

5044

U. S. COAST & GEODETIC SURVEY  
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Form 504  
Ed. June, 1928  
DEPARTMENT OF COMMERCE  
U. S. COAST AND GEODETIC SURVEY  
R.S. Patton, Director

State: N. Carolina

## DESCRIPTIVE REPORT

Aero-  
Topographic  
Photography

Sheet No. 5044

LOCALITY 5044

Atlantic Coast

Alligator Bay to Virginia Creek ✓

1933

CHIEF OF PARTY

O.S. Reading

U. S. GOVERNMENT PRINTING OFFICE: 1927

5044

DESCRIPTIVE REPORT  
to Accompany  
Air Photo Topographic Sheet No. 5044

1. General Information.

(a) This sheet is a compilation of Army Air Corps five-lens photographs taken with type T-3A camera from an altitude of approximately 10,000 feet. A fairchild F-1A plane was used, piloted by Lieutenant Goodrich with Sergeant Matos as photographer.

(b) Statistics - 34.0 square statute miles of area, 14.4 miles of <sup>coastline</sup> ~~shoreline~~ and 14.6 miles of intracoastal waterway. 48 miles of inside shoreline.

(c) The description of this area, as noted from the descriptive report for topographic sheet No. 4279, is as follows: "The general description of this locality follows that of all this coast; a wide, flat, straight beach with low sand dunes rising abruptly at high water line and behind these dunes about a mile of low marshy land, cut up with sloughs and creeks, extends back to the mainland."

(d) The photographs Nos. 301 to 324, inclusive, which embrace this sheet are part of a single strip taken between 10:30 A.M. and 1:30 P.M. January 29, 1933. At this time the tide was 1.7 feet (approximately) above mean low water.

2. Control.

(a) The control consists of second order triangulation by R. P. Strough in 1914; third order triangulation by J. A. Bond in 1933, <sup>All</sup> control is adjusted to the N.A. 1927 datum. (Topo Control Sheet #T-4760).

Control (a) and (c) - Only the radial line method of compilation was used. The field inspection covered only the B prints of the flight used in plotting this sheet. Since all the control points along the beach fell outside the center pictures they were therefore left unspotted by the field inspection party. For better comparison with previous surveys, it was desirable that this control be located on the photographs. In order to accomplish this, the radial line method of locating a control point on the celluloid was reversed in order to locate the control point on the photograph. A well controlled photo showing the area in which some of the points are located was oriented to the sheet and azimuth lines through the points in question were transferred to the photograph. This was repeated on other photos until direction lines to all control points not spotted by the field inspection party were obtained. Where possible these were collected on one photograph to give an intersection at the desired point.

The following stations were located on the photographs by this method: Fed, Banks, High, Garat, Bluff, Bee, and Bumble:

The "C" wing print was missing in all photographs covering this sheet, and for this reason it was somewhat difficult to obtain good intersections on the inshore areas.

Field inspection <sup>for the area covered by the "B" prints</sup> was complete and satisfactory. However, much was left to the judgment of the compiler in areas covered by the wing prints.

### 3. Comparison with Other Surveys

(a) Junction on the north with sheet No. 5049 is good.

(b) No discrepancy with field topographic sheet No. 4279 noted. This latter sheet, however, covers the coastline only.

Respectfully submitted.

*H. E. MacEwen*  
*Bernard A. McEwen*

# RECOVERABLE TOPOGRAPHIC STATIONS \*

| Description | Position |            |         |             | Remarks |
|-------------|----------|------------|---------|-------------|---------|
|             | Lat.     | D.W.       | Long.   | D.P.        |         |
| Bn. No. 3   | 34° 30'  | 683 (1166) | 77° 24' | 748 (782)   |         |
| Bn. No. 9   | 34° 29'  | 404 (1445) | 77° 27' | 1352 (178)  |         |
| Bn. No. 11  | 34° 28'  | 1828 (21)  | 77° 28' | 628 (903)   |         |
| Bn. No. 13  | 34° 28'  | 1399 (450) | 77° 28' | 1430 (101)  |         |
| Bn. No. 15  | 34° 28'  | 971 (878)  | 77° 29' | 745 (786)   |         |
| Bn. No. 17  | 34° 28'  | 548 (1301) | 77° 30' | 6 (1525)    |         |
| Bn. No. 21  | 34° 27'  | 1346 (503) | 77° 30' | 1365 (166)  |         |
| Bn. No. 23  | 34° 27'  | 615 (1234) | 77° 31' | 516 (1015)  |         |
| Bn. No. 27  | 34° 26'  | 998 (851)  | 77° 32' | 347 (1185)  |         |
| Bn. No. 29  | 34° 26'  | 275 (1574) | 77° 32' | 1010 (522)  |         |
| Bn. No. 14  | 34° 25'  | 1066 (783) | 77° 33' | 1011 (521)  |         |
| Bn. No. 16  | 34° 25'  | 699 (1150) | 77° 34' | 303 (12.29) |         |
| Bn. No. 18  | 34° 25'  | 336 (1513) | 77° 34' | 1108 (424)  |         |
| Bn. No. 20  | 34° 24'  | 1223 (626) | 77° 35' | 1082 (450)  |         |
| Bn. No. 22  | 34° 24'  | 518 (1331) | 77° 36' | 401 (1131)  |         |

5264

\* These stations were transferred from T-4760 to T-5044

# GEOGRAPHIC NAMES

Survey No. TS044

| Name on Survey              | On Chart<br>No. | On previous survey<br>No. | On U. S. quadrangle<br>Maps | From local<br>information | On local Maps | P. O. Guide or Map | Rand McNally Atlas | U. S. Light List |    |
|-----------------------------|-----------------|---------------------------|-----------------------------|---------------------------|---------------|--------------------|--------------------|------------------|----|
|                             | A,              | B,                        | C,                          | D                         | E             | F                  | G                  | H                | K  |
| ✓ <u>Virginia Creek</u>     |                 |                           |                             |                           |               |                    |                    |                  | 1  |
| ✓ <u>Bishop Creek</u>       |                 |                           |                             |                           |               |                    |                    |                  | 2  |
| ✓ <u>Edens Landing</u>      |                 |                           |                             |                           |               |                    |                    |                  | 3  |
| ✓ <u>Sears Landing</u>      |                 |                           |                             |                           |               |                    |                    |                  | 4  |
| ✓ <u>Waters Bay</u>         |                 |                           |                             |                           |               |                    |                    |                  | 5  |
| ✓ <u>Barlow Creek</u>       |                 |                           |                             |                           |               |                    |                    |                  | 6  |
| ✓ <u>Hollow Pt. Landing</u> |                 |                           |                             |                           |               |                    |                    |                  | 7  |
| ✓ <u>Permuda I.</u>         |                 |                           |                             |                           |               |                    |                    |                  | 8  |
| ✓ <u>Moll I.</u>            |                 |                           |                             |                           |               |                    |                    |                  | 9  |
| ✓ <u>King Creek</u>         |                 |                           |                             |                           |               |                    |                    |                  | 10 |
| ✓ <u>Spicer Bay</u>         |                 |                           |                             |                           |               |                    |                    |                  | 11 |
| ✓ <u>Asha I.</u>            |                 |                           |                             |                           |               |                    |                    |                  | 12 |
| ✓ <u>Turkey Creek</u>       |                 |                           |                             |                           |               |                    |                    |                  | 13 |
| ✓ <u>Turkey Pt.</u>         |                 |                           |                             |                           |               |                    |                    |                  | 14 |
| ✓ <u>Tar Landing</u>        |                 |                           |                             |                           |               |                    |                    |                  | 15 |
| ✓ <u>Roger Bay</u>          |                 |                           |                             |                           |               |                    |                    |                  | 16 |
| ✓ <u>Goose Bay</u>          |                 |                           |                             |                           |               |                    |                    |                  | 17 |
| ✓ <u>Alligator Bay</u>      |                 |                           |                             |                           |               |                    |                    |                  | 18 |
| ✓ <u>Topsail Sound</u>      |                 |                           |                             |                           |               |                    |                    |                  | 19 |
| ✓ <u>Stump Sound</u>        |                 |                           |                             |                           |               |                    |                    |                  | 20 |
| ✓ <u>Dixon Pt.</u>          |                 |                           |                             |                           |               |                    |                    |                  | 21 |
| ✓ <u>Sloop Pt.</u>          |                 |                           |                             |                           |               |                    |                    |                  | 22 |
|                             |                 |                           |                             |                           |               |                    |                    |                  | 23 |
|                             |                 |                           |                             |                           |               |                    |                    |                  | 24 |
|                             |                 |                           |                             |                           |               |                    |                    |                  | 25 |
|                             |                 |                           |                             |                           |               |                    |                    |                  | 26 |
|                             |                 |                           |                             |                           |               |                    |                    |                  | 27 |
|                             |                 |                           |                             |                           |               |                    |                    |                  | 28 |

Rogers Bay

(add this name)

L Heck 1/23/42

No N.L. in D.R. TS044

DEPARTMENT OF COMMERCE  
U. S. COAST AND GEODETIC SURVEY

REG. NO. 5044

TOPOGRAPHIC TITLE SHEET

The Topographic Sheet should be accompanied by this form, filled in as completely as possible, when the sheet is forwarded to the Office.

Field No. 5044

REGISTER NO. 5044

State North Carolina

General locality Atlantic Coast

Locality Alligator Bay to Virginia Creek

Scale 1:20,000 Date of Photographs - Jan. 29, 1933  
Compilation - July-Oct., 1933

Airplane Fairchild, F - 1A. Lieut. Goodrich, Pilot

~~Chief of party~~ compilation Sgt. Matos, Photographer  
Chief of party O. S. Reading OK

Photos plotted by H. E. MacEwen, July 22, 1933 H.E.M.  
~~Surveyed by~~

Inked by H. E. MacEwen, L. A. McGann, Oct. 8, 1933 H.E.M. L.A.M.

Heights in feet above \_\_\_\_\_ to ground to tops of trees

Contour, Approximate contour, Form line interval \_\_\_\_\_ feet

Instructions dated \_\_\_\_\_, 19 \_\_\_\_\_

Remarks: Compilation of 5-lens aerial photographs printed by  
photo-lithographic process

Polyconic Proj. by - H. E. MacEwen, July 15, 1933 H.E.M.  
Projection verified by - F. G. Erskine, July 17, 1933 7-9E  
Control plotted by - H. E. MacEwen, July 17, 1933 H.E.M.  
Control verified by F. G. Erskine, July 18, 1933 7-9E

## REVIEW OF PHOTO TOPOGRAPHIC SURVEY NO. 5044

Title (Par. 56) *Atlantic Coast, Alligator Bay to Bugina Creek, North Carolina*Chief of Party *O. S. Reading*Compiled by *H. E. MacEwen and L. A. McEwen*Project *North Carolina*

Instructions dated —

1. ✓ The survey and preparation for it conform to the requirements of the Topographic Manual. (Par. 8; and 16, a, b, c, d, e, g and i.)
2. ✓ The character and scope of the compilation satisfy the instructions and the "Notes on the Compilation of Planimetric Line Maps from Five Lens Aerial Photographs".
3. ✓ The control and adjustment of the radial plot were adequate. (Par. 12, 29.)
4. ~~There is sufficient control on maps from other sources that were transmitted by the field party for their application to the charts. (Par. 28.)~~
5. ✓ High water line on marshy and ~~manrove~~ <sup>sandy</sup> coast is clear and adequate for chart compilation. (Par. 16a, 43, 44.)
6. ✓ The representation of low water lines, ~~reefs, coral reefs and~~ rocks, and legends pertaining to them is satisfactory. (Par. 36, 37, 38, 39, 40, 41.)
7. ✓ Important details shown on previous surveys and on the chart have been compared with this sheet and a statement has been entered in the report regarding the removal from the chart or change in position of important detail such as rocks, lights, beacons, prominent objects, bridges, docks, and structures along the water front.
8. ~~The span, draw and clearance of bridges are shown. (Par. 16c.)~~
9. ✓ The data furnished by the Field Inspection is adequate.  
*Field inspection was furnished in "B" prints only.*

NOTE: Strike out paragraphs, words or phrases not applicable and modify those requiring it. Paragraph numbers refer to those in the Topographic Manual. Use reverse side for extending remarks.

(17) A list of recovery stations was not submitted on form 524 with photo control sheet T-4760, however a list of unlighted beacons and U.S.C. marks dated on T-4760 and transferred to this sheet (T-5044) is submitted in the report.



10. ✓ The descriptive report covers all details listed in the Manual, so far as they apply to this survey. (Par. 64, 65 and 66.)
11. ✓ The descriptive report also contains all additional information required in photo topography as prescribed in the instructions and in the "Notes on the Compilation of Planimetric Line Maps from Five Lens Aerial Photographs".
12. ✓ ~~The descriptions of recoverable stations and references to shore line were accomplished on Form 524, and scaling of positions checked.~~ (Par. 29, 30 and 57.) *see opposite page*
13. ✓ A list of landmarks for charts was <sup>not</sup> furnished on Form 567, and ~~scaling of positions checked.~~ (Par. 16d, e, 60.) *Descriptive report T-4760 states that no landmarks for charts of value fell within the limits of the sheet.*
14. ✓ The geographic datum of the sheet is *N.A. 1927* and the reference station is correctly noted. (Par. 34.)
15. ✓ Junctions with contemporary surveys are adequate.
16. Geographic names are shown on the sheet and are <sup>*Taken from chart 1235.*</sup> ~~covered by the~~ *field inspection notes and photo* ~~Descriptive Report.~~ (Par. 64, 66k.) *central sheet # T-4760.*
17. ✓ The quality of the drafting is good. (Par. 31, 32, 33, 35, 36, 37, 38, 39, 40, 41, 42, 45, 46.)
18. ✓ No additional surveying is recommended.
19. Remarks: *This sheet was compiled in the Washington Office.*

*Approved*  
 20. ~~Examined and approved:~~ *J. Reading*  
 Chief of Party

21. Remarks after review in office:

Reviewed in office by: *Frank G. Eubank, Feb. 15, 1934*

Examined and approved:  
*K. T. Adams*  
 Chief, Section of Field Records  
*L. O. Jolub*  
 Chief, Division of Charts

*Frank S. Borden*  
 Chief, Section of Field Work  
*G. Glade*  
 Chief, Division of  
 Hydrography and Topography.

*Applied to Chart 1235 - Oct. 1934. H. P. Banks*