

122
8277

Diag. Cht. No. 78-3.

Form 504

U. S. DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY

DESCRIPTIVE REPORT

Type of Survey Hydrographic

Field No. CO-1255 Office No. H-8277

LOCALITY

State Virginia

General locality Chesapeake Bay

Locality Vicinity of Smith Point

1955

CHIEF OF PARTY

D.A. Jones, W.N. Martin & K.S. Ulm.

LIBRARY & ARCHIVES

DATE February 2, 1959

USCOMM-DC 5087

8277

HUA

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.

REGISTER No. H-8277

Field No. CO-1255

State Virginia

General locality Chesapeake Bay

Locality *Vicinity of Smith Point*
~~Great Wicomico River to Smith Point (Inshore area)~~

Scale 1:10,000 Date of survey 4 April 1955-27 Sept. 1955

Instructions dated 5 Feb. 1953, 25 Feb. 1954, and 14 Jan. 1955

Vessel USCGS Ship COWIE

Chief of party Lt. Cdr. D. A. Jones, Cdr. W. N. Martin, Cdr. K. S. Ulm

Surveyed by Officers, Ship COWIE

Soundings taken by fathometer, ~~graphic recorder~~, hand lead, ~~wire and sounding pole~~

Fathograms scaled by Personnel, Ship COWIE

Fathograms checked by Personnel, Ship COWIE

Protracted by A.G. Atwill

Soundings penciled by A.G. Atwill

Soundings in ~~fathoms~~ feet at MLW ~~MLLW~~ *are true depths*

REMARKS:

DESCRIPTIVE REPORT
TO ACCOMPANY

HYDROGRAPHIC SURVEY H-8277

FIELD NO. CO-1255

CHESAPEAKE BAY

GREAT WICOMICO RIVER
to SMITH POINT

SHIP COWIE

SCALE 1:10,000

Don A. Jones
William N. Martin
Kenneth S. Ulm
Commanding

A. Project:

Project CS-1287, Supplemental Instructions dated 5 February 1953, 25 February 1954, and 14 January 1955.

B. Survey Limits and Dates:

This survey includes the upper reaches of Cockrell Creek, the Little Wicomico River and tributaries, and Chesapeake Bay from Chesapeake Beach to Smith Point and eastward to Longitude $76^{\circ} 10'$. Junctions with contemporary surveys are as follows: CO-1654 to the South, CO-2155 to the east, and ~~CO-2155~~ and CO-1355 to the north. ^{H-8190 (54-55)}
_{H-8280 (1955) & H-8435 (1956) H-8278 (1955) & H-8283 (1955-56)}

The survey began on 21 April and concluded on 27 September 1955.

C. Vessels and Equipment:

Launch 102, equipped with 808 type fathometers 114-S, 156-SPX, and 118-S, was used in the Chesapeake Bay, in general depths of five feet and upward. Skiff 749, equipped with 808 type fathometer 114-S and sounding pole, was used exclusively in Cockrell Creek and the Little Wicomico River, and in shoal areas along the shore of Chesapeake Bay. A 16 ft. aluminum skiff, equipped with sounding pole, was used for making a tagline survey of the entrance channel to the Little Wicomico River.

The Launch and skiffs operated from the Ship COWIE.

D. Tide and Current Stations:

A portable automatic tide gage was maintained at the Great Wicomico River Lighthouse throughout the entire period of this survey, and one was maintained at Sunnybank, Little Wicomico River, while performing surveys in that area. Tide gage records and soundings are on Eastern Standard Time.

No current stations were occupied within the limits of this survey.

E. Smooth Sheet:

Construction and plotting of the smooth sheet ^{was} ~~will be~~ by the Norfolk Processing Office.

F. Control Stations:

Triangulation Stations:

Little Wicomico River Light 1, 1955
 *Little Wicomico River Light 3, 1952
 *Little Wicomico River Light 5, 1952
 Reedville Morris Factory Stack, 1938
 Reedville Municipal Water Tank, 1955
 Sig, 1955
 Smith Point Lighthouse, 1898

Hydrographic Names:

Jet
 *Pau
 *Sex
 Stak
 Aft
 Sig
 Smith

* Topographic Stations
from T-11049

Topographic: Sheet CO-1255 - Manuscript T-11049

Abe	Cop	Fox	Jay	Nip	Tax
Act Act	Deb	Gal	Jim	Nix	Tom
Add	Dif	Gam	Job	Oak	Try
Aim	Dim	Gas	Joy	Odd	Use
Alp	Dip	Gem	Ked	Oil	Val
Amp	Dud	Get	Key	Old	*Vet Vex
Ann	Ebb	Gin	Kid	Par	Vet
Axe	Eel	Guy	Kim	Pep	Vim
Bag	Egg	Ham	Lax	Pet	Wad
Bed	Elf	Hat	Lay	Pup	Wag
Bob	Elm	Her	Leg	Ram	War
Bon	Emo	Hid	Lip	Rig	Was
Bum	Eon	Hoe	Mal	Rim	Wax
Bus	Few	Hop	Man	Rub	Yak
Cab	Fig	Hug	Mar	Sad	Yam
Car	Fin	Ice	Mid	Sag	Yea
Cat	Fit	Its	Nat	Set	Yet
Cod	Fly	Ivy	Nay	Tan	Zig
Con	Foe	Jaw	Ned	Tap	Zoo

Sam - Sam (1943) 1952
 Tor - Tor(1943) 1952

*Used twice on sheet.

Sheet CO-1255 - Manuscript T-11051

Ace	Box	Doc	Fez	Ion	Pal
Ago	But	Don	Fro	Irk	Peg
Aha	Cam	Dot	Fun	Jap	Rag
Any	Cap	Dun	Gad	Jar	Rat
Ant	Caw	Duo	Gag	Ken	Ray
Ave	Coo	Ear	Geo	Lad	Rev
Azo	Cow	Eat	Gig	Lam	Sal
Bah	Cry	Era	Gob	Lee	Sic
Bar Bar	Cue	Erg	Hag	Mag	Sis
Bat	Cur	Eva	Hem	Mas	Tex
Bib	Cut	Far	Hex	Nut	Tub
Big	Daw	Fat	His	Off	Yes
Boa	Day	Fed	Ida	Owl	Zag

F. Control Stations (Cont.):

Signals located by sextant:

Ego How
Fog ~~Who~~ Dog } Vol 7, pg 61-62

G. Shoreline and Topography:

The shoreline on the boat sheet was transferred from ^{unreviewed} aerial-
photograph manuscripts T-11049 and T-11051. of 1952-54. ^{Reviewed}
photogrammetric surveys were applied to smooth sheet.

It was not practical to define the entire low water line
by soundings due to the small range of tide in this area. The
following areas have shoreline corrections as shown in red ink on
the boat sheet.

- | | | | |
|----|---|----------------------------|----------------|
| 1. | Latitude 37° 53.31', Longitude 76° 17.58'. | <i>See addendum pg. 10</i> | |
| 2. | " 37° 53.50', " 76° 17.88'. | | |
| 3. | " 37° 53.60', " 76° 17.44'. | | |
| 4. | " 37° 52.45', " 76° 16.12'. | | <i>✓ Islet</i> |
| 5. | " 37° 53.08', " 76° 16.99'. | | <i>✓ Islet</i> |
| 6. | " 37° 53.20', " 76° 18.08'. | | <i>✓ Pond</i> |
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H. Soundings:

Soundings, which were taken with the 808 type fathometer,
hand lead, and sounding pole, agree satisfactorily and depth curves
can be adequately drawn at the junctions.

I. Control of Hydrography:

Soundings lines were controlled by three-point fixes using
natural objects or signals erected along the shoreline. Satis-
factory results were obtained from using these signals.

J. Adequacy of Survey:

This survey is considered complete, adequate for charting
purposes, and should supersede all prior surveys. Junctions with
the adjoining surveys are satisfactory, no holidays exist, and
depth curves can be drawn adequately at the junctions.

K. Crosslines:

Crosslines are in good agreement and comprise approximately
ten percent of the principal system of lines.

L - M. Comparison with prior Surveys and Charts:

- Item 1 (Preliminary Review). (This item ~~is~~ is assumed
to be the same as item 9 of the Preliminary Review-Smith Point
to Point No Point). The charted wreck at latitude 37° 53.33',

L - M, Comparison with Prior Surveys and Charts (Cont.):

longitude $76^{\circ} 15.88'$ is from a Corps of Engineers Survey, Bp. 30834 (1936-37). A thorough investigation was conducted with a 16 ft. aluminum skiff, using a sounding pole (see "d" day, p. 70, Vol. XIV, CO-1255); the least depth obtained being five feet.* Local residents were unable to furnish any information concerning such a wreck. Therefore, in considering the time involved, it is believed that the wreck has broken up and disappeared in the sand, and should be deleted from the chart.* *A 3' pole sounding was found at this position on line 96-97s. See Review p 7A.*

2. Item 10 (Preliminary Review) states that the charted feature at latitude $37^{\circ} 54.00'$, longitude $76^{\circ} 16.28'$, is an islet as compiled on T-11049 (Bp. 47922). The 1955 survey of this area verifies the above information.

3. At latitude $37^{\circ} 50.65'$, longitude $76^{\circ} 17.42'$, are two small wrecks on beach, pos. 118a, Skiff 749.

4. At latitude $37^{\circ} 50.30'$, longitude $76^{\circ} 17.37'$, is a submerged wreck, pos. 125-126a, Skiff 749.

5. At latitude $37^{\circ} 50.47'$, longitude $76^{\circ} 17.25'$, is a lone pile, pos. 132-133a, Skiff 749.

6. At latitude $37^{\circ} 50.18'$, longitude $76^{\circ} 16.59'$, is a submerged wreck, pos. 25b, Skiff 749.

7. At latitude $37^{\circ} 50.30'$, longitude $76^{\circ} 16.17'$, is a submerged wreck, pos. 51b, Skiff 749.

8. At latitude $37^{\circ} 50.38'$, longitude $76^{\circ} 16.51'$, are two lone piles, pos. 64-65b, Skiff 749.

9. At latitude $37^{\circ} 50.92'$, longitude $76^{\circ} 16.87'$, is a group of piles bare ~~10 feet~~, pos. 31d, Skiff 749.
13' MHW

10. Latitude $37^{\circ} 50.57'$, longitude $76^{\circ} 16.59'$, marks the offshore end of a group of mooring piles, pos. 70d, Skiff 749.

11. At latitude $37^{\circ} 50.48'$, longitude $76^{\circ} 16.75'$, is a group of mooring piles bare ~~eight feet~~, pos. 74d, Skiff 749.
10' MHW

12. It should be noted that this report only gives a partial list of the numerous wrecks and ruins in the vicinity of Ceckrell Creek. The ones that could be located on aerial photographs are shown in red ink on the manuscript, which should be referred to in plotting the smooth sheet.

13. At latitude $37^{\circ} 54.60'$, longitude $76^{\circ} 16.63'$, is a previously uncharted wreck baring four feet at MLW, pos. 64e, Skiff 749.

14. At latitude $37^{\circ} 53.79'$, longitude $76^{\circ} 16.14'$, is a previously uncharted wreck, pos. 119e, Skiff 749.

L - M. Comparison with Prior Surveys and Charts (Cont.):

15. At latitude 37° 53.97', longitude 76° 17.02', is a previously uncharted wreck bearing four feet at MLW, pos 55f, Skiff 749. 557 ✓

16. At latitude 37° 54.04', longitude 76° 17.03', is a previously uncharted wreck bearing three feet at MLW, between pos. 57 and 58f, Skiff 749. ✓

17. At latitude 37° 54.04', longitude 76° 17.93', are two previously uncharted wrecks, pos. 98h, Skiff 749. ✓

18. At latitude 37° 53.42', longitude 76° 16.15', is a pile bearing five feet at MLW, pos. 111-1, Skiff 749. ✓

19. Previously uncharted power cables cross Bridge Creek at the following locations:

- Latitude 37° 52.20', longitude 76° 17.30',
- latitude 37° 52.30', longitude 76° 16.40',
- latitude 37° 52.35', longitude 76° 16.10'.

20. A comparison with Chart 534 (print date 2/9/53) indicates a general deepening of from two to eight feet in the area between Smith Point and Chesapeake Beach. (Outside of 6' curve) See Review p 6 534 ✓

21. At latitude 37° 50.94', longitude 76° 14.48', general depths of 16 feet were obtained in charted depths of eight feet. See Review p 6. ✓

22. At latitude 37° 52.70', longitude 76° 12.71', general depths of 20 feet were obtained in charted depth of eight feet. Charted 8 ft sounding erroneous. See Review p 6 534 ✓

23. A comparison with Chart 557 (print date 10/18/54) indicates a general shoaling of the eastern tip of the shoal making off Smith Point. ✓

24. General depths of eight feet were obtained at latitude 37° 53.22', longitude 76° 11.54', in charted depths of 27 feet. Review p 6 ✓

N. Dangers and Shoals:

1. At latitude 37° 52.60', longitude 76° 16.40', is the edge of a shoal, pos. 124p, Skiff 749. ✓

2. At latitude 37° 52.57', longitude 76° 16.30', is the edge of a shoal, pos. 125p, Skiff 749. ✓

3. At latitude 37° 52.52', longitude 76° 16.27', is the edge of a shoal, pos. 126p, Skiff 749. ✓

4. At latitude 37° 53.25', longitude 76° 14.60', a sand bar is defined, pos. 56-60s, Skiff 749. ✓

5. It should be noted that the shoal making off Smith Point is changing in the vicinity of Smith Point Lighthouse (see L-M, item 23). Review p 6 ✓

O. Coast Pilot Information:

The 1955 Coast Pilot Report is being prepared as a separate report. ✓

P. Aids to Navigation:

Form 567, Nonfloating Aids to Navigation, is being prepared as a separate report.

There are no Floating Aids to Navigation within the limits of this survey. ✓

Q. Landmarks for Charts:

Form 567, Landmarks for Charts, is being prepared as a separate report. *Chrt. Ltr 288 (1955). Triangulation position below.* ✓

The following landmark is recommended for the area covered by this survey:

Reedville Municipal Water Tank ⁽¹⁹⁵⁶⁾ (signal Aft) @ latitude 37° 50' 726.₃ M (1123.₄ M), and longitude 76° 16' 939.₄ M (527.₇ M). ✓

R. Geographic Names:

Geographic names as shown on the charts of this area are adequate and no additional names are recommended. ✓

U - Y. Miscellaneous:

Fathometer corrections were obtained by averaging all bar checks according to the fathometer and survey vessel used. ✓

Z. Tabulation of Applicable Data:

A list of signals is attached to Vol. I of the sounding volumes. ✓

A tabulation of other data is included as part of this report.

Respectfully submitted,

Albert J. Ramey
Albert J. Ramey
Lt. (jg), USC&GS

Robert J. Black
Robert J. Black
Ens., C&GS

Approved and forwarded,

Kenneth S. Ulm

Kenneth S. Ulm
Comdr., USC&GS
Commanding Ship COWIE

TIDAL NOTE - SHEET CO-1255

A portable automatic tide gage was maintained at the Great Wicomico River Lighthouse throughout the entire period of this survey, and was used for obtaining tide reducers outside of the Little Wicomico River. Another portable automatic tide gage was maintained at Sunnybank, Little Wicomico River, and was used for obtaining tide reducers for the Little Wicomico River. Great Wicomico tides were substituted for Sunnybank tides when the latter gage was inoperative, with a time difference of $\frac{1}{2}$ 2:35 and a range ratio of 0.7. No other time or height corrections were applied. The hourly heights were scaled from the marigrams and the tide curves were plotted by personnel of the Ship COWIE.

STATISTICS:

Launch No. 102:

<u>Vol. No.</u>	<u>Date</u>	<u>Day Letter</u>	<u>No. of Pos.</u>	<u>Stat. Miles</u>
I	6/22	a	155	23.3
I	6/23	b	52	8.0
II	6/27	c	65	13.2
II	6/30	d	206	33.8
III	6/30	d	16	2.5
III	7/6	e	199	30.4
III	7/7	f	59	11.0
IV	7/7	f	146	18.1
IV	7/14	g	85	14.7
IV	7/26	h	43	6.6
V	7/26	h	127	18.6
V	7/28	j	46	5.8
V	8/31	k	50	9.6
VI	9/1	l	167	25.5
Totals			<u>1416</u>	<u>221.1</u>

Skiff 749:

VII	4/21	a	163	15.2
VII	5/4	b	111	7.9
VIII	7/19	c	118	14.1
VIII	7/20	d	137	9.5
IX	7/20	e	132	12.1
IX	7/21	f	180	15.0
X	8/3	g	152	13.3
X	8/4	h	154	16.1
XI	8/8	j	45	3.1
XI	8/9	k	101	9.2
XI	8/11	l	111	10.1
XII	8/18	m	33	0.0
XII	8/23	n	108	9.5
XII	8/25	p	144	10.1
XIII	8/29	q	28	1.8
XIII	9/6	r	19	2.5
XIII	9/7	s	163	14.3
Totals			<u>1899</u>	<u>163.8</u>

Sixteen ft. Alum. Skiff:

XIV	9/14	a	11	0.5
XIV	9/15	b	63	3.1
XIV	9/22	c	109	8.4
XIV	9/27	d	54	3.2
Totals			<u>237</u>	<u>15.2</u>

Launch No. 102	1416	221.1
Skiff No. 749	1899	163.8
Sixteen ft. Alum. Skiff	<u>237</u>	<u>15.2</u>
Grand Totals	<u>3552</u>	<u>400.1</u>

Area: 14.36 square statute miles

FATHOMETER CORRECTIONS
SHEET CO-1255

Fathometer No. 114-S - Launch No. 102:

<u>Scale</u>	<u>Range</u>	<u>Correction</u>
A	0 - 30	0.0
A	30.5 - 40	+0.2
A	40.5 - 50	+0.4
A	50.5 - 60	+0.6
<u>B</u>	37.0 - 44	+2.0
B	44.5 - 55	+2.2
B	55.5 - 72	+2.0
B	72.5 - 75	+2.2
B	75.5 - 77	+2.4
B	77.5 - 79	+2.6
<u>B</u>	79.5 - on	+2.8
<u>C</u>	68.0 - 72	+6.0
C	72.5 - 76	+5.8
C	76.5 - 80	+5.6
C	80.5 - 84	+5.4
C	84.5 - 88	+5.2
C	88.5 - 92	+5.0
C	92.5 - 96	+4.8
C	96.5 - 100	+4.6
C	100.5 - 104	+4.4
C	104.5 - 108	+4.2
C	108.5 - 112	+4.0
C	112.5 - 116	+3.8
C	116.5 - 120	+3.6

Fathometer No. 118-S - Launch 102:

A	0 - 7	0.00
A	7.5 - 26	+0.2
A	26.5 - 35	+0.4
A	35.5 - 40	+0.6
A	40.5 - 45	+0.8
A	45.5 - 48	+1.0
<u>A</u>	48.5 - 50	+1.2
<u>B</u>	40.0 - 44	+1.0
B	44.5 - 58	+1.2
B	58.5 - 60	+1.0

Fathometer No. 156 - SPX - Launch No. 102:

A	0 - 7	+0.4
A	7.5 - 12	+0.6
A	12.5 - 36	+0.8

Fathometer No. 114-S - Skiff No. 749:

A	0 - 14	+0.2
A	14.5 - 19	0.0
A	19.5 - 25	-0.2
A	25.5 - 40	-0.4

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NORFOLK PROCESSING OFFICE
ADDENDUM
To Accompany

HYDROGRAPHIC SURVEY H-8277 (Co-1255)

GENERAL

This appears to be an excellent basic survey and no unusual conditions were encountered during the smooth plot.

The bottom in the immediate vicinity of Smith Point L.H. is made up of almost continuous sandwaves. The smooth plotter drafted the depth curves while penciling the soundings and many of the greater depths were omitted between the shoal curves to avoid congestion on the sheet. Some shoaling has occurred in the area. *Review p 1 and 6*

Several new daybeacons have been constructed since this survey was made. Also, the positions of some of the original beacons have been changed. *Review p 70.*

SHORELINE

Shoreline changes, ^{page 3, par. 9} indicated on the boat sheet at Lat. 37-53.3' Long. 76-17.58' and at Lat. 37-53.5' Long. 76-17.88', were found to be unnecessary. Some positions of topo stations were changed when the manuscripts were revised. The plot on the new signal locations agree with shoreline shown on the manuscript. *Concur*

CHART COMPARISONS

Lat. 37-53.72' Long. 76-13.60' ^{is now charted} The six foot sounding on line 24 to 25f is not charted. The chart does show two 6' soundings South of this point which were not found. *Charted from Boat Sheet prior to Verification. See p 7A.*

The area along the shoreline South of Smith Pt. runs generally shoaler than charted. The 3' sounding charted at Lat. 37-52.39' Long. 76-14.20 was not found. Sandwaves in this area run parallel with the shoreline. (See positions 143-144f) ^{3' is from H-252 (1849-50)} *See Review p 6.*

Lat. 37-52.77' Long. 76-13.29' Smooth sheet shows 12 to 14 feet in charted 18' area. *Chart has been corrected.*

Lat. 37-53.31' Long. 76-13.72' The 3' sounding charted here was not found. *This is a 3.7' sounding from C. of E. Blueprint 16522 of 1917. Present hydro is adequate to discredit the prior sounding in this changeable area.*

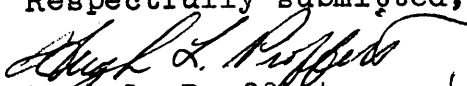
(continued)

Lat. 37-53.09' Long. 76-13.00' The 6' sounding charted here was not found. *From H-252 (1849-50). Present hydro is adequate to discredit this prior sounding.*

The smooth sheet soundings do not adequately delineate channels at the entrances to Cod and Ellyson Creeks. *Review 36.*

Norfolk, Va.
21 Jan. 1959

Respectfully submitted,


Hugh L. Proffitt
Cartographer.

OFFICE OF CARTOGRAPHY

REVIEW SECTION -- NAUTICAL CHART DIVISION

REVIEW OF HYDROGRAPHIC SURVEY

REGISTRY NO. H-8277

FIELD NO. CO-1255

Virginia, Chesapeake Bay, Vicinity of Smith Point

SURVEYED: April - September 1955

SCALE: 1:10,000

PROJECT NO. 1287

SOUNDINGS: 808 Depth Recorder
Sounding Pole
Hand Lead

CONTROL: Sextant fixes
on shore signals

Chief of Party ----- D. A. Jones; W. N. Martin; K. S. Ulm
Surveyed by ----- A. J. Ramey; D. A. Jones, W. N. Martin
R. J. Black; O. C. Swindell
Protracted by ----- A. G. Atwill
Soundings plotted by ----- A. G. Atwill
Verified and inked by ----- H. J. Keeler
Reviewed by ----- D. R. Engle
Inspected by ----- R. H. Carstens

DATE: 4-25-61

1. Description of the Area

The survey covers the area from Smith Point east to Smith Point Lighthouse and south to Chesapeake Beach in Chesapeake Bay, all of Little Wicomico River and the northern part of Cockrell Creek.

The character of the bottom in the bay area is generally sandy and is relatively smooth outside the 6-ft. curve, except in the vicinity of Smith Point Lighthouse where the submarine relief consists of an intricate pattern of sand waves running in an east-west direction. Inside the 6-ft. curve, numerous sand waves also exist and generally run parallel to the shoreline.

Little Wicomico River and Cockrell Creek both have deep channels with muddy bottoms. The entrance to Little Wicomico is dredged, but Cockrell Creek has a natural entrance channel.

2. Control and Shoreline

The origin of the control is given in the Descriptive Report.

The shoreline originates with reviewed photogrammetric surveys T-11049 and T-11051 of 1952-54. Several minor shoreline revisions made from hydrographic information are shown in red on the survey.

3. Hydrography

Sounding line crossings are in good agreement.

The usual depth curves are adequately delineated. The 3-ft. curve was added to delineate the shoals and the river channels.

The development of bottom configuration and least depths is satisfactory except that the entrance to Ellyson Creek is not adequately developed. The boat sheet shows the 6-ft. curves running between the shoals extending out from either side of the creek between stations HAT and IVY. However, no soundings are recorded to substantiate this channel. Therefore it could not be shown on the smooth sheet.

4. Condition of Survey

The field plotting, records and reports were adequate and conform to the requirements of the Hydrographic Manual.

5. Junctions

Adequate junctions were effected with H-8278 (1955) on the north and H-8190 (1954-55) on the southwest. Junctions with H-8280 (1955) and H-8435 (1956) on the east and south-east, and H-8283 (1955-56) on the northeast will be considered in the review of those surveys.

6. Comparison with Prior Surveys

H-211 (1849) 1:20,000	H-1003 (1869) 1:20,000
H-252 (1849-50) 1:40,000	H-2500 (1900-01) 1:60,000
<u>H-3012 (1909) 1:20,000</u>	

These prior surveys cover the area of the present survey except in Little Wicomico River where no prior surveys had been made by this bureau. A comparison of the prior and present surveys reveals variable changes in the bottom. The shoal, running from Smith Point out toward Smith Point Lighthouse, is 1 to 5 feet shoaler on the present survey and extends about 50 meters farther offshore than on the prior surveys. South of Smith Point shoal the present survey reveals that the inshore area is generally 1 to 3 feet shoaler,

while the offshore area is 1 to 4 feet deeper than the prior surveys. Only minor differences in depth are revealed in Cockrell Creek.

Attention is called to the following:

(a) At. Lat. $37^{\circ}52.7'$, Long. $76^{\circ}12.7'$ an 8-foot sounding charted from H-252 (1849-50) falls in present depths of 21 feet. This sounding is from a line which is considered to be out of position. The development on the present survey is adequate to discredit this 8-ft. sounding and other sounding on this line. The 8 should be removed from the chart.

(b) Several soundings on H-252 (1849-50) were found to differ with present depths by as much as 5 fathoms. Development on the present survey is adequate to discredit these prior soundings which are probably faulty or out of position. For example, at Lat. $37^{\circ}53.35'$, Long. $76^{\circ}10.10'$, a prior 72-ft. sounding falls in present depths of about 100 feet and is probably out of position.

The more thorough coverage of the present survey reveals many features not shown on the sparsely developed prior surveys. The present survey is adequate to supersede the the prior surveys in the common areas.

7. Comparison with Chart 557 (Latest print date 11-7-60)
534 (Latest print date 8-15-60)
1223 (Latest print date 3-20-61)

A. Hydrography

Charted hydrography originates principally with the previously discussed surveys supplemented by partial application of the present survey from copies of the boat sheet. Minor revisions in depth and position were made during smooth plotting and verification, and survey depths may vary as much as one foot from boat sheet depths. In areas where the present survey has not been applied to the charts, differences in depth of 1 to 5 feet are due to bottom changes, and differences of 16 to 22 feet are due to erroneous soundings applied from prior surveys. These differences are discussed in par. 6 above.

The submerged wreck charted at Lat. $37^{\circ}53.33'$, Long. $76^{\circ}15.08'$ from Corps of Engineers blueprint 30834 (1936-37) was not found by the hydrographer during his investigation of the area on d-day (par. 3, L-M 1). However, a 3-ft. pole sounding in general depths of 5 feet was obtained on another sounding line, 96-97 s-day, about 40 meters NW of the charted position of the wreck and may be wreckage. It is therefore recommended that the submerged wreck be retained on the charts.

With the above exception the present survey is adequate to supersede the charted information.

B. Controlling Depths

The charted controlling depth of the entrance channel to Little Wicomico River is based on date furnished by the U. S. Corps of Engineers subsequent to the date of the present survey and supersedes the present survey information. The charted controlling depth of Little Wicomico River inner channel was applied from the present survey and is in adequate agreement with the present smooth sheet.

C. Aids to Navigation

The aids to navigation located on the present survey are in substantial agreement with the charts except the daybeacons number 7 to 15 in the upper part of Little Wicomico River. Beacon number 8 was moved and beacons no. 7, 9, 11, 12, 14 and 15 were established subsequent to the date of the present survey.

The aids to navigation as presently charted adequately mark the features intended.


8. Compliance with Project Instructions

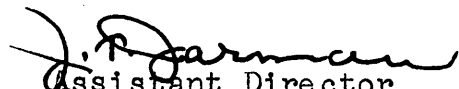
The survey adequately complies with the Project Instructions.

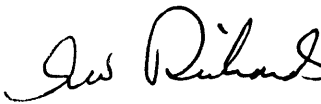
9. Additional Field Work


This is a good basic survey. It would be desirable, however, to confirm the absence of a channel through the bar at the entrance to Ellyson Creek, Lat. $37^{\circ}53.68'$, Long. $76^{\circ}15.92'$ by additional sounding lines in this area.

Examined and Approved:


Chief, 10/13/61
Nautical Chart Division

 10/24/61
Assistant Director,
Office of Cartography


Projects Officer,
Operations Division

 10/26/61
Assistant Director,
Office of Oceanography

GEOGRAPHIC NAMES
Survey No. H-8277

Name on Survey	Source										
	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			(Title)						BGN	1 -	
Chesapeake Bay			"						"	2 -	
Great Wicomico River			"						"	3	
Chesapeake Beach										4 ✓	
Cockrell Creek									BGN	5 ✓	
Reedville										6 -	
Smith Point										7 -	
Little Wicomico River										8 ✓	
Rock Hole										9 ✓	
Tabb Creek										10 -	
Sharps Creek										11 -	
Sunnybank			(Tide station)							12 ✓	
Bridge Creek										13 -	
Back Creek										14 ✓	
Cod Creek										15 ✓	
Spring Cove										16 ✓	
Ellyson Creek										17 ✓	
			Names approved 2-2059. See charts 534 and 557 for best placement of names.								18
Tide station off sheet:										19	
Great Wicomico River Lighthouse										20	
										21	
										22	
										23	
										24	
										25	
										26	
										27	

L. HASK

Hydrographic Surveys (Chart Division)

HYDROGRAPHIC SURVEY NO. ...8277...

Records accompanying survey: Smooth sheets ...1...;
 boat sheets ...1...; sounding vols. 14...; wire drag vols.;
 (2 parts)
 Descriptive Reports ...1...; graphic recorder envelopes ...7...;
 special reports, etc.

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

Number of positions on sheet	3552
Number of positions checked	23
Number of positions revised	7
Number of soundings revised (refers to depth only)	42
Number of soundings erroneously spaced	0
Number of signals erroneously plotted or transferred	8
Topographic details	Time 4
Junctions	Time 10
Verification of soundings from graphic record	Time 14
Special adjustments	Time 4

Verification by *David Keeler* Total time 312 Date Oct. 28, 1960

Reviewed by *D. L. Engle* Time 99 Date Apr. 26, 1961

RHC

TIDE NOTE FOR HYDROGRAPHIC SHEET

Chart Division: R. H. Carstens

26 March 1959

Plane of reference approved in
14 volumes of sounding records for

HYDROGRAPHIC SHEET 8277

Locality Vicinity of Smith Point, Chesapeake Bay

Chief of Party: K. S. Ulm in 1955

Plane of reference is mean low water reading

1.9ft. on tide staff at Great Wicomico River Lt. House

14.2ft. below B.M. 1 (1898)

2.4 ft. on tide staff at Sunnybank

3.0 ft. below B.M. 1 (1955)

Height of mean high water above plane of reference is as follows:

Great Wicomico River Lt. Ho. = 1.1 feet
Sunnybank = 0.8 feet

Condition of records satisfactory except as noted below:



Signature

Chief, Tides Branch

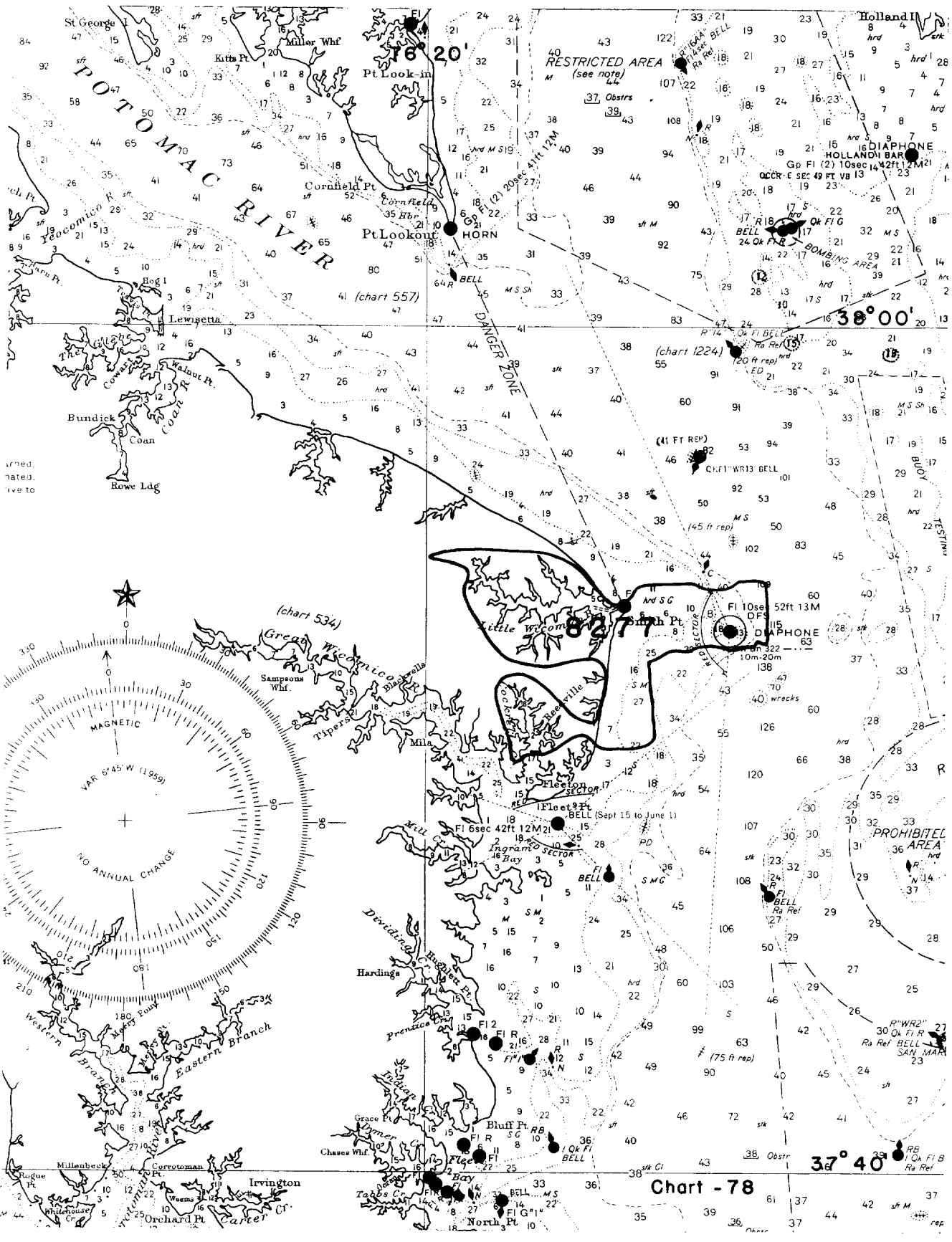


Chart - 78

37° 40'

NAUTICAL CHARTS BRANCH

SURVEY NO. H-8277

Record of Application to Charts

DATE	CHART	CARTOGRAPHER	REMARKS
557	4/2/59	J. H. Eaton ^{VRK}	Part Before After Verification and Review
1223	4/2/59	J. H. Eaton ^{VRK}	Part Before After Verification and Review
1224	4/2/59	J. H. Eaton	Part Before After Verification and Review
78	6/30/59	J. P. Walker	Before After Verification and Review <i>Examined - not applied</i>
2-16-60	101-1	A. J. Hoffman	Partially Before After Verification and Review, also applied changes to Ch. 557.
5/2/60	534	Helmer	Before After Verification and Review <i>Partial of critical sigs and curves</i>
5/26/61	557	J. H. Eaton	<i>Comp App'd.</i> Before After Verification and Review <i>before Insp.</i>
8/11/61	1223	J. H. Eaton	<i>Comp app'd. thru CR 557</i> Before After Verification and Review
8-28-61	1224	R. E. Elkins	Before After Verification and Review <i>Partly applied Examined review - no revisions</i>
8-29-61	1224	R. E. Elkins	Before After Verification and Review <i>Fully applied thru chart 1223</i>
9/29/67	78	M. A. Hall	<i>Fully app after V + R thru CR 1223</i>

*via 557 & 1223
SMU*

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.