REPORT

Quadrangle T-9155

Project Ph-45(49)

Harry F. Garber, Chief of Party

The field work for this quadrangle was done during the winter of 1950-51, in accordance with Instructions, dated 15 September 1949 and Supplement One, dated 19 January 1950, under the direction of George E. Varnadoe, Supervisor, and Harry F. Garber, Chief of Party.

In addition to the phases listed on pages 2 and 3, field work was done by the following personnel:

<u>Name and Title</u>	<u>Phase</u>	<u>Date</u>
Richard E. Conway, Jr. Cart. Surv. Aid	Horizontal & Vertical Control Recovery and Identification	Nov. 1950
Richard L. McGlinchey Cart. Surv. Aid	Horizontal Control Recovery and Identifi- cation, Shoreline Inspection. Traverse	Jan. & Apr., 1951

### 2. AREAL FIELD INSPECTION

The salient features of the quadrangle are: the eastern part of the incorporated town of Columbia, and a portion of the Albemarle Sound.

The industries are agriculture, lumbering and fishing.

The area is low and for the most part heavily wooded with dense swamps adjacent to the drains. Only about ten per cent is under cultivation. These small scattered farms are along, or on, the higher ridges and knolls.

It is believed that no part of the field inspection is substandard.

Refer to heading 6 for marginal swamp land, which is peculiar to this area.



### 3. HORIZONTAL CONTROL

(a) Reference is made to this item in the report for quadrangle T-9154 for supplemental control established.

(b) No datum adjustments were made by the field party.

(c) Traverse stations established by the USED in 1942 were used along with USC&GS control throughout the project.

(d) A sufficient number of stations were identified to satisfy the project instructions.

(e) All known horizontal control was searched for and reported on form 526. One USC&GS station, namely "PAL, 1909", which was reported destroyed in 1933, and was replaced the same year by "DEBT, 1933", has been reported as not recovered on form 526.

(f) All stations identified are positive and all useful information is noted on the identification cards.

### 4. VERTICAL CONTROL

(a) Third order bench marks were established by this party along N. C. Highway 94 in 1948, and along U. S. Highway 64 in 1950. The adjusted elevations of the bench marks were used. Listed, are the bench marks:

L-245	V-248
M-245	W-248
S-248	X-248
T-248	Y-248
U-248	

(b) Fly levels were run to establish supplemental control (spot elevations) for contouring. These fly levels originated and were terminated on third order bench marks or on spot elevations that were previously established from third order bench marks. The greatest error of closure was 0.37 foot. Adjustments were made on all lines where the closure exceeded 0.3 foot according to the number of instrument set-ups.

(c) The first and last designated level points (spot elevations) are 55-1 and 55-50.

(d) Inapplicable.

## 5. CONTOURS AND DRAINAGE

Contouring was by plane-table methods directly on the field photographs at a contour interval of 5 feet. Elevations ranged from one to fourteen feet.

The drainage is along man-made ditches and canals and flows toward the Albemarle Sound and Scuppernon River.

## 6. WOODLAND COVER

Classified in accordance with topographic manual, part II.

Inasmuch as a large percentage of the cover is marginal swamp it was inspected at determinative places to differentiate between swamps and woodland, and the line of demarcation was then extended, by use of the stereoscope, through inaccessible areas.

## 7. SHORELINE AND ALONGSHORE FEATURES

Due to the rapid erosion of the shore along Albemarle Sound the shoreline is foul with trees and stumps from the shore to a line, from one hundred to about three hundred and fifty feet, offshore. This foul area has been indicated and labeled on the photographs.

(a) Except for shore stretches at the mouths of drains where the shoreline is apparent, the mean high-water line is along a low bluff where sand has been deposited by wave action. Both the mean high-water line and apparent shoreline are adequately indicated on the photographs by symbols and labels.

(b) There is no periodic perceptible tidal change\* in Albemarle Sound therefore the mean high-water line and low-water line are synonymous.  
*\* Less than 1/2 foot. coincide*

(c) Inapplicable.

(d) The bluffs, as stated above, are low (below five feet) therefore would not be recognized as such.

(e) Two piers which are in ruins are indicated on the photographs.

(f) There are no submarine cables within the quadrangle.

(g) Except for a cluster of piles, indicated on photograph 49-0-1859, which probably is all that remains of an old pier, there are no other alongshore features.



## 8. OFFSHORE FEATURES

None exist.

## 9. LANDMARKS AND AIDS

No landmarks for nautical charts, interior landmarks, outstanding interior features, aeronautical aids or aids to navigation exist within the limits of the quadrangle.

## 10. BOUNDARIES, MONUMENTS AND LINES

This is the subject of a special report submitted by Mr. Richard L. McGlinchey, dated June, 1950. *Filed in Division of Photogrammetry under project data. See also 56, Field Edit Report.*

## 11. OTHER CONTROL

Listed are the recoverable topographic stations established:

Eric, 1951  
Gable, 1951  
Hyde, 1951

## 12. OTHER INTERIOR FEATURES

Roads and buildings were classified in accordance with the Topographic Manual, Part II.

The western terminal for the Alligator River Ferry has been changed from Fort Landing to Sandy Point and a new road was constructed from Columbia to Sandy Point.

The route of U. S. Highway 64 was changed from the Fort Landing Road to the Sandy Point Road, and formerly what was route 64 is now known only as the Fort Landing Road.

## 13. GEOGRAPHIC NAMES

*on file 25/1*  
This will be the subject of a special report for the project, which will be submitted at a later date.

## 14. SPECIAL REPORTS AND SUPPLEMENTAL DATA

Chart sections, with revisions, will be submitted with quadrangle T-9156 for that part of the project west of Croatan Sound.

22 April 1951

Submitted by:

*George E. Varnadoe*  
George E. Varnadoe  
Cartographic Engineer

25 May 1951

Approved by:

*Harry E. Garber*  
Harry E. Garber  
Commander, USC&GS  
Chief of Party

### **Photogrammetric Plot Report**

**This report covers surveys T-9154 through T-9158, T-9273 through T-9276 and T-9279 through T-9283. It is filed as part of the Descriptive Report for T-9158.**



[illegible]



COMPILATION REPORT T-9155PHOTOGRAMMETRIC PLOT REPORT.

This report submitted with T-9158.

31. DELINEATION.

The graphic method was used.

The single-lens photographs furnished for the delineation were not used except along the eastern margin because of poor scale. Two nine-lens photographs were used as they were of better scale and they were much clearer insofar as the vast swamp areas were concerned. Minor changes were made along the swamp limits due to the clarity of these nine-lens prints. A few additional features appeared on these prints because they were of a more recent date. The field inspection generally appeared complete.

32. CONTROL.

The placement of primary <sup>(Triangu.)</sup> and secondary <sup>(pass pts.)</sup> control points <sup>was</sup> ~~was~~ such that no difficulty was encountered in the establishment of additional control. <sup>(detail pts.)</sup>

33. SUPPLEMENTAL DATA.

Reference Item 14.

34. CONTOURS AND DRAINAGE.

No difficulty was encountered in the compilation of contours and drainage.

35. SHORELINE AND ALONGSHORE DETAILS.

Reference Item 31.

The shoreline inspection was adequate and has been shown as depicted by the field inspector. No unusual alongshore details were noted. The high-water and low-water lines were synonymous. There is no perceptible tide. <sup>(i.e. "periodic tide is less than 1/2 foot")</sup>



36. OFFSHORE DETAILS.

No statement.

37. LANDMARKS AND AIDS.

None.

38. CONTROL FOR FUTURE SURVEYS.

Three (3) recoverable topographic stations are being submitted which may be of use to the hydrographer. They are listed under Item 49.

39. JUNCTIONS.

T-9156 on the east is in agreement.  
T-9273 on the south is in agreement.  
T-9154 on the west is in agreement.  
No contemporary survey to the north.

40. HORIZONTAL AND VERTICAL ACCURACY.

No statement. *See 66 of Review Report*

41. BOUNDARIES.

All boundaries have been plotted graphically from plats attached to the "Special Boundary Report". Proportional dividers were used to take distances from projection lines. *See also 52, Field Edit Report.*

46. COMPARISON WITH EXISTING MAPS.

Comparison was made with U. S. E. Quadrangle, COLUMBIA, N.C., 1:125,000 scale, 1942. *See Review Report, 63*



47. COMPARISON WITH NAUTICAL CHARTS.

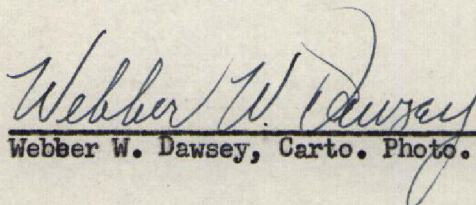
Comparison was made with USC&GS Chart 1228, 1:80,000 scale, May 1937, corrected to 31 August 1951. There were no major differences. *See 65, Review Report.*

ITEMS TO BE APPLIED TO NAUTICAL CHARTS IMMEDIATELY.

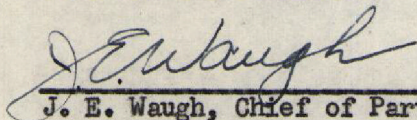
None.

ITEMS TO BE CARRIED FORWARD.

None.

  
Webber W. Dawsey, Carto. Photo. Aid

APPROVED AND FORWARDED:

  
J. E. Waugh, Chief of Party

49. NOTES FOR THE HYDROGRAPHER.

The following topographic stations are for use by the hydrographer.

HYDE - 1951

ERIC - 1951

GABLE - 1951

There is an area foul with stumps extending into Albemarle Sound forty meters. This area is along the south shore, the full extent of Quadrangle T-9155.



48. GEOGRAPHIC NAME LIST.

ALBEMARLE SOUND ✓  
ALLIGATOR TOWNSHIP ✓

BIG SAVANNAH

COLUMBIA ✓  
COLUMBIA TOWNSHIP ✓  
CRANBERRY ISLAND ✓

DEWEY PIER ✓  
DILLON RIDGE ✓

FORT LANDING ROAD ✓  
FREEWILL CHURCH ✓

• JERRY ✓

LEVELS ✓  
 • LITTLE ALLIGATOR RIVER ✓

• MALACHI CHURCH ✓ *Chapel*  
MILLS RIDGE ✓  
MISSIONARY CHURCH ✓

NEWFOUNDLAND ✓  
NORTH CAROLINA ✓

PALMETTO POINT ✓  
PLEASANT VIEW ✓

• RIDERS CREEK ✓

SANDY POINT ROAD ✓  
 • SECOND CREEK ✓  
SHIP POINT ✓  
SOUNDSIDE ✓  
STATE 94 ✓

U. S. 64 ✓

Tyrrell County ✓

→ 2 words in names report  
 (see note on Name Sheet)

*FE, says one word*

Names underlined in  
 red are approved

10-27-52

L. Heck

Based on project Names  
 Report.



FIELD EDIT REPORT  
Project Ph-45(49)  
Quadrangle T-9155

51. METHODS

The field edit of this area was accomplished by standard surveying methods in conjunction with visual inspection. Actual field work was completed in February, 1953.

Field edit data appears on the field edit sheet, discrepancy print, field photograph 49-0-1820, and in this report.

The reviewer's questions are answered on the discrepancy print when feasible.

A legend appears on the field edit sheet, which is self-explanatory.

52. ADEQUACY OF COMPILATION

The map compilation is adequate and will be complete after field edit revisions have been applied. *See 66, Review Report*

53. MAP ACCURACY

*See 66 Review Report*

The horizontal accuracy of the map detail is relatively good.

The accuracy of the contouring, in general, is good.

Contour corrections were made in the vicinities of Mills Ridge, Pleasant View and Sound Side.

54. RECOMMENDATIONS

None.

55. EXAMINATION OF PROOF COPY

It is believed that Mr. C. W. Tatem, registered surveyor, of Columbia, North Carolina, is best qualified to examine a proof copy of this work.



### GEOGRAPHIC NAMES

Refer to item 48 - Compilation Report.

1. FORT LANDING ROAD - Name and placement is correct.
2. SANDY POINT ROAD - Name and placement is correct.
3. MALACHI CHURCH - Change to MALACHI'S CHAPEL.

### 56. BOUNDARIES

Refer to item 10 - Field Inspection Report.

1. Town Limits of Columbia, N. C. - The corrected boundary of this incorporated town is shown on field photograph 49-0-1820. The limits, in violet ink, indicated on the photograph, were verified by the mayor, Mr. Paul Liverman, of the Town of Columbia, N. C. The legal description should be disregarded, in view of the fact that it does not wholly agree with the actual limits.

2. Columbia - Alligator Township - According to local county officials this township line is correct as indicated. These township lines are not surveyed; they are arbitrarily placed on a county map by the Board of County Commissioners.

### 57. DRAINAGE

Refer to item 5 - Descriptive Report.

Additional main drainage ditches have been shown on the field edit sheet. All "feeder" ditches have been deleted.

### 58. OTHER INTERIOR FEATURES

Refer to item 12 - Field Inspection Report.

All features labeled and symbolized (Dismantled R.R.) have been deleted. These tram lines (dismantled R.R.) are of a temporary nature only. After they have served the purpose for which they are constructed, the rails are removed and the lines soon become covered with vegetation.

Additional buildings have been shown on the field edit sheet.

59. JUNCTIONS

Satisfactory junctions have been made with all adjacent contemporary quadrangles.

16 February 1953  
Submitted by:

*James E. Hundley*  
James E. Hundley, *Ph.*  
Cartographer

25 March 1953  
Approved by:

*Paul Taylor*  
Paul Taylor  
Lt. Comdr., USCGS  
Chief of Party



50.

## PHOTOGRAMMETRIC OFFICE REVIEW

T- 9155

1. Projection and grids J.G. 2. Title J.G. 3. Manuscript numbers J.G. 4. Manuscript size J.G.

## CONTROL STATIONS

5. Horizontal control stations of third-order or higher accuracy M.M.S. 6. Recoverable horizontal stations of less than third-order accuracy (topographic stations) J.G. 7. Photo hydro stations XX 8. Bench marks J.G. 9. Plotting of sextant fixes J.G. 10. Photogrammetric plot report J.G. 11. Detail points J.G.

## ALONGSHORE AREAS

(Nautical Chart Data)

12. Shoreline J.G. 13. Low-water line J.G. 14. Rocks, shoals, etc. J.G. 15. Bridges J.G. 16. Aids to navigation XX 17. Landmarks XX 18. Other alongshore physical features J.G. 19. Other along-shore cultural features J.G.

## PHYSICAL FEATURES

20. Water features J.G. 21. Natural ground cover J.G. 22. Planetable contours J.G. 23. Stereoscopic instrument contours XX 24. Contours in general J.G. 25. Spot elevations J.G. 26. Other physical features J.G.

## CULTURAL FEATURES

27. Roads J.G. 28. Buildings J.G. 29. Railroads J.G. 30. Other cultural features J.G.

## BOUNDARIES

31. Boundary lines J.G. 32. Public land lines XX

## MISCELLANEOUS

33. Geographic names J.G. 34. Junctions J.G. 35. Legibility of the manuscript J.G. 36. Discrepancy overlay J.G. 37. Descriptive Report J.G. 38. Field inspection photographs J.G. 39. Forms J.G. 40. Jesse A. Giles William A. Rasure  
Reviewer Supervisor, Review Section or Unit

41. Remarks (see attached sheet)

## FIELD COMPLETION ADDITIONS AND CORRECTIONS TO THE MANUSCRIPT

42. Additions and corrections furnished by the field completion survey have been applied to the manuscript. The manuscript is now complete except as noted under item 43.

\_\_\_\_\_  
Compiler\_\_\_\_\_  
Supervisor

43. Remarks:

M-2623-12

## History of Hydrographic Information for T-9155


Hydrography was added to the map manuscript in accordance with the General Specifications of 18 May 1949.

Depth curves and soundings are in feet at mean lowwater datum and originate with the following:

### Hydrographic Survey:

H-3732 1:30,000 1915

Hydrography was compiled by Everett H. Ramey on 16 September 1954 and verified by O. Svendsen on 22 September 1954.

  
Everett H. Ramey



Review Report  
Topographic Map T-9155  
17 June 1954

62. Comparison with Registered Topographic Surveys:

T-246            1:20,000            1848

Because of numerous changes in culture and of erosion of shoreline, T-9155 supersedes the older surveys for charting purposes throughout the area covered by the present survey.

63. Comparison with Maps of Other Agencies.-

USE Columbia, N. Carolina, 1:125,000, 1943

A visual comparison reveals a general agreement.

64. Comparison with Contemporary Hydrographic Surveys.

The latest hydrographic survey was made in 1915-17. No comparison was made.

65. Comparison with Nautical Charts.-

1228 1:80,000 ed. May 1937, rev. Aug. 1951

Remarks under 62 above also apply to the chart for the area of T-9155.

66. Accuracy.-This map meets the National Standards of Map Accuracy and complies with project instructions. ✓

Reviewed by:

Lena T. Stevens  
Lena T. Stevens

APPROVED

L. C. Lande  
Chief, Review Branch  
Div. of Photogrammetry

Will Swanson  
Chief, Div. of Photogrammetry

30 Sept. 1955

H. C. Edmonson  
Chief, Nautical Chart Branch  
Division of Charts GFI

Earl O. Henton  
Chief, Div. of Coastal Surveys

## NAUTICAL CHARTS BRANCH

SURVEY NO. 9155

## Record of Application to Charts

[illegible]

M-2168-1

A basic hydrographic or topographic survey supersedes all information of like nature on the uncorrected chart. Give reasons for deviations, if any, from recommendations made under "Comparison with Charts" in the Review.