8079

Diag. Cht. No 78-2

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey Hydrographic

Field No. CO-1253 Office No. H-8079

LOCALITY

State Virginia

General locality Chesapeake Bay

Locality Vicinity of Milford Haven

194/53

CHIEF OF PARTY

COMDR. J. H. BRITTAIN

LIBRARY & ARCHIVES

DATE February 1, 1955

B-1870-1 (1)

8079

Form 537
(Ed. June 1946)

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-8079

Field No. CO-1253

State VIRGINIA

General locality CHESAPEAKE BAY

Locality ~~VICINITY OF~~ MILFORD HAVEN AND VICINITY

Scale 1:10,000 Date of survey 9 June to 4 September 1953

Instructions dated 5 February 1953

Vessel Ship COWIE

Chief of party COMDR. J. H. BRITTAIN

Surveyed by ~~PERSONNEL, Ship COWIE~~ A. E. Greaves Jr. & A. J. Ramey

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

Fathograms scaled by PERSONNEL, Ship COWIE

Fathograms checked by " " " & Norfolk Processing Office

Protracted by Richard D. Lynn

Soundings penciled by Richard D. Lynn

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

REMARKS: This survey was smooth plotted by the Hydrographic Section of the Norfolk Processing Office.

U. S. GOVERNMENT PRINTING OFFICE 16—66520-1

DESCRIPTIVE REPORT

TO ACCOMPANY

HYDROGRAPHIC SURVEY H-8079, FIELD NO. CO-1253

CHESAPEAKE BAY VICINITY OF MILFORD HAVEN

SHIP COWIE SCALE: 1:10,000

J. H. BRITTAIN, COMDG.

A - PROJECT:

Project CS-287; Supplemental Instructions dated 5 February 1953.

B - SURVEY LIMITS AND DATES:

The area covered by this survey is from lat. 37°24.40', to lat. 37°29.00', and long. 76°12.60', to long. 76°19.30'. Junction is made with H-8078 CO-1153 (1953) to the south, H-8083 CO-2153 (1953) to the east, and H-8083 CO-2153 and H-8080 CO-1353 (1953) to the north. Review, par. 4

Hydrographic surveys began 9 June 1953 and ended 4 September 1953.

C - VESSELS AND EQUIPMENT:

Thirty-foot launch no. 102 and 25 foot unnumbered hydrographic skiff were used, both boats operating from the Ship COWIE. Launch no. 102, using 808 type fathometer no. 63, was used in Chesapeake Bay where the depth was 6 feet and over. The 25 foot skiff, powered by two outboard motors and using fathometer no. 118, pole and handlead for sounding, was used in shoal areas close to shore, and in creeks and inlets.

D - TIDE AND CURRENT STATIONS:

Portable automatic tide gages were maintained at Wolf Trap Light Station, and at Breeze Point, Milford Haven during this survey.

D - TIDE AND CURRENT STATIONS: (CONT.)

Tide gage records and all soundings are on Eastern Standard Time.

No current stations were observed in this area.

E - SMOOTH SHEET:

Projections will be constructed and sheets plotted by the Norfolk Processing Office.

F - CONTROL STATIONS:

Triangulation:

BILLUPS (VFC) 1920.

CARL (VFC) 1920-41

HOOK (VFC) 1920-41

Hydrographic:

INK - Rigby Island Light.

TOPOGRAPHIC - T-11158 (1952)

NAME	MAN. NO.	DESCRIPTION	NAME	MAN. NO.	DESCRIPTION
COP	246	Temporary signal	JAW	231	Temporary signal
DOG	245	Temporary signal	KID	232	Temporary signal
EMO	236	Temporary signal	LAY	-	Temporary signal
FIX	-	S^{E} Corner, shack	LIZ	-	Temporary signal
HER	226	Cedar Tree	MAR	234	Temporary signal
IRK	230	Temporary signal			

F - CONTROL STATIONS: (CONT.)

TOPOGRAPHIC - MANUSCRIPT NO. T-11157:

NAME	MAN. NO.	DESCRIPTION
ABE	-	Temporary signal
AGO	252	Temporary signal
ANT	368	End of Pier
APT	-	Temporary signal
ART	-	Temporary signal
ASK	266	SE corner of pier
AVE	306	E corner of pier
BAG	288	Temporary signal
BIG	251	Temporary signal
BIT	257A	S gable of house
BOB	307	End of pier
BUG	320	S gable of boat ho.
BUT	-	Bow of wrecked boat
CAB	287	End of pier
CALL	(1944)'53	Chimney, S. gable ho.
CAM	-	Temporary signal
COD	248	Temporary signal
COE	262	Temporary Signal
COT	268	S. end (center) of log shed
CUR	365A	Chimney of house
CUT	-	Temporary signal
DAW	286	NE corner of pier
DEB	-	Temporary signal
DID	260A	Bow of sunken boat
DOC	352	W gable of shed
DOX	269	Pier end
DUN	367	NE corner of "T" pier.
EAR	309	SE " " " "
EGO	291	NE " " " "
ELI	-	Temporary signal
ELM	353	End of pier
ERG	365	End of pier
FAR	-	W. gable, boat house
FAT	303	NW gable, boat house
FIT	354	Temporary signal
FOP	334	End of pier
FRO	359	Temporary signal
FRY	-	Temporary signal
GAD	302	SE Corner "L" pier
GAY	202	W. corner "T" pier
GET	355	Temporary signal
GIL	358	E. corner, pier
GOO	314	E. upper gable, ho.
GULF	(1944)'53	Boat house
GUM	333	Cedar Tree
HAT	301	End of Fence
HE	298	Pier end
HEM	290	S. corner, shed on pier
HIT	313	E. upper gable, house
HOD	328	NE corner of barge
HUB	332	Temporary signal
HUT	319	Temporary signal
HURST	(1944)'53	N. gable, barn
ICE	282	S. gable, house
IMA	321	Temporary signal
IT	296	S. corner "T" pier
IVA	315	Temporary signal
JAK	-	Temporary signal
JAR	280	Small holly tree
JIP	-	Temporary signal
JUD	274	S. gable, boat ho.
KEN	283	End of pier
KIP	316	Cedar Tree
KOD	273	SW corner, pier
KOP	-	Temporary signal
LAD	-	Temporary signal
LAX	294	Pier end
LID	272	Temporary signal
LOT	311	S. gable, boat ho.
LUG	331	Temporary signal
LUM	317	Temporary signal
MAG	-	Center, SW end of boat ho.
MAL	299	Pier end
MET	-	Temporary signal
MEX	270	N. gable shed
MIX	-	Temporary signal
NED	284	NW corner, pier
NOP	-	N. corner, pier end.
NOR	330	NE gable, house
NOT	-	Temporary signal
NUB	-	Dead tree in water
NUT	-	Temporary signal
OAK	285	N corner of pier
OFF	300	Pier end
OPE	322	End of pier
ORE	254	E corner of pier
ORI	267	End of pier
PAT	-	Box on NE corner pier
PEG	362	Temporary signal
PLY	-	S'ly. small ~~signal~~ cedar
POI	329	End of groin
PRO	255	N corner of pier
PUG	264	N corner of pier
PUP	312	NW corner of pier
RAG	-	SW end, boat house

F - CONTROL STATIONS: (CONT.)

TOPOGRAPHIC - MANUSCRIPT NO. T-11157:

NAME	MAN. NO.	DESCRIPTION:	NAME	MAN. NO.	DESCRIPTION
REL	309	NW corner of pier	TIM	-	Temporary signal
RET	-	Temporary signal ~~SW end, boat house~~	TO	295	S gable, house
RIG	356	Temporary signal	TOE	305	End of pier
RIT	-	N corner, pier end	TOT	370	End of pier
RUM	-	Temporary signal	TRAV	(1944)'53	W gable, barn
SAD	-	S gable, boat house	TREE	-	N'ly. of 2 prom trees
SAG	289	End of pier	TWIN	(1944)'53	S gable, house
SAX	357	Temporary signal	US	297	End of pier
SIC	346	Temporary signal	VAL	-	S'ly. of small cedars
SIN	-	Temporary signal	VIA	277	Temporary signal
SKY	371	N. gable of building	WAN	-	End of pier
SLY	-	Temporary signal	WAS	276	Temporary signal
SOD	261	NE corner, pond	WEE	323	W chimney of house
SOW	265	N corner of pier	WET	257	Temporary signal
SOX	308	Small Cedar	WIG	369	End of pier
TAN	-	End of pier	WIN	-	Temporary signal
TEL	-	SE corner of pier	YAK	-	Temporary signal
THY	-	Temporary signal	YEA	324	N gable house ~~Temporary signal~~
TID	-	Temporary signal	YET	253	Temporary signal
TIL	-	Temporary signal	ZIG	-	End of pier

G - SHORELINE AND TOPOGRAPHY:

The shoreline on the boat sheet was transferred from manuscripts T-11157 (1952) and T-11158 which cover this area. The air photos were taken recently and the shoreline on the manuscripts is correct. All the topographic signals were radial plotted from the air photos on the manuscripts and then transferred directly to the boat sheet by a Photogrammetrist from the Division of Photogrammetry and by personnel of the Ship COWIE.

It was not practicable to define the entire low water line by soundings due to the small range of tide and the attendant difficulty of getting the sounding vessel close to the beach without long periods spent dragging bottom or going aground. However, the sounding lines were run close to and parallel to the beach wherever possible.

H - SOUNDINGS:

Depths were measured with 808 type recording fathometer, leadline and pole. Bar checks were taken daily from the launch to depths where satisfactory results could be obtained. Fathometer corrections have been determined from the bar checks and entered in the sounding record by the field party. The leadline was checked daily with no corrections found. A check on the boat sheet of the overlap between fath., leadline and pole shows no more than 1 ft. difference.

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 using these signals.

J - ADEQUACY OF SURVEY:

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

K - CROSSLINES:

Crosslines are in good agreement, the percentage being estimated at eight to ten percent.

L-M - COMPARISON WITH PRIOR SURVEYS AND CHARTS:

A comparison with prior survey H-2813 (1906), H-987 (1868-69) and charts 534 (2/9/53), 1223 (12/22/52), 494 (5/6/52) and 78 (2/25/52) shows the following:

(1) In lat. 37°28.75, long. 76°15.19', a charted 14 foot sounding was found to have 15½ foot depths at this time.

(2) In lat. 37°28.97', long. 76°14.80', the charted 20 foot sounding was verified with 20 feet obtained 80 ~~meters west,~~ however, ~~150 meters west~~ ~~an~~ isolated 13 ~~14~~ foot shoal was found. in the same locality.

(3) In lat. 37°28.55', long. 76°15.04', the charted 13 foot sounding was not verified. Depths in the vicinity are 14 ~~15~~ to 16 feet. 13-ft. depths closeby

(4) In lat. 37°28.42', long. 76°14.35', 17 to 18 feet soundings were obtained in charted 20 foot depths.

(5) In lat. 37°28.36', long. 76°14.25', 16 ~~18~~ feet was obtained in charted 17 foot depths, ~~however 17 feet was obtained 80 meters to the east.~~

(6) In lat. 37°28.10', long. 76°13.53', 15 feet was obtained in charted depths of 17 feet. 13-ft. depths nearby

(7) In lat. 37°28.15', long. 76°14.60 ~~82~~', ~~6 to 7~~ 9 feet was obtained in charted 10 foot depths.

(8) In lat. 37°28.15', long. 76°14.97', 8 feet was obtained in charted 5 foot depths. (shoals have shifted in position

(9) In lat. 37°27.68', long. 76°14.38', 7 to 9 feet was obtained in charted 5 foot depths. (due to shifting shoals)

(10) In lat. 37 27.42', long. 76 14.18', 4-6 feet was obtained 80 meters north of a charted depth of 6 feet. The area of the charted 6 foot sounding was found presently to have 4 foot depths.

(11) In lat. 37°27.10', long. 76°13.81', 11-13 feet was obtained in charted 17 foot depths.

(12) In lat. 37°27.10', long. 76°13.10', 17 feet was obtained in charted 20 foot depths.

(13) In lat. 37°27.03', long. 76°12.81', 19 feet was obtained in charted 22 foot depths.

(14) In lat. 37°27.93', long. 76°14.09', 8-9 feet was obtained in charted 8 foot depths.

(15) In lat. 37°26.96', long. 76°14.36', 9-10 feet was obtained in charted 8 foot depths.

(16) In lat. 37°26.36', long, 76°14'38', 9 feet was obtained in charted 11 foot depths.

(17) In lat. 37°26.50', long. 76°14.03', 7-10 feet was obtained in charted 8 foot depths.

(18) In lat. 37°26.04', long. 76°14.30', 6-7 feet was obtained in charted 9 foot depths.

(19) In lat. 37°26.85', long. 76°13.53', 17 feet was obtained in charted 19 foot depths.

(20) In lat. 37°26.92', long. 76°12.97', 17 to 18 feet was obtained in charted 21 foot depths.

(21) In lat. 37°26.40', long. 76°12.87', 17 and 18 foot soundings verified a charted 17 foot sounding 90 meters south.

(22) In lat. 37°25.94', long. 76° 12.90', 18 feet was obtained in charted 18 foot depths.

(23) In lat. 37°25.14', long. 76°13.82', 10 feet was obtained in charted 14 foot depths.

(24) In lat. 37°25.9~~3~~1', long. 76°14.1~~0~~3', 7 feet was obtained in charted 14 foot depths.

(25) In lat. 37°24.50', long. 76°14.03', ~~7~~ 6 to 8 feet was obtained in charted 11 foot depths.

(26) In lat. 37°25.00', long. 76°12.80', 19 to 20 feet was obtained in charted 18 foot depths. 18-ft depths closeby

(27) In lat. 37°27.42', long. 76°12.70', ~~13~~ 11 to 15 feet was obtained in charted 28 foot depths on Milford Haven Spit. steep slope

(28) In lat. 37°27.42', long. 76°12.95', the 8 foot charted soundings was verified. by 7-ft.

(29) In lat. 37°27.25', long. 76°13.30', 12 to 15 feet was obtained in charted 18 foot depths. (6-ft. shoal ridge slightly northward)

(30) Least depths of 7 ~~and~~ to 10 feet were found on the eastern end of Milford Haven Spit in lat. 37°27.30', long. 76°12.~~68~~70'. These were previously uncharted. (6-ft. shoal ridge closeby)

(31) The southern edge of Milford Haven Spit has many sand ridges at the point where the depths fell rapidly into 13 to 22 feet. Most of the shoaler depths are uncharted and the following list is the general least depths along the shoal at this time.

5-6 feet at lat. 37° 27.28', long. 76°13.07'.

~~4~~5 feet at lat. 37°27.28', long. 76°13.26'.

~~4~~5 feet at lat. 37°27.2~~8~~5', long. 76°13.75'.

4 feet at lat. 37°27.1~~8~~6', long. 76°13.9~~5~~6'.

~~3~~4 feet at lat. 37°27.40', long. 76°14.~~19~~20'.

3 feet at lat. 37°27.33', long. 76°14.45'.

4 feet at lat. 37°27.4~~9~~7', long. 76°14.5~~1~~2'.

2 feet at lat. 37°27.4~~8~~0', long. 76°14.~~66~~73'.

(32) In lat. 37°25.4~~3~~5', long. 76°14.1~~5~~6', a previously uncharted 3 foot sounding was obtained.

(33) In lat. 37°25.15', long. 76°14.20', a previously uncharted 3 foot sounding was obtained.

(34) In lat. 37°24.80', long. 76°14.18', a previously uncharted shoal having a least depth of 3 feet was found.

(35) In lat. 37°24.76', long. 76°13.~~38~~40', a previously uncharted 9 foot sounding was ~~obtained~~.

(36) On the southern end of the boat sheet, three unverified charted soundings of 5 feet at lat. 37°24.42', long. 76°14.79'; 8 feet at lat. 37°24.42', long. 76°14.57', and 8 feet at lat. 37°24.38', long. 76°14.08', will be found. These soundings were developed on H-8078 CO-1153(1953), the adjoining survey, and depths of 4-7 ft. obtained ~~none were verified in that development.~~

(37) A jetty which at one time served as a breakwater for the entrance to Garden Creek, was located at lat. 37°25.40', long. 76°14.98'. Two rows of submerged piles were located in the same area. These piles are about flush with the bottom at this time.

(38) A previously uncharted 2 foot shoal was located at lat. 37°27.38', long. 76°15.00', in general depths of 3 to 6 feet.

(39) A group of piles, bare at MHW was located at lat. 37°27.6~~5~~8', long. 76°17.42'.

(40) A group of submerged piles was located at lat. 37°27.685', long. 76°17.42'.

(41) The offshore end of a double row of piles, extending beyond a small dock and bare at MHW, was located at lat. 37°27.63', long. 76°17.56'.

(42) A group of piles, bare at MHW, was spotted on the boat sheet at lat. 37°27.99', long. 76°19.00'.

(43) A group of piles, 12 bare and 4 submerged, was located at lat. 37°27.99', long. 76°19.00',.

(44) A mooring pile was located at lat. 37°27.28', long. 76°18.51'.

(45) A mooring pile was located at lat. 37°27.40', long. 76°18.47'.

(46) A mooring pile was located at lat. 37°27.00', long. 76°16.91'.

(47) A 3 foot shoal was located at lat. 37°28.03', long. 76°15.38', in surrounding depths of 6 feet.

N - DANGERS AND SHOALS:

Offshore there were found a number of fish traps, all of which are temporary. No other dangers of this nature were found in the offshore survey.

No new shoals were found in this survey, the depths on Milford Haven Spit had changed appreciably from prior surveys and these changes have been incorporated under Section L-M of this report.

O - COAST PILOT INFORMATION:

Coast Pilot information for this area has been prepared in a separate report by the Commanding Officer and has been forwarded to the Washington Office.

P - AIDS TO NAVIGATION: See Processing Office List

Form 567, Nonfloating Aids to Navigation was forwarded to the Washington Office 30 November 1953.

(1) Milford Haven Spit Buoy "C15", lat. 37 27.5~~0~~3', long. 76 12.5~~8~~9', in 30 feet of water.

(2) Whites Creek Entrance Buoy 1, lat. 37 27.92', long. 76 16.1~~5~~6', in 5 feet of water. Review, par. 6 B.

(3) Stutts Creek Entrance Buoy 1, lat. 37 28.20', long. 76 16.69', in 9 feet of water.

(4) Stutts Creek Entrance Buoy 2; lat. 37°28.21', long. 76°16.77', in 7 feet of water.

(5) Stutts Creek Buoy 3; lat. 37°28.07', long. 76°16.98', in 8 feet of water.

(6) Stutts Creek Junction Buoy; lat. 37°27.83', long. 76°17.20', in 7 feet of water.

(7) Stutts Creek Buoy 6; lat. 37°27.78', long. 76°17.49', in 7 feet of water. Review, par. 6 B.

(8) Stutts Creek Buoy 8; lat. 37°27.70', long. 76°18.02', in 9 feet of water.

(9) Milford Haven Buoy 9; lat. 37°29.05', long. 76°17.22', in 12 feet of water.

(10) Milford Haven Buoy 10; lat. 37°28.83', long. 76°16.98', in 11 feet of water.

(11) Milford Haven Buoy 12; lat. 37°28.61', long. 76°16.49', in 9 feet of water.

Q - LANDMARKS FOR CHARTS:

Form 567, Landmarks for Charts was forwarded to the Washington Office 30 Nov. 1953.

The northerly one of two large, prominent trees in lat. 37°26.' 1041.4 m, (808.3)m, long. 76°15' ~~1440.0 m (34.8)~~ 700m, is visible for a considerable distance and is recommended as a landmark. (so indicated on smooth sheet)

R - GEOGRAPHIC NAMES:

Geographic names as shown on Charts 534, 1223 and 78 are adequate and no additional names are recommended.

U-Y - MISCELLANEOUS:

In featureless shoal areas, soundings were spaced every 30 seconds on the boat sheet. Intermediate soundings were plotted only when needed to define underwater features.

The former entrance to Garden Creek, as shown on the aerial photograph is now blocked by sand. The jetty which formed this entrance was located as described in item 37, paragraph L-M.

Z - TABULATION OF APPLICABLE DATA:

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

A tabulation of other data is attached.

Respectfully submitted,

Arthur E. Greaves Jr.
ArthurE. Greaves, Jr.,
Lieut. (j.g.), USC&GS,

Albert J. Ramey
Albert J. Ramey,
Ensign, USC&GS,
Ship COWIE.

Approved and forwarded:

J. H. Brittain
J. H. Brittain,
Comdr., USC&GS,
Comdg. Ship COWIE.

FLOATING AIDS TO NAVIGATION
H-8079

BUOY	LAT.	LONG.	DEPTH	POS. NO.	DATE
Milford Haven Spit Buoy "C15"	37-27.53	76-12.58	30	1m	8/12/53
Whites Creek Ent. Buoy 1	37-27.92	76-16.16	4	23d	7/7/53
Stutts Creek Ent. Buoy 1	37-28.20	76-16.68	9	27w	9/1/53
Stutts Creek Ent. Buoy 2	37-28.21	76-16.78	9	28w	9/1/53
Stutts Creek Junction Buoy	37-27.84	76-17.21	7	30w	9/1/53
Stutts Creek Buoy 3	37-28.08	76-16.98	8	29w	9/1/53
Stutts Creek Buoy 6	37-27.78	76-17.49	7	23v	8/31/53
Stutts Creek Buoy 8	37-27.71	76-18.02	10	22v	8/31/53
Milford Haven Buoy 12	37-28.62	76-16.49	9	22d	7/7/53
Milford Haven Buoy 9	37-29.05	76-17.23	12	35d	7/7/53
Milford Haven Buoy 10	37-28.83	76-16.98	11	40d	7/7/53
C1 (Privately maintained	37-28.07	76-15.95	5	1w	9/1/53

STATISTICS

LAUNCH NO. 102:

VOL. NO.	DATE(1953)	DAY LETTER	NO. OF POSITIONS	STATUTE MILES
I	6/9	a	27	6.6
I	7/1	b	29	5.8
I	7/2	c	34	7.4
I	7/7	d	68	13.3
I	7/8	e	19	4.4
I	7/9	f	37	7.4
II	7/17	g	146	49.9
II	7/30	h	134	32.6
III	7/30	h	33	6.1
III	7/31	j	144	27.3
III	8/10	k	100	19.9
IV	8/10	k	24	4.9
IV	8/11	l	234	52.2
IV	8/12	m	42	7.0
V	8/12	m	234	39.6
V	8/31	n	69	11.7
VI	8/31	n	41	6.9
VI	9/1	p	290	52.2
VII	9/3	q	82	18.6
VII	9/4	r	35	6.3
LAUNCH TOTALS:			1596	369.1

HYDROGRAPHIC SKIFF:

VOL. NO.	DATE (1953)	DAY LETTER	NO. OF POSITIONS	STATUTE MILES
VIII	6/30	a	206	32.8
VIII	7/1	b	67	9.7
IX	7/1	b	154	21.0
IX	7/2	c	148	20.2
X	7/2	c	5	0.7
X	7/7	d	61	6.7
X	7/8	e	24	3.0
X	7/9	f	12	2.1
X	7/16	g	114	13.3
X	7/17	h	51	4.7
XI	7/17	h	44	5.0
XI	7/23	j	32	3.3
XI	7/24	k	119	10.6
XI	7/28	l	98	10.1
XII	7/28	l	110	11.1
XII	7/29	m	204	16.9
XIII	7/30	n	171	17.1
XIII	7/31	p	100	9.3
XIV	8/4	q	162	16.7
XIV	8/6	r	130	9.5
XV	8/7	s	82	7.0
XV	8/11	t	150	10.5
XV	8/12	u	127	9.7
XVI	8/12	u	53	3.8
XVI	8/31	v	58	4.0
XVI	9/1	w	33	2.1
HYDROGRAPHIC SKIFF TOTALS:			2189	228.0
LAUNCH TOTALS:			1596	369.12
GRAND TOTALS:			3785	597.12

AREA - 16.1 Square Statute Miles:

FATHOMETER CORRECTIONS

LAUNCH NO. 102:

DAY	DATE(1953)	CORRECTION
a	6/9	No Correction
b	7/1	No Correction
c	7/2	No Correction
d	7/7	No Correction
e	7/8	No Correction
f	7/9	No Correction
g	7/17	0.0 to 14.5 - 0.0 ft. Over 14.5 - +0.2 ft.
h	7/30	No Correction
J	7/31	0.0 to 14.5 - 0.0 ft. 15.0 to 24.5 - -0.2 ft. Over 24.5 - 0.0 ft.
k	8/10	No Correction
l	8/11	No Correction
m	8/12	No Correction
n	8/31	No Correction
p	9/1	No Correction
q	9/3	No Correction
r	9/4	No Correction

FATHOMETER CORRECTIONS

HYDROGRAPHIC SKIFF:

DAY	DATE(1953)	CORRECTION
a	6/30	Pole
b	7/1	Pole
c	7/2	0.0 to 6.0 ft. - +-0.0 ft.
		6.5 to 9.0 ft. - -0.2 ft.
		9.5 to 13.0 ft. - -0.4 ft.
		13.5 to 20 ft. - -0.6 ft.
d	7/7	0.0 to 8.0 ft. - + - 0.0 ft.
		8.5 to 12.0 ft.- - 0.2 ft.
		12.5 to 15.0 ft. - 0.4 ft.
		15.5 to 18 ft. - - 0.6 ft.
e	7/8	0.0 to 7.0 ft. - + - 0.0 ft.
		7.5 to 11.0 ft. - 0.2 ft.
		11.5 to 16.0 ft. - 0.4 ft.
		16.5 to 19.0 ft. - 0.6 ft.
f	7/9	Pole
g	7/16	Pole
h	7/17	Pole
j	7/23	Pole
k	7/24	Pole
l	7/28	Pole
m	7/29	Pole
n	7/30	Pole
p	7/31	Pole
q	8/4	Pole
r	8/6	Pole
s	8/7	Pole
t	8/11	Pole
u	8/12	Pole
v	8/31	Pole
w	9/1	Pole

TIDE NOTE

A portable automatic tide gage at Breeze Point, lat. 37°28.27', long. 76°16.88', was used for obtaining the tide reducers for Milford Haven and Milford Haven Entrance. The tide reducers for the remainder of the survey were obtained from a portable automatic tide gage at Wolf Trap Light Station at lat. 37°23.41', long. 76°11.39'. No Time or height corrections were applied to the observed tides. Hourly heights were scaled from the marigrams by personnel of the Ship COWIE. A tabulation of the work covered by each tide gage is included in this report.

TIDES

WOLF TRAP TIDES: LAUNCH NO. 102:

VOL. NO.	DATE(1953)	DAY
I - VII	6/9 - 9/4	1-a - 35-r

WOLF TRAP TIDES: HYDROGRAPHIC SKIFF:

VIII	6/30	1-a - 20-a
VIII	6/30 - 7/1	33-a - 7-b
VIII	7/1	28-b - 41-b
VIII-IX	7/1	60-b - 71-b
IX	7/1	85-b - 100-b
IX	7/1 - 7/2	147-b - 51-c
IX	7/2	77-c - 85-c
XII	7/29	183-m - 193-m

BREEZE POINT TIDES:

VIII	6/30	20-a - 33-a
VIII	7/1	7-b - 28-b
VIII	7/1	41-b - 60-b
IX	7/1	71-b - 85-b
IX	7/1	100-b - 147-b
IX	7/2	51-c - 77-c
IX-XII	7/2 - 7/29	85-c - 182-m
XII-XVI	7/29 - 9/1	194-m - 33-w

ADDENDUM
To Accompany

HYDROGRAPHIC SURVEY H-8079 (Field No. Co-1253)

GENERAL Considerable erosion has occurred in the vicinity of Lat. 37-26.50 and Long. 76-15.05, and an alongshore slough from 3 to 4 feet deep has formed in areas charted at 1 to 2 feet.

The tides on p day, 1 Sept. 1953 were entered incorrectly. This condition was corrected in the processing office bringing the soundings on this day in to agreement with surrounding hydrography. The general agreement of soundings at crossings was very good considering the many irregularities in the bottom in offshore areas.

ADDITIONAL CHART COMPARISONS

LAT.	LONG.	CHART	SMOOTH SHEET
37-27.28	76-12.75	19 to 23	6
37-27.32	76-13.08	8 to 12	5
37-27.23	76-13.89	10 to 14	4
37-25.03	76-14.21	7 to 9	3
37-25.17	76-14.72	3 to 5	2
37-25.55	76-13.71	14 to 15	11

Norfolk, Va.
28 Jan. 1955

Respectfully submitted,
Hugh L. Proffitt
Hugh L. Proffitt
Cartographer.

GEOGRAPHIC NAMES

Survey No. H-8079

Name on Survey	A On Chart No.	B On previous survey No.	C On U. S. quadrangle Maps	D From local information	E On local Maps	F P. O. Guide or Map	G Rand McNally Atlas	H U. S. Light List	K	
Virginia									BGN	1
Chesapeake Bay									"	2
Milford Haven Spit	(not hitherto named)									3
Milford Haven										4
Rigby Island										5
Whites Creek									BGN	6
* Back Creek										7
Stoakes Creek										8
Billups Creek										9
*Hudgins Creek										10
Morris Creek										11
Stutts Creek										12
*Callis Creek										13
Point Breeze		(one tide station)								14
Lanes Creek										15
Sandy Point										16
Gwynn Island										17
				Names approved 2-23-55, L. Heck						18
										19
Wolf Trap Light		(one tide station)							BGN	20
										21
*these three names have not hitherto been charted, but are on the 1948 MATHEWS 7½' quadrangle.										22
										23
										24
										25
										26
										27

M 234

Hydrographic Surveys (Chart Division)

HYDROGRAPHIC SURVEY NO. 8079.....

Records accompanying survey:

Boat sheets 1 (2 parts); sounding vols. 16; wire drag vols. .....;

bomb vols. .....; graphic recorder rolls 8 env.;

special reports, etc. 1 Smooth sheet.....

.....

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

Number of positions on sheet		3785
Number of positions checked		69
Number of positions revised		3
Number of soundings revised (refers to depth only)		*250
Number of soundings erroneously spaced		0
Number of signals erroneously plotted or transferred		0
Topographic details	Time	8
Junctions	Time	12
Verification of soundings from graphic record	Time	15

Verification by F. P. Saulebury.....Total time 203 Date 10-26-56

Reviewed by J. A. Dinsmore..... Time 32 Date 12-5-56

* Various tide & initial corrections.

M-2232-1

DIVISION OF CHARTS

REVIEW SECTION - NAUTICAL CHART BRANCH

REVIEW OF HYDROGRAPHIC SURVEY

REGISTRY NO. H-8079 FIELD NO. CO-1253

Virginia, Chesapeake Bay, Milford Haven and Vicinity

Project No. CS-287

Surveyed - June - Sept., 1953 Scale 1:10,000

Soundings: Control:

808 Fathometer
Hand lead
Pole

Sextant fixes on shore signals

Chief of Party - J. H. Brittain
Surveyed by - A. E. Greaves, Jr. and A. J. Ramey
Protracted by - R. D. Lynn
Soundings plotted by - R. D. Lynn
Verified and inked by - F. P. Saulsbury
Reviewed by - T. A. Dinsmore 5 December 1956
Inspected by - R. H. Carstens

1. Shoreline and Signals

The shoreline originates with unreviewed air-photographic surveys T-11157 and T-11158 of 1952.

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

2. Sounding Line Crossings

Depths at crossings are in good agreement.

3. Depth Curves and Bottom Configuration

The usual depth curves are adequately delineated. The 3-ft. curve was added to accentuate the many shoal sand ridges and knolls which characterize much of the inshore bottom. The bottom is generally undulating except where the sand ridges rise abruptly. A striking feature of the area is Milford Haven Spit extending eastward from Milford Haven inlet to long. 76°12.7', where depths of 6 - 10 ft. drop sharply to depths of 26 - 28 ft. in as short a distance as 40 meters.

4. Junctions with Contemporary Surveys

Adequate junctions were effected with H-8083 (1953) on the northeast and east and with H-8078 (1953) on the south. In these junctions, minor differences of 1 - 2 ft. were resolved during verification of the present survey. The junction with H-8080 (1953) on the north will be considered in the review of that survey.

5. Comparison with Prior Surveys

H-285 (1851) 1:40,000
H-987 (1868-69) 1:20,000
H-2813 (1906) 1:20,000

These prior surveys cover the area of the present survey. A comparison of the prior and present surveys reveals widespread bottom changes throughout the area generally except within the reaches of the sheltered creeks. In the entrance and offshore areas, much shifting of sand shoals has occurred. The shifting is evidenced by appreciable displacements in the 6-and 12-ft. depth curves. The following comparison indicates a few of the more conspicuous differences in depths:

Latitude	Longitude	Prior Depth	Present Depth
37°27.25'	76°12.75'	26	6
37°27.3'	76°13.2'	17	5-6
37°27.65'	76°14.4'	5	8-9
37°28.3'	76°14.9'	5	9-10
37°28.05'	76°15.65'	1	4-5

The 12-ft. curve delineating Milford Haven Spit which terminates in long. 76°12.7' has moved seaward about 250 meters since 1906. In the entrance area to Milford Haven, radical changes in shoreline delineation resulting from erosion have taken place since the early inshore survey of 1868-69 (H-987).

The present survey which completely delineates the bottom in this changeable area, entirely supersedes the prior surveys within the common area.

6. Comparison with Chart 494 (latest print date 7/9/56)
Chart 534 (latest print date 10/31/55)

A. Hydrography

Charted hydrography originates principally with the unverified boat sheets (Bps. 51826-7) of the present survey. Comparison of the charts and present survey smooth sheet reveals differences in depths of 1 to 3 ft. and

numerous depth-curve differences.

The 18-ft. sounding charted in lat. 37°28.72', long. 76°14.23', should be disregarded. Originating with the boat sheet (Bp. 51828) of H-8083 (1953), the apparent stray fathogram recording was revised to 23 ft. during the verification of the survey smooth sheet.

The piling charted in Stutts Creek from T-8329 (1942-46) were neither confirmed nor disproved by the present survey. The piling may still exist as charted or as submerged piling.

Except as noted in the preceding paragraph, the present survey is adequate to supersede the charted information.

B. Aids to Navigation

The beacons charted in Milford Haven and Stutts Creek were established subsequent to the present survey in accordance with information reported in H. O. Notices to Mariners Nos. 1 and 38 of 1955.

Except as noted, the aids to navigation located on the present survey are in substantial agreement with the charted aids and adequately mark the features intended.

7. Condition of Survey

a. The sounding records are complete; the Descriptive Report covers all matters of importance except that an excessive number of soundings under items L and M were listed with their latitudes and longitudes. Over fifty soundings or inshore features were listed, a large majority of which were of minor importance to nautical chart revision or to the verification or review of the survey.

b. The smooth plotting was accurately done.

8. Compliance with Project Instructions

The survey adequately complies with the Project Instructions.

9. Additional Field Work

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

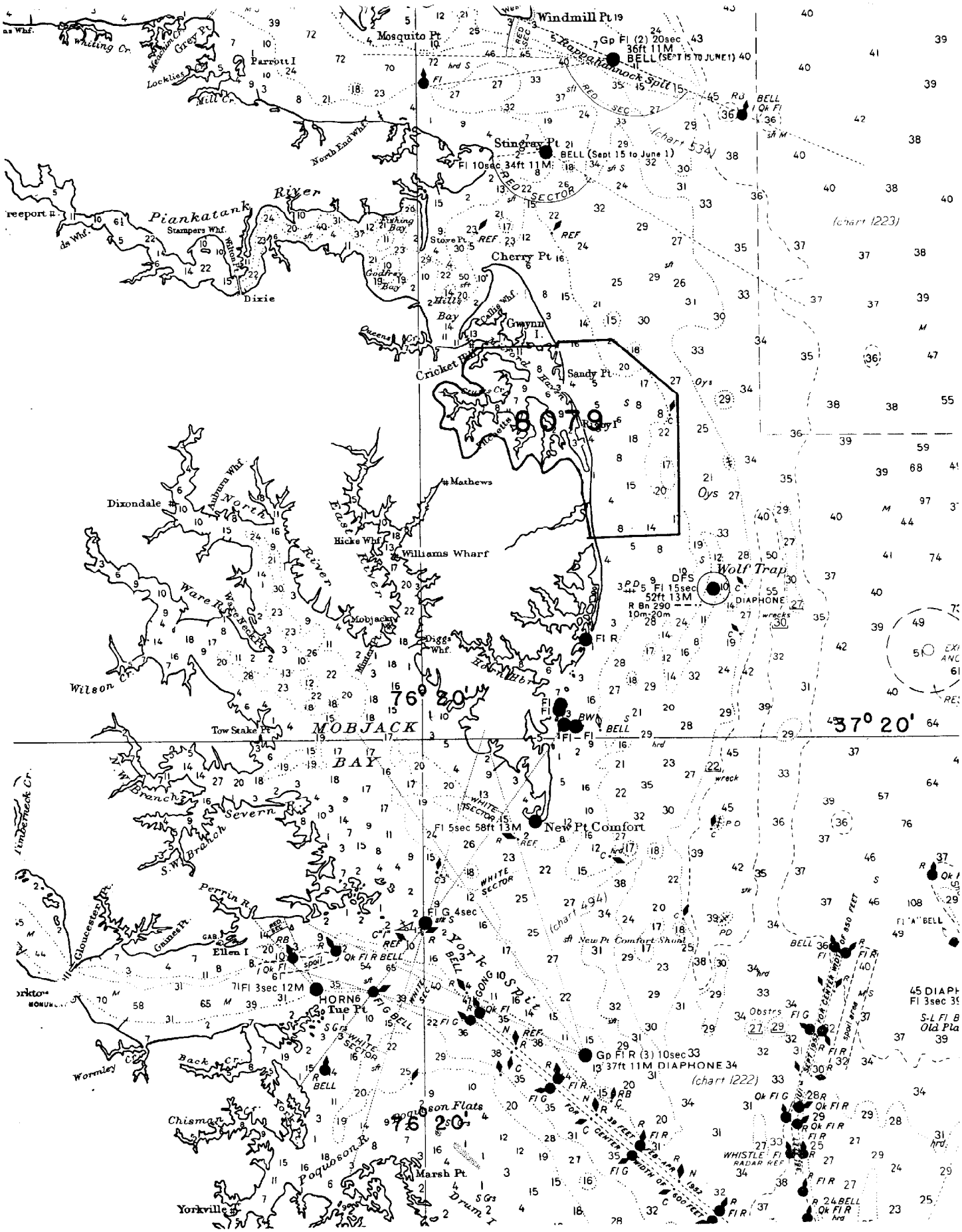
Examined and Approved:

Max G. Ricketts
Chief, Nautical Chart Branch

Charles A. Schanck
Chief, Division of Charts

Karl B. Jeffers
Chief, Hydrography Branch

Samuel B. Grenell
Chief, Coastal Surveys Division


Windmill Pt
Mosquito Pt
Gp Fl (2) 20sec 36ft 11M BELL (SEPT 15 TO JUNE 1)
Rappahannock Spit
Parrott I
Locklies
Stingray Pt
BELL (Sept 15 to June 1)
Fl 10sec 34ft 11M
(chart 534)
Piankatank River
Stampers Whf.
Dixie
Stove Pt
Cherry Pt
(chart 1223)
Hills Bay
Gwynn I.
Cricket Hill
Sandy Pt
Mathews
Dixondale
Ashburn Whf.
North River
East River
Hicks Whf.
Williams Wharf
Wolf Trap
DFS
Fl 15sec 52ft 13M
R Bn 290
DIAPHONE
Mobjack
Diggs Whf.
Wilson Cr.
Tow Stake Pt
MOBJACK BAY
37° 20'
New Pt Comfort
Fl 5sec 58ft 13M
Severn R.
Perrin R.
Ellen I
Fl G 4sec
(chart 494)
New Pt Comfort Shoal
YORK SPIT
Tue Pt
HORN
Fl 3sec 12M
Gp Fl R (3) 10sec 37ft 11M DIAPHONE
(chart 1222)
Chisman Cr.
Poquoson Flats
Marsh Pt.
Yorkville
Drum I
WHISTLE
RADAR REF
WIDTH OF 600 FEET
76° 20'

RHC

Form 712
DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY
Rev. Apr. 1950

TIDE NOTE FOR HYDROGRAPHIC SHEET

~~Division of Coastal Surveys:~~ 14 March 1955

Division of Charts: R. H. Carstens

Plane of reference approved in
16 volumes of sounding records for

HYDROGRAPHIC SHEET 8079

Locality Chesapeake Bay, Virginia

Chief of Party: J. H. Brittain in 1953
Plane of reference is mean low water, reading
2.5 ft. on tide staff at Wolf Trap Lighthouse (Apr. 29)
2.3 ft. ~~below B.M.~~ on tide staff at Wolf Trap Lighthouse (Aug.15)
6.7 ft. below B. M. 1 (1901)

4.3 ft. on tide staff at Point Breeze
3.9 ft. below B. M. 1 (1953)

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

Wolf Trap Lighthouse = 1.5 feet
Point Breeze = 1.1 feet

Condition of records satisfactory except as noted below:

NOTE: Tide reducers for Volume 1, Position 9C - 34C have been revised in red and verified.

E. C. McKay
Tides Branch

Chief, Division of Tides and Currents.

U. S. GOVERNMENT PRINTING OFFICE 877933

NAUTICAL CHARTS BRANCH

SURVEY NO. H-8079

Record of Application to Charts

DATE	CHART	CARTOGRAPHER	REMARKS
5/10/55	494	Yearley	Before ~~After~~ Verification and Review Partially
9/13/55	534	Eaton	Before ~~After~~ Verification and Review Partially
2/27/56	78	J.H. Benson	Examined for Critical Corrections - added to opposite Reply 1 Before ~~After~~ Verification and Review
10/15/57	534	[illegible]	~~Before~~ After Verification and Review
3-12-59	1223	R.K. DeLauder	Complete ~~Before~~ After Verification and Review. Area covered by Cht 534 applied thru that chart.
9/16/59	494	H.E. MacEwen	~~Before~~ After Verification and Review Fully applied.
1/4/61	78	J.H. Eaton	~~Before~~ After Verification and Review Taken cht 1223
10-2-85	12201 Prototype	J Graham	Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review

M-2168-1

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.