

5999

U. S. COAST & GEODETIC SURVEY  
LIBRARY AND ARCHIVES

APR 29 1936

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Form 504  
Rev. April 1935  
DEPARTMENT OF COMMERCE  
U. S. COAST AND GEODETIC SURVEY

## DESCRIPTIVE REPORT

~~Topographic~~ } Sheet No. 24  
Hydrographic }

State North Carolina

LOCALITY

NEUSE RIVER

Vicinity of New Bern

1936

CHIEF OF PARTY

John A. Bond

U. S. GOVERNMENT PRINTING OFFICE

DEPARTMENT OF COMMERCE  
U. S. COAST AND GEODETIC SURVEY

HYDROGRAPHIC TITLE SHEET

U. S. COAST & GEODETIC SURVEY LIBRARY AND ARCHIVES	REG. NO.
APR 29 1936	
Acc. No. _____	

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. 24

REGISTER NO. 5939

State North Carolina

General locality NEUSE RIVER <sup>10</sup> — TRENT RIVER

Locality Vic. of New Bern, N. C. Vicinity of New Bern

Scale 1:5,000 and 1:10,000 Date of survey January, 19 36

Vessel MIKAWA

Chief of Party John A. Bond

Surveyed by George W. Lovesee

Protracted by D. M. Watt

Soundings penciled by John C. Bull

Soundings in ~~fathoms~~ feet

Plane of reference M.L.W.

Subdivision of wire dragged areas by \_\_\_\_\_

Inked by G. C. McElmon

Verified by G. C. McElmon

Instructions dated August 31, 1934

Remarks: \_\_\_\_\_

## DESCRIPTIVE REPORT

To Accompany Hydrographic Sheet No. 24

NEUSE RIVER - Vicinity of New Bern, N. C.

DATE OF INSTRUCTIONS - August 31, 1934

Project HT-197

### LIMITS

The smooth sheet is sub-divided into three plans the largest of which covers the New Bern waterfront and the mouth of the Trent River. The section covered by this plan was surveyed on the scale of 1:5,000. The other plans on the sheet, surveyed on the scale of 1:10,000 cover the Neuse River north of the railroad bridge, and the Trent River south of its mouth. The sheet is joined on the southwest by sheet 23, surveyed this season by the party of the MIKAWA ✓

### SURVEY METHODS

Standard Coast Survey methods of hand lead soundings and sextant fixes were used throughout. 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 are necessary throughout any of the work. ✓

The survey was made by Lieutenant (j.g.) G. W. Lovesee using a 24 foot skiff equipped with sounding chair and plotting table, powered by a Johnson 9 H.P. outboard motor. ✓

### DANGERS

No dangers are known to exist which would obstruct small boat navigation in the buoyed channels of the river. Shoal areas, presumably caused by dredge dumpings are found adjacent to the channel; their limits are clearly defined on the survey. ✓

### 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 colored pencil in the sounding records. ✓

### SHOAL OFF COAST GUARD DOCK

The Coast Guard Cutter PAMLICO having previously grounded on a spot about 60 meters northeast of their dock (the dock shown on the sheet 100 meters north of signal Bow) left a stake to mark the spot. A close investigation of the area was made during the survey, the least depth found reducing to 6 feet. The leadsman states that the bottom at this spot was hard sand or shell with no indication of the shoal being formed by a submerged object. Many more soundings were ✓

obtained in the vicinity which were not recorded. It is believed certain that the least depth is as indicated.

#### CHANNELS

A 12 foot channel extends from the southern limits of the sheet northward along the waterfront and through the draw openings of the highway and railroad bridges, shoaling to 8 feet in the vicinity of beacon No. 1, 1932. This channel also branches to the westward at the can buoy 250 meters south of Station New Bern, 1932, and continues to the southwest through the draw openings of the Trent River railroad and highway bridges.

#### COMPARISON WITH PREVIOUS SURVEYS

In comparison with soundings shown on chart 538 general river depths appear to <sup>have</sup> remained unchanged, the same shoal areas being common to the chart and the present survey although developed in much more detail on the latter.

#### SHORELINE ON SMOOTH SHEET

All shoreline shown on the smooth sheet was carefully transferred from aluminum mounted sheets surveyed this season by standard topographic methods.

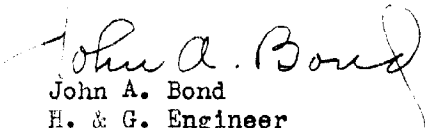
#### LANDMARKS FOR CHARTS

"Landmarks for Charts" and "Non-floating Aids to Navigation" have been made the subjects of reports submitted under separate cover.

Submitted by,

George W. Lovesee  
Jr. H. & G. Engr.

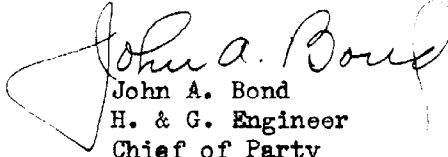
Approved by,

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

LIST OF STATISTICS - SHEET 24

Date	Day Letter	Volume	Miles (Statute)	Soundings	Positions
Jan. 6	a	1	6.9	312	55
7	b	1 & 2	24.2	1447	243
9	c	2	8.0	535	102
13	d	2	4.0	227	195
15	e	2	1.5	107	48
16	f	2 & 3	11.3	617	121
17	g	3	32.0	1400	253
20	h	3 & 4	15.2	684	138
21	j	4	21.8	996	211
22	k	4 & 5	25.8	1250	285
24	l	5	<u>4.3</u>	<u>292</u>	<u>75</u>
			155.0	7867	1726

Smooth Sheet No. 24 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

HYDROGRAPHIC SURVEY NO. H5999

Smooth Sheet Yes

Boat Sheet 1

Sounding Records 5 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. **H5999**

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

Number of positions on sheet	172.6
Number of positions checked	18.
Number of positions revised	None
Number of soundings recorded	2867
Number of soundings revised	92.
Number of signals erroneously plotted or transferred	None

Date: 22 June, 1936

Verification by G. C. McGlosson

Review by Harold W. Murray

Time: 6 days 3 hr.

Time:



Remarks

Decisions

1		
2		
3		
4		
5	has "BERNE"	<u>BERN</u>
6	has "Lanson's"	<u>LANSON</u>
7	has "BRICE'S"	<u>BRICE</u>
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# GEOGRAPHIC NAMES

Survey No. H5999

Name on Survey	Sources									
	A	B	C	D	E	F	G	H		
	<i>On Chart No. 538</i> <i>On previous survey No. 11031</i> <i>On U. S. Quadrangle Maps index</i> <i>From local information</i> <i>On Maps USBGN</i> <i>P. O. Guide or Map</i> <i>Rand McNally Atlas</i> <i>1928 CP864</i> <i>U.S. Coast and Geodetic Survey</i> <i>KVSCP</i>									
<u>Neuse River</u> ✓	*	✓	✓	✓			✓			1
<u>Trent River</u>	*	✓		✓						2
<del>Bridge Creek</del>										3
<u>Bridgeton</u> ✓	*			✓			✓			4
<u>New Bern</u> ✓	*	✓		✓	✓		✓		✓	5
<u>Lawson Creek</u> ✓	*	✓		✓						6
<u>Brice Creek</u> *	*			✓				✓		7
										8
										9
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Names underlined in red approved  
 by *[Signature]* on 5/17/36

# MEMORANDUM

## IMMEDIATE ATTENTION

SURVEY  
 DESCRIPTIVE REPORT  
~~PHOTOSTAT/OF~~

No. H 5999  
~~#N#F#~~

received Apr. 29, 1936  
 registered May 11, 1936  
 verified  
 reviewed  
 approved

This is forwarded in order that your attention may be directed to the matters as indicated below. Please initial in column 3 as an acknowledgement that your attention has been thus directed. The complete original records are available if desired. If you cannot give this your immediate attention, please initial, note, and forward to the next section marked, calling for the records at your convenience.

ROUTE		Initial	Attention called to
20			
22			
24			
25			
26			
30			
40			
62			
63			
82			
83			
88			
90			

RETURN TO

82	
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C. K. Green *May 12-36*

240

TIDE NOTE FOR HYDROGRAPHIC SHEET

June 3, 1936.

Division of Hydrography and Topography:

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

Tide Reducers are approved in  
5 volumes of sounding records for

HYDROGRAPHIC SHEET 5999

Locality Vicinity of New Bern, Neuse River, N. C.

Chief of Party: John A. Bond in 1935-36  
Plane of reference is mean low water reading  
1.8 ft. on tide staff at New Bern  
5.1 ft. below B.M. 1

There is practically no periodic tide and the plane of reference was  
taken 1/2 foot below mean water level.

Condition of records satisfactory except as noted below:

*Paul Schuman*  
Acting Chief, Division of Tides and Currents.

22 June 1936.

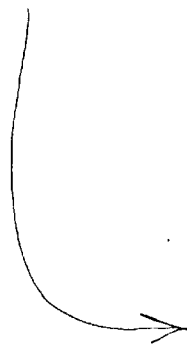
Report on H 5999  
Verifying and Sinking

1. The records conform to the requirements of the General Instructions.
2. The usual depth curves can be completely drawn within the limits of the sheet. The one half foot was added to the six and twelve foot soundings when justified in order to smooth the one and two fathom curves.
3. The field plotting was completed to the extent prescribed in the Hydrographic Manual.
4. The officer draftsman had to do over part of drafting done by field party as follows:
  - (a) 92 soundings revised.
  - (b) ~~92~~ 9 locations of piles had to be revised or transferred from the topographic sheets.

The tide gage location (lat.  $35^{\circ}06'4$ , long.  $77^{\circ}02'5$ ) was shown on the topo on the eastern side of the slip. The neighbor who was a member of the field party recalls that the gage was actually located on the western side of the slip. The topo sheet has been changed to agree with the hydro.

H. E. W. M.

7/13/36



- (c) 22 trees were relocated or transferred from the topographic sheets.
- (d) 2 docks and one stump had to be transferred from the topographic sheets.
- (e) 2 Marine railroads and one wreck were transferred from the topographic sheets.
- (f) The names of four topographic signals had to be changed on the smooth sheet to agree with ~~top~~ the names on the topographic sheets.
- (g) The tide gauge as shown on the smooth sheet and topographic sheet do not agree. The location on the Hydrographic sheet is correct.  
See note on opposite page.
- (h) Buoys S-3, S-4, and S-6 had to be transferred from the topographic sheet.
5. A study of the junctions with contemporary adjacent sheets will be made at a later date as they have not been verified and inked. Questions made at time of review.
- H.M.M.

6. The soundings and signals are taken from the Aluminium mounted topographic sheets T 6477 and T 6478.
7. In volume 4, positions 58-61; inclusions were not plotted because they could not be found on the boat sheet nor smooth sheet.
8. The aids to navigation were located as follows:
- (a) All beacons were located by topography <sup>were</sup> and transferred to the smooth sheet.
  - (b) The buoy S in lat  $35^{\circ} 08.4'$  long,  $77^{\circ} 03.05'$  was located by hydrography, and not located by topography.
  - (c) Buoys S-2 and S-8 were located by hydrography and topography and the locations agree.
  - (d) Buoys S-3, S-6, S-4, S. C, S-5, S-7, S-6, S-2, and S-1, were located by the topographer and transferred to the smooth sheet.

Respectfully submitted,  
E. C. McGlannon



Section of Field Records

REVIEW OF HYDROGRAPHIC SURVEY NO. 5999 (1936) FIELD NO. 24

Vicinity of New Bern, Neuse River, North Carolina  
Surveyed in 1936  
Instructions dated August 31, 1934 (NATOMA)

Hand Lead Soundings.

3 Point fixes on shore signals.

Chief of Party - John A. Bond.  
Surveyed by - G. W. Lovesee.  
Protracted by - D. M. Watt.  
Soundings penciled by - J. C. Bull.  
Verified and inked by - G. C. McGlasson.

1. Condition of Records.

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

- a. A number of piles, docks, buoys, etc., located on the topographic survey and falling outside the highwater line were not shown on the smooth sheet. These were added in the office. In addition, the field party's transfer of some details such as piles were incorrect. These were corrected in the office.
- b. Positions 58 to 61j day, inclusive and accompanying soundings were not plotted on the smooth sheet nor on the boat sheet. These were plotted on the smooth sheet in the office.
- c. No duplicate of the chart forwarded to the Lighthouse Bureau for use in locating aids to navigation was received by this office.

The Descriptive Report is clear and comprehensive and satisfactorily covers all matters of importance.

2. Compliance with Instructions for the Project.

The plan, character and extent of the survey conform to the requirements of the instructions for the project.

3. Shoreline and Signals.

The shoreline and signals are from plane table surveys:

T-6477 (1935-36) and T-6478 (1935-36).

4. Sounding Line Crossings.

Such cross lines as were run, as well as those that result from the work are in good agreement with the main system of lines.

5. Depth Curves.

Within the limits of the survey, the usual depth curves may be satisfactorily drawn including portions of the low water and 6 foot curves.

6. Junctions with Contemporary Surveys.

- a. The junction on the southeastward with H-5998 (1935-36) is satisfactory.
- b. The western limits of the present survey in Neuse and Trent Rivers fall just outside the limits of Chart 538 and represent the limit of hydrography in these areas.

7. Comparison with Prior Surveys.a. H-845 (1863-64).

This survey is on a scale of 1:20,000 and covers most of the present survey in Neuse River. It is of a reconnaissance nature and the area covered was resurveyed 2 years later on a larger scale (see H-892 (1866) discussed in par. 7b of this review). The survey contains no information not adequately covered by the present survey.

b. H-892 (1866).

This 1:10,000 scale survey covers most of the present survey. Depths on the present survey are in good agreement in most areas but vary 1 to 2 feet deeper in some cases. A few areas are 4 to 8 feet deeper on the present survey. These larger differences are due to dredging operations.

8. Comparison with Chart 538 (New Print dated Feb. 15, 1936).a. Hydrography.

Information shown on the chart originates with surveys discussed in preceding paragraphs of this review and several outside sources. The latter are as follows:

- (1) The U. S. Engineers' survey of 1909 (blueprint 13707) covers the entire area of the present survey in Neuse River. Depths on the present survey are generally in good agreement although a few areas are 1 to 2 feet deeper in some cases and shoaler in others.
- (2) The Engineers' survey of 1908 - 1914 (H. R. Doc. 1453; 63-3) covers Trent River. Depths on the present survey are in good agreement in some areas but vary 1 to 11 feet deeper in the main channel.

The present survey adequately covers the information shown on the Engineers' surveys and should supersede those surveys for charting purposes.

b. Controlling Depths in Channels.

- (1) The controlling depth in the dredged channel in the vicinity of New Bern is 12 feet as of Feb. 1936. This is generally borne out by the present survey. Chart Letter 387 (1936) which is subsequent to the present survey states that the controlling depth is 12 feet as of June 1, 1936.
- (2) The charted controlling depth in the dredged channel in Neuse River extending above New Bern is 4 feet as of Feb. 1, 1936 (Chart letter 130, 1936). This information is contemporary with the present survey and although the hydrographer made no effort to develop the channel, this depth is generally borne out by the present survey.
- (3) The charted controlling depth in Trent River and extending to Pollockville (town is outside limits of chart) is 6 feet as of Feb. 1, 1936 (Chart Letter 130, 1936). Within its limits, the present survey shows a controlling depth of 7 feet.

c. Aids to Navigation.

The beacon and buoy S1 in Trent River, buoy S2 and the four beacons between lat.  $35^{\circ}06.8'$ , long.  $77^{\circ}02.1'$ , and latitude  $35^{\circ}08.7'$ , long.  $77^{\circ}03.6'$ , were located on the present survey in substantially the same positions as charted. The remaining aids were located in positions differing 60 to 110 m. from the positions charted. These aids have been charted in their present positions continuously since the 1st edition of the Chart in 1915. Exceptions to the above are the beacon in lat.  $35^{\circ}09.0'$ , long.  $77^{\circ}04.2'$ , which was located approximately 150 m. SSE of its charted position. The charted position originates with Chart Letter 161 (1915) and was spotted on a section of Chart 538. The buoy (lat.  $35^{\circ}06.5'$ , long.  $77^{\circ}02.1'$ ) was located approximately 65 m. SSW of its charted position. The charted position originates with Lighthouse Notice to Mariners 48 (1932) and is based on a single bearing and distance.

The aids as located on the present survey correctly mark the features intended, however, the following matters should be noted:

- (1) The beacon in lat.  $35^{\circ}09.0'$ , long.  $77^{\circ}04.2'$  was located on the present survey approximately 150 m. SSE of its charted position and depths on the present survey also indicate that the charted dredged channel limit is SSE

by a similar amount. The charted information originates with Chart Letter 161 (1915) and is spotted on a section of Chart 538.

- (2) In the vicinity of lat.  $35^{\circ}08.4'$ , long.  $77^{\circ}03.3'$ ; buoys S6 and S8 were located on the present survey approximately 65 m. SSE of the charted positions and depths on the present survey also indicate that the dredged channel limit is SSE by a similar amount. The source of the charted channel limit was not ascertained but it is noted that the channel was charted in its present position on the 1st edition of Chart 538 in 1915 (superseded old chart 144-2).
- (3) Buoy S5 charted in lat.  $35^{\circ}08.5'$ , long.  $77^{\circ}03.6'$  is intended to mark the western side of the dredged channel off Bachelor Creek. The present survey shows deeper water to the westward of the buoy though the depth to the eastward is in agreement with the controlling depth of 4 feet in the dredged channel (see par. 8b(2)). A photostat of a section of H-5999 has been furnished the Lighthouse Service and their attention called to conditions in the vicinity of buoy S5.
- (4) The present survey shows a buoy S in lat.  $35^{\circ}08.4'$ , long.  $77^{\circ}03.0'$ , and another, S2 in lat.  $35^{\circ}04.5'$ , longitude  $77^{\circ}04.0'$  which are not charted. Buoy S2 is listed in the 1936 Local Light and Buoy List.
- (5) A note inked on the smooth sheet by the field party states that the beacon in lat.  $35^{\circ}08.7'$ , long.  $77^{\circ}03.6'$  is "unlighted". The beacon is listed in the 1936 Local Light and Buoy List as a lighted beacon and a telephone conversation held with the Lighthouse Bureau reveals that the light has not been discontinued. The light as observed by the field party was probably temporarily out of order.

9. Field Plotting.

Field protracting and plotting were satisfactory and conform to the requirements of the Hydrographic Manual.

10. Additional Field Work Recommended.

This is a well executed survey and no additional field work is required.

11. Note to Compiler.

The compiler's attention is called to several matters discussed in paragraph 8c (1), (2), (4) and (5) of this review.

12. Superseding Previous Surveys.

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

H-845 (1863-64)	in part.
H-892 (1866)	" "

13. Reviewed by Harold W. Murray, July 11, 1936.

Inspected by - R. J. Christman, July 28, 1936.

Examined and approved:

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

*L. O. Robert*  
Chief, Division of Charts.

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

*G. W. de*  
Chief, Division of H. & T.

Applied to Chart Comp. 538 July 30, 1937, H.E. MacEwen  
" " " " " (insert on reconst. drug) 2/3/55 HFD