### Type of Survey
- Topographic

### Field No.
- Ph-45 (49)

### Office No.
- T-9160

### LOCALITY
- **State:** North Carolina
- **General locality:** Roanoke Sound
- **Locality:** Nags Head

### CHIEF OF PARTY
- Harry F. Garber, Chief of Field Party
- Arthur L. Wardwell, Tampa Photogrammetric Office

### DATE
- September 28, 1955
DATA RECORD

T-9160

Project No. (II): Ph-45(49) Quadrangle Name (IV):

Field Office (II): Manteo, N.C. Chief of Party: Harry F. Garber

Photogrammetric Office (III): Tampa, Florida Officer-in-Charge: Arthur L. Wardwell

Instructions dated (II) (III): 15 September 1949
19 January 1950 (Supplement One) Copy filed in Division of Photogrammetry (IV)
Office Files

Method of Compilation (III): Graphic

Manuscript Scale (III): 1:20,000 Stereoscopic Plotting Instrument Scale (III): Inapplicable

Scale Factor (III): None

Date received in Washington Office (IV): FEB 27 1956 Date reported to Nautical Chart Branch (IV): FEB 27 1956

Applied to Chart No. Date: Date registered (IV): SEP 16 1955

Publication Scale (IV): Publication date (IV): 


Mean sea level except as follows:
Elevations shown as (26) refer to mean high water
Elevations shown as (26) refer to sounding datum
I.e., mean low water or mean lower low water

Reference Station (III): BODIE ISLAND NORTH BASE, 1849

Lat.: 35°53' 56.932 (1754.7 m) Long.: 75°35' 52.613 (1319.4 m) Adjusted

Plane Coordinates (IV):

Y= X=

Roman numerals indicate whether the item is to be entered by (II) Field Party, (III) Photogrammetric Office, or (IV) Washington Office.

When entering names of personnel on this record give the surname and initials, not initials only.
All contouring done by
Richard E. Conway Jr.

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

Field Inspection by (II): Ralph G Holland
Topographic Engr.
Date: MAR-APR., 1950

Cartographic Survey Aid
Date: August, 1950

Completion Surveys by (II): R.L. Me Glinchey
Date: March 1953

Mean High Water Location (III) (State date and method of location):
Air Photo Compilation
Date: 15 May, 1950

Projection and Grids ruled by (IV): S. R. (W.O.)
Date: 20 October 1950

Projection and Grids checked by (IV): R. D. W. (W.O.)
Date: 25 October 1950

Control plotted by (III): I. I. Saperstein
Date: 8 December 1950

Control checked by (III): R. R. Wagner
Date: 15 December 1950

Radial Plot: stereoscopic
Control extension by (III): M. M. Slavney
Date: 15 January 1951

Stereoscopic Instrument compilation (III): Inapplicable
Contours
Date:

Manuscript delineated by (III): C. J. Downing
Date: 19 March 1951

Photogrammetric Office Review by (III): J. A. Giles
Date: March 1951

Elevations on Manuscript
checked by (III): C. J. Downing
Date: 16 March 1951
<table>
<thead>
<tr>
<th>Number</th>
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<th>Scale</th>
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</thead>
<tbody>
<tr>
<td>1798</td>
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<td>13:42</td>
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<td>0.1 ft. above M.L.W.</td>
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<tr>
<td>1799</td>
<td>5-12-49</td>
<td>13:42</td>
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<tr>
<td>1800</td>
<td>5-12-49</td>
<td>13:43</td>
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<td>&quot;</td>
</tr>
<tr>
<td>1801</td>
<td>5-12-49</td>
<td>13:43</td>
<td>&quot;</td>
<td>&quot;</td>
</tr>
<tr>
<td>1802</td>
<td>5-12-49</td>
<td>13:44</td>
<td>&quot;</td>
<td>&quot;</td>
</tr>
</tbody>
</table>

**Reference Station:** HAMPTON ROADS, VA  
**Subordinate Station:** OREGON INLET, N.C.

**Tide (III)**

<table>
<thead>
<tr>
<th>Ratio of Ranges</th>
<th>Mean Range</th>
<th>Spring Range</th>
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<tbody>
<tr>
<td>1.0</td>
<td>2.5</td>
<td>3.0</td>
</tr>
<tr>
<td>0.7</td>
<td>1.8</td>
<td>2.2</td>
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</table>

**Date:** 5 Feb 1954

**Final Drafting by (IV):**  
**Drafting verified for reproduction by (IV):**  
**Proof Edit by (IV):**

**Land Area (Sq. Statute Miles) (III):** 5
**Shoreline (More than 200 meters to opposite shore) (III):** 22 miles
**Shoreline (Less than 200 meters to opposite shore) (III):** 2.3 miles
**Control Leveling - Miles (II):** 5 miles of third order, 4 miles of fly levels. Total 9 miles

**Number of Triangulation Stations searched for (II):** 3  
**Recovered:** 1  
**Identified:** 1

**Number of BMs searched for (II):** 16  
**Recovered:** 4  
**Identified:** 3

**Number of Recoverable Photo Stations established (III):** 8
**Number of Temporary Photo Hydro Stations established (III):** None

**Remarks:**

Form T-Page 4
Summary to Accompany Topographic Map T-9160

Map T-9160 is one of eighteen topographic maps in Project Ph-45(49). It covers land area southward of Nags Head, North Carolina between the Atlantic Ocean and the Roanoke Sound.

Project Ph-45(49) is a graphic compilation project. Field work in advance of compilation included the establishment of additional horizontal and vertical control, the delineation of contours directly on the photographs by planetable methods, field inspection of all features and the investigation of geographic names and political boundaries.

Map T-9160 was compiled at a scale of 1:20,000 using single-lens photographs taken in 1949. The map was then field edited. After the addition of hydrographic data, the map will be forwarded to the Geological Survey for publication as a standard 7½' topographic map.

Items registered under T-9160 will include a descriptive report, a lithographic copy of the map manuscript at a scale of 1:20,000 and a color copy of the published map at a scale of 1:24,000.
The field work for this quadrangle was done in compliance with the Director's Instructions, Project Ph-45 (49) dated 15 September 1949 and Supplement One instructions dated 19 January 1950. In addition to contouring as indicated on Page 2, the field work was accomplished by:

<table>
<thead>
<tr>
<th>Name and Title</th>
<th>Phase</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ralph G. Holland</td>
<td>Horizontal &amp; Vertical Control Recovery &amp; Identification</td>
<td>March, 1950 to April, 1950</td>
</tr>
<tr>
<td>Topographic Engr.</td>
<td>Interior Inspection, Shoreline, Fly levels, and 3rd order levels.</td>
<td>Supplemental horizontal control.</td>
</tr>
</tbody>
</table>

AREAL

2. AREAL FIELD INSPECTION

This quadrangle lies in Dare County, North Carolina covering an area of land known as Bodie Island located between the Atlantic Ocean and Roanoke Sound and in addition some large marsh islets in Roanoke Sound.

The only town or settlement in this quadrangle is the unincorporated town of Nags Head which is principally a summer resort site consisting of small hotels, tourists cabins, beach cottages and a few business houses. Practically everything is closed during the winter season except for a few business houses that remain open during hunting season.

The area is served by one primary highway, U.S. Highway 158 which parallels the Atlantic shore. The road leading south to Oregon Inlet is paved for about one mile from its juncture with U.S. Highway 158 and the remainder is a sand road served from the south by a ferry.

There are no railroads within this area.

The land area consists chiefly of shifting sand hills except for some low marsh area along the shores of Roanoke Sound.

The quality of the photographs is satisfactory. No difficulty should be encountered in interpretation of tones by the compiler.

The field inspection is believed to be complete.
3. HORIZONTAL CONTROL

(a) A third order position of Control Pt. "B" was determined by a three point fix to supplement the horizontal control. * Station unmonumented. Used for controlling photogrammetric plot.
(b) No datum adjustments were made by the field party.
(c) No stations other than the USC&GS were recovered. Does any exist?
(d) Lost station is the NAGS HEAD C.G. STATION, 1933
(e) All Coast & Geodetic stations were searched for and reported on Form 525.

4. VERTICAL CONTROL

In order to supplement the existing vertical control, a third order line was run along U.S. Highway 158 from the southwestern limits of quadrangle northward to the Nags Head Coast Guard station. A spur of this third order level line was run for about one mile south along the Oregon Inlet Road from its junction with U.S. Highway 158.

(a) Bench Marks

(1) Third Order USC&GS
   
M-249, 1949
M-249, 1949
P-249, 1950
M 14.5 (USGS) 1939
M 13.5 (USGS) 1939

(All of the above Bench Marks were established by third order leveling by the field party)

(2) Other Agencies (Third order Bench Marks)
   
M 10 (USGS) Not Recovered
M 10.5 (USGS) Not Recovered
M 11.0 (USGS) Not Recovered
M 11.5 (USGS) Not Recovered
M 12.0 (USGS) Destroyed
M 12.5 (USGS) Recovered
M 13.0 (USGS) Recovered
M 13.5 (USGS) Recovered
M 14.0 (USGS) Not Recovered
M 14.5 (USGS) Recovered
M 17.5 (USGS) Recovered
784 71 (USGS) Destroyed
(3) Two USGS Bench Marks, namely 13.5 and 14.5 were tied into the third order level line by this party which proved a datum difference of 0.320 feet. This datum difference was applied to all USGS Bench Marks that were used. The level line was adjusted to USGS Bench Marks Number 13.5 and 14.5 by the Washington Office.

(b) Four miles of fly levels were run to establish supplemental vertical control for contouring and closed on third order bench marks.

(c) The first and last level points are: 60-01 to 60-08.

5. CONTOURS AND DRAINAGE

All contouring was done by planetable methods directly on single lens photographs at a five foot interval. In some cases the peaks run higher than the last contour shown. This is because they are so small and sharp and could not be delineated accurately on 1:20000 scale. Such points are indicated on the photographs. In the northern portion of the quadrangle and on the sound side are concentrated most of the higher dunes. A five foot interval was maintained here up to their summit.

The drainage pattern, although very indefinite and irregular is generally toward the sound. Water stands in pockets between the two ridges that parallel the ocean and sound. Because of the ridge parallel to the ocean, there is practically no drainage in this direction.

6. WOODLAND COVER

There is no woodland coverage in the quadrangle.

7. SHORELINE AND ALONGSHORE FEATURES

(a) The mean high water line along the Atlantic Shore was indicated on the photographs by both field inspection and reference measurements. The shoreline is generally apparent along the sound side.

(b) The low water line was not indicated on the photographs along the barrier beach since the photography was made near the time of mean low water. On the sound side there is practically no perceptible periodic tide change and the mean low water line and the mean high water line are synonymous.

(c) The foreshore is sand.

(d) Inapplicable.

(e) Docks, wharves, piers and landings are clearly discernible on the photographs and clearly labeled.

8. OFFSHORE FEATURES

There are no offshore features that require further investigation.
9. LANDMARKS AND AIDS

(a) Landmarks and non-floating aids to navigation are listed on Form 567.

There are no aeronautical aids within the quadrangle.

10. BOUNDARIES, MONUMENTS AND LINES

For legal descriptions of all boundaries in this project, see "Special Boundary Report" which has been submitted by Mr. R.L. McGlinchey. * Filed under project data in Div. of Photogrammetry.

11. OTHER CONTROL

Recoverable topographic stations established are:
ADAM, 1950
ARCO, 1950
AXE, 1950
BAND, 1950
BANK, 1950 (Falls on T-9159)
BANK, 1950 (Nags Head C.G. Station) 1950
BAN, 1950 (Falls on T-9159)
SHACK, 1950
SPIKE, 1950
TOWER, 1950
CHIMNEY, 1950

12. OTHER INTERIOR FEATURES

All roads and buildings were classified in accordance with instructions.

The only bridge over navigable waters in the area is the swing draw bridge on U.S. Highway 158 which crosses Roanoke Sound in the southwestern section of the quadrangle. A new bridge is at present under construction near this site to be used in lieu of this bridge. There will be some revision in the location of the highway approaches to this bridge. This new bridge and revision in the highway approaches to the bridge should be checked by the field editor.

Clearances were obtained on the above bridge and on one fixed bridge located on U.S. Highway 158 crossing Roanoke Sound between two islands just east of the swing draw bridge.

All bridge data is shown on photographs.
There is one overhead transmission line crossing navigable waters in the quadrangle. This line crosses Roanoke Sound paralleling the south side of the swing draw bridge and clearance was obtained and clearly noted on the photograph. Check Bridge Book for discrepancies in clearance of bridges.

There are no airports, landing strips, or submarine cables in this quadrangle.

13. GEOGRAPHIC NAMES

This special report will be submitted by Mr. R.L. McGlinchey. This report is filed in the Geographic Names Sect., Div. of Charts.

14. SPECIAL REPORT AND SUPPLEMENTAL DATA

Except for items 10 and 13 above, there are no special data for this sheet.

2 June 1950
Submitted by:

Ralph O. Holland
Topographic Engr.
<table>
<thead>
<tr>
<th>STATION</th>
<th>SOURCE OF INFORMATION (INDEX)</th>
<th>DATUM</th>
<th>LATITUDE OR $\nu$-COORDINATE</th>
<th>LONGITUDE OR $x$-COORDINATE</th>
<th>DISTANCE FROM GRID IN FEET OR PROJECTION LINE IN METERS</th>
<th>DATUM CORRECTION</th>
<th>N.A. 1927 - DATUM DISTANCE FROM GRID OR PROJECTION LINE IN METERS</th>
<th>FACTOR DISTANCE FROM GRID OR PROJECTION LINE IN METERS</th>
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<tr>
<td>BODIE ISLAND</td>
<td>S.P. 218</td>
<td>N.A. 1927</td>
<td>35 53</td>
<td>56,932</td>
<td>1,754.7 (94.5)</td>
<td></td>
<td>1,319.4 (185.3)</td>
<td></td>
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<tr>
<td>NORTH BASE, 1849</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
COMPILATION REPORT T-9160

PHOTOGRAMMETRIC PLOT REPORT.

This report will be submitted with T-9159.

31. Delineation.

Compiled by graphic methods. No unusual methods were used.

32. Control.

Horizontal control was adequate. Identification, placement and density were satisfactory.

33. Supplemental Data.

None used. See § 14

34. Contours and Drainage.

No difficulty was encountered in the delineation of contours or drainage. See § 35

35. Shoreline and Alongshore Details.

Shoreline inspection was adequate. Low-water line was delineated from the photographs since photography was done at low tide. Reference Item 7(b).

36. Offshore Details.

No unusual problems were encountered while delineating offshore detail.

37. Landmarks and Aids.

No unusual methods employed. See § 65
38. **CONTROL FOR FUTURE SURVEYS.**

Eight (8) topographic stations are being submitted on Form 524. These topographic stations have been listed under Item 49. See §11

39. **JUNCTIONS.**

Adjoining quadrangles were not completed at this time. See §58

40. **HORIZONTAL AND VERTICAL ACCURACY.**

No statement is required. See §53

46. **COMPARISON WITH EXISTING MAPS.**

Comparison was made with U. S. C. of E. quadrangle ROANOKE ISLAND, scale 1:125,000, dated 1942. See §62.4, §63

47. **COMPARISON WITH NAUTICAL CHARTS.**

Comparison was made with NAUTICAL CHART, 1229, scale 1:80,000, dated December 1942, corrected to August 7, 1950. See §65

**ITEMS TO BE APPLIED TO NAUTICAL CHARTS IMMEDIATELY.**

None

**ITEMS TO BE CARRIED FORWARD.**

None.

Approved and Forwarded:

[Signature]

Charles J. Downing
Photogrammetric Aid

[Signature]

Arthur L. Wardwell
Chief of Party
NOTES FOR THE HYDROGRAPHER.

A list of eight (8) recoverable topographic stations which may be useful to the hydrographer follows:

ADAM - 1950
ARTO - 1950
AXER - 1950
BAND - 1950
BOUNDARY Mon. #1 - 1950
SHACK - 1950
SPIRE - 1950
TOWER - 1950
CHIMNEY - 1950

Reported 1953 as destroyed. CHG.
51. METHODS

The field edit of this quadrangle was accomplished by traversing, via truck, all roads, and walking to other areas in which the reviewer requested information. The shoreline was inspected from a skiff.

Corrections and additions were made by standard surveying methods in conjunction with visual inspection.

The reviewer's questions are answered on the discrepancy print, field edit sheet, field photographs 49-0-1798, 1799, 1799A, 1801, 1802 and this report.

Delations have been noted on the field edit sheet, and the field photographs. A legend appears on the field edit sheet which is self-explanatory.

Field work was accomplished intermittently during February, 1953.

52. ADEQUACY OF COMPILATION

The map compilation is adequate and will be complete after field edit data is applied. Complete re-classification of buildings was made on the field photographs for all areas adjacent to U.S. Highway 158 along Nags Head Beach, north of the causeway to Manteo.

53. MAP ACCURACY

Topographic station "BAND, 1950" was re-identified by the sub-station method as a check against the original identification by 3-point fix. The position of this station as delineated on the map manuscript could not be reconciled as to the shoreline and other topographic features. The horizontal accuracy of map detail in all other areas appears adequate.

A small area of isolated sand spots on Bodie Island just east of Headquarters Island was found to be above five (5) feet and contoured on field photograph 49-0-1802.
54. RECOMMENDATIONS

It is recommended that shifting sand dunes of the nature of those portrayed in the northern areas of this sheet, and outlined in red on the field edit sheet, not be contoured, but only an occasional spot elevation be shown on the higher peaks.

55. EXAMINATION OF PROOF COPY

It is believed that Mr. David Cox, Jr., registered land surveyor, Hertford, N. C., or Mr. Melvin Daniels, Dare County Registrar of Deeds, Manteo, N. C., are best qualified to examine a proof copy of this map.

A spot check of Geographic Names was made and found to be in excellent agreement with the Geographic Name List.

56. CONTOURS AND SAND DUNES

The sand dunes included in this sheet are classified in three groups:

(a) All that area along the Barrier Beach included east of U. S. Highway 158 and east of the new road to Oregon Inlet. The sand dunes in this entire area are very similar. These dunes can be classed as more stable than shifting in that grass covers most of the sand. The dunes are not too high and are not moving steadily in one direction as in areas north of here. South of the causeway to Manteo, the 5 and 10-foot carrying contours along the beach and inland along the new road are fairly steady. North of the causeway, the five and ten-foot contour along the beach and the ten-foot contour that generally follows U. S. 158 is also fairly steady. However, the 15-foot contour and any higher elevations are very unsteady. These higher areas are dotted with hundreds of small peaks and depressions which are subject to change by varying wind directions. It is recommended that in this area, the five and ten-foot contour be mapped and that some spot elevations be shown on the larger and higher areas.

(b) Areas immediately south and west of Nags Head, and circled in red on the Field Edit Sheet, are classed as shifting sand dunes. The contours here are recommended for deletion. These areas should be labeled "SHIFTING SAND DUNES" and only occasional spot elevations shown on the highest peaks.

(c) All other areas where contours are shown, are classed as stable sand areas and should be mapped. These areas are under ten (10) feet in elevation, generally isolated, and usually surrounded by bushes which afford protection against the wind.
57. OTHER INTERIOR FEATURES

Since the original photography and field work, a new bridge has been built over Roanoke Sound and the old bridge removed. That portion of the new bridge falling in T-9160 has been located on the field edit sheet and a proper junction made with the field edit sheet of T-9159. For further bridge data, see field edit sheet for T-9159.

Also, a new road has been built from approximately one mile south of the causeway to Manteo, to Oregon Inlet. This road has been located on the field edit sheet and a proper junction made with T-9278.

The U. S. Department of Interior, National Park Service, is in the process of acquiring all that land south of the causeway to Manteo, to Cape Hatteras. As of this date, no permanent boundaries have been established.

58. JUNCTIONS

A satisfactory junction was made with T-9159 on the west, and T-9278 on the south. The waters of the Atlantic Ocean are on the north and east.

12 March 1953
Submitted by:

Richard L. McGlinchey, Lt.
Carto. Surv. Aid

25 March 1953
Approved by:

Paul Taylor
Lt. Comdr., USCGGS
Chief of Party
PHOTOGRAMMETRIC OFFICE REVIEW

T-9160


CONTROL STATIONS


ALONGSHORE AREAS

(Nautical Chart Data)


PHYSICAL FEATURES


CULTURAL FEATURES


BOUNDARIES

31. Boundary lines J.G.

MISCELLANEOUS


40. Jesse A. Giles

Reviewer

William A. Basore
Supervisor, Review Section or Unit

41. Remarks (see attached sheet)

FIELD COMPLETION ADDITIONS AND CORRECTIONS TO THE MANUSCRIPT

42. Additions and corrections furnished by the field completion survey have been applied to the manuscript. The manuscript is now complete except as noted under item 43.

Compiler

Supervisor

43. Remarks:
Review Report
Topographic Map T-9160
5 February 1954

62. Comparison with Registered Topographic Surveys:—

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<thead>
<tr>
<th>Survey</th>
<th>Scale</th>
<th>Date</th>
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</thead>
<tbody>
<tr>
<td>T-351</td>
<td>1:20,000</td>
<td>1851</td>
</tr>
<tr>
<td>354</td>
<td></td>
<td>1649</td>
</tr>
<tr>
<td>3538</td>
<td>1:40,000</td>
<td>1915-16</td>
</tr>
</tbody>
</table>

Differences in shoreline and cultural features exist between these surveys and T-9160. Map T-9160 is to supersede the above surveys for the area encompassed by T-9160.

63. Comparison with Maps of Other Agencies:—

Roanoke Island, N.C. (USE) 1:125,000 1943

T-9160 is in general agreement with this map. Some changes in culture have occurred since this 1943 map was published.

64. Comparison with Contemporary Hydrographic Surveys:— None

65. Comparison with Nautical Charts:—

<table>
<thead>
<tr>
<th>Chart</th>
<th>Scale</th>
<th>Date</th>
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</thead>
<tbody>
<tr>
<td>1229</td>
<td>1:80,000</td>
<td>1942 corr. to 53- 8/24</td>
</tr>
</tbody>
</table>

Differences in shoreline and culture exist. Changes made to the map manuscript during this review are shown in red. Note the position correction made during this review to the attached Form 567 for landmark: Tower.

66. Adequacy of Results and Future Surveys:— This map meets the "national Standards of Map Accuracy and complies with project instructions.

67. Vertical Control:— Reference par. (a) (3), sub-heading 4. The adjustment of this level circuit in conjunction with the adjustment of two other level circuits which were also referenced to BM M-145 (USGS) was made by the Section of Leveling, Div. of Geodesy. It was concluded from this investigation that the elevation of BM M-145, as published, should be retained. The elevations of benchmarks established in conjunction with this survey were accordingly recomputed by the Section of Leveling.

The application by the contouring party of a datum difference to the USGS benchmarks on Bodie Island is in error. However, the error is insignificant in securing the accuracy of contours.

68. Bridges and cables: The fixed bridge appearing on this map is not listed in the USE bridge book.
69. Contours and Sand Dunes: Reference par. (a) Sub-heading 56.
Parts of the area referred to required further generalization to
permit symbolization and contouring. The selection of the limits
between the stable and shifting dunes is difficult and somewhat
arbitrary.

Reviewed by:
Everett H. Ramsey

APPROVED

La Lande
Chief, Review Branch
Div. of Photogrammetry

W. Swanson
Chief, Div. of Photogrammetry

Edmonston
Chief, Nautical Chart Branch
Division of Charts

Earl O. Heaton
Chief, Div. of Coastal Surveys

Sept 23, 1915
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 Charles J. Downing

Arthur L. Wardwell
Chief of Party

<table>
<thead>
<tr>
<th>STATE</th>
<th>NORTH CAROLINA</th>
<th>POSITION *</th>
<th>LATITUDE</th>
<th>LONGITUDE</th>
<th>METHOD OF LOCATION AND SURVEY No.</th>
<th>DATE OF LOCATION</th>
<th>CHARTS AFFECTED</th>
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<tbody>
<tr>
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<td></td>
<td>SIGNAL</td>
<td>O 1</td>
<td>D.METERS</td>
<td>D.P.METERS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NAME</td>
<td></td>
<td>NAME</td>
<td></td>
<td></td>
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<tr>
<td>Lt. 26</td>
<td>ROANOKE ISLAND, Red box on pile</td>
<td></td>
<td>35 52</td>
<td>1655</td>
<td>75 37 705</td>
<td>N.A.</td>
<td>1229</td>
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<td>Sn. 23</td>
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</tr>
<tr>
<td></td>
<td>BLACK SQUARE DAYBEACON ON PILE</td>
<td></td>
<td>35 52</td>
<td>958</td>
<td>75 37 649</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Positions were verified by planetable in 1953.
** 1953 Light List designates these as Roanoke Sound Channel.

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 charts only. Information herein has been redetermined should be given.
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 Charles J. Downing

Arthur L. Hardwell

Chief of Party

<table>
<thead>
<tr>
<th>State</th>
<th>North Carolina</th>
</tr>
</thead>
<tbody>
<tr>
<td>Charting Name</td>
<td>Description</td>
</tr>
<tr>
<td>TOWER</td>
<td>Roof finial of lookout, Nags Head C.G. Station, ht = 48 (55)</td>
</tr>
</tbody>
</table>
48. GEOGRAPHIC NAME LIST.

Investigation incomplete at this time - Geographic Names will be listed after Field Edit.

Those names shown on the map manuscript are for the most part taken from the Nautical Chart and are indisputable.

- North Carolina
- Dare County
- Atlantic Ocean
- Bodie Island
- Roanoke Sound
- U.S. No. 138
- Bells Island
- Headquarters Island
- Rockhall Creek
- House Island
- Grun Island
- Pond Island
- Little Bridge
- Jeanettes Ocean Pier
- Cedar Island
- Big Penguin Island
- Little Penguin Island
- Nags Head Island
- St. Andrews by the Sea Church
- Nags Head

Nags Head Coast Guard Station

Names underlined in red are approved, on basis of Project Names Report, before Field Edit.

5-8-52
L. Heck
History of Hydrographic Information for T-9160

Hydrography was added to the map manuscript in accordance with the general specifications of 18 May 1949.

Depth curves and soundings are in feet at mean low water datum and originate with the following C&GS hydrographic surveys:

<table>
<thead>
<tr>
<th>Survey</th>
<th>Scale</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>H-257</td>
<td>1:20,000</td>
<td>1851</td>
</tr>
<tr>
<td>1053</td>
<td>1:40,000</td>
<td>1870</td>
</tr>
<tr>
<td>3772</td>
<td>1:20,000</td>
<td>1915</td>
</tr>
</tbody>
</table>

Also two shoals were added in accordance with Nautical Chart 1229, 1:80,000, 1942 corrected to 53-8/24. These were reported shoals and have not been surveyed by C&GS. Comparison of other hydrography was made with this chart.

Hydrography was compiled by Everett H. Ramey on 3 March 1954 and verified by O. Svendsen on 11 March 1954.

Everett H. Ramey
### Nautical Charts Branch

**Survey No. 4160**

**Record of Application to Charts**

<table>
<thead>
<tr>
<th>Date</th>
<th>Chart</th>
<th>Cartographer</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>10-28-54</td>
<td>1229</td>
<td>C. Wilson</td>
<td>Before &amp; After Verification and Review</td>
</tr>
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</table>

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.