

8722

Diag. Cht. No. 538

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey TOPOGRAPHIC

Field No. Ph-5(15) Office No. T-8722

LOCALITY

State NORTH CAROLINA

General locality NEUSE RIVER

Locality ARAPAHOE

194 9

CHIEF OF PARTY

R. J. Sipe, Chief of Field Party.

R. A. Gilmore, Tampa Photogrammetric Office.

LIBRARY & ARCHIVES

DATE March 4, 1952

8722

DATA RECORD

T-8722

Quadrangle (II): *ARAPAHOE, N.C.*

Project No. (II): Ph-5(45)

Field Office: New Bern, N.C.

Chief of Party: Riley J. Sipe

Compilation Office: Tampa, Fla.

Chief of Party: Ross A. Gilmore

Instructions dated (II III): Undated

Copy filed in *Div. of Photogrammetry*
~~Report No. T-~~ *Descriptive*
(VI)Completed survey received in office: *3-24-49*Reported to Nautical Chart Section: *3-30-49*Reviewed: *Nov 6 1950* Applied to chart No.

Date:

Redrafting Completed:

Registered: *5 Feb 1952*

Published:

Compilation Scale: 1: 20,000

Published Scale: *1:24,000*

Scale Factor (III): None

Geographic Datum (III): N.A. 1927

Datum Plane (III) *M.S.L.*Reference Station (III): *ARAPAHOE, 1931*Lat.: *35° 01' 23.341"* (719.3m) Long.: *76° 49' 32.325"* (819.5m)*Adjusted*
~~Unadjusted~~State Plane Coordinates (VI): *North Carolina*X = *2,650,923.60 Feet*Y = *470,470.08 Feet*

Military Grid Zone (VI)

PHOTOGRAPHS (III)

<u>Number</u>	<u>Date</u>	<u>Time</u>	<u>Scale</u>	<u>Stage of Tide</u>
15917	4/1/46	1237	1:20,000	No preceptible tide
15954	4/5/46	1312	"	"
15955	4/5/46	1313	"	"
15969	4/5/46	1351	"	"
15970	4/5/46	1352	"	"

Tide from (III): No ^{periodic} tide

Mean Range:

Spring Range:

Camera: (Kind or source) C. & G. Survey nine-lens, 8.24" focal length

Field Inspection by: Mathew A. Stewart

date: Aug. 1947-Apr. 1948

Field Edit by: C.A. NAVIN

date: APR. 1950

Date of Mean High-Water Line Location (III): April 1948

Projection and Grids ruled by (III) H.R. (W.O.)

date: Nov. 18, 1947

" " " checked by: T.L.J. "

date: Nov. 18, 1947

Control plotted by: R. Dossett

date: March 3, 1948

Control checked by: C.H. Baldwin

date: March 3, 1948

Radial Plot by: M.M. Slavney

date: Sept. 14, 1948

Detailed by: W.H. Shearouse

date: Oct. 1948- Feb. 1949

Reviewed in compilation office by: J.A. Giles

date: Feb. 1949

Map Manuscript
Elevations on Field Edit Sheet
checked by: J.A. Giles

date: Feb. 1949

STATISTICS (III)

Land Area (Sq. Statute Miles): 160,112

Shoreline (More than 200 meters to opposite shore): 5.6 Statute miles

Shoreline (Less than 200 meters to opposite shore): 7.7 Statute miles

Number of Recoverable Topographic Stations established: 1

Number of Temporary Hydrographic Stations located by radial plot: None

Leveling (to control contours) - miles: 52

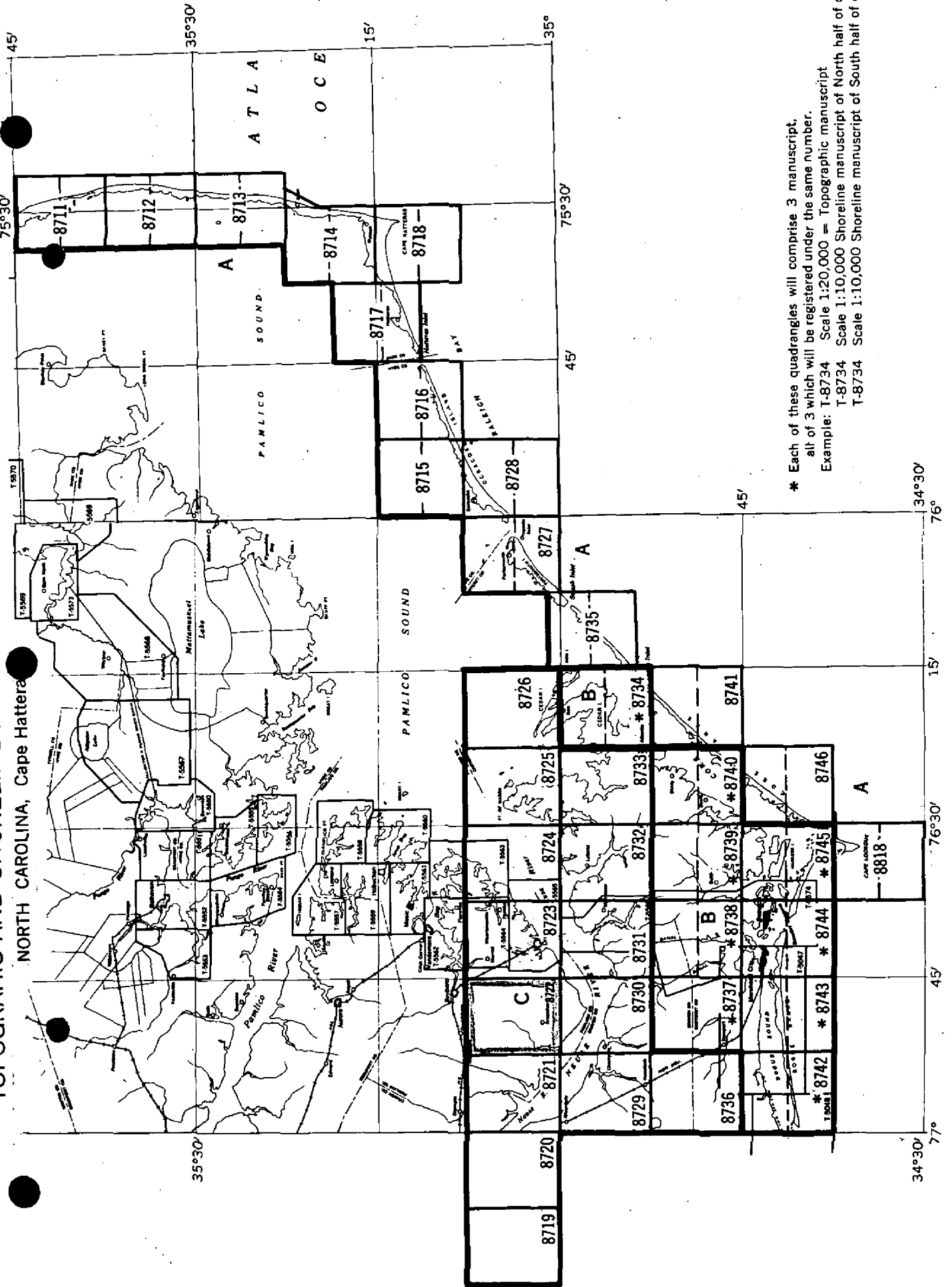
Roman numerals indicate whether the item is to be entered by, (II) Field Party, (III) Compilation Party, or, (VI) the Washington Office.

When entering names of personnel on this record give the surname and initials (not initials only).

Remarks:

TOPOGRAPHIC AND SHORELINE MAPPING PROJECT PH-5 (45) A-B-C

NORTH CAROLINA, Cape Hatteras



* Each of these quadrangles will comprise 3 manuscript, alt of 3 which will be registered under the same number.
 Example: T-8734 Scale 1:20,000 = Topographic manuscript
 T-8734 Scale 1:10,000 Shoreline manuscript of North half of quad
 T-8734 Scale 1:10,000 Shoreline manuscript of South half of quad

Summary to Accompany T-8722

Topographic map T-8722 is one of a series of 37 maps, graphically compiled, in Project Ph-5(45). The field operations included complete field inspection and planetable contouring on 1:20,000 scale nine-lens photographs. A manuscript was compiled and completely field edited. .

The map is to be published by the Geological Survey at a scale of 1:24,000 as a standard 7 1/2 minute quadrangle. The registered copies under T-8722 will include the original descriptive report, a cloth mounted print of the manuscript at a scale of 1:20,000, and a cloth mounted color print of the published map at a scale of 1:24,000.

FIELD INSPECTION REPORT
T-8722
Project Ph-5(45)
(35-00/76-45/7.5)
Riley J. Sipe, Chief of Party

All phases of the field work were done in accordance with the Director's Instructions, Project Ph-5(45), Field, undated; Supplement No. 1 to the above, dated 11 November 1946; and other applicable instructions as herein noted.

The various phases of the field work were done by the following personnel:

<u>Name & Title</u>	<u>Phase</u>	<u>Date</u>
Matthew A. Stewart Engineering Aid	Third Order Levels Contours & Interior Field inspection	8/21/47-9/16/47 10/31/47-4/30/48
Benjamin Garfinkel Engineering Aid	Levels	10/24/47-11/29/47

1. DESCRIPTION OF THE AREA

The area covered by this quadrangle is located in Pamlico County, N. C. Arapahoe, the only community, is located in the southwestern portion of the quadrangle. The chief occupation is agriculture.

The area, for the most part, is wooded, with pine predominating. The north-east section of the quadrangle is swampy, this being the source of several of the larger streams.

Transportation facilities are good except in the northeastern portion of the quadrangle which is inaccessible because of swamps. The quadrangle is crossed by one highway, which is State Route 306. A good system of rural roads also serves the area. Some of them become impassable under winter weather conditions.

2. COMPLETENESS OF FIELD INSPECTION

Field inspection is felt to be adequate and complete to date.

Construction is in progress constantly.

Woodland cover was classified in accordance with Photogrammetry Instructions, No. 15, dated 16 June 1947.

3. INTERPRETATION OF THE PHOTOGRAPHS

Little difficulty in interpretation of the photographs was encountered.

4. HORIZONTAL CONTROL

All horizontal control ^{stations were} ~~was~~ recovered or search^{ed} for, and a sufficient number were identified for control of the radial plot. All horizontal control stations were identified where it was practical to do so in this quadrangle.

5. VERTICAL CONTROL

Eight miles of third order levels were run in this quadrangle. Forty-four miles of fly levels were run to furnish supplemental control for contouring.

6. CONTOURS AND DRAINAGE

Contouring was done on 1:20,000 scale photographs by planetable methods. Heavy woods and swampy ground made contouring difficult in many places.

Highest ground exists along the west side of the quadrangle. This ground, with the exception of a few sand ridges, is swamp. The water level, of course, recedes during the dry summer months.

Beards Creek and Dawson Creek are the largest streams draining this swamp. Beards Creek flows southwest to the Neuse River, Dawson Creek flows southeast to the Neuse River.

Drainage was located by planetable and, in some places, delineated under the stereoscope.

7. MEAN HIGH WATER LINE

There is no perceptible periodic tide in the Neuse River (any change in water level is caused by wind).

8. LOW WATER LINE

Due to the fact that there is no periodic tide in the Neuse River, the mean low water line is synonymous with the MHWL.

9. WHARVES & SHORELINE STRUCTURES

All new wharves or shoreline structures not shown on photographs were located by, (1) sextant fix or cut, (2) measured in from some identifiable points on the photographs.

10. DETAILS OFFSHORE FROM THE MEAN HIGH WATER LINE

There were no offshore details in this quadrangle.

11. LANDMARKS AND AIDS TO NAVIGATION

Prior to this survey, no landmarks were charted within the area of this quadrangle, and there are no aids to navigation.

12. HYDROGRAPHIC CONTROL

The horizontal control was supplemented with recoverable topographic stations where they were needed.

13. LANDING FIELDS AND AERONAUTICAL AIDS

There are no landing fields in this quadrangle.

14. ROAD CLASSIFICATION

All roads were classified in accordance with Photogrammetry Instructions No. 10, dated 14 April 1947.

15. BRIDGES

There were no bridges over navigable waters in this quadrangle.

16. BUILDING AND STRUCTURES

Adequately covered on the photographs.

17. BOUNDARY MONUMENTS AND LINES

See special report on Boundaries for project Ph-5(45) by A. J. Wright, Topographic Engineer.

18. GEOGRAPHIC NAMES

See special report on Geographic Names for Project Ph-5(45) by A. J. Wright, Topographic Engineer.

Date: 28 May 1948
Submitted by:

Matthew A. Stewart
Matthew A. Stewart
Engr. Aid

Date: 28 May 1948
Approved By:

Riley J. Sipe
Chief of Party

5

COMPILATION REPORT
TO ACCOMPANY
QUADRANGLE T-8722

26 & 27 CONTROL AND RADIAL PLOT:

These are the subject of a special report submitted to the Washington Office by Milton M. Slavney, Photogrammetric Engineer, November 12, 1948.

Filed in Div of Photogrammetry

28. DELINEATION:

This map manuscript was delineated in accordance with the latest instructions insofar as possible. An attempt was made to draw buildings in accordance with Photogrammetry Instructions No. 29, dated October 1, 1948. Since the instructions were issued after field inspection the compiler may be in error in some classifications. Buildings located in cultivated fields, and appearing to be barns of landmark value, have been drawn as class II buildings. Buildings in the more thickly populated areas, and those appearing to be dwellings in homestead clearings, are shown as class I. *See #16 Field Edit Report*

The area comprising the LIGHT GROUND POCOSON in the northeast section of the quadrangle is peculiarly interesting. The ground rises westward from the 15-foot contour to an elevation of 23 feet, yet it is swamp. The rise is very gradual and the practically impenetrable density of the underbrush tends to hold the water back and the area continues wet and swampy at all times. Encircling this POCOSON on south, east and northeast sides is lower ground but most of it is not swampy as is borne out by the fact that much of it is cultivated. This farm land is made tenable by reason of the numerous ditches cut to take care of the water seepage from the higher, swampy ground. These ditches act as feeders for the lead-off drainage. The lead-off drainage from the POCOSON is natural and definite and in fact is the make-up of several creeks.

In attempting to delimit the area of the POCOSON a careful stereoscopic study was made by the compiler and other experienced photogrammetrists. The exact confines were doubtful and varied, but the compiler feels the line as drawn is reasonably accurate. Verification is requested of the field editor.

Field inspection of the quadrangle was satisfactory but not thorough. For instance, it would help the compiler considerably if swamp areas were classified swamp instead of "T". Also, a careful review of the photographs to see that all roads are labelled would relieve the Field Editor of that responsibility.

Photographic coverage is satisfactory. The scale of photographs 15917, 15954 and 15955 was found fair to good while that of 15969 and 15970 was poor. The projector was used to transfer contours from parts of field photograph 15970 to the map manuscript.

29. SUPPLEMENTAL DATA:

Pamlico County Map showing township lines.
Pamlico County Municipal Map.

30 & 31. MEAN HIGH-WATER LINE, LOW-WATER AND SHOAL LINES:

Delineated as shown on the field photographs. Also, see Items 7 and 8 of Field Inspection Report.

32. DETAILS OFFSHORE FROM THE HIGH-WATER LINE:

None

33. WHARVES AND SHORELINE STRUCTURES:

Two piers drafted as photographed.

34. LANDMARKS AND AIDS TO NAVIGATION:

None.

35. HYDROGRAPHIC CONTROL:

One topographic station was established.

No hydrographic signal sites were required in this part of the project.

36. LANDING FIELDS AND AERONAUTICAL AIDS:

None.

37. CONTOURS:

Due to the bad scale of photograph 15970, the projector was used to transfer contours to the map manuscript in the vicinity of Beard Creek.

In delineating the swamp limits in the northwest corner of the quadrangle and LIGHT GROUND POSOCCN, license was taken to slightly reshape the contours to more logically portray the terrain. It is believed that the accuracy of the contours has not been damaged.

38. POLITICAL BOUNDARIES:

Township lines have been drawn on the map manuscript as far as they appear logical. With a print of the map manuscript at hand it is believed the Field Editor can complete these boundaries with more accuracy and reason than that shown on the political boundary map of the county. The matter has been referred to the Field Editor on the discrepancy overlay.

39. GEOGRAPHIC NAMES:

Names as shown on the official Geographic Name Sheet have been applied to the map manuscript.

40. BUILDINGS:

The field editor has been requested to give special attention to any buildings omitted from the map manuscript. Most of the buildings are very small and it was difficult to select them all with certainty.

44. COMPARISON WITH EXISTING TOPOGRAPHIC QUADRANGLES:

None available for comparison.

45. COMPARISON WITH NAUTICAL CHARTS:

Nautical chart No. 538, scale 1: 40,000, bearing a correction date of August 4, 1947 covers the area of this quadrangle. The only shoreline is that of Beard Creek, Dawson Creek and Tarkiln Creek. Visual comparison indicates excellent agreement.

Respectfully submitted,

William H. Shearouse

William H. Shearouse

Approved and Forwarded:

Ross A. Gilmore

Ross A. Gilmore, 3/18/49
Chief of Party.

FIELD EDIT REPORT
QUADRANGLE T-8722
35° -00.0'/76° -45.0'/7.5'
Project Ph-5 (45)

Harry F. Garber, Chief of Party

The field edit of the quadrangle was accomplished during the period from 25 April to 8 May, 1950 by Cecil A. Navin, Topographic Engineer. All work was performed in accordance with Field Edit Instructions, dated August 1945, Supplement 1, dated February 1946, and Topographic Manual-Part II, dated June 1949.

51. METHODS

All features were checked, no unusual methods being used. Minor corrections were made by visual inspection augmented by hand-level elevations, and major corrections were accomplished by plane-table methods either on the photographs or the field edit sheet. All corrections have been labeled on the field edit sheet.

Discrepancies not settled on the field edit sheet, are discussed elsewhere in this report.

A legend, describing the colored inks used, is shown on both the photographs and the field edit sheet.

The field edit data is shown on one (1) field edit sheet, one (1) discrepancy sheet, one (1) geographic names sheet, and three (3) nine-lens photographs (1:20,000 scale) numbers 15954 (previously submitted with quadrangle T-8721) 15969, and 15970. Photographs 15955 and 15969 should be retained by the compilation office until receipt of field edit data T-8723.

52. ADEQUACY OF COMPILATION

With the exception of numerous buildings omitted along Highway No. 306, the compilation appears very satisfactory.

53. MAP ACCURACY

Map accuracy appears good with the exception of small areas in contouring, corrected during field edit. No vertical accuracy tests were specified.

54. RECOMMENDATIONS

No comment.

55. EXAMINATION OF THE PROOF COPY

A copy of the map manuscript was submitted to Mr. R. C. Holton, Pamlico County Surveyor, and Mr. L. V. Hardison, Pamlico County Commissioner. They recommended no changes not covered during field edit.

6. CONTOURS AND DRAINAGE

The contours appear very satisfactory with the exception of those along the sand ridge parallel to State Highway No. 306, which were corrected during field edit. The exact portrayal of swamp limits is very impractical. In general all drainage heads in a semi-swamp area and the "bottom" of the hollow is swamp until near the mouth where the marsh is apparent. The area known as "Light Ground Pocoson" is a swamp throughout with few trees and thick underbrush. This area was formed by fire which burned the ground (old peat bog) to a depth of two to three feet. The outside of the area is well drained and as such the swamp limit is consistent only as to the amount of rainfall and can vary by 2000 feet.

16. BUILDINGS AND STRUCTURES

Numerous buildings were added during field edit and all buildings were re-classified in accordance with current instructions. ~~See~~

17. BOUNDARY MONUMENTS AND LINES

The township boundaries were discussed with the Pamlico County Surveyor and the Tax Collector, where a complete re-delineation ~~map~~ ensued. The township limits have been shown on the field edit sheet in accordance with their records and legal descriptions. See County Map submitted herewith.

18. GEOGRAPHIC NAMES

All geographic names were investigated during field edit and corrections shown on "Geographic Names Sheet". Eight (8) references are listed; however numerous other inhabitants were interviewed and all gave unanimous approval of the names as shown, after correction.

Submitted:
10 May 1950

Cecil A. Navin
Cecil A. Navin
Topographic Engineer

Approved:

Harry F. Garber
Harry F. Garber
Chief of Party

48. GEOGRAPHIC NAME LIST

Holts chapel
Holts chapel school
St. Stephens Baptist church

ARAPAHOE ✓
Beard
BARTS CREEK

(use old name
Pending B.G.N.
decision)

CARAWAY CREEK ✓
CASH CORNER NO. 2 ✓
CEDAR GUT ✓

DAWSON CREEK ✓
DEEP RUN ✓
DEEP RUN BRANCH ✓

EAST PRONG ✓

FORK RUN ✓

GOOSE CREEK ✓
GRANNY GUT ✓

✓ HOLTS CHAPEL
HOLTS CHAPEL SCHOOL

LIGHT GROUND POCOSON

MILL CREEK ✓

NEUSE RIVER ?
NEUSE ROAD (also to East of Arapahoe)
NORTH CAROLINA

PAMLICO COUNTY
TOWNSHIP 1
TOWNSHIP 2
TOWNSHIP 5

POINT ROAD ✓
PURIFOY GUT ✓ (also North of Arapahoe)
" to south "

SIMMONS BRANCH ✓
✓ ST. MATTHEWS CHURCH .
✓ ST. STEPHENS CHURCH
STATE NO. 306

TARKILN CREEK ✓
TURNPIKE ROAD

WHEELER GUT ✓

Names underlined in
red are approved
11-6-50
L. Heck

GEOGRAPHIC NAMES

Survey No. T-8722

Arapahoe 7 $\frac{1}{2}$ ' quad, m N.C.

Name on Survey

	A	B	C	D	E	F	G	H	K	II
North Carolina									USGB	1
Neuse River									"	2
Pamlico County										3
Township No. 1										4
Township No. 5										5
State Highway No. 306										6
										7
Tarkiln Creek	✓									8
Dawson Creek	✓									9
Cash Corner No. 2	✓									10
Pamlico Road										11
Light Ground Poconson	✓	large area								12
Arapahoe	✓									13
Point Road	✓									14
Matthews Church	✓									15
Beard Creek	✓									16
Fulcher Creek										17
Neuse Road	✓									18
										19
										20
										21
										22
										23
										24
										25
										26
										27

Names approved subject to final
check by field edit. 4/14/49

11-6-50:

See new list

L.H.

L. Heck

Review Report T-8722
Topographic Map Manuscript
6 November 1950

62. Comparison with Registered Topo Surveys.-For the areas in common, this survey supersedes:

T-1051	(1867)	1:20,000
1052	(1867)	1:20,000
6466	(1935)	1:10,000
6470	(1935)	1:10,000

for nautical charting purposes.

63. Comparison with Maps of Other Agencies.- None

64. Comparison with Contemporary Hydro Surveys.- None

65. Comparison with Nautical Charts.-No. 538, 8-4-47, 1:40,000

The overhead cable on Dawson Creek is not shown on the chart. This survey should be applied to this chart when it is reconstructed. Changes and additions made during review are shown in red ink on the manuscript.

66. Adequacy of Results.-This map complies with national map accuracy standards.

67. Overlay.-An overlay has been prepared showing road classification, control, etc. This map will be edited and published by the Geological Survey.

Reviewed by:

Jack L. Rihn
Jack L. Rihn
Cartographer

APPROVED

S. V. Griffith 2/11/52 W. E. Edmonstone
Chief, Review Section Chief, Nautical Chart Branch
Div. of Photogrammetry Division of Charts

O. S. Reading W. E. Edmonstone
Chief, Div. of Photogrammetry Chief, Div. of Coastal Surveys
12.14.

NAUTICAL CHARTS BRANCH

SURVEY NO. 8722

Record of Application to Charts

[illegible]

M-2168-1

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.