

8976

ORIGINAL

Diag. Cht. No. 1229 & 1232

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey TOPOGRAPHIC

Field No. Ph-20 (17) Office No. T-8976

LOCALITY

State NORTH CAROLINA

General locality PAMLICO SOUND

Locality LONG SHOAL RIVER TO SANDY BAY

1941

CHIEF OF PARTY

E. R. McCarthy, Chief of Field Party

A. L. Wardwell, Tampa Photogrammetric Office

LIBRARY & ARCHIVES

DATE _____

8976

DATA RECORD

T - 8976

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

Field Office (II): Washington, N. C.

Chief of Party: E. R. McCarthy

Photogrammetric Office (III): Tampa, Florida

Officer-in-Charge: A. 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):

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): PAIN, 1933

Lat.: $35^{\circ} 34' 37.173''$ (1145.6m) Long.: $75^{\circ} 47' 00.229''$ (5.8m)Adjusted
Unadjusted*(LAMBERT)*

Plane Coordinates (IV):

State: *N.C.*

Zone:

Y= *680,401.86 ft.*X= *2,956,313.87 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.

All contours by:
Elmer L. Williams
Cartographer

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

DATA RECORD

Field Inspection by (II): Elmer L. Williams

Date: 2 February 1949
8 September 1949

Planetable contouring by (II): Elmer L. Williams

Date: 2 February 1949
8 September 1949

Completion Surveys by (II): J.E. Hundley

Date: 26 June 1951

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

Air Photographic Compilation

Date of 24000 series photographs 21 December 1948

Minor change by planetable in vicinity of Long Shoal Pt., 26 June 1951.

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

Date: 1 July 1948

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

Date: 1 July 1948

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

Date: 12 October 1948

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

Date: 22 October 1948

Radial Plot or Stereoscopic

~~Control Extension~~ by (III): M. M. Slavney

Date: 19 April 1950

Stereoscopic Instrument compilation (III):

Planimetry

Inapplicable

Contours

Date:

Date:

Manuscript delineated by (III): R. R. Wagner

Date: 26 May 1950

Photogrammetric Office Review by (III): J. A. Giles

Date: June 1950

Elevations on Manuscript

checked by *fl* (III):

R. R. Wagner

Date: 25 May 1950

Camera (kind or source) (III): U. S. C. & G. S. 9-Lens Camera 8 $\frac{1}{4}$ focal length

Number	Date	Time	Scale	Stage of Tide
21518	18 Dec.1947	11:27	1:20,000	+ No tide
21519	18 Dec.1947	11:27	"	
22110	29 Mar.1948	11:45	"	
22111	29 Mar.1948	11:46	"	
22112	29 Mar.1948	11:47	"	
24105	21 Dec.1948	11:53	"	
24106	21 Dec.1948	11:53	"	
24107	21 Dec.1948	11:54	"	

Tide (III)

Reference Station: + No tide
 Subordinate Station:
 Subordinate Station:

Ratio of Ranges	Mean Range	Spring Range

Washington Office Review by (IV): S. J. Hathorn

Date: 21 March, 1952

Final Drafting by (IV):

Date:

Drafting verified for reproduction by (IV):

Date:

Proof Edit by (IV):

Date:

Land Area (Sq. Statute Miles) (III): 17
 Shoreline (More than 200 meters to opposite shore) (III): 18.4
 Shoreline (Less than 200 meters to opposite shore) (III): 2.1
 Control Leveling - Miles (II): 9.4
 Number of Triangulation Stations searched for (II): 10 **
 Number of BMs searched for (II): 0
 Number of Recoverable Photo Stations established (III): 7*
 Number of Temporary Photo Hydro Stations established (III): None

Recovered: 7 ** Identified: 7 **
 Recovered: 0 Identified: 0

Remarks:

Contouring done prior to establishment of third order levels.
 Elevations subject to change upon third order level determination of elevations of:

T-9281 258 (NCGS)
 T-8975 259 (NCGS)
 T-9281 H-1 (C of E)
 263 (NCGS) } Maximum change after adjustment = 0.11 ft.

*One of these 7 stations (KIND 1949) falls on T-9282 of Ph-45(49)

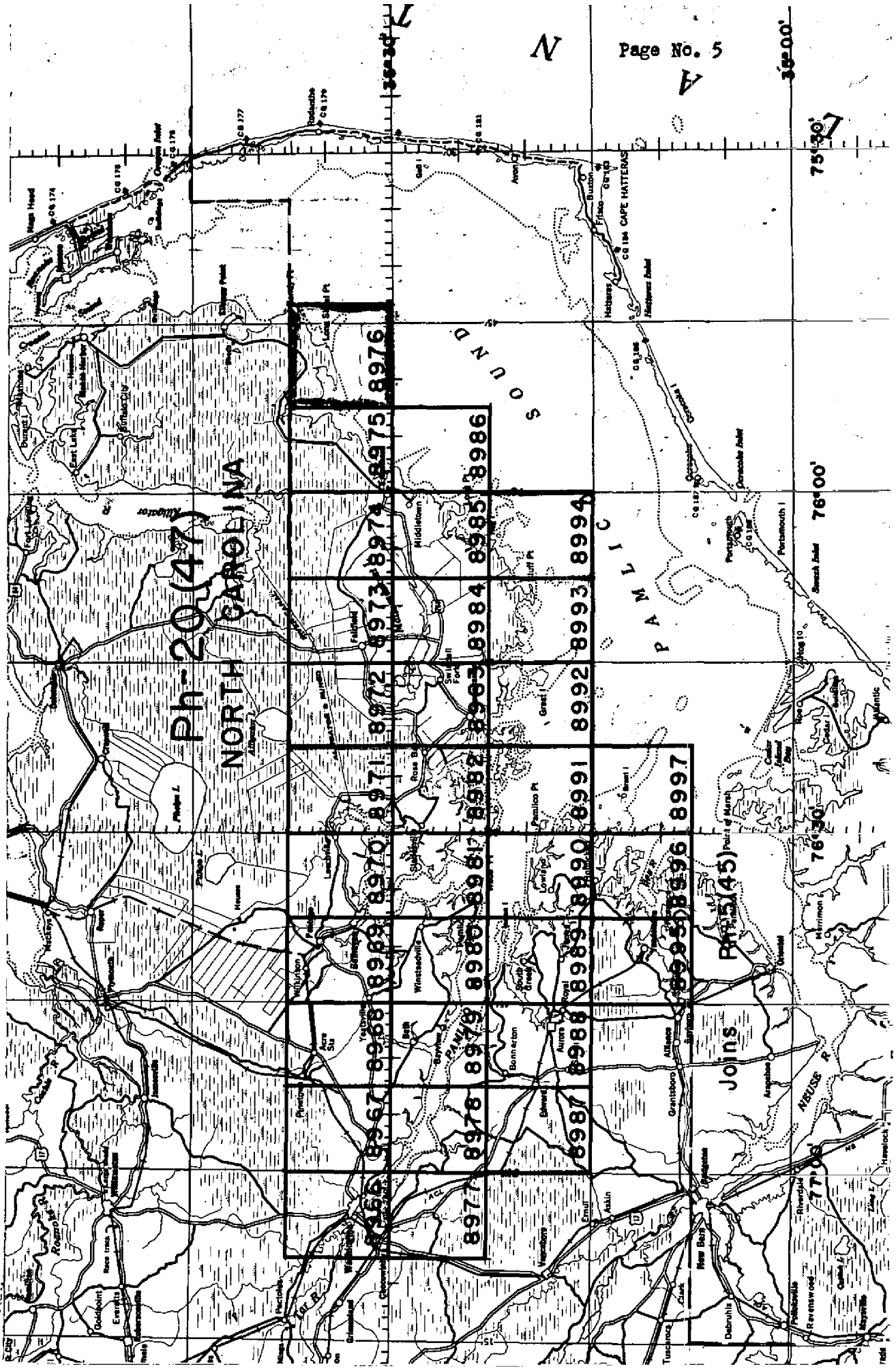
Four 3rd order bench marks established.

** Four within quadrangle.

Form T-Page 4

M-2618-12(4)

~~The periodic tide is negligible.~~ + The range of the periodic tide is less than 1/4 foot. sm.



Ph-20(47)

Ph-25(45)

Joins

SUMMARY TO ACCOMPANY T-8976

Topographic map T-8976 is one of 32 similar maps of Project Ph-20(47) and is the northeasterly map in the project. It covers a boat-shaped point along the west shore of Pamlico Sound, North Carolina. The land area is situated completely within Dare County, but lies adjacent to Hyde County on the west.

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 covers $7\frac{1}{2}'$ in latitude by $8\frac{1}{2}'$ in longitude. The entire map was field edited. After addition of hydrographic information the map will be forwarded to the U. S. Geological Survey for publication as a standard topographic quadrangle.

Items registered under T-8976 will 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-8976
 35-30/75-45/7.5
 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, and other instructions as noted herein. All field work was done by the following personnel:

<u>Name and Title</u>	<u>Phase</u>	<u>Date</u>
E. L. Williams	Horizontal Control	February 2, 1949
Cartographer	Recovery	
	Field Inspection	through
	Fly Levels	
	Contours	September 8, 1949

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

2. AREAL FIELD INSPECTION

~~contains~~ no human habitations.

The quadrangle ~~is uninhabited~~. The land mass consists of about 20 square miles, of which about one sixth is marsh and the remainder very flat land. About half of this land is wooded and the rest overgrown with low bushes about three feet high.

Route U. S. #264, a fire tower, and about 6 sheds are the only cultural features. Wild cattle range in the woods south of Route #264. The canal from the bridge on Route #264 to Pains Creek is used regularly by fishermen and oystermen for access to Pamlico Sound.

No difficulty was encountered in interpretation of the photographs. Normal planetable methods were used.

3. HORIZONTAL CONTROL

(c) Stations not established by the Coast and Geodetic Survey are:

<u>Station</u>	<u>Agency</u>	<u>Order</u>
(T-9282) 257	North Carolina Geodetic Survey	Unknown
(T-9282) 260	North Carolina Geodetic Survey	Unknown
263	North Carolina Geodetic Survey	Unknown
(T-9281) H-1	Corps of Engineers	Third (traverse)

(e) Stations reported as lost on Form 526 are:

- (T-9282) 257 North Carolina Geodetic Survey
(T-9282) 260 North Carolina Geodetic Survey

4. VERTICAL CONTROL

(a)

(5) Third order bench marks established by this party are:

Established 5 Jan 1950:

None to date.

X-246

Y-246

W-246

MON. 263-1935 (N.C. GEOD. SUR.)

(b) Nine and four tenths miles of fly levels were run to supplement existing control. All lines which averaged over 0.01 feet in error per set up were adjusted by prorating the error through the line.

The first and last level points are 76-1 and 76-12.

See note under remarks P-4 of this report.

5. CONTOURS AND DRAINAGE

Contouring was done by planetable methods directly on nine-lens photographs.

Drainage of the area north of Route #264 is by seepage into the canal along the road which empties into Pains Creek. None of the tidal creeks extend into the woods.

(H.F. Garber, C/P, recommended roadside ditches (canals) not be mapped. - 3/52)

6. WOODLAND COVER

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

7. SHORELINE AND ALONGSHORE FEATURES

The shoreline from Pains Bay east to Long Shoal Point, is a very narrow sand beach which may change at intervals. An obvious change took place on Long Shoal Point. Plotting the shore with the planetable revealed that the shore changed considerably between the date of inspection and the date of the first photography (3-29-48), but that the change since the date of last photography (12-21-48) was negligible.

See Par. 56.

(b) Pamlico Sound has no periodic tide. ~~MIWL is the same as MIWL.~~

** The periodic tide is negligible.
* The range of tide is less than 1/4 foot.
Err.*

8. OFFSHORE FEATURES

The wreck on the south section of Long Shoal which was used as a bombing target was visited and photographs taken of both the ship and of one of the 8 platforms grouped around it. The platforms are 8 x 8 feet set on piles 6 feet above water.

The wreck is a Great Lakes type ship with deck about 7' and the highest point of superstructure is about 45' above the surface. *See item 37.*

(Outside quadrangle & project limits.)

9. LANDMARKS AND AIDS

The fire tower recommended as a landmark will eventually be torn down and replaced with a steel tower. The district fire warden's opinion is that this will not take place for several years. The field editor should check on this point. *(Form 524 submitted by Field Inspector.) See par. 57. Form 524 filed in Div. of Photogrammetry.*

Positions of fixed aids are submitted on Form 567, which accompanies this report.

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 which will be submitted at a later date by A. J. Wraight. *(Pamlico River Entrance, dtd 7 Nov., 1949.) Reports filed in Division of Photogrammetry.*

11. OTHER CONTROL

Recoverable Topographic stations established are:

BOND, 1949	PART, 1949
JAKE, 1949	REID, 1949
T-9282 KIND, 1949	SKID, 1949

(Forms 524 submitted by Field Inspector) Filed in Division of Photogrammetry.

12. OTHER INTERIOR FEATURES

None

13. GEOGRAPHIC NAMES

This will be the subject of a special report which will be submitted by A. J. Wraight at a later date. *(15 Jan 1950) Report filed in Geographic Names Section, Division of Charts.*

14. SPECIAL REPORTS AND SUPPLEMENTAL DATA

Not applicable.

15. SWAMP

All wooded land which is on the Sound side of Route U. S. #264, and for an average distance of one mile inshore from the marsh is classified as swamp chiefly because it is lower, slightly, than the land closer to the road and the water lies on the surface all year. Whereas the land close to the road was dry at the time of field inspection, which was done during a rainy period.

The peculiar oblate shaped area (north of the road and northeast of the bridge over Pains Creek) of low bushes was very wet at the time of field inspection and probably remains so all year.

15 September 1949
Submitted by:

E. L. Williams
E. L. Williams *my JKW.*
Cartographer

Approved:
22 September 1949

E. R. McCarthy
E. R. McCarthy
Chief of Party

11.

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.

COMPILATION REPORT T-8976

PHOTOGRAMMETRIC PLOT REPORT

Submitted with T-8974

31. DELINEATION

The graphic method of compilation was used.

The field inspection was good. However, a few discrepancies were noted on the discrepancy overlay.

32. CONTROL

A sufficient number of secondary control points was established by the radial plot and no difficulty was encountered in cutting in additional detail points.

33. SUPPLEMENTAL DATA

None was used.

34. CONTOURS AND DRAINAGE

No difficulty was encountered in the delineation of drainage or contours.

35. SHORELINE AND ALONGSHORE DETAILS

No difficulty was encountered in delineation of the shoreline or the adjacent area. The field inspection was good.

The only shoal area which could be accurately shown is around Rawls Island. *see item 67.*

36. OFFSHORE DETAILS

None.

37. LANDMARKS AND AIDS

A landmark "WRECK" which falls beyond the eastern limits of project was located by a two cut intersection from the radial plot. It is believed that the position listed on Form 567 is within the required accuracy.

38. CONTROL FOR FUTURE SURVEYS

Six (6) recoverable topographic stations have been shown on the manuscript and Form 524 submitted for each. A seventh recoverable topographic station, KIND, 1949, was located. It falls on Ph-45(49) quadrangle T-9282.

A list of these stations has been prepared for the hydrographer and included in Item 49.

39. JUNCTIONS

T-8975 - to the west: in agreement
T-9282 Ph-45(49) - to the north: delineation has not been started.

Limits of project to the east and south.

40. HORIZONTAL AND VERTICAL ACCURACY

No statement *See item 66.*

46. COMPARISON WITH EXISTING MAPS

Comparison was made with Roanoke Island Quadrangle scale 1:125,000 edition 1943.

47. COMPARISON WITH NAUTICAL CHARTS

Comparison was made with Chart 1229, scale 1:80,000, 1942 edition and corrected 14 June 1948. The manuscript and chart are in agreement except for the following:

At Long Shoal Point the shoreline has built out into Pamlico Sound forming some ponds and a sand beach. *See item 56.*

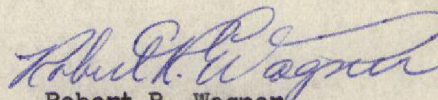
The point of land between Pamlico Sound and Pains Bay has washed away somewhat. Also an islet between this point of land and Rawls Island does not appear on the photographs.

ITEMS TO BE APPLIED TO NAUTICAL CHARTS IMMEDIATELY.

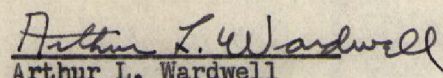
None.

ITEMS TO BE CARRIED FORWARD.

None.


Robert R. Wagner
Cartographic Survey Aid

Approved and Forwarded.


Arthur L. Wardwell
Chief of Party

49. NOTES FOR THE HYDROGRAPHER

The following are topographic stations which may be useful to the hydrographer:

BOND, 1949
FIRE LOOKOUT TOWER, 1949 (Landmark)
JAKE, 1949
KIND, 1949 - T-9282
PART, 1949
REID, 1949
SKID, 1949

Two shoals, LONG SHOAL and PINGLETON SHOAL were not shown on the map manuscript. The limits of the shoals could not be seen on the photographs.

50

PHOTOGRAMMETRIC OFFICE REVIEW

T- 8976

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

ALONGSHORE AREAS

(Nautical Chart Data)

12. Shoreline J.G. 13. Low-water line J.G. 14. Rocks, shoals, etc. J.G. ~~XXXXXXXX~~ 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. ~~XXXXXXXXXX~~ ~~XXXXXXXXXX~~ 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. ~~XXXXXXXX~~ 30. Other cultural features J.G.

BOUNDARIES

31. Boundary lines J.G. ~~XXXXXXXXXX~~

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:

M-2523-12

FIELD EDIT REPORT
Project Ph-20(47)
Quadrangle T-8976

Harry F. Garber, Chief of Party

51. METHODS

The field edit of this area was accomplished by traversing, via truck, the one road (U.S. Highway #264) and the shoreline by boat.

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 have been 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 in one day, 26 June 1951.

52. ADEQUACY OF COMPILATION

The map compilation is adequate and will be complete after field edit data has been applied. *See item 66.*

53. MAP ACCURACY

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

54. RECOMMENDATIONS

None.

55. EXAMINATION OF PROOF COPY

It is believed that Mr. John L. Mann, of New Holland, N. C., is best qualified to examine a proof copy of this work.

56. SHORELINE AND ALONGSHORE DETAILS

Ref. to item 35 - Compilation Report.

The delineation of the shoreline is adequate except in that area W.S.W. of Δ PAIN 1933. The charted wreck does not exist and only one island (sand and shell) is apparent. Due west of this plotted island a sand and shell spit has built up and is connected to the mainland as shown on the field edit sheet. The shoreline in this particular area is subject to change with storm tides.

57. LANDMARKS AND AIDS TO NAVIGATION

Ref. to item 9 - Field Inspection Report.

The fire tower recommended as a landmark is in excellent condition and at present (according to authoritative sources) there is no intention of its removal or reconstruction.

58. OTHER INTERIOR FEATURES

The only road appearing in this area is U. S. Highway #264.

The interpretation of woodland cover has been reclassified and the limits shown on the field edit sheet. *changed again by Hundley in Nov 1951 to agree substantially with original field inspection. See item 61.*

59. JUNCTIONS

Junctions with quadrangles in Ph-45(49) to the north will be made at a later date. *See item 68.*

28 June 1951

Submitted by:

James E. Hundley
James E. Hundley *CEV*
Cartographer

17 July 1951

Approved by:

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

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

PHOTOGRAMMETRIC REVIEW SECTION

NONFLOATING AIDS OR LANDMARKS FOR CHARTS

TO BE CHARTED }
TO BE DELETED }

STRIKE OUT ONE

Washington, N. C.

23 September, 1949

I recommend that the following objects which have ~~chart not~~ been inspected from seaward to determine their value as landmarks, be charted on ~~(deleted from)~~ the charts indicated.

The positions given have been checked after listing by Robert R. Wagner

Tampa Photogrammetric Office

E. J. McCarthy

Chief of Party.

[illegible]

This form shall be prepared in accordance with Hydrographic Manual, pages 800 to 804. Positions of charted landmarks and *nonfloating* aids to navigation, if redetermined, shall be reported on this form. The data should be considered for the charts of the area and not for individual field survey sheets. Information under each column heading should be given.

48. GEOGRAPHIC NAME LIST

CLARK CREEK ✓

DARE COUNTY ✓

ENGELHARD - STUMPY POINT ROAD ✓

HYDE COUNTY ✓

*LONG SHOAL — *under water*

LONG SHOAL POINT ✓

LONG SHOAL RIVER ✓

MUDDY CREEK ✓

NORTH CAROLINA ✓

PAINS BAY ✓

PAINS CREEK ✓

PAINS POINT ✓

PAMLICO SOUND ✓

PARCHED CORN BAY ✓

PARCHED CORN POINT ✓

*PINGLETON SHOAL — *under water*

RAWLS ISLAND ✓

SANDY BAY ✓

CROATAN TWP.

LAKE LANDING TWP.

*Not shown on manuscript. Limits of shoal could not be seen on photographs.

Names approved,
subj to F.E.

12-19-50

a.j.w.

REVIEW REPORT T-8976
Topographic Manuscript
21 March 1952

61. General Statement:

Four third-order bench marks, W-246, 263 (N.C. Geo. Sur.), X-246 and Y-246, were established in January 1950, subsequent to field inspection, along the Engelhard-Stumpy Point Road at approximately one-mile intervals.

Discrepancies in woodland cover classification along the junction of Ph-20(47) with Ph-45(49) to the north required the field editor to revisit the quadrangle in November 1951 for the reconciliation of these discrepancies.

62. Comparison with Registered Topographic Surveys:

T-1385	1:20,000	1875
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See item 47 for major changes.

Map T-8976 is to supersede this survey for nautical charting purposes for common areas.

63. Comparison with Maps of other Agencies:

See item 46.

64. Comparison with Contemporary Hydrographic Surveys:

None

65. Comparison with Nautical Charts:

1229	1:80,000	51-10/22
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See item 47.

66. Adequacy of Results and Future Surveys:

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

67. Offshore Features:

The shoal area (see item 35) compiled around Rawls Island was removed from the manuscript because of its conflict with soundings. This feature will be more

adequately shown with the addition of hydrography to the manuscript.

68. Junctions:

See item 39.

This quadrangle joins quadrangles T-9282 and T-9283 in Ph-45(49) to the north. Compilation of these quadrangles has not been started. However, the field inspection photographs for the quadrangles were available during review and no junction difficulties are anticipated.

Reviewed by:

Stanley J. Hathorn
Stanley J. Hathorn

Approved:

S. V. Kuffel 11/20/52
Chief, Review Section
Division of Photogrammetry

H. Edmonston
Chief, Nautical Chart Branch
Division of Charts

O. J. Reading
Chief, Div. Photogrammetry
MP

Earl O. Heston
Chief, Div. Coastal Surveys
E.O.H.

History of Hydrographic Information

Quadrangle T-8976

Pamlico Sound, North Carolina

Hydrography was applied to the manuscript of this quadrangle in accordance with Division of Photogrammetry general specifications dated 18 May 1949.

Soundings, and 6, 12 and 18 foot depth curves at mean low water datum originate with the following:

U.S.C.&G.S. Hydrographic Surveys:

H-1362a, (1875-77) 1:20,000

H-1362b, (1875-76) 1:20,000

H-1363a, (1875-77) 1:20,000

U.S.C.&G.S. Nautical Charts:

1229 1:80,000, latest print date 10-22-51

1232 1:80,000, " " " 2-19-51

Hydrography was compiled by K. N. Maki and verified by C. B. Samuels.

K. N. Maki

K. N. Maki

Division of Photogrammetry

15 April 1952

NAUTICAL CHARTS BRANCH

SURVEY NO. 8976

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.