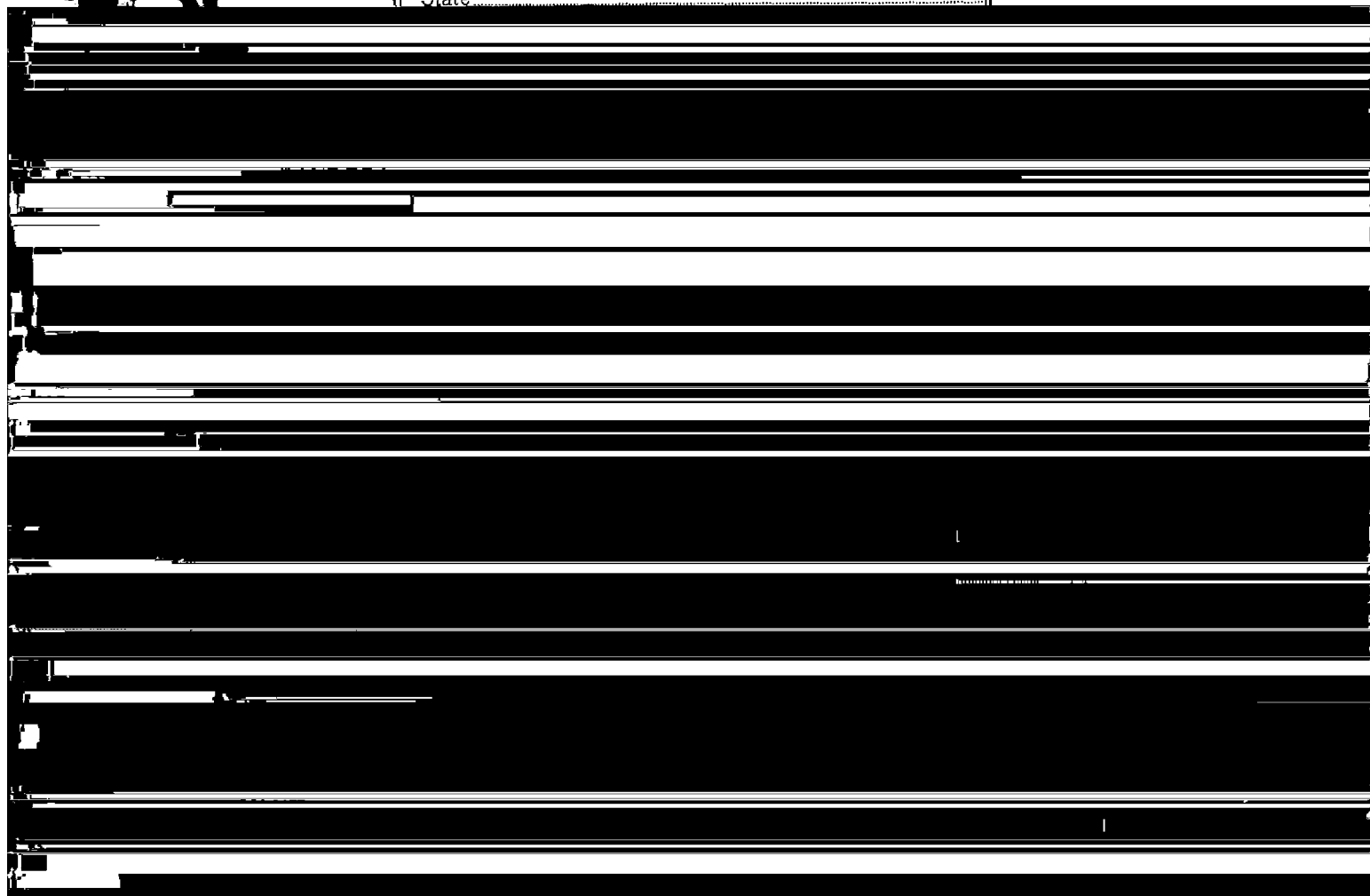


8974

ORIGINAL

Diag. Cht. No. 1232

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-8974
LOCALITY	
State	NORTH CAROLINA



DATA RECORD

L 8974

Project No. (II): Ph-20 (47) Quadrangle Name (IV):

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): DEC 7 1950 Date reported to Nautical Chart Branch (IV): DEC 13 1950

Applied to Chart No.

Date:

Date registered (IV): 12 Sept 1952

Publication Scale (IV): 1:24,000

Publication date (IV):

Geographic Datum (III): N.A. 1927

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

Mean sea level except as follows:

Elevations shown as (25) refer to mean high water

Elevations shown as (5) refer to sounding datum

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

Reference Station (III): 264, 1934 (N C Geod. S.)

Lat. 35° 32' 37" 043 (1141.6m) Long.: 76° 03' 36" 838 (927.9m)

Adjusted
~~Unadjusted~~

(LAMBERT)

Plane Coordinates (IV):

State: N.C.

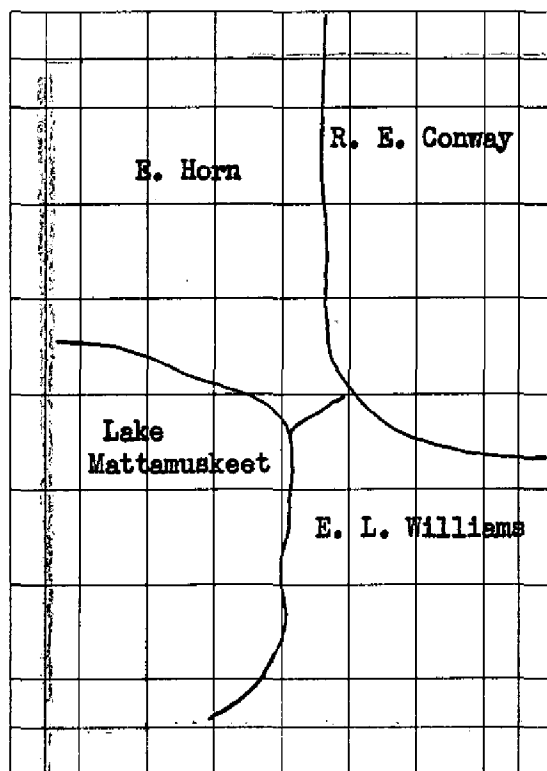
Zone:

Y= 665,710.46 ft.

X= 2,874,399.60 ft.

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)

E. L. Williams,	Cartographic Survey Aid	July-Sept. 1949
E. Horn	Cartographic Survey Aid	Oct.-Nov. 1949
R. E. Conway	Cartographic Survey Aid	December 1949

PHOTOGRAPHS (III)

Number	Date	Time	Scale	Stage of Tide
22115	29 March 1948	11:50	1:20,000	No tide **
22116	"	11:51	"	
22159	"	13:04	"	
22160	"	13:05	"	
24103	21 Dec. 1948	11:51	"	

Tide (III)

Reference Station:
Subordinate Station:
Subordinate Station:

No tide **

Ratio of Ranges	Mean Range	Spring Range

Washington Office Review by (IV):

Date: 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):

50

Shoreline (More than 200 meters to opposite shore) (III): ~~8.6 Stat. miles~~

Shoreline (Less than 200 meters to opposite shore) (III): 7.1 Stat. miles

Control Leveling - Miles (II): 11.5

Number of Triangulation Stations searched for (II): 3

Recovered: 2

Identified: 2

Number of BMs searched for (II): *

Recovered: 2

Identified: 2

Number of Recoverable Photo Stations established (III): None

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

Remarks: *Third Order BM's established by party (2)

** Inshore quadrangle - Lake Mattamuskeet non-tidal.

Summary To Accompany T-8974

Topographic map T-8974 is one of 32 similar maps in project Ph-20(47) and is located in the northeastern part of the project. All of the quadrangle falls within Hyde County, North Carolina. It includes the western half of the town of Engelhard in the southeast corner of the quadrangle, approximately 8 square miles of the northeast portion of Lake Mattamuskeet in the southwest part of the quadrangle and the land area immediately north of these two features. There is no navigable water in this quadrangle.

Project Ph-20(47) is a graphic compilation project. Field work in advance of compilation included complete field inspection, the recovery and identification of horizontal control, the establishment of third-order vertical control and the delineation of contours on the photographs by planetable methods.

This map was compiled at a scale of 1:20,000 and is $7\frac{1}{2}'$ in latitude by $7\frac{1}{2}'$ in longitude. The entire map was field edited. The map is to be published by the Geological Survey at a scale of 1:24,000 as a standard topographic quadrangle.

Items registered under T-8974 include a cloth-mounted lithographic print of the manuscript at 1:20,000 scale, a cloth-mounted color print of the published map at 1:24,000 scale and the descriptive report.

FIELD INSPECTION REPORT
 QUADRANGLE T-8974
 35-30/37.5 76-00/07.5
 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:

<u>Name and Title</u>	<u>Phase</u>	<u>Date</u>
E. L. Williams	Horizontal	10 March 49 to
Cartographer	Control Recovery	9 Sept 49

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

2. AERIAL FIELD INSPECTION

About one-half of the quadrangle area is burnt over wasteland, about one-quarter is cultivated, and the remaining one-quarter is water (Eastern section of Mattamuskeet Lake).

Farming, the chief occupation, is confined to a narrow strip straddling the Ridge Road* which circles the Lake. Seasonal hunting (deer, goose, and duck) furnishes employment during the fall months.

The ^{Boundary} ~~Dike~~ Canal, which is located about one mile north of and parallel to the Ridge Road, was originally dredged to divert water from the Lake which--at that time--was pumped dry and under cultivation. The ^{Boundary} ~~Dike~~ Canal, itself, is not navigable but drains into a larger canal which, in turn, drains into Waupopin Creek.

Much of the land north of the ^{Boundary} ~~Dike~~ Canal is pitted with holes caused by ground fires. Few people, even the deer hunters, penetrate the waste land more than a mile above the canal.

A large juniper swamp along the north limits of the quad has been cut over and is entered by means of a tram road from the Intra-coastal Waterway. The older cuttings have grown up with a thick mat of brush and briars. The area which is being logged at the present time will soon be overgrown.

~~There are no settlements and but one road within the quadrangle.~~
^{See item 61.}

No difficulty was encountered in the interpretation of the photographs.

The field inspection is believed to be complete.

* Not a geographic name.

3. HORIZONTAL CONTROL

(c) There are only three stations in the Quad none of which were established by the USC&GS.

<u>Station</u>	<u>Agency</u>	<u>Order</u>	<u>Datum</u>
264 (NCGS)	North Carolina Geodetic Survey	Third	NA 1927
265 (NCGS)	North Carolina Geodetic Survey	Third	NA 1927

(e) Station reported on Form 526 as lost is:

60 (NCGS)

4. VERTICAL CONTROL

(a) Bench Marks

(3) Third Order USC&GS

(T-8985→J-246, 1949)

K-246, 1949

L-246, 1949

(b) Eleven and one-half (11.5) miles of fly levels were run to control the contours. The errors were small and were not adjusted.

(c) The first and last level points are: 74-1 and 74-23.

(d) Outside of the project limits a fly level line was run with a semi-precise level from water level on the Intracoastal Waterway eastward along the tram road mentioned in Paragraph 2, to the end of the road. Closure of this line was made with the planetable from the Ridge Road to the south and the junction was satisfactory (3.2' vs 3.5').

5. CONTOURS AND DRAINAGE

All contouring was done with a planetable directly on the nine lens photographs.

Drainage is apparent from the contours. The land drains north into a swamp thence into Swan Lake and the Intracoastal Canal. It drains south toward Mattamuskeet Lake and its tributary and supplemental canals.

For a mile north of the ~~Dike~~ ^{Boundary} Canal the land is dry then, further north--although higher--tends to be boggy with water standing for some time after heavy rains. This condition shows the effect of artificial drainage on an area that depends for natural drainage on seepage.

The land between the Lake and the ~~Dike~~ ^{Boundary} Canal is dry.

6. WOODLAND COVER

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

7. SHORELINE AND ALONGSHORE FEATURES

No detailed inspection was made of the shoreline of Mattamuskeet Lake because it is only two feet deep. All the shoreline is apparent.

8. OFFSHORE FEATURES

Inapplicable.

9. LANDMARKS AND AIDS

Inapplicable.

10. BOUNDARIES, 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 8⁷ November 1949 by A. J. Wraight.

Reports filed in Division of Photogrammetry.

One monument of the Mattamuskeet National Wildlife Refuge was located. Form 524 not submitted.

11. OTHER CONTROL

Inapplicable.

12. OTHER INTERIOR FEATURES

Inapplicable.

13. GEOGRAPHIC NAMES

This report was submitted 15 January 1950 by A. J. Wraight.

Report filed in Geographic Names Sec.- Div. of Charts.

14. SPECIAL REPORTS AND SUPPLEMENTAL DATA

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

15. SWAMP

The woods for some distance away from the Lake, have been classified as Swamp, as the water is usually, at least, six inches deep in this area.

The woods directly north of the cultivated fields are made up of gum and other water loving trees but the area is not swamp as the artificial drainage has dried it up.

True swamp has been classified with the 'SW' symbol and intermittent swamp as 'Fls'.

16. NOTE BY CHIEF OF PARTY

The work on this sheet was done intermittently, over several months, by E. L. Williams, Egmont Horn, and R. E. Conway, Jr. The principal difficulty in the quad area has been transportation as the wasteland area is particularly difficult of access most of the year.

The Topographic Map described in the report for T-8985-6 was not found to be of any value and will not be submitted. (Map by Joseph L. Mann vicinity of Lake Mattamuskeet).

24 January 1950

Submitted By:

E. R. McCarthy

E. R. McCarthy

for

Messrs Williams,
Horn and Conway

Approved:

25 January 1950

E. R. McCarthy

E. R. McCarthy
Chief of Party

PHOTOGRAMMETRIC PLOT REPORT

21. AREA COVERED

This report is on Photogrammetric Plot No. 4 of Ph-20(47) North Carolina. This plot comprised nine quadrangles; T-8973, T-8974, T-8975, T-8976, T-8984, T-8985, T-8986, T-8993 and T-8994.

The sketch on page 15 of this report shows the arrangement of the quadrangles, the junction with Ph-45(49), the centers of the photographs used, and the control identified for use in this radial plot.

The projections for the quadrangles in this plot are polyconic at 1:20,000 scale and, with the exception of T-8976, all are 7' 30" in latitude and longitude. T-8976 is 7' 30" in latitude and 9' 30" in longitude. The 10,000 foot intervals of the North Carolina Lambert Co-ordinate System are ruled on the projections.

22. METHOD

This photogrammetric plot was laid using hand templates in the radial plot method.

The base grids were of vinylite ruled with 10,000 foot intervals at 1:20,000 scale. Sufficient grids were joined to encompass all the area and the control identified for this radial plot as shown in the sketch on page 15 .

All the horizontal control recovered or established by the field party was plotted on the projections and checked. Substitute stations identified and located for controlling the radial plot were plotted graphically unless the substitute station was more than 1,000 feet from the main station, or more than one instrument set-up was made; in which case position computations were made and the station plotted conventionally and checked.

Control to be used in the radial plot was transferred from the quadrangle projections to the base grids by matching the plane co-ordinate grid lines of the quadrangles with those of the base grids. Identified control that fell outside the quadrangle projection limits was plotted on the base grids conventionally. It is noted that the projections, of acetate, did not fit the base grids and so adjustment within each 10,000 ft. square was necessary; this was required also when "taking off" the radial plot, and multiplied the cost and work incidental to these operations.

The photographs furnished for this radial plot were nine-lens at approximately 1:20,000 scale, numbered as follows:

21516 - 21520 inclusive
 21526 and 21527
 22105 - 22107 inclusive
 22109 - 22117 "
 22156 - 22161 "
 22166 - 22169 "
 22209 - 22216 "
 22245 - 22251 "
 24103, 24104 and 24123

Calibration templet 21682 was used for correcting transforming errors and paper distortion on all the photographs excepting 24103, 24104 and 24123, for which calibration templet 22561 was used. The calibration marks were transferred to all the templets to be used in the plot. All the templets used were vinylite.

Horizontal control identified was circled on all the affected office photographs.

Pass points were selected in a regular scheme to assist in strengthening the radial plot, and densely enough to provide ample control for cutting in detail points. Pass points were extended beyond the project limits into Ph-45(49) to insure good junction with that project.

The radial plot was developed conventionally from rigidly fixed templets through those less strongly fixed and finally bridging those with the least control.

The final laydown of this plot gave tight intersections on pass points, all of which were fixed by cuts from four or more photographs to give strong fixes.

Intersections for all points located by the radial plot were circled on the plot before transfer to the map projections. The map projections were superposed on the plot with the grid co-ordinate lines of the map projections matching those of the base grids for transfer of the photogrammetric points and photograph centers.

Before assigning the quadrangles for compilation, an extra check was made of the plot by examining all the photographs in place under the map manuscripts. The dates of completion of the photogrammetric plot are:

T-8994 on April 12, 1950
 T-8985 and T-8986 on April 13, 1950
 T-8976 on April 19, 1950
 T-8975 on May 2, 1950
 T-8974 on May 4, 1950
 T-8984 on June 15, 1950
 T-8993 on June 16, 1950
 T-8973 on July 27, 1950

23. ADEQUACY OF CONTROL

Forty seven horizontal control stations were recovered or located and identified of which forty two were held. The five stations not held as originally submitted are substitute station SPOIL 1935, Substitute station Az. Mk. No. 267 1934, Substitute station FAIRFIELD 1935, Substitute station PINGLE 1933, Substitute station No. 2 BING R.M. 1, 1933.

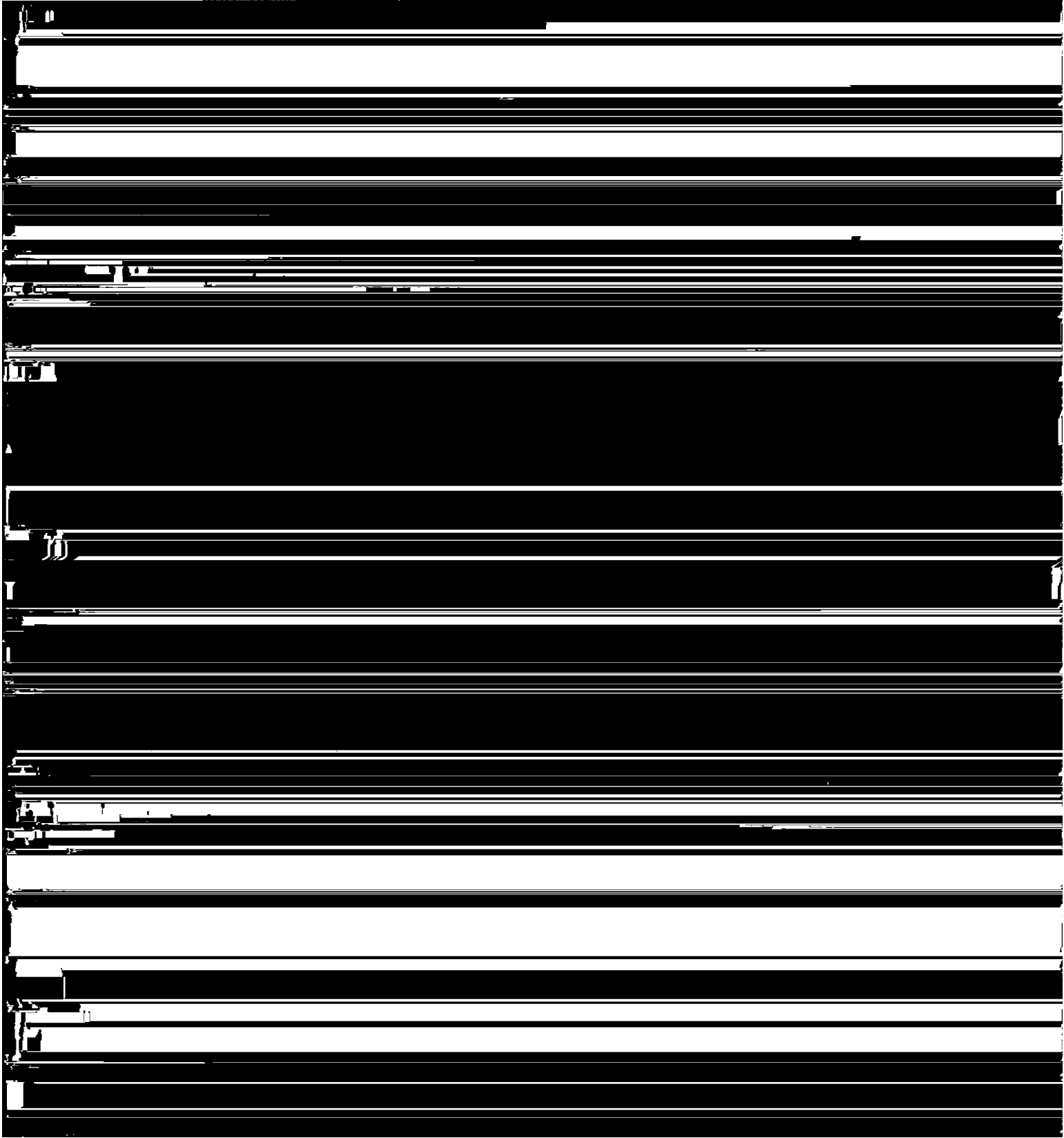
(A) Substitute station SPOIL 1935, "Positive", No. 30 on the sketch) north of T-8973 refused to hold on the radial plot, the intersection being .75 mm (15 meters) south of the position ascertained from the field notes on the pricking card. The notes and field print were consequently returned to the field party with the possibility of vegetation changes noted. The Field party identified and located Substitute station ENTRANCE 1935 (No. 29 on the sketch) in lieu of re-locating Substitute station SPOIL, 1935 which was very difficult to reach and whose identification would not be positive because of possible vegetation changes. Substitute station Entrance 1935 held tightly on the plot.

(B) Substitute station Az. Mk. No 267, 1934, (No. 36 on sketch) on T-8973, "Doubtful" in identification, would not hold on the radial plot. The radial plot position of this station is 0.8 mm. (16 meters) north northwest of the field position; the radial plot position is indicated on the map manuscript as a pass point.

*42 other
stations
held in the
plot.*

(C) Substitute station FAIRFIELD 1935, "Positive" in identification, (No. 34 on sketch) refused to hold on the radial plot and was returned to the field party. Field investigation changed the distance to the same substitute station from 47.49 meters to 18.26 meters. The new position was held tightly.

(D) Substitute station No. 1 and No. 2 PINGLE, 1933 on T-8975; both "Doubtful" in identification (No. 9 on sketch) were different points identified and located by two different men. The control station identification cards were identical in directions and distances resulting in the same geographic position for the different Substitute



1. 1. 1933
1933

23
(S.C.S.)

24
(S.C.S.)

25
(S.C.S.)

26 (S.C.S.)

27

28 1933

29
(S.C.S.)
30
(S.C.S.)
31
(S.C.S.)
32
(S.C.S.)
33
(S.C.S.)

34 (S.C.S.)

35
36

37
(S.C.S.)
38
(S.C.S.)

26. GENERAL

A final check was made of all the map manuscripts to insure the proper transference 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 for compilation.

Milton M. Slavney
Milton M. Slavney
Cartographer (Photo.)

Approved and Forwarded

Arthur L. Wardwell
Arthur L. Wardwell
Chief of Party

NO. FH-20(47)..... SCALE OF MAP..... 1:20,000
SCALE FACTOR..... 1.000

[illegible]

22 Sept. 48

CHECKED BY: R. R. Wagner

DATE 23 Sept. 48

W-2388-12

31. DELINEATION

The graphic method was used. The projector was used to apply the contours in the northern part of the manuscript. The field inspection was adequate except for a few items listed on the discrepancy overlay.

32. CONTROL

A sufficient number of well placed secondary control points were located by the radial plot to insure accurate establishment of detail points.

33. SUPPLEMENTAL DATA

None used.

34. CONTOURS AND DRAINAGE

No difficulty was encountered in the delineation of drainage or in the transferring of contours from the field photographs.

35. SHORELINE AND ALONGSHORE DETAILS

Shoreline inspection was adequate. There are no low-water or shoal lines shown on the manuscript.

36. OFFSHORE DETAILS

None.

37. LANDMARKS AND AIDS

There are no landmarks or aids.

38. CONTROL FOR FUTURE SURVEYS

There are no topographic or photo-hydro stations.

39. JUNCTIONS

Junction was made with the following surveys:

T-8973 to the west

T-8975 to the east

T-8985 to the south

Delineation on T-9280 of Ph 45 (49) to the north has not been started.

40. HORIZONTAL AND VERTICAL ACCURACY

No statement.

46. COMPARISON WITH EXISTING MAPS

Comparison was made with C of E quadrangle, COLUMBIA, N. C., scale 1:125,000, compiled in 1942. The two are in good agreement.

47. COMPARISON WITH NAUTICAL CHARTS

There are no Nautical Charts covering this area.

ITEMS TO BE APPLIED TO NAUTICAL CHARTS IMMEDIATELY

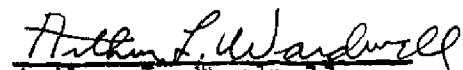
None.

ITEMS TO BE CARRIED FORWARD

None.


Robert R. Wagner
Cartographic Survey Aid

Approved and Forwarded


Arthur L. Wardwell
Chief of Party

50 PHOTOGRAMMETRIC OFFICE REVIEW

T- 8974

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

CONTROL STATIONS

5. Horizontal control stations of third-order or higher accuracy MMS ~~XXXXXX~~ 6. Bench marks JG ~~XXXXXX~~ 7. Bench marks JG ~~XXXXXX~~ 8. Bench marks JG ~~XXXXXX~~ 9. Bench marks JG ~~XXXXXX~~ 10. Photogrammetric plot report JG ~~XXXXXX~~ 11. Detail points JG ~~XXXXXX~~

ALONGSHORE AREAS

(Nautical Chart Data)

12. Shoreline JG ~~13. Low water line~~ ~~XXXXXXXXXXXXXXXXXXXX~~ ~~14. High water line~~ ~~XXXXXXXXXXXXXXXXXXXX~~ ~~15. Brackish water~~ ~~XXXXXXXXXXXX~~ ~~16. Fresh water~~ ~~XXXXXXXXXXXX~~ ~~17. Other alongshore physical features~~ ~~XXXXXXXXXXXX~~ 18. Other alongshore physical features JG 19. Other alongshore cultural features JG

PHYSICAL FEATURES

20. Water features JG 21. Natural ground cover JG 22. Planetable contours JG ~~23. Spot elevations~~
~~24. Contours in general~~ JG 24. Contours in general JG 25. Spot elevations JG 26. Other physical
features JG

CULTURAL FEATURES

27. Roads JG 28. Buildings JG 29. Railroads JG 30. Other cultural features JG

BOUNDARIES

31. Boundary lines JG ~~XXXXXXXXXXXXXXXXXXXX~~

MISCELLANEOUS

33. Geographic names JG 34. Junctions JG 35. Legibility of the manuscript JG 36. Discrepancy overlay JG 37. Descriptive Report JG 38. Field inspection photographs JG 39. Forms JG

40. Jesse A. Giles William A. Rasure
Jesse A. Giles William A. Rasure
Reviewer Supervisor Review Section of 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-8974

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 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 actual field work was accomplished in 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.

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 question on Discrepancy Print regarding Ridge Road.

This name is no longer in use and has been obsolete for several years.

Ref. to item 48 - Compilation Report.

Boundary Canal-Dyke Canal - See Field Edit Report T-8972.*

Ref. to question on Discrepancy Print regarding the spelling of Engelhard, N. C.

1. The sign designating the town, on highway U.S. 264, is spelled "Englehard".
 2. The school building has carved in stone "Englehard School".
 3. All churches that display their names (three) spell it "Englehard".
 4. The post office name is spelled "Engelhard".
 5. Numerous inhabitants, of many years residence, were questioned concerning the spelling of the name; some spelled it one way, some spelled it another, and some said they often spelled it both ways.
 6. The act incorporating this town uses the spelling "Engelhard".
 7. This town ceased to function as an incorporated town in 1948.
- Recommend that the name be spelled "Engelhard".

56. DELINEATION

Ref. to item 31 - Compilation Report.

The delineation of additional ditches and changes of some of the vegetation limits have been shown on the field edit sheet.

57. OTHER INTERIOR FEATURES

Ref. to item 12 - Field Inspection Report.

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

58. JUNCTIONS

Satisfactory junctions have been made with adjacent quadrangles.

See item 67.

18 July 1951

Submitted by:

James E. Hundley
James E. Hundley HES
Cartographer

26 July 1951

Approved by:

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

* Boundary Canal recommended by field edit,
and approved by Geographic Names Section.

REVIEW REPORT T-8974
Topographic Manuscript
7 May 1952

The sixth paragraph under item 2, "There are no settlements and but one road within the quadrangle.", is an incorrect statement. The western half of the corporate limits of Engelhard, including at least one-half of the town's buildings, is located in the southeast corner of the quadrangle. Approximately two miles of U. S. Highway No. 264 (class 2 road) traverses the southeast corner of the quadrangle; a class 4 road junctions with this portion of U. S. 264 and extends northwesterly, through the high (cultivated) land along the lake, across the quadrangle.

62. Comparison with Registered Topographic Surveys:

None.

63. Comparison with Maps of Other Agencies:

See item 46.

64. Comparison with Contemporary Hydrographic Surveys:

None.

65. Comparison with Nautical Charts:

Not applicable.

66. Adequacy of Results and Future Surveys:

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

67. Junctions:

See item 39 and 58.

This quadrangle joins T-9280, project Ph-45(49) to the north compilation of T-9280 has not been completed, so was not available for junctioning. However, field inspection data along the project junction was transferred from the T-8974, project Ph-20(47), field photographs to the T-9280 field photographs prior to field work, by H. F. Garber, chief of party, and no junction difficulties are anticipated.

-2-

68. Boundaries:

See item 10.

Legal descriptions were not furnished for the townships and the compiler's delineation of the boundary between Fairfield and Lake Landing Townships has been labeled "approximate" because of the lack of positive information on it's exact location.

A U. S. Department of Agriculture boundary map, with a metes and bounds description thereon, was submitted for Mattamuskeet National Wildlife Refuge. However, insufficient boundary monuments were recovered by the field inspection to allow compilation from the courses shown on the boundary map. The compiler has shown the boundary line along a fence which is located along the offshore

