9396

ORIGINAL

N&S

*9376

Diag Cht 1234-2

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

# DESCRIPTIVE REPORT

Type of Survey: Topographic

Field No.: PH-58(49)

Office No.: T-9396

LOCALITY

State: North Carolina

General locality: Atlantic Coast

Locality: Bear Creek

1952

CHIEF OF PARTY

H. F. Garber, Chief of Party

H. A. Paton, Baltimore Photogrammetric Office

LIBRARY & ARCHIVES

DATE MAR 24 1955

B-1870-1 (1)

9396

Partially Applied to chart 833 Sept 1955 [illegible]
Part Appd to Cht 1234 (no correction) 3-7-56 RKD.
Cht 777 - Fully Applied (No Corr) 5-24-62 G.R.J.

DATA RECORD



T - 9396

Project No. (II): Ph-58(49) Quadrangle Name (IV): Hubert N.C.

Field Office (II): Holly Ridge, N. C.
Jacksonville, N.C.

Chief of Party: Harry F. Garber

Photogrammetric Office (III): Baltimore, Md.

Officer-in-Charge: H.A.Paton

Instructions dated (II) (III): 27 February 1950
28 April 1950, Supplement 1
26 April 1951, Supplement 2

Copy filed in Division of Photogrammetry (IV) Office Files

Method of Compilation (III): Air Photographic Multiplex (Planimetry) Graphic (Contours)

Manuscript Scale (III): 1:10,000

Stereoscopic Plotting Instrument Scale (III): 1:10,000

Scale Factor (III): 1.000

Date received in Washington Office (IV): 1-28-52

Date reported to Nautical Chart Branch (IV): 2-5-52

Applied to Chart No.

Date:

Date registered (IV): 2-18-55

Publication Scale (IV): 1:24,000

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 (5) refer to sounding datum
i.e., mean low water or mean lower low water

Reference Station (III): RUSSELL, 1932

Lat.: 34° 39' 27".717

Long.: 77° 11' 43".098

Adjusted

Plane Coordinates (IV):

State: NC

Zone:

Y=

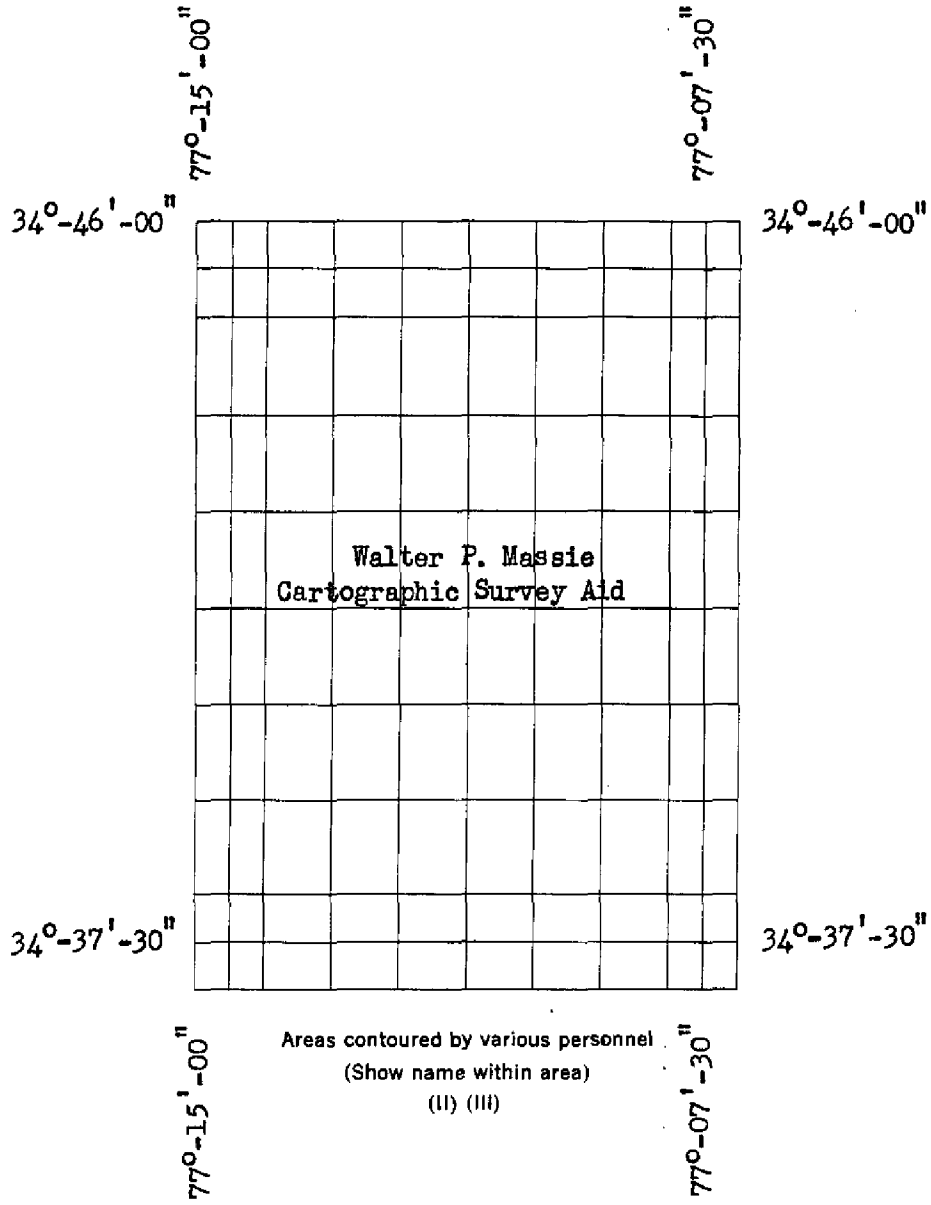
X=

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.



M-2618-12(4)


77°-15'-00"
77°-07'-30"
34°-46'-00"
34°-46'-00"
Walter P. Massie
Cartographic Survey Aid
34°-37'-30"
34°-37'-30"
Areas contoured by various personnel
(Show name within area)
(II) (III)
77°-15'-00"
77°-07'-30"

# DATA RECORD

Field Inspection by (II): M. W. Smith
H. G. Murphy
Date: May, 1950

Planetable contouring by (II): W. P. Massie
Date: June, 1951

Completion Surveys by (II): H. R. Cravat
Date: March, 1952

Mean High Water Location (III) (State date and method of location): 8 November 1949
(Date of photography)

Projection and Grids ruled by (IV): TLJ
Date: March 1950

Projection and Grids checked by (IV): HDW
Date: March 1950

Control plotted by (III): A. C. Rauck, Jr.
Date: May 1950

Control checked by (III): H. P. Eichert
Date: May 1950

Radial Plot or Stereoscopic
Control extension by (III): A. K. Heywood
Date: June 1950

Stereoscopic Instrument compilation (III):
Planimetry A. K. Heywood
Date: June 1950
Contours
Date:

Manuscript delineated by (III):
J. Y. Councill 9396 S
B.Wilson 9396 N
Date:
June 1950
July 1950

Photogrammetric Office Review by (III):
A.K. Heywood
Date:
July 1950

Elevations on Manuscript
checked by (II) (III):
J. A. Clear, Jr.
A.C. Rauck, Jr.
Date:
June, 1951
Jan. 1952

Camera (kind or source) (III): 6" Focal Length

PHOTOGRAPHS (III)

| Number | Date | Time | Scale | Stage of Tide |
|---|---|---|---|---|
| 2-154 - 2-162 | 11/8/49 | 1354 | 1:24,000 | 0.7 MLW |
| 2-197 - 2-205 | " | 1338 | " | 0.9 MLW |
| 3-5 - 3-12 | " | 1314 | " | 1.2 MLW |
| 3-53 - 3-62 | " | 1237 | " | 1.4 MLW |
| 3-68 - 3-76 | " | 1219 | " | 1.7 MLW |

Tide (III)

**From predicted table of tides**

Reference Station: HAMPTON ROADS (SEWALL PT)
Subordinate Station: NEW RIVER INLET
Subordinate Station:

| Ratio of Ranges | Mean Range | Spring Range |
|---|---|---|
| 1.0 | 2.5 | 3.0 |
| 1.2 | 3.0 | 3.6 |
| | | |

Washington Office Review by (IV): C. Hanavich Date: 7 Jan, 1953

Final Drafting by (IV): John H. Frazier - 9396-S, John H. Frazier - 9396-N (E/2 & W/2 for registration) Date: 7-13-54, 8-25-54

Drafting verified for reproduction by (IV): 9396 N W O Hallmin, 9396 S W O Hallmin Date: 9-28-54, 10-4-54

Proof Edit by (IV): Date:

Land Area (Sq. Statute Miles) (III): 54
Shoreline (More than 200 meters to opposite shore) (III): ~~35.6~~ 36
Shoreline (Less than 200 meters to opposite shore) (III): ~~27.7~~ 28
Control Leveling - Miles (II): 57
* Number of Triangulation Stations searched for (II): 26 Recovered: 16 Identified: 15
Number of BMs searched for (II): 10 Recovered: 6 Identified: 6
Number of Recoverable Photo Stations established (III): ~~7~~ 8
Number of Temporary Photo Hydro Stations established (III): 14

Remarks: (III)

* One triangulation station was searched for a second time at a later date. This was Bogue Sound Beacon 25, 1933. A second recovery card was submitted stating "STATION DESTROYED, BEACON MOVED".
One station was searched for and recovered off project limit, making a total of 17 recovered.
In addition 3 traverse stations and 2 azimuth marks were identified, bringing the total stations identified to 20.



M-2618-12(4)

# TOPOGRAPHIC MAPPING PROJECT

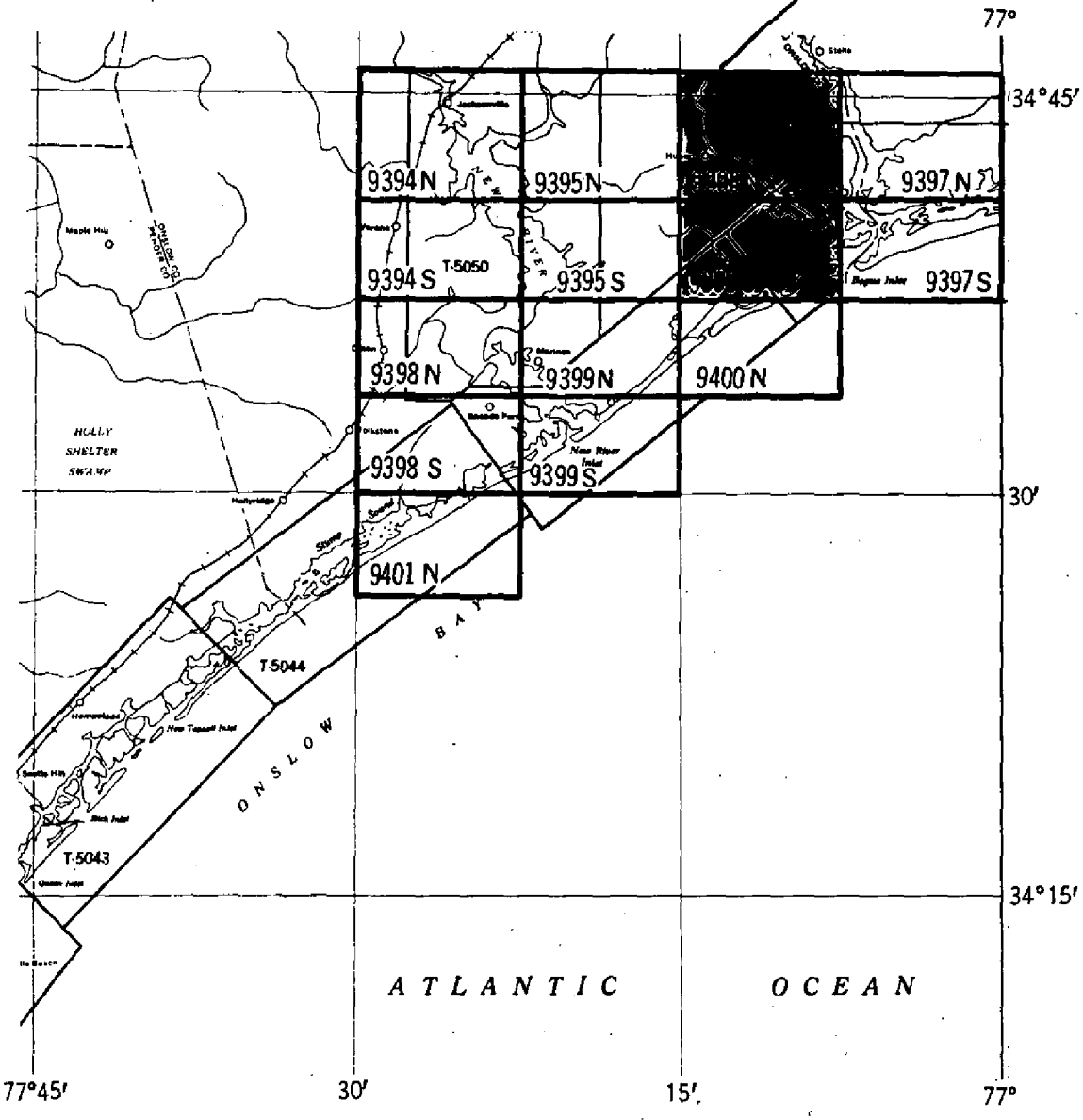


## PH-58 (49)

## NORTH CAROLINA New River

Scale 1:10,000

Registered copy: E/2 & W/2



Summary T-9396

Project Ph-58(49), a topographic mapping survey, consists of 8 quadrangles numbered T-9394 to T-9401, inclusive. The area of the project is located in the vicinity of the town of Swansboro and New River, N.C., and extends from the coastline between longitudes 77° 00' and 77° 30' northward to latitude 34° 46'. To the east it junctions with Ph-5(45) - a topographic and shoreline mapping project.

The field operations included complete field inspection and the establishment of some additional horizontal control. Contouring was accomplished by planetable at 5-foot intervals. Compilation of planimetry was done by the multiplex; planetable contours were later applied by graphic methods. The compilation scale was at 1:10,000. Except for T-9400N and T-9401N, each map manuscript is comprised of 2 sheets and is identified as the N (North) or S(South) sheet. Each sheet of the map manuscript - including T-9400N and T-9401N - is 3 3/4' in latitude by 7½' in longitude; the exception to this is in the northern tier of 4 sheets (T-9344N to T-9397N inclusive) which are 4 3/4' in latitude.

For information on other phases of the work concerning the project, such as the project instructions, special reports, official correspondence, and other supplementary information, reference should be made to the project completion report, which will be compiled and submitted upon completion of the review of all the surveys on this project.

These maps are to be published by the Geological Survey at a scale of 1:24,000 as a standard topographic quadrangle. Cloth-backed lithographic prints* of the original map manuscripts at compilation scale and the descriptive reports for all maps in this project will be filed in the Bureau Archives. Cloth-backed copies of the published topographic quadrangles will also be filed.

* Registered as T-9396 N (E/2 & W/2) and T-9396 S

FIELD INSPECTION REPORT
Quadrangle T-9396
Project Ph-58

Harry F. Garber, Chief of Party

## 2. AREAL FIELD INSPECTION

The area is rural and the high ground devoted to farming.

A settlement of several buildings, known as Hubert, N. C., lies at the western edge. This is the only collection of buildings of consequence but there are numerous farm homesteads scattered throughout.

There are numerous natural drains formed by the rolling upland. These empty into the White Oak River on the east, the Intracoastal Waterway which crosses the southeast corner, or Queen Creek, a stream flowing northwest-southeast through the center.

Access roads are plentiful and of good quality, the most prominent being N. C. State Highway No. 24 and No. 172.

U.S. Marine Corps,Reservation, Camp Lejeune, occupies a small part of the southwest section.

Notes were made on the photographs classifying the vegetation, no unusual difficulty of interpretation being encountered.

The photographs are of good quality and adequately cover the area.

## 3. HORIZONTAL CONTROL

As a result of a traverse run to provide supplemental control for the photogrammetric plot, four temporary stations were established. These are all just north of the quadrangle limit and were numbered: P. Pt. HM #1, P. Pt. HM-P #1, P. Pt. HM-P #2, and P. Pt. HM-P #3.

Two Corps of Engineer third order traverse stations were recovered. They are: Mon. 15 (C of E), 1941 (north of quad. limit), and Mon. 22 (C of E), 1941.

All known U.S. Coast and Geodetic Survey stations were searched for and reported on Form 526. Those reported "Lost" are listed as follows:

Bogue Sound, Beacon 25, 1933
Bogue Sound, Beacon 29, 1933
Helio, 1927
Mill, 1914
Smith's House Cupola, 1914
Water Tank near Queen, 1933
294(USE), 1933

Of these, MILL, 1914, was identified for use in the photogrammetric plot as the base of the monument was found still in place although the tip had been broken off.

4. VERTICAL CONTROL

There are no U.S. Coast and Geodetic Survey bench marks. The following Corps of Engineer third-order bench marks were recovered and reported on Form 685A: Mon. 15 (C of E), 1941, Queen (USE), and Meadow (USE).

Also, three fourth-order elevations, established by military personnel of the Corps of Engineers on horizontal control stations, were recovered. They are:

Hubert, 1932
Mon. 22 (C. of E.)
Russell, 1932

The elevation of each of these stations was proved to be in error by ± 2.0 feet.

(1) Hubert, 1932 was used as the vertical, as well as horizontal, origin of the Hubert-Mill traverse run to supplement the photogrammetric plot control. The levels failed to close by ± 2 feet at a first order bench mark. The line was rerun with the same results. A line was then run from Corps of Engineer third-order bench mark Mon. 15 (north of quad. T-9396) to Hubert, 1932. This proved the elevation of Hubert to be 50.00 feet and not 51.93 feet, as published.

(2) The elevation of Mon. 22 was proved in error by running a line from U.S.M.C. Mon. 424 (third order) to it. The elevation of U.S.M.C. Mon. 424 was proved good by running a fly-level line from it to third order bench mark SWANSBORO (USE) in Quadrangle T-9397.

(3) The elevation of RUSSELL, 1932 was proved in error by running a line between closed fly-level points.

In each instance, the published elevation and that shown on the quadrangle maps is 2 feet high. The Corps of Engineers have not been informed of this discrepancy.

Supplemental control for contouring was established by spirit level lines run between bench marks or checked spot elevation points. Approximately 57 miles were run; 108 checked spot elevations were established. The first was numbered 9601; the last 96108. The largest error of closure was 0.54 foot; the next 0.48 foot. These two lines were adjusted but others of smaller error were not.

## 5. CONTOURS AND DRAINAGE

Contouring was done by standard planetable methods on the photographs. Lines were cleared where the vegetation was dense and planetable traverses were run on them. The stereoscope was used to shape contours where sketching was done.

Drainage was delineated by the compilation office at the time the planimetric maps were compiled. The field office has checked the drainage by comparing the compilation with the contoured photographs. Corrections have been indicated on a film positive of the planimetric map manuscript which was labeled "Drainage Overlay".

## 6. WOODLAND COVER

On the high ground, pine trees predominate with some oak being found on the sand areas. Deciduous trees predominate in the swamps, with a scattering of cypress and pine. The flat upland Pocasin-like areas are covered with dense brush, briars, vines, and scattered pine.

## 7. SHORELINE AND ALONGSHORE FEATURES

Shoreline was inspected from a small boat running close to shore. Notations were made on the photographs. The high-water line was delineated in the White Oak River and at the ocean front on Bear Island. In the marsh area adjacent to the Intracoastal Waterway, the apparent shoreline was labeled.

The approximate low-water line was shown on the ocean front only.

The foreshore is sand and shell or mud throughout.

Alongshore structures were inspected and labeled.

## 8. OFFSHORE FEATURES

None noted except where approximate low-water line was indicated.

9. LANDMARKS AND AIDS

A special report was submitted for the project for Landmarks and for Non-floating Aids.

10. BOUNDARIES, MONUMENTS AND LINES

This is the subject of a special project report.

11. OTHER CONTROL

None established. (see side heading 38)

12. OTHER INTERIOR FEATURES

Roads, buildings, etc. were inspected and classified in accordance with current instructions.

There are no bridges over navigable water.

13. GEOGRAPHIC NAMES on file 8 04 L.H.

A special report for the project was submitted to the Washington Office in June, 1950.

14. SPECIAL REPORTS AND SUPPLEMENTAL DATA

Special project reports were submitted for Boundaries, Landmarks for Charts, Non-floating Aids, and Geographic Names.

Field inspection and edit of planimetry data were forwarded to the Baltimore Photogrammetric Office under Transmittals No. 8, dated 29 April 1950; No. 13, dated 25 May 1950; No. 24, dated 20 July 1950; and No. 26, dated 24 July 1950.

22 June 1951
Submitted by:
William H. Shearouse
William H. Shearouse H.F.G.
Cartographer

13 July 1951
Approved by:
Harry F. Garber
Harry F. Garber
Commander, USC&GS
Chief of Party

# PHOTOGRAMMETRIC PLOT REPORT

Filed as part of the

Descriptive Report for T-~~9396~~ 9401

Photogrammetry

MAP T-9396 PROJECT NO. Ph-58(49) SCALE OF MAP 1:10,000 SCALE FACTOR 1.000

| STATION | SOURCE OF INFORMATION (INDEX) | DATUM | LATITUDE OR y-COORDINATE / LONGITUDE OR x-COORDINATE | DISTANCE FROM GRID IN FEET, OR PROJECTION LINE IN METERS FORWARD | (BACK) | DATUM CORRECTION | N.A. 1927 - DATUM DISTANCE FROM GRID OR PROJECTION LINE IN METERS FORWARD | (BACK) | FACTOR DISTANCE FROM GRID OR PROJECTION LINE IN METERS FORWARD | (BACK) |
|---|---|---|---|---|---|---|---|---|---|---|
| HUBERT, 1932 | G.P. P.37 | N.A. 1927 | 34 45 15.015 | 462.7 | (1386.2) | | | | | |
| | | | 77 13 58.793 | 1495.3 | ( 30.7) | | | | | |
| RUSSELL, 1932 | " | " | 34 39 27.717 | 854.1 | (994.7) | | | | | |
| | | | 77 11 43.098 | 1097.4 | (430.4) | | | | | |
| HAWK, 1914 | G-5297 P.493 | " | 34 39 00.901 | 27.8 | (1821.0) | | | | | |
| | | | 77 09 39.675 | 1010.4 | (517.6) | | | | | |
| HAMMOCK, 1855 | " P. 500 | " | 34 38 48.575 | 1496.8 | (352.0) | | | | | |
| | | | 77 10 13.406 | 341.4 | (1186.7) | | | | | |
| BEACH, 1914 | " P. 493 | " | 34 38 26.024 | 801.9 | (1046.9) | | | | | |
| | | | 77 08 49.413 | 1258.5 | (269.7) | | | | | |
| BEAR, 1914 | " " | " | 34 37 38.984 | 1201.3 | (647.5) | | | | | |
| | | | 77 10 07.687 | 195.8 | (1332.6) | | | | | |
| MEADOW, 1914 | " | " | 34 37 37.704 | 1161.8 | (687.0) | | | | | |
| | | | 77 12 36.675 | 934.2 | (594.2) | | | | | |
| MILL, 1914 | " | " | 34 38 10.992 | 338.7 | (1510.1) | | | | | |
| | | | 77 11 51.377 | 1308.6 | (219.7) | | | | | |
| BANK, 1914 | " P.492 | " | 34 38 57.456 | 1770.4 | (78.4) | | | | | |
| | | | 77 08 04.920 | 125.3 | (1402.7) | | | | | |
| MON.22, STA 22 (~~C of E~~) USE, 1941 | " P. 9 | " | 34 42 28.999 | 893.6 | (955.3) | | | | | |
| | | | 77 13 54.134 | 1377.6 | (149.3) | | | | | |
| QUEEN, 1914 | SP. 192 ~~C of E~~ P. 32 | " | 34 40 12.566 | 387.2 | (1461.7) | | | | | |
| | | | 77 08 18.016 | 458.7 | (1068.9) | | | | | |
| BOUNDARY MARKER I | U.S.M.C. Bound. Map. | N.A. 1927 | 326,102.22 | 336.0 | 1188.0 | See note on page 12 applying to boundary markers. | | | | |
| | | | 2,539,739.95 | 1444.7 | 79.3 | | | | | |

1 FT. = .3048006 METER

COMPUTED BY: A. K. Heywood DATE 5/50 CHECKED BY: Wayne L. Lineweaver DATE 5/50

M-2388-12

Photogrammetry

MAP T- 9396 PROJECT NO. Ph-58(49) SCALE OF MAP 1:10,000 SCALE FACTOR 1.000

| STATION | SOURCE OF INFORMATION (INDEX) | DATUM | LATITUDE OR y-COORDINATE / LONGITUDE OR x-COORDINATE | DISTANCE FROM GRID IN FEET, OR PROJECTION LINE IN METERS FORWARD | (BACK) | DATUM CORRECTION | N.A. 1927 - DATUM DISTANCE FROM GRID OR PROJECTION LINE IN METERS FORWARD | (BACK) | FACTOR DISTANCE FROM GRID OR PROJECTION LINE IN METERS FORWARD | (BACK) |
|---|---|---|---|---|---|---|---|---|---|---|
| BOGUE SOUND BEACON NO.25,1933 | G-5297 P. 512 | N.A. 1927 | ~~34 40 51.491~~ | ~~1586.6~~ | ~~(262.3)~~ | Destroyed. This bn. was rebuilt in 1933 after position was established. | | | | |
| | | | ~~77 07 51.091~~ | ~~1300.6~~ | ~~(226.7)~~ | | | | | |
| BOGUE SOUND BEACON No.27,1933 | " " | " | 34 40 15.365 | 473.5 | (1375.4) | This is also Bogue Sound Lt. 49. | | | | |
| | | | 77 08 00.074 | 1.9 | (1525.6) | | | | | |
| BOGUE SOUND BEACON NO.27C,1933 | " " | " | 34 38 34.057 | 1049.4 | (799.4) | Also Saunders Creek Lt. 5-5 | | | | |
| | | | 77 10 49.697 | 1365.7 | (262.4) | | | | | |
| HM NO.1,1950 | Field Comp. | " | 378,592.46 | 1095.0 | (429.0) | | | | | |
| | | | 2,529,333.46 | 1320.8 | (203.2) | | | | | |
| T.P.HM-P-2 | " | " | 378,658.56 | 1115.1 | (408.9) | | | | | |
| | | | 2,536,580.80 | 481.8 | (1042.2) | | | | | |
| H.M.P-3=p.pt.HMP-1 | " | " | 378,406.05 | 1038.2 | (485.8) | | | | | |
| | | | 2,540,677.65 | 206.5 | (1317.5) | stations plot North of project limits | | | | |
| HM P-21=p.pt.HMP-3 | " | " | 383,539.22 | 1078.7 | (445.3) | | | | | |
| | | | 2,559,261.57 | 1298.9 | (225.1) | | | | | |
| PELLETIER, 1932 | G.P. P.37 | " | 34 47 15.285 | 471.0 | (1377.9) | | | | | |
| | | | 77 07 24.407 | 620.5 | (904.9) | | | | | |
| HM P-8=p.pt.HMP-2 | Field Comp. | " | 376,703.54 | 519.2 | (1004.8) | | | | | |
| | | | 2,549,267.89 | 1300.8 | (223.2) | | | | | |
| BOUNDARY MARKER II | U.S.M.C. BOUND. MAP | " | 324,296.48 | 1309.6 | 214.4 | These stations have been designated by the bdry mon. symbol on the map manuscript. Accuracy of these stations is unknown, if they were not used in the plot | | | | |
| | | | 2,539,682.70 | 1427.3 | 96.7 | | | | | |
| BOUNDARY MARKER III | " | " | 323,978.66 | 1212.7 | 311.3 | | | | | |
| | | | 2,540,925.04 | 282.0 | 1242.0 | | | | | |
| BOUNDARY MARKER IV | " | " | 323,616.87 | 1102.4 | 421.6 | | | | | |
| | | | 2,540,985.37 | 300.3 | 1223.7 | | | | | |

1 FT. = .3048006 METER

COMPUTED BY: A.K.Heywood DATE 5/50 CHECKED BY: Wayne L.Lineweaver DATE 5/50

M-2388-12

COMPILATION REPORT

T-9396

Photogrammetric Plot Report

Refer to Descriptive Report T-9401 for photogrammetric plot report.

31. DELINEATION

Refer to item 5 of field inspection report and item 31 of descriptive report T-9397.

32. CONTROL

Refer to items 3 and 4 of field inspection report and item 23 of photogrammetric plot report.

33. SUPPLEMENTAL DATA

Map Showing Location of Reservation Boundary, Camp Lejeune, N.C. sheet No. 1 of 2.

This map was used to determine horizontal positions of Boundary Markers and also to supplement field inspection of the boundary line.

34. CONTOURS AND DRAINAGE

Refer to item 5 of field inspection report and letter dated 28 November 1951 attached to this report.

Drainage, in poor agreement with contours, was removed from the manuscript as per instructions in letter dated 28 November 1951.

Where photograph scale was in good agreement with the manuscript, contours were graphically delineated by the usual photogrammetric methods.

In most cases photograph scale was poor. These had to be ratioed to scale by vertical projection. And because many of these photos had acetate contour overlays which will not stand the heat of the vertical projector, it was necessary to trace the contours to a suitable transparent paper and then ratio to scale with the projector.

The selection of photographs for planetable contours was poor. In many instances the field inspector placed his contours in the outside areas of the photographs, whereas he could have placed all contours in the central areas of each, thus eliminating or at least minimizing relief displacement.

35. SHORELINE AND ALONGSHORE DETAILS

Shoreline inspection was adequate. Low water lines were furnished by the field inspection party. Shallow lines were delineated from interpretation of the photographs.

The extensive marsh area on the shouthern portion of the manuscript was delineated in the same manner.

36. OFFSHORE DETAILS

These data are complete.

37. LANDMARKS AND AIDS

Form 567 is herewith submitted for four nonfloating aids. One of these was a triangulation station which has been moved. A new position (scaled from a multiplex plotted position, verified by field edit) is submitted.

Of the remaining three, two are plotted by multiplex and one, DAYBEACON 53, was transferred from the field edit photographs.

Form 567 is also submitted for one landmark plotted by multiplex.

38. CONTROL FOR FUTURE SURVEYS

Six recoverable topographic stations and fourteen photo-hydro stations are plotted on the manuscript.

Item 11 "Other Control", field inspection report, states "None established". However, the field party submitted six forms 524 for aids to navigation, two of which are triangulation stations. (Forms 524 for the 2 triangulation stations were destroyed.)

Forms 524 are submitted for the following:

Bogue Sound Light 48 (formerly triangulation station, Beacon, Bogue Sound 25, 1933 which has been moved. New position plotted by multiplex)
Bear Creek Light 58 (plotted by multiplex)
Queen Creek Daybeacon 51 (plotted by multiplex)
Queen Creek Daybeacon 53 (transferred to manuscript from field edit photo)
Observation Tower (landmark, plotted by multiplex) (submitted by field editor).

Also included on forms 524 are the multiplex positions of Russell Azimuth Mark, R.M. 1, 1932 and Queen Azimuth Mark, R.M. 3, 1933. The positions, descriptions, and sketches of these two have been completed by the Baltimore Photogrammetric Office.

See item 11, paragraph 2 of field report T-9397, regarding hydrographic survey. In consideration of this, the fourteen photo hydro stations are <u>not</u> included in the described list of recoverable topographic stations under item 49 of this report.

39. JUNCTIONS

To the north there is no contemporary survey.

Satisfactory junctions have been made:

To the east with survey T-9397
To the south with survey T-9400
To the west with survey T-9395.

40. HORIZONTAL AND VERTICAL ACCURACY

Refer to last paragraph of item 4, Vertical Control of field inspection report, and Vertical Accuracy Test, attached to this report.

41. BOUNDARIES AND LINES

The following boundaries lie within the limits of this survey:

~~The Intracoastal Waterway Right of Way~~ (Not shown on map manuscript.)
The U.S.M.C. Camp Lejeune boundary line
White Oak - Swansboro Township Line
Onslow - Carteret County line
Croatan National Forest Boundary line.

Differences in position of Boundary Monuments I to IV U.S.M.C. exist between data listed in U.S.M.C. list, page ten and the data listed on U.S.M.C. Reservation Boundary Map, sheet 1 of 2. The positions as plotted on the manuscript and shown on the control form were taken from the data on the U.S.M.C. Reservation Boundary Map.

42. thru 45

Inapplicable.

46. COMPARISON WITH EXISTING MAPS

Comparison was made with the following:

War Dept. C. of E. 15 minute Swansboro, N.C. quadrangle, scale 1:62,500, dated 1942.
U.S.C.& G.S. sheet No. T-5049, Bear Inlet to Alligator Bay, scale 1:20,000, dated 1933, revised 1934.
U.S.C.& G.S. sheet No. T-5048, Cat Island to Bear Inlet, scale 1:20,000, dated 1933.

Comparison with these sources was in good agreement with a few exceptions.

In the vicinity of Swansboro northeast of Bogue Sound Lt. 48 there is a bridge or small causeway shown on U.S.C.& G.S. sheet T-5048. This is believed non-existent and not shown on the manuscript.

A long pier extending south into the Intracoastal Waterway in the same

46. COMPARISON WITH EXISTING MAPS (continued)

vicinity is also shown on T-5048, but is not on the manuscript.

The usual cultural changes were also in evidence.

47. COMPARISON WITH NAUTICAL CHARTS

Comparison was made with the following:
Coast Chart No. 1234, scale 1:80,000, dated March 1940 (7th edition)(10-3-49)
Intracoastal Waterway Chart No. 833, scale 1:40,000, dated June 1946 (2nd edition)(11-22-48)

The bridge or causeway at Swansboro noted in the preceding item is also not evident on these charts, while the pier in the same vicinity is shown on both.

Items to be applied to nautical charts immediately:
None.

Items to be carried forward
None.

Respectfully submitted
19 March 1952

Albert C. Rauck Jr.
Albert C. Rauck, Jr.
Cartographer

Approved and forwarded

Hubert A. Paton
Hubert A. Paton,
Comdr., C&GS
Officer in Charge

Field Edit Notes, T-9396 N

The compilation of this half quadrangle is adequate and will be complete after field edit additions, etc., have been applied.

Drainage, marshes, swamps and flooded areas were well-compiled on this map manuscript. The pattern seems excellent with no great amount of revision being required.

No check was made of geographic names. A special report has been submitted for the project.

Field edit information appears on the Discrepancy Print, Field Edit Sheet and the following photographs: LEJ-2-160, 198, 199, 200, 201, and LEJ-3-9, 10, 54, 55, 57.

William H. Shearouse
William H. Shearouse,
Cartographer

Jacksonville, N. C.
20 July 1950

Field Edit Notes, T-9396 S

Compilation of this half quadrangle will be adequate after application of field edit information.

Field edit corrections are general, there being no part of the compilation requiring special attention.

Regarding the Reservation Boundary at Bear Creek, it was determined that the survey was made with reference to "normal high-water line", which was interpreted by the surveyors for land acquisition to be the edge of marsh and is the line we have shown as apparent shoreline.

Triangulation station QUEEN was visited and a rubbing made. The stamping was found to be QUEEN, 1914, 1932. Please correct control station identification card.

Forms 526 and 524 are submitted for BOGUE SOUND BN., 1933. Undoubtedly it has been mooved. Light list name: Bogue Sound Lt. 48. Position located by radial plot.

Geographic names were not verified. They should be checked with the Project Report on names.

William H. Shearouse
William H. Shearouse,
Cartographer

Jacksonville, N. C.
24 July 1950

VERTICAL ACCURACY TEST
Quadrangle T-9396
Project Ph-58

A test of about 2 miles was run near the northern project limit. It began vertically at fly-level point no. 9652 and ended at fly-level point no. 9626. Closure was 0.4 foot low and no adjustment was made.

It began and ended horizontally at road intersections. Error of horizontal closure was about 15-20 feet.

An attempt to evaluate the accuracy of the contours was made by placing a piece of clear vinylite over the section of the print of the map manuscript on which the test was run and taking off the elevations. Detail, like road intersections, field lines, etc. were traced to be used as control when the vinylite was placed on the contoured photographs. Accurate evaluation could not be determined as the photographs are of poor scale. It is suggested that a projector, or other machine, be used to take out this scale difference, for making the comparison.

Visual comparison indicates the contours to be within accuracy requirements.

22 June 1951
Submitted by:
William H. Shearouse
William H. Shearouse H.F.S.
Cartographer

For vertical accuracy test, refer to enclosed report (Field completion and Contour Revision Report) by H. R. Cravat.

Field Completion

And

Contour Revision Report T 9396

The planimetry of this map was field edited in the spring and summer of 1950. This report particularly includes the field edit of contours, drainage and the planimetric changes occurring subsequent to the field edit of planimetry.

Methods:

Prior to field work the original field contour photographs were examined. Areas in which the original planetable control appeared to be weak, were examined in the field, either visually or by planetable methods.

The planetable work was done on 8 field edit sheets, (double weight prints of the map manuscript), or on aerial photographs that are cross indexed to the field edit sheets. All additions and changes that are to be made on the map manuscript are indicated on either the field edit sheets or the photographs.

The photographs used in making this survey are distinguished from the original field photographs in that all work is in red ink and the photographs boldly labeled 1952 REVISION PHOTOGRAPH.

The following headings supplement but do not supersede the same headings discussed previously in the descriptive report.

Contours and Drainage:

Numerous contour changes were made on the field edit sheets, and several areas were completely recontoured on the 1952 revision photographs.

All perennial drainage has been classified and delineated on the field edit sheets.

The swamp limits were completely revised on the field edit sheets.

Geographic Names:

Changes in Geographic Names are recommended as follows:

1. Change the placement of the name Queen Creek to Pasture Branch, and add the name Queen Creek to the main tributary of the stream, leading north across North Carolina Hwy. No. 24, to an abandoned grist mill. This grist mill was at the head of navigation on Queen Creek, prior to silting. 854 WA

These data were furnished by local residents as follows:

| | | | | |
|---|---|---|---|---|
| Mr. Lee Rogers | Resident of 40 yrs., | Hubert, | N. | C. |
| Mr. Roy Henderson | " " 50 " | " | " | |
| Mr. John Starling | " " 30 " | " | " | |

Geographic Names Continued:

2. Delete the name Jones Landing -- In the past when travel was by water, the name Jones Landing applied to the boat landing on Queen Creek at the terminus of the road, and not an interior feature as indicated on the map. This landing is in a state of ruins, abandoned, and no more prominent than any of several along the Creek.

These data were furnished by local residents as follows:

| | | | |
|---|---|---|---|
| Mr. H. J. Jones | Resident of 50 yrs. | Swansboro, | N. C. |
| Mr. Roy Odum | " " 20 " | " | " |
| Mr. Roy Henderson | " " 50 " | Hubert, | N. C. |

Junctions:

To insure a satisfactory contour junction with future surveys, on the north, a planetable traverse was completed along north latitude 34- 45. In the areas of contours elevations were marked on the field edit sheets at 500 ft. intervals and at all changes in slope.

Vertical Accuracy:

The vertical accuracy of this map as corrected on the field edit sheets, complies with National Map Accuracy Requirements.

In addition to the extensive planetable revision surveys, two vertical accuracy tests were made. The testing was by planetable profile methods. Forty five points were tested, of which 91% were within a tolerance of less than $\frac{1}{2}$ contour interval of error.

Misc.:

The Federal Government is planning the construction of a railroad from Camp Le Jeune, extending northeastward across this quadrangle. At the time of this survey the Department of Public Works had completed a tenative route survey on the ground, and preparations were underway for the acquisition of the land.

This party completed a closed planetable traverse over the brushed out line of the tenative route survey, and marked elevations on the field edit sheet at 500 ft. intervals and at all changes in slope on the field edit sheets. This planetable traverse was essentially completed because it afforded access for checking the original field contours in the densly wooded areas, and not as a basis for delineating the railroad.

Construction problems will result in various realignments and contour changes that cannot be anticipated at this early date. For the correct protrayal of the railroad and related features a field survey subsequent to construction would be required. The planetable traverse can be used however for delineating, "Location of Proposed Railroad".

Submitted 10 March 1952

Harland R Cravat

Harland R Cravat
Cartographer

Form T-2

# -50 - PHOTOGRAMMETRIC OFFICE REVIEW

T- 9396

1. Projection and grids ACR 2. Title ACR 3. Manuscript numbers ACR 4. Manuscript size ACR

## CONTROL STATIONS

5. Horizontal control stations of third-order or higher accuracy ACR 6. Recoverable horizontal stations of less than third-order accuracy (topographic stations) ACR 7. Photo hydro stations ACR 8. Bench marks ACR 9. Plotting of sextant fixes — 10. Photogrammetric plot report ACR 11. Detail points ACR

## ALONGSHORE AREAS

(Nautical Chart Data)

12. Shoreline ACR 13. Low-water line ACR 14. Rocks, shoals, etc. ACR 15. Bridges ACR 16. Aids to navigation ACR 17. Landmarks ACR 18. Other alongshore physical features ACR 19. Other alongshore cultural features ACR

## PHYSICAL FEATURES

20. Water features ACR 21. Natural ground cover ACR 22. Planetable contours ACR 23. Stereoscopic instrument contours — 24. Contours in general ACR 25. Spot elevations ACR 26. Other physical features ACR

## CULTURAL FEATURES

27. Roads ACR 28. Buildings ACR 29. Railroads ACR 30. Other cultural features ACR

## BOUNDARIES

31. Boundary lines ACR 32. Public land lines —

## MISCELLANEOUS

33. Geographic names ACR 34. Junctions ACR 35. Legibility of the manuscript ACR 36. Discrepancy overlay ACR 37. Descriptive Report ACR 38. Field inspection photographs ACR 39. Forms ACR

40. Albert C. Rauck Jr. (Reviewer) — Henry P. Eichel (Supervisor, Review Section or Unit)

Review of manuscript completed after application of field edit. July 24, 1952 A.C.R.

41. Remarks (see attached sheet) This manuscript has never been adequately reviewed due to urgent need of this survey by the Wash. office. Several items are listed under "Notes for Reviewer" for Wash. office disposition. A.C.R.

## 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.

Bernice Wilson J Councell (Compiler) — Henry P. Eichel (Supervisor)

43. Remarks: Field edit of contours yet to be applied.
Field edit of contours completed 7/24/52 R.

M-2623-12

62. Comparison with Registered Topographic Maps.-

| | | |
|---|---|---|
| T-1291 | (1872) | 1:20,000 |
| T-5048,Supp. | 1933 | 1:20,000 |
| T-5049 | 1933 | 1:20,000 |
| T-6003 | 1933 | 1:20,000 |
| T-6004 | 1933 | 1:20,000 |

A comparison of the new map with the old topographic surveys shows that numerous cultural changes have taken place. The more notable ones are the addition of new buildings and roads.

For nautical charting purposes the old surveys are superseded by the new map (T-9396).

63. Comparison with Maps of Other Agencies.-

H.O. Misc. 15, 042-50-N1; Edition 1948; ; 1:50,000
Maysville Quadrangle, AMS, Edition 1948, 1:50,000
Swansboro Quadrangle, AMS, Edition 1948, 1:50,000

The south side of the island, which confronts the ocean, between Bear and Bogue Inlets is an area of shifting sand dunes, and not a marsh area as indicated on the Swansboro Quadrangle. Again with reference to the Swansboro Quadrangle (contour interval - 20 feet), it was noted that in several areas 40-foot contours were not shown. The 20-foot contours in several cases are not in good agreement.

64. Comparison with Contemporary Hydrographic Surveys.- None

65. Comparison with Nautical Charts.-

Chart No. 833, 21 January 1952, 1:40,000
Chart No.1234, 27 October 1952, 1:80,000

Changes in the location of channel and shallow areas were found. However, it should be noted that the channel and shoal areas are subject to change.

66. Adequacy of Results and Future Surveys.-This map complies with the project instructions and the National Map Accuracy Standards.

67. Boundaries.-Although the boundary limits of the Croatan National Forest have been indicated on the map manuscript, it should be noted that the boundary lines shown are the proposed boundary lines. This statement is made in view of the fact that all lands within the proposed limits have not been acquired by the Federal Government.

Reviewed by:

Charles Hanavich

Charles Hanavich

L C Landy 3 March 55
Chief, Review Section
Div. of Photogrammetry

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

Chief, Div. of Photogrammetry

Earl O. Heaton
Chief, Div. of Coastal Surveys

T-9396

Atlantic Ocean

Bear Creek (Town)
Bear Creek Baptist
Bear Creek Church
Bear Inlet
Ball Swamp
Camp Lejeune * This name from "MAP SHOWING RESERVATION BOUNDARY CAMP LEJEUNE, N.C." Sheet 1 of 2. (not included in Name Inspection)
Carteret County
Cartwheel Creek
Cow Channel

Dicks Creek

Elm Landing

Great Neck Landing

Hargetts Creek
Holland Mill Creek
Holland Pt. N/2
Holland Pt. S/2
Hubert

Inland, Waterway (Intracoastal Waterway)

Jones Landing

Mill Creek

N.C. 24
N.C. 172 *
Onslow County

Parrot Swamp
Pasture Branch *
Queen Creek

Saunders Creek
Saunders Island
Shell Rock Landing
Silverdale Road
Sneads Ferry Road
Starling
Starretts Meadows
Swansboro Township *
White Oak River
Willis Landing

Zion Chapel (from Names Inspection; replaced with "BEAR CREEK METHODIST CHURCH" from field edit)

Bogue Inlet

* Bear Creek Methodist Church (from fieldedit; used instead of "ZION CHAPEL")

Branch

Goose Creek

(White Oak R.)
(Queen Cr.)

Oak Grove church

Piney Grove Church *

Sloans Landing *

Webb Creek *
White Oak Township *

* These names added to list during field edit corrections in Balto. office.

Names underlined in red approved 12-18-62. L. Beck

## 49. NOTES FOR THE HYDROGRAPHER

The following list of recoverable topographic stations are within this survey:

Bogue Sound Light 48, 1950 (new position, old light moved)
Bogue Sound Light 49, 1950
Queen Creek Daybeacon 51, 1950
Queen Creek Daybeacon 53, 1950
Saunders Creek Light, 55, 1950
Bear Creek Light 58, 1950
Queen Azimuth Mark, R.M. 3 (1933), 1950
Russell Azimuth Mark, R.M. 1 (1932) 1950
TOWER, 1950

Form 567
April 1945

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

# NONFLOATING AIDS ~~OR LANDMARKS~~ FOR CHARTS

TO BE CHARTED / ~~TO BE DELETED~~ } STRIKE OUT ONE

Baltimore, Maryland — February, 1952

I recommend that the following objects which have (~~have not~~) been inspected from seaward to determine their value as landmarks be charted on (~~deleted from~~) the charts indicated.

The positions given have been checked after listing by Albert C. Rauck, Jr. — Albert C. Rauck, Jr.

Hubert A. Paton — Hubert A. Paton, Chief of Party.

Chart letter 542 (51) Pg 6

STATE NORTH CAROLINA.

| CHARTING NAME | DESCRIPTION | SIGNAL NAME | POSITION LATITUDE ° ' | LATITUDE D.M. METERS | LONGITUDE ° ' | LONGITUDE D.P. METERS | DATUM | METHOD OF LOCATION AND SURVEY No. | DATE OF LOCATION | HARBOR CHART | INSHORE CHART | OFFSHORE CHART | CHARTS AFFECTED |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| LT. 48 | BOGUE SOUND LIGHT 48. White pile structure, red tankhouse | | 34 40 | 1623 52.67 | 77 07 | 52.98 1349 | N.A. 1927 | Air photo multiplex T-9396 | 1950 | x | | | 833 |
| DAYBN. 51 | QUEEN CREEK DAYBEACON 51, Black sq. daymk with yellow border on pile. | | 34 39 | 43.16 1330 | 77 08 | 53.72 1368 | " | " | " | x | | | " |
| DAYBN. 53 | QUEEN CREEK DAYBEACON 53. Black sq. daymk with yellow border on pile. | | 34 39 | 20.15 621 | 77 09 | 31.92 813 | " | " | " | x | | | " |
| LT. 58 | BEAR CREEK LIGHT 58. Red triangular daymk. with yellow bor. on white pile. | | 34 37 | 56.31 1735 | 77 12 | 19.70 502 | " | " | " | x | | | " |
| Lt. 49 | BOGUE SOUND LIGHT 49. White pile structure, black tankhouse (Δ Bogue Sound Beacon 27) | | 34 40 | 15.38 474 | 77 08 | 00.08 2 | " | Triangulation | 1933 | X | | | 833 |
| Lt. 55 | SAUNDERS CREEK LIGHT 55. White pile structure, black tankhouse. (Δ Bogue Sound Beacon 27C) | | 34 38 | 34.04 1049 | 77 10 | 49.70 1266 | " | " | " | X | | | " |

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

Form 567
April 1945

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

# ~~NONFLOATING AIDS OR~~ LANDMARKS FOR CHARTS

TO BE CHARTED / ~~TO BE DELETED~~ } STRIKE OUT ONE

Baltimore, Maryland July, 1952

I recommend that the following objects which have ~~have not~~ been inspected from seaward to determine their value as landmarks be charted on ~~deleted from~~ the charts indicated.

The positions given have been checked after listing by Albert C. Rauck Jr.
Albert C. Rauck, Jr.

Chart letter 193(52)

Hubert A. Paton *Chief of Party.*

STATE NORTH CAROLINA

| CHARTING NAME | DESCRIPTION | SIGNAL NAME | POSITION LATITUDE ° ' | LATITUDE D.M. METERS | LONGITUDE ° ' | LONGITUDE D.P. METERS | DATUM | METHOD OF LOCATION AND SURVEY No. | DATE OF LOCATION | HARBOR CHART | INSHORE CHART | OFFSHORE CHART | CHARTS AFFECTED |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TOWER | Observation Tower, skeleton, wood, (25 ft. high) | | 34 37 | 43,52 1341 | 77 12 | 30.54 778 | N.A. 1927 | Air photo Multiplex T-9396 | 1950 | x | | X | 1234 833 |

Note: This position supersedes the previous position on Form 567, dated Feb. 1952

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

C
O
P
Y

711-mkl

28 November 1951

To: Comdr. Hubert A. Paton
U. S. Coast and Geodetic Survey
518 East 32nd Street
Baltimore 18, Maryland.

Subject: Compilation of contours - Project Ph-58

Field photographs and other data for the compilation of contours on quadrangle T-9397 are being forwarded to you under separate transmitting letter. Please complete the compilation of the contours on this quadrangle as soon as possible. We would like to start field completion on Project Ph-58 as soon as this quadrangle is ready and by January 1st at the latest. Similar data for T-9396 will be forwarded soon.

Most contours on this quadrangle have been reshaped in the Washington office on acetate overlays taped to the photographs. The contours are to be compiled from the overlays and not from the photographs. The sand dune areas are an exception; no overlays have been prepared and contours of these areas are to be compiled directly from the photographs. Elevations are to be compiled directly from the photographs.

Each overlay is registered to its respective photograph by common planimetric details. In compiling the contours the overlays should be taped accurately in position on the photographs and details compiledin the usual manner, with the exception that the contours will be traced from the overlays. We believe that photographic details show through the overlays sufficiently to permit this.

Drainage has already been compiled on the manuscript. Where this drainage conflicts with the contours remove it but do not attempt to revise it. Revision will be made during field edit. No additional drainage need be compiled from the photographs at this stage.

If you have any questions about this please call us; we will be glad to have Mr. Cravat who made the overlays, come to Baltimore, or we will be glad to talk to your supervisor or compiler if you will send him over here.

O. S. Reading
Chief, Division of Photogrammetry

n

History of Hydrographic Information
Quadrangle T-9396
North Carolina

Hydrography was compiled onto the map manuscript in accordance with Division of Photogrammetry General Specifications dated 18 May 1949.

Depth curves and soundings are in feet at mean low water datum and originates with the following:

| | | |
|---|---|---|
| Nautical Chart 833 | 1:40,000 | 1952 |
| Hydrographic Survey H-4767 | 1:40,000 | 1927 |

Hydrography was compiled by C. Theurer and checked by O. Svendsen.

C. Theurer
3 June 1953