

9159

Diag. Cht. No. 1229

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey Topographic

Field No. Ph-45 (49) Office No. T-9159

LOCALITY

State North Carolina

General locality Roanoke Sound

Locality Manteo

1945

CHIEF OF PARTY

Harry F. Garber, Chief of Field Party

Arthur L. Wardwell, Tampa Photogrammetric
Office.

LIBRARY & ARCHIVES

DATE September 28, 1955

8-1670-1 (1)

9159

DATA RECORD

T - 9159

Project No. (II): **(Ph-45 (49))** Quadrangle Name (IV):Field Office (II): **Manteo, N. C.**Chief of Party: **Harry F. Garber**Photogrammetric Office (III): **Tampa, Florida**Officer-in-Charge: **Arthur L. Wardwell**Instructions dated (II) (III): **15 September 1949**
19 January 1950 (Supplement one)Copy filed in Division of
Photogrammetry (IV)
*Office Files*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): **10-19-51**Date reported to Nautical Chart Branch (IV): **10-29-51**

Applied to Chart No.

Date:

Date registered (IV): **SEP 18 1955**

Publication Scale (IV):

Publication date (IV):

Geographic Datum (III): **N. A. 1927**Vertical Datum (III): **MSL**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 waterReference Station (III): **HILL, 1933**Lat.: **35°56'04".818 (148.5m)**Long.: **75°41'55".166 (1382.8m)**Adjusted
~~1959~~

Plane Coordinates (IV):

Lambert

State:

N.C.

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.

DATA RECORD

Field Inspection by (II): **Ralph G. Holland**
Topographic Engineer

Date: **Feb-Mar 1950**

Planetable contouring by (II): **Richard E. Conway, Jr.**
Cartographic Survey Aid

Date: **July 1950**

Completion Surveys by (II): **R. L. Mc Glinchey**
J. E. Hundley

Date: **Apr 1953**
Apr 1954

Mean High Water Location (III) (State date and method of location):

Air Photo Compilation

5 Dec. 1949

Projection and Grids ruled by (IV): **T.L.J. (W.O.)**

Date: **20 Oct. 1950**

Projection and Grids checked by (IV): **T.L.J. (W.O.)**

Date: **20 Oct. 1950**

Control plotted by (III): **I. I. Saperstein**

Date: **8 Dec. 1950**

Control checked by (III): **R. J. Pate**

Date: **14 Dec. 1950**

Radial Plot or ~~Stereoscopic~~

Date: **15 Jan. 1951**

~~Control extension~~ by (III): **M. M. Slavney**

Planimetry

Stereoscopic Instrument compilation (III):

Inapplicable

Contours

Date:

Date:

Manuscript delineated by (III): **W. W. Dawsey**

Date: **19 June 1951**

Photogrammetric Office Review by (III): **J. A. Giles**

Date: **27 July 1951**

Elevations on Manuscript
checked by ~~XX~~ (III):

W. W. Dawsey

Date:

19 June 1951

6" Metregon lens
Camera (kind or source) (III): Fairchild Cartographic Camera "O"

Number	Date	Time	Scale	Stage of Tide *
49-0-1794	5-12-49	13:35	1:20,000	No perceptible tide
49-0-1793	"	13:34	"	"
49-0-1792	"	13:33	"	"
49-0-1791	"	13:32	"	"
49-0-1790	"	13:32	"	"
49-0-1795	"	13:42	"	0.0 ft.
49-0-1796	"	13:42	"	"
49-0-1797	"	13:42	"	"
49-0-1798	"	13:42	"	"
49-0-1799	"	13:42	"	"
49-0-1800	"	13:42	"	"

Tide (III)

* Tide is less than 1/2 foot ^{SW}
for sounds.
Reference Station: Hampton Roads, Va.
Subordinate Station: Oregon Inlet, N. C.
Subordinate Station:

Ratio of Ranges	Mean Range	Spring Range
1.0	2.5	3.0
0.7	1.8	2.2

Washington Office Review by (IV): Everett H. Ramey

Date: 13 May 1954

Final Drafting by (IV): P.C. Lach

Date: 31 May 1954

Drafting verified for reproduction by (IV):

Date:

Proof Edit by (IV):

Date:

Land Area (Sq. Statute Miles) (III): 17

Shoreline (More than 200 meters to opposite shore) (III): 26

Shoreline (Less than 200 meters to opposite shore) (III): 3

Control Leveling - Miles (II): 8 miles of third order, 6 miles fly levels - Total 14 miles

Number of Triangulation Stations searched for (II): 19 Recovered: 10 Identified: 8

Number of BMs searched for (II): 20 Recovered: 10 Identified: 10

Number of Recoverable Photo Stations established (III): 23

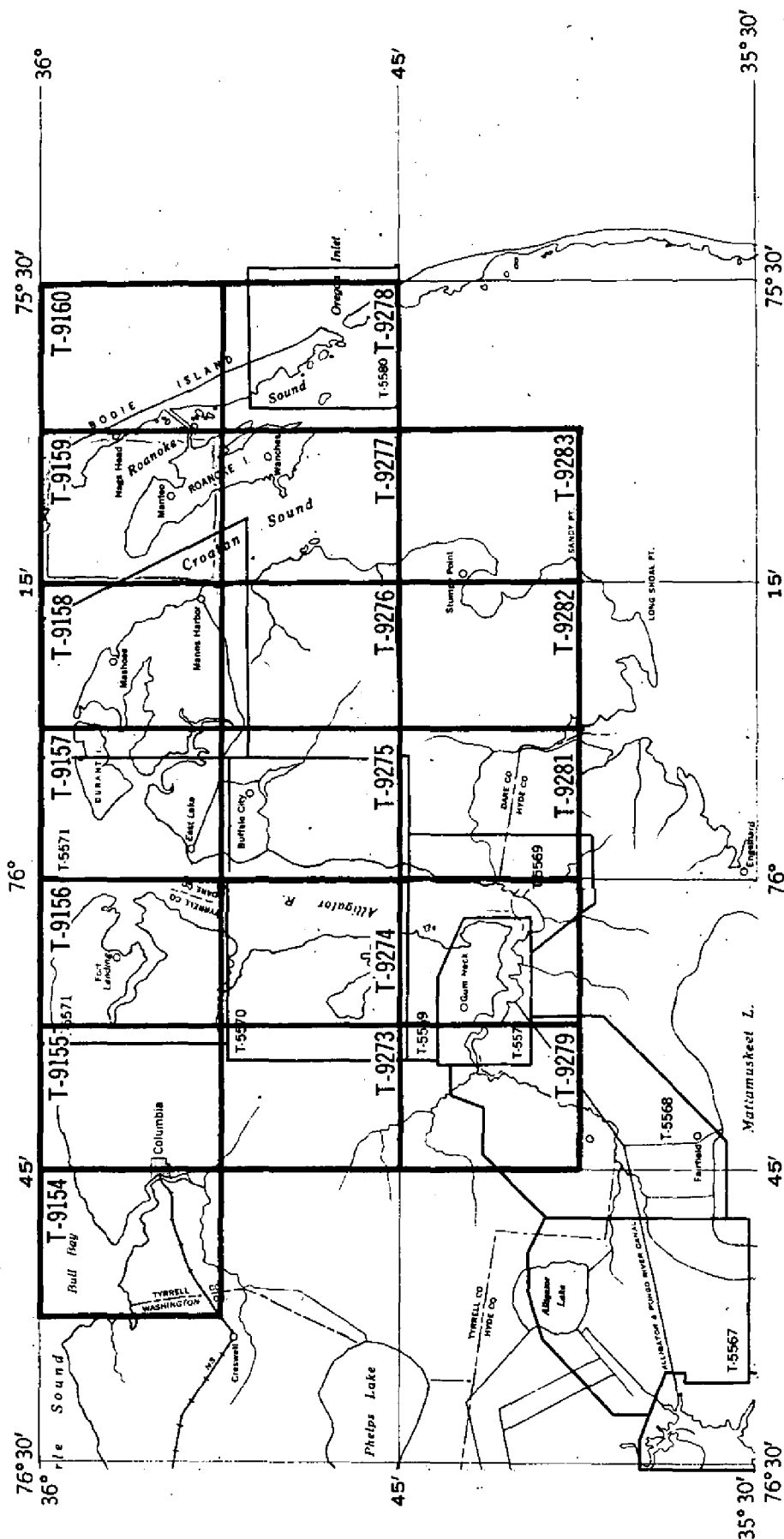
Number of Temporary Photo Hydro Stations established (III): None

Remarks:

TOPOGRAPHIC MAPPING PROJECT

PH-45 (49)

NORTH CAROLINA, Vicinity of Albemarle Sound



Summary to Accompany Topographic Map T-9159

Topographic map T-9159 is one of eighteen similar maps of project Ph-45(49). It covers portions of Bodie Island and Roanoke Island and adjacent water areas - all within Dare County, North Carolina.

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

Map T-9159 was compiled at a scale of 1:20,000 using single-lens photographs taken in 1949. 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.

Items registered under T-9159 will include a descriptive report, a cloth-backed lithographic print of the map manuscript at a scale of 1:20,000 and a cloth-backed color print of the published map.

FIELD INSPECTION REPORT
QUADRANGLE T-9159
Project Ph-45(49)

Harry F. Garber, Chief of Party

The field work for this quadrangle was done in accordance with the Director's Instructions, Project Ph-45(49) dated 15 September 1949 and Supplement One Instructions dated 19 January 1950. In addition to contours as indicated on Page 2 the field work was accomplished by:

<u>Name and Title</u>	<u>Phase</u>	<u>Date</u>
Ralph G. Holland Topographic Engineer	Horizontal and Vertical Control Recovery and Identification, Interior Inspection, Shoreline, Fly Levels, Supplemental Horizontal Control, Third Order Levels.	February 1950 March 1950

2. AREAL FIELD INSPECTION

This quadrangle lies in Dare County, North Carolina covering the northern half of Roanoke Island and the northern sections of Croatan and Roanoke Sounds. It also includes a small area of land located between the Atlantic Ocean and Roanoke Sound at the north-eastern limits of the quadrangle.

Manteo is a small village lying in the north central section of Roanoke Island and is the only incorporated town in this quadrangle. Its chief industry is fishing and summer tourists.

The northern section of Nags Head, North Carolina, an unincorporated town, lies in this area. It is a summer resort consisting of small hotels, tourists cabins, beach cottages and a few business houses.

Roanoke Island is the site of historical Old Fort Raleigh (The Lost Colony) which is located at the northeastern end of the island.

Roanoke Island is served by two primary highways. U. S. Highway No. 158 serves the island from the east and north and junctions with State Highway No. 345 which runs north and south through the central section of the island from Wanchese to the northern end of the island. The island is supplemented by a fair system of secondary roads. See 569

There are no railroads within the area.

The small area of land located at the northeastern limits of the quadrangle (at Nags Head) is served by U. S. Highway No. 158 which parallels the Atlantic Ocean.

Roanoke Island is served from the west or mainland by a ferry operating between Manns Harbor (mainland) and the north end of Roanoke Island. The Ferry operates about six times daily and Sunday at intervals of about every two hours from 0700 to 1900.

The quality of the photographs is satisfactory. No difficulty should be encountered in interpretation by the compiler.

The field inspection is believed to be complete.

3. HORIZONTAL CONTROL

(a) A third order position on Control Pt. "A" was determined by a theodolite fix for the purpose of holding the photogrammetric plot at the northeastern section of the quadrangle, in lieu of MANNS PT. R. M., 1903 which was not recovered. *See §23*

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

(c) One U.S.E.D. station was recovered on Baum Pt. A concrete monument (no disk) with "U.S.E.D. 1913" cast in top of the concrete monument. The order of accuracy is not known.

No data could be obtained on this station. ENR

(d) Sufficient stations were identified to satisfy the project instructions.

(e) All Coast and Geodetic stations were searched for and reported on Form 526.

(f) All stations were positively identified and all useful information noted on identification cards.

4. VERTICAL CONTROL

In order to supplement the existing vertical control, a third order level line was run from the north end of Roanoke Island to the southern end of Roanoke Island along State Highway No. 345. Third Order Levels were also run from the junction of State Highway No. 345 and U. S. Highway No. 158 eastward beyond the limits of this quadrangle.

(a) Bench Marks

(1) Third Order Bench Marks established by this party are:

Z-248, 1949	E-249, 1949
A-249, 1949	F-249, 1949
B-249, 1949	G-249, 1949
C-249, 1949	H-249, 1949
D-249, 1949	I-249, 1949

(2) Other Agencies (Third Order Bench Marks)

M 8.0 (USGS) Destroyed
 M 8.5 (USGS) Destroyed
 M 9.0 (USGS) Destroyed
 505+75 (USGS) Destroyed

(3) No datum adjustment was made by the field party. The level line was adjusted by the Washington Office.

(b) Six miles of fly levels were run to establish supplemental vertical control for contouring.

(c) The first and last level points are: 59-01 to 59-11.

5. CONTOURS AND DRAINAGE*See Page 12 and 13.*6. WOODLAND COVER

The coverage was classified in accordance with Paragraph 5433 of the Preliminary Edition of the Topographic Manual dated June 1949.

7. SHORELINE AND ALONGSHORE FEATURES

(a) The mean high water line along the Atlantic Shore is clearly indicated on the photographs. The shore line is generally apparent along the sound sides.

(b) On the sound side there is practically no periodic tidal change,* the fluctuation of the water is due to the wind and the mean high water line and the mean low water line are synonymous. The low water line was not indicated along the Atlantic Shore on the photographs since the photography was taken near the time of mean low water.

* Less than 1/2 foot. ^{ENR}

(c) The foreshore is sand.

(d) The shoreline along the northeastern end of Roanoke Island consists of bluffs which will be depicted by the contours.

(e) Docks, wharves, and landings are clearly discernible on the photographs and labeled.

8. OFFSHORE FEATURES

There are no offshore features that require further investigation.

9. LANDMARKS AND AIDS

(a) Landmarks and non-floating aids to navigation are listed on Form 567, *copies attached*

(b) At the date of this report the following aids to navigation were in the process of being moved by the Coast Guard and their positions should be checked by the field editor.

Roanoke Island Daybeacon "29"
Roanoke Island Daybeacon "32"
Roanoke Island Light "31"

See § 57

10. BOUNDARIES MONUMENT AND LINES

For legal descriptions of all boundaries in this report, see "Special Boundary Report", by Mr. R. L. McGlinchey, *filed under project data in Div. of Photogrammetry. See also § 58*

11. OTHER CONTROL

Recoverable Topographic Stations established are:

ABBY, 1950	GABLE, 1950
BALL, 1950	FLAGPOLE, 1950 *
ACRE, 1950	BEACON, 1950 <i>TOWER 1950 ENR</i>
CALL, 1950	CHIMNEY, 1950 <i>Destroyed (1953) ENR</i>
BUMP, 1950 *	CORNER, 1950
HOTEL, 1950	BOUNDARY MT. 1 (Manteo Air Field) <i>Ignore red. ENR</i>
GALE, 1950	BOUNDARY MT. 2 (Manteo Air Field) <i>Destroyed (1953) ENR</i>
DARE, 1950	BOUNDARY MT. 3 (Manteo Air Field)
CALM, 1950	BOUNDARY MT. 1 (Manteo Well Field Site)
HAVE, 1950	BOUNDARY MT. 2 (Manteo Well Field Site)
JANE, 1950	BOUNDARY MT. 1 (Fort Raleigh)
	BOUNDARY MT. 2 (Fort Raleigh) <i>Destroyed (1953) ENR</i>

MT. = MON.

* North of T-9159 limits. *ENR*

12. OTHER INTERIOR FEATURES

All roads and buildings were classified in accordance with instructions.

There is one bridge over navigable waters in this quadrangle, which is the swing draw bridge on U. S. Highway No. 158 crossing Roanoke Sound. A new bridge is at present under construction near this site and is to be used in lieu of this bridge. There is to be some revision in the location of the highway approaches to this new bridge. This new bridge and the revision in the highway approaches should be checked by the field editor.

See § 59

Clearances on the above bridge was obtained and data shown on photograph.

There is an overhead transmission line crossing Roanoke Sound that parallels the south side of the highway bridge. The clearance on the wires was obtained and data noted on the photograph.

The Dare County Airport is located within the limits of this quadrangle at the northern end of Roanoke Island. It is a former Naval Air Base and now in possession of Dare County.

See § 55

In addition there is one landing strip in this area, located on the west side of U. S. Highway No. 158 directly opposite the Carolinian Hotel in Nags Head. This strip is usable by only smaller type aircraft.

There are no known submarine cables within the limits of the quadrangle.

13. GEOGRAPHIC NAMES

This special report will be submitted by Mr. R. L. McGlinchey.*

* Filed in Geographic Names Section, Div. of Charts.

14. SPECIAL REPORT AND SUPPLEMENTAL DATA

Except for items 10 and 13 above, there are no special data for this sheet.

2 June 1950
Submitted by:

For *Harry F. Gisher*
Ralph G. Holland
Topographic Engineer

QUADRANGLE T-9159

(Note: This portion of the descriptive report to be added after Page 11 and reference noted under Paragraph 5 Page 9).

5. CONTOURS AND DRAINAGE

See §34

As the character of the terrain on the northern part of Roanoke Island is entirely different from that on Bodie Island on the Outer Banks, these islands will be discussed separately.

(a) ROANOKE ISLAND

Contouring was done directly on the photographs by standard planetable methods using a contour interval of five feet. However, the peaks of the sand dunes along the northeast portion of the island were so sharp that it was impossible to draw the contours above twenty-five feet without undue distortion. Peak elevations were obtained on these sharp peaks and ridges. Elsewhere on the island five foot contours were drawn without difficulty.

In general, North Carolina Highway No. 345 follows the divide on Roanoke Island with drainage flowing east and west. However, the drainage is quite indefinite in numerous places with the water seeping through a light sandy soil.

(b) BODIE ISLAND

The portion of Bodie Island contained in this quadrangle is characterized by extremely high sand dunes, the highest is known as Jockey Ridge with an elevation of 138 feet. The bare ridge ~~are~~ is unstable, subject to wind action. The dunes on the west side of the island along Roanoke Sound have become wooded, and are of course stabilized. Another series of smaller dunes or sand ridges are adjacent to the Atlantic Ocean running parallel to the shore. These are partially grass covered and somewhat stabilized.

Due to the intricacies of the patterns, the steep slopes, and the sharp narrow ridges and peaks, contouring was extremely difficult in this area. The scale of the photographs made it impossible to delineate all the detail. The wooded dunes were especially intricate with extremely narrow ridges, so that it was necessary to generalize the contours to some extent.

Contouring was done directly on the single lens photographs by standard planetable methods, supplemented by the frequent use of the stereoscope.

The instructions called for five foot contour intervals which was done wherever possible. On the high bare dunes, the five foot interval was carried to thirty feet, and twenty feet thereafter to the peaks. The contours were carried to twenty feet in the wooded area and dropped thereafter as the ridges were too sharp to delineate without distortion. The five and ten foot contours only were drawn on the dunes along the Atlantic Ocean. The sharp peaks were too small in area to delineate on a scale of 1:20000.

The drainage is indefinite. There is an inadequate ditch along the highway between the ocean dunes and the high ones inshore. This area is imudated in wet weather, and the water finally disappears by seepage. In the wooded area along the Roanoke Sound side of the island the water is collected in small ponds shown with depression contours. The ponds dry up in exceptionally dry weather.

Submitted by:

Richard E. Conway, Jr.
Richard E. Conway, Jr. *by H.F.S.*
Cartographic Survey Aid

Approved and Forwarded:

Harry F. Garber
Harry F. Garber
Chief of Party

PHOTOGRAMMETRIC PLOT REPORT.

21. AREA COVERED.

This report is on Photogrammetric Plot No. 1, of Ph-45(49), which covered all the area of surveys T-9159, T-9160, T-9277 and T-9278, excepting the area crosshatched on the accompanying sketch. The crosshatched area was omitted from this plot because it is believed that greater accuracy will be achieved by incorporating it in the plot for T-9158, T-9277, T-9282 and T-9283. *i.e. Plot 2*

The sketch on page 17 of this report shows the relative position of this plot, the quadrangles, the control furnished and the centers of the photographs used. A list of the control stations is a part of the sketch.

22. METHOD.

Radial Plot:

Map Manuscripts. --- The map projections are on vinylite at a scale of 1:20,000 ruled with the polyconic projection in black and the NORTH CAROLINA LAMBERT GRID in red. All the surveys are 7' 30" in latitude and longitude.

All control stations, including substitute points, were plotted using beam compass and meter bar.

Photographs. --- All of the photographs used were single-lens, taken in 1949 with Cartographic Camera O. The negative scale was 1:40,000 and print scale was 1:20,000.

Photographs used were:

49-O-1788 to 1794 inclusive.
49-O-1796 to 1808 inclusive.

Photographs 49-O-1743, 1744, 1747, 1748, 1786, 1787 and 1833 in the crosshatched area of the sketch were not used pending the radial plot for that area.

Templets. --- Vinylite templets were made from all the photographs. The master templet furnished by the Washington Office for these photographs was used to correct for paper distortion.

Closure and adjustment to control. --- Vinylite base sheets, with 10,000 ft. grids at 1:20,000 scale, previously used on another project, were used for this plot. Horizontal control points were transferred to the base sheets by matching common grid lines. Pass points established in the radial plot for T-8711 of Ph-5(45), which joins T-9278, (see sketch on page 17) were also transferred to the base sheets.

The preliminary radial plot indicated that all control could be held. The final radial plot was started in T-9278 by tying in with the previous radial plot for T-8711 of Ph-5(45). This was run north to Photograph 49-0-1804 when photograph templates 49-0-1793, 1792, 1791, 1790 and 1789 were laid. This well fixed flight was used to help support the laydown of 49-0-1803, 1801, 1800 and 1799, which tied into fixed photograph 49-0-1796 through 1797 and 1798. No difficulty was experienced in obtaining a tight plot and the junction with T-8711 of Ph-5(45) was very good.

The radial plot for the southwest corner of T-9159 and the west side of T-9277, shaded on the accompanying sketch, was postponed pending completion of control identification in T-9158, T-9276 and T-9283. *The plot report for this area is part of the Descriptive Report for T-9158. SNR*

23. ADEQUACY OF CONTROL.

Sufficient control was identified for this radial plot. In addition to points representing accepted monumented control, there were four points located by three point fix submitted to help control the plot. Two of the points, Control Point A in T-9159 and Control Point B in T-9160, Number 20 and 21 in the sketch, were not monumented and were solely to control the plot. The other two three point fixes were for monumented stations. EARN, 1950, and INEZ, 1950, on T-9278, Number 22 and 23 on the sketch, will be shown on the map manuscript as Topographic Stations. EARN, 1950, was "pricked direct", and a substitute point was identified for INEZ, 1950. All the control gave very good results and is believed to have given an accurate, tight plot.

24. SUPPLEMENTARY DATA.

Inapplicable.

25. PHOTOGRAPHY.

Photograph coverage was adequate and the prints were of good definition and contrast.

There were some tilted photographs but none so severe as to merit special attention.

26. GENERAL.

A final check was made of all the map manuscripts to insure the proper transfer of all pass points, control and photograph centers to the material limits of all manuscripts. "Dog-ears" for photograph centers needed for compilation were added before releasing the manuscripts.

Milton M. Slavney

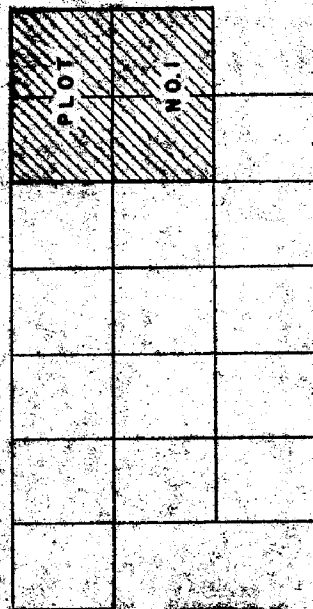
Milton M. Slavney
Cartographer (Photo.)
Tampa Photogrammetric Office

Approved and forwarded:

Arthur L. Wardwell

Arthur L. Wardwell
Chief of Party

SKETCH FOR REPORT ON
PHOTOGRAMMETRIC PLOT NO. 1
OF PH-45(49)

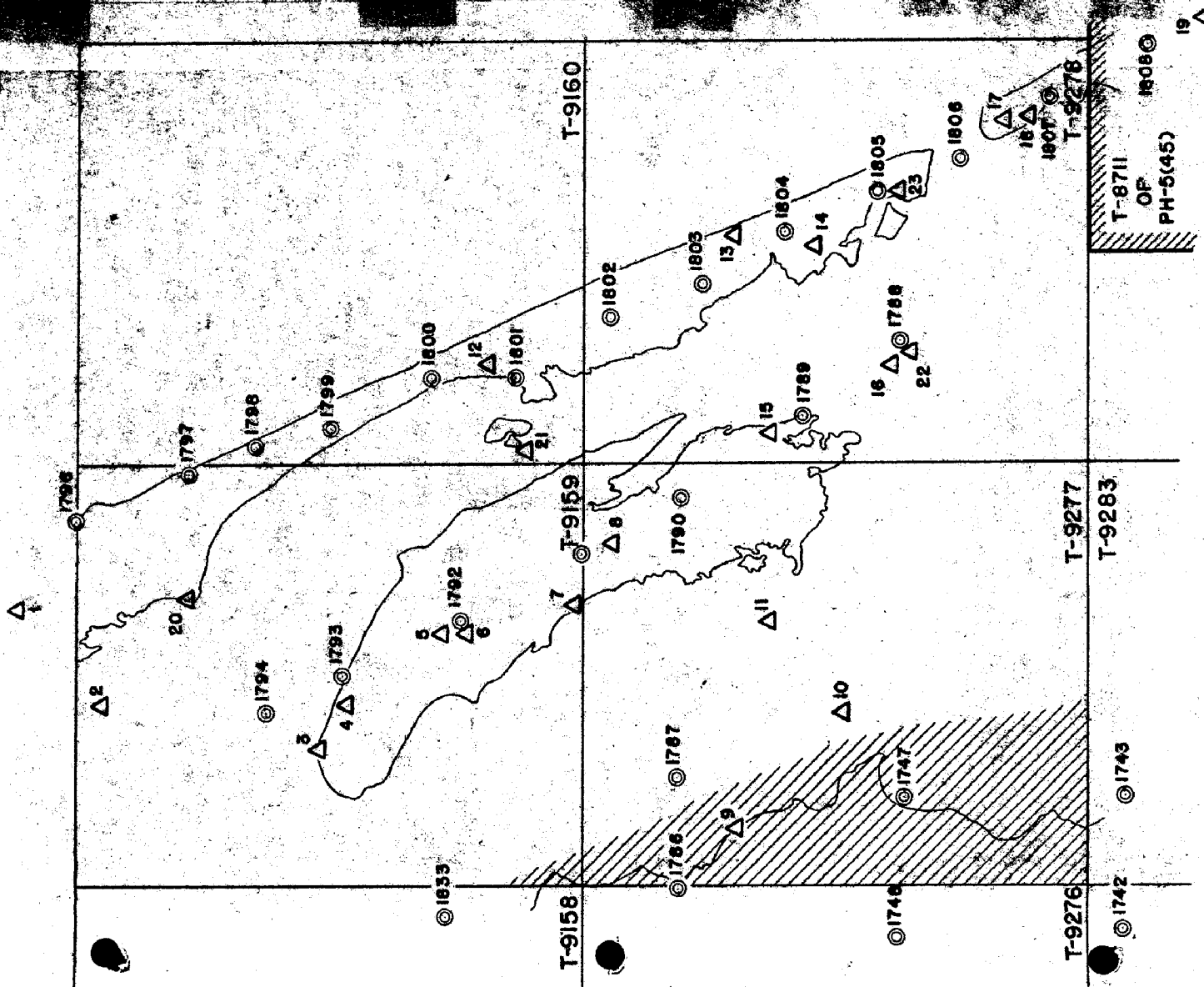


Δ HORIZONTAL CONTROL STATION

CENTER OF SINGLE LENS PHOTO

UNITED STATES OF AMERICA

1. HEIGHT MEMORIAL MONUMENT, 1933
2. Sub. Pt. BUNCH, 1915
3. Sub. Pt. BALEIGH M., 1933
4. Sub. Pt. HILL, 1933
5. BATTERY WATER TANK, 1933
6. METHODIST CHURCH SPIRE, 1933
7. Sub. Pt. AET, 1933
8. Sub. Pt. WANCH, 1913
9. Sub. Pt. DARE M., 1909
10. BOARDWALK MARSHES L.A., 1933
11. Sub. Pt. CEDAR RM 1, 1933
12. Sub. Pt. BOBIE ISLAND NORTH BASE, 1949
13. Sub. Pt. BOBIE ISLAND COAST GUARD STATION, 1933
14. BOBIE ISLAND L.A., 1875
15. MILE CHURCH, 1909
16. Sub. Pt. CLUB, 1933
17. OREGON INLET COAST GUARD CAPOLA, 1933
18. Sub. Pt. OREGON INLET COAST GUARD STA.
19. PLACOLA, 1933
20. Sub. Pt. FURN STA. A-2, 1942 (USE)
21. POINT PT. "A"
22. CONTROL PT. "B"
23. FURN, 1936
24. Sub. Pt. INEZ, 1950



MAP T-9159 PROJECT NO. Ph-45(49) SCALE OF MAP 1:20,000 SCALE FACTOR None

STATION	SOURCE OF INFORMATION (INDEX)	DATUM	LATITUDE OR μ -COORDINATE LONGITUDE OR x -COORDINATE	DISTANCE FROM GRID IN FEET, OR PROJECTION LINE IN METERS FORWARD (BACK)	DATUM CORRECTION	N.A. 1927 - DATUM DISTANCE FROM GRID OR PROJECTION LINE IN METERS FORWARD (BACK)	FACTOR DISTANCE FROM GRID OR PROJECTION LINE IN METERS FORWARD (BACK)
WRIGHT MEMORIAL MONUMENT, 1933	S.P. 218	N.A. 1927	36 00 50.801 75 40 05.805			1,565.7 (283.5) 145.4 (1,357.2)	N. of T-9159
NAGS*HEAD*LIGHT* 1943	Roanoke Island Quad	"	35 56 25.904 75 39 30.553			798.4 (1,050.9) 765.8 (738.1)	
FLEET, 1933	S.P. 218	"	35 52 58.684 75 44 56.606			1,808.6 (40.6) 1,419.8 (85.1)	
LUNCH, 1915	"	"	35 59 38.444 75 41 53.964			1,184.9 (664.4) 1,351.7 (151.2)	
MANTO WATER TANK, 1943	Roanoke Island Quad	"	35 54 15.431 75 40 30.621	* 30.821 * 25.076		475.6 (1,373.7) 767.9 (736.7)	
HILL, 1933	S.P. 218	"	35 56 04.818 75 41 55.166			148.5 (1,700.8) 1,382.8 (121.2)	
ASH, 1933	"	"	35 52 37.179 75 40 08.147			1,145.9 (703.3) 204.4 (1,300.7)	
METHODIST CHURCH SPIRE, 1933	"	"	35 54 34.55 75 40 21.35	* 30.821 * 25.076		1,064.9 (784.4) 535.4 (969.1)	
RALEIGH B.M. 1909	COMP.	"	35 56 19.638 75 42 20.001			605.3 (1,244.0) 501.3 (1,002.6)	
MANNS POINT R.M. 1903	Roanoke Island Quad.	"	35 58 17.088 75 39 58.802			526.7 (1,322.6) 1,473.3 (30.0)	
		"					
		"					
		"					

1 FT. = 3048008 METER

COMPUTED BY: W.W. DAWSEY

DATE 17 August 1950

CHECKED BY: I. I. Saperstein

DATE 6 Dec. 1950

M-2388-12

00

COMPILATION REPORT T-915931. DELINEATION

Delineation was accomplished using Graphic Methods.

Due to the unusually poor scale of the photographs, the projector was used extensively in most areas.

32. CONTROL

Horizontal control was adequate. Identification, placement and density were satisfactory.

*See Supplemental Compilation Report
which follows*

33. SUPPLEMENTAL DATA

None used.

See § 10

34. CONTOURS AND DRAINAGE

No difficulty was encountered in the delineation of drainage, but considerable difficulty was encountered in contour delineation. The 25-foot index contour was omitted by the topographer along numerous ridges and had to be added. The higher index contours had to be omitted on peak elevations. These were taken care of by spot elevations. The positions of contours now portrayed are believed to be doubtful and a thorough check is recommended.

*See § 53 &
§ 56*

35. SHORELINE AND ALONGSHORE DETAILS

Shoreline inspection was adequate. Low-water line was delineated from the photographs. Reference Item 7, (b).

36. OFFSHORE DETAILS

No unusual problems were encountered.

37. LANDMARKS AND AIDS

No unusual methods were employed.

Copies of Forms 567 attached to this report.

38. CONTROL FOR FUTURE SURVEYS

Twenty-three(23) topographic stations are being submitted on Form 524. These topographic stations have been listed under Item 49.*

* *Eighteen(18) were listed. EHR*

39. JUNCTIONS

T-9160	To the east	Satisfactory	
T-9277	To the south	"	
T-9158	To the west	"	
USE KITTY HAWK	To the north	Not available	<i>Junctions EHR</i>

1:50,000

1:62,500

40. HORIZONTAL AND VERTICAL ACCURACY

No statement.

See §66

46. COMPARISON WITH EXISTING MAPS

Comparison was made with USE Quadrangle ROANOKE ISLAND, scale 1:125,000, dated 1942, and was found to be in good agreement except for cultural changes.

*See §62
& §64*

47. COMPARISON WITH NAUTICAL CHARTS

Comparison was made with Nautical Chart 1229, scale 1:80,000, dated December 1942, corrected to 7 August 1950.


See §65

ITEMS TO BE APPLIED TO NAUTICAL CHARTS IMMEDIATELY


None.

ITEMS TO BE CARRIED FORWARD

None.



Webber W. Dawsey
Cartographic Survey Aid

Approved and Forwarded:

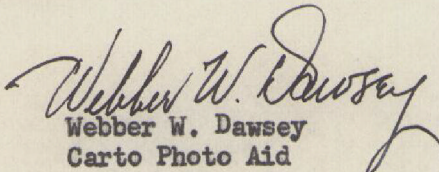
Arthur L. Wardwell, Chief of Party

SUPPLEMENTAL COMPILATION REPORT T-9159

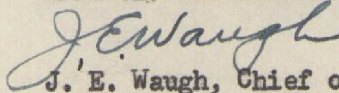
Triangulation Station MANNS POINT R.M., 1903 was listed as lost during field inspection, but was recovered by the Field Editor. The Field Editor also located a substitute station for MANNS POINT R.M., 1903 which was identified on Field Print 49-O-1794. The substitute point, "center of a small pine tree (six feet high)", as described on Form M-2226-12 could not be seen on the office prints but was transferred stereoscopically. The position of the substitute point, as "cut in" using the control and pass points of the radial plot is about 15 meters north of the computed position.

It is to be noted that more than two years elapsed between the time of photography and the time the Field Editor selected the substitute point. It is believed unlikely that a pine which was only six feet high by 1953 could be visible on the 1:20,000 scale 1949 photographs.

See §67


Webber W. Dawsey
Carto Photo Aid

APPROVED AND FORWARDED:


J. E. Waugh, Chief of Party

FIELD EDIT REPORT
Project Ph-45(49)
Quadrangle T-9159

51. METHODS

The field edit for this quadrangle was accomplished by traversing, via truck, all roads and walking to other areas in which the reviewer requested information, or for a general check on the adequacy of compilation. The shoreline was inspected from a skiff.

Corrections and additions were made by standard surveying methods in conjunction with visual inspection. All corrections and additions are referenced on the discrepancy print and the field edit sheet. Work appears on the field edit sheet, field photographs 49-0-1792, 1792A, 1793, 1793A, 1794, 1796F, 1797 and 1797F. An acetate overlay has been prepared for photograph 1793A.

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

The actual field work was accomplished intermittently during February, March and April, 1953.

52. ADEQUACY OF COMPILATION

The map compilation is adequate and will be complete after field edit data is applied.

53. MAP ACCURACY

The horizontal accuracy of the map detail is relatively good.

That portion of Collington Island falling within this quadrangle was contoured. This area of approximately one-third square mile, was omitted by the original contour party. The highest elevation obtained was 66 feet.

A planetable traverse was run on the field edit sheet along the northern quadrangle limits on Bodie Island. An area of about one half square mile - up to the northern quadrangle limit - was contoured on field photograph 49-0-1796F.

The contours along the northeast side of Roanoke Island were found to be below standard map accuracy. This area consists of high sand dunes and hills, heavily wooded with steep ridges and peaks. In most cases it was impossible to carry the five-foot contour interval to the top of the ridges. Numerous short planetable traverses were run to supplement the existing elevations. An acetate overlay was prepared for this area, properly registered to photograph 1793A. All contours were redrawn in red on this overlay. The reshaping of contours was extended southward and westward, to blend the two expressions of contours that will prevail.

See Supplemental
Field Edit Report

Ref. Item 34, Compilation Report.

Three vertical accuracy tests were run in the heavily wooded section of Bodie Island. Of a total of 58 points tested, only about 7 percent were within one contour interval. After a visual inspection of the remaining contours in this area, it was decided to recontour the entire area. This decision was concurred in by Commander L. W. Swanson, Assistant Chief, Division of Photogrammetry, after a reconnaissance of the area. Contouring was done on duplicate prints of photographs 1796, 1797. Because of the steep ridges and high peaks, a 10-foot interval was adopted. This was carried to the 50 foot level and dropped on the higher peaks with a top elevation shown. No attempt was made to depict the 5-foot interval. It is believed that sufficient elevations are shown for the office to interpolate this contour if desired. The adjacent areas to the south and east are shifting sand dunes (see paragraph 56). No contour junction was made with this area as contours here should be deleted.

Triangulation station MANNS PT. R.M., 1903 was recovered and identified. Station SEVEN, 1933 could not be recovered. Recoverable topographic station CALL, 1950 was re-identified. Additional theodolite cuts were taken to BEACON, 1950. CHIM, 1950 has been destroyed.

The horizontal accuracy of all other map detail appears good.

54. RECOMMENDATIONS

It is recommended that shifting sand dunes, of the nature of those portrayed in the northeastern portion of this sheet, and outlined in red on the field edit sheet, not be contoured, but only an occasional spot elevation shown on the higher peaks.

55. EXAMINATION OF PROOF COPY

It is believed that Mr. David J. Cox, Jr., registered land surveyor of Hertford, North Carolina, is best qualified to examine a proof copy of this map.

The following geographic names were investigated. Names verified were:

ROANOKE ISLAND CHURCH - The correct title of this church is ROANOKE ISLAND BAPTIST CHURCH. The church denomination is not recommended for mapping.

MANTEO AIRFIELD - Although DARE COUNTY AIRPORT is commonly used, it is not the official name of this field.

CALIFORNIA ROAD should be deleted. This street, according to the official city map of Manteo, is COUNTY STREET EXTENDED.

Persons contacted during the investigation were:

Mr. Martin Kellog	Manteo, N. C.	Mayor
Mr. Melvin R. Daniels	" "	Registrar of Deeds (Dare County)
Mr. Guy H. Lennon	" "	Resident
Mrs. C. B. Jones	" "	"
Mrs. John Ward	" "	"
Mr. William Henderson	" "	Administrator, Manteo Airfield

56. CONTOURS AND SAND DUNES

BODIE ISLAND

The contours on Bodie Island are discussed in three separate groups:

(1) That area included between U. S. Highway 158 and the sea beach. The pattern of sand dunes in this area is very similar. These dunes can be classed as more "stable" than shifting, in that considerable grass covers most of the sand. The five and ten foot carrying contour along the beach, and the 10 foot contour just east of the highway are fairly steady and should be mapped. The area between is dotted with hundreds of small peaks and hollows too small to portray at 1-20,000 scale. These peaks average between 20 and 25 feet. Only an occasional spot elevation is recommended after the 10 foot contour. These higher areas are not too steady and mostly bare of grass.

(2) Contours west of U. S. Highway 158 to wooded area. This area consists mostly of bare sand. Adjacent to the highway the area is low and flat with some vegetation. Water stands here during wet seasons and the contours are steady. West of this area the ground becomes higher and the sand is bare and shifting. These higher elevations are very unstable and contours should be deleted. These areas are outlined in red on the field edit sheet.

(3) West of these shifting dunes the area becomes heavily wooded. This is known as "Nags Head Woods". Contours here are of course stable and should be mapped. There are no drainage outlets here and many ponds have formed, creating large areas of depressions. It is significant to note that the great sand dunes just east of these woods are progressively moving westward and will eventually cover this wooded area.

ROANOKE ISLAND

All areas of Roanoke Island contained on this sheet are stable and the contours should be mapped. The sand ridges on the northeast side of the island are heavily wooded with only an occasional small bare spot. *See Supplemental Field Edit Report*

57. AIDS TO NAVIGATION

Ref. Item 9, Field Inspection Report.

New positions were obtained by theodolite cuts for ROANOKE ISLAND DAYBEACON 29, ROANOKE ISLAND LT. 31, and ROANOKE ISLAND DAYBEACON 32. These fixed aids have recently been moved as the result of new bridge construction. In addition to occupying two topographic stations and a control point established in 1950, a photo point was established for an additional cut.

Two planetable cuts of strong intersection were taken to all the remaining fixed aids in Roanoke Sound to verify their plotted position.

Theodolite cuts were taken to BLOCKADE SHOAL LT. from 6 stations of third order accuracy or higher.

Forms 24a and 567 are submitted.

58. BOUNDARY LINES

1. FORT RALEIGH NATIONAL HISTORIC SITE. - An additional tract of land has been added to this reservation since the original field inspection. The new corners have been cut in by planetable on the field edit sheet. A legal description of this parcel is contained in this report.

2. NAGS HEAD, ATLANTIC TOWNSHIP. - The Dare County Commissioners have recently voted to change this line, moving it further north. Following is a legal description of this line:

Beginning at the point of intersection of the center line of Eighth (8th) Street in the sub-division of Nags Head Shores, map or plat thereof of record in Map Book 1, Page 179, Dare County Registry, with the shore of the Atlantic Ocean, and running thence along the center of Eighth (8th) Street, and an extension thereof in a straight line, South 70° and 30' West to the Roanoke Sound, so that Atlantic Township shall include all of Dare County north of said line, including the Colington Islands.

Signed

J. E. Forebee, Chairman

G. B. Mann

J. A. Meekins

L. W. Stetson

W. L. Daniel

County Commissioners

With reference to the above description, the intersection of 8th Street and U. S. Highway 158 has been located on the field edit sheet. The plan of "Nags Head Shores", of which 8th Street is included, shows 8th Street running at right angles to U. S. Highway 158.

59. OTHER INTERIOR FEATURES

A new bridge has recently been completed over Roanoke Sound. This has been located on the field edit sheet. No evidence of the old bridge remains. All pertinent bridge data is given on the field edit sheet.

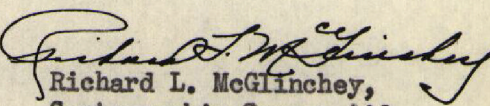
60. JUNCTIONS

Satisfactory junctions have been made with T-9158 on the west, T-9277 on the south, and T-9160 on the east. No junction has been effected* with USE, KITTY HAWK, 1:62,500 on the north.

Junctions, SHK

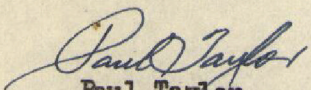
17 April 1953

Submitted by:


Richard L. McGlinchey,
Cartographic Survey Aid

23 April 1953

Approved by:


Paul Taylor
Lt. Comdr., USC&GS
Chief of Photo. Party #1

SUPPLEMENTAL FIELD EDIT REPORT-T-9159

All contour corrections have been shown on photographs 1792(2 of 2) and 1794.

These corrections were made by the use of various methods, i.e., establishing additional planetable elevations at critical points, use of the original spot elevations, visual inspection, and the stereoscope.

In the beginning, planetable elevations were spotted at critical points on the Discrepancy Print. However, this practice was discarded and the elevations transferred to the above mentioned photographs. This action was motivated by the fact that by using the photographs the stereoscope could be used to aid in the shaping of the contours.

The 5, 10, 15, 20, 30, 40, and 60 foot contours have been shown on the photographs.

See 961

Shoreline references to MANN'S PT. R.M., 1903 and GALE, 1950 have been shown on the Discrepancy Print.

Additional information in regards to roads has been shown on the Discrepancy Print.

James E. Hundley
James E. Hundley

50.

PHOTOGRAMMETRIC OFFICE REVIEW

T- 9159

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. Photostereostations~~ 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 J. G. 17. Landmarks J. G. 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~~ 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~~ 30. Other cultural features J. G.

BOUNDARIES

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

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 *Jesse A. Giles* William A. Rasure *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

by Tampa. ENR

49. NOTES FOR THE HYDROGRAPHER

A list of eighteen (18) recoverable topographic stations which may be useful to the hydrographer follows:

BUMP - 1950
FLAGPOLE - 1950
CORNER - 1950
HOTEL - 1950
GABLE - 1950
BOUNDARY MT. NO. 3, MANTEO AIRFIELD - 1950
BOUNDARY MT. NO. 1, MANTEO AIRFIELD - 1950
GALE - 1950
~~CHIMNEY~~ - 1950
CALL - 1950
CAIM - 1950
JANE - 1950
DARE - 1950
ACRE - 1950
HAVE - 1950
ABBY - 1950
BALL - 1950
~~BEACON~~ - 1950

} North of T-9159 limits. ENR

Destroyed (1953) ENR

TOWER 1950 ENR

T-9159.

Geographic Names.

- North Carolina ✓
- Dare County ✓
- Croatan Township ✓) ~~Not indicated on manuscript.~~ ^{287R}
- Nags Head " ✓)
- Atlantic " ✓)
- U.S. No. 158 ✓
- N.C. 345 ✓
- Atlantic Ocean ✓
- Albemarle Sound ✓
- Croatan Sound ✓
- Roanoke Sound ✓
- Roanoke Island ✓
- Fleetwood Point ✓
- Blockade Shoal Light ✓
- Sand Beach Creek ✓
- Broad Creek ✓
- J hns Creek ✓
- Roanoke Sound Bridge ✓
- Ballast Point ✓
- Shallowbag Bay ✓
- Scarboro Creek ✓
- Manteo ✓
- Doughs Creek ✓
- Sandy Point ✓
- Baum Point ✓
- Mother Vineyard ✓
- Mother Vineyard Road ✓
- Old Airport Road ✓
- Roanoke Island Church ✓
- Otis Cove ✓
- Fort Raleigh National Historical Site ✓
- Fort Raleigh City ✓
- Ferry Dock Road ✓
- Northwest Point ✓
- Old Ferry Dock ✓
- Weir Point ✓
- Sunny Side ✓
- Sunny Side Road ✓
- Airport Road ✓
- Manteo Airport ✓
- Ferry Landing ✓
- Burnside Headquarters (Historical Site) ✓
- California ✓
- California Road — County Street Extension ✓
- Haven Creek church ✓

Manteo Well Field Site ✓

(nothing known about this name,
not in original project names
report) in Boundary Report. ENR

Sand Point ✓

Ashbee Harbor ✓

Skyco ✓

Skyco Road ✓

Seven Sisters ✓

(hills)

Sound Side ✓

(community)

Sound Side Road ✓

Nags Head ✓

Engagement Hill ✓

Jackey Ridge ✓

Bodie Island ✓

Hatteras Road ✓

Mann Point ✓

Nags Head Woods ✓

Colington Island ✓

(BGN decision for one "I")

Buzzard Bay ✓

Names underlined in red are
approved. 6-12-52

Stack

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

PHOTOGRAMMETRIC REVIEW SECTION

NONFLOATING AIDS OR LANDMARKS FOR CHARTS

TO BE CHARTED
~~TO BE DELETED~~

STRIKE OUT ONE

Tampa, Florida

7 August, 1951

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

The positions given have been checked after listing by

Webber H. Dawsey

Tampa Photogrammetric Office

Arthur L. Wardwell Chief of Party

STATE	CHARTING NAME	DESCRIPTION	SIGNAL NAME	POSITION				METHOD OF LOCATION AND SURVEY NO.	DATE OF LOCATION	HARBOR CHART	INSHORE CHART	OFFSHORE CHART	CHARTS AFFECTED
				LATITUDE	LONGITUDE	DATUM	D. P. METERS						
NORTH CAROLINA				0 1	0 1		D. P. METERS						
	LIGHT	BLOCKADE SHOAL (Red pile with cage work at top)		See form 567, 1953				N.A. 1927	Rad. Plot T-9159	1950	X		1329
	LT. 42	ROANOKE SOUND* (Red pile with cage work at top)		35 56	800 75 39	773		"	Triang. Ekt 1943	"	X		"
	BN. 39	ROANOKE ISLAND DAYBEACON* (Black square daymark on pile)		35 56	100 75 39	600		"	"	"	X		"
	BN. 37	ROANOKE ISLAND DAYBEACON* (Black square daymark on pile)		35 55	920 75 39	311		"	"	"	X		"
	LIGHT	MANTO CHANNEL JUNCTION (Red and black horizontal banded pile with cage work at top)		35 55	142 75 39	61		"	"	"	X		"
	BN. 36	ROANOKE ISLAND DAYBEACON* (Red triangular daymark on pile)		35 55	107 75 38	1493		"	"	"	X		"
	LT. 33	ROANOKE ISLAND* (Black box on pile)		35 54	1084 75 38	1032		"	"	"	X		2
													25

This form shall be prepared in accordance with Hydrographic Manual, pages 800 to 804. Positions of charted landmarks and nonfloating aids to navigation, if redetermined, shall be reported on this form. The data should be considered for the charts of the area and not for

PHOTOGRAMMETRIC REVIEW SECTION DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEYNONFLOATING AIDS ~~TO BE CHARTED~~ FOR CHARTS

TO BE CHARTED

STRIKE OUT ONE

~~TO BE DELETED~~

Tampa, Florida

7 August, 19 51

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

The positions given have been checked after listing by

Webster W. Dawsey

Tampa Photogrammetric Office

Arthur L. Wardwell

Chief of Party

STATE	CHARTING NAME	DESCRIPTION	SIGNAL NAME	POSITION				METHOD OF LOCATION AND SURVEY No.	DATE OF LOCATION	HARBOR CHART	INSHORE CHART	OFFSHORE CHART	CHARTS AFFECTED
				LATITUDE		LONGITUDE							
				°	'	°	'						
	BN. 32	ROANOKE ISLAND DAYBEACON* (Red triangular daymark on pile)		35	54	75	38	885	N.A. 1927		X		1229
	LT. 31	ROANOKE ISLAND* (Black box on pile)		35	54	75	38	906	**		X		"
	BN. 29	ROANOKE ISLAND DAYBEACON* (Black square daymark on pile)		35	53	75	38	512	**		X		"
	BN. 28	ROANOKE ISLAND DAYBEACON* (Red triangular daymark on pile)		35	53	75	37	1258	"		X		"
	BN. 4	MANTO CHANNEL DAYBEACON* (Red triangular daymark on pile)		35	54	75	39	1474	"		X		"
	LT. 2	MANTO CHANNEL (Red slatted pile structure)		35	54	75	39	1117	"		X		"
		* Designation should be "Roanoke Sound Channel" aids.											
		** New position determined in 1953. See form 567 which follows. E.H.K.											
													26

This form shall be prepared in accordance with Hydrographic Manual, pages 800 to 804. Positions of charted landmarks and nonfloating aids to navigation, if redetermined, shall be reported on this form. The data should be considered for the charts of the area and not for

STRIKE OUT ONE

Tampa, Florida

16 August, 1951

The positions given have been checked after listing by

Hobbes W. Dawsey,

Tampa Photogrammetric Office

Arthur L. Wardwell *Chief of Party.*

Chief of Party.

27

This form shall be prepared in accordance with Hydrographic Manual, pages 800 to 804. Positions of charted landmarks and *nonfloating aids* to navigation, if redetermined, shall be reported on this form. The data should be considered for the charts of the area and not for

**TO BE CHARTED
TO BE DELETED**

STRIKE OUT ONE

NONFLOATING AIDS OR LANDMARKS FOR CHARTS

Tampa Photogrammetric Office, Tampa, Fla. 17 September, 1953

I recommend that the following objects which have ~~(been)~~ charted on ~~(deleted from)~~ the charts indicated.

I recommend that the following objects which have ~~(have not)~~ been inspected from seaward to determine their value as landmarks be
 orted on ~~(deleted from)~~ the charts indicated.

The positions given have been checked after listing by

Webber W. Dancy

[illegible]

This form shall be prepared in accordance with Hydrographic Manual, pages 800 to 804. Positions of charted landmarks and *nonfloating aids* to navigation, if redetermined, shall be reported on this form. The data should be considered for the charts of the area and not by individual field survey sheet. Information under each column heading should be given.

TIDE COMPUTATION

PROJECT NO. PH-45(49)T-9159

Time and date of exposure 13:42 5-12-49

Reference station HAMPTON ROADS, VIRGINIA

Mean range 2.5

Date of field inspection 2-6-50

Subordinate station

OREGON INLET, NORTH CAROLINA

Ratio of ranges 0.7

	Time	
	h.	m.
High tide	21	07
Low tide	15	18
Duration of rise or fall	5	49

	Height	Height x Ratio of ranges
	feet	
High tide	2.7	$2.7 \times 0.7 = 1.9$
Low tide	0.0	$0.0 \times 0.7 = 0.0$
Range of tide		1.9

	Time	
	h.	m.
High tide at Ref. Sta.	21	07
Time difference	-1	50
Corrected time at Subordinate station	19	17

	Time	
	h.	m.
Low tide at Ref. Sta.	15	18
Time difference	-1	50
Corrected time at Subordinate station	13	28

Time 4/4/4 L. T.						
Required time	13: 28					
Interval	13:42					
	14					
Time H. T. or L. T.						
Required time						
Interval						
Time H. T. or L. T.						
Required time						
Interval						
Time H. T. or L. T.						
Required time						
Interval						
Time H. T. or L. T.						
Required time						
Interval						

h.	m.					
13: 28						
13:42						
14						
		Ht. 4/4/4 L. T.				
		Tabular correction				
		Stage of tide above MLW				
		Ht. H. T. or L. T.				
		Tabular correction				
		Stage of tide above MLW				
		Ht. H. T. or L. T.				
		Tabular correction				
		Stage of tide above MLW				
		Ht. H. T. or L. T.				
		Tabular correction				
		Stage of tide above MLW				
		Ht. H. T. or L. T.				
		Tabular correction				
		Stage of tide above MLW				

		feet	feet	Photo. No.
Feature bares	Feature bares	0.0		
Stage of tide above MLW	Stage of tide above MLW	0.0		
Feature above MLW	Feature above MLW	0.0		
Feature bares	Feature bares			
Stage of tide above MLW	Stage of tide above MLW			
Feature above MLW	Feature above MLW			
Feature bares	Feature bares			
Stage of tide above MLW	Stage of tide above MLW			
Feature above MLW	Feature above MLW			
Feature bares	Feature bares			
Stage of tide above MLW	Stage of tide above MLW			
Feature above MLW	Feature above MLW			
Feature bares	Feature bares			
Stage of tide above MLW	Stage of tide above MLW			
Feature above MLW	Feature above MLW			
Feature bares	Feature bares			
Stage of tide above MLW	Stage of tide above MLW			
Feature above MLW	Feature above MLW			

LIST OF DIRECTIONS

Station BAND 1950 State N. CAROLINA
Chief of party PAUL TAYLOR Date 6 FEBRUARY 1953 Computed by R.L.M.
Observer R.L.M. & GLINCHEY Instrument GURLEY # 473550 Checked by R.S.T.

OBSERVED STATION	Observed direction	Eccentric reduction	Sea level reduction*	Corrected direction with zero initial	Adjusted direction*
MANTED WATER TANK, 1943	0 00 00.00			0 00 00.00	
ROANOKE IS. DAY-BN. #29	332 56 42				
ROANOKE IS. LIGHT #31	338 20 56				
ROANOKE IS. DAY-BN. #32	343 54 42				

* These columns are for office use and should be left blank in the field.

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY
Form 24A
Rev. Oct., 1932

CANAL LT. 1950
Station MANN'S HARBOR State N. CAROLINA

Chief of party PAUL TAYLOR Date 9 FEBRUARY 1953 Computed by R.L.M.

Observer R. L. McGLINCHEY Instrument GURLEY 473550 Checked by P. S. T.

* These columns are for office use and should be left blank in the field.

Station CRATON LIGHT, 1943 State N. CAROLINA

Chief of party PAUL TAYLOR Date 9 FEB. 1953 Computed by R.L.M.

Observer R. L. McGLINCHEY Instrument GURLEY # 473550 Checked by R. S. T

* These columns are for office use and should be left blank in the field.

LIST OF DIRECTIONS

Station CONTROL PT "B" (1950) State N. CAROLINA

Chief of party PAUL TAYLOR Date 6 FEBRUARY 1953 Computed by R. L. M.

Observer R. L. McGINCHY Instrument SURLEY # 473550 Checked by R. S. T.

[illegible]

* These columns are for office use and should be left blank in the field.

History of Hydrographic Information for T-9159

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

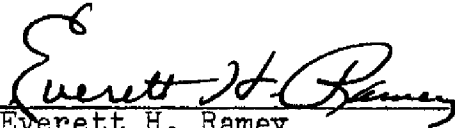
Depth curves and soundings are in feet at mean low water datum and originate with the following:

Hydrographic surveys:

H-1053	1:40,000	1870
H-3772	1:20,000	1915
H-6813	1:10,000	1943

and Nautical Chart 1229, 1:80,000, 1942 corrected to 53-8/24.

Hydrography was compiled by Everett H. Ramey on 21 September 1954 and verified by O. Svendsen on 29 September 1954.


Everett H. Ramey

Review Report
Topographic Map T-9159
13 May 1954

61: General.--Additional field edit for specific items of this map was accomplished in 1954. However, 1953 should be regarded as the latest date for field work for the map as a whole.

62. Comparison with Registered Topographic Surveys.--

T-351	1:20,000	1851
T-826	"	1861
T-933	"	1864
T-2952	"	1909
T-3538	1:40,000	1915-16
T-5572	1:20,000	1935

There have been many changes in culture since these surveys. Also there are a few differences in shoreline and topography between T-9159 and the above surveys. Map T-9159 should supersede the above surveys for nautical charting purposes for the area it encompasses.

63. Comparison with Maps of Other Agencies.--

Roanoke Island, N.C. (USE) 1:125,000 1942
Adequately discussed under Item 46.

64. Comparison with Contemporary Hydrographic Surveys.-- None

65. Comparison with Nautical Charts.--

1229 1:80,000 1942 corrected to 53-8/24

There are many differences in culture between this chart and map T-9159. Data for the new Roanoke Sound Bridge which was obtained by the field editor in 1953 is not shown on this chart. (See Item 59). Changes made to the map manuscript during this review are shown in red.

66. Adequacy of Results and Future Surveys.--This map meets the National Standards of map accuracy and complies with project instructions.

67. Horizontal Accuracy.--Reference Supplemental Compilation Report. During the supplemental field edit by J. E. Hundley reference measurements were taken from station "MANNS POINT RM, 1903" to identifiable shore features. No error in position could be detected. This corroborates the conclusion by the compiler that the substitute point was misidentified and that the compilation is accurate.

68. Contours. - Reference Supplemental Field Edit Report. The 25, 35, 45, 50, and 55 foot contours were added during this review. The area has been delineated by 5-foot intervals except the very small peaks which are shown by spot elevations.

69. Roads. - Reference Item 2. The location of U.S. 64 on Roanoke Island was shown by the supplemental field edit.

Reviewed by:

Everett H. Ramey
Everett H. Ramey

APPROVED BY:

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SURVEY NO. 9159

[illegible]

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.