

5903

U. S. COAST & GEODETIC SURVEY
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Form 504
Rev. Dec. 1933
DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY
R. S. PATTON, DIRECTOR

DESCRIPTIVE REPORT

~~Topographic~~ } ⁵⁹⁰³
Hydrographic } Sheet No. 16

State North Carolina

LOCALITY

~~Pamlico Sound - Bay River~~
Bonner Bay to ^{Smith Creek} ~~Lambert Point.~~

1935

CHIEF OF PARTY

John A. Bond

5903

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

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HYDROGRAPHIC TITLE SHEET
5

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. 16
Dia 1231-2
REGISTER NO. 5903

State North Carolina

General locality Bay River - ~~Pamlico Sound~~

Locality Bonner Bay to ~~Hambert Point~~ *Smith Creek*

Scale 1:10,000 Date of survey May - June, 1935

Vessel MIKAWA

Chief of Party John A. Bond

Surveyed by T. A. Rydingsvard

Protracted by T. A. Rydingsvard

Soundings penciled by T. A. Rydingsvard

Soundings in ~~fathoms~~ feet

Plane of reference M.L.W.

Subdivision of wire dragged areas by _____

Inked by C.R. Bush, Jr.

Verified by " " " "

Instructions dated August 31, 19 34

Remarks: _____

U. S. GOVERNMENT PRINTING OFFICE

Acc. No.
NOV 9 1935
U. S. COAST & GEODETIC SURVEY
LIBRARY AND ARCHIVES

DESCRIPTIVE REPORT

To Accompany Hydrographic Sheet No. 16

Bay River - Bonner Bay to Lambert Point.

DATE OF INSTRUCTIONS - August 31, 1934

Project HT-197

LIMITS

The sheet covers the central portion of Bay River from Bonner Bay westward to Lambert Point and includes Spring and Vandemere Creeks. The sheet is joined on the east by sheet 15, executed this year by the party of J. C. Bose. It is joined on the west by sheet 17, surveyed this year by the MIKAWA.

SURVEY METHODS

Standard Coast Survey methods of hand lead soundings and sextant fixes were used throughout. Close to the shoreline and in the extremities of the small tributaries sextant fixes were occasionally impractical and the positions were therefor plotted on the boat sheet in reference to nearby topographic detail, appropriate notes being made in the sounding records.

All soundings on the sheet were obtained from a 24 foot skiff powered by a Johnson 9 H.P. outboard motor. The leadline was Samson mahogany tiller rope graduated in feet and fathoms, used with an 8 pound lead. The leadline held its length remarkably well and no leadline corrections were necessary throughout any of the work.

DISCREPANCIES

No discrepancies are known to exist. Errors in the sounding records, principally in recording of angles and fixes, have been adjusted during the smooth plotting and noted in red in the sounding records.

DANGERS

No dangers are known to exist which would obstruct small boat navigation in the mid-stream channels of the river or tributaries.

COMPARISON WITH PREVIOUS SURVEYS

In general the depths developed by the new survey appear to be slightly shoaler than those shown on chart 1231.

LANDMARKS FOR CHARTS

"Landmarks for Charts" will be made the subject of a separate report to be submitted for the entire project.

SHORELINE ON SMOOTH SHEET

Shoreline as shown on the sheet was obtained from the completed air-photo sheets of the area compiled by Lieutenant S. B. Grenell, and was transferred to the smooth sheet by means of a new-type projector.

The shoreline had previously been run and signals located by standard topographic methods on aluminum mounted sheets by the party of J. C. Bose. Minor differences between the topographic sheets and the air-photo sheets were adjusted before the transfer was made. As inked on the smooth sheet the shoreline now agrees accurately with that shown on the air-photo sheets.

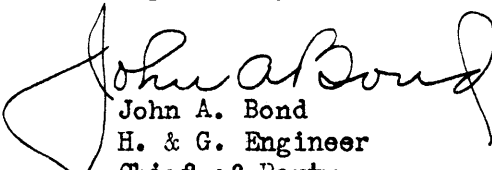
GEOGRAPHIC NAMES

A list of geographic names has been compiled by the photo compilation party of Lieutenant S. B. Grenell.

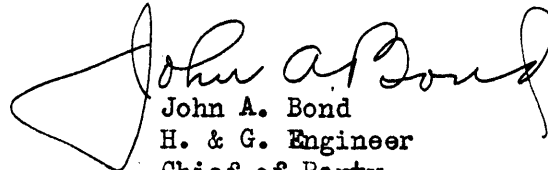
Submitted by,

T. A. Rydingsvard
T. A. Rydingsvard
Surveyor, C. & G. S.

Approved by:


John A. Bond
H. & G. Engineer
Chief of Party

Smooth Sheet No. 16 was plotted under the immediate supervision of the Chief of Party. The sheet and accompanying records have been inspected and are approved.



John A. Bond
H. & G. Engineer
Chief of Party

STATISTICS FOR HYDRO SHEET 16.

Date	Day Letter	Volume	Statute Miles	Soundings	Positions
May 20	a	1	14.7	667	121
21	b	1 & 2	25.4	893	210
22	c	2	35.5	1367	245
23	d	2 & 3	20.5	913	165
24	e	3	9.2	353	79
27	f	3 & 4	20.5	944	191
28	g	4 & 5	21.4	814	201
29	h	5	14.0	552	127
June 6	j	5	4.0	169	34
7	k	5	9.4	287	91
19	l	5	1.3	55	11
20	m	5	<u>0.3</u>	<u>12</u>	<u>3</u>
			176.2	7026	1478

HYDROGRAPHIC SURVEY NO. 5903

Smooth Sheet 1

Boat Sheet 1

Sounding Records 5 Vols. _____

Descriptive Report yes

Title Sheet yes

List of Signals yes

Landmarks for Charts (Form 567) No 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 5903...

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

Number of positions on sheet	1470..
Number of positions checked	...35
Number of positions revised1.
Number of soundings recorded	.7026.
Number of soundings revised	...75
Number of signals erroneously plotted or transferred	—

Date:

Verification ^{B. J. King} by *Chas R Bush Jr.*

Time: 2 days 1 1/2 hrs

Review by *S. Priggen*

Time: 13 1/2 hrs.

TIDE NOTE FOR HYDROGRAPHIC SHEET

February 13, 1936

Division of Hydrography and Topography:

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

Tide Reducers are approved in
5 volumes of sounding records for

HYDROGRAPHIC SHEET 5903

Locality Bonner Bay to Smith Creek, Pamlico Sound, N. C.

Chief of Party: John A. Bond in 1935
Plane of reference is mean low water reading
4.8 ft. on tide staff at Vandemere
4.9 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:



Chief, Division of Tides and Currents.

GEOGRAPHIC NAMES

Survey No. H 5903

Name on Survey	Source										
	A	B	C	D	E	F	G	H	K		
<u>Vandemere Cr.</u> ✓											1
<u>Smith Cr.</u> ✓											2
<u>Bell Pt.</u> ✓									✓		3
<u>Bay River</u> ✓									✓		4
<u>Ball Cr.</u> ✓											5
<u>Bonner Bay</u> ✓											6
<u>Spring Cr.</u> ✓											7
<u>VANDEMERE</u> ✓						✓					8
											9
<i>Names approved Dec. 16 1935</i>										10	
<i>O. E. Egan</i>										11	
											12
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March 14, 1936.

Report on H-5903.

The records conform to the General Instructions. ✓

The usual depth curves could be completely drawn. ✓

The field plotting was complete and accurate. ✓

The undersigned had to ink in a part of the shore line which was omitted by the field party. The records show positions taken off a New Dock at Vandemere. No such dock was shown on the smooth sheet. An inspection of the Air Photo Compilation showed what might be a dock to the North of the group of docks at Vandemere. Since it was so far removed it was not considered to be the New Dock mentioned. As the depth curve would naturally show approximately a 4ft. depth at this dock, the recorded sounding was omitted.

The junction with H-5926 on the North was very good. The junction with H-5904 on the West will be made by the verifier of that sheet when it is complete. ✓

Comparison was made with the celuloid of Air Photo Compilations T-5661, 5662 and 5663. The topography was in good agreement. The control sheets from which the signals were taken have not yet been received in the office. *Have been received, T-6403 & (1935) and T-6404 a & b (1935)* ✓

The work is considered excellent and complete. ✓

Chas. R. Bush Jr.

The new dock at Vandemere was sketched on the sheet from the sounding record at the request of the Reviewer. There is no indication of this dock on the photographs and so no data is available as to either its size or location. The enlargement of the docks is only approximate as a 5 to 1 enlargement of so small an object as these docks is subject to error.

Chas. R. Bush Jr.

Section of Field Records

REVIEW OF HYDROGRAPHIC SURVEY NO. 5903 (1935) FIELD NO. 16

Bonner Bay to Smith Creek, Bay River, North Carolina
Surveyed in May - June 1935
Instructions dated August 31, 1934 (NATOMA)

Hand Lead Soundings.

3 Point Fixes on Shore Signals.

Chief of Party - J. A. Bond.
Surveyed by - T. A. Rydingsvard.
Protracted by - T. A. Rydingsvard.
Soundings penciled by - T. A. Rydingsvard.
Verified and inked by - C. R. Bush, Jr.

1. Condition of Records.

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

- a. The figures representing minutes of longitude at the ends of projection lines were shown with the lines running between the digits. The accepted practice is to show the minute figures on the right side of these lines.
- b. A new dock at Vandemere is shown on a sketch in Sounding Volume 5, page 59, but was not shown on the smooth sheet. This feature was added in the office.

The Descriptive Report is clear and comprehensive and satisfactorily covers all items of importance, except that no information regarding the wharves at Vandemere was given. These were sketched in sounding volume 5, and include a dock noted "New Dock", which was not shown on the air photo compilation, T-5562 (1934) nor on T-6404a (1935). Since no dimensions were shown on the sketch, the position and size of this dock is only approximate on the smooth sheet. This matter has been referred to the field party.

See Letter
May 4, 1936
by J. A. Bond
attached to
Des. Rept.
H-5903

2. Compliance with Instructions for the Project.

This survey complies with the instructions for the project.

3. Shoreline and Signals.

The shoreline originates with Air Photo Compilations T-5661 (1934), T-5662 (1934) and T-5663 (1934). The topographic signals are from Graphic Control Sheets, T-6403b (1935), T-6404a (1935), and T-6404b (1935).

4. Sounding Line Crossings.

The cross lines as well as the adjacent parallel lines are in good agreement.

5. Depth Curves.

The usual depth curves can be satisfactorily drawn.

6. Junctions with Contemporary Surveys.

The junction with H-5926 (1935) on the northeast is satisfactory.

The junction with H-5904 (1935) on the west is satisfactory.

7. Comparison with Prior Survey.H-1011 (1869).

This survey, on a scale of 1:20,000, covers the entire area of the present survey and is the only prior survey by this Bureau. Comparison shows that in some areas general shoalings which vary from 1/2 to 2 feet have occurred. This is particularly marked in the mouth of South Creek, where a general shoaling has resulted in moving the 6 foot curve approximately 250 meters southeastward. Practically all the creeks show general shoalings. There are no shoals or features worth mentioning on the old work. Because of the changes which have occurred in some of the area, the present survey, which is more detailed and on a larger scale, should supersede the old work for charting purposes.

8. Comparison with Chart No. 538 (New Print dated Feb. 15, 1936),
and Chart No. 1231 (New Print dated Dec. 16, 1935).a. Hydrography.

Within the area of the present survey the charts are based on H-1011 (1869), discussed in the foregoing paragraph, and contain no additional information that needs consideration in this review.

b. Aids to Navigation.

Red Buoy "N2" was located in practically the same position as charted.

The lighted Bn. off Bell Pt. (unnumbered), was located by triangulation approximately 100 meters north of the charted position which originates with Lighthouse Notice to Mariners No. 23 of 1916.

The present positions of these aids correctly mark the features intended. Subsequent to the present survey, the number of the red buoy has been changed to "N4" and the beacon was given number "5". (Lighthouse Notice to Mariners No. 1, 1936).

9. Field Plotting.

The plotting of soundings and the protracting of positions were well done.

10. Additional Field Work Recommended.

This survey is complete and no additional work is required.

11. Note to Compiler.

The compiler's attention is called to a new dock at Vandemere shown on H-5903 (1935). This dock is not shown on T-5562 (1934) on T-6404a (1935). (See par. 1b, this review).

12. Superseding Old Surveys.

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

H-1011 (1869) in part.

13. Reviewed by - G. Risegari, April 10, 1936.

Inspected by - R. L. Johnston.

Examined and approved:

C. K. Green

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

L. O. Tolbut

Chief, Division of Charts.

Fred. L. Peacock

Chief, Section of Field Work.

G. Wade

Chief, Division of H. & T.

CKG
KTB
C

82-DRM

April 25, 1936.

To: Lieutenant John A. Bond,
U. S. Coast and Geodetic Survey,
Launch MIKAWE,
Box 1570,
Norfolk, Virginia.

From: The Director,
U. S. Coast and Geodetic Survey.

Subject: H 5903 - Docks at Vandemere, Bay River, North Carolina.

Enclosed is photostat of a section of your survey H 5903 (1935) showing the docks at Vandemere. The sub-sketch was added to the smooth sheet in this office.

The dock marked "new dock" is from a sketch by T. A. Rydingsvard in volume 5 of the sounding records, and is referred to as Lupton Fish Dock. Measured distances to the dock are not shown in the records and its location is therefore only approximate on the sub-sketch. Confirmation of the relative location as shown on the sub-sketch is desired.

(Signed) J. J. ...

Acting Director.

Inclosure.

80

POST-OFFICE ADDRESS: Box 1570, Norfolk, Virginia

TELEGRAPH ADDRESS:

EXPRESS ADDRESS:

1936 MAY - 5 - AM 8:30
C.K.G.
A.F.S.

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

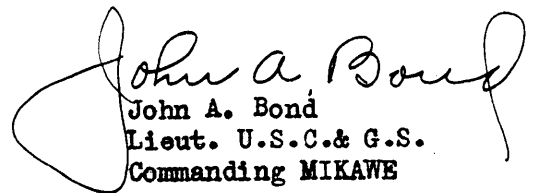
May 4, 1936

To: The Director
U. S. Coast and Geodetic Survey
Washington, D. C.

From: Commanding Officer
U.S.C.& G.S.S. MIKAWA

Subject: H 5903 - Docks at Vandemere, Bay River, North Carolina.

In reply to your letter of April 25, 1936 (82 DRM) relative to the location of the new dock at Vandemere, N. C. as shown on sheet H 5903, I would advise you that inquiry among all members of my party who are familiar with conditions in that locality would seem to indicate that the dock is correctly located on the sub plan of H 5903.


John A. Bond
Lieut. U.S.C.& G.S.
Commanding MIKAWA

Remarks

Decisions

	Remarks	Decisions
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20 - ~~Apr. 30~~ - 35

~~1937~~

Applied in part to Chart 583. May 6, 1937 H. MacEwan