Form 504
DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

State: North Carolina

DESCRIPTIVE REPORT.

Topographic Sheet No. 6 4346

LOCALITY:

Cape Lookout

Cape Lookout Point

1926-1927

CHIEF OF PARTY:

R. T. Adams
Locality and Limits

The area on this sheet covers the extreme point of Cape Lookout, North Carolina. It includes the area from Cape Lookout Light House to the point of Cape Lookout.

The small area surveyed on this sheet was accomplished in advance of the progress of the work. This sheet was laid out for a continuity of the work to the north east, however, as the progress of the work did not reach this locality before the season was closed, this sheet was sent in incomplete.

When and By Whom Surveyed

The survey on this sheet was accomplished during rough weather while the ship was anchored in Lookout Bight for protection from a rough sea. The survey was begun in 1926 and completed in 1927, a small amount of work being done at odd times over a long period.

The following officers were engaged in work on this sheet at different times: L. D. Graham, H. E. Hilton, P. L. Bernstein and G. W. Lovesee.

General Description

The land area on this sheet is loose sand and shifting sand dunes partly covered with a small amount of grass. The shore line on east side slopes gently from low water line to the storm water line where the sand dunes began. The distance from storm water to high water line is from 10 to 20 meters and the distance between high and low water lines varies from 30 to 150 meters. The area on the northwest side in the vicinity of the break-water is soft sand partly covered with grass and bares from 1/2 to 3/4 tide. The southwest shore is similar to that on the east side only more abrupt.

A small wreck is shown on the east side of the bight, southwest of the Lighthouse.

There is a wreck north of signal End, the position of which was not obtained.

Buildings and Improvements

The two Naval Radio towers are steel and about 125 feet high. The cupolas on the Coast Guard Station and the Naval Radio Station are prominent cupolas on large buildings. These two buildings are the only large ones on the point. There are many smaller shacks on the point, many of which are located in the list of permanent objects below.
<table>
<thead>
<tr>
<th>Name</th>
<th>Lat.</th>
<th>D M</th>
<th>Long.</th>
<th>DP</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cham</td>
<td>34 37</td>
<td>512.0</td>
<td>76 33</td>
<td>1562.0</td>
<td>Red bell buoy &quot;2&quot;, lighted.</td>
</tr>
<tr>
<td>Dis</td>
<td>34 36</td>
<td>932.5</td>
<td>76 32</td>
<td>1562.0</td>
<td>Lone shack.</td>
</tr>
<tr>
<td>Tor</td>
<td>34 35</td>
<td>1549.0</td>
<td>76 32</td>
<td>920.5</td>
<td>Lone shack.</td>
</tr>
<tr>
<td>Pole</td>
<td>34 35</td>
<td>1031.5</td>
<td>76 32</td>
<td>530.0</td>
<td>Pole.</td>
</tr>
<tr>
<td>So</td>
<td>34 35</td>
<td>578.4</td>
<td>76 32</td>
<td>155.5</td>
<td>South gable of lone shack.</td>
</tr>
<tr>
<td>Red</td>
<td>34 36</td>
<td>946.5</td>
<td>76 32</td>
<td>182.0</td>
<td>N.E. gable, Red roof, Ester Cottage.</td>
</tr>
<tr>
<td>Chim</td>
<td>34 36</td>
<td>1319.5</td>
<td>76 31</td>
<td>1287.0</td>
<td>Lone shack, chimney on S.gable.</td>
</tr>
<tr>
<td>Gab</td>
<td>34 36</td>
<td>1567.5</td>
<td>76 31</td>
<td>1188.0</td>
<td>North gable, lone shack.</td>
</tr>
<tr>
<td>Shak</td>
<td>34 36</td>
<td>1750.0</td>
<td>76 31</td>
<td>1077.0</td>
<td>Chimney, lone shack.</td>
</tr>
<tr>
<td>Wreck</td>
<td>34 36</td>
<td>1814.4</td>
<td>76 31</td>
<td>1311.5</td>
<td>Barge Wreck.</td>
</tr>
<tr>
<td>On</td>
<td>34 37</td>
<td>212.5</td>
<td>76 31</td>
<td>1055.5</td>
<td>Lone shack.</td>
</tr>
<tr>
<td>Out</td>
<td>34 37</td>
<td>543.5</td>
<td>76 31</td>
<td>1068.0</td>
<td>Chimney, lone shack.</td>
</tr>
<tr>
<td>Ben</td>
<td>34 36</td>
<td>1785.0</td>
<td>76 32</td>
<td>321.0</td>
<td>Channel Beacon, small.</td>
</tr>
<tr>
<td>Gauge</td>
<td>34 36</td>
<td>1201.5</td>
<td>76 32</td>
<td>243.0</td>
<td>Tide Gauge on small dock.</td>
</tr>
<tr>
<td>Eng</td>
<td>34 37</td>
<td>97.5</td>
<td>76 32</td>
<td>785.5</td>
<td>Pole.</td>
</tr>
</tbody>
</table>

Approved:

K. T. Adams
Chief of Party.

Respectfully submitted,

George L. Anderson,
Lieutenant, (j.g.)
DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY
WASHINGTON August 1, 1928.

SECTION OF FIELD RECORDS

Report on Topographic Sheet No. 4346
Cape Lookout, North Carolina
Surveyed in 1926-7

Chief of Party, K. T. Adams.

Surveyed by L. D. Graham.

Inked by G. L. Anderson.

1. The plan and character of the survey conform to the requirements of the General Instructions.

2. The descriptive report does not give the date of the specific instructions, and it does not appear that the work was called for by written instructions.

3. The junction with the adjoining sheet is adequate, and no further surveying is required.

4. The character and scope of the surveying and field drafting are excellent.

5. Reviewed by E. P. Ellis, June, 1928.

Approved:

[Signature]
Chief, Section of Field Records (Charts)

[Signature]
Chief, Section of Field Work (E. & T.)
DEPARTMENT OF COMMERCE
U.S. COAST AND GEODETIC SURVEY

TOPOGRAPHIC TITLE SHEET

The finished Topographic Sheet is to be accompanied by the following title sheet, filled in as completely as possible, when the sheet is forwarded to the Office.

U. S. Coast and Geodetic Survey.

Register No. 4346

State North Carolina

General locality Cape Lookout

Locality Cape Lookout Point

Chief of party L. T. Adams

Surveyed by L. D. Graham

Date of survey 1926 - 1927

Scale 1:20,000

Heights in feet above

Contour interval feet

Inked by G. L. Anderson Lettered by G. L. Anderson

Records accompanying sheet (check those forwarded): Photographs, Descriptive report, Horizontal angle books, Field computations, Data from other sources affecting sheet

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

State: North Carolina

LOCALITY
Cape Lookout
Lookout Bight

1928

CHIEF OF PARTY
J. Senior
AUTHORITY: This revision survey was executed under instructions of the Director to the Commanding Officer of the U.S.C. & G.S. Motor Vessel NATOMA, dated July 12, 1928.

LIMITS: This sheet starts with a point opposite Cape lookout Lighthouse and runs around Lookout Bight to a point about one mile below breakwater, the scale being 1:10000.

General Description: The topography of this section of the coast line is as shown on the bromide of topographic sheet 4346. Small sand dunes dot the country between the outside coast and the bight.

CHANGES: According to the photostat of topographic sheet 4346 the high water line is the same as shown. However the low water line was out quite a bit. This was approximately located by comparison with the tides and checked by hydrography. In the most cases the shacks along the beach were used as signals, making it necessary to erect only three banner signals.

The dock in the bight was found to be approximately correct but the breakwater was found to be out in azimuth to a large degree.

Small changes in the shape of the sand dunes make similar changes in the high water line in places.

The signals previously used were evidently built up signals which could not be redetermined.

SURVEY METHODS: The topography was accomplished by the usual plane table methods. The original set up was made in line between Cape Lookout Lighthouse and the Coast Guard Station at a measured distance from the lighthouse.

The signals were all located by planetable cuts, or, in other words, plane table triangulation.
The shore line was executed by running a plane table traverse along the beach with frequent resection checks on Cape Lookout Lighthouse and the Coast Guard Station.

A very careful set up was made on the breakwater in order to get a good azimuth of the same. An excellent check was later made on this azimuth by the hydrographic party. The outside end of the breakwater, being under water was also located by the hydrographic party.

The lighted buoy just off the end of the breakwater was located by planetable triangulation.

Respectfully submitted,

[Signature]
CHAS R. BUSH, Jr.
Jr. H. & G. E.
U. S. Motor Vessel
NATOMA.

Approved:

[Signature]
JACK SENIOR, H. & G. E.
Chief of Party,
Commanding NATOMA.
DEPARTMENT OF COMMERCE
U.S. COAST AND GEODETIC SURVEY
WASHINGTON September 20, 1928.

SECTION OF FIELD RECORDS

Report on Topographic Sheet No. 4346a
Lookout Bight, North Carolina
Surveyed in 1928
Instructions dated July 12, 1928 [RANGER]

Chief of Party, J. Senior.

Surveyed and inked by C. R. Bush, Jr.

1. The records as well as the plan and character of the survey conform to the requirements of the General Instructions.

2. The plan and extent of the survey satisfy the specific instructions.

3. The junctions with the previous survey are adequate and no further surveying is required.

4. The descriptive report states that "The lighted buoy just off the end of the breakwater was located by plane-table triangulation." This evidently refers to signal Boat, although it is nowhere so stated. Lighted Bell Buoy No. 2, located on T. 4346 is 100 meters W x N from signal Boat.

5. The character and scope of the surveying and field drafting are excellent.

6. Reviewed by E. P. Ellis, September, 1928.

Approved:

[Signature]
Chief, Section of Field Records (Charts)

[Signature]
Chief, Section of Field Work (H. & T.)
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. B

REGISTER NO. 43462

State NORTH CAROLINA

General locality CAPE LOOKOUT

Locality LOOKOUT BIGHT

Scale 1:10,000 Date of survey July, 1928

Vessel MOTOR VESSEL NATOMA

Chief of Party JACK SENIOR

Surveyed by CHAS. R. BUSH, JR.

Inked by

Heights in feet above to ground to tops of trees

Contour approximate contour, Form line interval feet

Instructions dated July 22nd, 1928

Remarks Revision survey of section of Topographic Sheet No. 4346 and Chart 1233.