

8973

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-8973

LOCALITY

State NORTH CAROLINA

General locality PAMLICO SOUND

Locality FAIRFIELD

194' 51

CHIEF OF PARTY

E. R. McCarthy, Chief of Party.

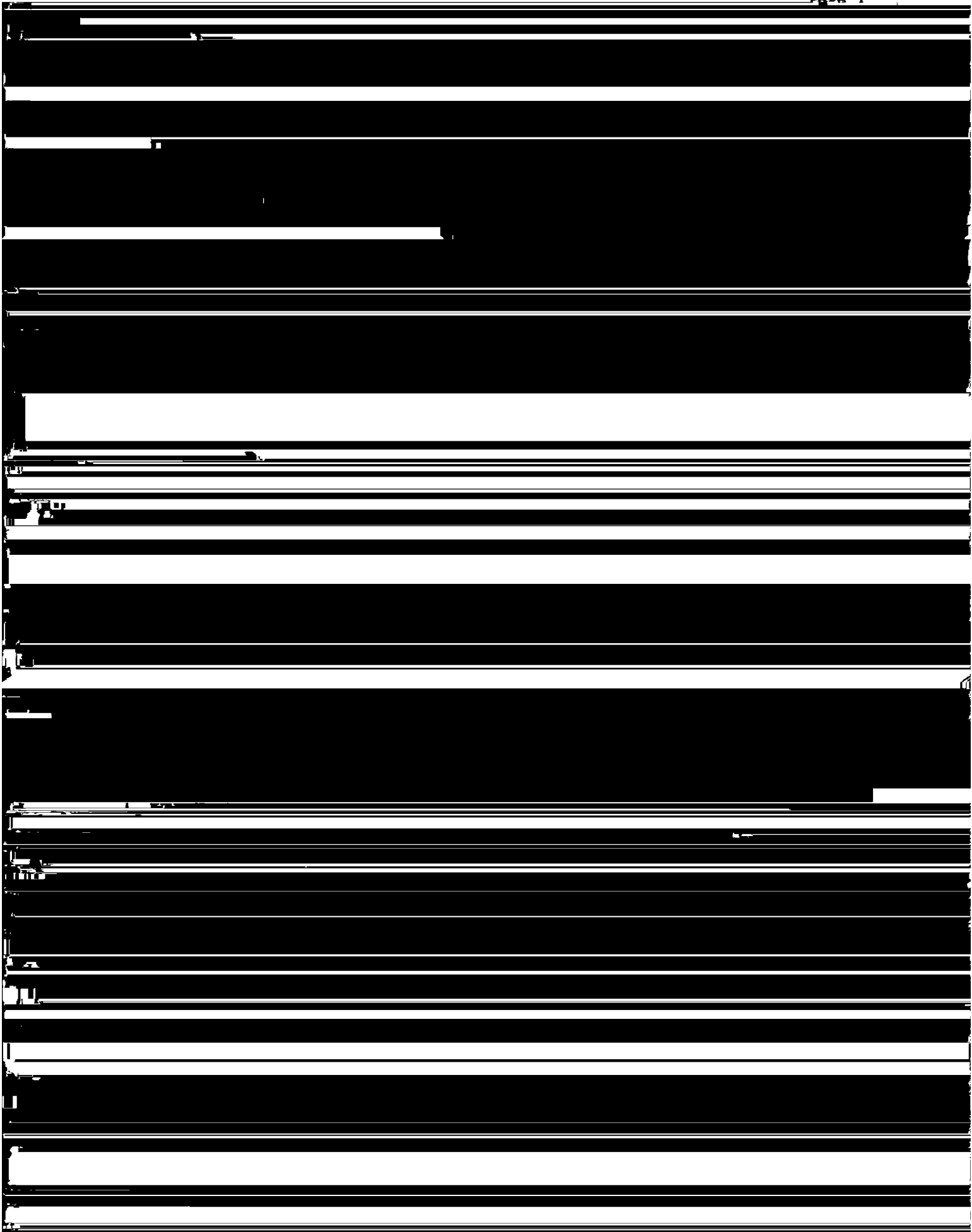
A. L. Wardwell, Tampa Photogrammetric Office

LIBRARY & ARCHIVES

DATE August 4, 1953

B-1870-1 (1)

8973



DATA RECORD

Field Inspection by (II): Egmont Horn, Cartographic Survey Aid
 Horizontal Control
 Recovery

Date: 1 October 1949 to
 15 November 1949

Planetable contouring by (II): Egmont Horn, Cartographic Survey Aid

Date: 29 September 1949
 to 15 November 1949

Completion Surveys by (II): James E Hundley

Date: 21-22 June 1951

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

Air photo compilation 29 March 1948

Projection and Grids ruled by (IV): W. E. W. (WASHINGTON OFFICE)

Date: 6 February 1948

Projection and Grids checked by (IV): W. E. W. (WASHINGTON OFFICE)

Date: 6 February 1948

Control plotted by (III): R. R. WAGNER

Date: 13 October 1949

Control checked by (III): B. F. LAMPTON

Date: 22 October 1949

Radial Plot ~~on Stereoscopic~~ M. M. SLAVNEY
~~Cartographic~~ by (III):

Date: 27 July 1950

Stereoscopic Instrument compilation (III):
 Planimetry
 Contours

Inapplicable

Date: _____

Date: _____

Manuscript delineated by (III): C. J. DOWNING

Date: 22 August 1950

Photogrammetric Office Review by (III): R. DOSSETT - I. I. SAPERSTEIN
J. A. GILES

Date: 14 December 1950

Elevations on Manuscript R. DOSSETT
 checked by dy (III):

Date: 7 September 1950

Camera (kind or source) (III): U. S. C. & G. S. Nine-lens $8\frac{1}{4}$ inch focal length

Number	Date	PHOTOGRAPHS (III)		Scale	Stage of Tide
			Time		
22157	29 March 1948	13:03	1:20,000	No periodic tide	
22158	29 March 1948	13:04	1:20,000	" " "	
24123	21 March 1948	12:26	1:20,000	" " "	

Tide (III)

Reference Station:
Subordinate Station:
Subordinate Station:

No periodic tide

Ratio of Ranges	Mean Range	Spring Range

Washington Office Review by (IV): *K. N. Maki*

Date: *5/6/52*

Final Drafting by (IV):

Date:

Drafting verified for reproduction by (IV):

Date:

Proof Edit by (IV):

Date:

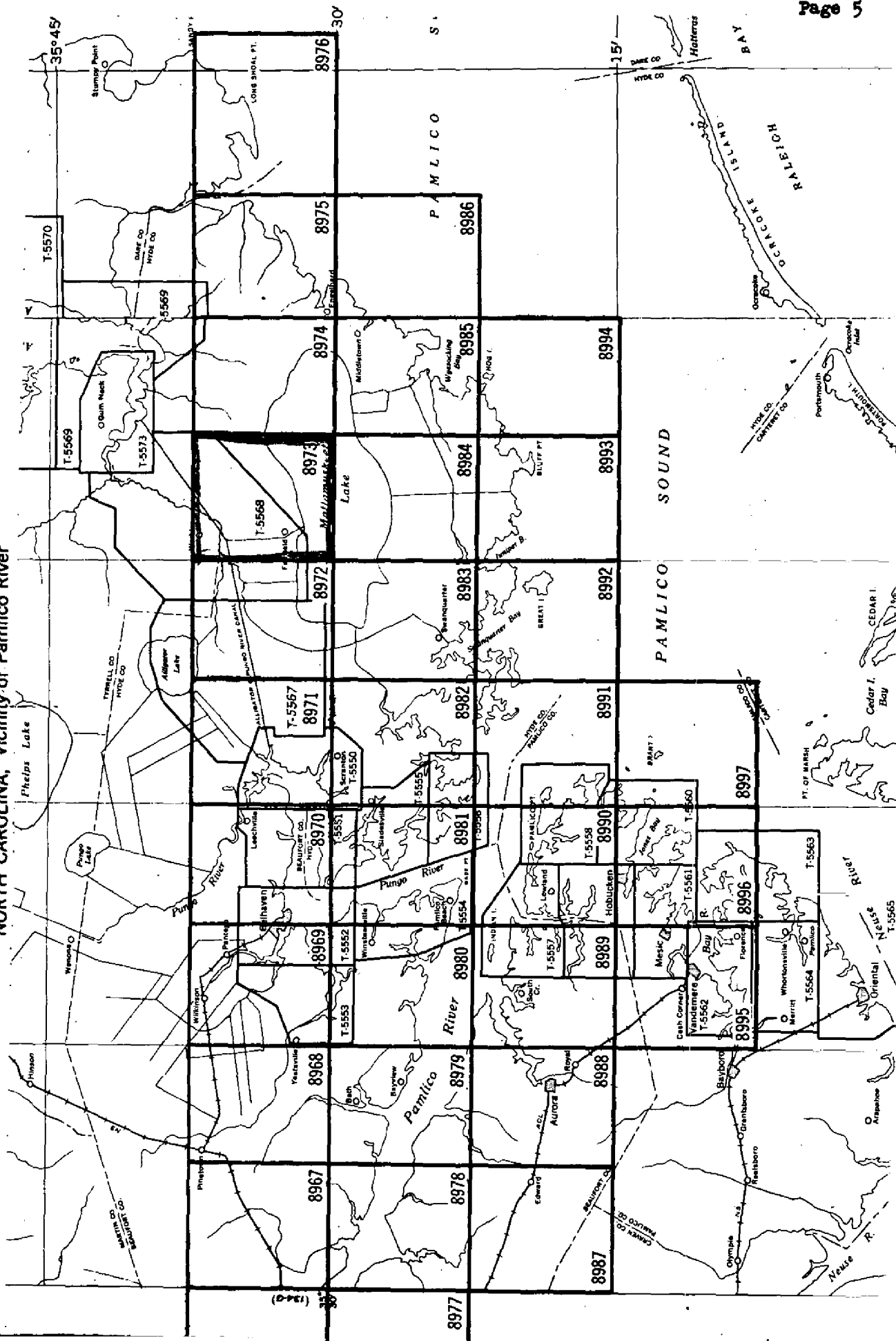
Land Area (Sq. Statute Miles) (III): *41 sq. mi.*

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

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

TOPOGRAPHIC MAPPING PROJECT PH-20(47)

NORTH CAROLINA, Vicinity of Pamlico River



Summary to Accompany T-8973

Topographic map T-8973 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-8973 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-8973

35-30/76 - 07.5/07.5

Project Ph-20 (47)

E. R. McCarthy, Chief of Party

The field work for this quadrangle was done in accordance with the Director's Instructions, Project Ph-20 (47), Field, dated 23 July, 1948.

This report was written in accordance with Paragraph 724, of the preliminary edition of the Topographic Manual dated June, 1949.

2. AREAL FIELD INSPECTION

A part of the northern portion of Mattamuskeet Lake covers almost half of the quadrangle. The northern portion of the quadrangle is bisected by the Intracoastal Waterway. Approximately twenty-five percent of the area is under cultivation. The remainder is either swampland and seasonally inundated.

Fairfield, an unincorporated town of approximately 300 population, is the only settlement within the quadrangle.

The area is served by N. C. State Highway No. 94 and a few secondary roads in the vicinity of Fairfield. About fifty percent is accessible only by canals and the Intracoastal Waterway.

Alligator River is navigable for large boats from N. C. State Highway No. 94 down stream. Fairfield and Carter Canals are navigable for large craft to the first bridges. Small skiffs can navigate to the end of these canals.

The land area throughout the quadrangle is very low and flat. It is dissected by many canals and ditches. The highest elevations is seven feet.

The elevation of Lake Mattamuskeet depends entirely upon wind and rainfall. The average height above sea level is 0.9 foot. (See Field Inspection Report for quadrangle T-8985 and T-8986).

Farming, lumbering, and guiding hunting parties are the principal occupations.

N. C. Highway No. 94 is under construction between the village of Fairfield and a point 0.5 mile north of the Intracoastal Waterway. The road between these points is being relocated and should be checked during field edit. *Checked by Field edit - item 59.*

Sufficient classifications have been made for the vegetation within the quadrangle so that it is believed that the compiler will encounter no difficulty in the interpretation of the photographs.

The Photographs were satisfactory.

3. HORIZONTAL CONTROL

All known horizontal control stations within the quadrangle were searched for. All recovered stations were identified for control of the radial plot. Two stations north of the quadrangle were also identified.

(c) Station not established by the Coast and Geodetic Survey is:

<u>Station</u>	<u>Agency</u>	<u>Order</u>	<u>Datum</u>
AZ MK 267	North Carolina Geodetic Survey	Third	N.A. 1927

(e) Station reported lost on Form 526 are: 267 (NCGS), 1934.

(f) This party was furnished coordinates of all North Carolina Geodetic Station azimuth marks. Station 267 (NCGS), 1934 was not found, however the azimuth mark was found and a substitute point selected for it. According to the records in the field the accuracy of the coordinate position is questionable as the azimuth shown on the description of station is a magnetic azimuth. Form M-2226-12 has been marked doubtful. *See item 56*

4. VERTICAL CONTROL

(a) A third order level line was run along Route 94 by this party in 1948. During the process of leveling, the elevations of all previously established bench marks were redetermined.

✓ B.M. No. 6 (USDA)
 B.M. No. 3 (USAE)
 B.M. No. 4 (USAE) } *-Not shown on map manuscript.*
 ✓ B.M. No. 5 (USAE)
 R.M. No. 3, Fairfield, 1935
 ✓ R.M. No. 2, Fairfield, 1935
 ✓ S-244
 R.M. No. 1, Junction, 1935
 ✓ Junction, 1935
 ✓ T-244

(b) Seventeen and four tenths miles of fly level were run to establish supplemental control for contouring. The largest closure was 0.44 feet, which was adjusted.

(c) First and last designated level point for Map: 73-1 to 73-35.

(d) Third order bench mark R-244 has been destroyed since 1948.

5. CONTOURS AND DRAINAGE

Contouring was done by planetable methods directly on nine lens photographs. The contour interval is five feet.

All drainage is artificial as this land is too low to be farmed under natural conditions. Most of the land is less than three feet above sea level.

Most of the ditches and canals drain into Mattamuskeet Lake.

6. WOODLAND COVER

The woodland cover was classified in accordance with the Preliminary Edition of the Topographic Manual, Part II, dated June 1949; paragraph 5433. In accordance with published edition.

7. SHORELINE AND ALONGSHORE FEATURES

(a) The Intracoastal Waterway has no periodic tide. The water level varies as much as a foot under varying conditions of wind and rain. The banks of the Intracoastal Waterway have been classified as apparent shoreline except for a small area near the Fairfield Swing Bridge which area has been noted on the photograph.

(b) The mean low water line and the mean high water line are synonymous for reasons under (a)

(c) There is no foreshore.

(d) Spoil banks exist along Intracoastal Waterway, ^{and,} where over five feet in elevation, have been depicted by contours.

(e) There are no piers or docks within the quadrangle.

(f) The shore ends of a submarine cable at Fairfield Swing Bridge have been located and labeled on the photograph.

(g) Inapplicable.

8. OFFSHORE FEATURES

Inapplicable.

9. LANDMARKS AND AIDS

There are neither landmarks nor aids within this quadrangle.

10. BOUNDARY MONUMENTS AND LINES

This is covered in a "Special Boundary Report" which was submitted by Wilbur A. Nelson on 14 February, 1949 and a Supplemental report submitted 8 November, 1949 by A. J. Wraight. *Filed in Div. Photogr. general files.*

One boundary point of the Mattamuskeet Refuge was located. It is not recoverable. Form M-2226-12 is submitted.

Not clear. Field notes and sketch on M-2226-12 indicate a recoverable monument or object of some kind is extant. Field editor did not furnish additional information. It is shown by the monument symbol "□". K.H.M.

11. OTHER CONTROL

One topographic station was established along the Intracoastal Waterway; namely TOMB, 1949.

12. OTHER INTERIOR FEATURES

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

There is one highway bridge across the Intracoastal Waterway. Pertinent data concerning this bridge has been shown on photograph 22157. All bridge information for the area covered by this report as listed in the "U. S. Engineers List of Bridges over Navigable Waters in the U. S." dated July 1, 1941, was verified in the field. All clearances were carefully measured with a steel tape and the published descriptions and clearances were found to be correct.

One submarine cable was located at Fairfield Swing Bridge and has been noted on the photograph numbered 22157. Form M-2226-12 is submitted.

The fixed wooden bridge over Alligator River will be relocated

Photogrammetric Plot Report

This report covers the plot for maps T-8973 to T-8976 inclusive, T-8984 to T-8986 inclusive, T-8993 and T-8994, and is filed as part of the descriptive report for T-8974.

Factor 1.000

[illegible]

M-2388-12

3 Sept. 48

12.

COMPILATION REPORT T-8973PHOTOGRAMMETRIC PLOT REPORT

Submitted with T-8974.

31. DELINEATION.

Graphic methods were used. The field inspection was adequate.

32. CONTROL.

Identification, placement and density were satisfactory.

33. SUPPLEMENTAL DATA.

None used.

34. CONTOURS AND DRAINAGE.

No difficulty was experienced in the delineation of contours.

Drainage was readily interpreted from the photographs.

35. SHORELINE AND ALONGSHORE DETAILS.

Shoreline was readily interpreted from the field photographs.
No low-water or shoal lines are shown.

36. OFFSHORE DETAILS.

None.

37. LANDMARKS AND AIDS.

None.

38. CONTROL FOR FUTURE SURVEYS.

One Form 524 has been submitted for a recoverable topographic station. It has been listed and ~~included~~ under Item No. 49. ||.

Filed in Div. Photogrammetry general files.

39. JUNCTIONS.

Survey T-9279 on the north - Project Ph-45(49). (not yet compiled).
Survey T-8974 on the east - Junction is good.
Survey T-8984 on the south - Junction is good.
Survey T-8972 on the west - Junction is good.

40. HORIZONTAL AND VERTICAL ACCURACY.

No statement.

46. COMPARISON WITH EXISTING MAPS.

Comparison was made with U. S. C. & G. S. Planimetric Map, T-5568, at a scale of 1:20,000, dated 1934. Agreement was good.

47. COMPARISON WITH NAUTICAL CHARTS.

Comparison was made with Nautical Chart No. 1231 at a scale of 1:80,000, edition dated November 1938, corrected to 1 August 1947.

The map listed under Item 46 appears to be the source of the Chart's planimetry; any differences are too minor for discussion.

ITEMS TO BE APPLIED TO NAUTICAL CHARTS IMMEDIATELY.

None.

ITEMS TO BE CARRIED FORWARD.

None.

Charles J. Downing
Charles J. Downing
Cartographic Aid (Photo)

Approved and Forwarded:

Arthur L. Wardwell
Arthur L. Wardwell, Chief of Party

48. GEOGRAPHIC NAME LIST.

ALLIGATOR RIVER
ALLIGATOR RIVER - FUNGO RIVER CANAL
ALL SAINTS CHURCH

BETHLEHEM CHURCH
*BOUNDARY CANAL
BURRUS CANAL

ok. See descriptive report T-8972.

CARMUR
CARTERS CANAL

FAIRFIELD
FAIRFIELD BRIDGE
FAIRFIELD CANAL
FAIRFIELD TOWNSHIP
FLORIDA CANAL

GUM NECK TOWNSHIP

HYDE COUNTY

INTRACOASTAL WATERWAY

LAKE MATTAMUSKEET

MATTAMUSKEET NATIONAL WILDLIFE REFUGE

NEW LAKE FORK
NORTH CAROLINA
NORTH LAKE CHURCH
NO. 1 EAST CANAL

SNOW HILL CHURCH
STAR ZION CHURCH
STATE 94

TYRRELL COUNTY

*Name shown on Map Manuscript in pencil - to be investigated
 by the field editor.

Names underlined in
 red are approved, subject

50.

PHOTOGRAMMETRIC OFFICE REVIEW

T- 8973

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. Bench marks~~ 8. Bench marks J.G. ~~9. Photogrammetric plot report~~ 10. Photogrammetric plot report J.G. 11. Detail points J.G.

ALONGSHORE AREAS

(Nautical Chart Data)

12. Shoreline J.G. ~~13. Bridges~~ 15. Bridges J.G. ~~16. Other alongshore physical features~~ 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. Spot elevations~~ 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. Other boundaries~~

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:

FIELD EDIT REPORT
Project Ph-20(47)
Quadrangle T-8973

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. A general check on the adequacy of the map compilation was made.

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

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

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

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

The 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 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 (See Field Edit Report, T-8972.)

56. HORIZONTAL CONTROL

Ref. to item 3 - Field Inspection Report.

A thorough search was made for Δ 267, 1934 (NCGS), but it was not recovered. It is believed that it was destroyed through road construction. The azimuth mark was found and was accurately pricked on the field edit sheet. Form M-2226-12, submitted along with the original field data, has been corrected.

The azimuth mark is 1343 feet east of Δ of N.C. 94 and 26 feet north of Δ of black-top road leading east.

57. BOUNDARY MONUMENTS AND LINES

Ref. to item 10 - Field Inspection Report.

One additional point on boundary of the Mattamuskeet National Wildlife Refuge has been shown on the field edit sheet. This point is not monumented, but, according to Mr. William Grey Cahoon, Refuge Manager, New Holland, N. C., it is within one foot of the true boundary.

The point is a large U.S. Department of Interior, Fish and Wildlife Service sign, suspended on a wooden frame. It is 1323 feet north of Δ of concrete culvert on N.C.94, and 32 feet west of Δ of N.C. 94.

According to Mr. Melvin M. Swindell, Clerk of Superior Court of Hyde County, Swan Quarter, N.C., there are five townships in the county, i.e. Currituck, Fairfield, Swan Quarter, Lake Landing, and Ocrakoke. There was a Mattamuskeet Township until the U.S. Government acquired title to Mattamuskeet Lake. Since that time, the township has been inoperative and all the area, not covered by government title, has been placed in one or more of the existing townships.

58. WOODLAND COVER

Ref. to item 6 - Field Inspection Report.

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

59. OTHER INTERIOR FEATURES

Ref. to item 12 - Field Inspection Report.

Reclassification of roads and buildings has been shown on the field edit sheet.

All new construction of roads, N. C. 94, has been shown on the field edit sheet.

The bridge and cable data for the sub-cable and swing bridge spanning the Intracoastal Waterway was verified.

The fixed wooden bridge over Alligator River has been removed and the road abandoned.

60. JUNCTIONS

Satisfactory junctions have been made with T-8974 on the east, T-8984 on the south, T-8972 on the west. Junction on the north with T-9279 (Ph-45(49) will be made at a later date.

18 July 1951

Submitted by:

James E. Hundley
James E. Hundley H78
Cartographer

26 July 1951

Approved by:

Harry F. Garber
Harry F. Garber
Commander, USC&GS
Chief of Party

REVIEW REPORT T-8973
Topographic Map
6 May 1952

62. Comparison with Registered Topographic Surveys:

T-5568 1:20,000 1934

This map, T-8973, supersedes T-5568 for nautical chart purposes.

63. Comparison with Maps of Other Agencies:

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

64. Comparison with Contemporary Hydrographic Surveys:

None

65. Comparison with Nautical Charts:

831 (Intracoastal Waterway) 1:40,000, 1st ed 1952
1231, 1:80,000, ed 1938, corr. 11/12/51

There are no significant differences between T-8973 and the charts.

66. Adequacy of Results and Future Surveys:

This map complies with national map accuracy standards. It is adequate as a base for construction of nautical charts.

Reviewed By:

K. E. Maki
K. E. Maki

Approved:

0756. 11-10

11/10/52

11/10/52

