

7677

WIRE DRAG

Diag'd. on Diag. Ch. No. 1222-3

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey WIRE DRAG(WRECK INVESTIGATIONS)

Field No. PBS-4148 WD Office No. H-7677 W. D.

LOCALITY

State Virginia

General locality Chesapeake Bay

Locality Vicinity of York River Entrance

194 7-'48

CHIEF OF PARTY

R.L.Pfau and A.C.Thorson

LIBRARY & ARCHIVES

DATE Sept. 28, 1949

B-1870-1 (1)

7677
WIRE DRAG

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

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. PBS- 4148 WD

REGISTER NO. H-7677 WD

State VIRGINIA

General locality CHESAPEAKE BAY

Locality NEAR YORK SPIT LIGHT VICINITY OF YORK RIVER ENTRANCE

Scale 1:40,000 Date of survey 8 Jan. 1947- 5 Aug. 1948

Vessel PARKER, BOWEN & STIRNI

Chief of Party R.L. PFAU - A.C. THORSON

Surveyed by " "

Protracted by HUGH L. PROFFITT

Soundings penciled by _____

Soundings in ~~XXXXXX~~ feet _____

Plane of reference MLW

Subdivision of wire dragged areas by H.L. PROFFITT

Inked by W.W. FRAZEL

Verified by L.V. Evans III

Instructions dated 12 SEPT. 1944, 24 JULY 1946, 5 Mar, 19 48

Remarks: _____

DESCRIPTIVE REPORT
TO ACCOMPANY

WIRE DRAG SURVEY FIELD SHEET NO. H-7677 WD (1447-48) PBS-WD-4148

PARKER, BOWEN & STIRNI

Lt. Comdr. A.C. Thorson, Comdg.

AUTHORITY

This survey was executed in compliance with instructions for Project CS-313 dated 12 September 1944 and CS-326, dated 24 July 1946 and 5 March 1948. ✓

DATE OF SURVEY

Field work on this sheet commenced on 8 January 1947 and was completed on (5 August 1948). ✓

SCOPE

This survey was made in order to complete Items 11, 12, 13 and 25 of the original instructions. An additional item was called for by Director's letter dated 13 Sept. 1948 in the vicinity of Back Creek, Virginia. This latter item was subsequently assigned and executed by the HILGARD-WAINWRIGHT. ✓

SURVEY METHODS

Standard dual control methods were used with the drag strips controlled by three point sextant fixes on shore objects. The tests were made by the tender using a graduated pipe attached to a graduated piece of 1/8" airplane cord with the whole suspended from a standard buoy head mounted on a float. The float consists of five small aluminum toggles held together by a wooden framework. The pipe was coated with a mixture of white lead and oil prior to each test in order to accurately determine the point of contact with the ground wire. ✓

The Ships PARKER, BOWEN & STIRNI were used as guide vessel, end vessel and tender respectively.

CONTROL

Natural objects ashore located by triangulation together with numerous hydrographic signals located by sextant cuts were used to control this survey. (Fixes for hydro. signals recorded in Vols. 1 & 2 of field records) ✓

RECORDS

The tide reducers and lift corrections have been entered in the records to the nearest 0.5 foot. The depth diagrams have been drawn and all entries have been checked. ✓

"A" and "B" days were originally plotted on a 1:20,000 scale. These days have been transferred to PBS-WD-4148 boat sheet and are incorporated in this survey.

TIDES

A tide gage was not maintained by this party. Drag settings were based on predicted tides for Hampton Roads. The actual tide curves drawn from data furnished by the Washington Office were used in processing the records. ✓

All references to effective depth unless otherwise specified are those shown in the completed records.

OBSTRUCTIONS, CLEARANCES, DISCREPANCIES, ETC.

Special reports relative to this survey were submitted to the Director during the progress of the field work. Duplicates of these reports were furnished the Supervisor, Southeastern District. Copies of these reports are attached hereto and become a part of this report. ✓

RECOMMENDATIONS

No additional work is recommended. ✓

Raymond H. Tryon, Jr.
Lt. Comdr. US C & GS

for:

A. C. Thorson
Lt. Comdr. US C & GS
Commanding Ships
PARKER, BOWEN & STIRNI

OBSTRUCTION DATA SHEET

LOCATION	GENERAL DEPTH FEET	MINIMUM HANG	POSITION NUMBER	MAXIMUM CLEARANCE FEET	POSITION NUMBER	CHARACTER OF OBSTRUCTION	REMARKS
37° - 22' 09.95" ✓ 76° - 09' 01.670	40' ✓ 39-43	-	-	35' ✓	1-16 K ✓	Chartered Wreck ✓	Remove from Chart
37° - 22' 09.95" 23.08 ✓ 76° - 09' 01.670 40M 09.05' ✓	31-36 ✓	29 ✓	7M	27' ✓	8-16 M	Item 13 ✓	
37° - 19' 39.57" 19.28 ✓ 76° - 11' 11.110 11.51' ✓	35' ✓	23 ✓	51 G	22' ✓	1-13 N	Item 12 ✓	shoalest of 4 hangs ✓
37° - 19' 39.57" ✓ 76° - 11' 11.110 ✓	44' ✓	-	-	36' ✓	14-27 F	Chartered Wreck ✓	Remove from Chart ✓
37° - 18' 49.4M 18.27 ✓ 76° - 09' 01.104M 09.78 ✓	34' ✓	31 ✓	13 A 20 A	29' ✓	6-13 C	Item 25 ✓	
37° - 18' 49.4M 13.17 ✓ 76° - 10' 01.648M 10.45' ✓	34' ✓	29 ✓	15 B	27' ✓	1-20 D	Item 25 ✓	
37° - 16' 0.52" ✓ 76° - 17' 0.582 ✓	24-27 ✓	-	-	21'-22' ✓	1-15 P ✓	Item 11 ✓	Remove from Chart ✓
37° - 22.65' ✓ 76° - 09.55' ✓	40' ✓	35' ✓	7K	30' ✓	1-19 L	Item 13 ✓	

STATISTICS FOR SHEET NO.
Ships PARKER, BOWEN & STIRNI

(PBS-WD-4148
(Project CS-326)

<u>Date</u> <u>1947</u>	<u>Day</u> <u>Letter</u>	<u>Stat. Miles</u> <u>Drag</u>	<u>Number</u> <u>Positions</u>	<u>No.</u> <u>H. L.</u>	<u>Soundings</u> <u>Faths</u>
8 Jan.	A	1.7	21	2	2
16 Jan.	B	1.6	15	1	-
<u>1948</u>					
19 Apr.	C	3.4	28	-	-
20 Apr.	D	2.8	20	-	-
21 Apr.	E	3.4	22	-	-
26 Apr.	F	3.1	27	-	-
29 Apr.	G	9.6	51	-	3
3 May	H	2.8	28	-	-
5 May	J	3.8	21	-	1
6 May	K	1.9	18	-	-
10 May	L	3.3	28	-	4
11 May	M	3.8	26	-	1
13 May	N	1.4	13	-	-
5 Aug.	P	1.2	15	-	-
Totals		43.8	333	3	11

Total square statute miles dragged - 8.6

418 P.O. Building, Norfolk, Virginia

11 August 1948

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

Subject: Special Report on Wrecks (Ch. L. 627, 1948)
Item No. 11.

This report covers the investigation of the wreck in Mobjack Bay, which lies about 1.7 miles 204 degrees true from New Point Comfort Light. The area is covered with fish traps which project into the channel on both sides. In addition there are numerous spar buoys in the vicinity of the wreck marking the limits of oyster beds. Thru cooperation with the Miles Fish & Oyster Company several of these spare buoys were removed to facilitate dragging operations.

We were informed by the Miles representative and fishermen in the area that the wreck no longer existed, that oyster dredges were constantly hauled over the area.

A drag having an effective depth of ~~28 $\frac{1}{2}$~~ feet cleared the wreck, ^{24 $\frac{1}{2}$}

It is impossible to cover an area of one half mile radius from charted position of wreck due to fish traps. The charted position of the wreck was verified by local oystermen.

It is recommended that the wreck symbol be removed from the charts.

/S/ A. C. Thorson
Lt. Comdr.

cc: Supervisor S.E.
District.

*Wreck deleted by hand
16-7 (1948)*

418 P.O. Building, Norfolk, Virginia

22 April 1948

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

Subject: Special Report, completed wire drag for
Obstructions noted below (Office Item No. 25) (Ch. L. 300, 1948)
Project CS-326

E.Obs. Lat. 37-13.2⁵₇)
Long. 76-09.7⁵₃) Recommended Charting
Depth 29 feet. ✓

W.Obs. Lat. 37-13.1⁵₇)
Long. 76-10.8⁵₉) Recommended Charting
Depth 27 feet. ✓

129] obstr. charted

121] obstr. charted

<u>Day</u>	<u>Date</u>	<u>Drag Data</u>
A	8 Jan. 1947	- 4000 ft. drag, North-eff. depth ^{31.0} 30.5 ft. hung on Ely obstruction.
		- 5000 ft. drag, South-eff. depth ^{31.5} 30.5 ft. hung on both Ely and Wly obstruction.
B	10 Jan. 1947	- 3000 ft. drag, North, eff. depth 24. ⁵ 0 ft. passed over Wly obstruction.
		- 3000 ft. drag, South, eff. depth 29.5 ft., hung on Wly. obstr.
C	19 Apr. 1948	- 4000 ft. drag, South, eff. depth 29.0 ft. passed over Ely obstruction.
		- 4000 ft. drag, South, eff. depth 25. ⁰ 5 ft. passed over Wly obstruction.
D	20 Apr. 1948	- 4000 ft. drag, South, eff. depth 27. ⁰ 5 ft. passed over Wly obstruction.

Nature of obstruction not determined.

Above recommended charting depth are based on predicted tides and therefore are subject to correction. (correction shown in red)

/s/ A.C. Thorson
Lt. Comdr. C & GS
Comdg. Ships
PARKER, BOWEN & STIRNI

Charts
494
1222

418 P.O. Building, Norfolk, Virginia

17 May 1948

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

Chart 1222

Subject: Special Report on Obstructions Found (Ch. L. 385, 1948)

1. Item 13, Off Wolf Trap Light, Chesapeake Bay

Obstruction found at Lat. 37° -23.08' ✓
Long. 76° -09.05' ✓

Drag set at effective depth of ⁹28' hung
" " " " 27' ²28' - cleared.

General depth in vicinity by fathometer 35 to 37 feet
Recommended charting depth 28' feet.

The currently charted wreck about 1/2 mile west of this
obstruction was cleared with a drag set to an effective
depth of 38' ⁵feet. (It is recommended that this wreck
symbol be removed from the charts.)

(26) wreck charted

*(27) wreck charted
10-6-49*

(36) wreck charted

2. Item 12, East of New Point Comfort

Obstruction No. 1
Lat. 37° -19.30' 32"
Long. 76° -11.50' 48"

Drag set to effective depth of 24' - hung
Drag set to " " 22' - cleared
General depth in vicinity by fathometer 36'
Recommended charting depth 22' ✓

(22) charted

Obstruction No. 2
Lat. 37° -19.30' 48"
Long. 76° -11.58' 52"

Drag set to effective depth of ²⁸29' ³feet - hung
Drag set " " 26' 28' 26" - cleared
Recommended charting depth 28' feet.
This obstruction lies near charted 29 feet spot.

*Too close to charted for
charting*

8.
-2-

Obstr. #4
Ø 37° 19.28"
2 76° 11.52"

Obstruction No. 3

Hung - 23' (35-50G)
Cleared - 22' (1-13N)

Lat. 37° -19.67:40 ✓
Long. 76° -11.50:43 ✓

Drag set to effective depth of ²⁶~~25~~ feet - hung
" " ²⁸~~24~~ " - cleared

General depth in vicinity by fathometer 36 feet.
Recommended charting depth ²⁴~~25~~ feet.

This obstruction is too close to Obstruction No. 1 to warrant trying to clear within 2 feet.

[22] Wreck charted
Too close to Obstr. 1
for charting

The charted wreck in this vicinity located east of the above obstructions was cleared with drag set to effective depth of 37 feet. It is recommended that this wreck symbol be removed from the chart.

[37] wreck
Charted

/s/ A.C. Therson

cc: Supervisor
S.E. District.

LIST OF SIGNALS

To Accompany

H-7677 W.D.

TRIANGULATION STATIONS

STA - OBSTRUCTION LIGHT, 1947
 WOLF - WOLF TRAP L. H., 1898-1932
 NEW - NEW POINT COMFORT, L. H., 1871-1932
 TUE - TUE MARSH, L. H., 1900-32
 YORK - YORK SPIT L. H., 1900-32
 FOX - FOX HILL, MUNICIPAL W.T., 1939

HYDROGRAPHIC STATIONS

TREE - Vol. 2, pg. 11 & 12, Guide Lch.
 SHED - " " " " " " " "
 PILE - " " " 12 " "
 FISH - Vol. 1, pg. 25, Tender Record
 LONE - Vol. 2, pg. 13, Guide Lch.
 BAY - Vol. 2, pg. 2, End Lch.
 PEP - " " pg. 1, " "
 TRAP - Vol. 2, pg. 13, Guide Lch.
 BRUSH - Vol. 2, pg. 12, Guide Lch.
 FLAG - " " " 13, " "
 SPIT - Vol. 2, pg. 1, End Lch.

ADDENDUM

To Accompany

WIRE DRAG SURVEY H-7677 (Field No. PBS-4148 W.D.)

ITEM 12. Lat. $37^{\circ}-19.3'$, Long. $76^{\circ}-11.5'$

Four obstructions were found in this vicinity. However, to avoid a congestion of lines on smooth sheet, the only lines plotted were those showing the minimum hang and the maximum clearance. The remaining drag lines are being submitted on an overlay.

(overlay tracing
in Desc. Report)

ITEM 13. Lat. $37^{\circ}-22.65'$, Long. $76^{\circ}-09.55'$

On Drag line 1-18k the drag hung and then ^{pulled clear} ~~cleared~~ two minutes later. This obstruction was not mentioned by the field party, other than by drag notes in the record book. This hang is located about 560 meters S.S.E. of the charted obstruction and may possibly be the one indicated. Effective depth of drag on this line was 35'.

| cleared by 30 ft.

Respectfully submitted,



Hugh L. Proffitt
Cartographer

Norfolk, Virginia
21 September 1949

Approved and forwarded.



Earl O. Heaton
Supervisor, SE Dist.

GEOGRAPHIC NAMES

Survey No. H-7677 WD

WIRE DRAG

Name on Survey

	A	B	C	D	E	F	G	H	K	
	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		
Virginia				(for title)					USGB	1
Chesapeake Bay				" "					"	2
York River				(" ")						3
										4
Wolf Trap									USGB	5
New Point Comfort										6
										7
										8
										9
										10
										11
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										23
										24
										25
										26
										27

Names underlined
in red are approved
10-3-49. L. Heck

Hydrographic Surveys (Chart Division)

HYDROGRAPHIC SURVEY NO. ^{H-7677 WD} WIRE DRAG

Records accompanying survey:

Boat sheets ²....; sounding vols. ¹....; wire drag vols. 5....;
 bomb vols.; graphic recorder rolls;
 special reports, etc. 1 A & D Sheet, 1 Overlay Template, 1 envel.- Drag
 strip tracings *incorporated in Desc. Report, 10/18/49*

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

Number of positions on sheet	.....	333
Number of positions checked	.....	22
Number of positions revised	.....	-
Number of soundings revised (refers to depth only)	.....	-
Number of soundings erroneously spaced	.....	-
Number of signals erroneously plotted or transferred	.....	-
Topographic details	Time	..... 6 hrs.
Junctions	Time -
Verification of soundings from graphic record	Time -
Verification by..... <i>J. W. Evans</i>	Total time	..... 30 hrs. Date 13 Oct. '49
Reviewed by..... <i>J. A. Dinsmore</i>	Time	..... 20 hrs. Date 20 Dec. 1949

DIVISION OF CHARTS

REVIEW SECTION - NAUTICAL CHART BRANCH

REVIEW OF HYDROGRAPHIC SURVEY

REGISTRY NO. H-7677 W.D.

FIELD NO. PBS-4148

Virginia, Chesapeake Bay, Vicinity of York River Entrance
Surveyed in Jan. 1947 and Aug. 1948 Scale 1:40,000
Project No. CS-326

Soundings:

Control:

Hand lead

Sextant fixes on shore signals

Chief of Party - R. L. Pfau and A. C. Thorson
Surveyed by - R. L. Pfau and A. C. Thorson
Protracted by - H. L. Proffitt
Soundings plotted by - H. L. Proffitt
Verified and inked by - L. V. Evans III
Reviewed by - T. A. Dinsmore, December 20, 1949
Inspected by - R. H. Carstens

1. Shoreline and Signals

The partially delineated shoreline is from topographic quadrangles T-8315, T-8316, T-8327, T-8328 and T-8329 (1944-45) and serves only to show the relative positions offshore of the wire-dragged areas.

The signals originate with previously established triangulation stations. The fixes for the supplementary hydrographic signals are recorded in volumes 1 and 2 of the field records of the survey.

2. Adjoining Surveys

The present survey covers detached areas and joins no other wire-drag, surveys.

3. Comparison with Contemporary Surveys

No contemporary surveys are registered at the present time in the areas covered by the present survey.

4. Comparison with Chart 494 (Latest print date 11/7/49)
Chart 1222 (Latest print date 6/20/49)

A. Hydrography

Charted depths are in harmony with the effective drag depths of the present survey, except for minor differences, as for example, the 29- and 30-ft. shoal spots (Chart 1222) in the vicinity of lat. $37^{\circ} 23.60'$, long. $76^{\circ} 09.25'$, which were cleared by an effective drag depth of 30 ft. on the present survey.

The present survey was applied to the charts from advance information of the survey contained in Chart Letters 300, 385 and 627 (1948), copies of which are attached to the Descriptive Report. The following discrepancies are noted:

- (1) The wreck charted in lat. $37^{\circ} 22.95'$, long. $76^{\circ} 09.60'$, from H.O. Notice to Mariners No. 40 (1917) with a clearance depth of 36 ft. from the present survey (now revised to 35 ft.) is considered to be disproved in this location. Two obstructions were found in this vicinity either one of which is probably the reported wreck.
- (2) A 35-ft. temporary grounding occurred in depths of about 40 ft. in lat. $37^{\circ} 22.65'$, long. $76^{\circ} 09.55'$, which is about 560 meters south of the wreck discussed in the preceding paragraph. This apparent obstruction was cleared with an effective depth of 30 ft.
- (3) The clearance depth of 26 ft. charted in lat. $37^{\circ} 23.08'$, long. $76^{\circ} 09.05'$, has now been revised to 27 ft. The character of this obstruction was not ascertained.
- (4) The wreck charted in lat. $37^{\circ} 19.35'$, long. $76^{\circ} 11.10'$, from H.O. Notice to Mariners No. 20 (1925) with a clearance depth of 37 ft. from the present survey is considered to be disproved in this location. The four closely grouped obstructions found about 500 meters westward are probably the remains of the reported wreck.

B. Aids to Navigation

Present survey positions of aids to navigation are in agreement with the charted positions and adequately mark the features intended.

5. Condition of Survey

- a. The field records and Descriptive Report are complete and comprehensive.
- b. The field plotting was accurate.
- c. The results obtained on the present survey are summarized as follows: (Item numbers correspond to those in the Project Instructions):

Item 11: The previously charted wreck in lat. $37^{\circ} 16.52'$, long. $76^{\circ} 17.52'$, originated with H.O. Notice to Mariners No. 46 (1943). Falling in depths of about 25 ft. the reported wreck was cleared by an effective drag depth of 21-22 ft. Local fishermen stated that the wreck no longer exists and that oyster dredges are hauled constantly over the area. The wreck, therefore, is considered to be non-existent.

Item 12: The previously charted wreck in lat. $37^{\circ} 19.35'$, long. $76^{\circ} 11.10'$, originated with H.O. Notice to Mariners No. 20 (1925). Falling in depths of about 42 ft., this spot was cleared by a maximum effective drag depth of 37 ft. The obstructions found about 500 meters westward are probably the remains of the reported wreck.

Item 13: The previously charted wreck in lat. $37^{\circ} 22.95'$, long. $76^{\circ} 09.60'$, originated with H.O. Notice to Mariners No. 40 (1917). Falling in depths of about 40 ft. the reported wreck was cleared by a maximum effective drag depth of 35 ft. Two other obstructions were found in this general vicinity, either one of which is probably a part of the reported wreck.

Item 25: The reported 30-ft. obstruction previously charted in lat. $37^{\circ} 13.22'$, long. $76^{\circ} 10.35'$, originated with H.O. Notice to Mariners No. 44 (1944). Two obstructions were encountered in this vicinity on the present survey. In lat. $37^{\circ} 13.15'$, long. $76^{\circ} 10.45'$, an obstruction hung at 29 ft. was subsequently cleared by an effective drag depth of 27 ft., and in lat. $37^{\circ} 13.25'$, long. $76^{\circ} 09.75'$, the other obstruction which hung at 31 ft. was later cleared by an effective depth of 29 ft. The obstructions were found in depths of 32-34 ft.

- d. The Descriptive Report, with copies of special reports by the hydrographer attached, discuss in detail the investigation of the items covered in paragraph c. above.


6. Compliance with Project Instructions

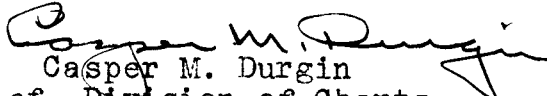
The present survey adequately complies with the Project Instructions.

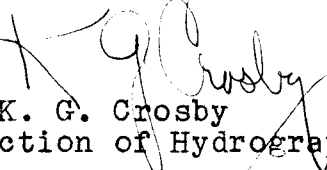
7. Additional Field Work


No additional field work is recommended.

Examined and approved:


H. R. Edmonston
Chief, Nautical Chart Branch


Casper M. Durgin
Chief, Division of Charts


K. G. Crosby
Chief, Section of Hydrography


W. M. Scaife
Chief, Division of Coastal Surveys

12'

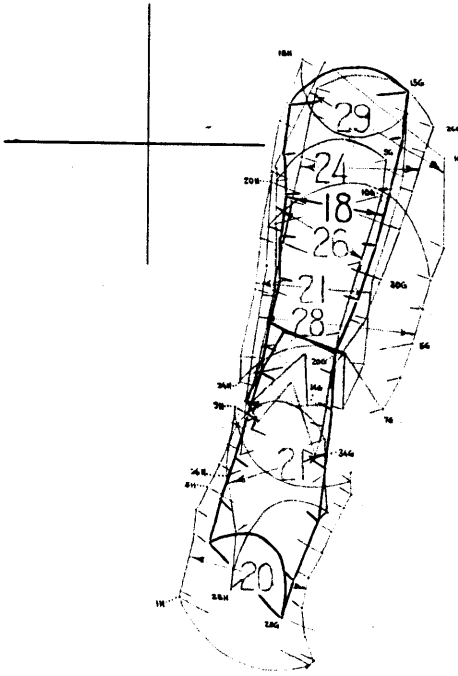
76° 10'

08'

22'

MAISE DBVC

0 VCCWLVMA H



37° 20'

18'

OVERLAY TO ACCOMPANY - H 7677

NAUTICAL CHARTS BRANCH

SURVEY NO. H-7677 WD WIRE DRAW

Record of Application to Charts

DATE	CHART	CARTOGRAPHER	REMARKS
10-6-49	1223	P.H. Andros	Before After Verification and Review <i>Partially Applied</i>
12/27/49	78	<i>J.E.</i>	Before After Verification and Review <i>(without signature)</i>
12/28/49	1222		" " " " " "
1-30-51	494	J.H. Eaton	Before After Verification and Review <i>Completely Applied</i>
9-26-51	Recon. 1223	J.H. Eaton	Before After Verification and Review
1953	Reconst. 494	H.E.M.	" " " "
11-9-59	562	R.E. Elkins	Before After Verification and Review <i>Applied in part thru chart 494.</i>
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
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			Before After Verification and Review
			Before After Verification and Review

A basic hydrographic or topographic survey supersedes all information of like nature on the uncorrected chart. Give reasons for deviations, if any, from recommendations made under "Comparison with Charts" in the Review.

RHC

TIDE NOTE FOR HYDROGRAPHIC SHEET

5 October 1949

~~Division of Hydrography and Topography~~

Division of Charts: R. H. Carstens

Plane of reference approved in
6 volumes of sounding records for

HYDROGRAPHIC SHEET 7677

Locality Chesapeake Bay, Virginia

Chief of Party: R. L. Phau and A. C. Thorson in 1947-48
Plane of reference is mean low water, reading
3.6 ft. on tide staff at Hampton Roads (NOB)
13.4 ft. below B. M. 6 (1927)

Height of mean high water above plane of reference is 2.5 feet.

Condition of records satisfactory except as noted below:

E. C. McKay
Section
Chief, ~~Division of Tides and Currents.~~