

9835

Diag. Cht. No. 1228

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey Topographic

Field No. Ph-61 (49) Office No. T-9835

LOCALITY

State North Carolina

General locality Roanoke River

Locality Plymouth

1945 51-54

CHIEF OF PARTY

H. F. Garber, Chief of Field Party
J. E. Waugh, Tampa Photogrammetric Office

LIBRARY & ARCHIVES

DATE June 19, 1957

9835

DATA RECORD

T - 9835

Project No. (II): Ph-61(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 June 1951

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):

SEP 28 1953

Date reported to Nautical Chart Branch (IV):

Applied to Chart No.

Date:

Date registered (IV): 3-14-57

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 water

Reference Station (III): PIPE STATION C-1, 1942 (U.S.E.)

Lat.: 35° 52' 07".691 (237.0 m.) Long.: 76° 44' 28".782 (722.1 m.)

Adjusted
~~Coordinates~~

Plane Coordinates (IV):

State: North Carolina 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):	Warren M. Gottschlich, Cartographic Survey Aid	Date:	Sept., 1951 ✓
Planetable contouring by (II):	Warren M. Gottschlich, Cartographic Survey Aid	Date:	July-Oct., 1951
Completion Surveys by (II):	<i>James E. Hundley</i>	Date:	<i>June 1954</i> ✓
Mean High Water Location (III) (State date and method of location):			17 March 1951 Air Photo Compilation
Projection and Grids ruled by (IV):	J. A. (W.O.)	Date:	24 Jan. 1952
Projection and Grids checked by (IV):	H. D. W. (W.O.)	Date:	28 Jan. 1952
Control plotted by (III):	R. E. Smith, Jr.	Date:	17 Mar. 1952
Control checked by (III):	I. I. Saperstein	Date:	31 Mar. 1952
Radial Plot or Stereoscopic <i>M. M. Slavney</i> Control extension by (III):		Date:	15 Aug. 1952
	Planimetry	Date:	
Stereoscopic Instrument compilation (III):	Inapplicable	Date:	
	Contours	Date:	
Manuscript delineated by (III):	R. Dossett, C. E. Downing, R. R. Wagner. (Completed by R. Dossett)	Date:	10 July 1953
Photogrammetric Office Review by (III):	J. A. Giles	Date:	25 Aug. 1953
Elevations on Manuscript checked by XX (III):	R. Dossett	Date:	9 July 1953

Camera (kind or source) (III): USC&GS Nine-lens camera, 1 1/4" focal length

PHOTOGRAPHS (III)				
Number	Date	Time	Scale	Stage of Tide
33122	17 March 1951	1042	1:20,000	No Periodic tide *
33123	"	1043	"	"
33124	"	1044	"	"
33136	"	1107	"	"
33137	"	1108	"	"
33138	"	1109	"	"
33139	"	1110	"	"
33151	"	1132	"	"
33152	"	1133	"	"
33153	"	1134	"	"
33154	"	1135	"	"

Tide (III)

Reference Station: No periodic tide *
 Subordinate Station: * Less than 1/2 foot. *SHR*
 Subordinate Station:

Ratio of Ranges	Mean Range	Spring Range

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

Date: *20 Dec 1954*

Final Drafting by (IV): *F. Johnson*

Date: *9-13-55*

Drafting verified for reproduction by (IV):

Date:

Proof Edit by (IV):

Date:

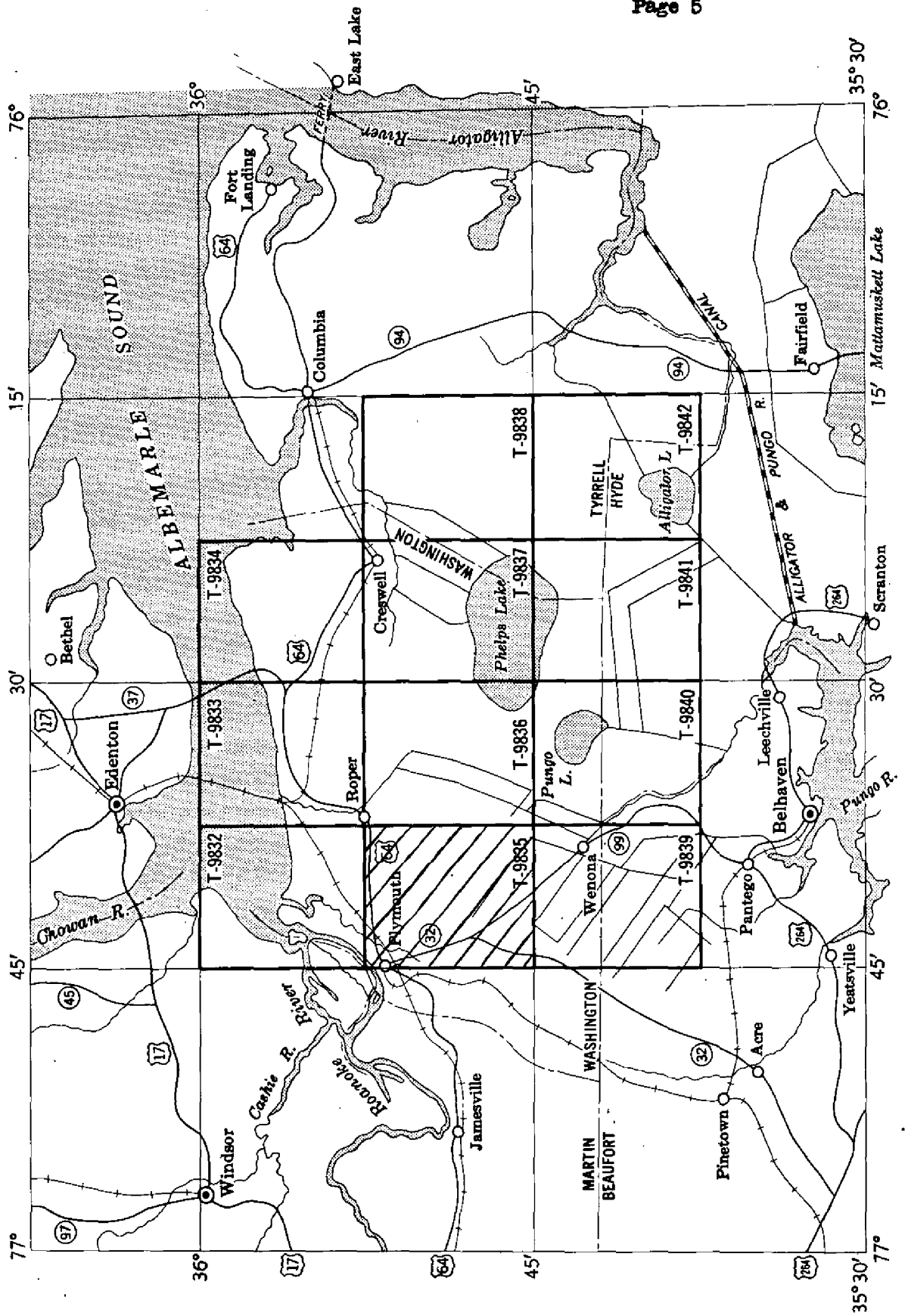
Land Area (Sq. Statute Miles) (III): *60.5*
 Shoreline (More than 200 meters to opposite shore) (III): *0*
 Shoreline (Less than 200 meters to opposite shore) (III): *0.4*
 Control Leveling - Miles (II): *24.5 miles of fly levels*
 Number of Triangulation Stations searched for (II): *8*
 Number of BMs searched for (II): *6*
 Number of Recoverable Photo Stations established (III): *2*
 Number of Temporary Photo Hydro Stations established (III): *0*
 Number of Bench Marks Established: (II): *7*
 Number of Traverse Stations Established: (II): *2*
 Remarks:

Recovered: 7	Identified: 4
Recovered: 5	Identified: 3

Identified: 7
Identified: 1

TOPOGRAPHIC MAPPING PROJECT PH-61-(49)
NORTH CAROLINA, Albemarle Sound and Vicinity

Compilation scale 1:20,000



Summary to Accompany Topographic Map T-9835

Topographic map T-9835 is one of eleven similar maps in Project Ph-61(49). It covers portions of the Roanoke River in North Carolina and adjacent land area to the southward.

Project Ph-61(49) is a graphic compilation project. Field work in advance of compilation included the recovery and identification of horizontal and vertical control, the establishment of some additional control, complete shoreline and interior inspection, the delineation of 5-foot contours directly on the photographs by planetable methods and the investigation of geographic names and political boundaries.

Map T-9835 was compiled at a scale of 1:20,000 using nine-lens photographs taken in 1951. The map was field edited. After the addition of hydrography the map will be published by the Geological Survey as a standard 7½' topographic quadrangle.

Items registered under T-9835 will be a descriptive report, copies of the map manuscript at a scale of 1:20,000 and the published map at a scale of 1:24,000.

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Items registered under T-9835 will be a descriptive report, copies of the map manuscript at a scale of 1:20,000 and the published map at a scale of 1:24,000.

FIELD INSPECTION REPORT

The field work for this quadrangle was done in accordance with the Topographic Manual and the project instructions. In addition to the phases shown on pages two and three, the work was accomplished by the following personnel:

<u>Name and Title</u>	<u>Phase</u>	<u>Date</u>
Warren M. Gottschlich, Cartographic Survey Aid	Vertical Control	July, 1951
Matthew A. Stewart, Cartographic Survey Aid	Vertical Control	August, 1951
James E. Hundley, Cartographer	Horizontal Control Traverse	Oct. & Nov., 1951
Henry R. Spies, Cartographic Survey Aid	Horizontal Control Traverse	December, 1951
Allen L. Powell, Lieutenant, USC&GS	Horizontal Control	July, 1951

2. AREAL FIELD INSPECTION

A portion of the town of Plymouth, the county seat of Washington County, is within the limits of this quadrangle. Plymouth is situated on the southern bank of the Roanoke River and has a small water front for handling river traffic.

The principal industries are agriculture, lumbering and manufacturing of paper and wood products.

The relatively high sandy land in the northern part of the quadrangle and a fringe along North Carolina Highway No. 32 in the western part is under cultivation. The remaining western part not under cultivation is covered with heavy underbrush and scattered pines. The east and central parts are swamp lands, and the southern part is burned over swamp land. This burned-over area, classified on the field photographs as marsh, is a black muck covered with a matted vegetation and a cat-tail grass that is five to six feet high.

The field inspection is believed to be complete.

3. HORIZONTAL CONTROL

All known horizontal control stations were searched for and reported on Form 526. *(Includes C&G.S. and C of E. control) ENR*

(a) Since horizontal control stations were rather sparse along the western limits of the project, a monumented third-order traverse was run from Pipe Station C1 USE, 1942 to Triangulation Station REKA, 1933. Also, a spur line was run from C1-RE-1, 1951 to Canal D near Pungo Lake. No monumented stations were established along the spur line. A part of both of these traverses falls within the limits of this quadrangle. The following monumented control points were established within the limits of this quadrangle:

C1-RE-1, 1951 ✓
C1-RE-1A, 1951

A Special Report on Horizontal Control for Ph-61(83) - including diagram - is filed with the

(b) No datum adjustments were made. *Descriptive Report for T-9839.*

4. VERTICAL CONTROL

(a) A third-order level line was run from the town of Plymouth along North Carolina Highways Nos. 32 and 99 to Pantego, N. C. The following bench marks were established within the limits of this quadrangle:

A-250, 1951 ✓
B-250, 1951 ✓
C-250, 1951 ✓
D-250, 1951 ✓
E-250, 1951 ✓
F-250, 1951 ✓
G-250, 1951 ✓

First order bench marks along the Norfolk and Southern Railroad in the vicinity of Plymouth were used for vertical control. These marks were established by the U.S.C. & G.S. in 1932. A list of these marks follows:

J-25, 1932 ✓
K-25, 1932 ✓
L-25, 1932 ✓

All known bench marks were searched for and reported on Form 685A.

(b) Fly levels were run to provide additional control for contouring. The largest closing error was 0.48 foot between 32-28 and 32-33; this line was adjusted.

(c) The first and last fly level points are 35-1 and 35-61.

5. CONTOURS AND DRAINAGE

Planetable contouring at five-foot intervals was done directly on field photographs.

The northern part of the quadrangle is drained by the Roanoke River and its tributaries. The southern part is drained via canals and small streams by Pungo River.

6. WOODLAND COVER

The line of demarcation between woodland, swamp and marsh has been indicated on the field photographs sufficiently for the compiler to delineate the remainder.

7. SHORELINE AND ALONGSHORE FEATURES

The only shoreline in this quadrangle is a small portion of the Roanoke River running along the northern side of the town of Plymouth. The northern side of the river is apparent shoreline. The Plymouth water front, the southern side of the river, has been delineated on the field photographs.

The numerous ditches in the cultivated areas are small in size and have no value in depicting relief. The main canals and drainage ditches were indicated on the field photographs by turning the contours into them. *Sec 956*

8. OFFSHORE FEATURES

There are no offshore features within the limits of this quadrangle.

9. LANDMARKS AND AIDS

Plymouth Water Tank and a stack are recommended for landmarks and are reported on Form 567. Attention is called to the erroneous published position of Plymouth Water Tank. (See recovery card.)

10. BOUNDARIES, MONUMENTS AND LINES

This will be the subject of a special report^{*} to be submitted at a latter date. ** Report by James E. Hundley is filed under project data, Div. of Photogrammetry. EHR*

11. OTHER CONTROL

The following recoverable topographic stations were established:

FIRE TOWER, 1951 ✓
PLYMOUTH WATER TANK, 1951 ✓

12. OTHER INTERIOR FEATURES

Roads and buildings were classified in accordance with the Topographic Manual. Telephone and power lines were delineated on the field photographs when not following roads. There are no bridges or cables over navigable water within the limits of this quadrangle.

13. GEOGRAPHIC NAMES

A project report on this subject will be submitted at a later date. *Filed in Geographic Names Section, Div. of Charts.*

14. SPECIAL REPORTS AND SUPPLEMENTAL DATA

See Items 10 and 13.

7 December 1951

Submitted by:

Allen L. Powell

Allen L. Powell,
Lieutenant, USC&GS

27 December 1951

Approved by:

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

MAP T-9835 PROJECT NO. Pa-61(49) SCALE OF MAP 1:20,000 SCALE FACTOR

STATION	SOURCE OF INFORMATION (INDEX)	DATUM	LATITUDE OR Y-COORDINATE LONGITUDE OR X-COORDINATE		DISTANCE FROM GRID IN FEET, OR PROJECTION LINE IN METERS		DATUM CORRECTION	N.A. 1927 - DATUM DISTANCE FROM GRID OR PROJECTION LINE IN METERS		FACTOR DISTANCE FROM GRID OR PROJECTION LINE IN METERS
					FORWARD	(BACK)		FORWARD	(BACK)	
PLYMOUTH, STACK, 1931	G.P.'s Pg 51	N.A. 1927	35	52	26.313			811.0	(1038.2)	
			76	44	29.164			731.6	(773.6)	
CI-RE-1, 1951	Field Comp	"	751,983.77			1,983.77	(8,016.23)			
			2,674,960.84			4,960.84	(5,039.16)			
CI-RE-1A, 1951	"	"	750,233.64			233.64	(9,766.36)			
			2,674,776.26			4,776.26	(5,223.74)			
CONTROL PT. "AA"	"	"	744,026.30			4,026.30	(5,973.70)			
			2,681,577.18			1,577.18	(8,422.82)			
PIPE STATION A-1, Plymouth 1942 (USE)	Quad 4	"	35	52	27.281			840.8	(1008.4)	
			76	40	29.569			741.8	(763.4)	
PIPE STATION C-1, Plymouth 1942 (USE)	Quad 1	"	35	52	07.691			237.0	(1612.2)	
			76	44	28.782			722.1	(783.2)	
PIPE STATION A-1, James- ville 1942 (USE)	Quad 14	"	35	48	42.183			1300.1	(549.1)	
			76	49	49.007			1230.3	(276.0)	Recovered in disturbed state.
PIPE STATION B-1 1942 (USE)	Quad 17	"	35	49	52.918			1630.9	(218.2)	
			76	47	45.861			1151.1	(354.9)	

G.P. on P. 1080
N.C. G.P. 5

COMPILATION REPORT T-9835PHOTOGRAMMETRIC PLOT REPORT.

Submitted with T-9834.

31. DELINEATION.

Compiled graphically.

The photographs were of reasonably good scale. Photograph No. 33137 showed considerable tilt.

The field inspection was adequate.

32. CONTROL.

Sufficient secondary control was established and placement was such that no difficulty was encountered in securing detail points.

33. SUPPLEMENTAL DATA.

None.

See § 14

34. CONTOURS AND DRAINAGE.

A well defined and complicated system of drainage ditches is apparent on the photographs, in areas cleared for cultivation. The compiler has delineated his interpretation of the main drainage structure and eliminated many that appear to be of temporary nature.

See § 56

No difficulty was encountered in the delineation of the contours which appear to be well characterized.

35. SHORELINE AND ALONGSHORE DETAILS.

Reference Item 7.

36. OFFSHORE DETAILS.

Reference Item 8.

37. LANDMARKS AND AIDS.

Reference Item 9.

38. CONTROL FOR FUTURE SURVEYS.

Two (2) recoverable topographic stations are being submitted on Form 524. They have been listed under Item 49.

39. JUNCTIONS.

A satisfactory junction has been made with T-9832 on the north, T-9836 on the east and T-9839 on the south. There is no contemporary survey on the west.

40. HORIZONTAL AND VERTICAL ACCURACY.

No statement.

See §66

46. COMPARISON WITH EXISTING MAPS.

A comparison was made with the PLYMOUTH quadrangle, U. S. Corps of Engineers, scale 1:125,000, a photogrammetric compilation of 1942. Except for highway survey changes, no outstanding differences were noted.

*See §62
& §63*

47. COMPARISON WITH NAUTICAL CHARTS.

A comparison was made with Nautical Chart No. 1228, scale 1:80,000, published May 1937 and corrected to 23 June 1949. No comparable difference was noted.

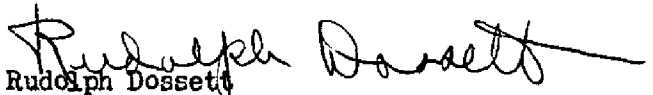
See §65

ITEMS TO BE APPLIED TO NAUTICAL CHARTS IMMEDIATELY.


None.

ITEMS TO BE CARRIED FORWARD.

None.


Rudolph Dossett
Carto Photo Aid

APPROVED AND FORWARDED:


J. E. Waugh, Chief of Party

FIELD EDIT REPORT
Project PH-61(49)
Quadrangle T-9835

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 June, 1954.

Field edit data appears on the field edit sheet, discrepancy print, field photographs 33137, 33138, 33139, 33152 (1 of 2), and in this report.

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.

53. MAP ACCURACY

The horizontal accuracy of the map detail is relatively good.

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

Minor contour corrections, to improve expression, were made on photographs 33137, 33138 and 33152 (1 of 2).

54. RECOMMENDATIONS

Recommend that Item 55 - Examination of Proof Copy be discontinued for the following reason: It is believed that the field editor does a more thorough job of checking the accuracy of compilation of any area than some uninterested individual.

See 866

55. GEOGRAPHIC NAMES

Refer to Item 48 - Compilation Report.

Delete the following names:

1. BROOKS SCHOOL
2. COUNTY HOME SCHOOL

These buildings are no longer used as schools or County Home.

56. DRAINAGE

Refer to Item 34 - Compilation Report.

All feeder ditches have been deleted from the field edit sheet.

Additional main drainage has been shown on the field edit sheet and photograph 33152 (1 of 2).

57. OTHER INTERIOR FEATURES

Refer to Item 12 - Field Inspection Report.

The reclassification of roads and buildings, where justifiable, has been shown on the field edit sheet.

Additional buildings and roads have been shown on the field edit sheet and photographs 33138 and 33139, respectively.

58. JUNCTIONS

Satisfactory junctions have been made with all adjacent contemporary surveys.

25 June 1954
Submitted by:

James E. Hundley
James E. Hundley
Cartographer

25 June 1954
Forwarded by:

J. E. Waugh
J. E. Waugh
CDR, USC&GS
Chief of Party

50.

PHOTOGRAMMETRIC OFFICE REVIEW

T. 9835

- 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 XX 14. Rocks, shoals, etc. XX 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 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:

Review Report
Topographic Map T-9835
20 December 1954

62. Comparison with Registered Topographic Surveys

T-922 1:20,000 1864

There are many differences in culture and position of detail. Map T-9835 is to supersede this survey for nautical charting for the area encompassed by T-9835.

63. Comparison with Maps of Other Agencies

Plymouth Quadrangle (C. of E., 1:125,000) 1943

A visual comparison reveals some differences in culture and drainage.

64. Comparison with Contemporary Hydrographic Surveys: None

65. Comparison with Nautical Charts

1228 1:80,000 1937 corrected to 53-5/11

Only minor differences in roads and drainage exist between this chart and T-9835. Changes made in the map subsequent to field edit are shown in red on a vinylite impression of the map manuscript.

66. Adequacy of Results and Future Surveys

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

Reviewed by:

Everett H. Ramey
Everett H. Ramey

Approved by:

L. C. Lande
Chief, Review Branch

Max S. Ricketts
Chief, Nautical Chart Branch,
Division of Charts

L. W. Pearson
Chief, Division of
Photogrammetry

J. S. Swell
Chief, Division of Coastal Surveys

5 April 1957

Review Report
Topographic Map T-9835
20 December 1954

62. Comparison with Registered Topographic Surveys

T-922 1:20,000 1964

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Reviewed by:

Everett H. Ramey

Approved by:

Chief, Review Branch

Chief, Nautical Chart Branch,
Division of Charts

Chief, Division of
Photogrammetry

Chief, Division of Coastal Surveys

49. NOTES FOR THE HYDROGRAPHER.

Following is a list of recoverable topographic stations for use by the hydrographer:

FIRE TOWER, 1951

PLYMOUTH WATER TANK, 1951

48. GEOGRAPHIC NAME LIST

- BERTIE COUNTY ✓
- BROOKS SCHOOL ✓ See § 55
- CONABY CREEK ✓
- COUNTY HOME SCHOOL ✓ See § 55
- EAST DISMAL SWAMP ✓
- LILY VALLEY CHURCH ✓
- LEES MILLS TOWNSHIP ✓
- MACEDONIA ✓
- MORATTOCK CHURCH ✓
- NORTH CAROLINA ✓
- NORFOLK SOUTHERN RAILROAD ✓
- OLD TURNPIKE ✓
- PINERIDGE ✓
- PLYMOUTH ✓
- PLYMOUTH TOWNSHIP ✓
- ROANOKE RIVER ✓
- STATE 32 ✓
- STATE 99 ✓
- SKINNERS CANAL ✓
- TIDEWATER EXPERIMENT STATION ✓
- U. S. 64 ✓
- UNION CHAPEL CHURCH ✓
- WASHINGTON COUNTY ✓
- Washington County Courthouse. ✓
- Atlantic Coast Line ✓

Names approved 7-24-53
 on basis of project
 Names report.
 L. Heagy
 Re-checked 12-20-54

