5900

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.* 5900 6.
Hydrographic }

LOCALITY

Intracoastal ~~Inland~~ waterway

~~Upper~~ North River (Upper Part)

193 5

CHIEF OF PARTY

Raymond P. Eyman.

U. S. GOVERNMENT PRINTING OFFICE: 1933

5900

Form 537
Ed. Dec., 1930

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

REG. NO.

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. 5900

Field No. G.
Dia 1228-2 & 1229-2
REGISTER NO.

State North Carolina

General locality Intracoastal Waterway

Locality ~~Upper~~ North River (Upper Part)

Scale 1-10,000 Date of survey Feb.- April, 1935

Vessel launches "Little Pat" "Little Marcus" and skiff (M.V. Natoma)

Chief of Party Raymond P. Eyman

Surveyed by E.S.Averell, John C. Bull.

Protracted by John C. Bull

Soundings penciled by M.O.Witherbee.

Soundings in ~~XXXXXX~~ feet

Plane of reference M.L.W.

Subdivision of wire dragged areas by - - -

Inked by Harold W. Murray

Verified by H. W. M.

Instructions dated Aug. 31, 1934, 19

Remarks:

U. S. GOVERNMENT PRINTING OFFICE: 1931

Descriptive Report to accompany
Hydrographic Sheet #6

Instructions

The work on this sheet was done in accordance with instructions dated August 31, 1934 for Project HT-189, M.V.NATOMA.

Scale and Limits

The work was done on a scale of 1-10,000 and covers the area of North River from its head at the end of the Coinjock land cut southward to a line where the river widens below Buck Island at Beacon #67, with adjacent portions of the various tributaries.; from Lat. 36-19½ to Lat. 36-15. It joins sheet #5 on the north and sheet #7 on the south.

Survey Methods

Standard Coast Survey methods were used thruout, with the hand lead line from small boats whose positions were fixed by sextant angles from triangulation stations and signals located by topography on aluminum mounted sheets.

Sounding lines were run on ranges where possible, otherwise the launch was headed for a definite point on the shore ahead; compass courses were not used. The lines are straight between fixes except in a few cases where the lines were run parallel to and close to shore.

Discrepancies

There are no discrepancies of any importance. The soundings in the small channel to the north of Buck Island were taken in mid-channel but seem to plot near the eastern shore. Position 74g plotted ashore; this was apparently due to an incorrect left angle, this angle was rejected by the smooth plotter and the position plotted with right angle and time. On positions 36 and 37f discrepancies in sounding intervals were noted; these were evidently caused by confusion of signals; the right object in each case apparently being recorded wrong; the smooth plotter made the intervals agree by changing the right object.

Dangers

There are no particular dangers except that of getting out of the main channel thru the dredged cuts where the borders of the channel are very shoal. In the tributaries there are numerous stumps and snags bordering the shorelines. A wreck lies close to the easter shore about 550 meters northward of Beacon #53 and two others close to the eastern shore about 300 meters northwestward of Beacon #59; in both cases the danger is well outside the channel.

Channels

The only channel of importance is the main channel of the Intracoastal Waterway, which enters North River from the Coinjock land cut thru Bumplanding Creek at the north end and follows the river thru to the southern limits. This channel is partly natural and partly dredged. It has a controlling depth of 11 ft. found near Beacon #51 and below Beacon #61; there are a few 10 ft. soundings between Beacons #61 and #63 which can be avoided by keeping well off the line between the Beacons. The channel is well marked by beacons and buoys and a few

brush stakes. It is 90 ft. wide thru the dredged land and Creek cuts, 125 ft. wide thru the northern portion of the sheet, and finally widens to 250 ft. thru the lower portion.

Sailing directions for the above channel are as follows: From mid-channel at Beacon #49 steer for a point 50 yds. off Daymark #2, round Beacon #51 and Daymark #4 at about 50 yds. off and steer for a point 50 yds. off Beacon #53; from abeam Beacon #53 steer for a point 50 yds. off black spar buoy #1, thence head about 50 yds. to the right of red spar buoy #2 (about 200 yds. south of Beacon #55) until about halfway between buoys #1 and #2 then head to pass about 50 yds. off Beacons #55 and #57; from Beacon #57 to Beacon #59 keep on the eastern side of the channel;from about 65 yds. off Beacon #59 head for the point of land,450 yds. north of Beacon #61, and the red spar buoy #4, giving the point of land to the eastward a berth of 100 yds., until within 150 yds. of red spar buoy #4, which pass at about 50 yds. off and head for Beacon #61; when about 80 yds. north of Beacon #61 head for red spar buoy #6 and round Beacon #63 about 100 yds. off, thence for red spar buoy #8, passing same close-to on starboard, thence for red spar buoy #10 and Beacon #65, passing the latter about 80 yds. off; thence for a point about 50 yds. off Beacon #67.

Indiantown Creek has a controlling depth of about 5½ ft. within the limits of this sheet (about 1 mile).

Cow Creek has a depth of about 4½ ft. for about 1 mile.

None of the other tributaries are of much importance and only have depths of 3 to 4 ft. for short distances.

Anchorages

There are no anchorages as such on this sheet except for shallow draft boats. Vessels drawing 6 to 7 ft. may anchor outside the channel in many places. Deeper draft vessels often moor to the banks of the canal in the Coinjock land-cut north of the limits of this sheet.

Previous Surveys

A comparison with an early survey of 1844, sheet 1579c, shows many minor changes. The early survey was made before all the later improvements made to the main channel. The present survey shows that much of the area outside of the main channel has shoaled considerably. Taylor Bay is 1 to 2 ft. shoaler; Bumplanding Creek is all but closed up; and Indiantown and Cow Creeks are 1 to 2 ft. shoaler; many parts of North River are much shoaler outside the channel.

Two prints of the U.S.Engineers condition survey of 1934 compare very well with the present work.

Statistics

A table of statistics accompanies this report.

Tide Data

A standard automatic tide gage was maintained at Coinjock Drawbridge, ½ mile north of the entrance to the canal at the north end of this sheet.

Hydrographers: E.S.Averell, Surveyor.
John C. Bull, Aid. John C. Bull

Respectfully submitted, Raymond P. Eyman.
Raymond P. Eyman, Chief of Party.

Statistics for Hydrographic Sheet #6

Date	Day	Vol.	Boat	Miles	Soundings	Positions
2-26-35	a	1	L.P.	26.1	930	171
2-27-35	b	1	"	1.2	53	12
2-28-35	c	1	"	19.2	752	168
3-1- 35	d	2	"	20.0	733	153
3- 2-35	e	2	"	18.5	614	140
3- 4-35	f	2&3	"	22.0	793	164
3- 5-35	g	3	"	12.5	498	157
3-22-35	h	3	skf.	8.0	393	99
3-25-35	j	3	L.M.	4.8	198	46
3-27-35	k	4	skf.	10.4	497	121
3-29-35	m	4	L.M.	4.0	157	47
4-11-35	n	4	L.M.&skf.	3.5	168	48
Total	12	4		150.2	5786	1326

	Remarks	Decisions
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GEOGRAPHIC NAMES

Survey No. H - 5900

Name on Survey	A On Chart No.	B On previous survey No.	C On U. S. quadrangle Maps	D From local information	E On local Maps	F P. O. Guide or Map	G Rand McNally Atlas	H U. S. Light List	K	
North River ✓	1228									1
Buck I. ✓	1228									2
INDIAN TOWN CR. ✓	1228									3
BUMPLANDING CR. ✓	1228									4
COW CR. ✓	1228									5
~~PUBLIC CR.~~	~~1228~~									6
~~DEER CR.~~	~~1228~~									7
										8
		Names approved Dec 12 1935								9
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				C. H. Eggert						11
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HYDROGRAPHIC SURVEY NO. 5900

Smooth Sheet 1

Boat Sheet 1

Sounding Records 4 Vols.

Descriptive Report yes

Title Sheet yes

List of Signals yes

Landmarks for Charts (Form 567) yes

Statistics yes

Approved by Chief of Party yes

Recoverable Station Cards (Form 524) No

Special Chart for Lighthouse Service No
(Circular Nov. 30,1933)

Remarks

Field Records Section (Charts)

HYDROGRAPHIC SHEET NO. 5900..

The following statistics will be submitted with the cartographer's report on the sheet:

Number of positions on sheet	1326
Number of positions checked	15
Number of positions revised	———
Number of soundings recorded	5786
Number of soundings revised	11
Number of signals erroneously plotted or transferred	———

Date: March 11, 1936

Verification by Harold W. Murray Time: 17 hrs.

Review by R. J. Christman Time: 11 hrs

LAC

Form 712
DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY
Ed. Feb. 1935

TIDE NOTE FOR HYDROGRAPHIC SHEET

January 31, 1936.

Division of Hydrography and Topography:

✓ Division of Charts: Attention: Mr. E. P. Ellis

Tide Reducers are approved in
4 volumes of sounding records for

HYDROGRAPHIC SHEET 5900

Locality North River (Upper Part), N. C.

Chief of Party: R. P. Eyman in 1935
Plane of reference is mean low water reading
2.2 ft. on tide staff at Coinjock Draw Bridge
5.0 ft. below B.M. 1

There is practically no periodic tide and the plane of reference was taken half a foot below mean water level.

Condition of records satisfactory except as noted below:

Harris
Chief, Division of Tides and Currents.

U. S. GOVERNMENT PRINTING OFFICE

Verification Report on H-5900 (1935)

1. Condition of Records.

The records are neat and legible and conform to the requirements of the Hydrographic Manual except as follows:

a. Numerous detail shown on the boat sheet and topographic sheets as well as noted in the sounding records such as fish traps and nets were not shown on the smooth sheet. These were added in the office. ✓

b. No special chart for use of the Lighthouse Bureau was submitted. ✓

2. Shore line & control.

The shoreline and control shown on this sheet agrees with plane table surveys: T-6366 a (1935), T-6366 (1935) and T-6367 a (1935). ✓

3. Sounding Line Crossings

No general system of cross lines was run but those that were as well as the adjoint lines show good agreement ✓

4. Depth Curves.

The 6, 12 and 18 foot curves may be satisfactorily drawn within the limits of the survey. Half foot soundings were freely used in smoothing out depth curves and in maintaining maximums and controlling depths in channels and in broad flat areas. ✓

5. Junctions with Contemporary Surveys

a. The junction on the north with H-5899(1935) ✓ is satisfactory

b. The junction on the south with H-5901(1935) will ✓ be considered when that sheet is verified.

c. No other surveys adjoin this survey on the east & west. ✓

6. Remarks.

a. The topographic sheets show several sunken wreck symbols. These were changed to the awash type of symbol in accordance with notes in the records. In this connection, T-6366(1935) shows two sunken wrecks in Lat. 36°17.2', Long. 75°56.9'. The sounding records (pgs. 92-93c) appear to indicate one wreck* awash at M&LW. One wreck awash has been shown. The D.R. (page 1, Rowan) notes 2 wrecks here.

* Two positions, probably two wrecks as shown on T-6366(1935).

7. Field Plotting

Field protracting and plotting were exceptionally correct. ✓

8. Verified & Inked by Harold W. Murray Mar. 11, 1936 ✓

Section of Field Records

REVIEW OF HYDROGRAPHIC SURVEY NO. 5900 (1935) FIELD NO. 6

North River, Upper part, Intracoastal Waterway, North Carolina.
Surveyed in Feb. - April 1935
Instructions dated August 31, 1934 (NATOMA).

Hand Lead Soundings. 3 Point Fixes on Shore Signals.

Chief of Party - R. P. Eyman.
Surveyed by - E. S. Averell, J. C. Bull.
Protracted by - J. C. Bull.
Soundings penciled by - M. O. Witherbee.
Verified and inked by - H. W. Murray.

1. Condition of Records.

The records are neat and legible and conform to the requirements of the Hydrogfaphic Manual except as follows:

a. The Index in the Sounding Record of "Objects Located by Hydrographic Party" was not accomplished.

b. Several details noted in the sounding records and on the boat sheet were not plotted on the smooth sheet. They have been added in the office.

The Descriptive Report is complete and satisfactorily covers the items of importance.

The duplicate of the Special Chart for the Lighthouse Service has not been received in the office. (Circ. Nov. 30, 1933).

2. Compliance with Instructions for the Project.

The plan and character of development are in accordance with the instructions for the project.

3. Shoreline and Signals.

The shoreline and the location of signals originate with plane table surveys T-6366a (1935), T-6366b (1935) and T-6367a (1935).

4. Sounding Line Crossings.

No regular system of cross lines was run but crossings occurring in development work and soundings on adjacent lines are consistent.

5. Depth Curves.

Within the area surveyed, the usual depth curves can be satisfactorily drawn.

6. Junction with Contemporary Surveys.

The junctions with H-5899 (1935) to the northeast and with H-5901 (1935) to the south are satisfactory.

7. Comparison with Prior Surveys.

H-230 (1850), H-1579c (1884).

The 1850 survey slightly overlaps the present survey at the southern edge of the sheet. The survey was made previous to the dredging of the Intracoastal Waterway. The few soundings shown indicate that there has been a general shoaling in the area outside the channel lines.

The 1884 survey covers the area of the present survey on a scale of 1:20,000. The Intracoastal Waterway, which follows the channel of the North River, has been deepened by dredging subsequent to the above survey. Soundings outside the channel areas and in the tributaries indicate a general shoaling of 1 to 2 feet since the above survey was made. Because the present survey adequately covers the area under consideration on a larger scale and with a close development, H-5900 (1935) should supersede the above surveys for future charting.

8. Comparison with Chart 1228 (New Print dated Dec. 12, 1935).

a. Hydrography.

Within the area of the present survey the chart is based on the surveys discussed in the foregoing paragraph, as well as the following:

(1) The detached 5 foot spot charted in latitude 36°18.5', longitude 75°58.4', is derived from an Engineer's survey in 1916 (blue print 16641). The present survey shows a general shoaling in this area, having depths of 5 to 6 feet over an even sticky bottom. The detached 5 foot spot should no longer be charted.

(2) Large sections of the channel in the North River have been deepened by dredging. The channel limits are shown on blue prints 26542 and 26543 of 1933.

(3) The charted note referring to bush stakes comes from Lighthouse Notice to Mariners 13 of 1926. The Descriptive Report mentions the existence of bush stakes in this area and the note should be retained on the chart.

b. Controlling Depth.

A controlling depth of "11 feet December 1935" for this section of the Intracoastal Waterways is shown by a note on the chart from Chart letter 1035 of 1935. The present survey is in

agreement with this controlling depth.

c. Aids to Navigation.

The beacons, daymarks and buoys shown on the above chart are in agreement with the locations given on the present survey.

9. Field Plotting.

The protracting was accurate and the field plotting in general exceptionally well done. Some minor details from the topographic sheets and from notes in the sounding records were added to the sheet by the verifier.

10. Additional Field Work Recommended.

The survey is very satisfactory and no further work is required.

11. Superseding Old Surveys.

Within the area covered the present survey supersedes the following surveys for charting purposes:

H-230 (1850) in part.
H-1579c (1884) in part.

12. Reviewed by - R. J. Christman, March 23, 1936.

Inspected by - A. L. Shalowitz.

Examined and approved:

C. K. Green
C. K. Green,
Chief, Section of Field Records.

K. T. Adams
Acting Chief, Division of Charts.

Fred. L. Peacock
Chief, Section of Field Work.

G. Rude
Chief, Division of H. & T.

20 – Rec'd 30, 1935

E.W.S.

Applied to drawing of Chart 1228 S.B.M. May 1936

Applied to Chart 830, R.L.J. July 27, 1937