

8080

Diag. Cht. No. 73-3

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey Hydrographic

Field No. 00-1353 Office No. H-8080

LOCALITY

State Virginia

General locality Chesapeake Bay

Locality Entrance to Piankatank River

194 53

CHIEF OF PARTY

John H. Brittain, Comdr.

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DATE Sept. 14, 1955

B-1870-1 (1)

8080

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-8080

Field No. Co-1353

State VIRGINIA

General locality CHESAPEAKE BAY

Locality ENTRANCE TO PIANKATANK RIVER

Scale 1:10,000 Date of survey 4 May to 8 Oct. 1953

Instructions dated 5 February 1953

Vessel COWIE

Chief of party JOHN H. BRITTAIN

Surveyed by ~~SHIP'S OFFICERS~~ A. E. Greaves, A. J. Ramey & J. M. Ogilvie

Soundings taken by ~~ALTIMETER~~ graphic recorder, hand lead, ~~with~~ POLE

Fathograms scaled by PERSONNEL OF SHIP COWIE

Fathograms checked by PERSONNEL OF SHIP COWIE

Protracted by GEO. L. FERNANDES & W.W. FEAZEL

Soundings penciled by GEO. L. FERNANDES & W.W. FEAZEL

Soundings in ~~XXXXXX~~ feet at MLW ~~XXXXX~~

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

Handwritten initials

DESCRIPTIVE REPORT

TO ACCOMPANY

HYDROGRAPHIC SURVEY H-8080, FIELD NO. CO-1353

CHESAPEAKE BAY

PIANKATANK RIVER

SHIP COWIE

SCALE: 1:10,000

J.H. BRITAIN, COMDG.

A - PROJECT:

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

B - SURVEY LIMITS AND DATES:

This survey extends from lat. $37^{\circ}29.0'$, northward to lat. $37^{\circ}33.6'$, and from longitude $76^{\circ}15.0'$, westward to long. $76^{\circ}23.0'$. It covers the entrance to and the lower Piankatank River, Jackson Creek, Milford Haven, Queens Creek and lesser creeks flowing into the Piankatank River.

Surveying operations began on 5/14/53 and closed on 10-8-53. Junction is made with ^{H-8079}CO-1253 (1953) to the south, ^{H-8083}CO-2153 (1953) to the east, ^{H-8081}CO-1453 (1953) to the west and ^{H-8082}CO-1553 (1953) to the north.

C - VESSELS AND EQUIPMENT:

Launch 102, equipped with 808 type fathometer No. 63, twenty-five foot hydrographic skiff no. 736 and an unnumbered 25 foot skiff, both equipped with 808 type fathometer Nos. 114 S and 118 S, hand-lead and pole for sounding. The skiffs used outboard motors for power and all boats operated from the Ship COWIE. The soundings obtained were satisfactory, showing not more than 1 foot difference between handlead, pole and fathometer. The leadline was checked daily when used and no changes were found.

D - TIDE AND CURRENT STATIONS:

Portable automatic tide gages were maintained at Wolf Trap Light Station, Breeze Point (Milford Haven), Swing Bridge (Milford Haven), and Jackson Creek, Piankatank River during the period of this survey.

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

A current station was occupied at lat. 37°31.25', long. 76°18.81'. Because of wind and sea conditions during the first 25 hour period, an additional 25 hour period was observed. All records have been forwarded to the Division of Tides and Currents.

E - SMOOTH SHEET:

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

*See Processing Office
List of Signals*

F - CONTROL STATIONS: MANUSCRIPT NO. T-11157:

<u>NAME</u>	<u>MAN. NO.</u>	<u>DESCRIPTION</u>	<u>NAME</u>	<u>MAN. NO.</u>	<u>DESCRIPTION</u>
AHA	384	S. gable, 2 story ho.	GAS	412	Temporary signal
AIM	349	End of pier	GEO	337	E gable, boat house
ALBE (1944)'53		Silo	GET	355	Temporary signal
ANN	402	End of pier	GOB	373	End of pier
APT	-	Temporary signal	GULF (1944)'53		NW gable, fish house
BOA	385	S gable, 2 story ho.	GUM	333	Small cedar tree
BOB	350	End of pier	HEX	414	Temporary signal
BUS	-	Stern of wrecked boat	HIS	338	End of pier
CON	386	End of pier	HOP	410	SE corner, pier
COO	-	End of pier	HOW	-	Pine tree on end of pier
CUE	403	End of pier	HUB	332	Temporary signal
DIX	-	S gable, fish house	JAK	-	Temporary signal
DOC	352	W gable, shed	JET	379	Inshore end of Jetty
DUD	-	Temporary signal	JOB	339	Lone cedar tree
ELF	335	End of pier	JUT	395	End of pier
ELM	353	End of pier	LET	340	W. gable of stable
EON	389	NW corner, pier	LOP	408a	End of pier
ERA	390	End of pier	LOW	-	Temporary signal
FEZ	-	Temporary signal	LUG	331	Temporary signal
FIN	336	Dead tree	MET	341	End of pier
FIT	354	Temporary signal	MUG	408	End of pier
FOE	392	Temporary signal	NEW	364	S end of bulkhead
FOG	391	End of pier	NIL	342	End of pier
FOP	334	End of pier	NOD	396	End of pier

F - CONTROL STATIONS (CONT.): MANUSCRIPT NO. T-11157: (CONT.)

<u>NAME</u>	<u>MAN. NO.</u>	<u>DESCRIPTION</u>	<u>NAME</u>	<u>MAN. NO.</u>	<u>DESCRIPTION</u>
OHM	363a	Temporary signal			
OLD	343	Temporary signal			
OWL	397	NE corner of "T" pier			
PEG	362	Temporary signal			
PET	344	S gable, shed			
PIX	399	End of pier			
RIG	356	Temporary signal			
RIO	345	Lone cedar tree			
RUB	406	End of pier			
RUE	388	N. gable, house			
RUM	-	End of pier			
SAX	357	Temporary signal			
SHE	400	NW corner of porch on ho.			
SIC	346	Temporary signal			
SIN	-	Temporary signal			
SKY	371	N gable of building			
SLY	-	Temporary signal			
TEE	-	E gable of boat house			
TIM	-	Temporary signal			
TOT	370	End of pier			
TOY	381	End of pier			
TRAV(1944)'53		W gable, large barn			
VIM	382	Dolphin			
WAX	383	Dolphin			
WED	348	End of pier			
WHY	401a	Lone cedar tree			
WIG	369	End of pier			
WIN	-	Temporary signal			

F - CONTROL STATIONS - MANUSCRIPT NO. T-11061:

<u>NAME</u>	<u>MAN. NO.</u>	<u>DESCRIPTION</u>	<u>NAME</u>	<u>MAN. NO.</u>	<u>DESCRIPTION</u>
ABLE	440	Temporary signal	LIP	452	Temporary signal
ADO	375	Temporary signal	LOG	469	E gable, house on pier
AMY	465	End of pier	LUX	444	SW corner, pier
ARM	420	Small tree	MAK	443	SW corner of pier
AT	437	Temporary signal	MAWA	372a	Temporary signal
BE	438	Temporary signal	ME	-	End of pier
BIB	375a	Temporary signal	MELS(1944)'53		Chimney at NE gable of ho.
BOX	473	E end, wedge shaped roof	MOP	470	End of pier
BUD	442	End of pier	MUM	416	End of pier
BUM	458	NE corner, pier	NEO	484	End of pier
CAW	-	Top of steps, W one of 4.	NIX	471	End of pier
COW	475	W gable, 3 story ho.	NON	-	Temporary signal
CRY	451	N corner of pier	NOW	411a	SE corner of pier
CUT		NE end of pier	OFF	480	S corner of bulkhead
DAD	426	NW gable of house	OUT	-	W corner of pier,
DIM	376	N gable of shed	OVA	436	SW corner of shack
DO	439	Temporary signal	PAW	481	N gable of house
DON	472a	End of pier	PIT	459a	SW corner of pier
DOT	455	End of pier	PLY	417	Tree on high bank
EGG	377	Temporary signal	POT	435	Duck blind
EL	-	Temporary signal	RAT	482	S gable of lg. pavillion
END		End of pier	RAY	434	SW corner of pier
EST	441	E gable of house	REV	478	S corner of pier
FA	-	Temporary signal	ROA	-	Roane Pt. Lt. (1944)'53
FLY	466	NW corner of pier	ROD(1944)'53		NE gable of house
FOR	449	Pier steps	ROY	460	End of pier
FOUR	-	Jackson Creek, Day Bn. 4	SAM	483	S gable of "L" shaped ho.
FOX	429	Temporary signal	SAT	431	Temporary signal
GIN	-	Temporary signal	SHORE(1944)'53		Chimney at S gable of ho.
GO	-	Temporary signal	SILO	421	Silo
GUS	448	S gable, house	SIS	462	Chimney at N gable, 2 story ho.
GUY	428	S gable, house	SIX	-	Jackson Creek Day Bn. "6"
HE	-	Temporary signal	SKI	477	S gable of boat house
HON	468	Temporary signal	SOL	432	End of pier
HUG	447	SW corner of pier	SON	-	Jackson Creek Day Bn "2"
HUM	430	Lone tree	TIE	418	N gable, house
INA	446	S dormer of house	TIP	461	End of pier
IS	-	Temporary signal	TOM	-	Chimney at S gable of ho.
ITS	-	Temporary signal	TOP	-	Top of pyramidal roof. shed on pier.
JACK	-	Jackson Creek Lt. "1"	VEX	476	Duck Blind
JAY	-	End of pier	VIL	463	End of pier
JEL	446a	End of pier	WAR	474	E gable of B'ldg. on pier
JOE	453	Temporary signal	WHO	464	NW end of pier
JUG	467	E corner of pier	WOO	419	N gable
KING	373	Chimney of house	YES	454	N gable of house
KOY	445	N gable, building			
LEAN(1944)'53		NW gable of house			
LEG	372	Temporary signal			

F - CONTROL STATIONS - MANUSCRIPT NO. T-11060 (1952):

<u>Name</u>	<u>MANUSCRIPT NO.</u>	<u>DESCRIPTION</u>
BAT	-	Temporary signal
GAD	-	NW corner of shack

TRIANGULATION SIGNALS - CO-1353:

BOSS - BOSS 1920	ROCK - ROCK (VFC) 1920
CHER - CHERRY PT. LT. 1953	STING - STINGRAY PT. LT. STATION 1900
ROA - ROAN PT. LT. 1944	STO - STOVE PT. LT. 1953
ROAN - ROAN (VFC) 1920	STOVE - STOVE (R) 1920

HYDROGRAPHIC SIGNALS - CO-1353:

CAP - Temporary signal	MIK - Temporary signal on fish trap
DEL - Temporary signal	PRO - Temporary signal
HUK - Temporary signal on fish trap	SAN - Queens Creek Ent. Lt.
KID - Mooring piling	TO - Duck blind

G - SHORELINE AND TOPOGRAPHY:

The shoreline of the boat sheet was transferred from air photo manuscript T-11157_A and T-11061_A (1952-53) which cover this area. All of the topographic signals were radial plotted from air photos on the manuscripts and then transferred directly to the boat sheet by a Photogrammetrist from the Division of Photogrammetry.

It was not practicable to define the entire low waterline by soundings due to the small range of tide and attendant difficulty of getting the sounding vessel close to the beach without long periods of time spent dragging bottom or aground. However, sounding lines begin and end as close to the beach as the sounding vessel's draft would permit.

H - SOUNDINGS:

Depths were measured with the 808 type fathometer, handlead and pole. Bar checks were taken daily from sounding vessels' to depths where satisfactory results could be obtained.

H - SOUNDINGS:

Fathometer corrections have been determined from bar checks and entered in the sounding volumes by the field party. The leadline was checked daily when used with no corrections being found.

A check on the boat sheet of the overlap between fathometer, leadline and pole shows no more than 1 foot differences. The junctions of work done by the individual boats are in good agreement and depth curves can be adequately drawn.

I - CONTROL OF HYDROGRAPHY:

Sounding lines were controlled by three-point fixes using natural objects or signals erected along the shorelines. 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 ten percent.

L-N - COMPARISON WITH PRIOR SURVEYS AND CHARTS: *See Review, P's 5 & 6*

A comparison with prior surveys H-2813 (1906), H-988 (1869), H-987 (1868-69) and charts 534 (2/9/53), 1223 (12/22/52) and 78 (2/25/52) shows the following:

(1) The charted 19 foot depth at lat. 37 30.28', long. 76 15.30', was not verified, however 150 meters southeast several 18 foot soundings were obtained.

L-N - COMPARISON WITH PRIOR SURVEYS AND CHARTS: (CONT.)

(2) At lat. $37^{\circ}30.75'$, long. $76^{\circ}15.88'$, several 15 foot soundings were obtained in charted 19 foot depths. *(14-15 ft. shoal southeastward)*

(3) At lat. $37^{\circ}30.82'$, long. $76^{\circ}16.15'$, 14 foot soundings were obtained. This shoal is isolated from No. 2, above, and from another shoal 230 meters to the westward.

(4) Previously uncharted depths of 5 feet were found at lat. $37^{\circ}31.15'$, long. $76^{\circ}16.68'$.

(5) Previously uncharted depths of 18 feet were found in lat. $37^{\circ}31.04'$, long. $76^{\circ}15.43'$. *18 now charted*

(6) Previously uncharted depths of 17 feet were found at lat. $37^{\circ}31.47'$, long. $76^{\circ}15.82'$.

(7) At lat. $37^{\circ}33.25'$, long. $76^{\circ}15.62'$, the charted 18 foot depth was not verified. Instead, general depths of 21-22 feet were obtained. *Disregard Review, P 5 b.*

(8) At lat. $37^{\circ}32.47'$, long. $76^{\circ}16.72'$, the charted 16 foot depth was verified.

(9) At lat. $37^{\circ}31.92'$, long. $76^{\circ}17.40'$, the charted 17 foot depth was verified as the least depth on an isolated shoal. *(16' sdg. 70 m. south)*

(10) At lat. $37^{\circ}31.56'$, long. $76^{\circ}18.29'$, the charted 11 foot depth was verified.

(11) At lat. $37^{\circ}31.68'$, long. $76^{\circ}18.39'$, uncharted soundings of 13 feet were obtained.

(12) Approximately 100 meters southwest of Cherry Point Beacon, at lat. $37^{\circ}31.24'$, long. $76^{\circ}18.68'$, soundings of 6 feet were obtained.

(13) At lat. $37^{\circ}30.87'$, long. $76^{\circ}19.03'$, 5 foot soundings were obtained in previously charted depths of 4 feet. *(4-ft. depths close by)*

L-N - COMPARISON WITH PRIOR SURVEYS AND CHARTS: (CONT.)

(14) At lat. $37^{\circ}30.98'$, long. $76^{\circ}19.13'$, 4 foot soundings were obtained in previously charted depths of 3 feet. ✓

(15) The charted 10 foot depth at lat. $37^{\circ}30.74'$, long. $76^{\circ}18.22'$, *Disregard Chart & survey depths agree* was not verified. Depths in this area were 14.6 to 15.4 feet. ✓

(16) The charted 14 foot shoal at lat. $37^{\circ}30.50'$, long. $76^{\circ}19.14'$, was verified. ✓

(17) Burton Point Shoal Buoy "C5" at lat. $37^{\circ}30.86'$, long. $76^{\circ}19.44'$, marks the eastern end of a 12 foot shoal. ✓

(18) At lat. $37^{\circ}30.92'$, long. $76^{\circ}20.92'$, a ⁽¹⁰⁾9.8 foot sounding was obtained in charted depths of 10 feet. ✓

(19) The 11 foot charted shoal at lat. $37^{\circ}31.70'$, long. $76^{\circ}20.87'$, was found to have 12.5 foot depths covering it. This shoal has least depths of 12 feet several hundred meters to the southwest. *12 adequate for charting* ✓

(20) At lat. $37^{\circ}31.27'$, long. $76^{\circ}20.80'$, ¹⁷17.5 foot soundings were obtained in charted depths of 25 feet. ✓

(21) A 7.5 foot sounding at lat. $37^{\circ}30.76'$, long. $76^{\circ}21.38'$, was found approximately 20 meters west of charted 15 foot depths. *steep slope* ✓

(22) A charted 20 foot sounding at lat. $37^{\circ}32.02'$, long. $76^{\circ}21.40'$, was found to have 15 feet immediately to the west and 11 feet approximately 40 meters to the northeast. ✓

(23) To the east of Iron Point, at lat. $37^{\circ}31.26'$, long. $76^{\circ}21.35'$, a shoal jutting out from the point has a depth of ¹²12 feet, at which point it drops sharply into 25 foot depths. ✓

(24) At lat. $37^{\circ}31.18'$, long. $76^{\circ}19.68'$, a charted 28 foot depth was ~~not~~ verified, a depth of ²⁷25.6 feet being found ⁵80 meters ~~northwest~~, and 14.6 feet was found 90 meters southward. ✓

(25) The offshore end of the old Deltaville Steamship Pier was located by Pos. 1-q, launch 102, at lat. 37°32.68', long. 76°19.36'.

Five piles were located, one was bare by 1½ feet, and the other four were submerged by 1½ to 2½ feet in 8 feet of water.

(26) At lat. 37°32.51', long. 76°20.42', Pos. 1-y, 2-y and 3-y, Lch. 102 are on submerged piling, the remains of the old Roark Wharf.

(27) A long pier at lat. 37°31.86', long. 76°20.08', is being completed at this time. Pos. 64-m, lch. 102, is on the face of the pier. Pos. 8-y, 9-y and 10-y, are on piling about the pier.

(28) Positions 14-m to 18-m are at ends of piers at Deagle's Marine Railway at lat. 37°32.45', long. 76°20.44'.

(29) At lat. 37°32.52', long. 76°20.42', the end of a pier at a small marine railway at Roark, Va., was located by Pos. 4-y, launch 102.

(30) The pile from Preliminary Review No. 24, lat. 37°30.82', long. 76°18.05', was searched for but not found. There are no remaining piles from the Cherry Point Wharf in the given locations, however, a group of submerged piles was found at lat. 37°30.84', long. 76°18.095', and another group at lat. 37°30.89', long. 76°18.03'. Other objects located in this vicinity, which is considered generally foul, include:

✓ A partly submerged, discarded can buoy at lat. 37°30.85', long. 76°18.04'.

✓ A submerged stump at lat. 37°30.85⁷, long. 76°18.02'.

✓ A partly submerged pile at lat. 37°30.89', long. 76°18.01'.

✓ A partly submerged piece of wreckage, with piles underneath at lat. 37°30.89', long. 76°18.02'.

✓ A group of partly submerged piles at lat. 37°30.89, long. 76°18.02'.

✓ A partly submerged piece of wreckage at lat. 37°30.89', long. 76°18.02'.

L-N - COMPARISON WITH PRIOR SURVEYS AND CHARTS: (CONT.)

✓(31) The following pile groups are from Preliminary Review No. 25:

✓The charted pile at lat. $37^{\circ}29.55'$, long. $76^{\circ}18.95'$, was searched for but not found. This is a shoal area and the bottom could be seen clearly. It is recommended that this pile be deleted from the charts. ✓ *Pile not presently shown on Cht. 534*

The charted piles at lat. $37^{\circ}29.42'$, long. $76^{\circ}18.60'$, were searched for but not found. The investigation consisted of planting a buoy and dragging an 8 foot iron pipe along the bottom while circling the buoy. The leadline and sounding pole were used to obtain soundings throughout the investigation.

✓According to local information, a crab house stood on the spot from 1927 to 1937. It is therefore recommended that these piles be deleted from the charts. ✓ *Concur*

✓The charted piles at lat. $37^{\circ}29.25'$, long. $76^{\circ}17.90'$, were searched for but not found. This is a shoal area and the bottom could be seen clearly. It is recommended that these piles be deleted from the charts. ✓ *Piles not now shown on Cht. 534*

✓(32) The charted wreck from Preliminary Review No. 26, at lat. $37^{\circ}29.28'$, long. $76^{\circ}19.11'$, was searched for but not found. This is a shoal area and the bottom could be seen clearly. According to local information, this was a wrecked schooner which disappeared several years ago. It is concluded from the above information that this wreck no longer exists and should be deleted from the charts. ✓ *Concur*

✓(33) The charted piles from Preliminary Review No. 23, at latitude $37^{\circ}32.80'$, long. $76^{\circ}19.40'$, are the remains of Jackson Creek Wharf. The piles that remain extend from lat. $37^{\circ}32.79'$, long. $76^{\circ}19.41'$, to lat. $37^{\circ}32.68'$, long. $76^{\circ}19.38'$. One of these piles, located near the off-shore end of the wharf ruins at lat. $37^{\circ}32.68'$, long. $76^{\circ}19.34'$, is bare at MHW. According to local information, the piles in and around the now existing channel into Jackson Creek were removed at the time of dredging the channel. No piles remain to the north of the channel, from these ruins. ✓

*Disregard
Piles -
Review,
#6*

*Disregard
wreck
Review, #6*

*Review,
#6*

L-N - COMPARISON WITH PRIOR SURVEYS AND CHARTS: (CONT.)

(34) A 4 foot square, submerged concrete block was located at lat. $37^{\circ}31.08^{\prime}$, long. $76^{\circ}17.85^{\prime}$. ✓

(35) A small wrecked boat was spotted on the boat sheet at lat. $37^{\circ}29.92^{\prime}$, long. $76^{\circ}17.62^{\prime}$. ✓

(36) The ruins of an old platform, awash at MHW, were located at lat. $37^{\circ}29.60^{\prime}$, long. $76^{\circ}18.28^{\prime}$. ✓

(37) The charted piles at lat. $37^{\circ}29.40^{\prime}$, long. $76^{\circ}17.61^{\prime}$, were searched for but not found. A small bush stake marks this spot which is located on the edge of a shoal. A thorough investigation was made of the spot using the handlead and sounding pole, to obtain soundings while circling the bush stake. It is recommended that these piles be deleted from the chart. ✓

*Review,
PG*

(38) A wrecked boat was located at lat. $37^{\circ}29.71^{\prime}$, long. $76^{\circ}17.54^{\prime}$. ✓

(39) A wrecked boat, on the beach, was located at lat. $37^{\circ}29.56^{\prime}$, long. $76^{\circ}17.58^{\prime}$. ✓

(40) A small marine railway was located at lat. $37^{\circ}29.56^{\prime}$, longitude $76^{\circ}17.58^{\prime}$. ✓

(41) A new pier, built since the project area was photographed, was located at lat. $37^{\circ}29.73^{\prime}$, long. $76^{\circ}18.41^{\prime}$. ✓

(42) The ruins of a small dock were located at lat. $37^{\circ}29.43^{\prime}$, long. $76^{\circ}18.64^{\prime}$. ✓

(43) A wrecked barge, on the beach, was located at lat. $37^{\circ}29'47''$, long. $76^{\circ}18.63^{\prime}$. ✓

(44) Four piles, bare at MHW, were located at lat. $37^{\circ}29'70''$, long. $76^{\circ}18.40^{\prime}$. ✓

(45) A piece of submerged wreckage, was located near the shore at lat. $37^{\circ}29.51^{\prime}$, long. $76^{\circ}18.62^{\prime}$. ✓

L-N - COMPARISON WITH PRIOR SURVEYS AND CHARTS: (CONT.)

- (46) A mooring pile was located at lat. $37^{\circ}32.78'$, long. $76^{\circ}19.92'$. ✓
- (47) A mooring pile was located at lat. $37^{\circ}32.7\overset{3}{2}'$, long. $76^{\circ}19.9\overset{4}{3}'$. ✓
- (48) The ruins of a small platform awash at MLW, were located at
lat. $37^{\circ}32.67'$, long. $76^{\circ}20.20'$. ✓
- (49) A group of submerged piles was located at lat. $37^{\circ}32.6\overset{7}{8}'$, long.
 $76^{\circ}20.20'$. ✓
- (50) A group of 3 piles, bare at MHW, was located at lat. $37^{\circ}32.1\overset{6}{1}'$,
long. $76^{\circ}20.90'$. ✓
- (51) The submerged ruins of a jetty near the entrance to Queens
(awash M.L.W)
Creek, Piankatank River were located as follows: ✓
- ✓ Inshore end of jetty ruins - lat. $37^{\circ}29.28'$, long. $76^{\circ}19.58'$. ✓
Angle in jetty ruins - lat. $37^{\circ}29.28'$, long. $76^{\circ}19.50'$. ✓
✓ Offshore end of jetty ruins - lat. $37^{\circ}29.38'$, long. $76^{\circ}19.33'$. ✓
- ✓ One pile, located at the offshore end of the jetty ruins is bare at MHW (1) ✓
- (52) A mooring pile was located at lat. $37^{\circ}32.96'$, long. $76^{\circ}20.01'$. (8) ✓
- (53) A mooring pile was located at lat. $37^{\circ}32.88'$, long. $76^{\circ}19.92'$. (5) ✓
- (54) A ~~group~~^{row} of *(awash MLW)* submerged piles was located near the shore at lat.
 $37^{\circ}32.805'$, long. $76^{\circ}19.56'$. ✓
- (55) A group of *(old platform ruins)* piling, 9 bare at MHW and 3 submerged, was located
at lat. $37^{\circ}32.695'$, long. $76^{\circ}20.26'$. ✓
- (56) A group of *(awash MLW)* submerged piles was located at lat. $37^{\circ}32.69'$, long.
 $76^{\circ}20.26'$. ✓
- (57) A group of 19 mooring piles were located around a pier belonging
to the Fishing Bay Yacht Club in Jackson Creek at lat. $37^{\circ}32.61'$, long.
 $76^{\circ}19.98'$. ✓
- (58) An 18.4 foot sounding was obtained at lat. $37^{\circ}32.10'$, long. $76^{\circ}22.20'$,
in surrounding depths of 28 to 30 foot. Local inquiry revealed that a large
Navy patrol boat had been intentionally disposed of by sinking in this vic-
inity. The sounding was obtained in 6 different instances with a fathometer. ✓

L-N - COMPARISON WITH PRIOR SURVEYS AND CHARTS: (CONT.)

(59) The charted pile in lat. 37°31.32', long. 76°22.10', was searched for but not found. The investigation consisted of circling a bush stake in ^(chan. marker) the same location. The bottom could be seen clearly. ~~It is recommended that this pile be deleted from the charts.~~ *charted pile in substantially the same location as the chan. marker stake shown on present survey*

(60) The charted pier ruins at lat. 37°31.30', long. 76°22.²74', were searched for but not found. The investigation consisting of running a system of closely spaced lines across the axis of said ruins and taking trial fixes to locate the position of the sounding vessel. ^{Review, PG} The bottom could be seen clearly up to depths of approximately 5 feet and the fathometer was used in depths over 5 feet.

(61) A double row of piles, bare at MHW, was located as follows:

Offshore end - lat. 37°31.43', long. 76°22.52'.

Inshore end - lat. 37°31.42', long. 76°22.56'.

(62) A mooring pile was located at lat. 37°31.4⁴5', long. 76°22.50⁴⁸' (5) ✓

(63) A group of 6 piles, 4 bare and 2 submerged, was located at lat. 37°33.62', long. 76°17.89'. ✓

(64) An 8 foot shoal was obtained at lat. 37°29.56', long. 76°18.39', in surrounding depths of 14 feet, with the leadline. A thorough investigation was made by planting a buoy and running a system of lines converging at the buoy. What appeared to be a 6 foot ^(stray) sounding was obtained during this investigation. Further investigation made by dragging an iron pipe along the bottom, proved that these shoal soundings were strays. ✓ The 8 foot sounding was rejected in the sounding record, on the assumption that the leadline was misread by 1 fathom. ✓

(65) The wreck charted at lat. 37 29.03', long. 76 16.2⁵8', could not be found. It is recommended that this wreck be deleted from the chart. ^{Disregard wreck} This is a shoal area and the bottom could be seen clearly. ^{Concur} ^{Review, PG}

L-N - COMPARISON WITH PRIOR SURVEYS AND CHARTS: (CONT.)

(66) A shoal sounding of 10 feet was obtained at lat. 37°32.50', long. 76°20.28', in surrounding depths of 17 feet. Further investigations proved this to be a stray sounding.

(67) A shoal sounding of 7 feet was obtained at lat. 37°32.48', long. 76°20.08', in surrounding depths of 16 feet. Further investigation proved this to be a stray sounding.

(68) A shoal sounding of 6.4 feet was obtained at lat. 37°31.07', long. 76°20.78', in surrounding depths of 12 feet. Further investigation proved this to be a stray sounding.

(69) A previously uncharted 3 foot shoal was located at latitude 37°31.37', long. 76°18.45', in surrounding depths of 8 feet. The chart shows 5 feet in this vicinity.

(70) The charted 3 foot depth at lat. 37°31.19', long. 76°17.36', was not found; 4-5 feet was the least depths obtained in this vicinity.

(71) The charted 3 foot depth at lat. 37°30.55', long. 76°16.72', was verified not found, 2.8 feet was the least depth obtained in this vicinity. However

1' Letter
15 & 16x
A 1 foot sounding was obtained ¹¹⁰ ~~80~~ meters southwest of the charted 3 foot depth.

(72) The charted 2 foot depth at lat. 37°30.10', long. 76°16.40', was not found. The least depth obtained in this vicinity was 4 feet.

(73) The charted 12 foot depth at lat. 37°29.44', long. 76°16.00', was not found. The least depth obtained in this vicinity was 12 feet.

(74) The charted 2 foot depth at lat. 37°29.41', long. 76°16.17', was not found. The least depth obtained in this vicinity was 4 feet.

(75) The charted 2 foot depth at lat. 37°29.28', long. 76°16.05', was not found. The least depth obtained in this area was 5 feet.

L-N - COMPARISON WITH PRIOR SURVEYS AND CHARTS: (CONT.)

(76) The charted ruins at lat. $37^{\circ}29.10'$, long. $76^{\circ}19.55'$, were looked for but not found. The bottom could be seen clearly. It is recommended *Review, PC* that these ruins be removed from the chart. ✓

(77) The pier ruins, lat. $37^{\circ}29.38'$, long. $76^{\circ}17.48'$, were looked for but not found. This is a shoal area and the bottom could be seen clearly. *Review, PC* It is recommended that these ruins be deleted from the charts. ✓

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: (C.L. 1126, 1953)

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

- (1) Cherry Point Buoy "C1" REF" - lat. $37^{\circ}31.71'$, long. $76^{\circ}16.10'$, in 18 feet of water.
- (2) Cherry Point Buoy "C3", lat. $37^{\circ}31.78'$, long. $76^{\circ}18.33'$, in 22 feet of water. ✓
- (3) Burton Point Shoal Buoy "C5", lat. $37^{\circ}30.86'$, long. $76^{\circ}19.43'$, in 16 feet of water.
- (4) Spar Buoy "S4AW", lat. $37^{\circ}32.89'$, long. $76^{\circ}15.25'$, in 23 feet of water.
- (5) Spar Buoy "S5AW", lat. $37^{\circ}33.23'$, long. $76^{\circ}15.42'$, in 27 feet of water.

P - AIDS TO NAVIGATION: ((CONT.))

(6) Spar Buoy "S5W", lat. $37^{\circ}32.5\overset{2}{\cancel{8}}'$, long. $76^{\circ}17.3\overset{3}{\cancel{2}}'$, in 21 feet of water.

(7) Hills Bay Buoy 1, lat. $37^{\circ}29.9\overset{1}{\cancel{0}}'$, long. $76^{\circ}19.1\overset{3}{\cancel{2}}'$, in 20 feet of water.

(8) Hills Bay Buoy 2, lat. $37^{\circ}29.44'$, long. $76^{\circ}19.18'$, in 10 feet of water.

(9) Milford Haven Buoy 4, lat. $37^{\circ}29.2\overset{6}{\cancel{5}}'$, long. $76^{\circ}18.82'$, in 8 feet of water.

(10) Milford Haven Buoy 6, lat. $37^{\circ}29.5\overset{2}{\cancel{1}}'$, long. $76^{\circ}18.30'$, in 12 feet of water.

(11) Milford Haven Buoy 7, lat. $37^{\circ}29.3\overset{7}{\cancel{8}}'$, long. $76^{\circ}17.79'$, in 15 feet of water.

(12) Milford Haven Buoy 8, lat. $37^{\circ}29.21'$, long. $76^{\circ}17.65'$, in 10 feet of water.

Q - LANDMARKS FOR CHARTS:

Form 567, Landmarks for Charts, was forwarded to the Washington Office 30 November 1953. (C.L. 1126, 1953)

The two following landmarks were located within the limits of Survey CO-1353:

(1) A large 2 story, white hotel with pavillion (Topographic signal RAT) at lat. $37^{\circ}33' 686.6 \text{ m. (1163.2 m)}$, long. $76^{\circ}17' 1436.2 \text{ m (36.6 m)}$, is prominently visible for a considerable distance and is recommended for a landmark

(2) A tall, silver-topped silo, painted white, (Topo. signal SILO), at lat. $37^{\circ}30' 1402.0 \text{ m. (447.8 m)}$, long. $76^{\circ}21' 971.5 \text{ m. (502.0 m)}$, is visible for a considerable distance from the east and is recommended for a landmark..

R - GEOGRAPHIC NAMES:

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

U-Y - MISCELLANEOUS:

On "m" day and "ea" day, unnumbered hydrographic skiff using 808 type fathometer no. 114-S, a number of soundings were obtained which, considering the flat bottom, were questionable.

In accordance with
~~According to~~ Section 571 of the Hydrographic Manual, a representative number of these soundings were investigated in the following manner:

With a different fathometer operating continuously, a 20 foot steel bar, set just clear of the bottom was dragged throughout the area, the skiff position being controlled by three-point fixes. In none of the three cases investigated did any indication of true shoal soundings appear. Therefore it was concluded that the soundings were strays and after reexamination of the fathograms, the stray soundings were struck from the sounding record and from the boat sheet.

H-8081 (1953)

This same situation was examined in 6 cases on CO-1453 with the same negative results.

The fathometer, No. 114-S, was removed from service.

For information, the positions of these investigated cases were as follows:

- ✓ (1) Lat. $37^{\circ}31.07'$, long. $76^{\circ}20.78'$, ✓ (2) Lat. $37^{\circ}32.48'$, long. $76^{\circ}20.08'$,
20° 20' 00" XXIII
- ✓ (3) Lat. $37^{\circ}32.50'$, long. $76^{\circ}20.28'$

Noted in Review, par. 7C.

Z - TABULATION OF APPLICABLE DATA:

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

A tabulation of other data is attached.

Respectfully submitted,

Arthur E. Greaves, Jr.
Arthur E. Greaves, Jr.,
Lieut. (j.g.); USC&GS,
Ship COWIE;

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.

TIDE NOTE

A portable automatic tide gage at Swing Bridge, Milford Haven, lat. 37°29.31', long. 76°18.62', was used for obtaining the tide reducers for Milford Haven and Milford Haven Entrance. The tide reducers for the remainder of the sheet were obtained from a portable automatic tide gage located at Jackson Creek, Piankatank River, lat. 37°32.79', long. 76°19.92. 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.

LAUNCH NO. 102: - JACKSON CREEK AND SWING BRIDGE TIDES:

<u>VOL. NO.</u>	<u>DATE(1953)</u>	<u>DAY</u>
I - XII	5/14 - 10/7	1a-y 10y

HYDROGRAPHIC SKIFF: - JACKSON CREEK TIDES:

XIII-XIV	5/14 - 5/21	1-a - 100-c
XV	6/5	1-g - 50-g
XVI	6/23	1-j - 24-j
XVI	6/25	1-k - 93-k
XVII	6/25	149-k - 154-k
XIX	8/5	1-u - 147-u
XX	8/13 - 9/1	1-w - 16-w 120w 1x16x Swing Bridge
XXI	9/2 - 9/10	92-y - 48-ba
XXI	9/10	67-ba - 109-ba
XXI	9/10	118-ba - 142-ba
XXI-XXIV	9/10 - 10/6	184-ba - 51-ga
XXIV	10/8	1-ha - 82-ha

-20-

HYDROGRAPHIC SKIFF - (CONT.) - SWING BRIDGE TIDES:

<u>VOL. NO.</u>	<u>DATE (1953)</u>	<u>DAY</u>
XIV-XV	5/21 - 5/27	101-c - 98-f
XV-XVI	6/11	1-h - 117-h
XVI	6/23	25-j - 68-j
XVI-XVII	6/25	94-k - 148-k
XVII-XIX	7/2 - 7/23	1-l - 104-t
XX	8/6	1-v - 12-v
XX-XXI	9/1 - 9/2	¹ 17 -x - 91-y
XXI	9/10	49-ba - 66-ba
XXI	9/10	110-ba - 117-ba
XXI	9/10	143-ba - 183-ba
XXIV	10/6	52-ga - 79-ga

STATISTICSLAUNCH NO. 102:

<u>VOL. NO.</u>	<u>DATE(1953)</u>	<u>DAY</u>	<u>NO. OF POSITIONS</u>	<u>STATUTE MILES</u>
I	5/14	a	266	54.7
I	5/15	b	54	11.2
II	5/15	b	52	12.9
II	5/21	c	216	52.7
III	5/22	d	133	26.1
III	5/26	e	127	29.3
IV	5/27	f	145	37.1
IV	6/5	g	112	22.2
IV	6/9	h	37	7.7
V	6/9	h	29	6.9
V	6/10	j	116	21.9
V	6/11	k	140	31.1
VI	6/23	l	256	58.6
VI	6/24	m	63	12.9
VII	6/24	m	75	14.8
VII	6/25	n	230	48.3
VIII	7/9	p	30	5.3
VIII	7/15	q	109	17.6
VIII	7/16	r	157	31.7
IX	7/16	r	108	18.2
IX	7/28	s	85	11.8
IX	7/29	t	118	20.5
X	7/29	t	138	19.4
X	8/5	u	168	27.4
XI	8/5	u	61	11.0
XI	8/6	v	240	39.2
XII	9/3	w	128	16.2
XII	9/4	x	71	12.9
XII	10/7	y	10	0.1
TOTALS:			<u>3474</u>	<u>679.7</u>

STATISTICSHYDROGRAPHIC SKIFF:

<u>VOL. NO.</u>	<u>DATE(1953)</u>	<u>DAY</u>	<u>NO. OF POSITIONS</u>	<u>STATUTE MILES</u>
XIII	5/14	a	182	32.6
XIII	5/15	b	82	14.3
XIII	5/21	c	20	3.6
XIV	5/21	c	99	14.6
XIV	5/22	d	77	11.8
XIV	5/26	e	62	9.1
XIV	5/27	f	53	5.1
XV	5/27	f	45	4.3
XV	6/5	g	50	6.1
XVI	6/11	h	117	9.8
XVI	6/23	j	68	6.1
XVI	6/25	k	104	12.0
XVII	6/25	k	50	5.8
XVII	7/2	l	37	5.5
XVII	7/7	m	109	11.6
XVII	7/8	n	92	10.2
XVIII	7/8	n	47	4.4
XVIII	7/9	p	126	9.7
XVIII	7/15	q	59	3.4
XVIII	7/16	r	63	2.8
XIX	7/17	s	19	2.2
XIX	7/23	t	104	10.5
XIX	8/5	u	147	12.2
XX	8/6	v	12	0.7
XX	8/13	w	120	10.5
XX	9/1	x	59	3.9
XX	9/2	y	104	10.2
XXI	9/8	z	34	1.6
XXI	9/9	aa	158	9.7
XXI	9/10	ba	130	11.8
XXII	9/10	ba	82	5.6
XXII	9/15	ca	178	18.1
XXII	9/16	da	63	5.2
XXIII	9/16	da	112	10.2
XXIII	9/17	ea	204	19.8
XXIV	9/17	ea	16	1.4
XXIV	10/2	fa	23	1.7
XXIV	10/6	ga	79	3.1
XXIV	10/8	ha	82	5.4
TOTALS FOR HYDRO. SKIFF:			3268	326.6
TOTALS FOR LAUNCH NO.102:			3474	679.7
GRAND TOTALS:			6742	1006.3

AREA: - 26.5 Square Statute Miles.

FATHOMETER CORRECTIONSLAUNCH NO. 102:

<u>DAY</u>	<u>DATE(1953)</u>	<u>CORRECTION</u>
a	5/14	No correction
b	5/16	No correction
c	5/21	0.0 to 6.0 - 0.4 ft. 6.5 to 9.0 - 0.2 ft. Over 9.0 - 0.0 ft.
d	5/22	No correction
e	5/26	No correction
f	5/27	No correction
g	6/5	No correction
h	6/9	No correction
j	6/10	0.0 to 7.5 - 0.2ft. Over 7.5 - 0.0 ft.
k	6/11	No correction
l	6/23	No correction
m	6/24	No correction
n	6/25	No correction
p	7/9	No correction
q	7/15	No correction
r	7/16	No correction
s	7/28	No correction
t	7/29	No correction
u	8/5	No correction
v	8/6	0.0 to 7.5 - 0.2 ft. 8.0 to 13.5 - 0.0 ft. 14.0 to 21.5 - 0.2 ft. 22.0 to 30.0 - 0.4 ft. Over 30.0 - 0.6 ft.
w	9/3	No correction
x	9/4	0.0 to 7.5 - 0.2ft. Over 7.5 - 0.0 ft.
y	10/7	No correction

FATHOMETER CORRECTIONS:

HYDROGRAPHIC SKIFF:

<u>DAY</u>	<u>DATE(1953)</u>	<u>CORRECTION</u>
a	5/14	Pole
b	5/15	Pole
c	5/21	Pole
d	5/22	Pole
e	5/26	Pole
f	5/27	Pole
g	6/5	Pole
h	6/11	Pole
j	6/23	Pole
k	6/25	Pole
l	7/2	No correction
m	7/7	No correction
n	7/8	0.0 to 8.0 - -0.0 ft. 8.5 to 14.0 - -0.2 ft. 14.5 to 18.0 - -0.4 ft. 18.5 to 20.0 - -0.6 ft. 20.5 to 22.0 - -0.8 ft. Over 22.0 - -1.0 ft.
p	7/9	Pole
q	7/15	Pole
r	7/16	Pole
s	7/17	0.0 to 13.0 - -0.0 ft. 13.5 to 17.0 - -0.2 ft. Over 17.0 - -0.4 ft.
t	7/23	Pole
u	8/5	Pole
v	8/6	Pole
w	8/13	Pole
x	9/1	Pole
y	9/2	Pole
z	9/8	Pole
aa	9/9	Pole
ba	9/10	No correction
ca	9/15	0.0 to 20.0 - -0.0 ft. 20.5 to 26.0 - -0.2 ft. 26.5 to 30.0 - -0.4 ft. 30.5 to 33.0 - -0.6 ft. Over 33.0 ft. - -0.8 ft.
da	9/16	No correction
ea	9/17	No correction
fa	10/2	0.0 to 23.0 - -0.0 ft. 23.5 to 27.0 - -0.2 ft. 27.5 to 30.0 - -0.4 ft. Over 30.0 - -0.6 ft.
ga	10/6	No correction
ha	10/8	No correction

Fathometer 120
" ?

PROCESSING OFFICE LIST OF SIGNALS
H-8080 (Co-1353)

TRIANGULATION STATIONS

BOSS	BOSS, 1920
CHER	CHERRY POINT LIGHT, 1953
MIL	MILFORD HAVEN ENTRANCE LIGHT, 1953
ROAN	ROAN (V.F.C.), 1920
ROCK	ROCK (V.F.C.), 1920
STING	STINGRAY POINT LIGHTHOUSE, 1900-38
STO	STOVE POINT LIGHT, 1953
STOVE	STOVE (V.F.C.), 1920

DESCRIBED TOPOGRAPHIC STATIONS

Albe	Albe, 1944-53	T-11157
Four	Jackson Creek Daybeacon 4, 1953	T-11061
Gulf	Gulf, 1944-53	T-11157
Jack	Jackson Creek Light No. 1, 1953	T-11061
Lean	Lean, 1944-53	"
Mels	Mels, 1944-53	"
Roa	Roan Point Light, 1944	"
Rods	Rods, 1944-53	"
Shore	Shore, 1944-53	"
Six	Jackson Creek Daybeacon 6, 1953	"
Son	Jackson Creek Daybeacon 2, 1953	"
Trav	Trav, 1944-53	T-11157

TOPOGRAPHIC STATIONS

COMPILATION T-11060

Bat	Eva	Fox	Gad	Guy	Hum	Sat
-----	-----	-----	-----	-----	-----	-----

COMPILATION T-11061

Able	Ado	Amy	Arm	At	Be	Bib	Box	Bud	Bum	Caw	Cow
Cry	Cut	Dad	Dim	Do	Don	Dot	Duo	Egg	El	End	Est
Fa	Fly	For	Gin	Go	Gus	He	Hon	Hug	Ina	Is	Its
Jay	Jel	Joe	Jug	Kim	Kay	Leg	Lip	Log	Lux	Mak	Maw
Me	Mop	Mum	Neo	Nix	Non	Now	Off	Out	Ova	Paw	Pit
Ply	Pot	Rat	Ray	Rev	Roy	Sam	Silo	Sis	Ski	Sol	Tie
Tip	Tom	Top	Vex	Vil	War	Who	Woo	Yes			

COMPILATION T-11157

Aha	Aim	Ann	Apt	Boa	Bob	Bus	Con	Coo	Cue	Dix	Doc
Dud	Elf	Elm	Eon	Era	Fez	Fin	Fit	Foe	Fog	Fop	Gas
Geo	Get	Gob	Gum	Hex	His	Hop	How	Hub	Jak	Jet	Job
Jut	Let	Lop	Law	Lug	Met	Mug	New	Nil	Nod	Ohm	Old
One	Owl	Peg	Pet	Pix	Rig	Rio	Rub	Rue	Rum	Sax	Sic
Sky	Sly	Tee	Tim	Tot	Toy	Vim	Wax	Wed	Why	Wig	Win

HYDROGRAPHIC STATIONS

Cap	T-11157	Del	T-11157	Huk	Vol. 8, pg. 65
Kid	T-11061	Mik	Vol. 1, pg. 67	Pro	T-11157
San	T-11157	To	T-11061		

FLOATING AIDS TO NAVIGATION
H-8080

<u>BUOY</u>	<u>LAT.</u>	<u>METERS</u>	<u>LONG.</u>	<u>METERS</u>	<u>DEPTH</u>	<u>POS. NO.</u>	<u>DATE</u>
Cherry Pt. Buoy 1	37-31	1327	76-16	153	18'	72t	7-29-53
Cherry Pt. Buoy 3	37-31	1443	76-18	474	22'	77e	5-26-53
Burton Pt. Shoal Buoy 5	37-30	1570	76-19	627	16'	82s	7-28-53
Hills Bay Buoy 1	37-29	1670	76-19	190	19'	59q	7-15-53
Hills Bay Buoy 2	37-29	817	76-19	259	10'	57m	7- 7-53
Milford Haven Buoy 4	37-29	510	76-18	1201	8'	60m	7- 7-53
Milford Haven Buoy 6	37-29	964	76-18	436	14'	39m	7- 7-53
Milford Haven Buoy 7	37-29	683	76-17	1160	14'	101m	7- 7-53
Milford Haven Buoy 8	37-29	390	76-17	952	10'	105m	7- 7-53

FISHING GROUND MARKER BUOYS

S-4AW	37-32	1688	76-15	395	29'	125n	6-26-53
S-5AW	37-33	434	76-15	644	27'	11w	9- 3-53
S-5W	37-32	955	76-17	483	20'	4x	9- 4-53
S	37-33	317	76-17	327	16'	94w	9- 3-53


ADDENDUM
To Accompany

HYDROGRAPHIC SURVEY H-8080 (Field No. Co-1353)

GENERAL

This appears to be an excellent basic survey and no unusual difficulties were experienced during the smooth plot. Soundings checked very well at crossings ✓ and the agreement between pole and fathometer soundings was good.

Respectfully submitted,


Hugh L. Proffitt
Cartographer

Norfolk, Va.
2 Sept. 1955

GEOGRAPHIC NAMES

Survey No. H-8080

Name on Survey											
	A	B	C	D	E	F	G	H	K		
<u>Virginia</u> ✓										BGN	1
<u>Chesapeake Bay</u> ✓										"	2
<u>Piankatank River</u> ✓										"	3
<u>Cherry Point</u> ✓											4
<u>Gwynn Island</u> ✓											5
<u>Milford Haven</u> ✓											6
<u>Hills Creek</u> ✓											7
<u>Hickorynut Cove</u>											8
<u>Barn Creek</u> ✓											9
<u>Edwards Creek</u> ✓											10
<u>Wharf Creek</u>											11
<u>Lanes Creek</u> ✓											12
<u>Winder Creek</u>											13
<u>Queens Creek</u> ✓											14
<u>Miller Cove</u>											15
<u>Pistle Cove</u>											16
<u>Kenney Creek</u>											17
<u>Hills Bay</u> ✓											18
<u>Burton Point</u> ✓											19
<u>Godfrey Bay</u> ✓											20
<u>Warehouse Cove</u>											21
<u>Cores Creek</u>											22
<u>Moore Creek</u> ✓											23
<u>Fishing Bay</u> ✓											24
<u>Stove Point Neck</u> ✓											25
<u>Jackson Creek</u> ✓											26
											27
											M 234

See chart 534 for best placement of names.

(name applies to both northerly and westerly arms)

Names approved 9-16-55. L. Heck

L.H.

Hydrographic Surveys (Chart Division)

HYDROGRAPHIC SURVEY NO. ~~8080~~.....

Records accompanying survey:

Boat sheets ~~1~~ (2 parts); sounding vols. ~~24~~...; wire drag vols.;
 bomb vols.; graphic recorder rolls ~~13~~ Envelopes
 special reports, etc. ~~1-Descriptive report, 1-Smooth sheet, &.....~~
~~3-Overlay tracings.....~~

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

Number of positions on sheet	.....	6742
Number of positions checked	.....	256
Number of positions revised	.....	15
Number of soundings revised (refers to depth only)	.....	*1440 <i>approx</i>
Number of soundings erroneously spaced	.....	5
Number of signals erroneously plotted or transferred	.....	0
Topographic details	Time	40
Junctions	Time	80
Verification of soundings from graphic record	Time	40

Verification by *F. P. SAULSBURY*..... Total time *517*... Date *3-13-57*

Reviewed by *J. A. Dinsmore*..... Time *48*... Date *7/3/57*

* Arbit. corr. 0.5 to 1.0 ft., affecting approx. 500 sd'gs. applied to parts of "L" day & "n" day-launch 102, to attain junctional agreement with H-8083.
 Tide corr. applied 28-844, 149-1584 Ark II, affecting approx 265 sd'gs.
 Various init corr., affecting approx. 675 sd'gs. applied to parts of b, n, g, t, v & x days, launch 102 & ha day, skiff 736.

DIVISION OF CHARTS
REVIEW SECTION - NAUTICAL CHART BRANCH
REVIEW OF HYDROGRAPHIC SURVEY

REGISTRY NO. H-8080

FIELD NO. CO-1353

Virginia, Chesapeake Bay, Entrance to Piankatank River

Project No. CS-287

Surveyed - May - Oct. 1953

Scale 1:10,000

Soundings:

Control:

808 Depth Recorder
Hand lead
Pole

Sextant fixes on
shore signals

Chief of Party - J. H. Brittain
Surveyed by - A. E. Greaves, A. J. Ramey and J. M. Ogilvie
Protracted by - G. L. Fernandes and W. W. Feazel
Soundings plotted by - G. L. Fernandes and W. W. Feazel
Verified and inked by - F. P. Saulsbury
Reviewed by - T. A. Dinsmore 3 July 1957
Inspected by - R. H. Carstens

1. Shoreline and Signals

The shoreline originates with reviewed air-photographic surveys T-11060, T-11061 and T-11157 of 1952-53.

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

2. Sounding Line Crossings

Depths at crossings are in excellent agreement. Numerous 1-ft. differences were eliminated by rescanning the fathograms, revisions to the initial correction and application of an arbitrary correction of plus or minus 0.1 - 0.2 ft. to pole soundings. The arbitrary corrections were based on numerous crossings and adjacent soundings. *Is such refinement necessary?*

3. Depth Curves and Bottom Configuration

The usual depth curves are adequately delineated. The 3-ft. curve was added to accentuate the inshore sand ridges and to delineate the creek channels.

A striking feature of the area is the shoal-water spit extending southeastward from Stove Point Neck to the light in lat. 37°30.85', long. 76°18.95', where depths of 4 - 5 ft. drop

+ 48' 100 fms.

sharply to depths of 47 ft. in as short a distance as 60 meters. Numerous shoals, sand ridges and abrupt slopes throughout the surveyed area contribute to the general unevenness of the bottom.

4. Junctions with Contemporary Surveys

Adequate junctions were effected between the present survey and H-8082 (1953-54) on the north, H-8083 (1953) on the east, H-8079 (1953) on the south and H-8081 (1953) on the west.

5. Comparison with Prior Surveys

a. H-285 (1851) 1:40,000

This early small-scale reconnaissance survey may be disregarded as lacking sufficient reliable information for a comparison of any value.

b. H-987 (1868-69) 1:20,000 H-2813 (1906) 1:20,000
H-988 (1869) 1:20,000

These prior surveys taken together cover the area of the present survey. A comparison of the prior and present surveys reveals only minor differences of 1 - 2 ft. In general, the prior and present depths agree closely. However, the more thorough coverage of the present survey discloses much information not shown on the smaller-scale prior surveys and defines the bottom configuration more completely.

The following discrepancies are noted:

(1) The 18-ft sounding charted in lat. $37^{\circ}33.25'$, long. $76^{\circ}15.62'$, from H-2831 should be disregarded. Falling in smooth-bottom depths of 21 - 22 ft. on both the prior and present surveys, the prior unsupported sounding is considered erroneous. Present development is adequate to discredit the prior sounding.

(2) The pile charted in lat. $37^{\circ}30.82'$, long. $76^{\circ}18.05'$, from H-2813 should be disregarded. Investigation on the present survey revealed that no piling from the old Cherry Point Wharf now exist in the above locality. Other piling and old wreckage located immediately northward should be charted.

The present survey is adequate to supersede the prior surveys within the common area.

6. Comparison with Chart 534 (Latest print date 5/20/57)A. Hydrography

Charted hydrography originates principally with the previously discussed surveys supplemented by partial application of the present survey prior to verification and review.

The following discrepancies in the charted information are noted:

- (1) An investigation of the ruins of Jackson Creek Wharf in lat. $37^{\circ}32.85'$, long. $76^{\circ}19.41'$, on the present survey revealed that the piling in and around the existing channel were removed at the time of dredging the channel. No piles remain north of the channel. Existing pile ruins south of the channel are indicated on the present survey.
- (2) The 19-ft. sounding charted in lat. $37^{\circ}31.17'$, long. $76^{\circ}19.78'$, from the present survey prior to verification and review should be disregarded. Falling in present depths of 27 ft., the 19 is erroneous as charted. A 19-ft. sounding does, however, fall about 45 meters southward.
- (3) The sunken wreck charted in lat. $37^{\circ}29.28'$, long. $76^{\circ}19.10'$, since 1910 from an undetermined source should be deleted from the chart. An investigation of this shoal area with the bottom visible revealed no remains of this old wreck which was reported locally as having been removed several years prior to the time of the present survey.
- (4) The piles charted in lat. $37^{\circ}29.45'$, long. $76^{\circ}18.60'$, from a Coast Pilot Inspection (Chart letter 106) of 1937 should be disregarded. A pipe-drag investigation of the locality revealed no remains of the piling which had previously supported a crab house. The piling should be removed from the chart.
- (5) The wreck charted in lat. $37^{\circ}29.03'$, long. $76^{\circ}16.25'$, from an air-photo revision survey of 1951 (Bp. 49025) should be disregarded. Falling in depths of 2 - 3 ft., no evidence of this wreck was found during a search on the present survey. The hydrographer states that the bottom was clearly visible.

(6) Attention is directed to the following charted features:

<u>Description</u>	<u>Latitude</u>	<u>Longitude</u>
pier ruins	$37^{\circ}31.4'$	$76^{\circ}22.2'$
" "	$37^{\circ}29.15'$	$76^{\circ}19.57'$
" "	$37^{\circ}29.4'$	$76^{\circ}17.46'$

The above ruins, all of which fall in relatively shoal depths were searched for on the present survey. The bottom was visible in all localities. In the opinion of the hydrographer, these features which have been charted as ruins for many years do not presently exist. It is, therefore, recommended that they be removed from the chart.

(7) The group of ^{stakes} piling charted in lat. $37^{\circ}29.4'$, long. $76^{\circ}17.6'$, from T-8329 (1945) should be revised to agree with the information shown on the present survey.

The present survey supersedes the charted information.

B. Aids to Navigation

The buoys located on the present survey in ^R Milford Haven (south of Gwynn Island) have been subsequently replaced by lights or daybeacons now charted from information published in H. O. Notice to Mariners No. 1 (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. The spar buoy located on the present survey in lat. $37^{\circ}33.18'$, long. $76^{\circ}17.21'$, is apparently a derelict buoy which has moved off its station.

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 paragraphs L - N were listed with their latitudes and longitudes. Seventy-seven soundings or inshore features were included, a large majority of which were unimportant to nautical chart revision or to the verification and review of the survey.

b. The smooth plotting was generally accurate.

c. Numerous fathogram strays produced on the survey were investigated by dragging a 20-ft. steel bar over the localities affected while the fathometer was kept in constant operation. In a close investigation of three separate areas, no indications of the shoaler depths were found. It was, therefore, concluded that the shoal fathogram recordings were indeed strays and were stricken from the sounding volumes. The areas investigated are listed in paragraph U - Y, page 17 of the Descriptive Report.

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:

Wallace A. Bruder
for Max G. Ricketts
Chief, Nautical Chart Branch

Charles A. Schanck
Charles A. Schanck
Chief, Chart Division

Karl B. Jeffers
Karl B. Jeffers 8/13/57
Chief, Hydrography Branch

Samuel B. Grenell
Samuel B. Grenell
Chief, Division of Coastal Surveys

To note under "Similarity Line Crossings"

Revisions apply to a
larger extent to the
elimination of irregularities
in depth curves in
flat bottom areas

R.H. Constant

RAC

TIDE NOTE FOR HYDROGRAPHIC SHEET

~~DIVISION OF COAST AND GEODETIC SURVEY~~

September 23, 1955

Division of Charts: R. H. Carstens

Plane of reference approved in 24
volumes of sounding records for

HYDROGRAPHIC SHEET 8080

Locality Plankatank River, Virginia

Chief of Party: J. H. Brittain in 1953

Plane of reference is mean low water, reading

2.4 ft. on tide staff ~~at~~ (May 5, 1953) at Jackson Creek

2.1 ft. ~~below B. M. 1~~ on tide staff (July 28, 1953) at Jackson Creek

9.9 ft. below B. M. 1 (1953)

1.7 ft. on tide staff at Milford Haven (Swing Bridge)

15.3 ft. below B. M. 1 (1953)

Height of mean high water above plane of reference is 1.2 feet.

NOTE: Tide reducers for the positions listed below have been revised in red and verified:

~~POSITIONS OF TIDE REDUCERS LISTED BELOW:~~

<u>Volume</u>	<u>Positions</u>
XX	19-84
XXI	150-157

William Shafiq

Acting Chief, Division of Tides and Currents.
Branch

