

5902

U. S. COAST & GEODETIC SURVEY
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NOV 16 1935

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Form 504
Ed. June, 1923

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

State: North Carolina

DESCRIPTIVE REPORT

~~X Hydrographic~~ } ⁵¹⁰² Sheet No. 8.
Hydrographic

LOCALITY

Albemarle Sound

~~Entrance to~~ North River. to Powell Pt

1935

CHIEF OF PARTY

Raymond P. Eymann

5902

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

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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. 8.
2106
Dia 1229
REGISTER NO.

State North Carolina

General locality Albemarle Sound

Locality ~~Vicinity of entrance to North River to Powell Pt.~~

Scale 1-10,000 Date of survey March - April, 1935

Vessel "Billie Bay", "Little Pat", and skiff (M.V. Natoma)

Chief of Party Raymond P. Eyman

Surveyed by M.O. Witherbee, E.S. Averell.

Protracted by John C. Bull

Soundings penciled by John C. Bull

Soundings in ~~fathoms~~ feet

Plane of reference M.L.W.

Subdivision of wire dragged areas by - - -

Inked by George F. Jordan

Verified by George F. Jordan

Instructions dated Aug. 31, 1934, 19

Remarks: _____

Descriptive Report to accompany
Hydrographic Sheet #8

Instructions

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

Scale and Limits

The scale of the sheet is 1-10,000. The sheet covers the area adjacent to the shoreline eastward and southward from the entrance to North River to Powell Point and from the shoreline out to about the 12 ft. curve, a distance of about 1 mile. It joins sheet #7 on the north and is the last sheet in this area on this project.

Survey Methods

Standard Coast Survey methods were used with the depths being obtained with the hand lead line and small boats or a skiff; positions were determined by sextant fixes on signals located by topography or triangulation. In very shoal water a pole was used for measuring the depths.

The northern third of the sheet was covered by running the lines parallel to the outside channel lines and spaced about 100 meters apart. The southern 2/3 was covered by running the lines normal to the shore and spaced about 250 meters.

Dangers

This sheet is really supplemental to the work done in 1915 on sheets 3772 and #3732, and carries the work in to the beach.

In this area it is seen that it is dangerous for any except very shallow draft boats to approach the shoreline beyond the 2 fathom curve, as the shoal water with a number of spots with only 1 and 2 ft. of water rises very abruptly inside this curve. Shoal soundings surrounded by deeper water are to be found as follows:

Sounding.	Lat.	Long.	
2 ft.	36-08.4	75-52.5	
1 "	-08.1	-52.4	
1 "	-07.0	-51.8	
2 "	-05.4	-50.9	
1 "	-05.1	-50.2	} (continues SE about 550 meters with depths of 1 and 2 ft.)
1 "	-04.2	-48.8	
1 "	-04.1	-48.2	
1 "	-04.1	-48.2	

Channels

There are no channels on this sheet as such. Clear water is to be found outside of the 12 ft. curve, and small boats with not over 2 ft. draft can find clear water between the shoals mentioned above and the beach, but with no special advantage as there are numerous fish stakes and other obstructions.

Anchorage

There is no anchorage on this sheet other than would be afforded from the lee of the land, and small craft can find better shelter with only short runs from this area.

Comparison with previous surveys

Hydrographic Sheet #8

Comparison with previous surveys

This sheet joins with the 1915 work shown on sheets #3732 and 3772. The agreement between the two sheets is very good, except for evidence of some change in the neighborhood of Powell Pt. in the shifting of shoals.

New Names

There are no new names appearing on this sheet.

Statistics

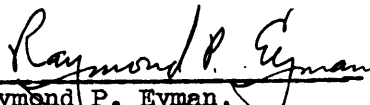
A table of statistics accompanies this report.

Tide Data

A standard automatic tide gage was maintained at Jarvisburg thruout the period during which work was done on this sheet and all soundings are reduced from that gage.

Hydrographer: Lieut. M.O. Witherbee,
E.S. Averell, Surveyor.

Respectfully submitted,


Raymond P. Eyman,
Chief of Party.

Statistics for Hydrographic Sheet #8

<u>Date</u>	<u>Day</u>	<u>Vol.</u>	<u>Boat</u>	<u>Miles</u>	<u>Soundings</u>	<u>Positions</u>
3-27-35	a	1	B.R.	15.9	392	77
4- 2-35		1	L.P.	18.6	658	130
4- 5-35		1	"	24.7	742	141
4-8- 35		2	skf.	7.3	283	45
4-10-35		2	L.P.	7.3	440	67
4-11-35		2	skf.	10.1	449	93
<hr/>						
Total	6	2		83.9	2964	553

Remarks

Decisions

	Remarks	Decisions
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GEOGRAPHIC NAMES

Survey No. H - 5902

Name on Survey	On Chart No.		On previous survey No.		On U. S. quadrangle Maps	From local information	On local Maps	P. O. Guide or Map	Rand McNally Atlas	U. S. Light List	
	A	B	C	D	E	F	G	H	K		
<u>Albemarle Sound</u> ✓	1228 1229	292	-					-			1
<u>North River</u> ✓	1228 1229	292	-					✓			2
<u>Powell Pt.</u> ✓	1229	292	-					✓			3
											4
<i>Names approved Dec. 12 1930</i>										5	
<i>St. Ignace</i>										6	
											7
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											27

Smooth Sheet 1

Boat Sheet 1

Sounding Records 2 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 _____

VERIFIERS REPORT ON H 5902 (1935)

1. Survey H 5901 (1935) joins this survey on the north, and has not been verified; so the junction of the two sheets will be considered in the report of that sheet. No other contemporary survey junction is made.
2. Control is obtained from the topographic surveys 6368(a) and (b), 1935. Air photos have been made of the area herein contained, but have not been compiled.
3. The field records conform to the requirements of General Instructions.
4. The 6 ft and 12 ft curves are readily drawn. The zero-curve is generally defined by transfer from the topographic survey.
5. The field plotting was found to be complete.
6. No additional plotting or changes were made.
7. Remarks-
 - a. The protracting and position numbers are satisfactory.
 - b. A number of penciled lines connecting the positions indented the paper excessively.
 - c. The soundings were evidently made with a soft pencil, resulting in a slight smudging and faint figures.
 - d. Bottom characteristics are well chosen and executed.
 - e. Position 27d (gr) is a single fix on an old pier, and plots 35 meters north of the topographic location. Considering the great width of the pier as outlined by the hydrographic fixes, and the inadequate description of the pier, recommend the topographic location as shown. Air photos of this section have not been compiled, and no comparison could be made with the aerial survey.
 - f. The Descriptive Report under "Dangers" does not give the position numbers and sounding referred to.
 - g. A few explanatory terms and shore line detail were transferred from the topographic survey.

Respectfully submitted,


George F. Jordan

Feb. 7, 1936

Field Records Section (Charts)

HYDROGRAPHIC SHEET NO. **5902**..

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

Number of positions on sheet	553 ..
Number of positions checked	..55 ..
Number of positions revised	...0 ..
Number of soundings recorded	2904 ..
Number of soundings revised	...5 ..
Number of signals erroneously plotted or transferred	...0 ..

Date:

Verification by **George F. Jordan**

Time: **29½**

Review by

Time:

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
2 volumes of sounding records for

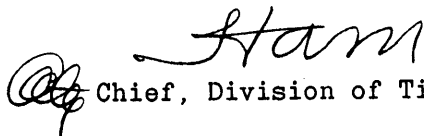
HYDROGRAPHIC SHEET 5902

Locality North River to Powell Pt., Albemarle Sound, N. C.

Chief of Party: R. P. Eymann in 1935
Plane of reference is mean low water reading
0.8 ft. on tide staff at Jarvisburg Landing
5.0 ft. below B.M. 1

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

Condition of records satisfactory except as noted below:


Chief, Division of Tides and Currents.

Section of Field Records

REVIEW OF HYDROGRAPHIC SURVEY NO. 5902 (1935) FIELD NO. 8

North River to Powell Point
Surveyed in Mar. - April 1935
Instructions dated August 31, 1934, H. T. 189

Hand Lead and Pole Soundings

3 Point fixes on shore signals.

Chief of Party - R. P. Eyman.
Surveyed by - M. O. Witherbee, E. S. Averell.
Protracted by - J. C. Bull, Aid.
Soundings penciled by - J. C. Bull, Aid.
Verified and inked by - Geo. F. Jordan.

1. Condition of Records.

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

The geographic datum was not given with the reference station. This was added in the office.

The Descriptive Report is brief, but satisfactorily covers all matters of importance.

2. Compliance with Instructions for the Project.

The plan, character and extent of the survey satisfy the instructions for the project, except that no system of cross lines was run as a check on the hydrography.

3. Shoreline and Signals.

The shoreline and topographic signals on this sheet originate with plane table surveys T-6368a & b (1935).

4. Sounding Line Crossings.

No regular cross lines were run. In the few cases where such crossings were obtained incidental to the development of shoals and bars along the 6 ft. curve they are in good agreement, considering the abruptness of the shoals along this curve.

5. Depth Curves.

Within the limits of the survey the usual depth curves may be satisfactorily drawn including portions of the low water curve.

6. Junctions with Contemporary Surveys.

The junction with H-5901 (1935) will be considered in the review of that sheet.

7. Comparison with Prior Surveys.

- a. H-220 (1849) H-257 (1851)
H-230 (1850)

The information on these surveys is insufficient to form a good basis for comparison with the present survey. They consist generally of widely spaced sounding lines run in random directions. Considerable change, however, is indicated in the portions of the shoreline and in some of the depth curves. Because of the lapse of time since these surveys were made, as well as their incomplete nature they should be superseded by the present survey in future charting.

- b. H-3732 (1915) H-3772 (1915).

These sheets overlap the present survey in only a few places. In general the agreement is good.

8. Comparison with Chart 1229 (New Print dated July 29, 1935)Hydrography.

Soundings shown on the chart within the limits of the present survey originate with surveys discussed in the preceding paragraphs and contain no additional information that needs consideration in this review.

9. Field Plotting.

The field plotting was complete and satisfactory and conforms to the requirements of the Hydrographic Manual.

Uncertainty surrounds the position and shape of an old pier in latitude $36^{\circ}05.5'$, longitude $75^{\circ}50'$, the hydrographic sextant fixes disagreeing with the topographic location. Adjustment should be deferred pending the compilation of the air photos of this section.

10. Additional Field Work Recommended.

No additional field work is required.

11. Note to Compiler.

A discrepancy exists between the topographic location of an old pier in latitude $36^{\circ}05.5'$, longitude $75^{\circ}50.0'$, and the hydrographic location (pos. 27 and 28d). This will be brought into agreement when the air photos of the area are received.

Air Photo in agreement with hydro. location. Pier now correctly shown on hydro. and topo. sheets.
4-10-35.

12. Superseding Old Surveys.

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

H-220	(1849)	in part
H-230	(1850)	" "
H-257	(1851)	" "
H-3732	(1915)	" "
H-3772	(1915)	" "

13. Reviewed by - C. A. Egner, Feb. 14, 1936.

Inspected by - A. L. Shalowitz.

Examined and approved:

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

L. O. Polbut
Chief, Division of Charts.

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

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

20 - Dec. 30 - 35

Applied to drawing of chart 1228

S.D.

S.B.M., May, 1936

Applied to drawing of chart 1229

S.B.M., May, 1936