8081

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-1453 *Office No.* H-8081

LOCALITY

State Virginia

General locality Chesapeake Bay

Locality Upper Piankatank River

194 53

CHIEF OF PARTY

Comdr. J. H. Brittain

LIBRARY & ARCHIVES

DATE November 17, 1953

B-1870-1 (1)

8081

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-8081

Field No. CO-1455

State VIRGINIA

General locality CHESAPEAKE BAY

Locality UPPER PIANKATANK RIVER

Scale 1:10,000 Date of survey 15 Sept - 2 Oct 1953

Instructions dated 5 February 1953

Vessel SHIP COWIE

Chief of party COMDR J. H. BRITTAIN

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

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

Fathograms scaled by Personnel of Ship COWIE

Fathograms checked by " " " "

Protracted by W.W. Feazel & D.P. Harnden

Soundings penciled by D.P. Harnden

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

REMARKS:

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

EJ

DESCRIPTIVE REPORT

TO ACCOMPANY

HYDROGRAPHIC SURVEY H-8081, FIELD NO. CO-1453

CHESAPEAKE BAY, UPPER PIANKATANK RIVER

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:

This survey is of the upper Piankatank River from long. 76°23.00', westward to long. 76°34.9', at which point the river becomes very narrow and passage is made difficult because of overhanging trees and underwater obstructions.

Surveying operations began 15 Sep't. 1953 and closed 2 October 1953.

Junction is made with H-8080 CO-1353 (1953) (not registered as of 6-21-55) at long. 76°23.00'.

C - VESSELS AND EQUIPMENT:

Twenty-five foot hydrographic skiff no. 736, and an unnumbered twenty-five foot hydrographic skiff, both operating from Ship COWIE, were used throughout this survey. These boats were powered with outboard motors and used hand lead, sounding pole and 808 type fathometers nos. 114-S, 118-S and 63 for sounding. The results obtained were satisfactory, showing not more than 1 foot difference between hand lead, pole and fathometer. The lead line was checked daily when used and changes were not found.

D - TIDE AND CURRENT STATIONS:

Portable automatic tide gages were maintained at Wilton Ferry Landing, Dixie, Va., and Freeport Wharf, Freeport, Va. during the entire period of this survey.

D - TIDE AND CURRENT STATIONS: (CONT.)

There were no time interruptions and no references were made to other gages.

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

A seventy-five hour current station was occupied at lat. 37°31.13', long. 76°27.02' while hydrography was being carried on upstream. 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.

F - CONTROL STATIONS: *See Processing Office signal list*

TRIANGULATION:

Hydrographic Name	Triangulation Name
COT	PIANKATANK 21 (VFC) 1932
CYP	CYPRESS (V) 1920
EAR	PIANKATANK 7 (VFC) 1932
ELI	PIANKATANK 20 (VFC) 1921
IMA	PIANKATANK 17 (VFC) 1921
LID	PIANKATANK 23 (VFC) 1932
NAN	NAN (VFC) 1920
ROAN	ROAN (VFC) 1920
SAD	PIANKATANK 13 (VFC) 1932
SIX	PIANKATANK 6 (VFC) 1932
YEL	YELDOW (VFC) 1920
YES	PIANKATANK 27 (VFC) 1932

F - CONTROL STATIONS: (CONT.)

TOPOGRAPHIC: MANUSCRIPT NO. T-11060:

NAME	DESCRIPTION:
AGO	Temporary signal
APT-771-	Temporary signal
ART	Temporary signal
ASK-707	End of Pier
BAK	Temporary signal
BAT	Temporary signal
BIL-751	Pier end
BIT-725	Pier end
BUG	Temporary signal
Buy-727	End of pier
CAD	Temporary signal
CAM-737	End of pier
CAT-708	Temporary signal
COE	Temporary signal
DAB	SE Cor.,Boat ho.
DAD	N gable, shack
DEB	N. gable, house
DID-726	Pier end
DOX-752	Pier end
DUK	Temporary signal
DUO	Temporary signal
EBB	Temporary signal
ELA-729	Pier end
EON	Temporary signal
EVA-427	N gable, house
FAD-709	Pier end
FAT-738	Temporary signal
FIB	Temporary signal
Fox-429	NE corner, pier
FRO-731	E end of pier
FRY	Lone Cedar
GAD-739	Temporary signal
GET	Temporary signal
GIL-733	Bridge piling
GOO	Temporary signal
GUT-710	End of pier
GUY-428	S gable. boat ho.
HAT-740	" " " "
HEE-711	N gable, house
HIT-757	Pier end
HORSE-712	Temporary signal
HOT	Temporary signal
HUM-430	Lone.Cedar
HUG-778	Temp. signal
HUT	Bridge piling
ICE	Temporary signal
IKE	Temporary signal
INA	Temporary signal
INK	Temporary signal
IVO-735	Pier end
IVY-713	NW gable, house
JAK	Tree
JAR-741	Temporary signal
JEL	Temporary signal
JIB	Temporary signal
JIL-715	Lone Oak
JIP-762	Pier end
JUD-736	Temporary signal
KEN	Tree
KID	Temporary signal
KIL	Temporary signal
KIP-721	Temporary signal
KOD-744	Lone Tree
KIP-763	Lone Tree
LAD-758	Temporary signal
LET-	Temporary signal
LOT-766	Shed
LOV	Cedar tree
LUM-720	Pier end
LUX-744	Pier end Fence ?
MAG	Temporary signal
MAK-772	Temporary signal
MAN-724	S. Corner, bldg.
MET-719	Pier end
MEX-745	Pier end
MIX-767	Pier end
MOO-722	E gable, house
NED-743	Temporary signal
NOP-747	W gable, boat ho.
NOT	Temporary signal
NUT-764	Temporary signal
OAK-746	Temporary signal
OAK-746	Temporary signal
OBO-728	SE gable, house
OPE-765	Lone Tree
ORE-718	Pier end
ORI-748	Pier end
OVA	Temporary signal
PAL-753	Temporary signal
PET-734	End of pier
POP-730	End of pier
PRO-717	Pier end
PUG	Temporary signal
PUP-768	Temporary signal
RAN	Shark
RAY-761	S gable,boat ho.
REL	Temporary signal
RET	Bow of wreck
RIT	Temporary signal
RUG-754	Temporary signal
SAT-431	Temporary signal
SOL	S gable barn
SOP-716	Pier end
SOW-749	Temporary signal
SOX-769	Pier, NE corner
TASK-750	S. gable, boat ho.
TAN	Pier end
TAT-706	Temporary signal
TEL	Tree
TIE	SE corner, boat ho.
TIL	Pier end
TIT-723	S gable, boat ho.
USE	Center of roof ho.
VAT	Temporary signal
WAN	Temporary signal
WAX	Temporary signal
WET	Pier end
WOO	Temporary signal
YAK	Temporary signal
ZAG	Temporary signal
ZEE	Temporary signal
ZIG	Temporary signal
ZIP	Temporary signal
ZOO	Temporary signal

F - CONTROL STATIONS: (CONT.)

TOPOGRAPHIC: MANUSCRIPT NO. T-11209:

NAME		DESCRIPTION	NAME		DESCRIPTION
ACE	125	Temporary signal	IRK	109	Temporary signal
BAG GAB	-	Fence post	JAP	112	Temporary signal
BED	126	Small pier end	JAW	135	Lone Cypress
CAB	103	Temporary signal	KEY	113	Temporary signal
CAR	-	Lone Tree	KIM	134	Temporary signal
DAW	104	Temporary signal	LAX	114	Fish Stake
DIP	128	Temporary signal	LAY		Temporary signal
EAT	105	Temporary signal	MAL	115	Temporary signal
EGG	129	Lone Cypress	NAY	116	Pier end
EST	-	Lone Pine	ODD	117	Temporary signal
FAR	106	Temporary signal	PAR	118	Temporary signal
FEW	130	Lone Cypress	QUO		Wreck awash at high water
GAG	108	Temporary signal	RAM	107	Temporary signal
GAL	131	Lonely Cypress	SAX		End of Fence
HER	110	Temporary signal	TOM	119	Temporary signal
HID	132	Small Cypress	VET	120	Temporary signal
INA		Temporary signal	WAR	121	Tree
			YAM	122	Temporary signal

F - CONTROL STATIONS - HYDROGRAPHIC:

No hydrographic signals were used in this survey.

G - SHORELINE AND TOPOGRAPHY:

The shoreline of the boat sheet was transferred from air photo manuscripts T-11209 (1953) and T-11060 (1952) 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 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 attendant difficulty of getting the sounding vessel close to the beach without long periods of time spent dragging bottom or aground. However, sounding lines began and ended as close to the beach as possible and shorelines were run as close in 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 the skiffs to depths where satisfactory results could be obtained. Fathometer corrections have been determined from the 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 skiffs are in good agreement and 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 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, the percentage being estimated at eight to ten percent.

L - COMPARISON WITH PRIOR SURVEYS:

A comparison with prior survey H-988 (1869) shows the following:

(1) In lat. 37°32.09', long. 76°24.25', general depths of 15 feet were found in charted depths of 24 feet. (on slope; 24 slightly out of position)

(2) In lat. 37°30.96', long. 76°24.87', ~~1 and 2~~ 1 – 3 foot soundings were obtained in charted depths of 3 feet.

(3) In lat. 37°30.98', long. 76°26.92', 15.0 and 15.5 foot soundings were obtained in charted depths of 20 feet.

(4) In lat. 37°30.78', long. 76°26.29', 3 to 5 foot soundings were obtained in charted depths of 5 feet.

(5) In lat. 37°32.28', long. 76°29.59', ~~9~~ 9 – 10 to ~~9~~ foot soundings were obtained in charted depths of 11 feet.

(6) In lat. 37°32.24', long. 76°29.91', ~~67~~ 15. foot soundings were obtained in charted depths of 15 feet. Prior & pres. depths in agreement

(7) In lat. 37°32.63', long. 76°30.21', ~~5~~ 7 foot soundings were obtained in charted depths of 7 feet. Prior & pres. depths in agreement

(8) In lat. 37°32.27', long. 76°29.08', ~~10~~ 13 foot soundings were obtained in charted 13 foot depths. Prior & pres. depths in agreement

L - COMPARISON WITH PRIOR SURVEYS: (CONT.)

(9) In lat. 37°31.47', long. 76°24.64', 24 foot soundings were obtained in charted depths of 32 feet.

(10) The area west of long. 76°30.70', had not been previously surveyed. The controlling depth for this new area is approximately 4 to 5 feet, as lines in the vicinity of long. 76°31.0', indicate. The hydrography was carried westward to the point where the river became increasingly narrow and difficult to navigate due to overhanging trees and underwater obstructions.

M - COMPARISON WITH CHART:

A comparison with Charts 534 (2/9/53) and 1223 (12/22/52) shows the following:

1. Chart 534 shows a 6 foot shoal extending to a southeastern limit at lat. 37°32.31, long. 76°24.16', and a southwestern limit at lat. 37°32.37', long. 76°24.29'. Chart 1223 does not show this shoal. The shoal does not exist, the offshore 6 foot depth curve and most of the area encompassed are in general depths of 17.6 to 18.6 feet. It should be removed from chart 534. Review, par. 6A.

2. On Chart 534 in lat. 37°32.23', long. 76°23.18', a building is shown. This building, an oyster watch house, no longer exists. Local inquiry made of the owner of the Horse Point Inn disclosed that the watch house was wrecked by a Northeaster in 1946, and the remains were removed. This was in 1 to 2 feet of water and a thorough search was made for it with negative results. It should be removed from the chart. Review, par. 6A. Chart pile closeby on present survey

3. In lat. 37°32.33', long. 76°23.58', the offshore end of a new pier, constructed since the photographs were taken, was located by Pos. 47-a. This pier extends northeastward from Horse Point. Added to smooth sheet in red

4. In lat. 37°33.28', long. 76°31.81', two positions, 139-a and 140-a, mark the stern and bow, respectively, of a large, abandoned barge. It was learned that the barge was towed to this location during extremely high water. It is apparently well grounded. (stranded wreck)

A considerable number of previously uncharted piling, piers, etc., were located as follows:

5. The offshore end of 8, 6 inch in diameter piling in 5 feet of water and awash at low water was located in lat. 37°33.28', long. 76°33.35'.

6. The offshore end of 3, 8 inch in diameter piling in 9 feet of water and baring 4 feet was located in lat. 37°34.06', long. 76°32.96'.

7. Signal "QUO" marks the offshore end of a mostly sunken wreck which bares 2 foot at this point at low water. The inshore end is covered with mud. It is at lat. 37°34.00', long. 76°32.82'.

8. A group of 6, 6 inch in diameter piles, baring 4 feet, and presumably the remains of a duck blind, was located at lat. 37°33.56', long. 76°32.69'.

9. In lat. 37°33.70', long. 76°33.06', the area along the shore is foul with fallen trees. No attempt was made to sound in their immediate vicinity.

10. There is a large submerged log at lat. 37°33.47', long. 76°32.78', in 2 to 3 feet of water. It is submerged by 1 foot at low water.

11. The creek in lat. 37°33.35', long. 76°32.24', is almost filled up with marsh grass. No entrance exists for boats other than small skiffs, and the end of the waterway is visible from the opening. It could not be entered with the hydrographic skiff.

M - COMPARISON WITH CHART: (CONT.)

12. In lat. 37°33.45', long. 76°32.70', several unsuccessful attempts weremade to enter this area. It was too shoal, being a mud flat, and no channel exists.

13. In lat. 37°33.16, long. 76°30.53', two separate piling, 8 inches in diameter, and each baring 2 feet, were located. They are in 2 feet of water.

14. In lat. 37°32.38', long. 76°30.23', the offshore end of a pier was located. The tide gage at Freeport, Va. was attached to this pier, and although deteriorating, it is quite solid at this time.

15. In lat. 37°32.38', long. 76°30.23', the offshore end of a former pier, now only a few piling remaining, was located. This is the remains of the former steamboat pier at Freeport. It was determined from the Post Master at Freeport that the entire point had been bulldozed into the water, covering all of the piling. What piling is now visible now has been exposed by erosion.

16. In lat. 37°32.17', long. 76°29.76', a single pile, 6 inches in diameter, protruding 4 inches above bottom, and in 1 foot of water, was located. (submerged pile)

17. In lat. 37°32.30', long. 76°29.22', Pos. 131-f & 132-f, mark the east and west ends, respectively, of a group of 12 piles, 8 inches in diameter, and baring 3 feet. This is probably the remains of a boat house foundation.

18. In lat. 37°32.07', long. 76°28.39', a group (4) of 6 inch in diameter piles, baring 2 feet, was located. This is probably the remains of a duck blind.

19. In lat. 37°31.35', long. 76°27.73', a large pier is located by Pos. 205-g, and two large dolphins off the northeast and southeast ends of the pier are located by Pos. 204-g and 203-g, respectively.

M - COMPARISON WITH CHART: (CONT.)

20. In lat. 37°30.86', long. 76°26.98', a platform 8 X 8 feet square, baring 2 feet, and atop 5 - 6 inch in diameter pilings, was located. There is no connection to shore, and there are no piles shoreward or around it.

21. In lat. 37°32.46', long. 76°24.38', a single 8 inchs in diameter pile, baring 4 feet, MLW, was located by Pos. 152-c.

22. In lat. 37°32.44', long. 76°24.15', a single 8 inchs in diameter pile, baring 6 MLW feet, was located by Pos. 158-c.

23. In lat. 37°32.05', long. 76°23.63', a single 8 inchs in diameter pile, baring 6 MLW feet, was located by Pos. 48-c.

24. In lat. 37°31.98', long. 76°23.56', a single 8 inchs in diameter pile, baring 8 MLW feet, was located by Pos. 40-c.

25. In lat. 37°31.98', long. 76°23.28', a single 8 inchs in diameter pile, baring 7 MLW feet, was located by Pos. 39-c.

26. In lat. 37°32.12', long. 76°23.44', a single 8 inchs in diameter pile, baring 9 MLW feet, was located by Pos. 38-c.

27. In lat. 37°32.28', long. 76°23.62', a single 8 inchs in diameter pile, baring 6 MLW feet, was located by Pos. 37-c.

28. In lat. 37°32.32'. long. 76°23.60', a single 12" inchs in diameter pile, baring 3 MLW feet, was located by Pos. 36-c.

29. In lat. 37°32.32', long. 76°23.59', a single pile 12 inches in diameter and baring 5 feet, was located by Pos 35-c.

30. In lat. 37°32.26', long. 76°23.54', a single* pile 12 inches in diameter and baring 4 MLW feet, was located by Pos. 34-c. * blk day beacon

31. In lat. 37°32.26', long. 76°23.54', the offshore end of a string of generally submerged piling extending from the beach outward was located by Pos. 33-c. This is a jetty for the bathing beach at Horse Point Inn..

M - COMPARISON WITH CHART: (CONT.)

32. In lat. 37°32.19', long. 76°23.44', a single* pile 12 inches in diameter and baring ~~8~~ 7 MLW feet, was located by Pos 32-c. * day beacon

33. In lat. 37°32.25', long. 76°23.17', a single pile 12 inches in diameter and baring 5 feet, was located by Pos. 31-c.

34. In lat. 37°32.30', long. 76°23.18', a single pile 12 inches in diameter and baring 5 feet, was located by Pos. 30-c.

35. In lat. 37°32.3~~0~~1', long. 76°23.2~~6~~5', a single pile 12 inches in diameter and baring 5 feet, was located by Pos. 29-c.

36. In lat. 37°32.2~~4~~5', long. 76°23.37', a single pile 12 inches in diameter and baring 5 feet, was located by Pos. 28-c.

37. In lat. 37°32.3~~8~~6', long. 76°23.~~58~~35', a single pile 12 inches in diameter and baring ~~8~~ 6 MLW feet, was located by Pos, 27-c.

N - DANGERS AND SHOALS:

1. Item No. 25 of the Preliminary Review indicates a piling in lat. 37°31.~~59~~50', long. 76°27.85'. Using hydrographic skiff no. 736 on 2 October 1953, "h" day, an extensive search was made for this piling in conjunction with defining the point of a shoal immediately northward. A bar check was set to clear the bottom in this area and dragged about while the fathometer operated continuously. Approximately one hour was spent in this immediate vicinity with nothing being encountered. It is believed that the piling no longer exists or is in another location. Deletion is recommended. Pile not presently charted

2. Item No. 36 of the Preliminary Review requests bridge clearances on the new Pianka tank River* Bridge at Dixie, Va.. They are as follows:

Vertical clearance: 43 feet at MHW

Horizontal clearance: 80 feet

ϕ 37°30.5'
λ 76°25.2'

* Bridge completed & opened to traffic (C.L. 884, Sept. 1953)

N - DANGERS AND SHOALS: (CONT.)

This was made part of the Coast Pilot Notes submitted by the Commanding Officer, Ship COWIE, on 9 Oct. 1953.

3. There were no new shoals discovered during this survey and except for the 6 foot shoal on Chart 534 (discussed under Section M, Paragraph 1) See Review, par. 6A.(2) the depths on charted shoals were either found to agree closely with this survey, or were found to have lesser depths at this time. In general the shoals extend into the river from flat points and are either marked by oyster bed piling or by brush stakes.

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:

1. There are no official aids to navigation, floating or fixed, within the area covered by this survey.

2. Four buoys are charted off Horse Point. These buoysware maintained by the Horse Point Inn, and marked the entrance into Healy Creek. The buoys have been replaced by day beacons as follows:

1. Day beacon "S1", lat. 37°32.03', long. 76°23.33', a 12 inch black pile, with black slatted daymark, baring 5 feet, in 7.4 feet of water and located by Pos. 166-h. Review par. 6B

2. Day beacon "RS2", lat. 37°32.19', long. 76°23.44', a 12 inch pile with red slatted daymark, baring 5 feet, in 6.5 feet of water and located by Pos. 32-c.

P - AIDS TO NAVIGATION: ITEM 2 - SUBITEM 3: (CONT.)

3. Day beacon "S3", lat. 37°32.26', long. 76°23.54', a 12 inch black pile with black slatted daymark, baring 5 feet, in 7.0 feet of water, and located by Pos. 34-c

The positions of these beacons agree closely with the charted buoys which they replaced. Buoy No. 4 was removed but not replaced by a beacon.

Q - LANDMARKS FOR CHARTS:

No new landmarks for charts other than beacons listed in the preceeding paragraph are recommended for the area covered by this survey.

R - GEOGRAPHIC NAMES:

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

U-Y - MISCELLANEOUS:

It was found that 808 type fathometer no. 114-S would produce strays on the fathogram when the gain advanced. This was troublesome on "d" day, hydro-jet skiff, when a number of these cases developed. In accordance with Section 571 of the hydrographic manual a representative number of these soundings were investigated in the following manner:

Using another fathometer in constant operation, a 20 foot steel bar set to just clear the flat bottom was dragged throughout the area. The position of the sounding vessel was controlled by three-point fixes, resulting in a very close investigation of the area. In none of the 6 cases investigated did any indication of such soundings appear. Therefore it was

U-Y - MISCELLANEOUS: (CONT.)

CONCLUDED AFTER INSPECTION OF THE PATHOGRAMS THAT THESE SOUNDINGS WERE INdeed strays, and they were stricken from the sounding volume, and from the boat sheet.

For information the latitude and longitude of these investigated areas are as follows:

lat. 37 31.18' long. 76 25.88'	lat. 37 31.37' long. 76 25.69'	lat. 37 31.19' long. 76 26.18'
lat. 37 31.20' long. 76 25.68'	lat. 37 31.06' long. 76 26.08'	lat. 37 30.55' long. 76 25.52'

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

Z - TABULATION OF APPLICABLE DATA:

A list of signals is attached in Volume I of the sounding record.

A tabulation of other data is attached.

Respectfully submitted,

Arthur E. Greaves Jr.
Arthur E. Greaves, Jr.,
Lieut. (jg.), 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.

STATISTICS

TO ACCOMPANY

HYDROGRAPHIC SURVEY H____, FIELD NO. CO-1453

CHESAPEAKE BAY, UPPER PIANKATANK RIVER

SHIP COWIE SCALE: 1:10,000

J. H. BRITTAIN, COMDG.

Hydrographic skiff no. 736:

15 Sept. 1953	"a" day	Vol. I	20.7	Stat. Miles		168	positions.
16 Sept. 1953	"b" day	Vol. I	21.4	"	"	148	"
16 Sept. 1953	"b "day	Vol. II	14.1	"	"	96	"
17 Sept. 1953	"c "day	Vol. II	21.5	"	"	197	"
22 Sept. 1953	"d "day	Vol. III	36.2	"	"	192	"
28 Sept. 1953	"e "day	Vol. III	13.0	"	"	76	"
29 Sept. 1953	"f "day	Vol. IV	33.0	"	"	246	"
30 Sept. 1953	"g "day	Vol. IV	6.1	"	"	43	"
30 Sept. 1953	"g "day	Vol. V	24.3	"	"	189	"
1 Oct. 1953	"h "day	Vol. V	21.2	"	"	137	"
1 Oct. 1953	"h "day	Vol. VI	3.1	"	"	28	"
2 Oct. 1953	"j "day	Vol. VI	3.1	"	"	58	"
		TOTALS:	217.7	"	"	1578	"

STATISTICS: (CONT.)

Hydrographic skiff (no number):

23 Sept.	1953	"a"	day	Vol. ~~I~~ VII	32.4	Stat.	Miles	194	Positions
24 Sept.	1953	"b"	day	Vol. ~~I~~ VII	14.4	"	"	117	"
24 Sept.	1953	"b"	day	Vol. ~~II~~ VIII	17.1	"	"	114	"
28 Sept.	1953	"c"	day	Vol. ~~II~~ VIII	7.9	"	"	98	"
29 Sept.	1953	"d"	day	Vol. ~~II~~ VIII	12.2	"	"	98	"
29 Sept.	1953	"d"	day	Vol. ~~III~~ IX	9.2	"	"	80	"
30 Sept.	1953	"e"	day	Vol. ~~III~~ IX	13.4	"	"	139	"
1 Oct.	1953	"f"	day	Vol. ~~III~~ IX	10.5	"	"	94	"
1 Oct.	1953	"f"	day	Vol. ~~IV~~ X	10.6	"	"	100	"
2 Oct.	1953	"g"	day	Vol. ~~IV~~ X	3.8	"	"	39	"
				TOTALS::	99.6	"	"	1073	"
				GRAND TOTAL:::	317.3	"	"	2651	"

AREA - 5.9 SQUARE STATUTE MILES

TIDE NOTE

TO ACCOMPANY

HYDROGRAPHIC SURVEY H____, FIELD NO CO-1453

CHESAPEAKE BAY UPPER PIANKATANK RIVER

SHIP COWIE SCALE: 1:10,000

J. H. BRITTAIN, COMDG.

Q Portable automatic tide gages were maintained at Wilton Ferry Landing, Dixie, Va., lat. 37°30.44', long. 76°25.01', and at Freeport Wharf, Freeport, Va., lat. 37°32.30', long. 76°30.20', during the period of this survey. There were no time interruptions. Height of MLW at Dixie was 5.0 feet above zero of the tide staff. Height of MLW at Freeport was 2.2 feet above zero of the tide staff. All tidal data is based on Eastern Standard Time.

Hourly heights were scaled from the marigrams by the personnel of the Ship COWIE.

FATHOMETER CORRECTIONS

TO ACCOMPANY

HYDROGRAPHIC SURVEY H____, FIELD NO. CO-1453

CHESAPEAKE BAY UPPER PIANKATANK RIVER

SHIP COWIE SCALE: 1:10,000

J. H. BRITTAIN, COMDG.

SKIFF NO. UNNUMBERED:

"a" day	23 Sept.	No correction
"b" day	24 Sept.	No correction
"c" day	28 Sept.	0.0 to 7.0 - ∓0.4 7.5 to 14.0 - ∓0.2 Over 14.5 - 0.0
"d" day	29 Sept.	0.0 to 6.0 - ∓0.8 6.5 to 8.0 - ∓0.6 8.5 to 10.0 - ∓0.4 10.5 to 15.5- ∓0.2 Over 15.5 - 0.0
"e" day	30 Sept.	0.0 to 14.5 - ∓0.2 Over 14.5 - 0.0
"f" day	1 Oct.	0.0 to 5.0 - ∓0.4 5.5 to 9.5 - ∓0.2 Over 9.5 - 0.0
"g" day	2 Oct.	No correction.

SKIFF NO. 736:

"a" day	15 Sept.	No correction.
"b" day	16 Sept.	0.0 to 5.0 - ∓ 0.4 5.5 to 15.0- ∓ 0.2 Over 15.0 - 0.0
"c" day	17 Sept.	No correction
"d" day	22 Sept.	No correction.
"e" day	28 Sept.	No correction.

FATHOMETER CORRECTIONS (CONT)

SKIFF NO. 736:

"f" day	29 Sept	0.0 to 7.5 - 0.0 8.0 to 17.5 - ∱ 0.2 Over 17.5 - 0.0
"g" day	30 Sept	No correction
"h" day	1 Oct.	No correction
"j" day	2 Oct.	No correction.

LIST OF SIGNALS
H-8081

TRIANGULATION STATIONS

BOB	PIANKATANK 4 (VFC), 1932
COT	PIANKATANK 21 (VFC), 1932
CYP	CYPRESS (VFC), 1920
EAR	PIANKATANK 7 (VFC), 1932
ELI	PIANKATANK 20 (VFC), 1932
HORSE	HORSE (VFC), 1920
IMA	PIANKATANK 17, (VFC), 1932
LID	PIANKATANK 23 (VFC), 1932
NAN	WILTON B (VFC), 1920
NED	PIANKATANK 9 (VFC), 1932
OAK	PIANKATANK 10 (VFC), 1932
PAL	PIANKATANK 11 (VFC), 1932
ROAN	ROAN (VFC), 1920
SAD	PIANKATANK 13 (VFC), 1932
SIX	PIANKATANK 6 (VFC), 1932
YEL	YELLOW (VFC), 1920
YES	PIANKATANK 27 (VFC), 1932

TOPOGRAPHIC STATIONS SOURCE, T-11060

Ago	Art	Ask	Bak	Bat	Bil	Bit	Buy	Cad	Cam	Cat
Coe	Dab	Dad	Deb	Did	Dox	Duk	Duo	Ebb	Ela	Eon
Eva	Fad	Fat	Fib	Fox	Fro	Fry	Gad	Get	Gil	Goo
Gut	Guy	Hat	Hee	Hit	Hot	Hum	Hut	Ice	Ike	Ink
Ivo	Ivy	Jak	Jar	Jib	Jil	Jip	Jud	Ken	Kid	Kil
Kip	Kod	Kop	Lad	Lay	Let	Lot	Lov	Lum	Mag	Man
Met	Mex	Moo	Nop	Not	Nut	Obo	Ope	Ore	Ori	Ova
Pet	Pop	Pro	Pug	Pup	Ran	Ray	Ret	Rit	Rug	Sat
Sol	Sop	Sow	Task	Tan	Tat	Tel	Tie	Til	Tit	Use
Vat	Wan	Wax	Wet	Yak	Zee	Zig	Zip	Zoo		

SOURCE, T-11209

Ace	Apt	Are	Bag	Bed	Bug	Cab	Car	Daw	Dip	Eat
Egg	Est	Far	Few	Gag	Gal	Gus	Her	Hid	Hug	Ida
Ina	Irk	Jap	Jaw	Jel	Key	Kim	Koy	Lax	Lay	Lux
Mak	Mal	Mix	Nay	Now	Odd	Par	Quo	Ram	Rel	Sax
Sox	Toe	Tom	Vet	War	Woo	Yam	Zag			

ADDENDUM
To Accompany

HYDROGRAPHIC SURVEY H-8081 (Field No. Co-1453)

FATHOGRAMS

The fathogram scanning and interpretation is rather questionable on much of this survey. Some of the fathograms have an excessive number of strays, while on others, the bottom trace is so dim an accurate reading is impossible.

SHORELINE AND CONTROL

After the soundings had been penciled, it was found that all shoreline and control between Long. 76-30 and 76-31 had been transferred from the wrong compilation (See note on manuscript T-11060). After the shoreline and control had been corrected, all positions and soundings in the affected area were replotted, except those in areas of flat bottom where a slight displacement would not effect depths nor curves.

SOUNDINGS

The charted 6' sounding at Latitude 37-31.2, Longitude 76-26.15, was developed on j-day (purple), and also investigated by dragging a 20' bar across the area. It is presumed the sounding was considered disproved, however, numerous strays appear on the fathogram on this day and the Field Party made no reccommendation concerning the disposition to be made of the sounding. Review, par. 6A.(1)

Lat. 37-32.25 Long. 76-24.60 Soundings between positions 160 and 163f (blue) were not plotted. The positions appear questionable. Sdgs not needed

Lat. 37-32.08 Long. 76-24.55 Soundings between positions 132 and 133c (purple) were not plotted. The positions appear questionable.
Sdgs not needed

Respectfully submitted,

Hugh L. Proffitt
Cartographer.

Norfolk, Va.
18 February 1955

RHC

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

TIDE NOTE FOR HYDROGRAPHIC SHEET

~~Division of Coastal Surveys~~: 17 March 1955

Division of Charts: R. H. Carstens

Plane of reference approved in
10 volumes of sounding records for

HYDROGRAPHIC SHEET 8081

Locality Chesapeake Bay, Va.

Chief of Party: J. H. Brittain in 1953
Plane of reference is mean low water, reading
5.0 ft. on tide staff at Dixie
3.9 ft. below B. M. 1 (1953)

2.2 ft. on tide staff at Freeport
3.2 ft. below B.M. 1 (1953)

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

Dixie = 1.3 ft.
Freeport = 1.4 ft.

Condition of records satisfactory except as noted below:

E. C. McKay
Tides Branch
Chief, Division of Tides and Currents.

U. S. GOVERNMENT PRINTING OFFICE 877938

GEOGRAPHIC NAMES

Survey No. H-8081

Name on Survey	On Chart No. A	On previous survey No. B	On U. S. quadrangle Maps C	From local information D	On local Maps E	P. O. Guide or Map F	Rand McNally Atlas G	U. S. Light List H	K	
Anderson Point										1
Berkley Island								BGN		2
Carvers Creek										3
Coach ~~Creek~~ Point										4
Cobbs Creek								BGN		5
Cooper Point										6
Creek Point										7
Dancing Creek								BGN		8
Deep Point										9
Doctor Point										10
Ferry Creek										11
French Creek										12
Ginney Point										13
Glebe Neck								BGN		14
Harper Creek								BGN		15
Healy Creek										16
Hell Neck										17
Holland Point										18
Horse Point										19
Iron Point										20
Piankatank River								BGN		21
Pond Point										22
Roane Point										23
Wilton Creek								BGN		24
Wilton Point										25
Freeport						Names approved 4-6-55 a.j.w.				26
Fairfield Landing										27
Dixie	• Stampers Wharf (BGN)									

M 234

Hydrographic Surveys (Chart Division)

HYDROGRAPHIC SURVEY NO. 8081.....

Records accompanying survey:

Boat sheets 1 in 2 parts; sounding vols. 10...; wire drag vols. .....;

bomb vols. .....; graphic recorder rolls 7 nav.;

special reports, etc. 1 Smooth Sheet & 1 Boat Sheet Overlay.....

.....

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

Number of positions on sheet		2651	2651
Number of positions checked		15	336
Number of positions revised		1	1
Number of soundings revised (refers to depth only)		6	0
Number of soundings erroneously spaced		6	50
Number of signals erroneously plotted or transferred		0	✓
Topographic details	Time	0	✓
Junctions	Time	0	✓
Verification of soundings from graphic record	Time	2...4	

Prelim. Verification: T. A. Dinsmore ----- 64 hrs. 20 June 1955

Verification by J. G. Chambers...Total time 23.2 Date 8-11-56

Reviewed by J. A. Dinsmore..... Time ...40... Date 27 June 1955

Add'l verification & depth curves (JAD) 24 Aug-1956

M-2232-1

DIVISION OF CHARTS

REVIEW SECTION - NAUTICAL CHART BRANCH

REVIEW OF HYDROGRAPHIC SURVEY

REGISTRY NO. H-8081 FIELD NO. CO-1453

Virginia, Chesapeake Bay, Upper Piankatank

Project No. CS-287

Surveyed - Sept., Oct., 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 and J. M. Ogilvie
Protracted by - W. W. Feazel and D. P. Harnden
Soundings plotted by - D. P. Harnden
Prelim. Verification by - T. A. Dinsmore
Verified and inked by -
Reviewed by - T. A. Dinsmore 27 June 1955
Inspected by - R. H. Carstens

1. Shoreline and Signals

The shoreline and signals originate with the unreviewed manuscripts of air-photographic surveys T-11060 (1952) and T-11209 (1953).

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 low-water curve was determined where practicable.

The bottom is generally smooth and undulating except where abrupt slopes occur at the banks of the natural channel. Shoals extending off points constrict the channel in many localities. The maximum depth in the Piankatank River is 45ft. which occurs in lat. 37°32.03', long. 76°24.54'.

4. Adjoining Surveys

Project surveys on the east have not yet been received in this office.

5. Comparison with Prior Surveys

H-988 (1869), 1:20,000

Except for the upstream reaches of the river, west of long. 76°30.5', the prior survey covers the area of the present survey. A comparison of the prior and present depths 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 prior survey and defines the bottom configuration more completely and clearly.

The following discrepancy with the prior survey is noted:

(1) The 24-ft. sounding charted in lat. 37°32.07', long. 76° 24.28' from H-988 should be disregarded. Falling in depths of 14-16 ft. on the present survey, the prior sounding is considered to be out of position and should actually fall about 100 meters northwestward where comparable depths were obtained on the present survey.

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

6. Comparison with Chart 534 (Latest print date 2/9/53)

A. Hydrography

Charted hydrography originates principally with the previously discussed survey which needs no further consideration.

Discrepancies with the charted information are noted as follows:

(1) The 6-ft. sounding charted in lat. 37°31.20', long. 76°26.18', by hand correction originates with advance information of the present survey reported in H. O. Notice to Mariners 44 (1954). The 6-ft. was believed to be a stray fathogram recording as it rose from smooth-bottom depths of 11-12 ft. This was later confirmed by additional fathometer development of closely spaced sounding lines supplemented by dragging a 20-ft. steel bar over the locality. The 6-ft. psuedo sounding is considered to be disproved and should be disregarded.

deleted by N.M. 41, 1954

(2) The offshore protrusions of the 6-and 12-ft. depth curves charted in the vicinity of lat. 37°32.3', long. 76° 24.2', resulted from erroneous shoal delineation on an unreviewed advance print of T-8341 (1942-46) which was applied during reconstruction of the chart in 1951. Both the prior survey of 1869 and the present survey shows depths of 17-18 ft. inshore from the charted 6-and 12-ft. curves. The charted information is superseded by the present survey depths.

(3) The "obstruction" charted in lat. 37°32.20', long. 76° 23.18', should be deleted from the chart. The former oyster watch house is reported to have been destroyed by a storm in 1946 and the remains subsequently removed. A thorough investigation of the locality revealed no remains of the former structure.

The present survey supersedes the charted information.

B. Aids to Navigation

The three charted beacons marking the channel into Healy Creek originate with information (H. O. Notice to Mariners No. 24, 1954) subsequent to the present survey. The beacons are privately maintained.

No other aids to navigation are charted within the limits of the present survey.

7. Condition of Survey

(a) The sounding records and Descriptive Report are complete and comprehensive.

(b) The preliminary verification indicates that the smooth plotting was generally accurate. The preliminary verification of the smooth sheet was generally confined to sounding-line crossings and unnatural bottom configuration. A pattern of sounding lines covering the general area have been verified and inked. Completion of the verification and inking is deferred until some future date at which time the shoreline will be checked and a further inspection of the depth curves will be made.

(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 six 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 14 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:

H. R. Edmonston
Chief, Nautical Chart Branch

E. R. McCarthy
Actg. Chief, Division of Charts

J. C. Bull
Chief, Hydrography Branch

Earl O. Heaton
Chief, Division of Coastal Surveys

REVIEW ADDENDUM

H-8081 (1953)

Verified by - J. C. Chambers
Reviewed by - T. A. Dinsmore 21 August 1956
Inspected by - R. H. Carstens

Junctions with Contemporary Surveys

The junction with H-8080 (1953) on the east will be considered in the review of that survey.

Comparison with Chart 534 (Revised 10/31/55)

Charted hydrography originates principally with the prior survey previously discussed in the review.

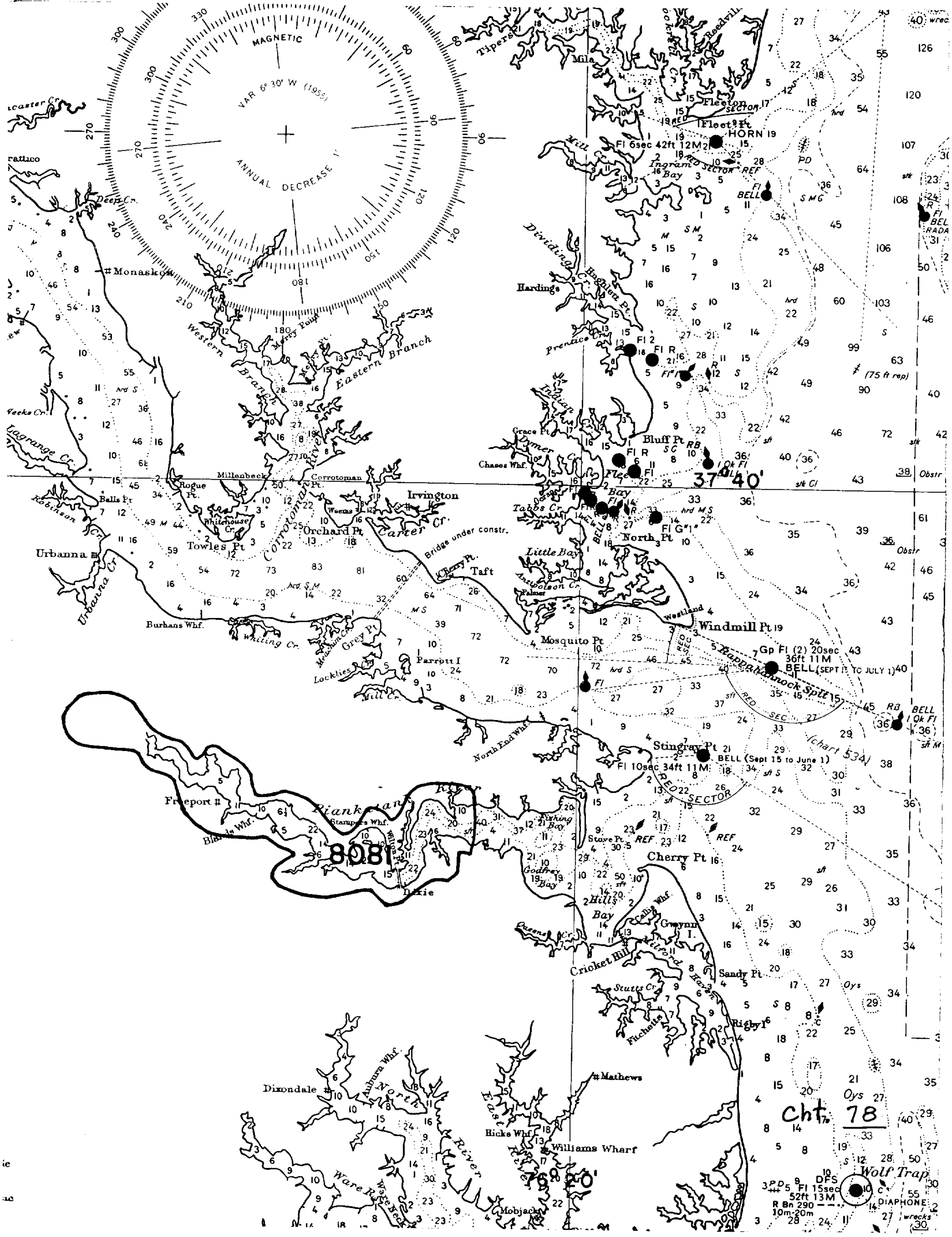
The 6-ft. sounding discussed in paragraph 6A (1) of the review has been removed from the chart in accordance with information published in H. O. Notice to Mariners 41 (1955). Except as noted, the other discrepancies enumerated in paragraph 5 and 6 of the review still remain on the chart. The present survey entirely supersedes the charted information.

Condition of Survey

With the inking of soundings and depth curves, the verification of this survey is now complete.

Approved:

Charles A. Schanck
Chief, Chart Division



MAGNETIC
VAR 6° 30' W (1955)
ANNUAL DECREASE 1'
Monaskon
Urbanna
Urbanna Cr.
Balls Pt
Lagrange Cr.
Deep Cr.
Rogue Pt.
Millenbeck
Whitehouse Cr.
Towles Pt
Corrotoman Pt.
Corrotoman River
Western Branch
Eastern Branch
Merry Point
Orchard Pt
Irvington
Weems
Carter Cr.
Bridge under constr.
Taft
Burhans Whf.
Whiting Cr.
Grey Pt
Parrott I
Mill Cr.
North End Whf.
Freeport
Stampers Whf.
Dixie
Piankatank River
8081
Tipers
Mila
Fleeton
Fleet Pt
HORN
Fl 6sec 42ft 12M
Ingram Bay
Mill Cr.
Dividing Cr.
Hardings
Prentice Cr.
Indian Cr.
Grace Pt
Chases Whf.
Dymer Cr.
Bluff Pt
Fleet Bay
Tabbs Cr.
North Pt
Little Bay
Antipoison Cr.
Westland
Windmill Pt
Mosquito Pt
Gp Fl (2) 20sec 36ft 11M
BELL (SEPT 15 TO JULY 1)
Rappahannock Spit
RED SEC
Stingray Pt
BELL (Sept 15 to June 1)
Fl 10sec 34ft 11M
RED SECTOR
Fishing Bay
Stove Pt
Godfrey Bay
Cherry Pt
Hills Bay
Gwynn I.
Queens Cr.
Cricket Hill
Milford Haven
Stutts Cr.
Sandy Pt
Fitchetts
Rigby I
37° 40'
Dixondale
Auburn Whf.
North River
East River
Mathews
Hicks Whf.
Williams Wharf
Mobjack
Ware River
Ware Neck
76° 20'
Wolf Trap
Fl 15sec 52ft 13M
DIAPHONE
R Bn 290
(chart 534)
Cht. 78

NAUTICAL CHARTS BRANCH

SURVEY NO. H-8081

Record of Application to Charts

DATE	CHART	CARTOGRAPHER	REMARKS
3-24-55	1223	C.R. Wittmann	Before ~~After~~ Verification and Review partial
Sept. '55	534	J.H. Eaton	After prelim. verif. & review – partial
11/26/57	534	[illegible]	~~Before~~ After Verification and Review Complete 3MA
3-16-59	1223	R.K. de Landa	~~Before~~ After Verification and Review Item chart 534
1/4/61	78	J. Heaton	~~Before~~ After Verification and Review Thru chart 1223
5/1/61	Inset 534	J.T. Phillipe	~~Before~~ After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			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.