

5203

SEP 12 1932

Acc. No.

Form 504
Ed. June, 1928

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

State: North Carolina

DESCRIPTIVE REPORT

Topographic	}	Sheet No. 5203
Hydrographic		Field No. 3

LOCALITY

Chowan River

~~Vicinity of Tunis and station~~

Tunis to Meherrin River

1932

CHIEF OF PARTY

C. A. Egner

5203

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

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REG. NO.
5203

HYDROGRAPHIC TITLE SHEET

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

Field No. 3

REGISTER NO. **5203**

State North Carolina

General locality Chowan River

Locality ~~Upper part~~ Tunis to Meherrin River

Scale 1:10,000 Date of survey May, 19 32

Vessel M. V. NATOMA (Motor Launch)

Chief of Party V. A. Egner

Surveyed by Jack C. Sammons

Protracted by John C. Bull

Soundings penciled by John C. Bull

Soundings in ~~fathoms~~ feet

Plane of reference 0.5 ft. below Mean Water Level

Subdivision of wire dragged areas by _____

Inked by _____

Verified by _____

Instructions dated Jan. 21, 1932, 19

Remarks: _____

DESCRIPTIVE REPORT.

to accompany

HYDROGRAPHIC SHEET NO. 3

CHOWAN RIVER, NORTH CAROLINA.

PROJECT 94

1. AUTHORITY:

The work on this sheet was done in accordance with the Instructions of the Director to the Commanding Officer of the Motor Vessel NATOMA, dated January 21, 1932.

2. LIMITS OF SHEET:

The limits of this sheet includes the Chowan River from a line joining Triangulation Station TUN and STAND (which are near the town of Tunis) to the northern limits of the work which is about one-half mile above the mouth of the Meherrin River. It includes the Meherrin River for a distance of about one-half mile from the mouth.

3. SHORE LINE:

Almost all of the shore line on this sheet is of cypress swamp. The shore line is indefinite, as there is usually from three to four feet of water at the tree lines, and in many places lone off-lying trees are found with as much as 8 feet of water between them and the shore line. The shore line was considered to be the tree line. This accounts for the fact that there are several places where the sounding lines were carried upon or inside of the shore line.

From Signal UNO to Signal IF the shore line consists of swamp land covered with tall grass, with only one or two trees; near Signal HARREL there is a small sand beach; and from Signal CLIFF to the town of Winton there is a narrow sand beach with a steep bluff in back.

4. SURVEY METHODS:

All the work on this sheet was done by the usual launch hydrographic party. The Motor Launch was used for most of the work, the Motor Sailer being used for some of the development near the shore line where the water was too shallow for the Motor Launch. The sheet is on a scale of 1:10,000 and the soundings were taken with a hand lead. The lines are run parallel to the shore line. It was possible to find natural ranges for the lines at almost all times. In cases where the lines were obstructed by fish nets the line was discontinued on a sextant fix and the launch run around the net and continued on the line from the opposite side of the net.

5. BARS AND CHANNELS:

There are no marked channels on this sheet. For the most part the bottom drops off rapidly from the shore line and there is deep water all the way across the river. Near the mouth of Mud Creek is a mud bar making off from the shore line. In summer this bar is covered with lily pads. Near the mouth of the Meherrin River there is a small sand bar making off from the end of the point.

6. OBSTRUCTIONS:

Near the shore line on either side of the river there are numerous snags and stumps; many of these are underneath the surface of the water. The water is almost always discolored and it is impossible to avoid these obstructions near the shore line in even the smallest draft boats. On numerous occasions the sounding launch would run onto these obstructions when the surrounding water was as deep as 6 feet.

Near the southern limits of the sheet there are several fish traps. These consist of cut poles about 5 inches in diameter driven down into the bottom. During the fishing season these poles support nets. After about June 1st., these nets are removed and it is then possible for boats to pass between them. The nets extend from the shore line to a third of the way across the river, leaving the central third open for navigation. During the fishing season there are many floating nets used on this section of the river, these nets are not supposed to extend into the central portion of the river, but they often do.

The Atlantic Coast Line Railroad bridge crosses the river at Tunis; it is a wooden structure on piling, with a central steel swinging span with opening on either side, this span is operated by hand and it requires a considerable length of time to open it.

At Winton there is a highway bridge crossing the river. It is a cement piling structure and has a central steel swinging span. This bridge is electrically operated and may be opened fairly rapidly. Boats pass on either side of the central support.

7. TRIBUTARIES:

There are several creeks flowing into the river which have fairly deep water. These creeks have no commercial importance other than to be used occasionally for rafting out timber. This was not considered important enough to warrant the large expense of placing control for making a detailed survey of these tributaries. However, reconnaissance lines were run up them for a considerable distance to give an idea of the depth of water in them.


Catherine Creek which is located just South of the town of Tunis, shows signs of having been of considerable importance in the past. There is a large saw-mill at Tunis and the creek was used to raft timber into the mill. The mill has not been used for several years and the creek is now clogged with fallen trees and other obstructions and is used only by small fishing boats. There is another short tributary just of Tusca-Rora Beach which extends up to the dam at Harrells Mill. It is used by local fishermen as a shelter for small boats. Mud Creek, on the north side of the river, has fairly deep water and is fairly free of obstructions. However, it has no commercial use as far as could be ascertained .

8. GENERAL:

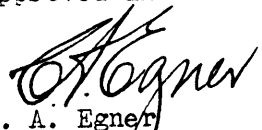
The work on this sheet constitutes an original survey for this section of the river. The control is furnished by a small scheme of triangulation which is closely connected to a larger scheme of triangulation of Second degree accuracy. Although the boat used for this work was necessarily given some very hard useage, it proved very satisfactory for this work and only a comparatively short amount of time was spent in getting it off of submerged stumps and logs which are very numerous near the shore line on either side. On one occasion the leadsman had just finished calling out "6 feet and hard bottom" when the launch struck a stump and stopped dead ; unfortunately the leadsman could not stop so suddenly and he tumbled head first out of the chair into the water. When he returned to the surface of the water he confirmed his previous report of "hard bottom".

The depth curves are not drawn on the smooth sheet as the banks are so steep that it is felt that drawing these contours would obscure some of the soundings.

Respectfully submitted,


Jack C. Sammons
Hyd. & Geod. Engineer

Approved and forwarded;


C. A. Egner
Hyd. & Geod. Engineer
Commanding M. V. NATOMA.

HYDROGRAPHIC STATISTICS

SHEET NO. 3

DATE 1932	DAY	VOLUME	BOAT	STATUTE MILES SOUNDINGS	NUMBER OF SOUNDINGS	NUMBER OF POSITIONS	
5/11	a	1	Launch	27.3	1092	198	
5/12	b	1	"	17.3	733	153	
5/12	b	2	"	2.3	115	26	
5/13	c	2	"	8.6	387	88	
6/1	a	2	M/S	12.6	623	138	
5/12	b	2	---	----	12	6	walking on docks.
5/16	c	2	---	----	33	10	walking on bridge
TOTALS				68.1	2,995	619	

Sheet No. 5203

Chief of Party: C. A. Egnor

Surveyed in: May 1932

Surveyed by: J. C. Sammons

Protracted by: J. C. Bull

Soundings Plotted by: J. C. Bull

Verified and Inked by: B. G. Jones

1 The Records conformed to the general instructions except that objects located by the Hydrographic Party were not indexed in the sounding volumes. This has been done in the office.

2 The protracting was good

3. A few soundings were replotted to correct for incorrect spacing.

4. The drafting was neatly done and conformed to the general instructions except as follows:

- (1) The dates of the triangulation stations was not shown on the sheet.
- (2) The name and geographic position of one triang. sta. was not shown on the sheet

- (3) The names of the towns shown on this sheet were inked by the field party
4. The two bridges were shown by solid lines with no indication of the draw spans. These have been changed in order to show the roundings in the bridge openings.

5. The descriptive report for T 4675 states that the names Yascarora Beach and Chouen Beach were formerly Mount Gallows and Barfield respectively but have been changed by local usage.

6. No descriptions are given for a number of the topographic stations which are outside the High Water line.

7. The work on this sheet conforms to the general instructions except as noted above and the development is satisfactory for drawing the depth curves

8. The cross lines run about every $\frac{1}{3}$ mile normal to the shore are satisfactory - No land crossings were noted

9. The controlling depth for the section of the Chouan River shown on this sheet and for the Mehenin River up to Parkers Ferry is the 14 ft. spot shown just north of the draw ledge at Junis.

10. Parkers Ferry on the Mehenin River is a Hand Operated Tug Ferry

11. The Coast Pilot Notes submitted in connection with this survey give 9 ft. as the controlling depth along the North face of the Atlantic Coast Line Dock at Junis. The sounding records show an 11 ft. rdg. at the N.E. corner of this dock and a 12 ft. sounding at the N.W. corner but no soundings along the North face of the dock. The controlling depth of 9 ft. as given in the Coast Pilot notes is probably located along the North face between the 11 and 12 ft. soundings shown on the sheet.

Soundings shown along the docks at Winton agree with the Coast Pilot Notes.

B. G. Jones

SECTION OF FIELD RECORDS

Review of Hydrographic Sheet No. 5203.
Tunis to Meherrin River, Chowan River, North Carolina.
Surveyed in May, 1932.
Hand lead soundings.
Instructions dated Jan. 21, 1932. (Natoma)

Chief of party - C. A. Egner.
Surveyed by - J. C. Sammons
Protracted and soundings plotted by - J. C. Bull.
Verified and inked by - B. G. Jones.

1. The records conform to the requirements of the general instructions except that objects located by the hydrographic party were not indexed in the sounding books.
2. The plan, character, and extent of the survey fully satisfy the requirements of the general and specific instructions.
3. The sounding line crossings and the agreement of adjacent lines parallel to the shoreline are satisfactory.
4. The information is sufficient for completely drawing the usual depth curves.
5. The junction on the southeast with H. 5202 is satisfactory. There is no work north of this survey.
6. The prescribed amount of field plotting was acceptably done by the field party with a few minor omissions which are listed in the verifier's report.
7. The character of the work is excellent and the development sufficient. Descriptions should have been given for 14 of the topographic signals which are outside the high water line. — *Cypress trees seen*
8. No additional work is needed in this area.
9. Reviewed by R. L. Johnston, Feb. 1, 1933.

Inspected: E. P. Ellis.

Approved: *L. O. Colbert*
L. O. Colbert, Chief, Field Records Section.

W. Borden, Chief, Section Field Work, N.H.T.

G. H. ... Chief, Division of N.H.T.

C. A. Egner
Chief, ...

September 27, 1932

Division of Hydrography and Topography:

✓ Division of Charts:

Tide Reducers are approved in
2 volumes of sounding records for

HYDROGRAPHIC SHEET 5203

Locality Tunis to Meherrin River, Chowan River, N.C.


Chief of Party: C. A. Egner in 1932
Plane of reference is mean low water, reading
3.1 ft. on tide staff at Winton
4.7 ft. below B. M. 1

~~Plane of reference is taken 0.5 foot below mean river level~~

NOTE: See (*) below.

Condition of records satisfactory except as checked below:

1. Locality and sublocality of survey omitted.
2. Month and day of month omitted.
3. Time meridian not given at beginning of day's work.
4. Time (whether A.M. or P.M.) not given at beginning of day's work.
5. Soundings (whether in feet or fathoms) not clearly shown in record.
6. Leadline correction entered in wrong column.
7. Field reductions entered in "Office" column.
8. Location of tide gauge not given at beginning of day's work.
9. Leadline corrections not clearly stated.
10. Kind of sounding tube used not stated.
11. Sounding tube No. entered in column of "Soundings" instead of "Remarks".
12. Legibility of record could be improved.
13. Remarks.


Acting Chief, Division of Tides and Currents.

- (*) There is practically no periodic tide in this locality and the plane of reference was taken 0.5 foot below mean river level as determined from observations by this party. This is in accordance with an agreement with the U. S. Army Engineers for the plane of reference in Albemarle and Pamlico Sounds.