

5998

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

DESCRIPTIVE REPORT

Topographic }
Hydrographic } Sheet No. 23

U. S. COAST & GEODETIC SURVEY
LIBRARY AND ARCHIVES
APR 23 1936
Acc. No.

State North Carolina

LOCALITY

NEUSE RIVER

LOWER DUCK CREEK TO ^{scotts} ~~DARKHOUSE~~ CREEK

1935 & 6

CHIEF OF PARTY

John A. Bond

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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.

Field No. 23

REGISTER NO. 5998

State North Carolina

General locality NEUSE RIVER

Locality Lower Duck Creek to ^{19 scotts} ~~Darkhorse~~ Creek. ³⁵

Scale 1:10,000 Date of survey November-January, 19 35-36

Vessel MIKAWA

Chief of Party John A. Bond

Surveyed by George W. Lovesee - C. F. Chenworth

Protracted by George W. Lovesee

Soundings penciled by George W. Lovesee

Soundings in ~~fathoms~~- feet

Plane of reference M.L.W.

Subdivision of wire dragged areas by

Inked by W. M. Kenney

Verified by R. C. McShannon

Instructions dated August 31, 19 34

Remarks:

DESCRIPTIVE REPORT

To Accompany Hydrographic Sheet No. 23

NEUSE RIVER, Lower Duck Creek to Darkhorse Creek.

North Carolina

DATE OF INSTRUCTIONS - August 31, 1934

Project - HT-197

LIMITS

The sheet covers the main body of the Neuse River from Lower Duck Creek to Darkhorse Creek. It is joined on the east by sheet 18, on the west by sheet 24 and on the north at the entrances to Goose, Upper Broad and Northwest Creeks by sheet 22. All adjacent sheets were surveyed this season by the party of the Launch 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 and Ensign C. F. Chenworth. On the open areas the 40 foot twin-screw chartered launch LONA was used. Along the inshore areas a 24 foot skiff was used, equipped with sounding chair and plotting table, powered by a Johnson 9 H.P. outboard motor. ✓

DANGERS

No dangers are known to exist other than the shoals developed on the sheet. *and the reported 6 foot shoal discussed in Par. 8a (c) of the review. Xum.* ✓

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. ✓

COMPARISON WITH PREVIOUS SURVEYS

In comparison with the soundings shown on chart 538 depths appear to have remained practically unchanged except adjacent to the dredged channel between Otter Creek Beacon and Hampton Shoal Beacon. In this area spoil banks with a least depth of 5 feet have been deposited as indicated on the sheet.

See Rev.
for more
detailed
comparison ✓

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. ✓

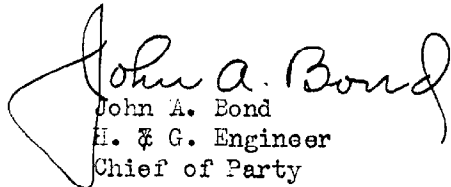
LANDMARKS FOR CHARTS

"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, Lieut. (j.g.)
and
C. F. Chenworth, Ensign

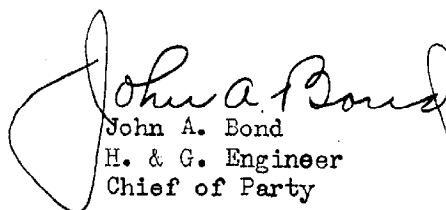
Approved by,


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

LIST OF STATISTICS - SHEET 23 (HYDROGRAPHIC)

Date	Day Letter	Volume	Miles (Statute)	Soundings	Positions
Nov. 21	a	1	13.9	624	117
22	b	1 & 2	38.6	1440	220
25	c	2 & 3	35.5	1276	247
26	d	3	35.6	1349	230
27	e	3 & 4	24.8	1183	216
Dec. 6	f	4	1.8	65	10
12	g	4 & 5	27.9	817	144
16	h	5	41.9	1254	225
17	j	6	40.4	1263	228
18	k	6	8.2	242	45
19	l	7	34.0	1085	185
20	m	7	5.6	184	27
Jan. 2	n	7 & 8	23.6	842	134
10	p	8	27.7	1102	202
11	q	8 & 9	14.2	712	139
13	r	9	22.8	859	150
14	s	9 & 10	18.9	863	205
24	t	10	0.5	42	14
			<u>415.9</u>	<u>15207</u>	<u>2738</u>

Smooth Sheet No. 23 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. H5998

Smooth Sheet Yes

Boat Sheet 1

Sounding Records 10 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. **H5998**

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

Number of positions on sheet	<i>2738</i>
Number of positions checked	<i>.40</i>
Number of positions revised	<i>None.</i>
Number of soundings recorded	<i>15207</i>
Number of soundings revised	<i>138</i>
Number of signals erroneously plotted or transferred	<i>None.</i>

Date: *June 25, 1936*

Verification by

G. C. McGowan

Reviewed by

C. F. McKinney

Harold W. Murray

Time:

5 days 2 1/2 hrs.

Time:

7 days 5 1/2 hrs.

2 " 1 "

} *13 da. - 1 hr.*

Remarks

Decisions

1		
2		
3		
4		
5		
6		
7	Int 35-05.5 July 77-02.1	
8	H-892 T1031 ha "Darkhouse" (1866)	see T-6477
9	8 cont U.S.G.S. "New Berri" ha "Scott Creek"	
10		
11		
12		
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14		
15		
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18		
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27		

GEOGRAPHIC NAMES

Survey No. H5998

Name on Survey	<div style="display: flex; justify-content: space-between; font-size: small;"> On Chart No. 538 On previous survey No. T1018 & 51 On U. S. Quadrangle Maps From local information ET 928 F 11031 (1866) P. O. Office Map Rand McNally Atlas U. S. Light List </div>								KUSCP	
	A	B	C	D	E	F	G	H		
Northwest Creek ✓	*	-		✓						1
Johnson Point ✓	*							-		2
Upper Broad Creek ✓	*	-		✓					✓	3
Goose Creek ✓	*	-		✓					✓	4
Lower Duck Creek ✓	*	✓								5
Otter Creek ✓	*	✓								6
Duck Creek ✓	*				✓	✓			✓	7
Darkhorse Creek ^{scotts cr.} ✓	*		?			?	-			8
										9
										10
										11
										12
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										21
										22
										23
										24
+ further investigation,										25
										26
										27

Names underlined in red approved
 by AGP/D on 5/14/36

MEMORANDUM

IMMEDIATE ATTENTION

SURVEY
 DESCRIPTIVE REPORT } No. H 5998
~~PHOTOGRAPHIC~~ } ~~No. H~~

{ received Apr. 23, 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*

25 June, 1936.

Report on H 5998
Verifying and Inking

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~~ ^{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 office draftsman did not have to do over any part of drafting done by field party except as noted on the statistic sheet. However many topographic features were not transferred to the

smooth sheet and this work was done by the Verifier. If our topographic names on the smooth sheet were changed to agree with the topographic sheets.

5. The junctions with H 5962, H 5997, and H 5999 were found to be satisfactory.
6. The signals and shoreline were taken from the Aluminum mounted topographic sheets # T-6473, T-6474, T-6476, and T-6477.
7. The buoys on the smooth sheet were located by the hydrographer by standard Coast survey methods. Buoys 5-10 and N12 were also located by the topographic party and the topographic location of N-12 was used on the smooth sheet. The beacons were either located by triangulation or by the topographic party by standard Coast Survey methods, and no discrepancies are known to exist. Edg. Rec. state that N 12 was moved after Hydro determination, hence use of later topographic location.
8. In volume 3, page 54, between positions 203 and 204. The hydrographer notes an old

ducks blind. Under this note
he states that this ducks
blind should not be charted.
As much as this ducks
blind exists at the time of
the survey, the verifier believes
that it should be plotted and
has shown it on the smooth
sheet as such. ^{note "old duck blind" plotted on sheet.}

Respectfully submitted,
G. L. McE. Glosson

LAC

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
10 volumes of sounding records for

HYDROGRAPHIC SHEET 5998

Locality Lower Duck Creek to Darkhorse Creek, Neuse River, N. C.

Chief of Party: J. 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 Johnson
Chief Chief, Division of Tides and Currents.

Section of Field Records

REVIEW OF HYDROGRAPHIC SURVEY NO. 5998 (1935-36) FIELD NO. 23

Lower Duck Creek to Scotts Creek, Neuse River, North Carolina

Surveyed in 1935 - 36

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 and C. F. Chenworth.

Protracted by - G. W. Lovesee.

Soundings plotted by - G. W. Lovesee

Verified and inked by - G. C. McGlasson and C. F. McKenney.

1. Condition of Records.

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

- a. No duplicate of the chart forwarded to the Lighthouse Bureau for use in locating aids to navigation was received by this office.
- b. A number of topographic features such as duck blinds and stumps were not shown on the smooth sheet. These were added in the office.

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

2. Compliance with Instructions for the Project.

The plan, character and extent of the survey conform to the instructions for the project, however, the reported shoal with least depth of 6 feet discussed in paragraph 8a(3) of this review should have been investigated. In addition, the sounding line spacing of approximately 200 m. in this general vicinity is excessive.

3. Shoreline and Signals.

The shoreline and signals are from plane table surveys: T-6473 (1935), T-6474 (1935), T-6476 (1935) and T-6477 (1935-36).

4. Sounding Line Crossings.

Agreement of sounding line crossings is satisfactory.

5. Depth Curves.

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

6. Junctions with Contemporary Surveys.

The junctions with H-5962 (1935), H-5997 (1935-36) and H-5999 (1936) are satisfactory.

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

This 1:20,000 scale survey covers a small portion of the present survey on the northwest. 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). This survey contains no information not adequately covered by the present survey.

b. H-892 (1866) and H-956 (1867-68).

These surveys are on scales of 1:10,000 and 1:20,000 respectively and cover the entire area of the present survey. Depths are generally in close agreement except in the deeper areas of the main channel where depths on the present survey vary 1 to 4 feet shoaler. A few shoal spots on the present survey such as the shoal with least depth of 5-1/2 feet in lat. 35°01.2', long. 76°57.6', also vary 1 to 4-1/2 feet shoaler. These spots are probably due to dredge dumpings.

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

Information shown on the chart originates with surveys discussed in the preceding paragraphs and several outside sources as follows:

- (1) The U. S. Engineers' survey of 1909 (blue print 13707) covers the present survey in the area northwestward of approximate lat. 35°00', long. 76°56'. Depths on the present survey are generally in close agreement but vary 1 to 4 feet shoaler in some spots and 1 to 3 feet deeper in others. The shoal with least depths of 4 and 5 feet (charted) in lat. 35°02.1', long. 76°56.4', falls in closely developed depths of 7 feet on the present survey. These soundings are two of four soundings obtained on line and indications would have been found on the present survey if they existed. The shoal has probably washed away and should be disregarded in future charting.
- (2) The Engineers' survey of 1922 (blue print 24420) shows two small detached developments. The one is in latitude 35°04.0', long. 76°59.8', and the depths are in close agreement with the present survey.

The other development is in lat. $35^{\circ}04.8'$, long. $77^{\circ}00.6'$. Depths are in good agreement with the present survey except that a shoaling of 3 to 4 feet has occurred on the north side of the channel. This is probably due to dredge dumpings.

- (3) The charted shoal with least depth of 6 feet in lat. $35^{\circ}01.0'$, long. $76^{\circ}57.6'$ originates with Chart Letter 415 (1931). The shoal is spotted on a section of Chart 538 and its discovery was due to a grounding of the Lighthouse Tender "HOLLY". The shoal falls in depths of 11 feet on the present survey and between sounding lines spaced 200 m. apart. This shoal is probably a dredge dump and in view of the inadequate development on the present survey should be retained in future charting. The present survey shows a shoal spot with least depth of $5\text{-}1/2$ feet approximately 330 m. NNW but there is no certainty that it is a more accurate location of the reported spot, or another shoal spot.
- (4) The charted sunken wreck in lat. $35^{\circ}04.7'$, longitude $77^{\circ}00.1'$, originates with Chart Letter 98 (1935) and falls 140 m. due east of the partly submerged wreck located on the present survey. The charted position is located by a 3-point fix and one check angle to nearby charted beacons which differ in geographic position from that located on the present survey (see par. 8c of this review). A replotting of the charted position based on the location of the aids shown on the present survey brings the charted wreck in very close agreement with the wreck on the present survey. The latter should be used in future charting.

The present survey adequately covers the information contained in the above sources and except as noted should completely supersede those sources for charting purposes.

b. Controlling Depth in Channels.

The controlling depth in the dredged channel in Neuse River is reported monthly by the U. S. Engineers. The latest report is 12 feet as of June 1, 1936 (Chart Letter 387, 1936). This information is subsequent to the present survey.

c. Aids to Navigation.

The beacons in lat. $35^{\circ}01.4'$, long. $76^{\circ}58.2'$, and lat. $35^{\circ}04.8'$, long. $77^{\circ}00.4'$, were located on the present survey in substantially the same positions as charted. The remaining aids were located in positions varying 50 to 160 m. from the charted positions. Some of these charted positions originate with Lighthouse Notice to Mariners 23 (1916) and 25 (1919).

Others have been charted since the first edition of the Chart in 1915. In connection with buoy S10 (lat. $35^{\circ}04.8'$, long. $77^{\circ}00.5'$), Lighthouse Notice to Mariners 24 (1936) dated June 10, 1936, and which is subsequent to the present survey, states that the buoy was relocated approximately 290 yards, 274 degrees from Fort Point Channel Beacon. This position agrees closely with that located on the present survey.

The aids as located on the present survey correctly mark the features intended, however, the following discrepancies in charted channel limits should be noted:

- (1) The lighted beacon in lat. $35^{\circ}05.3'$, long. $77^{\circ}01.5'$, was located 100 m. WSW of its charted position. The source of the charted position could not be readily ascertained but it has been charted in its present position since the 1st edition of Chart 538 in 1915. This beacon marks the eastern limit of the dredged channel in this vicinity according to the Engineers' blue print 24421 (1928) which is authority for the channel lines, but which were charted in relation to the beacon in question. The channel limits in the vicinity of the beacon are, therefore out by approximately 100 m. in a WSW direction.
- (2) Red buoy S10 in lat. $35^{\circ}04.8'$, long. $77^{\circ}00.5'$ was located 70 m. SE of its charted position. This buoy marks the northern limit of the dredged cut in this vicinity according to the Engineers' blue print 24420 (1922). This cut as indicated by depths on the present survey and the dredged limits on the Engineers' blue print is approximately 70 m. southeastward. The source of the charted position of the cut and buoy S10 could not be readily ascertained but they have been shown in their present positions since the 1st edition of Chart 538 in 1915.

9. Field Plotting.

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

10. Additional Field Work Recommended.

For Future Consideration.

When field work is resumed in this locality, the reported shoal with depth of 6 feet discussed in paragraph 8a (3) should be definitely located and the least depth ascertained. Additional lines should also be run outside the dredged channel from Hampton Shoal Beacon (lat. $35^{\circ}01.4'$, long. $76^{\circ}58.2'$) to the southeastward for about a mile.

11. Note to Compiler.

Attention is called to several matters discussed in paragraphs 8a (3), and 8c (1) and (2) 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)	" "
H-956	(1867-68)	" "

13. Reviewed by - Harold W. Murray, July 9, 1936.

Inspected by - A. L. Shalowitz.

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

Applied to Chart Comp. 538. July 27, 1937. H. E. MacEwen