Diag. Cht. No. 1229

U. S. COAST AND GEODETIC SURVEY
DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

<table>
<thead>
<tr>
<th>Type of Survey</th>
<th>TOPOGRAPHIC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Field No. Ph-45 (49)</td>
<td>Office No. T-9276</td>
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</tbody>
</table>

LOCALITY

<table>
<thead>
<tr>
<th>State</th>
<th>NORTH CAROLINA</th>
</tr>
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<tbody>
<tr>
<td>General locality</td>
<td>CROATAN SOUND</td>
</tr>
<tr>
<td>Locality</td>
<td>MANNS HARBOR</td>
</tr>
</tbody>
</table>

104 51

CHIEF OF PARTY
Harry F. Garber, Chief of Field Party
J. E. Waugh, Tampa Photogrammetric Office

LIBRARY & ARCHIVES

DATE AUG 31 1955
DATA RECORD

T - 9276

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

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

Photogrammetric Office (III): Tampa, Florida Officer-in-Charge: J. E. Waugh

Instructions dated (III): 15 September 1949
Supplement No. 1, 19 January 1950

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): JAN 23 1952 Date reported to Nautical Chart Branch (IV):

Applied to Chart No. Date: Date registered (IV): AUG 19 1955

Publication Scale (IV):

Publication date (IV):

Geographic Datum (III): N.A. 1927 Vertical Datum (III): MSL

Mean sea level except as follows:
Elevations shown as (25) refer to mean high water
Elevations shown as (0) refer to sounding datum
I.e., mean low water or mean lower low water

Reference Station (III): PIPE STATION 0-2 (USE) 1942

Lat.: 35° 48' 54.883 (1691.5m) Long.: 75° 47' 44.075 (1106.5m)

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.
DATA RECORD

Field Inspection by (I): Ralph G. Holland, Topo. Engr.
George E. Varnadore, Carto. Engr.

Date: May, 1950

Planetable contouring by (II): Richard E. Conway, Jr., Carto. Surv. Aid

Date: Aug, 1950

Completion Surveys by (II): R. L. McGlinchey

Date: May 1953

Mean High Water Location (III) (State date and method of location):

Air-Photo Compilation
Field identified on photographs taken 1949

Date: April 1951

Projection and Grids ruled by (IV): L.D. C. (W.O.)

Date: 12 July 1951

Projection and Grids checked by (IV): H. D. W. (W.O.)

Date: 13 July 1951

Control plotted by (III): R. J. Pate

Date: 24 July 1951

Control checked by (III): I. I. Saperstein

Date: 30 July 1951

Radial Plot of

Control plotted by (III): M. M. Slavney

Date: 22 October 1951

Stereoscopic Instrument compilation (III):

Planimetry
Contours

Inapplicable

Date:

Manuscript delineated by (III): R. R. Wagner

Date: 21 December 1951

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

Date: 27 March 1952

Elevations on Manuscript
checked by (III): J. A. Giles

Date: 27 March 1952
Camera (kind or source) (III): Fairchild Cartographic - 6" Metrogon lens, Camera "0"

PHOTOGRAPHS (III)

<table>
<thead>
<tr>
<th>Number</th>
<th>Date</th>
<th>Time</th>
<th>Scale</th>
<th>Stage of Tide</th>
</tr>
</thead>
<tbody>
<tr>
<td>49-0-1738 - 1739</td>
<td>5 Dec. 1949</td>
<td>12:18</td>
<td>1:20,000</td>
<td>No tide *</td>
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<tr>
<td>1740 - 1741</td>
<td></td>
<td>12:19</td>
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<tr>
<td>1742</td>
<td></td>
<td>12:20</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1748</td>
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<td>12:41</td>
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<td>1749</td>
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<td>12:42</td>
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<td>1750</td>
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<td>12:43</td>
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<tr>
<td>1751</td>
<td></td>
<td>12:44</td>
<td></td>
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<tr>
<td>1782 - 1783</td>
<td></td>
<td>13:18</td>
<td></td>
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</tr>
<tr>
<td>1784 - 1785</td>
<td></td>
<td>13:19</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1786 - 1787</td>
<td></td>
<td>13:20</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1833</td>
<td>6 Dec. 1949</td>
<td>11:24</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Tide (III)  
No tide *

Reference Station:  
Subordinate Station:  
Subordinate Station:  

Washington Office Review by (IV): Everett H. Ramey

Final Drafting by (IV): P.C. Bach

Drafting verified for reproduction by (IV):

Proof Edit by (IV):  

Land Area (Sq. Statute Miles) (III): 60  
Shoreline (More than 200 meters to opposite shore) (III): 1*  
Shoreline (Less than 200 meters to opposite shore) (III): 6  
Control Leveling - Miles (II): See Third Order Levels  
Number of Triangulation Stations searched for (II): 6  
Number of BMs searched for (II): Recovered: 6 Identified: 4  
Number of Recoverable Photo Stations established (III): 1  
Number of Temporary Photo Hydro Stations established (III): none  
Number of Third Order Bench Marks established: (11) 15 Identified: 15 16  
Remarks:  
*III - Data furnished by the Washington Office gave 4 mi. of shoreline
Summary to Accompany Topographic Map T-9276

Map T-9276 is one of eighteen topographic maps of project Ph-45(49). It covers a small portion of Croston Sound and adjacent land area to the westward—all within Dare Co., North Carolina.

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

Map T-9276 was compiled at a scale of 1:20,000 using aerial photographs taken in 1949. The map was then field edited. After the addition of hydrography the map will be forwarded to the Geological Survey for publication as a standard 7½' topographic quadrangle map.

Items registered under T-9276 will include a descriptive report, a lithographic copy of the map manuscript at a scale of 1:20,000 and a copy of the published map at a scale of 1:24,000.
FIELD INSPECTION REPORT
Quadrangle T-9276
Project Ph-45(49)

Harry F. Garber, Chief of Party

The field work for this quadrangle was done in accordance with Instructions for Ph-45(49), dated 15 September 1949, and the Director's letter, dated 4 October 1950. In addition to the phases shown on pages 2 and 3, the work was accomplished by the following personnel:

<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 Control</td>
<td>May, 1950</td>
</tr>
<tr>
<td>Topographic Engineer</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Richard L. McGlinchey</td>
<td>Vertical Control</td>
<td>Jan., 1950</td>
</tr>
<tr>
<td>Cartographic Survey Aid</td>
<td>Horizontal Control</td>
<td>May, 1950</td>
</tr>
</tbody>
</table>

2. AREAL FIELD INSPECTION

Two U.S. Highways Nos. 64 and 264 junction in the northwestern part of the quadrangle. - a few miles south of the terminal with the Croatan Sound ferry. No. 64 serves the area to the west and the Alligator River Ferry. No. 264 serves the area to the south. No other roads exist within the quadrangle.

The land for the entire quadrangle is in its natural state (marsh, swamp, open low brush land, and woodland). Lumbering on a small scale is the only industry. Three or four fishing shacks in the extreme northeast corner are the only buildings.

It is believed that the field inspection is complete.

3. HORIZONTAL CONTROL

(a) No supplemental control was established. However, in some cases, substitute stations were located, by traverse, considerable distances from existing control, in order to strengthen the plot.

(b) No datum adjustments were made.

(c) The only control within the quadrangle are traverse stations established by the U.S.E. in 1942, all of which were recovered. * one recovered in disturbed condition.
(d) All of the stations, required by the project instructions, were identified.

(e) Inapplicable.

4. VERTICAL CONTROL

All of the control within this quadrangle was established by this party. The bench marks of third-order accuracy are:

Pipe Station N-1  Q-247
K-247            R-247
L-247            W-247
M-247            X-247
Pipe Station C-2 Y-247
P-247            A-248
Pipe Station P-1 J-247  Tampa.

These bench marks were set at approximately one-mile intervals along the only existing roads, therefore, no differential levels were run.

5. CONTOURS AND DRAINAGE

In accordance with Bureau Letter No. 711 rs, dated 4 October 1950, no attempt was made to establish elevations in the dismal swamps that are so inaccessible. It is recommended that this map be published as a quadrangle type map. Elevations along the roads that are slightly higher than the adjoining land, and elevations in the cultivated areas corroborated by photo interpretation and a visual inspection conclusively prove that none of the land is above five feet, and no five-foot contour exists. (Copy of Bureau Letter 711 rs, dated 4 October 1950, is attached to the report for T-9274.)

Except for the canals, which parallel the highways and the heads of three small streams, all of which are affected by wind tides, there is no drainage.

6. WOODLAND COVER

This is the subject of a special report covering four quadrangles: T-9275, T-9276, T-9281 and T-9282, submitted by Mr. George E. Varnadoe, Cartographic Engineer, dated 22 June 1951. Filed with the descriptive report for T-9282.

7. SHORELINE AND ALONGSHORE FEATURES

A few hundred feet of shoreline along Croatan Sound and in the tidewater creeks constitute all of the shoreline that touches this quadrangle, all of which has been adequately labeled and/or symbolized.
There is no perceptible periodic tide; therefore the mean high-water line and low-water line are synonymous.

No bluffs, cliffs, docks, wharves, piers, submarine cables, or other offshore features are in existence. One landing, the State Highway Barge Landing, which was used for road material, while the two highways were being resurfaced, is discernible and has been labeled.

8. OFFSHORE FEATURES

Non-existent.

9. LANDMARKS AND AIDS

Non-existent.

10. BOUNDARIES, MONUMENTS AND LINES

A special report on boundaries was submitted by Mr. Richard L. McClinche, Cartographic Survey Aid, and is dated June, 1950. Filed in Div. of Photogrammetry.

11. OTHER CONTROL

Inapplicable. See §38

12. OTHER INTERIOR FEATURES

The two highways and three buildings have been classified in accordance with the Topographic Manual.

13. GEOGRAPHIC NAMES

This will be submitted as a special report for the project at a later date.

This report by Mark L. Smith filed in Geo. Names Sect., Div. of Charts.

14. SPECIAL REPORTS AND SUPPLEMENTAL DATA

There are three special reports. They are listed under items 6, 10 and 13.

27 June 1951
Submitted by:
George E. Varnadoe
Cartographic Engineer

28 June 1951
Approved by:
Harry S. Garber
Chief of Party
Photogrammetric Plot Report

This report covers surveys T-9154 through T-9158, T-9273 through T-9276 and T-9279 through T-9283. It is filed as part of the Descriptive Report for T-9158.
<table>
<thead>
<tr>
<th>STATION</th>
<th>SOURCE OF INFORMATION (INDEX)</th>
<th>DATUM</th>
<th>LATITUDE OR y-COORDINATE</th>
<th>LONGITUDE OR x-COORDINATE</th>
<th>DISTANCE FROM GRID IN FEET. OR PROJECTION LINE IN METERS</th>
<th>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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<tbody>
<tr>
<td>P-2, 1942 (USE)</td>
<td>East Lake Quad</td>
<td>N.A. 1927</td>
<td>35 51</td>
<td>23.186</td>
<td>75 47</td>
<td>54.187</td>
<td>743.7 (1,314.5)</td>
<td>Recovered in disturbed condition</td>
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<tr>
<td>P-1, 1942 (USE)</td>
<td>&quot;</td>
<td>&quot;</td>
<td>35 51</td>
<td>07.257</td>
<td>75 48</td>
<td>09.121</td>
<td>223.7 (1,062.5)</td>
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<tr>
<td>O-2,1942 (USE)</td>
<td>&quot;</td>
<td>&quot;</td>
<td>35 48</td>
<td>54.883</td>
<td>75 47</td>
<td>44.075</td>
<td>1,691.5 (157.7)</td>
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<tr>
<td>O-1,1942 (USE)</td>
<td>&quot;</td>
<td>&quot;</td>
<td>35 48</td>
<td>38.603</td>
<td>75 47</td>
<td>29.689</td>
<td>1,189.7 (659.5)</td>
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<td>&quot;</td>
<td>&quot;</td>
<td>35 46</td>
<td>29.914</td>
<td>75 46</td>
<td>11.049</td>
<td>921.9 (927.3)</td>
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<tr>
<td>N-1,1942 (USE)</td>
<td>&quot;</td>
<td>&quot;</td>
<td>35 46</td>
<td>09.633</td>
<td>75 46</td>
<td>10.026</td>
<td>296.9 (1,552.3)</td>
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</table>
COMPILATION REPORT T-9276

PHOTOGRAMMETRIC PLOT REPORT.

Submitted with T-9158.

31. DELINEATION.

The graphic method was used.

32. CONTROL.

The control identification was good. It is sufficiently spaced to insure good detail points.

33. SUPPLEMENTAL DATA.

None used.

34. CONTOURS AND DRAINAGE.

Reference Item 5.

The bench marks along the southern part of U. S. 26 indicate a 5-foot contour and it has been shown. There are two 5-foot contours along the shoreline of Croatan Sound.

No difficulty was encountered in delineation of drainage.

35. SHORELINE AND ALONGSHORE DETAILS.

The shoreline inspection was adequate.

Reference Item 7.

36. OFFSHORE DETAILS.

No statement.
37. **LANDMARKS AND AIDS.**

None.

38. **CONTROL FOR FUTURE SURVEYS.**

Item 11 is amended. A Form 5243 for GABLE, 1950, submitted by the Field Party with T-9277 falls on this quadrangle. The station is listed under Item 49.

39. **JUNCTIONS.**

Junction has been made with T-9156 to the north, T-9277 to the east, T-9282 to the south and T-9275 to the west. See Radial Plot Report on junction of state coordinate grids with relation to polyconic projections.

40. **HORIZONTAL AND VERTICAL ACCURACY.**

No statement. See § 66.

46. **COMPARISON WITH EXISTING MAPS.**

Comparison was made with U. S. G. of E. Quadrangle, ROANOKE ISLAND, N. C., scale 1:125,000, dated 1942. The two are in good agreement.

47. **COMPARISON WITH NAUTICAL CHARTS.**

Comparison was made with Chart 1229, scale 1:80,000, published 1942 and corrected 31 August 1951. The two are in good agreement.
ITEMS TO BE APPLIED TO NAUTICAL CHARTS IMMEDIATELY.

None.

ITEMS TO BE CARRIED FORWARD.

None.

Robert R. Wagner, Carto/Photo. Aid

APPROVED AND FORWARDED:

J. E. Waugh, Chief of Party
49. NOTES FOR THE HYDROGRAPHER.

There is only one (1) recoverable topographic station:

GABLE, 1950.
51. METHODS

The field edit for this quadrangle was accomplished by traversing all roads, via truck, and walking to other areas in which the reviewer requested information, and for a general check on the adequacy of the map compilation.

Corrections and additions were made both by visual inspection and standard surveying methods.

Corrections, additions and deletions have been made on the field edit sheet, discrepancy print, and field photograph 49-0-1742.

A legend appears on the field edit sheet indicating the various color inks used.

The field work was accomplished during the first week of February, 1953.

52. ADEQUACY OF COMPILATION

The map compilation is adequate and will be complete after field edit data is applied.

53. MAP ACCURACY

The relative accuracy of all topographic features appears good. Some OPEN areas along U.S. Highway 264 have been reclassified to TREES.

The turning points of contours along this highway were checked and noted on the field edit sheet.

54. RECOMMENDATIONS

None.

55. EXAMINATION OF PROOF COPY

It is believed that Mr. Malvin R. Daniels, Dare County Registrar of Deeds, Manteo, North Carolina, or Mr. David Cox, Jr., Registered Land Surveyor, Hertford, N. C., is best qualified to examine a proof copy of this map.

The following Geographic Name was verified by a further field investigation:

BILLY'S DITCH - This is a well known feature to local sportmen, as it leads to South Lake and East Lake.
Persons contacted were:

Mr. E. P. Hudson  East Lake, N. C.  Fisherman & Guide
Mr. Tom Tillett  Manns Harbor, N. C.  Fisherman
Mr. D. M. Grey  "  "  "

56. JUNCTIONS

Satisfactory junctions have been made with T-9277 on the east, T-9158 on the north, T-9275 on the west, and T-9282 on the south.

12 March 1953
Submitted by:

Richard L. McTavish
Cartographic Survey Aid

25 March 1953
Approved by:

Paul Taylor
Lt. Comdr., USCG & GS
Chief of Party
50. PHOTOGRAMMETRIC OFFICE REVIEW

T: 9276


CONTROL STATIONS


ALONGSHORE AREAS
(Nautical Chart Data)


PHYSICAL FEATURES


CULTURAL FEATURES


BOUNDARIES

31. Boundary lines J.G.  32. Public land lines XXX

MISCELLANEOUS


40. Jesse A. Gillies  
   Reviewer

  William A. Rampe  
  Supervisor, Review Section or Unit

41. Remarks (see attached sheet)

FIELD COMPLETION ADDITIONS AND CORRECTIONS TO THE MANUSCRIPT by Tampa

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:  

M 2623-12
62. **Comparison with Registered Topographic Surveys.**

<table>
<thead>
<tr>
<th>T-933</th>
<th>1:20,000</th>
<th>1864</th>
</tr>
</thead>
<tbody>
<tr>
<td>T-2952</td>
<td>1:80,000</td>
<td>1909</td>
</tr>
</tbody>
</table>

These surveys cover only a small area that is common to T-9276. Map T-9276 is to supersede the prior surveys for nautical charting for their common area.

63. **Comparison with Maps of Other Agencies.**

Roanoke Island, North Carolina (U.S.E.) 1:125,000 1942

There are differences in drainage and woodland limits between the above map and T-9276.

64. **Comparison with Contemporary Hydrographic Surveys.** None

65. **Comparison with Nautical Charts.**

1229 1:80,000 1942 corrected to 53-8/24

No significant differences were detected between the chart and T-9276.

66. **Adequacy of Results and Future Surveys.** This map meets the National Standards of map accuracy and complies with project instructions. See sub-heading 5 regarding contouring.

Reviewed by:

Everett R. Ramey

APPROVED

LaRonde
Chief, Review Branch
Div. of Photogrammetry

Earl O. Neuman
Chief, Div. of Coastal Surveys
29 Aug. 1951
T-9276  Geographic Names.

North Carolina  
Dare County  
Crotan Township  
East Lake Township  
Crotan Sound  
U.S. 64  
U.S. 254  

Stumpy Point, Yanns Harbor Road  
Lilltail Creek  
Billys Ditch  
Hooker Gut  
Spencer Creek  
Callaghan Creek  

Names underlined in red are approved. 7-1-52.

L. Heuk
## 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>6-20-62</td>
<td>12 28</td>
<td>Knoop</td>
<td>Complete Application Before After Verification and Review</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Before After Verification and Review</td>
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</tbody>
</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.