

8190

Diag. Cht. No. 78-3.

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey Hydrographic

Field No. CO-1654 Office No. H-8190

LOCALITY

State Virginia

General locality Chesapeake Bay

Locality Great Wicomico River

19/54-55

CHIEF OF PARTY

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

LIBRARY & ARCHIVES

DATE September 12, 1959

8-1870-1 (11)

8190

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-8190

Field No. CO-1654

State VIRGINIA

General locality CHESAPEAKE BAY

Locality GREAT WICOMICO RIVER ENTRANCE

Scale 1:10,000 Date of survey 12 Oct. 1954 to 20 July 1955

Instructions dated 5 February 1953, 25 February 1954 and 14 January 1955

Vessel LAUNCH NO. 102, LAUNCH NO. 174 AND SKIFF NO. 749

Chief of party Lcdr. Don A. Jones, Cdr. William N. Martin and Cdr. Kenneth S. Wlm

Surveyed by Lieut. (j.g.) Albert J. Ramey, Robert J. Black

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

Fathograms scaled by Personnel of Ship COWIE

Fathograms checked by Personnel of Ship COWIE

Protracted by R.D. Lynn

Soundings penciled by R.D. Lynn

Soundings in ~~fathoms~~ feet at MLW MLLW AND ARE TRUE DEPTHS

REMARKS: _____

257

DESCRIPTIVE REPORT
TO ACCOMPANY

HYDROGRAPHIC SURVEY H

FIELD NO. 00-1654

CHESAPEAKE BAY

GREAT WICOMICO RIVER

USC&GS SHIP COWIE

SCALE 1:10,000

Lcdr. D. A. Jones
Cdr. W. N. Martin
Cdr. K. 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:

The area covered by this survey includes the entrance to the Great Wicomico River and adjacent tributaries. Junctions with contemporary surveys are as follows: 00-1554 to the south, 00-1155 to the west, 00-1255 to the north, and 00-2155 to the east.

The survey began on 12 October 1954 and concluded on 20 July 1955.

C. Vessel and Equipment:

Launch No. 102, equipped with 808 type fathometers nos. 114-S, 118-S, 120-S, and 156-SPX, was used in general depths of 5 feet and upward. Skiff 749, equipped with 808 type fathometers 67 and 114-S, and sounding pole, was used in shoal areas along the shore, creeks and inlets. Launch No. 174 (HYDROJET), equipped with 808 type fathometers 114-S and 118-S, was used on an experimental basis in general depths of 2 feet and upward.

The two launches and skiff operated from the Ship COWIE.

D. Tides and Current Stations:

Portable automatic tide gages were maintained at the Great Wicomico River Light House and Glebe Point, Great Wicomico River, throughout the entire period of this survey. 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 ~~will~~^{was} be by the Norfolk Processing Office.

F. Control Stations:

Triangulation Stations:

Hydrographic Name

Cockrell Point Light, 1938	Poin
Cockrell's Creek Light, 1938	Reek
Cove (VFC), 1931	Cove
Cranes Creek Channel Daybeacon No. 2, 1955	Two
Cranes Creek Channel Daybeacon No. 4, 1955	Four
Fleet Point Light 2, 1955	Flee
Great Wicomico River Light House, 1898	Wico
Haynie Point Light, 1938	Hay
Haynie (VFC), 1931	Nie
Reedville Morris Factory Stack, 1938	Stak
Reedville Municipal Water Tank, 1955	Aft
Sandy Point Light, 1938	Andy

Topographic Stations: - Manuscript No. T-11051(52) *See N.P.O. Signal List.*

Abe	Bob	Cut	Egg <i>Ego</i>	Get	Kim	Pad	Sag <i>Sad</i>
Act	Box	Cry	Elf	Gig	Lad	Pal	Sal
Age	Bus	*Dim	Elm	Gin	Lax	Pep	Sam
Aha	But	Dim <i>DIN</i>	End	*Guy	Mac	Pet	She
Alp	Cam	Dip	Era	Guy <i>Gay</i>	Mar	Pin	Sic
Amp	Can	Dix	Eva	Hoe	Mas	Pit	Tan
Ann	Cap	*Doc	Far	Hop	Mid	Pix	*Tap
Ant	Car	Dec <i>DON</i>	Few	Hub	Ned	Put	Tap <i>Top</i>
Bar	Caw	Dot	Fin	Ion	New <i>Net</i>	Ram	Thy
Bat	Coo	Dud	Fix	Jaw	Nip	Red	Van
Bed	Cow	Due	For	Jay	Oil	Rot	Vex
Bib	Cud	*Egg	Gee	Jug	Owl	Rum	Vie
							Wad
							*Wag
							Wag <i>Wac</i>
							Zig

* These names used twice on sheet.

Topographic Stations: - Manuscript No. T-11053 (52)

Ace	Dog	Gal	Irk	Log	Obi	Rue	Ula
Aim	Dun	Glo	Ivy	Low	Orb	Sam <i>Sap</i>	Vet
Bag	Eat	Got	Joe	Mug	Pat	Sex	Vim
Big	Few <i>Fed</i>	Hat	Joy	Mum	Pat	Ski	War
Gow <i>CON</i>	Fig	Hex	Kay	Nap	Quo	Tax	Wax
Coy	Fox	His	Kid	New	Rat	Tox	Yet
Day	Gag	Ice	Kim <i>KIN</i>	Nod	Rev	Try	

Signals located by sextant:

Bea
Pil

G. Shoreline and Topography:

The shoreline on the boat sheet was transferred from aerial photograph manuscripts T-11051 and T-11053. 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° 46.95'	Longitude	76° 16.50'
2.	37° 47.65'		76° 18.70'
3.	37° 47.75'		76° 18.60'
4.	37° 48.75'		76° 16.95'
5.	37° 49.62'		76° 15.73'
6.	37° 49.90'		76° 15.35'

H. Soundings:

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

I. Control of Hydrography:

Sounding lines were controlled by three point fixes, using natural objects or signals erected along the shoreline. Satisfactory 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 adequately drawn 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:

Skiff No. 749:

1. Item 7, (Preliminary Review), lists a wreck in Latitude 37° 28.25', Longitude 76° 17.21' which was charted in 1925 from an undetermined source. Prior to that time, a wreck was charted from H-3012 (1909), 300 meters southwestward. A buoy was planted, pos. 1421, and a thorough search was conducted as described in the sounding volume. According to Mr. A. L. Saunders, there had been three boats, one a schooner, put on the shoal, and that all of them had disappeared in the sand many years ago. It is therefore recommended that this wreck be removed from the chart.

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

2. At latitude $37^{\circ} 49.39'$, longitude $76^{\circ} 16.39'$ is a ^{Amash MLW} submerged wreck, pos. 82a.
3. The charted ruins at latitude $37^{\circ} 49.35'$, longitude $76^{\circ} 16.58'$ is a ^{Amash MLW} submerged large wreck, pos. 46b.
4. The charted ruins at latitude $37^{\circ} 50.25'$, longitude $76^{\circ} 14.98'$ are iron stakes and submerged cement tile groins, pos. 75p.
5. The entrance to Taskmers Creek at latitude $37^{\circ} 49.9'$, longitude $76^{\circ} 15.35'$ no longer exists, having been closed by sand.
6. The shoreline in the vicinity of latitude $37^{\circ} 49.6'$, longitude $76^{\circ} 15.5'$ is foul with piles and cement tile groins. ^{CHANGE IN Shoreline Not Made At This Time 10/22/57}
7. The entrance to the small gut, latitude $37^{\circ} 49.6'$, longitude $76^{\circ} 15.75'$ is blocked by sand.
8. At latitude $37^{\circ} 48.16'$, longitude $76^{\circ} 19.29'$ is a pile, 10 inches in diameter and bare 7 feet (Hydrographic Signal Pil), pos. 16q.
9. The shoreline in the vicinity of latitude $37^{\circ} 49.05'$, longitude $76^{\circ} 16.95'$ is foul with partly submerged piles.
10. The entrance to Shell Creek, latitude $37^{\circ} 49.6$, longitude $76^{\circ} 19.25'$ is blocked by a shoal bar, pos. 40s. ^(low water advice)
11. At latitude $37^{\circ} 49.08'$, longitude $76^{\circ} 16.95'$ are two mooring piles which bare 6 feet, positions 12 & 13u. ^{N.P. very close in shore}
12. At latitude $37^{\circ} 49.02'$, longitude $76^{\circ} 16.94'$ is the ruins of a fish house, which, according to Mr. I. R. McFarland, existed approximately 40 years ago. ^{N.P. close inshore}
13. At latitude $37^{\circ} 48.56'$, longitude $76^{\circ} 16.95'$ is the remains of a 40 foot yacht which wrecked on the ice-breaker rocks east of the Great Wicomico River Lighthouse, 18u.
14. At latitude $37^{\circ} 48.96'$, longitude $76^{\circ} 16.16'$ is a power pole which marks the inshore end of an underwater cable extentend to the Great Wicomico River Lighthouse.
15. Latitude $37^{\circ} 48.18'$, longitude $76^{\circ} 18.52'$ marks the entrance to Towles Creek which is blocked by a shoal bar.
16. It should be noted that this report only gives a partial list of the numerous wrecks and ruins in the vicinity of Cockrell 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. ^{Creek}

Launch No. 102:

1. A comparison with Chart No. 534 (print date 2/9/53), shows good agreement between the old and new surveys.

N. Dangers and Shoals:

Skiff No. 749:

1. The bight in the vicinity of latitude $37^{\circ} 49.8'$, longitude $76^{\circ} 16.7'$ is foul with large pieces of scrap metal.
2. Latitude $37^{\circ} 49.40'$, longitude $76^{\circ} 16.34'$, marks the offshore end of a shoal bar, pos. 1b.
3. Latitude $37^{\circ} 50.09'$, longitude $76^{\circ} 17.82'$, marks the offshore end of a shoal making off point, pos. 43d.

Launch No. 102:

1. The pile of rocks, 25 meters east of the Great Wicomico River Lighthouse, is considered a danger to navigation, and is recommended for charting. These rocks, which bare about ~~1 foot~~ ^{2 feet} at MLW, are submerged at high tide. The danger of these rocks is evidenced by the fact that a 40-foot yacht was wrecked on them in April 1955 (See L-M, item 13).

O. Coast Pilot Information:

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

P. Aids to Navigation: *See list by processing Office.*

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

Floating aids to Navigation, within the limits of this survey are as follows:

1. Dameron Marsh Shoal Buoy "3", latitude $37^{\circ} 47.80'$, longitude $76^{\circ} 15.54'$, in 24 feet of water.
2. Mill Creek Entrance Buoy "1", latitude $37^{\circ} 47.57'$, longitude $76^{\circ} 18.18'$, in 5-1/2 feet of water.
3. Fleet Point Buoy "2", latitude $37^{\circ} 48.46'$, longitude $76^{\circ} 17.33'$, in 19 feet of water.
4. Mississippi River Nun Buoy, latitude $37^{\circ} 48.96'$, longitude $76^{\circ} 17.12'$ in 11 feet of water (private maintained).
5. Mississippi River Nun Buoy, latitude $37^{\circ} 49.02'$, longitude $76^{\circ} 17.02'$, in 6 feet of water (private maintained).

Q. Landmarks for Charts:

Form 567, Landmarks for Charts is being prepared as a separate report.

No new landmarks are recommended for the area covered by this survey.

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 fathometers and survey vessel used. An abstract of these
corrections is included as part of this report.

Z. Tabulation of Applicable Data:

A list of signals is attached to Vo. No. 1 of the sounding records. ✓

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

Respectfully submitted,

Albert J. Ramey

Albert J. Ramey
Lieut. (j.g.), USC&GS

Approved and forwarded:

Edmund S. Ulm

Kenneth S. Ulm
Commander, USC&GS

TIDE NOTE

A portable automatic tide gage at the Great Wicomico River Lighthouse, latitude $37^{\circ} 48.25'$, longitude $76^{\circ} 16.08'$, was used for obtaining tide reducers for the entire survey. No time or heights corrections were applied to the observed tides. 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	10/12/54	a	34	5.3
I	10/13/54	b	30	4.7
I	10/14/54	c	25	3.7
II	4/13/55	d	76	11.8
II	4/14	e	70	10.7
II	4/18	f	115	17.4
III	4/18	f	13	1.9
III	4/28	g	229	31.3
IV	5/25	h	102	14.3
IV	6/2	j	151	20.2
V	6/2	j	30	3.9
V	6/6	k	242	28.3
VI	6/14	l	91	11.3
VI	6/15	m	167	21.4
VII	6/15	m	79	11.0
VII	6/16	n	178	25.1
VIII	6/20	p	64	9.5
VIII	6/21	q	170	23.6
IX	6/22	r	89	13.7
IX	6/23	s	116	17.3
X	6/27	t	18	3.3
X	6/30	u	27	4.4
X	7/14	v	79	9.3
Totals			2,195	303.4

Statistics: Skiff No. 749: ✓

XI	4/19/55	a	133	12.0
XI	4/20	b	89	7.2
XI	5/10	c	87	4.0
XII	5/10	c	30	3.7
XII	5/11	d	79	5.8
XII	5/12	e	167	19.8
XIII	5/17	f	83	8.3
XIII	6/9	g	46	5.3
XIII	6/13	h	104	11.5
XIII	6/28	j	17	1.9
XIV	6/29	k	150	18.9
XIV	6/30	l	142	14.4
XV	7/5	m	77	6.0
XV	7/6	n	147	12.4
XV	7/7	p	38	4.9
XVI	7/7	p	137	15.8
XVI	7/11	q	74	7.0
XVII	7/12	r	132	13.2
XVII	7/13	s	142	11.4
XVIII	7/13	s	17	0.3
XVIII	7/18	t	56	4.9
XVIII	7/19	u	55	3.0
XVIII	7/20	v	4	0.1
Totals			2,006	191.8

Statistics: Launch No. 174: ✓

<u>Vol. No.</u>	<u>Date</u>	<u>Day Letter</u>	<u>No. of Pos.</u>	<u>Stat. Miles</u>
XIX	6/14/55	a	27	3.2
XIX	6/28	b	<u>135</u>	<u>16.1</u>
Totals			<u>162</u>	<u>19.3</u>
Launch No. 102			2,195	303.4
Skiff No. 749			2,006	191.8
Launch No. 174			<u>162</u>	<u>19.3</u>
Grand Totals			<u>4,363</u>	<u>514.5</u>

Area: 15.97 Square Statute Miles.

FATHOMETER CORRECTIONS

Launch No. 102 - Fathometer No. 114-S

All Corrections are PLUS unless
otherwise marked.A Scale

0	30	0.0
30.5	40	0.2
40.5	50	0.4
50.5	60	0.6

B Scale

37	44	2.0
44.5	55	2.2
55.5	72	2.0
72.5	75	2.2
75.5	77	2.4
77.5	79	2.6
79.5	Rest	2.8

C Scale

68	72	6.0
72.5	76	5.8
76.5	80	5.6
80.5	84	5.4
84.5	88	5.2
88.5	92	5.0
92.5	96	4.8
96.5	100	4.6
100.5	104	4.4
104.5	108	4.2
108.5	112	4.0
112.5	116	3.8
116.5	120	3.6

Skiff No. 749 - Fathometer No. 114-S

A Scale

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

Launch No. 174 - Fathometer No. 114-S

0	15	0.0
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* Continued at bottom of page

Launch No. 102 - Fathometer 118-S

A Scale

0	7	0.0
7.5	26	0.2
26.5	35	0.4
35.5	40	0.6
40.5	45	0.8
45.5	48	1.0
48.5	50	1.2

B Scale

* 40	44	1.0
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Launch No. 174 - Fathometer 118-S

A Scale

0	5.5	0.2
6	7.5	0.0
8	15	-0.2

Launch No. 102 - Fathometer 120-S

A Scale

0	40	0.0
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Launch No. 102 - Fathometer 156-SPX

A Scale

0	7	0.4
7.5	12	0.6
12.5	36	0.8

Skiff No. 749 - Fathometer 67

A Scale

0	12	0.2
12.5	35	0.0

*Launch No. 102 - Fathometer 118-S

B Scale

44.5	58	1.2
58.5	60	1.0

PROCESSING OFFICE
LIST OF SIGNALS

H-8190

TRIANGULATION STATIONS

AFT	REEDVILLE MUNICIPAL WATER TANK, 1955 ✓
ANDY	SANDY POINT LIGHT, 1938 ✓
COVE	COVE (V.F.C.), 1931 ✓
FLEE	FLEET POINT LIGHT 2, 1955 ✓
FOUR	CRANES CREEK CHANNEL DAYBEACON, 4, 1955 ✓
HAY	HAYNIE POINT LIGHT, 1938 ✓
NIE	HAYNIE (V.F.C.), 1931-38 ✓
POIN	COCKRELL'S POINT LIGHT, 1938 ✓
REEK	COCKRELL'S CREEK LIGHT, 1938 ✓
STAK	REEDVILLE, MORRIS FACTORY STACK, 1938 ✓
TWO	CRANES CREEK CHANNEL DAYBEACON 2, 1955 ✓
WICO	GREAT WICOMICO RIVER L.H., 1898-1938 ✓
MARS	MARSH, 1944-52 ✓

TOPOGRAPHIC STATIONS

SOURCE T-11051 (1952)

Abe	Act	Age	Aha	Alp	Amp	Ann	Ant	Bar	Bat
Bed	Bib	Bob	Box	Bus	But	Cam	Can	Cap	Car
Caw	Coo	Cow	Cud	Cut	Cry	Dim	Din	Dip	Dix
Doc	Don	Dot	Dud	Due	Egg	Ego	Elf	Elm	End
Era	Eva	Far	Few	Fin	Fix	For	Gay	Gee	Get
Gig	Gin	Guy	Hoe	Hop	Hub	Ion	Jaw	Jay	Jug
Kin	Lad	Lax	Lee	Mac	Mar	Mas	Mid	Ned	Net
Nip	Oil	Owl	Pad	Pal	Pep	Pet	Pin	Pit	Pix
Put	Ram	Red	Rot	Rum	Sag	Sal	Sam	Set	She
Sic	Tan	Tap	Top	Thy	Van	Vex	Vie	Wac	Wad
Wag	Zig								

SOURCE T-11053 (1952)

Ace	Aim	Bag	Big	Con	Coy	Day	Dog	Dun	Eat
Fed	Fig	Fox	Gag	Gal	Glo	Got	Hat	Hex	His
Ice	Irk	Ivy	Joe	Joy	Kay	Kid	Kim	Log	Low
Mug	Mum	Nap	New	Nod	Obi	Orb	Pat	Poi	Quo
Rat	Rev	Rue	Sap	Sex	Ski	Tax	Tox	Try	Ula
Vet	Vim	War	Wax	Yet					

HYDROGRAPHIC STATIONS ✓

Bea	Vol. 16, Pg. 43
Pil	Vol. 16, Pg. 46

PROCESSING OFFICE
LIST OF
FLOATING AIDS TO NAVIGATION

<u>BUOY</u>	<u>LATITUDE</u>	<u>LONGITUDE</u>	<u>DEPTH</u>	<u>POS. NO.</u>	<u>DATE</u>
Dameron Marsh Shoal Buoy 3	37-47.8	76-15.5	24	170n	6/16/55 ✓
Mill Creek Entr. Buoy 1	37-47.5	76-18.1	5	1b	6/28/55 ✓
Fleet Point Buoy 2	37-48.4	76-17.3	19	1m	6/15/55 ✓

PRIVATELY MAINTAINED BUOYS

Mississippi Nun Buoy	37-48.9	76-17.1	11	17u	7/19/55 ✓
" " "	37-49.0	76-17.0	6	16u	7/19/55 ✓

PROCESSING OFFICE ADDENDUM
To Accompany

HYDROGRAPHIC SURVEY H-8190 (Field No. Co-1654)

GENERAL

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

SIGNAL NAMES

The hydrographic names of fourteen topographic signals were changed to avoid duplications on the smooth sheet

SHORELINE CHANGES

This Office was unable to determine the exact position of the high-water-line changes in the area N.W. of station Set.

Lat. 37-47.4 and Long. 76-19.1 -- Hydrographic lines indicate shoreline changes in this area. Reference to air-photos will probably be helpful in clarifying both instances.

satisfactory adjustment made by verifier.

Norfolk, Va.
9 Sept. 1957

Respectfully submitted,

Hugh L. Proffitt

Hugh L. Proffitt
Cartographer.

Survey No. 8190

M 234

TIDE NOTE FOR HYDROGRAPHIC SHEET

Chart Division: R. H. Carstens:

23 September 1957

Plane of reference approved in
19 volumes of sounding records for

HYDROGRAPHIC SHEET 8190

Locality Chesapeake Bay, Virginia

Chief of Party: J. C. Bull)
W. N. Martin) in 1954-55

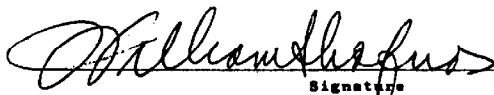
Plane of reference is mean low water, reading

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

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

Height of mean high water above plane of reference is 1.1 feet.

Condition of records satisfactory except as noted below:



Signature

Chief, Tides Branch

Hydrographic Surveys (Chart Division)

HYDROGRAPHIC SURVEY NO. ..8190..

Records accompanying survey:

Boat sheets .1...; sounding vols. ..19.; wire drag vols.;
bomb vols.; graphic recorder rolls .13-^Benvelopes
special reports, etc. .1-Smooth sheet and .1-Descriptive report.
.....

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

Number of positions on sheet	4363.
Number of positions checked	.381..
Number of positions revised	..3...
Number of soundings revised (refers to depth only)	...8...
Number of soundings erroneously spaced	..0...
Number of signals erroneously plotted or transferred	..0...
Topographic details	Time ..10..
Junctions	Time ..0...
Verification of soundings from graphic record	Time ..12...

Verification by *Gary Ater*.....Total time 322.. Date 1/27/59

Reviewed by...*[Signature]*..... Time 27.... Date 30 Sept 1959

DIVISION OF CHARTS

REVIEW SECTION - NAUTICAL CHART BRANCH

REVIEW OF HYDROGRAPHIC SURVEY

Registry No. 8190

Field No. 60-1654

Virginia, Chesapeake Bay, Great Wicomico River Entrance

Surveyed: Oct. 1954 - July 1955

Scale 1:10,000

Project No. CS-1287

Soundings: 808 Depth Recorder
Hand lead and pole

Control: Sextant fixes on
shore signals

Chief of Party ----- D. A. Jones, W. N. Martin and K. S. Ulm
Surveyed by ----- A. J. Ramey and R. J. Black
Protracted by ----- R. D. Lynn
Soundings plotted by --- R. D. Lynn
Verified and inked by -- G. Ater
Reviewed by ----- L. S. Straw
Inspected by ----- R. H. Carstens

Date: 30 Sept. 1959

1. Shoreline and Control

The shoreline originates with reviewed air-photographic surveys T-11051 (1952-54) and T-11053 (1952-54) supplemented by corrections shown in red made by the hydrographic party.

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

2. Sounding Line Crossings

The depths at sounding line crossings are in good agreement.

3. Depth Curves and Bottom Characteristics

The usual depth curves supplemented by the 3 ft. curve were adequately delineated.

The present survey covers essentially the entrance of the Great Wicomico River into Chesapeake Bay including several small tributary creeks. In many areas, the deeper natural channels rise abruptly to shoal flats extending off from shore.

7. Condition of Survey

- a. The sounding records and Descriptive Report are complete and comprehensive.
- b. The smooth plotting was done accurately.

8. Compliance with Project Instructions

The survey adequately complies with the Project Instructions.

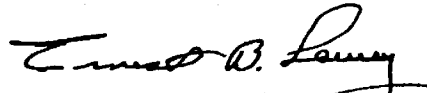
9. Additional Field Work Recommended

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

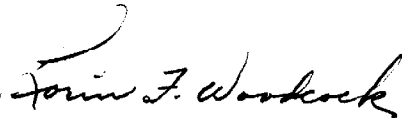
Examined and Approved:



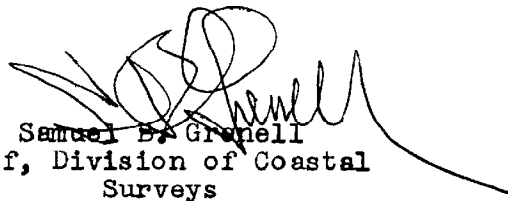
Max G. Ricketts
Chief, Nautical Chart Branch



Ernest B. Lewey
Chief, Division of Charts



Lorin F. Woodcock
Chief, Hydrography Branch



Samuel B. Grenell
Chief, Division of Coastal
Surveys

4. Junctions with Contemporary Surveys

The junction with H-8189 (1954) on the south in the vicinity of Dameron Marsh appears to be satisfactory but will be finally considered in the addendum to the review of that survey. The junctions with the unverified surveys H-8276 (1955) on the northwest and H-8277 (1955) on the north will be considered in the reviews of those surveys. H-8280 (1955) on the east has not as yet been received from the field.

5. Comparison with Prior Surveys

H-252 (1849 - 51)	1:40,000	H-1319a (1860)	1:128,000
H-1003 (1869)	1:20,000	H-1319b (1877)	1:80,000
H-1319 (1877)	1:80,000	H-2500 (1900-01)	1:60,000
		H-3012 (1909)	1:20,000

Only minor differences of 1 - 2 ft. in depths are noted between the prior and present surveys. Shoreline changes because of erosion, have been substantial in exposed areas. For example, the eastern shoreline of Eull Neck between lat. $37^{\circ}49'$ and $37^{\circ}51'$ is from 100 to 450 meters northwest of its location in 1849 (H-252); the island in lat. $37^{\circ}47.0'$, long. $76^{\circ}16.5'$ shown on H-252 (1849-51) has disintegrated to form several small islands; the shoreline in the vicinity of the mouth of Towles Creek has eroded westward about 275 meters and at Cockrell Point 130 meters northward. On the other hand, Sandy Point and Bussel Point have accreted northerly 180 meters and 360 meters respectively.

It is noted that H-1319 (1877), H-1319a (1860) and H-1319b (1877) contain no hydrography done in those years but pertain to the boundary line between Maryland and Virginia.

The present survey is adequate to supersede the sparsely developed smaller scale prior surveys within the common area.

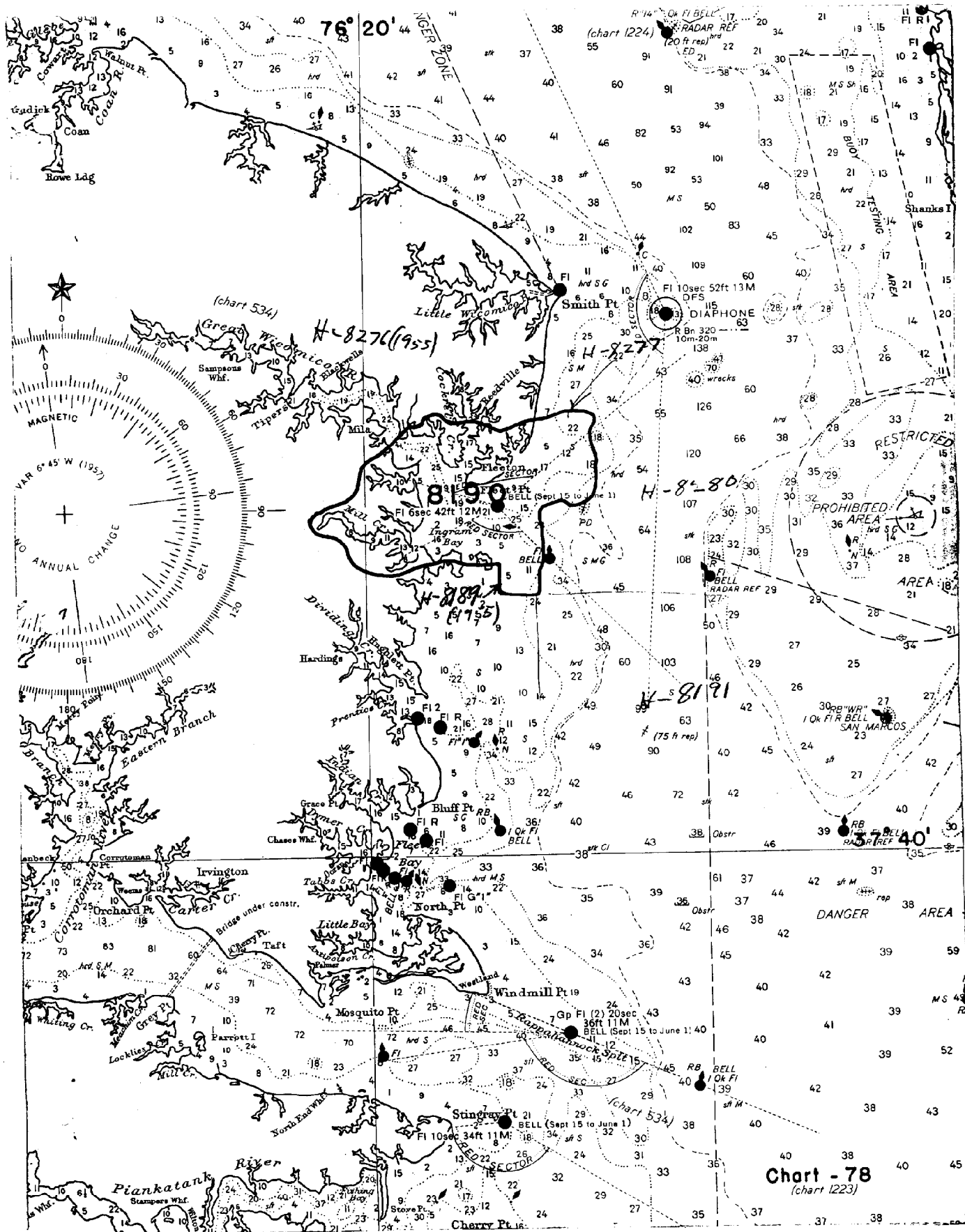
6. Comparison with Chart 534 (latest print 5-4-59)

A. Hydrography

The present survey was basically applied to the chart after preliminary verification but before review and is in agreement therewith.

B. Aids to Navigation

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



Sept 17, 1957

Record of Application to Charts

M-2168-1

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