8972

Diag. Cht. No. 1231-2

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey TOPOGRAPHIC

Field No. Ph-20(47) Office No. T-8972

LOCALITY

State NORTH CAROLINA

General locality PAMLICO SOUND

Locality MATTAMUSKEET LAKE, NORTHWEST SECTION

194 51

CHIEF OF PARTY

E.R.McCarthy, Chief of Field Party.
A.L.Wardwell, Tampa Photogrammetric Office

LIBRARY & ARCHIVES

DATE August 14, 1953

8-1870-1 (1)

8972

DATA RECORD

T-8972

Project No. (II): Ph-20 (47) Quadrangle Name (IV): New Lake SE, N.C.

Field Office (II): Manteo, N. C. Chief of Party: E. R. McCarthy

Photogrammetric Office (III): Tampa, Florida Officer-in-Charge: Arthur L. Wardwell

Instructions dated (II) (III): 23 July 1948 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): [illegible] Date reported to Nautical Chart Branch (IV): 4-25-51

Applied to Chart No. Date: Date registered (IV): 7-23-53

Publication Scale (IV): 1:24000 Publication date (IV): 1951

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

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): SIXTEEN, 1935

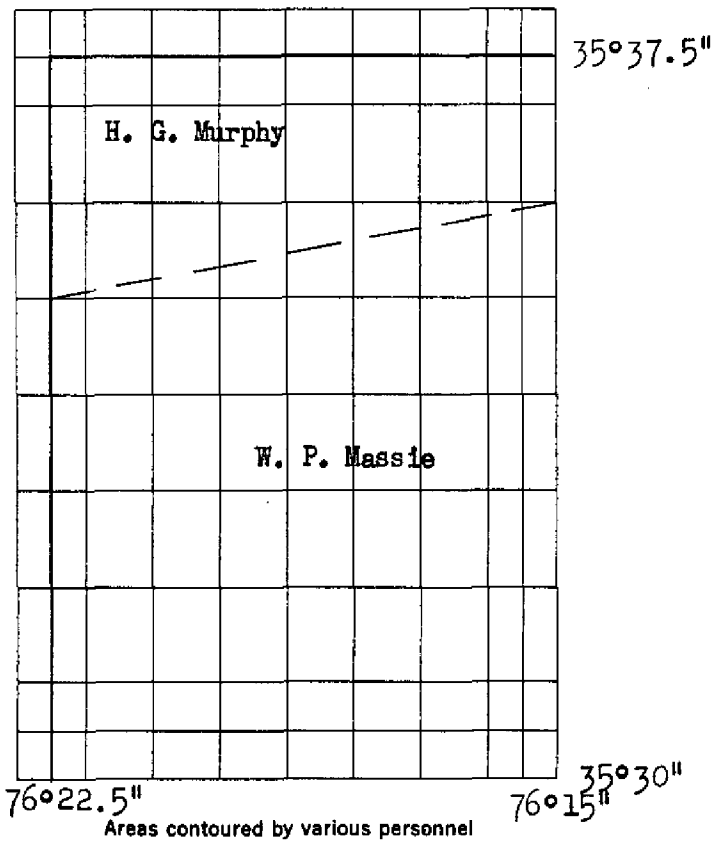
Lat.: 35°34' 13".733 (423.2 m) Long.: 76°21' 24".068 (606.1 m) Adjusted [illegible]

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.



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

W. P. Massie, Cartographic Survey Aid
H. G. Murphy, Cartographic Survey Aid

DATA RECORD

Field Inspection by (II): W. P. Massie, Cartographic Survey Aid
H. G. Murphy, Cartographic Survey Aid
Date: 11 October 1949 to 31 January 1950

Planetable contouring by (II): W. P. Massie, Cartographic Survey Aid
H.G. Murphy, Cartographic Survey Aid
Date: 14 October 1949 to 1 February 1950

Completion Surveys by (II): cJames E. Hundley
Date: 21 June 1951

Mean High Water Location (III) (State date and method of location):
Air Photo compilation
15 April 1949

Projection and Grids ruled by (IV): W. E. W. (W.O.)
Date: 2 June 1948

Projection and Grids checked by (IV): W. E. W. (W.O.)
Date: 2 June 1948

Control plotted by (III): B. F. Lampton
Date: 22 September 1948

Control checked by (III): R. R. Wagner
Date: 23 September 1948

Radial Plot ~~or Stereoscopic~~ Control extension by (III): M. M. Slavney
Date: 16 August 1950

Planimetry

Stereoscopic Instrument compilation (III): Inapplicable
Date: —

[redacted]

Manuscript delineated by (III): C. J. Downing
Date: 15 January 1951

Photogrammetric Office Review by (III): J. A. Giles
Date: 6 February 1951

Elevations on Manuscript checked by ~~XXX~~ (III): C. J. Downing
Date: 15 January 1951

Camera (kind or source) (III): U. S. C. & G. S. Nine-lens 8¼" focal length

PHOTOGRAPHS (III)

Number	Date	Time	Scale	Stage of Tide
21621	26 Jan. 1948	13:28	1:20,000	No periodic tide
21622	26 Jan. 1948	13:29	"	"
22154	29 Mar. 1948	13:00	"	"
22155	29 Mar. 1948	13:01	"	"
22156	29 Mar. 1948	13:02	"	"
24109	21 Dec. 1948	12:06	"	"
24110	21 Dec. 1948	12:07	"	"
24111	21 Dec. 1948	12:08	"	"
24112	21 Dec. 1948	12:09	"	"
24121	21 Dec. 1948	12:24	"	"
24122	21 Dec. 1948	12:25	"	"

Tide (III)

Reference Station: No periodic tide

Subordinate Station:

Subordinate Station:

Ratio of Ranges	Mean Range	Spring Range

Washington Office Review by (IV): K. N. Maki Date: 2 May 1952

Final Drafting by (IV): Date:

Drafting verified for reproduction by (IV): Date:

Proof Edit by (IV): Date:

Land Area (Sq. Statute Miles) (III): 53

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

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

Control Leveling - Miles (II): 6.0

Number of Triangulation Stations searched for (II): 9 Recovered: 7 Identified: 6

Number of BMs searched for (II): None Recovered: 0 Identified: 0

Number of Recoverable Photo Stations established (III): 3

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

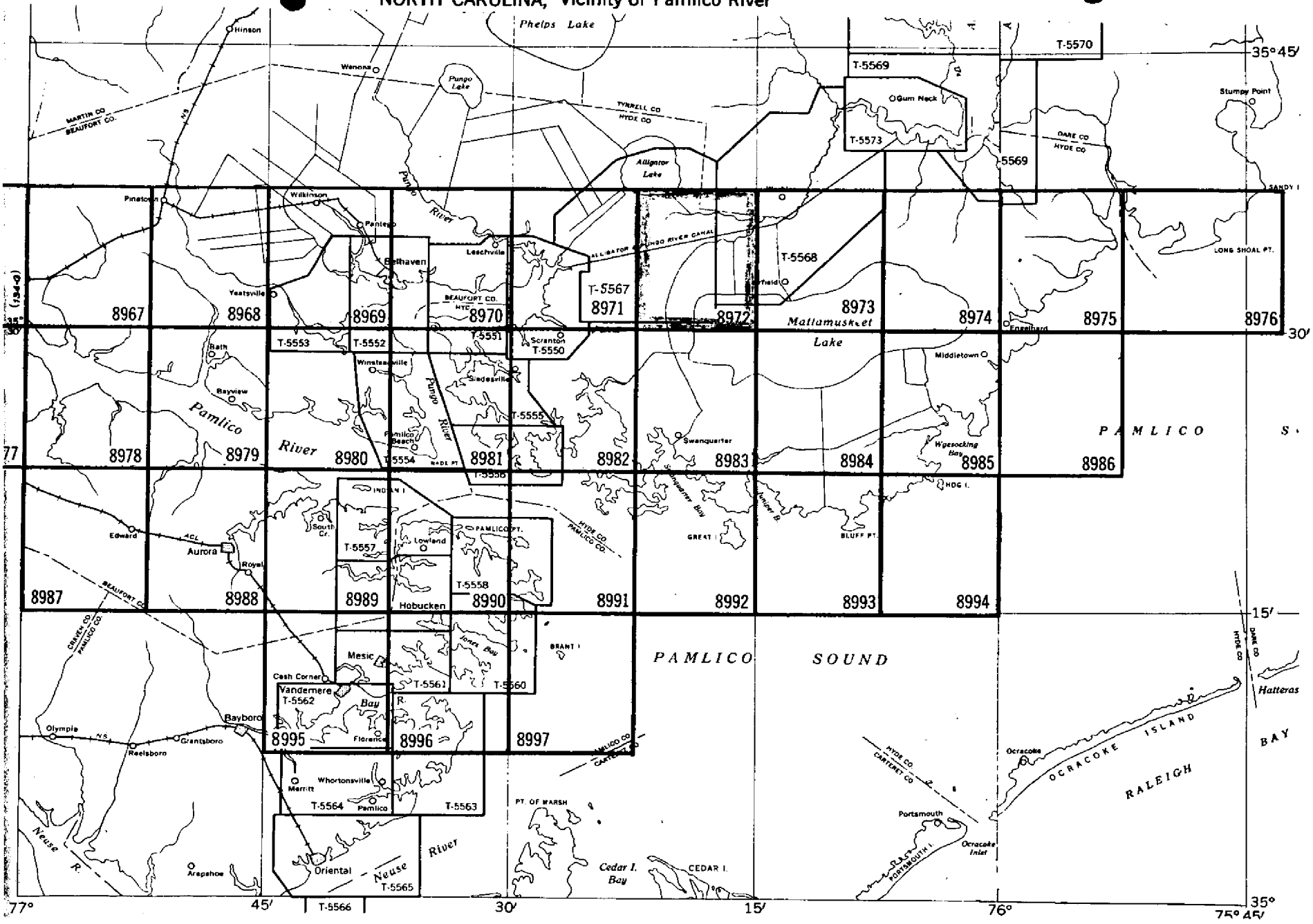
Remarks:

M-2618-12(4)

TOPOGRAPHIC MAPPING PROJECT

PH-20(47)

NORTH CAROLINA, Vicinity of Pamlico River



Summary to Accompany T-8972

Topographic map T-8972 is one of a series of 32 maps in Project Ph-20(47). The field operations included complete field inspection and planetable contouring on 1:20,000 scale nine-lens photos. The manuscript was graphically compiled and completely field edited.

This map is to be published by the U. S. Geological Survey at a scale of 1:24,000 as a standard 7½ minute quadrangle. The registered copies under T-8972 to be filed in the Bureau Archives will include the original descriptive report, a cloth-mounted print of the manuscript at a scale of 1:20,000 and a cloth-mounted print of the published map at a scale of 1:24,000.

FIELD INSPECTION REPORT
QUADRANGLE T-8972
35-30/37.5 76-15/22.5
Project Ph-20 (47)

E. R. McCarthy, Chief of Party

The field work for this quadrangle was done in accordance with Instructions dated 23 July 1948 (Project Ph-20). Field work in addition to those phases listed on Pages 2-3, was done by the following personnel:

Name and Title	Phase	Data
H. G. Murphy	Horizontal Control	1 April 1949
Cartographic Survey Aid	Recovery and Shoreline	15 April 1949

This report is written in accordance with Paragraph 724 of the Preliminary Edition of the Topographic Manual dated June 1949.

2. AREAL FIELD INSPECTION

About 5% of the area is cultivated, 30% intermittent swamp, 10% water (NW section of Mattamuskeet Lake), and the remainder true swamp.

There are no towns or villages in the quadrangle. A portion of the secondary road which connects U. S. Highway No. 264 with N. C. Highway No. 94 lies in the southeast section. A portion of the secondary road that connects U. S. Highway No. 264 with the village of New Lake lies in the northwest section. A portion of the Alligator River-Pungo River Canal of the Intracoastal Waterway cuts across the northern half of the quadrangle in a general east-west direction.

Small scale farming and lumbering is carried on along the northern shore of Mattamuskeet Lake. During the open seasons, the farmers augment their income by acting as guides or by renting their fields to the bear, goose, duck and deer hunters.

No difficulty was encountered in the interpretation of the photographs. Sufficient classifications were made so that the compiler should have no great amount of difficulty with the tones.

The field inspection is believed to be complete.

3. HORIZONTAL CONTROL

(a) No supplemental control was established.

(b) All stations are on the NA 1927 datum.

(c) Stations not established by the USC&GS are:

Station	Agency	Order	Datum
261, 1935	North Carolina Geodetic Survey	Third	NA 1927
262, 1934	North Carolina Geodetic Survey	Third	NA 1927
266, 1935	North Carolina Geodetic Survey	Third	NA 1927
271, 1934	North Carolina Geodetic Survey	Third	NA 1927
272, 1934	North Carolina Geodetic Survey	Third	NA 1927
POST, 1933	U. S. Engineers	Third	NA 1927

(d) Search was made for all known control. Stations reported as "lost" or "not recovered" are:

261, 1935 (NCGS) AZ Mark recovered — See item 8
272, 1934 (NCGS)
POST, 1933 (USE)

4. VERTICAL CONTROL

(a) There are no bench marks within the quadrangle.

(b) Six miles of fly levels were run extending from BM 5 (USAE) to close on BM 59 (NCGS) in Quad 8983. The error was negligible.

(c) The first and last fly level points were 72-1 and 72-12.

(d) Inapplicable.

5. CONTOURS AND DRAINAGE

The contouring was done by planetable methods directly on nine-lens photographs, at a contour interval of five (5) feet.

The natural drainage is by seepage to Mattamuskeet Lake and Alligator River and its southern branch. New Lake drains into the main branch of the Alligator River on the east and into the State Canal (Quad 8971) on the south.

The natural drainage has been supplemented by the artificial canals such as the Dyke and other canals in the vicinity of the Mattamuskeet Lake which were dug primarily for agricultural purposes and the Alligator River-Pungo River Canal which was dug primarily for navigational purposes.

The effect of the artificial drainage has been, of course, to dry up the adjacent land. There is some complaint to the effect that the Alligator River-Pungo River Canal has salted the land.

The highest natural elevation (12 feet) is in the northwest section of the sheet--in the vicinity of New Lake. Some places on the spoil bank which lies on the north bank of the Intracoastal Canal reach 19 feet.

Several elevations were determined on the water level of New Lake which elevations together with the dates taken are shown on the photographs.

6. WOODLAND COVER

The cover was classified in accordance with Paragraph 5433 of the Preliminary Edition of the Topographic Manual dated June 1949.
In accordance with published edition.

7. SHORELINE AND ALONGSHORE FEATURES

(a) Except as noted on Photos 22154 and 22156, the banks of the Alligator River-Pungo River Canal have undergone no change since photography.

(b) Since there is no periodic tide, the MHWL coincides with the MLWL.

(c) There is no foreshore.

(d) Bluffs.

Along the northern shore of the Intracoastal Waterways is a wide spoil ranging in width from 350 to 1100 feet with elevations ranging from 5 to 19 feet.

9. LANDMARKS AND AIDS

There are neither landmarks nor aids to navigation in this quadrangle.

10. BOUNDARIES, MONUMENTS AND LINES

These are covered in a "Special Boundary Report", which was submitted by Wilbur A. Nelson on 14 February 1949, and a Supplemental Report submitted by A. J. Wraight on 8 November 1949.
Filed in Div Photogrammetry general files.

One monument (#25) of the Mattamuskeet Lake Refuge is pricked

11. OTHER CONTROL

Recoverable Topographic Stations established are: Form 524 filed in Div. Photogrammetry general files.

Acer, 1949
Hand, 1949
Hope, 1949

12. OTHER INTERIOR FEATURES

All roads and buildings have been classified in accordance with Paragraph 5441 and 5446 of the Preliminary Edition of the Topographic Manual dated June 1949. In accordance with published edition.

There are no bridges, cables over navigable waters, airports or landing field in this quadrangle.

13. GEOGRAPHIC NAMES

This report was submitted by A. J. Wraight on 15 January 1950. Filed in Geographic Names Section, Div. of Charts.

14. SPECIAL REPORTS AND SUPPLEMENTAL DATA

Except as noted in Paragraphs 10 and 13, there are no special data for this quadrangle.

15. SWAMP

Most of the area north of the Intracoastal Waterway is true swamp. The seasonally inundated areas were classified with the aid of the local inhabitants.

Some pine trees were found growing on small hammocks in true swamp areas.

Seasonally inundated areas were classified with the symbol 'Fls' and true swamp by the symbol "Sw".
This symbol deleted - such areas determined to be either swamp woods or open area

16. NOTES BY CHIEF OF PARTY

[redacted]

Photogrammetric Plot Report No.5

This report covers the radial plot for maps T-8969 to T-8972 inclusive, T-8980 to T-8983 inclusive, and T-8992 and is filed as part of the descriptive report for T-8992.

MAP T-8972 PROJECT NO. Ph-20(47) SCALE OF MAP 1:20,000 SCALE FACTOR 1.000

STATION	SOURCE OF INFORMATION (INDEX)	DATUM	LATITUDE OR y-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)
271(NCGS),1934 X	NCGS	N.A. 1927	35 37 51.205 76 19 19.700			1578.1(271.1) 495.7(1013.9)	North of map limits.
MILL, 1935	G.P. 297	"	35 34 59.966 76 16 58.497			1848.1(1.0) 1472.8(37.8)	
SIXTEEN, 1935	G.P. 297	"	35 34 13.733 76 21 24.068			423.2(1425.9) 606.1(904.8)	
262(NCGS),1934	NCGS	"	35 32 08.833 76 15 57.651			272.2(1576.9) 1452.3(59.2)	
POST, 1933	SP.PUB. 218	"	35 31 35.657 76 19 01.923			1098.9(750.2) 48.4(1463.3)	
271 AZ.MK. (NCGS),1934 X	NCGS	"	696,699.36 2,795,998.23	6,699.36(3,300.64) 5,998.23(4,001.77)			North of map limits.
261 AZ. MK. (NCGS),1935	NCGS	"	677,985.54 2,809,256.61	7,985.54(2014.46) 9,256.61(743.39)			
262 AZ. MK. (NCGS), 1934	NCGS	"	661,326.24 2,814,408.42	1,326.24(8673.76) 4,408.42(5591.58)			
266(NCGS),1935	NCGS	"	35 34 13.621 76 15 04.074			419.8(1429.4) 102.6(1408.3)	
266 AZ. MK. (NCGS), 1935	NCGS	"	672,153.66 2,817,220.03	2,153.66(7846.34) 7,220.03(2779.97)			
POST AZ. MK. 1933	COMP	"	35 31 17.759 76 19 17.075			547.3(1301.8) 430.2(1081.6)	

1 FT. = .3048006 METER

COMPUTED BY: B.F.Lampton DATE 22 September 1948 CHECKED BY: R.R.Wagner DATE 23 September 1948

M-2388-12

COMPILATION REPORT - T-8972

PHOTOGRAMMETRIC PLOT REPORT.

Submitted with T-8992.

31. DELINEATION.

Compiled by graphic methods. No unusual methods were used. Field inspection was adequate, except for labeling of several areas of vegetation; these have been referred to the field editor for clarification. See item 56.

32. CONTROL.

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

33. SUPPLEMENTAL DATA.

None used.

34. CONTOURS AND DRAINAGE.

No difficulty was encountered in the delineation of contours. Drainage was readily identifiable on the photographs and has been drafted accordingly.

35. SHORELINE AND ALONGSHORE DETAILS.

The shoreline inspection was adequate. No difficulty was encountered in delineation.

36. OFFSHORE DETAILS.

No unusual problems were encountered.

37. LANDMARKS AND AIDS.

No statement required.

38. CONTROL FOR FUTURE SURVEYS.

Three (3) topographic stations are being submitted on Form 524. These topographic stations have been listed ~~and included~~ under Item 11, ~~49.~~

39. JUNCTIONS.

T-8971 to the west: in agreement
T-8973 to the east: in agreement
T-8983 to the south: in agreement

40. HORIZONTAL AND VERTICAL ACCURACY.

No statement required.

46. COMPARISON WITH EXISTING MAPS.

Comparison was made with U. S. C. of E. topographic quadrangle COLUMBIA, N.C., Scale of 1:125,000, edition dated 1943 and Planimetric Maps T-5567 and T-5568, scale 1:20,000, dated 1934. They appear to be in good agreement.

47. COMPARISON WITH NAUTICAL CHARTS.

Comparison was made with Nautical Chart 1231, scale 1:80,000, published November 1938, corrected to 27 January 1950.

It is believed that the planimetric maps listed in Item 46 are the source of topography of the nautical chart and the same statement regarding comparison applies.

ITEMS TO BE APPLIED TO NAUTICAL CHARTS IMMEDIATELY.

None.

ITEMS TO BE CARRIED FORWARD.

None.

Charles J. Downing
Charles J. Downing
Photogrammetric Aid

Approved and Forwarded:

Arthur L. Wardwell
Arthur L. Wardwell
Chief of Party

Form T-2

50. PHOTOGRAMMETRIC OFFICE REVIEW

T-8972

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 J.G. 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. [illegible] 17. Landmarks J.G. 18. Other alongshore physical features J.G. 19. Other alongshore cultural features J.G.

PHYSICAL FEATURES

20. Water features J.G. 21. Natural ground cover J.G. 22. Planetable contours J.G. [illegible] 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. [illegible]

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* — Reviewer

William A. Rasure *William A Rasure* — 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

FIELD EDIT REPORT
Project Ph-20(47)
Quadrangle T-8972

Harry F. Garber, Chief of Party

51. METHODS

The field edit of this area 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 the map compilation.

Corrections and additions were made by standard surveying methods in conjunction with visual inspection.

All corrections, additions, and deletions have been shown on the field edit sheet.

The reviewer's questions are answered on the discrepancy print, field edit sheet and this report.

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

The actual field work was accomplished during June, 1951.

52. ADEQUACY OF COMPILATION

The map compilation, in general, is adequate, and will be complete after field edit data has been applied.

53. MAP ACCURACY

The horizontal and vertical accuracy of the map detail is relatively good. See item 66.

54. RECOMMENDATIONS

None.

55. EXAMINATION OF PROOF COPY

It is believed that Mr. Joseph S. Mann, of Fairfield, N. C., is best qualified to examine a proof copy of this work.

Ref. to item 48 - Compilation Report.

Questionable Name - Boundary Canal

This feature was a part of the original boundary of the Lake Mattamuskeet Drainage District, a Hyde County development, and was excavated in 1915. All legal records since 1915 concerning this particular area, in Hyde County Courthouse, refer to this feature as the boundary canal. All maps of the U.S. Department of Agriculture, U.S. Department of the Interior, and N.C. Department of Conservation and Development, use the name Boundary Canal or Boundary Line Canal.

It is recommended that the name"Boundary Canal" be used. ✓

56. DELINEATION

Ref. to item 31 - Compilation Report.

Reclassification of several areas of vegetation has been shown on the field edit sheet.

57. OTHER INTERIOR FEATURES

Ref. to item 12 - Field Inspection Report.

Reclassification of roads and buildings was made on the field edit sheet.

The widths of all major drainage ditches have been shown on the field edit sheet.

One new ditch, 8 feet wide, has been shown on the field edit sheet at Lat. 35°-30' ±, Long. 76°-19' ±.

58. HORIZONTAL CONTROL

Ref. to item 3 - Field Inspection Report.

The Azimuth Mark of △ 261, 1935 (NCGS) was visited and a new search was made for the station, but it could not be found. Form 526 is submitted.

59. JUNCTIONS

Satisfactory junctions have been made with adjacent quadrangles.

16 July 1951
Submitted by:
James E. Hundley 1479.
James E. Hundley
Cartographer

26 July 1951
Approved by:
Harry F. Gerber
Harry F. Gerber
Commander, USC&GS

48. GEOGRAPHIC NAME LIST.

✓ ALLIGATOR RIVER
✓ ALLIGATOR RIVER - PUNGO RIVER CANAL
✓ *BOUNDARY CANAL (on Hyde Co. Highway map; also verified by Wraight. check further)
✓ CURRITUCK TOWNSHIP
✓ FAIRFIELD TOWNSHIP
FLORIDA CANAL
✓ GUM NECK TOWNSHIP
✓ HEAD LAKE ISLAND
✓ HYDE COUNTY
✓ INTRACOASTAL WATERWAY
✓ LAKE MATTAMUSKEET
✓ MATTAMUSKEET NATIONAL WILDLIFE REFUGE
✓ NEW LAKE (Pending with B.G.N.)
✓ NEW LAKE FORK
✓ NEW LAKE ROAD
✓ NORTH CAROLINA
✓ SWINDELLS CANAL
✓ TYRRELL COUNTY

*Name penciled on manuscript. This feature is called DYKE CANAL on field photograph 24121 and in Field Inspection Report. Discrepancy noted on overlay.

Names underlined in red are approved, on basis of Wraight's report subject to final check by Field Edit. 4-24-51.
L. Heck

Re-checked after Field Edit. 5-1-52.
L Heck

REVIEW REPORT T-8972
Topographic Map
2 May 1952

62. Comparison with Registered Topographic Surveys:

T-5567 1:20,000 1934

[redacted]

63. Comparison with Maps of Other Agencies:

Columbia, N. C., U.S.E. quadrangle, 1:125,000, 1942

64. Comparison with Contemporary Hydrographic Survey:

None.

65. Comparison with Nautical Charts:

1231, 1:80,000, ed 1938, corr. 2/20/50

There are no significant differences between T-8972 and the charts.