

8712  
N 45

Diag.' on Diag.' Ch. No. 1229 & 1232

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey **TOPOGRAPHIC**

Field No. **T-8712** Office No.

LOCALITY

State **STATE OF NORTH CAROLINA**

General locality **DARE COUNTY**

Locality **RODANTHE**

1947

CHIEF OF PARTY

Lieut. Comdr. Riley J. Sipe

(Field)

Lieut. Comdr. George E. Morris, Jr.

LIBRARY & ARCHIVES

DATE

8712

## DATA RECORD

T-8712

Quadrangle (II):

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 the  
Copy filed in Descriptive  
~~Report No. T-~~ (VI)  
Div. of Photogrammetry

Completed survey received in office: Aug. 25, 1947

Reported to Nautical Chart Section: Sept. 1, 1947

Reviewed: Oct. 1948

Applied to chart No.

Date:

Redrafting Completed:

Registered: Nov. 10, 1948

Published:

Compilation Scale: 1:10,000

Published Scale: 1:24,000

Scale Factor (III): None

Geographic Datum (III): N.A. 1927

Datum Plane (III): Mean Sea Level

Reference Station (III): Salvo, 1933

Lat.: 35° 32' 02.888" (89.0m) Long.: 75° 28' 33.180" (835.9m) Adjusted  
~~Unadjusted~~

State Plane Coordinates (VI): North Carolina Coordinate System

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>
16054	6 April 1946	13:05	1:10,000	1.2 2.2' } Above MLW
16055	"	13:05	"	1.2 2.2' }
16056	"	13:05	"	1.2 2.2' }
16057	"	13:15	"	1.2 2.2' }
16072	"	13:35	"	1.2 2.2' }

Tide from (III): Oregon Inlet  
Reference Station Hampton Roads  
Mean Range: 1.8 Spring Range: 2.2

Camera: (Kind or source) C&GS Nine lens camera

Field Inspection by: B.O. Bryant, S. J. Hathorn and J.R. Smith date: December 1946

Field Edit by: J. K. Wilson date: June 1948

Date of Mean High-Water Line Location (III): 12 December 1946

Projection and Grids ruled by (III) T.L.J. (Wash. Office) date: 12 March 1947

" " " checked by: T.L.J. & S.R. (W.O.) date: 12 March 1947

Control plotted by: E. C. Andrews date: 28 March 1947

Control checked by: W.H. Shearouse date: 22 April 1947

Radial Plot by: M.M. Slavney date: 2 July 1947 (N/2)  
15 July 1947 (S/2)

Detailed by: B.F. Lampton (N/2) 2-31 July 1947  
W.H. Shearouse (S/2) date: 21-31 July 1947

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

Elevations on ~~Map Manuscript~~ <sup>Map Manuscript</sup> checked by: J.A. Giles date: August 1947

STATISTICS (III)

Land Area (Sq. Statute Miles): 5.2

Shoreline (More than 200 meters to opposite shore): 21.3 stat. mi.

Shoreline (Less than 200 meters to opposite shore): 6.2 stat. mi

Number of Recoverable Topographic Stations established: 7

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: This  $7\frac{1}{2}$  minute quadrangle is submitted in 2 parts of  $3\frac{3}{4}$  minutes of latitude each. Statistics have been combined. (N/2) denotes north half and was compiled by B. Frank Lampton, Jr. (S/2) denotes south half and was compiled by William H. Shearouse.

[illegible]

Statement to Accompany Descriptive Report

T 8712

1. T 8712 is composed of two complete topographic map manuscripts as follows:

T 8712  $\frac{N}{2}$  scale 1/10,000

T 8712  $\frac{S}{2}$  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, boundary investigation, and planimetric contouring.

(c) Compilation by graphic methods, and fitting the Geological survey contours to the map details. Refer to Review Report, item 39.

(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-8712 N & S.

(g) Processing - Composite 1:20,000 scale blue line reductions are being prepared for smooth drafting. There will be no 1:20,000 scale manuscript.

3. T 8712 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 8712 will be filed and may be obtained as follows:

(a) Filed in the Division of Photogrammetry.

(1) T 8712 N & S, scale 1:10,000, map manuscripts, field edit and final review corrections applied. (A field edit sheet was not prepared by the field edit party; work was done on photos and a discrepancy print.)

(b) Filed in Coast and Geodetic Survey Archives.

(1) Descriptive Report T 8712

(2) 1:10,000 scale, cloth mounted photographic print of manuscript T 8712  $\frac{N}{2}$ .

(3) 1:10,000 scale, cloth mounted photographic print of manuscript T 8712  $\frac{S}{2}$ .

(4) The above prints are to be permanently registered under one number, T 8712 and when T 8712 is published, a cloth backed copy of the published map will also be registered.

Date Oct. 14, 1946

Harland R. Cravat

Harland R. Cravat

Cartographer, Photogrammetrist

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-8712

26 AND 27 CONTROL AND RADIAL PLOT:

A special report covering these subjects was submitted to the Washington Office on 5 August 1947, by Milton M. Slavney, Photogrammetric Engineer. Special report filed in General files of the Div. of Photogrammetry

28 DELINEATING:

The delineating of this quadrangle has been done in accordance with current instructions.

The 9-lens photographs were clear and of very good scale. The following photographs were used: 16055, 16056, 16057 and 16072.

In the field inspection report it was stated that one north and south road, indicated by dots on the field inspection photographs, was to be shown; all other roads were to be deleted. However, on the field inspection photographs, several other roads were classified. Also, at the junction of photographs 16055 and 16056, different roads were dotted. All roads classified on the field inspection photographs have been shown on the map manuscript, and all doubtful ones have been questioned on the discrepancy overlay. ROAD DISCREPANCIES WERE RECONCILED DURING FIELD EDIT.

It is believed that some unidentified areas on the field inspection photographs may be marsh. Also, the limits of some areas indicated as marsh are difficult to determine. After stereoscopic examination lines delimiting marsh and brush areas have been drawn and have been questioned on the discrepancy overlay.

There was a serious discrepancy between the high water line shown on the field inspection photographs of T-8711 and T-8712. RECONCILED BY REVIEWER

No detail points were established on the S/2 of this map manuscript as the pass points were sufficient. On the N/2 it was deemed necessary to establish some detail points because of scale difference.

29. SUPPLEMENTAL DATA:

A photographic enlargement of a Geological Survey planetable sheet was used for all contours in the area covered.

### 30. MEAN HIGH WATER LINE:

The high water line on the Atlantic Ocean side was indicated at intervals on the field inspection photographs. Several measurements were given from easily identifiable points. Detail points were cut-in on the map manuscript at the measurement points and the shoreline was located at these points by scale measurements. The intervals between the identifications on the field inspection photographs were filled in under the stereoscope and transferred to the map manuscript. A recheck of this high-water line has been requested on the discrepancy overlay. *DELINEATION Satisfactory WPL*

It was stated in the field inspection report that the photographs show the correct high-water line in Pamlico Sound. This shoreline was indicated in its entirety on the photographs with a dashed line. However, the indication appeared to be generalized somewhat; so the limits of vegetation in Pamlico Sound was applied to the map manuscript directly from the office photographs.

### 31. LOW WATER AND SHOAL LINES:

The low-water line was indicated with a measurement and dotted line at one point. This fell at the outer edge of the breakers along the shore. This line was shown as the approximate low-water line throughout the ocean shoreline, except for a section where there appears to be deep water between the breakers and the visible shoreline.

It is possible that this line of offshore breakers, and some other spots of offshore breakers should be shown as shoals. No mention was made on the field inspection photographs. The question has been referred to field edit. *Delineated in a satisfactory manner, WPL*

### 32. DETAILS OFFSHORE FROM THE HIGH WATER LINE:

The wreck at approximate Latitude  $35^{\circ} 32.4'$  Longitude  $75^{\circ} 27.9'$  was cut-in by radial line intersection and delineated with the standard symbol.

### 33. WHARVES AND SHORELINE STRUCTURES:

Wharves and shoreline structures were plainly visible on the photographs and delineated accordingly.

34. LANDMARKS AND AIDS TO NAVIGATION:

Two landmarks, Chicamacomico Coast Guard Lookout Tower and Fairhaven Church Steeple, and one aid to navigation, Chicamacomico Inner Light, were located by radial plot methods. They have been scaled and their positions entered on Form 567. Three lights along the channel leading to Rodanthe have not been located. The field inspector has recommended these for location by the field edit party.

*The lights were located by the field edit party.*

35. HYDROGRAPHIC CONTROL:

None required.

36. LANDING FIELDS AND AERONAUTICAL AIDS:

None within the quadrangle.

37. RECOVERABLE TOPOGRAPHIC STATIONS:

Seven (7) recoverable topographic stations have been located by radial plot methods. They have been scaled and the positions entered on Form 524.

38. BOUNDARIES:

No political boundary data has been received from the field.

*Received and Filed in General Files of the Division of Photogrammetry.*

The southern boundary of the Pea Island Wildlife Refuge has been delineated according to field notes. Two photo stations were established to control the position of the boundary.

39. CONTOURS:

On more than half of the quadrangle, contours were taken from a photographic enlargement of a Geological Survey planetable sheet. There were a number of discrepancies in position and detail. Contours were adjusted to fit detail as far as possible. Along the Atlantic shoreline, the main ridge along the shore was drawn under the stereoscope. The contour of the ridge on the planetable sheet was adjusted to this line. An attempt was made to locate approximately the 5-foot contour along the shore under the stereoscope, however this could be held only in a few spots. The 5-foot contour shown is sketched for the most part. This procedure was followed in accordance with the Acting Director's letter of 18 July 1947 and supplemental instructions, a copy of which is included in the descriptive report for quadrangle T-8711.

44. COMPARISON WITH EXISTING TOPOGRAPHIC QUADRANGIES:

Comparison was made with a photographic enlargement of a Geological Survey planetable sheet. In some areas the detail was very similar, but for the most part there were many discrepancies, particularly in shoreline, buildings shown and roads. Positions were somewhat different.

45. COMPARISON WITH NAUTICAL CHARTS:

Comparison was made with nautical charts 1229 print date 23 December 1946 and 1232 print date 23 February 1946. Due to the small scale (1:80,000) of the nautical charts, it was difficult to determine changes in position and detail accurately. However, the detail along the Pamlico Sound shore seems to be somewhat different.

There is little detail to compare on the Atlantic Ocean shoreline. A number of buildings are shown west of the road in Rodenthe on the nautical chart. On the map manuscript most of the buildings are east of the main road. The detail of the main road is somewhat different.

The church building charted at the village of Salvo does not exist and should be deleted from chart 1232.

The Gull Shoal Coast Guard Station is reported by the field inspector as "abandoned. In state of ruins. To be deleted."

Respectfully submitted,

B. Frank Lampton  
B. Frank Lampton *J. Giles*  
Principal Photo. Aid

William H. Shearouse  
William H. Shearouse  
Cartographer ( Photogrammetric)

Approved and forwarded:

George E. Morris, Jr.  
George E. Morris, Jr.  
Chief of Party.

FIELD EDIT REPORT  
Quadrangle T-8712  
35°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 existing roads. All features added to the map compilation were cut in by planetable or from measurements 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 T-8712.

47. ADEQUACY OF THE COMPILATION

The compilation was found to be adequate and complete except for a few omissions during the original field inspection.

The positions of Chicamacomico Lights 1, 3 and 5 were not determined by the field inspection party. An attempt was made by the field edit party to determine these positions by planetable on a double weight print of the map manuscript T-8712 N/2. As the results were not satisfactory, theodolite cuts from five points were made. Lights 3 and 5 were identified on the photographs by the field edit party. However, these two lights appear on two photographs only.

There are two L. S. T.'s which have been washed up on the beach since the original field work. These two wrecks are located near the villages of Rodanthe and Wave. They were located by planetable during the field edit. According to local information these ships may be dismantled in the near future.

Attention is called to the boundary line of the Wildlife Refuge located just north of the village of Rodanthe. A discrepancy was encountered by the compilation office between the U. S. Geological Survey position and the position acquired by the field inspector. According to all local information, the position as shown by the field inspection is correct.

A power line which runs more or less parallel and west of the U. S. Coast Guard telephone line has been shown on the field edit sheet. This power line ends in the village of Rodanthe. See field edit report for quadrangle T-8714.

All roads were reclassified according to Photogrammetry Instructions No. 10, dated 14 April 1947.

481. ACCURACY TESTS

There were no accuracy tests specified for this quadrangle.

18. GEOGRAPHIC NAMES

All names as appear on the Geographic Names Prints were found to be correct as shown.

The map was examined for possible errors by Mr. F. G. Gray of Avon. Mr. Gray is highly familiar with the area, having been a resident of this vicinity for over forty years. He could find no errors.

Submitted:  
24 June 1948

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

Approved:  
24 June 1948

*Riley J. Spe*  
Riley J. Spe  
Chief of Party

Division of Photogrammetry  
Review Report of  
Topographic Map Manuscript T-8712

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 30, MP 30.5, etc. Recovered bench marks have been shown on the map manuscript by the appropriate BM symbol. Unrecovered, National Park Service bench marks, which were transferred to the map manuscript from U.S. Geological Survey maps, have been shown as spot elevations, along with the mile post designations; they will be published as spot elevations.

28 Detailing

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

The compiler delineated the features, scattered brush in marsh, and flooded areas encircled by marsh, for which there is no publication symbol. In both instances the marsh feature was retained on the manuscript. The less important feature was removed.

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.

37 Political Boundaries

Boundaries were investigated by the field inspection party and the subject is adequately covered by a Special Report of Boundaries PHS, 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.

39 Contours

The contours delineated on the map manuscript are 1939 contours by the U.S. Geological Survey, <sup>except for our planimetric contours between N. K. 25-30 and 35-32 S.</sup> 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 field edit were made by the field edit party and reviewer.

The contours are subject to continual change, due to the unstable sand dunes.

#### 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 for Ph 5 is filed in the Geographic Names Section of the Division of Charts.

The approved geographic names have been shown and are to be retained on the map manuscript. However, at the reduced publication scale it is necessary to eliminate some of the names for legibility. The names retained for publication, based on name importance and congestion, are indicated on a 1:20,000 scale ~~print of the map manuscript which serves as a drafting overlay.~~

#### 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: (A) Quadrangle, (B) Topographic Surveys. All common Topographic features are superseded by T-8711.

(A)	U. S. Engineers, Roanoke Island, 1:125,000, 1943
(B)	367 1:20,000 1852
	2951 1:20,000 1909
	3706 1:40,000 1917
	3707 1:40,000 1917

#### 45 Comparison with Nautical Charts

See sub heading 45 in the Compilation Report.

#### 47 Adequacy of Compilation

An examination of map manuscript T-8711 reveals it to be complete in all details as a topographic quadrangle and as a base map for common area nautical charts and hydrographic surveys.

#### 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. The unstable characteristics of the dunes render any test useless.



Accuracy Statement

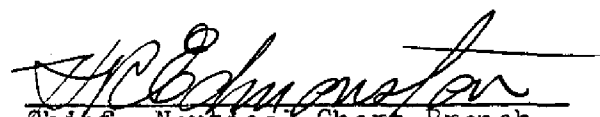
The published map will carry the following statement:  
"This map complies with National Standards of Map Accuracy"  
supplemented by appropriate statements on unstable features.

Reviewed by


  
Harland R. Cravat 10/14/48

Approved by:

  
Chief, Review Section

  
Chief, Nautical Chart Branch,  
Division of Charts

  
Chief, Div. of Photogrammetry

  
Chief, Division of Coastal Surveys  
1692

# GEOGRAPHIC NAMES

Survey No.

GEOGRAPHIC NAMES										
Survey No.										
Name on Survey	<div>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</div>									
	A	B	C	D	E	F	G	H	K	
Salt Springs ✓										1
Round Hammock Bay ✓										2
Pauls Island ✓										3
Pauls Ditch ✓										4
Pea Island National Wildlife Refuge ✓										5
Uncle Jimmys Landing ✓										6
Greens Point ✓										7
Backmer Gut ✓										8
South Drain Landing ✓										9
Rodanthe ✓										10
Chicamacomico Coast Guard Station ✓										11
N <sup>o</sup> North Drain ✓										12
N <sup>o</sup> South Drain ✓										13
✓ Aunt Phobes Marsh ✓										14
N <sup>o</sup> Waves ✓										15
✓ Waves Landing ✓										16
✓ Great Island ✓										17
✓ Atlantic Ocean* ✓										18
✓ North Carolina* ✓		(for title)								19
✓ Dare County ✓			..							20
✓ Pamlico Sound* ✓										21
out Davids Ditch ✓										22
Davids Point ✓										23
out Deep Hole ✓										24
✓ Midgett Island ✓										25
Midgett Cove ✓										26
✓ Salvo ✓										27

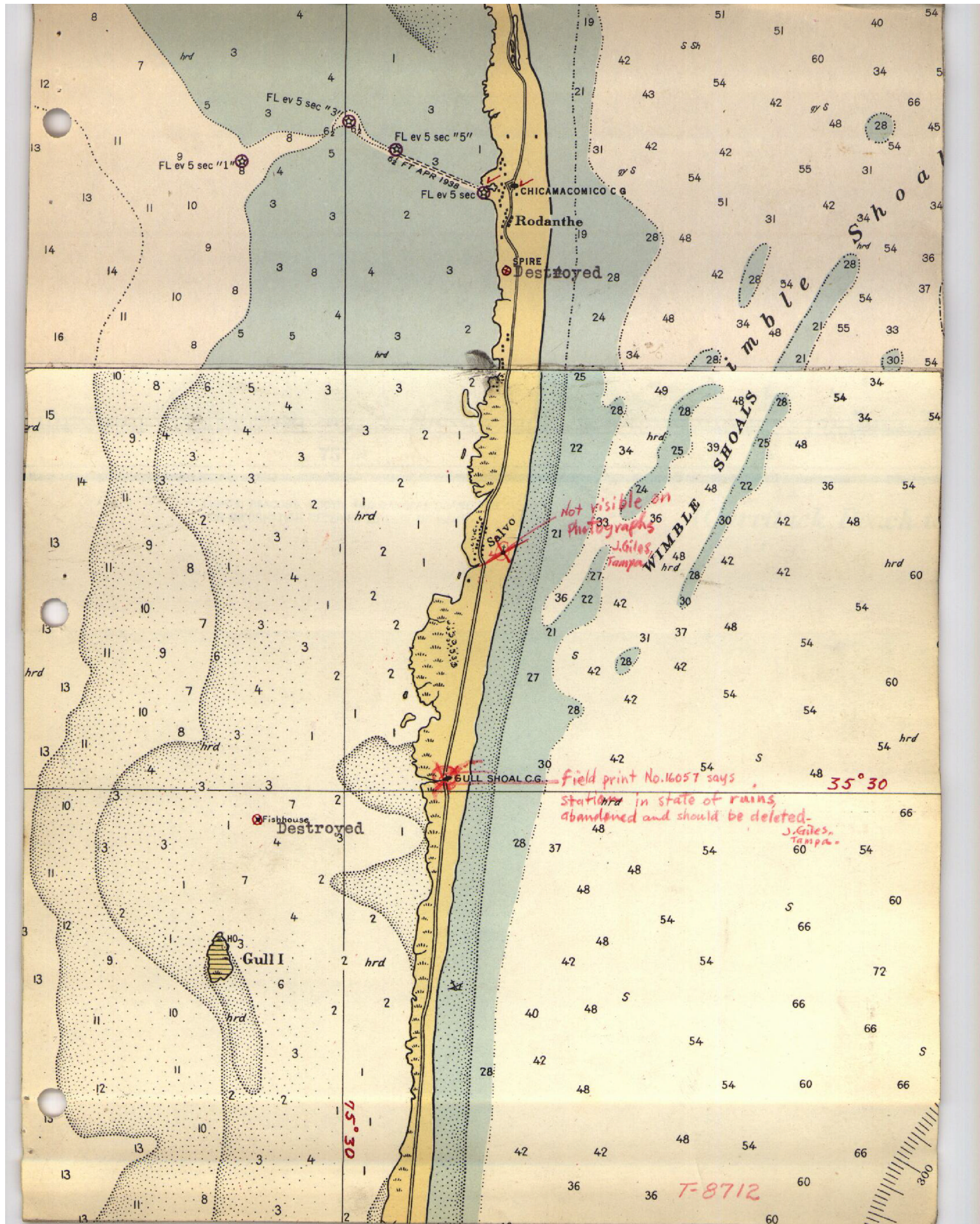
M 234

# 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>Clarks Bay</u> .										1
<u>No Ache Bay</u> .										2
<u>No Ache Island</u> .										3
										4
										5
										6
	* - Decis. of BGN.									7
	Underlined names approved.									8
	10-13-48.									9
	a. j. w.									10
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DEPARTMENT OF COMMERCE  
U. S. COAST AND GEODETIC SURVEY

**TO BE CHARTED**

**STRIKE OUT ONE**

## RESEARCH DESIGN

# NONFLOATING AIDS ORIENTED MATERIALS FOR CHARTS

645



194

I recommend that the following objects which have ~~(three of)~~ 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

**B. Frank Lampton, Jr.**

**SECRET**

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 considered for the charts of the area and not by the data reported on this form. The data should be considered for the charts of the area and not by the data reported on this form.

DEPARTMENT OF COMMERCE  
U. S. COAST AND GEODETIC SURVEY

**NONFLOATING/AIDS/OR LANDMARKS FOR CHARTS**

**TO BE CHARTED**  
**HOUSING/BEACHES**

STRIKE OUT ONE

Morehead City, N.C. 24 January 1947

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

The positions given have been checked after listing by H.W. Dawsey, Tampa Photogrammetric Office

Lieut. Comdr. Riley J. Sipe

Chief of Party.

STATE	NORTH CAROLINA				POSITION				METHOD OF LOCATION AND SURVEY No.	DATE OF LOCATION	HARBOR CHART	INSHORE CHART	OFFSHORE CHART	CHARTS AFFECTED	
	CHARTING NAME	DESCRIPTION	SIGNAL NAME	LATITUDE		LONGITUDE		DATUM							
				°	'	D. M. METERS	°								'
TOWER	Chilmark Ledge C.G. Lookout Tower		35	35	1350.8	75	27	1509 59.4	1927	1927	Rad. Plot	Dec 1946	x	1229	
STEEPLE	Fairhaven Church Steeple		35	34	1702	75	27	1240	1927	1927	"	"	x	1229	

SURVEY NO. T 8712

[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.