

6596

6596

Form 504
Rev. April 1935

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

DESCRIPTIVE REPORT

~~Torrey~~ } Field No.
Hydrographic } Sheet No. 400

U. S. COAST & GEODETIC SURVEY
LIBRARY AND ARCHIVES

NOV 22 1940

Acc. No.

State Virginia

LOCALITY

Off Newport News, Southwest of
Newport News Middle Ground Light.

Anchorage F. Explosives.

1940

CHIEF OF PARTY

H. C. Warwick

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. 400

REGISTER NO. **H6596**

State Virginia

General locality Newport News, Virginia.

Locality Vicinity of Newport News Middle Ground Light, "Anchorage F, Explosives".

Scale 1/10,000 Date of survey Oct. 30-Nov. 1, 1940

Vessel Tender GILBERT

Chief of Party H. C. Warwick

Surveyed by H. C. Warwick

Protracted by Alfred Kaupa

Soundings penciled by D. M. Stanley

Soundings in ~~fathoms~~ feet

Plane of reference Mean Low Water

Subdivision of wire dragged areas by

Inked by G. B. Littlepage

Verified by G. B. Littlepage

Instructions dated Oct. 11 and Oct. 15, 1940

Remarks: Protracted and soundings penciled at the Norfolk

Processing Office under the supervision of John H. Brittain.

DESCRIPTIVE REPORT
to accompany
SHEET Field No. 400 H-6596(1940)

DATE OF INSTRUCTIONS

This survey was executed in accordance with Instructions, dated October 11, 1940, Project HT-255, Amended Instructions, dated October 15, 1940, Project HT-255, and the Director's letter of October 22, 1940.

DATE OF SURVEY

The work on this sheet was done on October 30, 31 and November 1, 1940.

LOCALITY AND LIMITS

The area surveyed, approximately one and one-half miles square, is off Newport News, Virginia, in Hampton Roads. It lies southward of an east and west line through Newport News Middle Ground Light to the 12-foot curve and westward of a north and south line through the same light to the western limits of the prohibited anchorage area surrounding "Anchorage F, Explosives".

SURVEY METHODS

The work on this sheet was done with the Tender GILBERT. The hydrography was controlled by three point sextant fixes on triangulation stations.

The soundings were obtained with the Dorsey No. 1 Fathometer and hand lead. The hand lead was used in the shoaler part of the sheet.

TIDE DATA

Hourly heights for a tide gage established by this party at Newport News, Va., referred to a datum of 1.4 feet on the tide staff, were used in the reduction of soundings on this sheet. The low water datum was obtained from the elevation of tidal bench marks previously established at Newport News. Tide reducers were entered to one-half ft., the change points being taken at 0.25 and 0.75 ft.

FATHOMETER CORRECTIONS

The fathometer corrections were 0.0 ft. for this sheet.

DISCREPANCIES

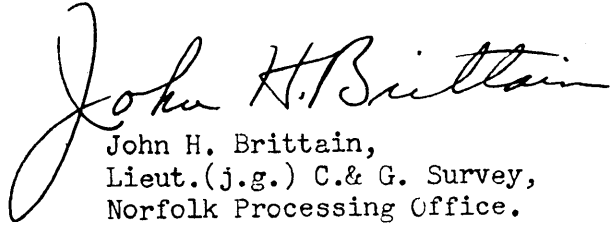
There are no discrepancies on this sheet. The crossings are satisfactory.

JUNCTIONS WITH CONTEMPORARY SURVEYS

There are no contemporary surveys in this area. ✓

COMPARISON WITH PREVIOUS SURVEYS

In general the agreement with the soundings on Chart 400 is satisfactory. Between buoys WS "E" and S "28H" the chart shows ✓ depths to 32 feet while the maximum depth on this survey is 26 feet. *Deeper depths from H-4078(1918-19)*


John H. Brittain,
Lieut.(j.g.) C.& G. Survey,
Norfolk Processing Office.

STATISTICS

H6596

SHEET Field No. 400

<u>DATE</u>	<u>Day Letter</u>	<u>Stat. Miles</u>	<u>Soundings</u>	<u>Positions</u>
Oct. 30	A	11.9	293	55
Oct. 31	B	29.1	698	132
Nov. 1	C	<u>16.4</u>	<u>355</u>	<u>65</u>
	TOTAL	57.4	1346	252

200
FILE.

TIDE NOTE FOR HYDROGRAPHIC SHEET

November 27, 1940

Division of Hydrography and Topography:

✓ Division of Charts: Attention: Mr. H. R. Edmonston.

Tide Reducers are approved in
2 volumes of sounding records for

HYDROGRAPHIC SHEET 6596

Locality Vicinity, Middle Ground Light, James River, Va.

Chief of Party: H. C. Warwick in 1940
Plane of reference is mean low water reading
1.4 ft. on tide staff at Newport News
31.3 ft. below B.M. 3

Height of mean high water above plane of reference is 2.6 feet.

Condition of records satisfactory except as noted below:

Chief, Division of Tides and Currents.

Remarks

Decisions

	Remarks	Decisions
1		369764
2		369763
3		369764 U.S.G.B.
4		369763
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GEOGRAPHIC NAMES
 Survey No. **H6596**

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>Newport News</u>										1
<u>Hampton Roads</u>										2
<u>James River</u>										3
<u>Newport News Middle Ground</u>										4
										5
										6
										7
										8
										9
										10
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										27

Names underlined in red approved
 by L. Heck on 11/29/40

Field Records Section (Charts)

HYDROGRAPHIC SHEET NO. **H6596**

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

Number of positions on sheet	252
Number of positions checked	8
Number of positions revised	5
Number of soundings recorded	1346
Number of soundings revised	2
Number of soundings erroneously spaced	38
Number of signals erroneously plotted or transferred	—

Date: 11/29/40

Verification by *S. Bluntpage* Time: 9 hrs

Review by *Harold W. Murray* Time: 3 "

HYDROGRAPHIC SURVEY NO. H6596

Smooth Sheet One

Boat Sheet One

Records; Sounding 2 Vols., Wire Drag Vols., Bomb 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)

Hydrography: Total Days 3; Last Date Nov. 1, 1940

Remarks _____

MEMORANDUM

IMMEDIATE ATTENTION

SURVEY
 DESCRIPTIVE REPORT
 PHOTOSTAT OF

No. H **H6596**
~~XXXX~~

{ received Nov. 25, 1940
 registered Nov. 26, 1940
 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
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90			

RETURN TO

82	T. B. Reed
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V 1130

VERIFIER'S REPORT OF HYDROGRAPHIC SURVEY NO. H

Verified and Inked by

G. B. Tuttlepage

Date 11/29/40

1. The descriptive report was consulted and appropriate action taken. ✓
2. Soundings originating with the survey and mentioned in the descriptive report have been verified, including latitude and longitude. ✓
3. All references to survey sheets mentioned in the descriptive report include the registry number and year. ✓
4. Geographic names of hydrographic features are in slanting lettering and of topographic features in vertical lettering. ✓
5. All items effecting the plotting of the survey which are entered in the remarks columns of the sounding records were noted and check marked. In all cases appropriate action was taken. ✓
6. All positions verified instrumentally were check marked in the sounding records. ✓
7. All critical soundings are clear and legible. ✓
8. The metal protractor has been checked within the last three months. ✓
9. The protracting and plotting of all bad crossings were verified. ✓
10. All detached positions locating critical soundings, rocks or buoys were verified. ✓
11. The boat sheet was compared with the smooth sheet. ✓
12. The spacing of soundings as recorded in the records was closely followed. ✓
13. The bottom characteristics were shown on outstanding shoals. ✓
14. The reduction and plotting of doubtful soundings were checked. ✓

15. The transfer of contemporary topographic information was carefully examined. ✓
16. All junctions were transferred. *No contemporary surveys in this area*
17. The notation "JOINS H" was added for all contemporary adjoining or overlapping sheets now registered.
18. The depth curves have been drawn to include the significant depths. ✓
19. All triangulation stations and transfer of topographic and hydrographic signals were checked by the field party. ✓
20. Heights of rocks were checked against range of tide. ✓
21. Rocks transferred from topographic survey have a dotted curve where shown thereon. ✓
22. Unnecessary pencil notes have been removed. ✓
23. Objects on which signals are located and which fall outside of the low water line have been described on the sheet. ✓
24. The low water line and delineation of shoal areas have been properly shown (see letter of October 20, 1934).
25. Degree and minutes values and symbols have been checked. ✓
26. Source of shoreline and signals (When not given in report).
27. Depth curves were satisfactory except as follows: ✓

28. Sounding line crossings were satisfactory except as follows: ✓

29. Junctions with contemporary surveys were satisfactory except as follows: ✓

see P 16

30. Condition of sounding records was satisfactory except as follows: ✓

31. The protracting was satisfactory except as follows: ✓

32. The field plotting of soundings was satisfactory except as follows: ✓

33. Notes to reviewer:

Locations of buoys shown on sheet are by distances from sounding lines ✓

DIVISION OF CHARTS

Section of Field Records

REVIEW OF HYDROGRAPHIC SURVEY NO. 6596 (1940) FIELD NO. 400

Virginia, Vicinity of Newport News Middle Ground Light
"Anchorage F, Explosives"

Surveyed in October 30 - November 1, 1940, Scale 1:10,000
Instructions dated October 11 and 16, 1940 (GILBERT)

Soundings:

Fathometer and Hand Lead

Control:

Three point fixes on shore signals

Chief of Party - H. C. Warwick.

Surveyed by - H. C. Warwick.

Protracted by - Alfred Kaupa.

Soundings plotted by - D. M. Stanley.

Verified and inked by - G. B. Littlepage.

Reviewed by - Harold W. Murray, November 29, 1940.

Inspected by - H. R. Edmonston.

1. Shoreline and Signals.

This is an offshore survey and no shoreline is shown.

The signal control consists of triangulation stations.

2. Sounding Line Crossings.

Agreement of sounding line crossings is exceptionally good.

3. Junctions with Surveys.

a. The junctions on the south, west and north will be considered when that work is received from the field.

b. The eastern limit of the present survey is the limit of the present project. A satisfactory junction, however, is available with the charted hydrography in this area.

4. Comparison with Prior Surveys.

a. H-447 (1854), H-529 (1854-55), H-1188 (1873)
H-1213 (1874) and H-3039 (1919), scales 1:10,000
and 1:20,000.

Portions of each of these surveys cover the present survey. The general features and outlines of the channel area are unchanged except that differences up to 6 feet are noted in the deeper part of the

channel. The present survey supersedes these surveys.

b. H-3788a (1915) Scale 1:10,000.

This survey contains a small development of the main channel in the vicinity of lat. $36^{\circ}56'$, long. $76^{\circ}24'$. Depths as great as 33 feet have now shoaled to a maximum of 27 feet. The present survey supersedes this survey.

c. H-4078 (1918-19) and H-4084 (1919) Scales 1:10,000

These surveys taken together completely cover the present survey. General agreement is within 1 to 2 feet or less. Greater differences, however, exist in a few spots on H-4078. In midchannel in lat. $36^{\circ}56'$, long. $76^{\circ}24'$, the old survey shows a narrow channel with depths ranging from 29 to 33 feet. The present survey indicates that this area has been filled in since depths of 26 to 27 feet are now existing. In lat. $36^{\circ}55.8'$, long. $76^{\circ}25.0'$ on the present survey; a least depth of 11 feet is shown on a small detached shoal area where depths of 9 feet (charted) were formerly existing. On the shoal at the northeast limits of the present survey, the present survey shows a least depth of 14 feet in an area where 16 feet was formerly shown. The present survey within the area covered, supersedes these surveys (See par. 8, this review).

5. Comparison with Chart 400 (New Print dated June 6, 1940)

a. Hydrography.

Hydrography shown on the chart originates with surveys discussed in the foregoing paragraphs and no further consideration is necessary.

b. Aids to Navigation.

Aids to navigation agree closely with the charted positions and satisfactorily mark the features intended.

Mention is made, however, of the fact that the light located by triangulation in the northeast limits of the present survey should be shifted about 10 m. southward of its present charted position.

The floating aids on the present survey were plotted from estimated distances made on passing sounding lines.

6. Condition of Survey.

- a. The sounding records are neat and legible and conform to the requirements of the Hydrographic Manual.
- b. The field protracting and plotting of soundings were exceptionally accurate.
- c. The descriptive report is clear and satisfactorily covers all matters of importance.

7. Compliance with the Instructions for the Survey.

The plan, character and extent of the survey satisfy the Instructions for the Project.

8. Additional Field Work Recommended.


This is an excellent survey and no additional field work is required.

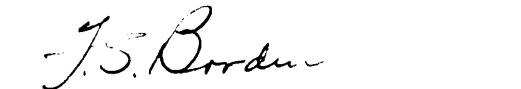
Reference is made to the 9 foot soundings from H-4078 (1918-19) discussed in paragraph 4c of this review. This shoal spot is about twice as large on the old survey and is characterized by hard bottom. Drift soundings run over this spot, when surveys are again undertaken in this area, would supplement the present survey development, least depth 11 feet in general depths of 14 to 15 feet, and add assurance to the statement that the present survey development is adequate.

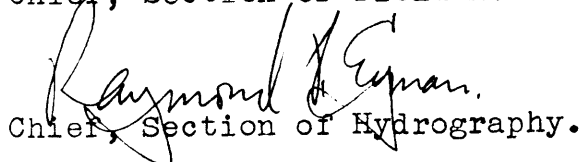
9. Superseded Surveys.


H-447	(1854) in part	H-3039	(1919) in part
H-529	(1854-55) in part	H-3788a	(1915) in part
H-1188	(1873) in part	H-4078	(1918-19) in part
H-1213	(1874) in part	H-4084	(1919) in part

Examined and approved:


Thos. B. Reed,
Chief, Section of Field Records.


J. B. Borden,
Chief, Division of Charts.


Raymond Egan,
Chief, Section of Hydrography.


G. H. Hude,
Chief, Division of Coastal Surveys.

Applied to Chart 400, 529, 1222, and 78 12-6-40
S.C.M.