State: N.C.

LOCALITY

NEW RIVER
N.C.

CHIEF OF PARTY
A. P. Ratti
DESCRIPTIVE REPORT

to accompany

TOPOGRAPHIC SHEETS

A to E incl.

NEW RIVER, NORTH CAROLINA.


Authority -- Director's instructions dated September 29, 1932.

Extent -- These sheets comprise a survey of New River and its tributaries from and including New River inlet to the water front at Jacksonville, N.C. Also, the intracoastal waterway for a distance of approximately 4½ miles easterly and westerly of the inlet.

Survey Methods -- The entire territory was surveyed by the standard Coast Survey plane table method. This survey was controlled by triangulation stations established and located by A. P. Ratti in 1932-33 and stations established by U. S. E. in 1931 and recomputed by A. P. Ratti in 1932-33.

The survey of several of the branching creeks was controlled by plane table triangulation. In this case successive control points were carefully located by sharp intersections of three or more cuts. The accuracy obtained emphasizes the advantage of the aluminum sheet over the Whatman's paper sheet. The topographer was greatly thrilled upon starting work on the aluminum sheets (his first experience) to find all intersections so sharp and accurate and also the fact that strong winds had no effect upon them. The size of the aluminum sheets necessitated inserts for some of the creeks branching off from the river but this caused little inconvenience as it was only necessary to accurately relocate on the sheet a few control points and continue as before.

Description -- The entire ocean coast line is outlined with a range of shifting, partially grass covered, sand dunes varying in height from approximately 10 to 30 feet. The tidal marsh which comprises a large area near the inlet is covered by about an inch or two of water at normal high tide. It is covered with marsh grass and the edges are well defined. Between marsh and sand dunes there is a narrow strip, densely covered with shrubs or trees locally called merrill.

The New River inlet is constantly shifting and so cannot be permanently outlined.

In general, both banks of the New River give the appearance of being wooded, when viewed from the river, though often there is only a narrow fringe of trees at the riverbank. Practically all bluffs and points are subject to constant change by wave action, which is excessive since the water is shallow and there is little current.

The "rocks awash" symbols on sheet A all indicate oyster "rocks" which are awash at normal low water.

A great many duck blinds, built out in water of two or three feet depth, lined both shores of the river throughout nearly its entire length.

The ferry shown on sheet B is approached by low wooden trestles as indicated by the solid line. The dotted line shows the travel of the ferry itself which is a flat scow capable of holding two automobiles and propelled by a small power launch. The cable rests on the river bed and comes up over rollers on the side of the scow as it proceeds. The ferry is maintained by the state and has no toll during daylight hours.

The airport shown on sheet D is registered. It has no lights of any kind but the runways are level and flat. It is not used commercially but is useful for emergency landings.

The railroad bridge shown on sheet E is a wooden trestle affair with the draw span of steel girders revolving on a center pier.
Remarks—Comparison of sheet A with Chart #422 shows changes too numerous to specify. These changes were due to the construction of the intracoastal waterway.

The aerial photographs of this territory were not available until completion of the topography. The photographs were, however, compared to the plane table sheets, some of the control points marked on the photos, and a letter code used to indicate the nature of the vegetation. This code is as follows:

A....Sand Dunes
B....Dredged Material (Sand, Clay, Shells, etc.)
C....Salt Marsh
D....Grass
E...."Merkle"
F....Coniferous Trees
G....Deciduous Trees
H....Cultivated Fields which

Names of topographic features were subject to some question and described below. In all cases the authority for these names were local rivermen and inhabitants.

In reference to topographic sheet A, the bay which is called Wilsons Bay on chart #422, is locally known as Traps Bay or Traps Creek Bay. No one seemed to know it as Wilsons Bay.

Chart #422 calls the bay near triangulation station Crag, Salliers Bay but locally it is known as Mile Hammock Bay (not well established), and the one near triangulation station Bay is Salliers Bay. The largest creek from this bay is called Holover Creek.

In reference to topographic sheet B, the bay above Jarretts Point is known as Ellis Cove.

In reference to topographic sheet D, Montford Point is spelled "Quiffle" Light.

Little Ragged Point is so named on old maps and by Army Engineers but fishermen say it is locally known as Holmes Point. Holmes Point recommended.

Statistics:

<table>
<thead>
<tr>
<th>Topographic Sheet</th>
<th>Area Surveyed</th>
<th>Length of Shoreline</th>
<th>Surveyed in Statute Miles</th>
<th>Length of Roads</th>
<th>Railroads in Statute Miles</th>
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<tbody>
<tr>
<td>A</td>
<td>20.0</td>
<td>160</td>
<td>1.5</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>B</td>
<td>11.0</td>
<td>21.4</td>
<td>0.4</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>C</td>
<td>10.5</td>
<td>16.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
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<tr>
<td>D</td>
<td>12.5</td>
<td>22.8</td>
<td>2.8</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>E</td>
<td>4.5</td>
<td>14.5</td>
<td>0.0</td>
<td>0.0</td>
<td>0.4</td>
</tr>
</tbody>
</table>

Respectfully submitted,

[Signature]
Chief of Party.
LANDMARKS FOR CHARTS

Director, U.S. Coast and Geodetic Survey:

The following determined objects are prominent, can be readily distinguished from seaward from the description given below, and should be charted.

Chief of Party.

<table>
<thead>
<tr>
<th>DESCRIPTION</th>
<th>LATITUDE</th>
<th>LONGITUDE</th>
<th>DATUM</th>
<th>CHARTS AFFECTED</th>
</tr>
</thead>
<tbody>
<tr>
<td>Light No. 31</td>
<td>34 32</td>
<td>1831.4</td>
<td>N.A. 1914 Topo. No. 422</td>
<td></td>
</tr>
<tr>
<td>Beacon No. 31 A Black</td>
<td>34 32</td>
<td>1623.4</td>
<td>n</td>
<td>n</td>
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<tr>
<td>*Beacon No. 31 B Black</td>
<td>34 33</td>
<td>121.7</td>
<td>n</td>
<td>n</td>
</tr>
<tr>
<td>*Beacon No. 34 Red</td>
<td>34 33</td>
<td>511.7</td>
<td>n</td>
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<td>Light No. 33</td>
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<td>436.0</td>
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<td>n</td>
</tr>
<tr>
<td>Light No. 2</td>
<td>34 32</td>
<td>1772.6</td>
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<tr>
<td>Beacon No. 4 Red</td>
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<td>1281.4</td>
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<tr>
<td>Beacon No. 6 Red</td>
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<td>763.8</td>
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<td>Light No. 8</td>
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<td>Beacon No. 10</td>
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<td>Rod Beacon</td>
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<td>n</td>
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<td>Red Beacon</td>
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<td>n</td>
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<tr>
<td>Water Tank</td>
<td>34 44</td>
<td>1538.0</td>
<td>Topo. &amp; n</td>
<td>n</td>
</tr>
</tbody>
</table>

A list of objects which are of sufficient prominence for use on the charts, together with a description of the same, must be furnished in a special report on this form, and a copy of such report must be attached by the Chief of Party to his descriptive report. The selection, determination, and description of these points are of primary importance.

The description of each object should be short, but such as will identify it; for example, standpipe, water tower, church spire, tank, tall stack, red chimney, radio mast, etc. Generally, flagstaffs and like objects are not sufficiently permanent to chart.

These beacons were destroyed by passing vessels and were not replaced to date.
REVIEW OF TOPOGRAPHIC SURVEY No. 4721-2-3-4-5

Title (Par. 56) New River, North Carolina

Chief of Party A.P. Ratti
Surveyed by D.B. Ling
Inked by D.B. Ling
Shore party W. A. Cash
Instructions dated Sept. 29, 1932
Surveyed in Nov. 1932 to Mar. 1933

1. The survey and preparation for it conform to the requirements of the Topographic Manual. (Par. 7, 8, 9, 13, 16.)

2. The character and scope of the survey satisfy the instructions.

3. The control and closures of traverses were adequate. (Par. 12, 29.)

4. The amount of vertical control that the Manual specifies for contours-formlines was accomplished. (Par. 18, 19, 20, 21, 22, 23.)

5. The delineation of contours-formlines is satisfactory. (Par. 49, 50.)

6. There is sufficient control on maps from other sources that were transmitted by the field party to enable their application to the charts. (Par. 28.) No one submitted. Aero-photos were taken of this area, see Des. Rpt.

7. High water line on marshy and mangrove coast is clear and adequate for chart compilation. (Par. 16a, 45, 44.)

8. 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.)

9. Rocks and other important details shown on previous surveys and on the chart were verified. (Par. 25, 26, 27.)

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

11. Locations and elevations of summits are given. (Par. 19, 61.)

12. The tree line was shown on mountains. (Par. 16g.)

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.
13. The descriptive report covers all details listed in the Manual, in so far as they apply to this survey. (Par. 64, 65, 66, 67.)

14. The descriptive report also contains additional information required in aro-topography, relative to type of photographs, method of compilation and type of ground control.

15. The descriptions of recoverable stations and references to shore line were accomplished on Form 524. (Par. 29, 30, 57, 67 except scaling of DMs and DPs, 68.)

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

17. The magnetic meridian was shown and declination was checked. (Par. 17, 52.)

18. The geographic datum of the sheet is North American and the reference station is correctly noted. (Par. 34.)

19. Junctions with contemporary surveys are adequate.

20. Geographic names are shown on the sheet and are covered by the Descriptive report. (Par. 64, 66k.) After consulting Mr. Bassi, the name "Traps Bay," "Mumford Pt." and "Holmes Pt." was lifted from pencil pending official of the Geo. Board and/or further investigation.

21. The quality of the drafting is good. (Par. 31, 32, 33, 35, 35, 37, 38, 39, 40, 41, 42, 45, 46, 47, 48, 49, 50.)

22. No additional surveying is recommended.

23. The Chief of Party inspected and approved the sheet and the descriptive report after review by L 4721 is on regular Whatman paper, the others are.

24. Remarks:  one Aluminum mounted sheets were not available for close comparisons at time of survey.


Examined and approved:

[Signatures]

Chief, Section of Field Records

Chief, Section of Field Work

Chief, Division of Charts

Chief, Division of Hyd. and Top.
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. A

REGISTER NO. 4721

State N.C. Carolina

General locality New River

Locality New River Inlet and Waterway

Scale 1-10,000 Date of survey Nov., 1932-Jan. 1933

Vessel Project HT-113

Chief of party A. P. Ratti

Surveyed by D. S. Ling

Inked by D. S. Ling & H. G. Ash

Heights in feet above to ground to tops of trees

Contour, Approximate contour, Form line interval feet

Instructions dated Sept. 29, 1932

Remarks: Aero-photos taken of area covered by this 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. B

REGISTER NO. 4722

State: N. Carolina

General locality: New River

Locality: Stone Bay and Vicinity

Scale: 1:10,000. Date of survey: Jan., 1933

Vessel: Project H.T.-113

Chief of party: A. P. Ratliff

Surveyed by: D. S. Ling

Inked by: H. G. Ash

Heights in feet above to ground to tops of trees

Contour, Approximate contour, Form line interval — feet

Instructions dated: Sept. 29, 1932

Remarks: Aero-photos taken of this area...
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. C

REGISTER NO. 4723

State: N. Carolina

General locality: New River

Locality: Farnell Bay and Vicinity

Scale: 1:10,000 Date of survey: Feb., 1933

Vessel: Project HT-113

Chief of party: A. P. Rathi

Surveyed by: D S Ling

Inked by: H. G. Ash

Heights in feet above ground to tops of trees

Contour, Approximate contour, Form line interval

Instructions dated: Sept. 29, 1932

Remarks: Aero-photos taken of this area

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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. 4724

REGISTER NO. 4724

State  N. Carolina
General locality  New River
Locality  Morgan Bay & Northeast Creek
Scale  1: 10,000  Date of survey  Feb., 1933
Vessel  Project H.T. 113
Chief of party  A.P. Raili
Surveyed by  D.S. Ling
Inked by  D.S. Ling

Heights in feet above to ground to tops of trees
Contour, Approximate contour, Form line interval—feet
Instructions dated  Sept. 29, 1932
Remarks:  Aero. photos taken of this area

...
DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

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. 4725

REGISTER NO. 4725

State: N. Carolina

General locality: New River

Locality: Southwest Creek (New River Ragged Jet) Jacksonville

Scale: 1-10,000 Date of survey: Feb. Mar., 1933

Vessel: Project HT-113

Chief of party: A. P. Ratti

Surveyed by: O. S. Ling

Inked by: O. S. Ling

Heights in feet above to ground to tops of trees

Contour, Approximate contour, Form line interval

Instructions dated: Sept 29, 1932

Remarks: Aero. photos taken of this area.