DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY
R. S. Patton, Director

State: N. C.

DESCRIPTIVE REPORT

Sheet No. 5050.

LOCALITY

Atlantic Coast

New River

1934

CHIEF OF PARTY:

O. S. Reading
Descriptive Report
to accompany
Air Photo Topographic Sheet No. 5050.

General Information

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 Hatos as photographer.

For a general description of this area see the combined descriptive report of the field topographic surveys No. 4722-4725 inclusive.

Statistics

Fifty-three square statute miles of area; 66 miles of shoreline; 12 miles of streams less than 200 meters wide.

The photographs which embrace this sheet consist of five strips as follows: Nos. 236 to 248 incl., Nos. 249 to 268 incl., Nos. 278 to 300 incl., taken January 29, 1933; Nos. 796 to 802 incl., Nos. 784 to 790 incl., taken November 1933. There is practically no periodic tide along this river at any time.

Control

The control consists of second order triangulation established by A. P. Ratti in 1932, 1933. All control is adjusted to the N.A. 1927 datum.

Not all triangulation stations however, could be identified on the photographs and used for control. Those which could be used are listed as follows: Stations Crag, Cedar Point, Light No. 2, Stone U.S.E. Eec., Grey U.S.E., Glen U.S.E. Eec., Fish U.S.E., Jarmon, Paradise U.S.E., Mill, U.S.E., and Beacon U.S.E. All stations, however, are plotted on this sheet.

Compilation

Only the radial line method of compilation was used. The projection was laid on a scale of 1/10,000 exactly, while the photographs varied in scale with factors ranging from 0.99 to 1.07. On this account marked adjustment was required and in order to eliminate this, all tracing was confined to the center "B" print. Photostats were made to the scale of the sheet for the photographs Nos. 796 to 802 covering an area around Stone Bay. These photos were too small by about 15 per cent of the correct size.

The field inspection notes covered the center or "B" print only.
There was a lack of triangulation stations identified on them by the field party and for this reason, a rigid radial plot was made with difficulty.

The shoreline as shown on the field topographic sheets Nos. 4722 to 4725 inclusive, was transferred in blue ink and used for control at prominent and well defined places, such as Hadnot Point and Ragged Point. Discrepancies were noted, however, with this transferred shoreline on the river channel just south of Station Beacon, U.S.E., the inlet of Stone Creek, Southwest Creek, just west of Station Jarmon, and Sneads Creek. These differences have been probably due to the errors in sketching between rod readings by the field party.

All roads with the exception of those marked in the vicinity of Jacksonville are dirt roads. From the photographs it had been very difficult to determine which roads are passable or not. Since the field inspection party did not denote the condition of the roads, the compiler used his own judgment in representing them.

Comparison with other Surveys

The junction with sheet No. 5049 (aerial) on the south is satisfactory. Sheets Nos. 4722 to 4725, inclusive, adjoin and cover the same area and their junctions are discussed above.

Recommendations for further Surveys

The compilation is believed to have a probable error of five meters in positions of well defined detail of importance for charting and of ten meters for other data.

Respectfully submitted

(Sgd.) Leonard A. McGann,

Leonard A. McGann

Approved:

O. Reading
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. ........................

REGISTER NO. 5050

State... North-Carolina

General locality... Atlantic Coast

Locality... New River

Scale... 1:20,000

Photographs January 29, 1933

Compilation August and December 1933

Date of

Sgt. Matos, Photographer

Airplane

Fairchild, F-1-A

Lieutenant Goodrich, Pilot

Vessel

Chief of party... O. S. Reading

Photos plotted by... L. A. McGann

Surveyed by... L. A. McGann

Inked by... L. A. McGann

Completed... Dec. 27, 1933

Instructions dated............................., 19

Remarks: Compilation of 5-lens aerial photos—(Nos. 234-599 incl. and 784 to 790; 790-802) printed by photo-lithographic process.

Polyconic projection by L. A. McGann... July 28, 1933.

Projection verified by J. H. Walbern... July 29, 1933.

Control plotted by L. A. McGann... July 29, 1933.

Control checked by... J. H. Walbern... July 29, 1933.
REVIEW OF PHOTO TOPOGRAPHIC SURVEY NO. 5050

Title (Par. 56) Atlantic Coast, New River, North Carolina

Chief of Party O. S. Reading

Compiled by L. R. McGraw

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 mangrove 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. See back of this sheet.

8. The span, draw and clearance of bridges are shown. (Par. 16c.)

9. The data furnished by the Field Inspection is adequate.

The right of Compilation.

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.
7. At the mouth of French Creek, Lat 34°38½' Long 77°50½', T.47.23 shows a pier. The pier is not visible on the photographs and is not shown in T.5050. Three humps are also shown in various places on the reef. These humps are from three shots to T.5050. These humps are not a few feet high and consequently very difficult to see in the photographs. However, they were seen to be quite possible. (See map, Apr. 7.47.2).

On Helo Point, Chart 4.22 shows a pier at about Lat 34°33½', Long 77°32½'. The pier is no longer in existence.

16. The names appearing in the sketch are from Chart 4.22 and shots T.47.24 to T.47.25 inclusive. The names Papa Key, Thumb Point, and Home Point are omitted from this sketch as they have not as yet been improved by the Geodetic Board. On T.47.24 the point at Lat 34°44½', Long 77°22½' is called HAD NOT. It is shown as HAD NOT in this chart, T.5050. See Survey Report T.47.21-25.
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. Descriptions of recoverable stations and references to shore line were accomplished on Form 524, and scaling of positions checked. (Par. 29, 30 and 57.)

13. A list of landmarks for charts was furnished on Form 567 and scaling of positions checked. (Par. 16d, e, 60.)

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 covered by the Descriptive Report. (Par. 64, 66k.) See attached pages.

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.

20. Examined and approved: 
   
   Chief of Party

21. Remarks after review in office:

Reviewed in office by: Frank S. Erskine
Examined and approved:
Chief, Section of Field Records

K. T. Adams
Chief, Division of Charts

March 29, 1934

Chief, Section of Field Work

Chief, Division of Hydrography and Topography.