8741

Skyhook Survey N85

Diag. Cht. No. 1233

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey: Topographic

Field No. ..... Office No. T-8741

LOCALITY

State: North Carolina

General locality: Core Sound

Locality: Core Banks

194 5-'49

CHIEF OF PARTY
R.J.Sipe, Chief of Party
R.A.Gilmore, Tampa Photo Office

LIBRARY & ARCHIVES

DATE: February 10, 1950

8-1870-1 (1)

8741

9-29-69 419 Chr J Beeler after review & verification applied Revised Shoreline

Form T-1

DATA RECORD

T-8741

Quadrangle (II):

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

Field Office: Morehead City, N.C. Chief of Party: Riley J. Sipe
Lieut. Comdr

Compilation Office: Tampa, Fla. Chief of Party: Ross A. Gilmore
Lieut. Comdr.

Instructions dated (II III): Undated

Copy filed in ~~Descriptive Report No. T-~~ ~~(VI)~~ Div of Photog Office Files

Completed survey received in office: 4/6/48

Reported to Nautical Chart Section: 4/13/48

Reviewed: 10/27/49 Part. Applied to chart No. 419 420 1233 Date: 3/29/49 7/15/49 2/25/49

Redrafting Completed:

Registered: 12/19/49 Published:

Compilation Scale: 1:10,000 Published Scale: 1:24,000

Scale Factor (III): None

Geographic Datum (III): N.A. 1927 Datum Plane (III): M.S.L.

Reference Station (III): BANK 1933

Lat.: 34° 50' 27".511 (847.8m.) Long.: 76° 19' 59".360 (1508.2m) Adjusted ~~Unadjusted~~

State Plane Coordinates (VI): N. Carolina State Grid

X = Y =

Military Grid Zone (VI)

PHOTOGRAPHS (III)

Number	Date	Time	Scale	Stage of Tide
16109	4-7-46	0928	1:10,000	2.05
16110	"	0929	"	"
16111	"	0929	"	"
16112	"	0930	"	"
16196	"	1135	"	----
16197	"	1138	"	----

Tide from (III): Average Ocracoke Inlet and Cape Lookout.
Reference Station Hampton Roads

Mean Range: 2.8 Spring Range: 3.3

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

Field Inspection by: John S. Howell, Stanley J. Hathorn, John R. Smith, Robert A. Horn date: 21 Feb. 1947 to 26 Mar. 1947

Field Edit by: E.T. Jenkins date: Jan 1949

Date of Mean High-Water Line Location (III): 18 Feb. - 27 March 1947

Projection and Grids ruled by (III) T.L.J. (Wash. Off.) date: 29 July 1947

" " " checked by: " " date: " " "

Control plotted by: R. R. Wagner date: 4 Aug. 1947

Control checked by: M. M. Slavney date: 4 Aug. 1947

Radial Plot by: M.M. Slavney date: 27 Jan. 1948

Detailed by: C.H. Baldwin date: Feb. 1948

Reviewed in compilation office by: J. A. Giles date: March 1948

Elevations on Map Manuscript checked by: J.A. Giles date: March 1948

STATISTICS (III)

Land Area (Sq. Statute Miles): 2.25

Shoreline (More than 200 meters to opposite shore): 15.5 miles

Shoreline (Less than 200 meters to opposite shore): 3.2 miles

Number of Recoverable Topographic Stations established: 7

Number of photo-hydro Stations located by radial plot: 6

Leveling (to control contours) - miles: 6

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:

Summary Report to Accompany T-8741

Topographic map T-8741 is one of 37 standard 7½ minute maps in Project Ph-5(45) and is located along the eastern limits of the project. It covers a part of the Core Banks and the mainland in the vicinity of Styron Bay. This is a planetable contouring project. T-8741 is composed of one topographic manuscript, N/2, and S/2, each 7½ minutes in longitude and 3-3/4 minutes in latitude.

The several mapping operations were:

(a) 9-lens aerial photography and laboratory processing, 1:10,000 scale.
(b) The field survey included identification of shoreline, planetable contouring, identification and establishment of horizontal and vertical control, classification of photographic detail and geographic names investigation.
(c) Compilation by graphic methods.
(d) Preliminary office inspection
(e) Field Edit
(f) Final review of the map manuscript to ensure completeness and conformance with specifications and to include corrections in accordance with the field edit survey.
(g) Processing
A 1:20,000 scale glass plate negative will be prepared for transmittal to the Geological Survey.

T-8741 will be published and distributed by the Geological Survey at a scale of 1:24,000 as a standard topographic quadrangle in accordance with an agreement of March 25, 1947.

Data pertaining to T-8741 will be filed and may be obtained as follows :

(a) Filed in the Division of Photogrammetry:
(1) T-8741 N/2 and S/2, scale 1:10,000 map manuscripts, field edit and final review corrections applied.
(b) Filed in the Coast and Geodetic Survey Archives
(1) Descriptive Report
(2) 1:10,000 scale, cloth mounted lithographic prints of map manuscript T-8741 N/2 and S/2.

(3) The above print is to be permanently registered under T-8741 and when T-8741 is published in its entirety, a cloth backed copy of the published map, at a scale of 1:24,000, will also be registered.

FIELD INSPECTION REPORT
T-8741 (34 -45'/76 -15'/7.5')
Project Ph-5(45)
Sub-project EA

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, and Supplement 1 to the above, dated 11 December 1946; except for deviations noted herein.

The field work on this quadrangle was performed by the following personnel on the dates indicated:

NAME AND TITLE	FIELD WORK	DATE
John S. Howell Topographic Engineer	Horizontal Control Shoreline Inspection Interior Inspection	10 Mar - 11 Mar 47
Stanley J. Hathorn Photogrammetrist	Horizontal Control Shoreline Inspection Interior Inspection	21 Feb - 27 Feb 47
John R. Smith Engineering Aid	Vertical Control Supplemental Vertical Control	3 Mar - 5 Mar 47
Robert A. Horn Photogrammetrist	Contours	21 Mar - 26 Mar 47

1. Description of the Area:

The entire land area of this quadrangle is a part of Core Banks which in turn is a part of the North Carolina Barrier Beaches, with the exception of .25 square miles of mainland. The entire Core Banks area is low and flat with the land mass being divided about equally between sand beaches and marsh land with the dividing line paralleling the beach. The highest land averages about eight feet above mean sea level and is the sand beach that has been built up by wave action. At the time of high storm water the entire land area is awash and the storm water drains westward to Core Sound. The western half of the Bank is low

and flat and covered by marsh grass. Very little other vegetation exists.

The United States Coast Guard maintains one Lifeboat Station, the Atlantic Lifeboat Station near the northern limit of the quad and it is the only substantial installation in the quadrangle.

2. Completeness of Field Inspection:

Field Inspection is believed to be complete and adequate.

3. Interpretation of the Photographs:

All phases of the field work, except the mainland contouring, were completed on 9-lens, 1/10,000 scale photographs. No difficulty was encountered in the interpretation of the photographic detail.

4. Horizontal Control:

Seven horizontal control stations were searched for or recovered, of these two were pricked on the photographs for control of the radial plot. Horizontal control was supplemented by the establishment of Topographic Stations.

5. Vertical Control:

Two U.S.E. Bench Marks were recovered in this quadrangle. These bench marks are U.S.C. & G.S. triangulation stations on which elevations have been established.
See Report for T-8734 for information relative to datum used

6. Contours and Drainage:

To expedite the field work all contouring was done on 9-lens, 1/10,000 scale photographs. Control of the contours was maintained by reference to the fourth order temporary bench marks. Two five-foot contours generally parallel the beach with one falling on each side of the ridge of sand that has been built up parallel to the beach.

There is no definite ground water drainage pattern and what appears to be drains change with every flooding by storm water.

7. Mean High Water:

The entire high water line was inspected by jeep and by walking along the shoreline. On the Atlantic Ocean side, of the mean high water line was indicated on the photographs and substantiated by measurements from identifiable topographic detail.

On the Core Sound side the entire shoreline, with a few minor exceptions, is apparent and should be easily delienated using the field notes for a guide.

8. Low Water Line:

Due to the stage and the condition of the tide at the time of shoreline inspection no measurements were made to determine the low water line.

On the Sound side no definite low water line exists due to the variable nature of the tide in the sound.

9. Wharves and Shoreline Structures:

The only wharf of a substantial nature in the quadrangle is that at the Atlantic Lifeboat Station.

10. Detail Offshore from Mean High Water Line:

Details noted offshore from mean high water line consisted of fixed aids to navigation located in Core Sound and one piece of wreckage on the Atlantic Ocean side. See field edit report

11. Landmarks and Aids to Navigation:

All necessary information pertaining to landmarks and aids to navigation is furnished on Form 567.

12. Hydrographic Control:

Five fixed aids to navigation and one natural object were selected as hydrographic stations.

13. Landing fields and Aeronautical Aids:

There are no landing fields or aeronautical aids within the limits of this quadrangle; however, it is possible

for light planes to land on the beach at low water.

14. Roads:

There are no roads or trails on the Core Banks portion of this quadrangle.

15. Bridges:

No bridges exist within the limits of this quadrangle.

16. Buildings:

Buildings have been clearly indicated for the compiler.

17. Boundaries:

No boundaries fall within the limits of this quadrangle.

18. Geographic Names:

Geographic names will be the subject of a special report by A. J. Wraight, Topographic Engineer.

Submitted:
2 April 1947

John S. Howell
Topographic Engineer

Robert A. Horn by GEV.
Robert A. Horn
Photogrammetrist

Approved:
May 1947

Riley J. Sipe
Chief of Party

Form 567
April 1945

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

8741

NONFLOATING AIDS OR LANDMARKS FOR CHARTS

~~TO BE CHARTED~~
TO BE DELETED — STRIKE OUT ONE

Morehead City, N. C. 25 Mar. 47, 19

I recommend that the following objects which have ~~(have 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 J. S. Howell, Topographic Engr.

Riley J. Sipe *Chief of Party.*

STATE	North Carolina		POSITION									
			LATITUDE		LONGITUDE			METHOD OF LOCATION AND SURVEY NO.	DATE OF LOCATION	HARBOR CHART	INSHORE CHART	OFFSHORE CHART	CHARTS AFFECTED
CHARTING NAME	DESCRIPTION	SIGNAL NAME	° ′	D.M. METERS	° ′	D.P. METERS	DATUM						
MAST	Not prominent. See "Flagpole" Form 567, to be charted, Quad.T-8741		34 51		76 18		NA 1927	unknown	unknown		x		1233 421

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 by individual field survey sheets. Information under each column heading should be given.

Form 567
April 1945

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

NONFLOATING AIDS ~~TO NAVIGATION~~ FOR CHARTS

TO BE CHARTED / ~~TO BE DISCONTINUED~~ } STRIKE OUT ONE

Morehead City, N.C. 25 March, 19 47

I recommend that the following objects which have ~~not~~ been inspected from seaward to determine their value ~~for discontinuance~~ be charted on ~~the discontinued~~ the charts indicated.

The positions given have been checked after listing by R. H. Wagner, Tampa Photogrammetric Office.

Riley J. Sipe
Riley J. Sipe, *Chief of Party.*

STATE: North Carolina			POSITION									
			LATITUDE		LONGITUDE							
CHARTING NAME	DESCRIPTION	SIGNAL NAME	° ′	D.M. METERS	° ′	D.P. METERS	DATUM	METHOD OF LOCATION AND SURVEY No.	DATE OF LOCATION	HARBOR CHART	INSHORE CHART	OFFSHORE CHART	CHARTS AFFECTED
CORE SOUND													
LIGHT 23	Black slatted Pile Structure		34 52	720	76 20	564	NA 1927	Rad.Plot T-8741	1947	X			421 1233
CORE SOUND													
LIGHT 24	Red Slatted Pile Structure		34 51	1495	76 20	1186	"	"	1947	x			"
CORE SOUND													
LIGHT 26	Red triangular daymark on red pile		34 51	798	76 21	292	"	"	1947	x			"
CORE SOUND													
LIGHT 27	Black slatted pile structure		34 50	1155	76 22	105	"	"	1947	x			"
ATLANTIC LIFEBOAT													
STATION LIGHT	Black pile on end of dock		34 51	1073	76 18	1054	"	"	1947	x			"

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 by individual field survey sheets. Information under each column heading should be given.

Form 567
April 1945

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

8741

NONFLOATING AIDS OR LANDMARKS FOR CHARTS

TO BE CHARTED / ~~TO BE DELETED~~ } STRIKE OUT ONE

Morehead City, N.C. 25 March, 19 47

I recommend that the following objects which have been inspected from seaward to determine their value as landmarks, be charted on the charts indicated.

The positions given have been checked after listing by R. R. Wagner, Tampa Photogrammetric Office.

Robert L. Wagner

Riley F. Sipe

Riley F. Sipe
Chief of Party.

STATE	North Carolina		POSITION									
			LATITUDE		LONGITUDE			METHOD OF LOCATION AND SURVEY No.	DATE OF LOCATION	HARBOR CHART	INSHORE CHART	OFFSHORE CHART	CHARTS AFFECTED
CHARTING NAME	DESCRIPTION	SIGNAL NAME	° ′	D.M. METERS	° ′	D. P. METERS	DATUM						
CUPOLA	Cupola on the Atlantic Lifeboat Station		34 51	995′	76 18	917′	N.A. 1927	Rad. Plot T-8741	1947		x		1233 421
FLAGPOLE	Flagpole at the Atlantic Lifeboat Station.		34 51	962′	76 18	954′	"	"	"		x		1233 421

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 by individual field survey sheets. Information under each column heading should be given.

MAP T-8741 PROJECT NO. Ph-5(45) SCALE OF MAP 1:10,000 SCALE FACTOR -- -----

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)
ATLANTIC BN. 1933	G.Ps. Page 409	N.A. 1927	34° 52' 25.82"			795.6 (1053.3)	Lost
			76 20 10.72			272.3 (1251.6)	
CORE, 1932	G.Ps. P.405	"	34 51 32.893			1013.6 (835.3)	
			76 18 38.570			979.8 (544.3)	
BANK, 1933	G.Ps. P 405	"	34 50 27.511			847.8 (1001.1)	
			76 19 59.360			1508.2 (16.3)m	
STEEP PT. BN., 1932	"	"	34 51 43.662			1345.4 (503.5)	Lost
			76 20 52.284			1328.0 (196.1)	
CORE SOUND LT. 27	Office Comp.	"	34 50 37.544			1156.9 (692.0)	Not Δ
			76 22 04.161			105.7 (1418.7)	
SALT MARSH 3 1908	G.Ps. P. 406	"	34 49 12.473			384.4 (1464.5)	
			76 22 23.774			604.2 (920.7)	

1 FT. = .3048006 METER

COMPUTED BY: W.H. Shearouse DATE 21 March 1947

CHECKED BY: M.M. Slavney DATE 11 July 1947

M-2388-12

COMPILATION REPORT
TO ACCOMPANY
QUADRANGLE T-8741

26 & 27 CONTROL AND RADIAL PLOT:

A "Report on Main Radial Plot (No. 4) for Ph-5(45)" was prepared and submitted by Milton M. Slavney, Photogrammetric Engineer, on 26 February, 1948. Filed in the Div of Phtgy Files Section

28. DELINEATION:

The nine-lens photographs used in delineating this quadrangle were of fair to good scale. The contouring on the small portion of mainland that falls within the limits of this quadrangle was done on the 1:20,000 nine-lens field photographs. See items 3 and 6 of the field inspection report. The projector was used in transferring these contours to the map manuscript with no unusual difficulties encountered.

The field inspection was adequate for the delineation; no problems were encountered which could not be solved.

29. SUPPLEMENTAL DATA:

None

30. MEAN HIGH-WATER LINE:

The mean high water line was delineated according to instructions. See field inspection report, item No. 7.

31. LOW WATER AND SHOAL LINES:

There are no low-water lines shown on this manuscript. See field inspection report item No. 8.

32. DETAILS OFFSHORE FROM HIGH-WATER LINE:

Details offshore from high-water line consist of fixed aids to navigation in Core Sound.

The field inspection report for this quadrangle states, in item No. 10, that there is "one piece of wreckage on the Atlantic Ocean side". No recovery of this wreckage can be found on the field photographs or on the nautical charts of this area. The field editor has been asked, on the discrepancy overlay, to check this. See field edit report

33. WHARVES AND SHORELINE STRUCTURES:

All wharves and shoreline structures have been delineated according to instructions.

34. LANDMARKS AND AIDS TO NAVIGATION:

All landmarks and aids to navigation have been shown according to instructions.

35. HYDROGRAPHIC CONTROL:

Five ~~Six~~ photo-hydro stations were located by radial plot or theodolite cuts:

~~4101 South gable of net Shack~~ Deleted from manuscript - per field editor
4102 Core Sound Lt. # 23
4103 " " " 24
4104 " " " 26
4105 " " " 27
4106 Atlantic Lifeboat Station Light

36. LANDING FIELDS AND AERONAUTICAL AIDS:

None. See field inspection report item No. 13.

37. POLITICAL BOUNDARIES:

None.

38. GEOGRAPHIC NAMES:

All geographic names have been shown according to the geographic name sheets received from the Washington Office with the exception of "John Smith Creek". This creek is not visible on the photographs and could not be delineated. A check of this feature has been requested of the field editor. Located and named by field editor

39. TOPOGRAPHIC STATIONS:

The chained distances as shown on form 524, of four topographic stations are not in agreement with the map manuscript. A check of these discrepancies has been requested of the field editor. Checked by field editor

44. COMPARISON WITH EXISTING TOPOGRAPHIC QUADRANGLES:

None available for comparison.

45. COMPARISON WITH NAUTICAL CHARTS:

A comparison was made with nautical chart No. 420 bearing a print date of 13 January 1947, and nautical chart No. 419 bearing a print date of 19 October 1946. No discrepancies were noted except for "John Smith Creek". See item No. 38 of this report

Respectfully submitted,

Charles H. Baldwin

Charles H. Baldwin
Photogrammetric Aid

Approved and Forwarded:

Ross A. Gilmore

Ross A. Gilmore
Chief of Party.

GEOGRAPHIC NAMES

Survey No. T-8741

1 Name on Survey	A On Chart No.	B On previous survey No.	C On U. S. quadrangle Maps	D From local information	E On local Maps	F P. O. Guide or Map	G Rand McNally Atlas	H U. S. Light List	K	
North Carolina									USGB	1
Carteret County										2
Atlantic Ocean										3
Core Sound										4
Core Banks									USGB	5
U.S. No. 70										6
										7
Cedar Inlet		(only one application)								8
Old Channel										9
Old Channel Point										10
Flounder Slough										11
Inner Grass Lump										12
Outer Grass Lump										13
Cedar Hammock		(area reduced)								14
Big Marsh										15
Big Marsh Point										16
Gutter Creek										17
Sheep Islands										18
Sheep Pen Creek										19
Horsepen Creek										20
Nigger Creek										21
Shoal Cross/Channel										22
Atlantic Coast Guard Station No. 189										23
John Smith Creek		(very small)								24
Mill Point Shoal										25
Steep Point Shoal										26
Styron Bay									USGB	27

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GEOGRAPHIC NAMES

Survey No. T-8741

2 Name on Survey	A On Chart No.	B On previous survey No.	C On U. S. quadrangle Maps	D From local information	E On local Maps	F P. O. Guide or Map	G Rand McNally Atlas	H U. S. Light List	K	
Annis Run										1
Glover Creek										2
Steep Point										3
Flounder Slouth										4
Yaupon Hammock Gut										5
Carteret Rod and Gun Club				Names underlined in red are approved. 10-20-49 L. Heck						6
										7
										8
										9
										10
										11
										12
										13
										14
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										26
										27

M 234

FIELD EDIT REPORT
Quadrangle T-8741 N/2
34°45' - 76°15/7.5
Project Ph-5(45)B

Riley J. Sipe, Chief of Party

Field edit of this quadrangle was started during October 1948 by John D. Weiler, Photogrammetrist and completed by E. T. Jenkins, Engineering Aid in January 1949.

46. METHODS

In field editing the map manuscripts, all roads were traversed by truck. All data added to the map manuscript were either plotted from topographic features or cut in by planetable methods.

47. ADEQUACY OF THE MAP MANUSCRIPT

The map manuscript covered very little land area and was correct except for a few additions since the date of the original field inspection. Most of the notes on the field edit sheet are self-explanatory.

The flagpole at the Atlantic Lifeboat Station was measured and noted on the field edit sheet.

The wreck mentioned in item 10 of the field inspection report falls in the south half of the quadrangle. It is undoubtedly the wreck Aphrodite, an old civil war vessel. The boiler is above MHW. It is located just southeast of the Carteret Gun and Rod Club about 150 yards offshore.

A few additional geographic names were uncovered and are shown on the geographic name discrepancy print in blue pencil.

48. VERTICAL ACCURACY TEST

No vertical accuracy test was specified for this quadrangle.

The corrected sheet was reviewed by Mr. Calvin Mason of Davis, N.C., a life long resident and highly familiar with the area; he could find no errors.

Submitted:
24 January 1949

E. T. Jenkins
Engineering Aid

Approved:
24 January 1949

Riley J. Sipe
Chief of Party

Review Report T-8741
Topographic Map
October 27 1949

62. Comparison with Registered Topographic Surveys

1017	1866	1:20,000
1020	1866	1:20,000
1306	1873	1:20,000
8043	1942-1945	1:20,000
8044	1942-1945	1:20,000

All areas of the above topographic surveys common to the map are unqualifiedly superseded for the purpose of nautical charting.

63. Comparison with Maps of other Agencies

None

64. Comparison with Contemporary Hydrographic Surveys

None

65. Comparison with Nautical Charts

419	(1946)
420	(1947)

66. Adequacy of Results and Future Surveys.- This map complies with the project instructions and Bureau policy. It also complies with the National Standards of Accuracy.

67. Boundaries: The boundary line between Hunting Quarter and Portsmouth Townships has been added to the map manuscript. BTH

Reviewed by:

B. Thomas Hynson

B. Thomas Hynson 10/27/49

Approved by:

A. V. Griffiths F.H.M.
Chief, Review Section
Division of Photogrammetry

H. R. Edmonston
Chief, Nautical Chart Branch
Division of Charts

O. S. Reading
Chief, Div. of Photogrammetry

W. M. Scaife
Chief, Div. of Coastal Surveys