

8713
N 45

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) Office No. T-8713

LOCALITY

State NORTH CAROLINA

General locality DARE COUNTY

Locality OUTER BANKS

1946-1948

CHIEF OF PARTY

R. J. Sipe

LIBRARY & ARCHIVES

DATE

B-1870-1 (1)

8713

DATA RECORD

T- 8713

Quadrangle (II): T-8713

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

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

OFFICE FILES OF
Copy filed in ~~Descriptive~~
Report No. T- (VI)
THE DIVISION OF PHOTOGRAMMETRY

Completed survey received in office: Aug. 25, 1947

Reported to Nautical Chart Section: Sept. 1, 1947

Reviewed: Oct. 1948 Partially applied to chart #1232 - Oct. 10, 1947
Applied to chart No. Date:

Redrafting Completed:

Preliminary Nov. 16, 1948

Registered: Final _____ 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): CE, El, 649 NC - 1/3TT - 3.2, 1942

Lat.: 35° 27' 03.048(93.9m) Long.: 75° 29' 09.009(227.2m) Adjusted
~~Unadjusted~~

State Plane Coordinates (VI): NORTH CAROLINA COORDINATE SYSTEM

X =

Y =

Military Grid Zone (VI)

PHOTOGRAPHS (III)

Number	Date	Time	Scale	Stage of Tide
16069	6 Apr. '46	1330	1:10,000	2.2
16070	"	"	"	2.2
16073	"	"	"	2.2
16058	"	1315	"	2.2
16059	"	"	"	2.2
16060	"	"	"	2.2
16061	"	"	"	2.2
16062	"	"	"	2.2

Tide from (III): Oregon Inlet

Ref. Sta. Hampton Roads

Mean Range: 1.8

Spring Range: 2.2

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

S.J. Hathorn

Field Inspection by: B.O. Bryant

I.V. Fitzgerald

date: 1 Dec., '46 to
7 Jan., '47

Field Edit by: J. K. Wilson

date: June 1948

Date of Mean High-Water Line Location (III): 12 Dec., 1946

Projection and Grids ruled by (III) T.L.J. Washington date: 12 Mar., '47 (N/2)
Office date: 16 Apr., '47 (S/2)

" " " checked by: " " date: 12 Mar., '47 (N/2)
16 Apr., '47 (S/2)

Control plotted by: E.C. Andrews, W.H. Shearouse date: 20 Mar., '47
29 Apr., '47

Control checked by: W.H. Shearouse, R. Dossett, date: 20 Mar., '47
M.M. Slavney 30 Apr., '47

Radial Plot by: M.M. Slavney date: 14 July, '47

Detailed by: C.H. Baldwin (N/2) date: July, '47
R.R. Wagner (S/2)

Reviewed in compilation office by: J.A. Giles date: Aug., '47

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

date: Aug., '47

STATISTICS (III)

Land Area (Sq. Statute Miles): 3.6

Shoreline (More than 200 meters to opposite shore): 19.5 Stat. mi.

Shoreline (Less than 200 meters to opposite shore): 1.7 Stat. mi.

Number of Recoverable Topographic Stations established: 5

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:

MAP T. 8713

PROJECT NO. PH 5 (45)

SCALE OF MAP 1:10,000

SCALE FACTOR

STATION	SOURCE OF INFORMATION (INDEX)	DATUM	LATITUDE OR ν -COORDINATE LONGITUDE OR x -COORDINATE		DISTANCE FROM GRID IN FEET, OR PROJECTION LINE IN METERS		DATUM CORRECTION	N.A. 1927 - DATUM DISTANCE FROM GRID OR PROJECTION LINE IN METERS		FACTOR DISTANCE FROM GRID OR PROJECTION LINE IN METERS	
					FORWARD	(BACK)		FORWARD	(BACK)	FORWARD	(BACK)
Pipe Station E-1	C.E. 510	N.A. 1927	35° 27'	03.048"				93.9	(1755.1)		
			75° 29'	09.009"				227.2	(1285.9)		
Pipe Station E-2	C.E. 511	"	35 27	16.956				522.6	(1326.5)		
			75 29	07.970				201.0	(1312.1)		
Pipe Station F-1	C.E. 512	"	35 29	59.447				1832.0	(17.1)		
			75 28	47.447				1195.8	(316.4)		
Sub. Station E-2	Pos. Comp.	"	35 27	38.318				1180.9	(668.2)		
			75 29	05.700				143.7	(1370.2)		
Sub. Station #1 of F-1	"	"	35 29	01.932				59.5	(1789.6)		
			75 28	54.676				1378.3	(134.2)		
Sub. Station E-1	"	"	35 26	16.659				513.4	(1335.7)		
			75 29	12.033				303.5	(1209.8)		
Sub. Station #2 of F-1	"	"	35 29	36.412				1122.2	(726.9)		
			75 28	52.271				1317.5	(194.8)		
Pipe Station C-2	C.E. 507	"	35 22	43.894				1352.7	(496.4)		
			75 29	49.448				1248.2	(266.3)		
Pipe Station D-1	C.E. 508	"	35 24	26.126				805.2	(1043.9)		
			75 29	21.564				544.1	(969.8)		
Pipe Station D-2	C.E. 509	"	35 24	40.254				1240.6	(608.5)		
			75 29	20.026				505.3	(1008.6)		
Sub. Station #2 of D-1	Pos. Comp.	"	35 24	19.842				611.5	(1237.6)		
			75 29	28.493				718.9	(795.1)		

1 FT. = 3048008 METER

COMPUTED BY: W. H. Shearouse

DATE 19 March, 1947

CHECKED BY: R. Dossett

DATE 26 March, 1947

M-2388-12

Statement to Accompany Descriptive Report

T 8713

1. T 8713 is composed of two complete topographic map manuscripts as follows:

T 8713 N/2 scale 1/10,000
T 8713 S/2 scale 1/10,000

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, clarification of photographic details, geographic names and boundary investigations. A part of the area was contoured by the field inspection party.
- (c) Compilation by graphic methods and fitting the Geological Survey contours to the map details. Refer to Review Report, Item 39 for contours by U.S.G.S.
- (d) Preliminary office inspection.
- (e) Field Edit.
- (f) Final review of both map manuscripts to insure completeness and conformance with specifications, and to include corrections in accordance with the field edit survey of T 8713 N and S.
- (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 8713 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 8713 will be filed and may be obtained as follows:

- (a) Filed in the Division of Photogrammetry
(1) T 8713 N and S, scale 1:10,000, map manuscripts, field edit and final review corrections applied. (No field edit sheet was prepared by the field edit party; work was done on photos and discrepancy prints.)
- (b) Filed in Coast and Geodetic Survey Archives
(1) Descriptive Report T 8713

THE FIELD INSPECTION REPORT FOR QUAD-
RANGLES T-8711, T-8712 AND T-8713 IS
INCLUDED WITH THE DESCRIPTIVE REPORT
FOR QUADRANGLE T-8711.

COMPILATION REPORT
TO ACCOMPANY
QUADRANGLE T-8713

26 AND 27 CONTROL AND RADIAL PLOT:

A special report was prepared and submitted to the Washington Office by Milton M. Slavney, Photogrammetric Engineer, on 5 August, 1947. RADIAL PLOT REPORT, filed in General Files of the Div. of Photogrammetry

28. DELINEATION:

The nine lens photographs used for this quadrangle were of very good scale. Only three detail points were cut in as the network of passpoints, established by the radial plot, made more unnecessary.

The field inspection was fair, but not complete in all cases. The recovery of the mean high water line was very sketchy as a whole. As the field inspector did not follow any particular marking or line on the photographs, there will be a slight discrepancy in one or two places, where the map manuscript and the field inspector notes on the field print do not agree. This discrepancy has been put on the discrepancy overlay to be checked.

RESOLVED BY REVIEWER

The contours on this quadrangle, between latitude $35^{\circ} 22' 30''$ and $35^{\circ} 24' 50''$ were taken from photographic enlargements of U.S. G.S. Planetable sheets, dated 1939. The contours on the rest of the quadrangle were taken from the nine lens field photographs. This area is not covered by U.S.G.S. planetable sheets. In transferring the contours from these planetable sheets the projection was held along with the detail. Where detail could not be held satisfactorily the ridges on the photographs were outlined under the stereoscope and used in conjunction with the detail to place the contour. In some places the five foot contour along the ocean side fell beyond the shoreline and had to be brought back and placed just inside the high water line. Some discrepancies were noted and questioned on the discrepancy overlay.

On the Atlantic Ocean side the Geological Survey shows a ten foot contour extending along a narrow ridge for approximately seventy meters north from Latitude $35^{\circ} 25'$. Since the field investigation shows the highest elevation along this ridge to be 6.8 feet at approximate Latitude $35^{\circ} 24.9'$ the ten foot contour was closed just south of this point. The five foot contour was shifted to conform with the shoreline and make junction with the C. & G.S. contour.

Contour junction resolved by Field Editor.

On the Pamlico Sound side the Geological Survey contours have been shifted to agree with those of the Coast and Geodetic Survey. Because of the small change in elevation of the area affected (during the interim between the two surveys) very little deformation of the contours resulted.

For additional information see paragraph 39 of Compilation Report for quadrangle T-8711.

29. SUPPLEMENTAL DATA:

U.S. G. S. Planetable sheet, dated 1939.

30. MEAN HIGH WATER LINE:

See field inspectors report item No. 7.

31. LOW WATER AND SHOAL LINES:

See field inspectors report item No. 8.

No low water line was recovered on this quadrangle.

32. DETAILS OFFSHORE FROM HIGH WATER LINE:

None. Except as noted under heading 47 of Field Edit Report

33. WHARVES AND SHORELINE STRUCTURES:

None.

34. LANDMARKS AND AIDS TO NAVIGATION:

See field inspectors report item No. 11.

One landmark appears on the southern portion of this quadrangle - CUPOLA, Little Kinnakeet Coast Guard Station, 1947.

Copy of Form 567 attached. Also, a Rec. Topo Sta.

35. HYDROGRAPHIC CONTROL:

See field inspectors report item No. 12.

Rec. Topo Sta.	Data, 1946
	Been "
	Year "
	Keep "

36. LANDING FIELDS AND AERONAUTICAL AIDS:

None.

Form 524 cards in general files
of Div. of Photogrammetry.

37. POLITICAL BOUNDARIES:

No information on political boundaries or precinct lines has been submitted by the field inspector. Boundary Report Submitted. Please refer to item 37 of Review Report.

44. COMPARISON WITH EXISTING TOPOGRAPHIC QUADRANGLES:

A comparison was made with that portion of U.S. G.S. Planetable sheet which covers a small part of this map manuscript. Considerable change was noted in the shoreline on both the Atlantic Ocean and Pamlico Sound.

45. COMPARISON WITH NAUTICAL CHARTS:

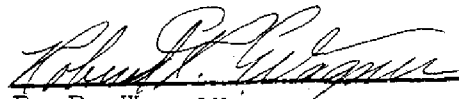
A comparison was made with U.S.C. & G.S. Nautical Chart No. 1232, bearing a print date of 23 February, 1946. Because of the great difference in scale an accurate comparison could not be made. No discrepancies were noted.

Respectfully submitted,

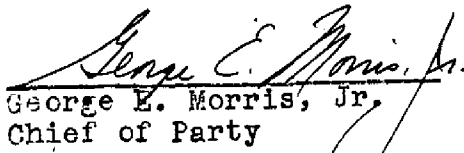


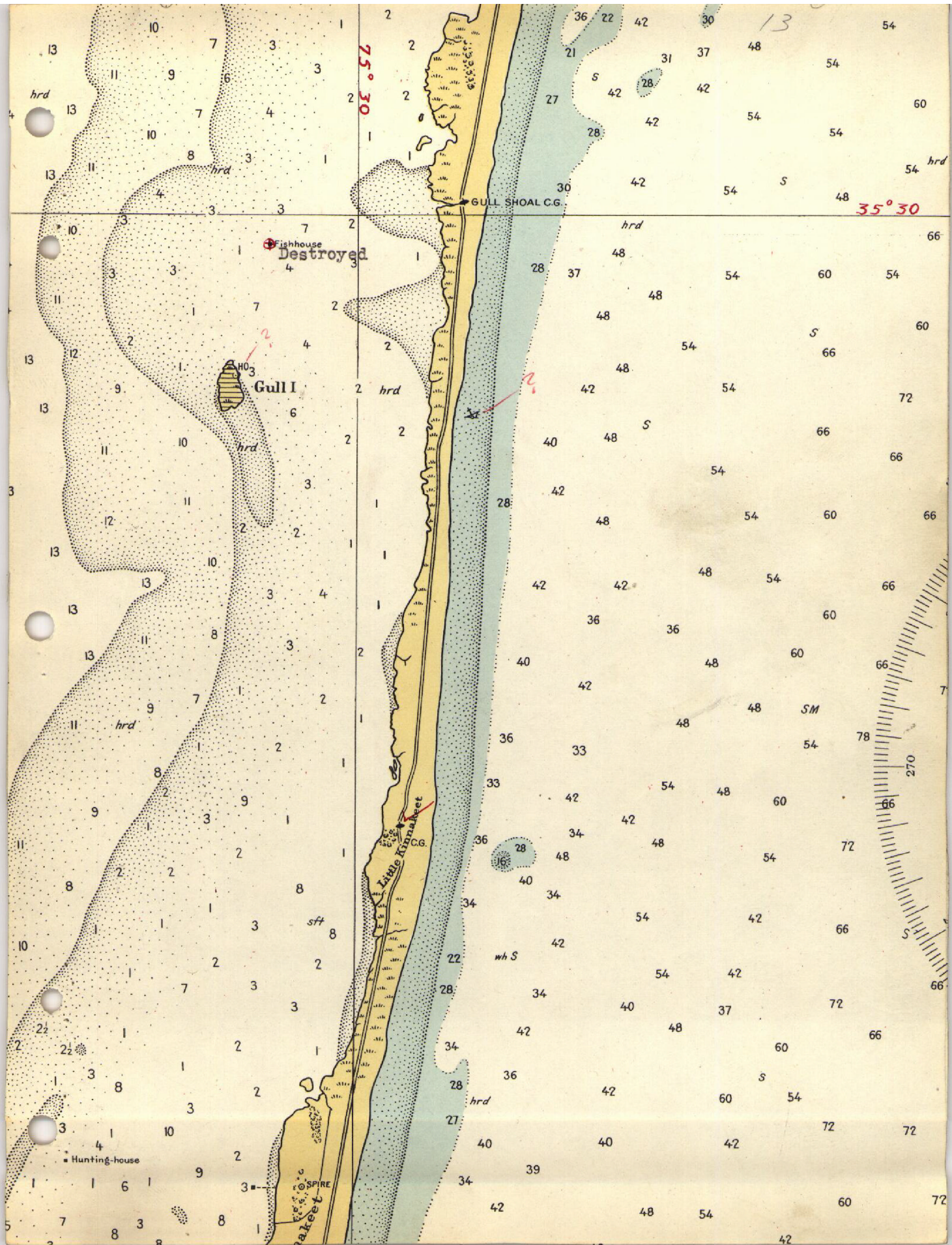
C. H. Baldwin,
Engineering Draftsman

Respectfully submitted, .


R. R. Wagner
Photogrammetric Aid

Approved and Forwarded:


George E. Morris, Jr.
Chief of Party



FIELD EDIT REPORT
Quadrangle T-8713
35°22'30"-75°26'30"/7.5
Project Ph-5(45)
Riley J. Sipe, Chief of Party

The field edit of this quadrangle was completed during June, 1948 by Joseph K. Wilson, Cartographer.

46. METHODS

This quadrangle was inspected by truck, traversing all available roads. All features added to the map compilation were cut in by planetable methods or distances measured from topographic features.

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. ^{Copy of} Letter filed in Descriptive Report T8711.

47. ADEQUACY OF THE COMPILATION

The compilation was adequate and complete except for a few details omitted during the original field work.

The only road in this quadrangle is a sand road along the center of the Island. This road is only in its approximate location. Motorists use the beach at low water. The road shown is as of the date of photography.

Attention is called to an old wreck located at approximate latitude 35° 28' and longitude 75° 29'. This wreck was omitted during the original field inspection and has been noted on the field edit sheet. This old wreck is now on the mean high-water line and is entirely uncovered at low water.

On Chart #1232 a house is shown on Gull Island. This house has been destroyed. A new house has been rebuilt on this island since the original field inspection and is noted on the field edit sheet.

A power line has been located and shown on the field edit sheet. This line runs parallel and west of the Coast Guard telephone line.

All roads were reclassified according to Photogrammetry Instructions No. 16, dated 14 April 1947.

48. ACCURACY TESTS

No accuracy tests were specified for this quadrangle.

18. GEOGRAPHIC NAMES

Attention is called to the name THE DRAIN located at approximate latitude $35^{\circ} 25'$ and longitude $75^{\circ} 29'$. This name is correct but its position was slightly misplaced and has been correctly shown on the Geographic Names Discrepancy print.

The map was examined for possible errors by Mr. F. G. Gray of Avon. Mr. Gray has been a resident of the vicinity for over forty years and has been located at many of the Coast Guard stations on this island. He could find no errors except for the misplacement of the afore mentioned name.

Submitted:
24 June 1948

Joseph K. Wilson
Joseph K. Wilson
Cartographer, Photo.

Approved:
24 June 1948

Riley J. Sipe
Riley J. Sipe
Chief of Party

GEOGRAPHIC NAMES

Survey No.

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
<u>Gull Island</u> ✓									1
<u>Gull Island Bay</u> ✓									2
<u>Pamlico Sound</u> * ✓									3
<u>Atlantic Ocean</u> * ✓									4
<u>North Carolina</u> * ✓ (for title)									5
<u>Dare County</u> ✓									6
<u>Phipps Cove</u> ✓									7
<u>The Drain</u> ✓									8
<u>Drain Islands</u> ✓									9
<u>Terrapin Point</u> ✓									10
<u>Little Kinnekeet</u> ✓ (locality name)									11
									12
									13
									14
									15
									16
									17
									18
									19
									20
									21
									22
									23
									24
									25
									26
									27

* - Decis. of BGN.

Underlined names approved.

10-15-48.

A. J. W.

DIVISION OF PHOTOGRAMMETRY
Review Report of
Topographic Map Manuscript T-8713

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 47, MP 47.5 etc. Recovered bench marks have been shown on the map manuscript by the appropriate BM symbols. Unrecovered, National Park Service bench marks, which were transferred to the map manuscript from U.S. Geological Survey maps, have been shown on the map manuscript as either monumented bench marks or spot elevations, along with the mile post designation; they will be published as checked spot elevations.

28 Detailing

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

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 Low Water and Shoal Line

The low water line was not delineated because the shoreline inspection was not practicable at the time of M.L.W. The character of the shoreline, limits the delineation of M.L.W. to an approximate line which is of little or no value, as the shoreline is subject to continual change.

37 Political Boundaries

Boundaries were investigated by the field inspection party and the subject is adequately covered by a Special Report on Boundaries PH 5, filed in the general files of the Division of Photogrammetry.

The Cape Hatteras National Seashore Recreation Area, mentioned in the Special Boundary Report is not applicable to this map. The project is in a planning stage, making the final boundaries and date of materialization very questionable.

changes
KTA

39 Contours

The contours delineated on the map manuscript are of two sources. The contours ~~south~~ ^{north} of Lat. $35^{\circ} 25'$ are 1939 contours by the U.S. Geological Survey. The compiler transferred the contours to the map manuscript and adjusted them to the planimetry. Major adjustments to meet conditions existing at the time of the field edit were made by the field edit party.

The contours ~~south~~ ^{north} of Lat. $35^{\circ} 25'$ were by the field inspection party, using planetable methods and contouring directly on 1:10,000 scale, 9-lens photographs.

All contours delineated on the map manuscript are subject to continual change, due to the unstable sand dunes.

Correction: 1939 U.S.G.S. Contours are ~~South~~ ^{north} of Lat. $35^{\circ} 24' 50''$

43 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 this survey. A Special Geographic Names Report, Ph 5 is filed in the Geographic Names Section of the Division of Charts.

44 Comparison with Existing Topographic Surveys

In addition to the comparison mentioned under item 44 of the compilation report, comparison was made with the following Topographic Surveys, and all common topographic features are superseded by T-8713.

377	1:20,000	1852
3797	1:40,000	1917

45 Comparison with Nautical Charts

See sub heading 45 of the Compilation Report.

48 Accuracy Test

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 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.

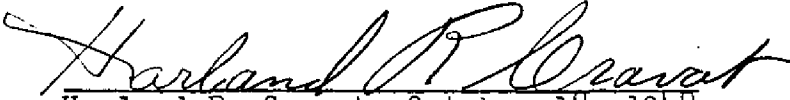
Vertical

No vertical accuracy test was made as the unstable characteristics of the dunes render any test useless.


Accuracy


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

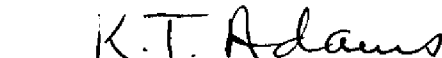
Reviewed by:

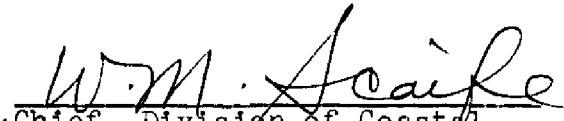

Harland R. Cravat October 18, 1948

Approved by:


Chief, Review Section *ENM*


Chief, Nautical Chart Branch
Division of Charts


Chief, Division of Photogrammetry


Chief, Division of Coastal Surveys

T-8713

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

Smooth Drafting: 30 November 1948

Checking: 30 November-1 December 1948

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

30 December 1948

Color proof furnished by the Geological Survey and
examined by

Name

Date

Published by the Geological Survey.

NAUTICAL CHARTS BRANCH

SURVEY NO. 8713

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.