

8728N

Diag'd on Diag. Ch. No. - 1232

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey Topographic

Field No. Ph-5(45)-A Office No. T-8728

LOCALITY

State North Carolina

General locality Ocracoke Island

Locality Ocracoke & Vicinity

1946-48

CHIEF OF PARTY

R. J. Sipe

LIBRARY & ARCHIVES

DATE _____

B-1870-1 (1)++

8728

DATA RECORD

T- 8728

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: George E. Morris, Jr.
Lieut. Comdr.

Instructions dated (II III): Undated

Copy filed in ^{Division of Photogrammetry} ~~Descriptive~~ Office Files.
~~Report No. T- (VI)~~

Completed survey received in office: 7/27/48

Reported to Nautical Chart Section: 8/2/48

Reviewed: 11/19/48

Applied to chart No.

Date:

Redrafting Completed:

Registered: 12/6/48

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): Ocracoke, 1933

Lat.: 35° 07' 02.460" (75.8m)

Long.: 75° 58' 52.982" (1341.6m) Adjusted
~~Unadjusted~~

State Plane Coordinates (VI): None available

X =

Y =

Military Grid Zone (VI)

PHOTOGRAPHS (III)

<u>Number</u>	<u>Date</u>	<u>Time</u>	<u>Scale</u>	<u>Stage of Tide</u>
16095	7 April 1946	09:16	1:10,000	0.5' Above MLW
16096	"	09:16	"	" "
16097	"	09:17	"	" "
16098	"	09:18	"	" "
16209	"	11:55	"	1.9' "

Tide from (III): Ocracoke Inlet (Ref. Station Hampton Roads)

Mean Range: 1.9

Spring Range: 2.3

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

I.Y. Fitzgerald, Photo. Aid
Field Inspection by: M.A. Stewart, Engr. Aid
S.J. Hathorn, Photogrammetrist

27 January -
date: 13 February
1947

Field Edit by: *J. K. Wilson*

date: *10 June 1948*

Date of Mean High-Water Line Location (III): 3-14 February 1947

Projection and Grids ruled by (III) T.L.J. Wash. Office date: 25 Sept. 1947

" " " checked by: " " " date: 25 Sept. 1947

Control plotted by: I.I. Saperstein date: 6 Oct. 1947

Control checked by: R.R. Wagner date: 6 Oct. 1947

Radial Plot by: M.M. Slavney date: 3 Nov. 1947

Detailed by: R.A. Reece date: 6-17 Nov. 1947

Reviewed in compilation office by: J.A. Giles date: Nov. 1947

Elevations on ~~Field Edit Sheet~~ ^{Map Manuscript}
checked by: J.A. Giles

date: Nov. 1947

STATISTICS (III)

Land Area (Sq. Statute Miles): 5

Shoreline (More than 200 meters to opposite shore): 15 Statute mile

Shoreline (Less than 200 meters to opposite shore): 2 " "

Number of Recoverable Topographic Stations established: 3

Number of Temporary Hydrographic Stations located by radial plot: None

Leveling (to control contours) - miles: None

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:

[illegible]

1 FT. = 3048006 METER

COMPUTED BY: **W.H. Shearouse**

DATE 20 March 1947

CHECKED BY: M.M. Slavney

DATE 7 July, 1947

M-2388-12

Statement to Accompany Descriptive Report

1. T-8728 is composed of one topographic map manuscript, scale 1:10,000. The south half of the area is water and no manuscript was prepared.
2. 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, identification of horizontal and vertical control, planetable contouring, clarification of photographic details, geographic names and boundary investigation.
 - (c) Compilation by graphic methods.
 - (d) Preliminary office inspection.
 - (e) Field edit.
 - (f) Final review of the map manuscript to insure completeness and conformance with specifications, and to include corrections in accordance with the field edit survey.
 - (g) Processing
Composite 1:20,000 scale blue line reductions are being prepared for smooth drafting. There will not be a 1:20,000 scale manuscript.
3. T-8728 and the adjoining quadrangles will be published and distributed by the Geological Survey, in accordance with an agreement of March 25, 1947.
4. Data pertaining to T-8728 will be filed and may be obtained as follows:
 - (a) Filed in the Division of Photogrammetry
 - (1) T-8728, scale 1:10,000, map manuscript, field edit and final review corrections applied, and field edit sheet.
 - (b) Filed in Coast and Geodetic Survey Archives:
 - (1) Descriptive Report
 - (2) 1:10,000 scale, cloth mounted photographic print of map manuscript. (Advance print)
 - (3) The above print is to be permanently registered and when T-8728 is published, a cloth backed copy of the published map will also be registered.

November 19, 1948

B. Thomas Hynson
B. Thomas Hynson
Cartographer (Photogrammetrist)

A cloth-backed lithographic print will replace the cloth-backed photographic print.

FIELD INSPECTION REPORT
T-8728 (35° 00'.0/75° 52'.5/7'.5)
Project Ph-5(45)
Sub-Project A

Riley J. Sipe, Chief of Party

All phases of field work was completed in accordance with the Director's Instructions, Project Ph-5(45), Field, not dated; and Instructions - Project Ph-5(45) - Field, Supplementl, dated 11 December, 1946, except for deviations herein noted. Filed in Div. of Photogrammetry Office Files.

The field work on this quadrangle was completed by the following personnel:

<u>NAME AND TITLE</u>	<u>FIELD WORK</u>	<u>1947 DATES</u>
I. Y. Fitzgerald Photo Aid	Shoreline Inspection Contours	10 Feb - 13 Feb. 24 Feb - 24 Feb.
S. J. Hathorn Photogrammetrist	Horizontal Control Recovery	6 Feb - 14 Feb.
M. A. Stewart Engr. Aid	Contours	17 Feb - 18 Feb.

1. Description of the Area:

The land area of this quadrangle is comprised of the southwest end of Ocracoke Island. This Island lies between Hatteras Inlet at the northeast end of the island and Ocracoke Inlet at the southeast end of the island; and is a part of the North Carolina Outer Banks.

Many sand dunes appear in the eastern section of the quadrangle. The remainder of the island is a sand flat except for the village of Ocracoke. The land on which the village is situated is from two to eight feet in elevation.

The sand flat is covered by water when moderate or stronger winds are blowing from the northwest or west. There are some scattered dunes in the sand flat.

2. Completeness of Field Inspection:

Field inspection is felt to be complete and adequate.

3. Interpretation of the Photographs:

See combined report for quadrangles T-8715 and T-8716.

4. Horizontal Control:

See combined report for quadrangles T-8715 and T-8716.

5. Vertical Control:

National Park Service bench marks were used in addition to C. & G. S. Tidal bench marks for control of contours.
As existing control was sufficient no fly levels were run.

6. Contours and Drainage:

Contouring was completed directly on 9-lens photographs, 1/10,000 scale. Plane table methods were used.
There is no definite drainage pattern of any kind.

7. Mean High Water Line:

The mean high water line was located by measurements from identifiable points of detail except around Ocrocoke Inlet where it was located by plane table.

The mean high water line along the Pamlico Sound shore is very indefinite. No identifiable line could be discerned on the ground. This part of the mean high water line is shown as being indefinite.

Along the marsh areas of the island, all of which border Pamlico Sound, an apparent shoreline is found.

8. Mean Low Water Line:

The mean low water line was not delineated along the open beach.
The mean low water line will coincide with the HWL along the shore of Pamlico Sound except near Ocracoke Inlet.

9. Wharves and Shoreline Structures:

Adequately covered on photographs.

10. Detail Offshore from High Water Line:

Adequately covered on photographs.

11. Landmarks and Aids to Navigation:

All landmarks and aids to navigation reported on Form #567.

12. Hydrographic Control:

Additional horizontal control was established where needed to supplement existing control.

13. Landing Fields and Aeronautical Aids:

There are no landing fields in the area. However, the flat sand areas are used by light planes. These areas are subject to flooding

by strong northwest and west winds.

Ocracoke Light is a Surface Navigational Light shown on aeronautical charts.

14. Roads:

See combined report for quadrangles T-8715 and T-8716.

15. Bridges:

There are no bridges within the limits of this quadrangle.

16. Buildings:

Adequately covered on the photographs.

17. Boundaries:

See combined report for quadrangles T-8715 and T-8716.

18. Geographic Names:

See combined report for quadrangles T-8715 and T-8716.

Submitted:

24 February, 1947

I. Y. Fitzgerald
I. Y. Fitzgerald *CFV*
Photo. Aid

Approved:

March, 1947

Riley J. Sipe
Riley J. Sipe
Chief of Party

COMPILATION REPORT
TO ACCOMPANY
QUADRANGLE T-8728

26 AND 27. CONTROL AND RADIAL PLOT:

These items will be the subject of a special report to be submitted by M.M. Slavney, Photogrammetric Engineer, at a future date.
Filed in Div. of Photogrammetry Office Files.

Attention is called to station U.S.E.D., 1913, which was recovered in the field and is described on Form No. 526; however, no geographic position is available in this office for plotting.

28. DELINEATION:

Photographs 16095, 16096, 16097, 16098 and 16209 were used for delineation. These photographs are of good scale and provide a good coverage of the area.

Field inspection was satisfactory, though scant in some sectors. No unusual difficulties were encountered in interpretation. Unclassified areas were compared with similar areas classified on adjoining quadrangles.

Pass points were sufficient for delineating much of the area. Detail points were used most extensively in the village of Ocracoke and vicinity.

All roads are compiled in accordance with amendment to Photogrammetry instructions No. 10 dated October 24, 1947. All roads are now class 7, whereas in the field inspection report they were designated class 4 in accordance with "General Instructions - Classification and Compilation of Roads" dated 30 June 1945. In Notes to Compiler, it was stated that the road traversing the island was shown by a broken line on the field prints. No such line was drawn by the field inspector on field prints 16096 or 16097. The road shown on the map manuscript is that interpreted by the compiler and has been noted to the Field Editor for investigation. Refer to Field Edit Report.

29. SUPPLEMENTAL DATA:

None used.

30. MEAN HIGH-WATER LINE:

The mean high-water line is shown as indicated by the Field Inspector.

31. LOW-WATER AND SHOAL LINES:

The low-water line has been delineated and labeled "approximate", since the Field Inspector did not indicate it.

The approximate limits of the shoal areas in Pamlico Sound have been delineated with a dashed line.

32. DETAILS OFFSHORE FROM HIGH-WATER LINE:

Off shore details were adequately described on field photographs and have been delineated accordingly.

33. WHARVES AND SHORELINE STRUCTURES:

All docks, piers and other structures along the shoreline have been delineated according to field inspection notes.

34. LANDMARKS AND AIDS TO NAVIGATION:

Landmarks and aids to navigation are being submitted on form 567 and made a part of this report. Form No. 567 has been requested of the field editor for Cockle Shoal Light. Refer. to Field Edit Report

35. LANDING FIELDS AND AERONAUTICAL AIDS:

None. Reference is made; however, to item No. 13 of the Field Inspector's report for further information.

Copies attached; also, Form 524 cards (Rec. Topo Sta.) on all aids & landmarks, plus "Wade, 1946" which is marked by a disk.

37. BOUNDARIES:

No political boundary data have been received from the field.

38. CONTOURS:

Contours were transferred directly from the field inspection photographs to the map manuscript. No difficulties or unusual conditions were encountered.

39. GEOGRAPHIC NAMES:

Geographic names have been assigned as shown on copies of U.S. C. & G. S. Nautical Charts No. 419 and No. 1232 sent from the Washington Office with all the established names given. List of approved names attached to this Desc. Report.


44. COMPARISON WITH EXISTING TOPOGRAPHIC QUADRANGLES:

There are none available in this office for comparison.

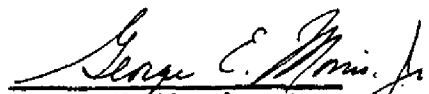
45. COMPARISON WITH NAUTICAL CHARTS:

Comparison was made with nautical charts No. 1232 (scale: 1: 80,000) dated 23 February 1946, and number 419 (scale 1: 40,000) bearing a print date of 19 October 1946. There are no changes worthy of note.

Respectfully submitted,


Richard A. Reece
Engr. Draftsman

Approved and Forwarded:


George E. Morris, Jr.
Chief of Party.

NONFLOATING AIDS OR LANDMARKS FOR CHARTS

TO BE CHARTERED

STRIKE OUT ONE

Morehead City, N. C.

17 February, 1947

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

The positions given have been checked after listing by

Robert R. Wagner

Riley J. 81p

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

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

NONFLOATING AIDS OR LANDMARKS FOR CHARTS

TO BE CHARTED
~~TO BE DELETED~~

STRIKE OUT ONE

Tampa, Florida

20 July

1948

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

The positions given have been checked after listing by

Richard A. Reece
R.A. Reece, Engr. Draftsman

Tampa Photogrammetric Office

Ross A. Gilmore
Lieut. Comdr. Ross A. Gilmore Chief of Party.

STATE NORTH CAROLINA			DESCRIPTION	SIGNAL NAME	POSITION					METHOD OF LOCATION AND SURVEY No.	DATE OF LOCATION	HARBOR CHART	INSHORE CHART	OFFSHORE CHART	CHARTS AFFECTED
CHARTING NAME	LATITUDE	LONGITUDE			DATUM										
		°				'	D. M. METERS	°	'						
TEACHES HOLE CHANNEL LIGHT	35 05	802	75 59	1102	N.A. 1927	plane table	1948	X		1231 418 1232 419					
COCKLE SHOAL LIGHT	35 06	765	75 59	826	"	"	1948	X		" "					
SILVER LAKE ENTRANCE LIGHT	35 06	1631	75 59	628	"	"	1948	X		" "					
L. 386 (1948)															
Note:															
Positions of Aids have been replotted and checked .															
Each one is in a slightly different position from the															
one cut in radially.															

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.

NONFLOATING AIDS[®] OR LANDMARKS FOR CHARTS

**NO EXCHANGED
TO BE DELETED**

STRIKE OUT ONE

Morehead City, N. C.

17 February 1947

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

The positions given have been checked after listing by

I. Y. Fitzgerald, Ph.D.

I. Y. Fitzgerald, Photo. Aid

Riley J. Sipe
Chief of Party.

Chief of Party.

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.

FIELD EDIT REPORT
Quadrangle T-8728
35°00'.0 - 75° 52.5' / 7.5
Project Ph-5(45)
Riley J. Sipe, Chief of Party

The field edit of this quadrangle was completed during June, 1948.

46. METHODS

The island of Ocracoke was inspected by truck, traversing all available roads. All features added to the compilations were plotted from topographic features or cut in by planetable. The area along the western portion of Ocracoke Island was inspected by boat. All aids to navigation were cut in by planetable on an aluminum mounted sheet.

Reference to the letter from Chief, Division of Photogrammetry, (Field Edit of the Barrier Beaches) dated 18 May 1948 to Lieut. Comdr. Riley J. Sipe.

*Filed in the
Div of Photg
office files*

47. ADEQUACY OF THE COMPILATION

The compilation was found to be adequate. The field inspection was very scant in the vicinity of the village of Ocracoke. Numerous notes which would have been very beneficial to the compiler were omitted.

All aids to navigation were cut in by planetable methods. Teaches Hole Channel Light, Cockle Shoal Light and Silver Lake Entrance Light were verified by at least two planetable cuts on the aluminum mounted sheet.

Ocracoke Beacon, 1935 has been destroyed and replaced by Cockle Shoal Light which is located about 100 meters south of the old beacon position.

Big Foot Slough Light 5 which was located just northwest of this quadrangle has been destroyed.

A concrete road (9 feet wide) has been constructed from the U. S. Coast Guard Station to the eastern portion of Ocracoke.

The road along the Plains is only in its approximate position. The sand is constantly shifting and is also covered by water depending on the direction of the winds.

48. ACCURACY TESTS

There were no accuracy tests specified for this quadrangle. See reference letter mentioned in paragraph 46.

18. GEOGRAPHIC NAMES

The names LITTLE OYSTER CREEK and OYSTER CREEK, which are located in the northeastern portion of the village of Ocracoke are no longer used. The area has filled in. It is recommended that the names LITTLE OYSTER CREEK and OYSTER CREEK be deleted.

The map was examined for possible errors by Mr. Ben Fulcher of Ocracoke. Mr. Fulcher has been a resident of this vicinity for over fifty years. He is highly familiar with the area and was very helpful.

Submitted:
10 June 1948

Joseph K. Wilson
Joseph K. Wilson
Cartographer

Approved:
10 June 1948

Riley J. Sipe
Riley J. Sipe
Chief of Party

GEOGRAPHIC NAMES

Survey No. T-8728

OCRACOKE ISLAND, N.C.

1 Name on Survey

On Chart
No.

On previous survey
No.

On U. S. quadrangle
Maps

From local
information

On local Maps

P. O. Guide or Map

Rand McNally Atlas

U. S. Light List

A	B	C	D	E	F	G	H	K	
								USGB	1
									2
									3
								USGB	4
									5
									6
									7
									8
									9
									10
									11
									12
								USGB	13
									14
									15
									16
									17
									18
									19
									20
									21
									22
									23
									24
									25
									26
									27

GEOGRAPHIC NAMES

Survey No. **T-8728**

2 Name on Survey

	On Chart No.	On previous survey No.	On U. S. quadrangle Maps	From local information	On local Maps	P. O. Guide or Map	Rand McNally Atlas	U. S. Light List	
A	B	C	D	E	F	G	H	K	
<u>Old Slough</u>									1
<u>First Grass</u>									2
<u>Second Grass</u>									3
									4
									5
Names underlined in red are approved. 11/19/48 D. Heck.									
									6
									7
									8
									9
									10
									11
									12
									13
									14
									15
									16
									17
									18
									19
									20
									21
									22
									23
									24
									25
									26
									27

DIVISION OF PHOTOGRAMMETRY
Review Report of
Topographic Map Manuscript T-8728

Subject numbers not used in this report have been adequately covered in other parts of the Descriptive Report.

26 Control

National Park Service third order bench marks are located at half mile intervals along the barrier beach, and are described as mile posts, MP 56.0, MP 56.5 etc. Only one recovered bench mark has been shown on the map manuscript by the appropriate BM symbol.

28 Detailing

The original delineation was adequate except for minor corrections and changes made by the reviewer.

The woodland classification was changed to agree with Photogrammetry Instructions No. 21

The Big Foot Slough Channel ^{limits were} ~~was~~ deleted from the manuscript because ^{they were} ~~it was~~ not discernable on the photographs.

30 Mean High Water Line

The mean high water line has been delineated as of the date of photography, and supplemented by the field inspection. The action of wind, tide, current, and shifting sands cause frequent changes in the shoreline and it is subject to continual change.

31 Landmarks and Aids to Navigation

A form 524 was prepared in the Washington Office for Cockle Shoal Light since none was submitted with the map manuscript.

39 Geographic Names

Geographic names were investigated by the field inspection party and have been approved by the Geographic Names Section of the Division of Charts. Attached, following the review report, is a list of all geographic names for T-8728. A special Geographic Names Report, Ph-5, is filed in the Geographic Names Section of the Division of Charts.

41 Comparison with Existing Topographic Quadrangles

Comparison was made with the following and all topographic features in common areas are superseded by T-8728:

376	1:20,000	1852
622	1:10,000	1857-1866
792	1:20,000	1860-1866
2733	1:20,000	1905
6924	1:10,000	1942-1943

There are no contemporary hydrographic surveys.

15 Comparison with Nautical Charts

See sub heading 45 in the compilation report.

T-8728 has not been applied to nautical charts as of the date of this review.

47 Adequacy of the Compilation

An examination of map manuscript T-8728 reveals it to be complete in all details as a topographic quadrangle and as a base map for coastal area nautical charts and hydrographic surveys.

48 Accuracy Tests

Horizontal

No horizontal accuracy test was made. The combination of adequate 9-lens photographic coverage, 9-lens radial plot methods and the adequate horizontal control insures a horizontal accuracy equal to or better than the National Map Accuracy Standards.

Due to the unstable shoreline and shifting dunes, the accuracy applies to the delineation of details as of the date of photography supplemented by field inspection and field edit surveys.

Vertical

No vertical accuracy test was made. The unstable characteristics of the dunes on the barrier beach render any test useless.

Accuracy Statement

The published map will carry the following statement:
"This map complies with National Standards of Map Accuracy",
supplemented by appropriate statements on unstable features.

Reviewed by:

B. Thomas Hynson
B. Thomas Hynson Nov 19, 1948

Approved by:

L. V. Griffith
Chief, Review Section K.H.M.

H. C. Edmunds
Chief, Nautical Chart Branch,
Division of Charts

K. T. Adams
Chief, Div. of Photogrammetry

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

T-8728

Record of Work Subsequent to the Manuscript Review,
that is, Smooth Drafting, Checking, and Printing

Smooth Drafting: 1 February 1949

Checking: 9-10 February 1949

Manuscript forwarded to the U. S. Geological
Survey for smooth drafting and publication.

28 February 1949

Color proof furnished by the Geological Survey and
examined by _____

Name

Date

Published by the Geological Survey.

NAUTICAL CHARTS BRANCH

SURVEY NO. 8728

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.