9301

Diag. Cht. No. 77-3

NOAA FORM 76-35A

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL OCEAN SURVEY

DESCRIPTIVE REPORT
(HYDROGRAPHIC)

Type of Survey HYDROGRAPHIC

Field No. 742-10-2-72

Office No. H-9301

LOCALITY

State VIRGINIA - MARYLAND

General Locality POTOMAC RIVER

Locality MARYLAND POINT TO BRENT POINT

19 72

CHIEF OF PARTY
Ned C. Austin

LIBRARY & ARCHIVES

DATE March 1, 1978

☆ U.S. GOV. PRINTING OFFICE: 1976—669-441

9301

ARCA-2

559 (12288)
101 (12285)
77 (12260)

FORM C&GS-537 (8-66)

U.S. DEPARTMENT OF COMMERCE
ENVIRONMENTAL SCIENCE SERVICES ADMINISTRATION
COAST AND GEODETIC SURVEY

HYDROGRAPHIC TITLE SHEET

REGISTER NO.

H-9301

INSTRUCTIONS - The Hydrographic Sheet should be accompanied by this form, filled in as completely as possible, when the sheet is forwarded to the Office.

FIELD NO.

742-10-2-72

State Virginia and Maryland

General locality Potomac River

Locality Maryland Point to Brent Point

Scale 1:10,000 Date of survey 18 May-August 22 1972

Instructions dated 3/1/72 &3/3/72 Project No. OPR-409

Vessel Hydrographic Field Party 742 Launches 1259 and 1260; Skiff 570

Chief of party CDR Ned C. Austin

Surveyed by Lt. Richard L. Baker, Ltjg James L. Stokoe, J. Scott Bradford

Soundings taken by echo sounder, hand lead, pole Echo Sounder and Pole

Graphic record scaled by Party Personnel

Graphic record checked by Party Personnel Verification Branch (AMC

Protracted by _____ Automated plot by AMC CALCOMP 616 (AMC)

Soundings penciled by _____

Soundings in ~~fathoms~~ feet at MLW ~~MLLW~~

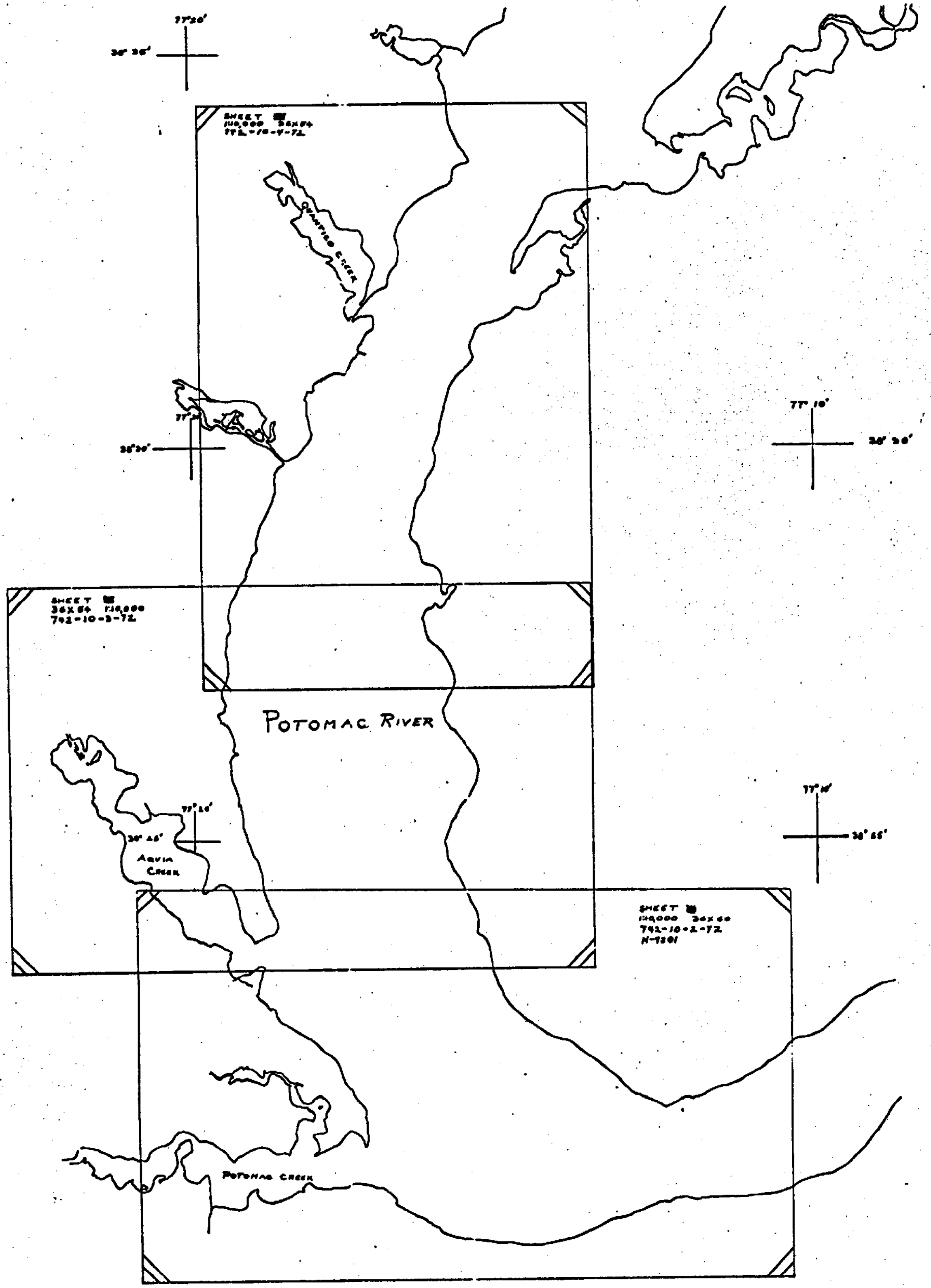
REMARKS: Survey 742-10-2-72 was done using three boatsheets: 10-2-72A covered Potomac Creek, 10-2-72B covered generally the Maryland side of the Potomac River, 10-2-72C covered the Virginia side. This descriptive report is divided into three sections, one for each sheet, except for those sections of the appendix which are common to all. The survey data is also separated so that one sheet can be processed at a time if desired. The main reason for doing the survey this way was to speed up the field processing.

appd. WJT 8-16-78

Notes in red made during verification by L.G. Cram

The time meridian for hydrography is Greenwich Mean Time.

USCOMM-DC 37009-P66


SHEET
1:10,000 36X54
SHEET
36X54 1:10,000
742-10-3-72
POTOMAC RIVER
AQUIA CREEK
SHEET
1:10,000 36X60
742-10-2-72
POTOMAC CREEK

DESCRIPTIVE REPORT
742-10-2-72 A

A. PROJECT

Sheet 742-10-2-72 A, Project Number OPR-409, was done in accordance with Project Instructions dated March 1, 1972, and Supplement to Instructions, Change No. 1, dated March 3, 1972.

B. AREA SURVEYED

The area surveyed includes the navigable limits of Potomac Creek out to the eastern limit at the mouth of the creek, Long. 77°17.3" W. Hydrography began June 9, 1972 and ended June 22, 1972. A junction was made at the mouth of the creek with the current Survey 742-10-2-72 C ([redacted])

C. SOUNDING VESSEL

Launch 1259 (blue) was used for Positions 4001 to 4477 and Positions 4481 to 4483. Skiff 570 (brown) was used for Positions 5001 to 5025. (Please note that, due to an oversight, Position Numbers 5001 to 5025 were also used on Sheet 10-2-72 C).
* Note these Positions were changed during verification to the 2000 series Position numbers

D. SOUNDING EQUIPMENT

Raytheon Fathometer DE-723, Number 535, was used on all soundings taken with Launch 1259, and Raytheon Fathometer DE-723, Number 806, was used on all soundings taken with Skiff 570. Generally, in water less than 6 feet deep, a sounding pole was used in place of the fathometer.

Echo sounder corrections were determined from bar checks.

E. SMOOTH SHEET

The smooth sheet will be prepared by the Atlantic Marine Center Processing Division from punched tapes made by this party. Boatsheet A, B, and C of this survey can be plotted on a single oversized (36 x 60) smooth sheet provided that the western part of Potomac Creek is plotted as an insert. Actual tides will be furnished by Rockville from ADR gages. Supplemental tide staff readings during hydrography were observed at Lat. 38°20'38" Long. 77°19'15". **See also Tide Note in this report.**

F. CONTROL

Horizontal control for hydrography was by sextant fixes. All signals for this survey were located by Photo Party 61 and are described in the Control Report to accompany this Descriptive Report.

G. SHORELINE

Shoreline details for this survey were obtained from shoreline Manuscripts TP-00330 and TP-00331. Low water line was not defined by the soundings due to the small tide range.

H. CROSSLINES

Approximately 10% of the sounding lines run were crosslines. They are in good general agreement at crossings.

I. JUNCTIONS

At the mouth of Potomac Creek, where a junction is made with 10-2-72 C, the soundings from 10-2-72 A appear to be about 1 to 2 feet greater than those from 10-2-72 C. There are two possible explanations for this. First, the hydrography in this area on 10-2-72 A was run shortly after the Potomac River flooded in June (see O. Miscellaneous), and the water may still have been abnormally high. This can be investigated when actual tides are used for smooth processing. Secondly, Launch 1259 was used on 10-2-72 A and Skiff 570 was used ~~on this~~ 10-2-72 C. When settlement and squat and velocity corrections are applied during smooth processing, this may also help resolve the discrepancy. No discrepancy ~~exists~~ was found on Smooth Sheet

J. COMPARISON WITH PRIOR SURVEYS

A prior survey of Potomac Creek was not furnished to this party. Item 3 on the Pre-Survey review was investigated on this sheet by searching both areas with an improvized wire drag. The first piling reported at Lat. 38°~~23'26"~~21'06" Long. 77°~~18'48"~~19'48" was not found, and it is recommended that it be removed from the chart. However, two adjacent ~~submerged~~ snags were found in the second area (Pos. 4482 and 4483) at Lat. 38°20.6', Long. 77°17.7'. Furthermore, a third pile ~~awash at~~ MLW (Pos. 4481) was found at Lat. 38°20.6', Long. 77° 19.1', after being mentioned by a local resident. This is a navigational hazard and should definitely be added to the chart. Origin c/L 704 (1965)

delete note "piling"

delete note "piling awash at MLW"

one foot above

Concur

Chart prior

K. COMPARISON WITH THE CHART

With two exceptions, there is good general agreement between this survey and Chart C&GS 101 SC, although detailed comparison is impossible due to the great difference in scales.

One sounding on the chart that appears incorrect is a 14-foot sounding at approximate Lat. 38°21.1' N, Long. 77°20.0' W, where the actual depth is 7 feet.

The other is 4-foot sounding at approximate Lat. 38°21.1' N, Long. 77°20.6', in 1 foot of water. This sounding should be displaced to the east about 0.1'.

The entire Potomac Creek contains many fish nets and traps, some of which are unmarked. The unmarked lines are especially hazardous to navigation, since they can easily become entangled in a boat's propeller. These nets were too numerous to list individually. They are not of a permanent nature, but it is recommended that they be mentioned as a hazard on the chart as well as the Coast Pilot.

Also of interest is the fact that several new marsh areas have grown up in the creek since the chart was made. These should be identifiable on the photographs.

L. ADEQUACY OF SURVEY

This survey is considered complete and adequate to supersede prior surveys for charting. Fathogram scanning was done under supervision of launch chiefs.

M. AIDS TO NAVIGATION

All aids to navigation were found to be as described in the Coast Guard Light List.

N. STATISTICS

There were 480 positions taken on this survey by Launch 1259 for a total of 48 nautical miles sounding line. Twenty-five (25) positions were taken by Skiff 570 for a total of 1.8 nautical miles sounding lines. The total area of the survey is approximately 3 square nautical miles. Eighteen (18) bottom samples were taken.

O. MISCELLANEOUS

The bottom of Potomac Creek is, in general, composed of soft

mud or silt, at least several feet thick. The creek is generally shallow except at the upper end of Accokeek Creek, and also at a constriction in the Potomac Creek between Long. 77°20.0' W and 77°20.5' W, where depths of over 10 feet are found.

There was a large flood in the area on June 23. When hydro was run on June 26 and June 27 (Julian days 178 and 179), it appeared that the water in Potomac Creek was still abnormally high. Since predicted tides were used on the boatsheet, the soundings shown for these days (Pos. 4420 to 4477) may be 1 or 2 feet deeper than the correct soundings. This discrepancy should disappear when actual tides are used on the smooth sheet.

Contact with the Tides Branch in Rockville indicated tides were about 1 foot above predicted.

P. RECOMMENDATIONS

It is recommended that mention be given in the Coast Pilot to the numerous fish traps in the area (see Section K).

Q. REFERENCE TO REPORTS

1. Control Report for 742-10-2-72 (by Photo Party 61, enclosed)
2. HFP-742 Field Season's Report, 1972-OPR-409

Respectfully Submitted:

Richard L. Baker
LT, NOAA

DESCRIPTIVE REPORT
742-10-2-72 B

A. PROJECT

Sheet 742-10-2-72 B, Project Number OPR-409, was done in accordance with Project Instructions dated March 1, 1972, and Supplement to Instructions, Change No. 1, dated March 3, 1972.

B. AREA SURVEYED

The area surveyed includes the eastern side of the Potomac River junctioning with prior Survey H-8706 (1962, 1:10,000) at Long. 77°11'30" on the eastern limit. The area surveyed continues along the eastern shore to Lat. 38°24'00" where a junction is made with contemporary survey 742-10-2-72 C. The entire river is surveyed on this sheet between Long. 77°11'30" and 77°14'30". At Long. 77°14'30" a junction is made with contemporary survey 742-10-2-72 C, continuing to the northern limit at 38°24'00". (See attached Project Limits Sketch.)
Hydrography began on May 18, 1972 and ended on July 20, 1972.

C. SOUNDING VESSEL

Launch 1260 (red) was used from Positions 1 to 646, 682 to 751, 805 to 883, 955 to 1127, and 7001 to 7032. Skiff 570 (brown) was used from Positions 648 to 681, 752 to 804, 884 to 954, and 1128 to 1220. Launch 1259 (blue) was used from Positions 1221 to 1269.

D. SOUNDING EQUIPMENT

Raytheon Fathometer DE-723, No. 535 was used on all soundings taken with Launch 1259. Fathometer No. 806 was used on all soundings taken with Skiff 570. Three fathometers were used in Launch 1260: No. 1889 from May 18 to May 23, No. 535 on June 2, and No. 1885 from May 25 to June 1 and from June 6 to July 6.

A sounding pole was used generally in depths 4 feet or less. Echo sounder corrections were determined from bar checks and recorded in a separate Bar Check Volume.

F. CONTROL

The major portion of Sheet 742-10-2-72 B (H-9301) was by range-range control using the Del Norte electronic position control system. Calibrations were made at PRV 11B at the mouth of Aquia Creek, Clifton Beach Light, and Lt. 2 at the mouth of Potomac Creek. These were recorded in a separate calibration volume.

The calibration procedure was to position the launch's antenna as close as possible to the calibration station (usually within 1 Meter), record the readout, and reset for crystal drift if necessary. For a more complete discussion of the Del Norte System and calibration, see the Electronic Control Calibration Report for this project.

A portion of the sheet, near the eastern limit, was done visually using signals located by Photo Party 61. The visual signals used are described in Photo Party 61 Control Report to accompany this Descriptive Report. "See Boatsheet" methods were used for short stretches of shoreline near Stations #118 and #114. Positions 7033, 7034 and 7035, 7036 are "Dummy Fixes."

G. SHORELINE

Shoreline details for this survey were obtained from shoreline Manuscripts TP-00331 and TP-00332. Low water lines were not defined due to the small tide range. Shoreline details were in good agreement with the results obtained by Photo Party 61.

H. CROSSLINES

Crossline mileage comprises 12% of the total mileage of sounding lines. Agreement at crossings is good.

I. JUNCTIONS

The junctions with Survey H-8706 (1962) at the eastern limit is in good general agreement (2.0 feet or less). Velocity, settlement and squat, and actual tide correctors should affect the junction slightly. No junction is required with Sheet 10-2-72 C (H-7361), although soundings at that junction are in good agreement.

J. COMPARISON WITH PRIOR SURVEYS

Two numbered Pre-Survey Review Items and 12 unnumbered items are in the survey area and were investigated by a grid of sounding lines 25 meters apart. The result plotted on a mylar overlay to accompany the boatsheet are summarized below.

PSI #1 "visible wreck" at Lat. 38°20'28" Long. 77°12' 30" was searched for (Vol. 9 P. 52) and not found. It is recommended that the feature be deleted from the chart. Concur RWB 4/78

PSI #2 "visible wreck" at Lat. 38°20'20" Long. 77°12'51" was found to be 0.05 NM to the east of its charted position, baring 5 ft. at M.H.W. The new position is Lat. 38°20'19.39" and Long. 77°12'49.72" (Vol. II, P. 52). Concur
Recommend charting present survey location.

The following unnumbered Pre-Survey Review Items were developed by running closely spaced sounding lines in the areas. All items were charted as shoal areas by prior surveys.

Location	Origin	Remarks
38°21'06" 77°12'30"	Bp 58206 (1959)	Previously charted as 22', Least depth found is 23'. Chart present survey depths. Lat 38°21' 08.24 Long 77°12' 28.92 Pos #643
38°21'05" 77°12'23"	Bp 58206 (1959)	Previously charted as 20', Least depth found is 20'. Lat 38°21' 7.56" Long 77°12 23.14" Pos #688
38°21'04" 77°12'17"	Bp 23819 (1930)	Previously charted as 17', Least depth recorded is 17'. Chart present survey depths Lat 38°21'04.86" Long 77° 12' 18.50" Pos #694
38°20'50" 77°12'48"	H-2706 (1904)	Previously charted as 20', Least depth found is 17'. Lat 38°20'51.16" Long 77° 12' 98.07" Pos #708
38°20'53" 77°12'40"	H-2706 (1904)	Previously charted as 27', Least depth found is 26'. Lat 38°20'55.11" Long 77°12'41.18" Pos #722
38°21'04" 77°13'17"		Previously charted as 18', Least depth found is 15'. Lat 38°21'05.76" Long 77°13'15.36" Pos #550
38°20'58" 77°13'15"	H-2706 (1904)	Previously charted as 13', Least depth recorded is 13'. Lat 38°21' 01.96" Long. 77° 13' 16.54" Pos #330
38°20'53" 77°13'06"	H-2706 (1904)	Previously charted as 17', Least depth recorded is 17'. Lat 38°20'53.87" Long. 77° 13' 05.35" Pos #734
38°21'06" 77°12'55"	Bp 23819 (1930)	Previously charted as 12', Least depth found is 13'. Chart present survey depths Lat 38°21'06.18" Long 77°12'55.38" Pos #351
38°21'36" 77°13'02"	H-2706 (1904)	Previously charted as 8', Least depth found in vicinity of shoal area is 8'. Lat 38°21'36.28 Long. 77°12'59.93 Pos #319
38°21'45" 77°13'25"	H-2706 (1904)	Previously charted as 11', Least depth record is 11'. Lat 38°21' 44.05" Long 77° 13' 25.49" Pos #863
38°21'42" 77°14'50"	H-2706 (1904)	Previously charted as 12', Least depth record is 12'. ~~Lat 38°21' 42.03" Long 77° 14' 43.01"~~ Recommend charting present survey depths in vicinity. Pos #820

Comparison with prior Surveys No. 2706 (1:10,000, 1904) and No. 2707 (1:10,000, 1904).

Along the Maryland shore, all depth curves have moved southwest; however, the shape of the features remains generally the same. In the vicinity of Maryland Point the features (shoals and deeps) have remained, but the water is generally deeper now. On the Virginia side of the river, the curves have moved slightly south since 1904, although agreement on this side is good. (present survey) (2 to 3 feet shoaler)

K. COMPARISON WITH THE CHART

With the exception of slight deepening in the channel and in the vicinity of Maryland Point, there is good agreement of depth curves with C&GS Chart 559, February 27, 1971. Bottom characteristics do not appear to have changed, although a more significant rock hazard exists along the shoreline than is noted on the chart, especially on the Maryland side. The limits of some areas, where rocks or hard pebbly bottom existed from the high waterline to the 3 ft. depth curve, were determined by taking detached positions. These areas were labeled foul on the boatsheet.

Most debris from the flash floods of late June was either washed ashore or sunk by July 10th. DP's were taken on all remaining snags. Flood damage included undercut banks, cave-ins along bluffs, and undercut trees fallen in the water or washed ashore.

Fish-net stakes in this area are small, unmarked, and very temporary. They should not be used for navigation; however, the stakes and the nets stretched between them do constitute a small boat hazard.

The visible wreck charted at Lat. 38°20'28", Long. 77°12'30" could not be found (see section J).

L. ADEQUACY OF THE SURVEY

This survey is complete and adequate to supersede prior surveys for charting. Fathograms were scanned under supervision of launch chiefs.

M. AIDS TO NAVIGATION

Within the limits of this survey, there are 6 floating aids to navigation and one fixed aid, which are maintained by the Coast Guard. The aids are listed in Light List, Vol. I, 1972, and adequately serve the purpose intended.

N. STATISTICS

LAUNCH	TOTAL NUMBER OF POSITIONS	MILES OF SOUNDING LINE
1260	1000	138.2 NM
570	251	23.1 NM
1259	49	5.5 NM

This survey covers 4.3 square nautical miles. Seventeen bottom samples were taken.

O. MISCELLANEOUS

The pronounced submarine relief in the vicinity of Maryland Point seems unusual when compared to the relatively flat bottom elsewhere; however, these same features have been recorded as early as 1904. They are apparently due to the narrowing and resultant noticeable current increase of the river at this point. It is possible that Maryland Point Light has some effect on the relief also.

P. REFERENCES TO REPORTS

1. Control Report - Photo Party 61 (enclosed)
2. Season's Report HFP-742 (1972), OPR-409
3. Electronic Control Calibration Report for OPR-409, 1972

Respectfully Submitted:

Hal C. Austin

for James L. Stokoe
LTjg, NOAA

DESCRIPTIVE REPORT
742-10-2-72 C

A. PROJECT

Sheet 742-10-2-72 C, Project Number OPR-409 was done in accordance with Project Instructions dated March 1, 1972 and Supplement to Instructions, Change No. 1, dated March 3, 1972.

B. AREA SURVEYED

The area surveyed includes the western side of the Potomac River, junctioning with Sheet 10-2-72 B on the eastern and southern limits, with 10-2-72 A' at the mouth of Potomac Creek, and with 10-3-72 A (H-7321) at the mouth of Aquia Creek. The northern limit is Lat. 38°24.0', where a junction will be made with sheet 10-3-72 B & C (H-7321) (See project limit sketch to accompany this report). Hydrography began on June 29, 1972 and ended on August 22, 1972.

C. SOUNDING VESSEL

Launch 1260 (red) was used for Positions 5000 to 5475 and Positions 7050 to 7562.

Skiff 570 (brown) was used for Positions 5476 to 5559.

Launch 1259 (blue) was used for Positions 9000 to 9197.

D. SOUNDING EQUIPMENT

Raytheon Fathometer No. 1885 was used on Launch 1260, No. 535 on Launch 1259, and No. 806 in Skiff 570. Sounding pole was generally used on all soundings less than 4 feet.

Echo sounder corrections were determined from bar checks and recorded in a separate bar check volume.

E. SMOOTH SHEET

The smooth sheet will be processed by AMC Processing Division using punched tapes prepared by the party. Actual tides, furnished by Rockville, will be used for smooth processing.

F. CONTROL

Most of the hydrography on this sheet was done electronically using the Del Norte System. Stations were at Brent RM-4, Maryland 2 RM-4, 104 (USE), and TWIN 1929, 1959. Calibration was performed daily at Day Beacon PRV 11B or Light #2, and recorded in a separate calibration volume. Visual hydrography was run at the mouth of Aquia Creek.

Electronic control was used in conjunction with visual control in small holiday areas in the middle of the river, Positions 9124 to 9172. This will be logged with a Del Norte distance and a sextant angle to determine the position.

All visual signals, calibration points, and shore control stations were located by Photo Party 61 and are described in the accompanying Control Report.

G. SHORELINE

Shoreline details for this survey were obtained from shoreline Manuscripts TP-00331 and TP-00332. Low water line was not defined by the soundings due to the small tide range.

H. CROSSLINES

Approximately 10% of the sounding lines run were crosslines. The soundings are in good agreement at the crossings, except for Positions 9016 to 9043 which disagree 1-2 feet. The records were re-examined and no explanation could be found except perhaps predicted tides.

I. JUNCTIONS

There is a discrepancy at the junction of this sheet with 10-2-72 A at the mouth of Potomac Creek. This is discussed in the report for 10-2-72 A.

Also, junctions were made with 742-10-2-72 A & B. This is thought to be due to the use of predicted tides.

J. COMPARISON WITH PRIOR SURVEYS

A comparison was made with prior Surveys H-2706 & H-2707 dated 1904. The soundings are in general agreement except on the northeastern part of the sheet. It shows a difference of 2 to 4 feet in 16 to 20 feet of water. The prior survey shows a 18 foot curve at Lat. 38°23.5' and Long. 77°16.8'. This curve was not found and the general depth of this area was 16'.

There were two Pre-Survey Review Items within the limits of this survey:

Also part of Item AA PSI

PSI-A - Markers PRV 10A, PRV 10B were fixed using Del Norte Control (Vol. 17, Page 13) and the positions agree with Chart C&GS 559. PRV 11A was fixed by Del Norte (Vol. 22, Page 8) and the position does not agree with Chart C&GS 559. PRV 11B's position was determined by Photo Party 61 as Lat. 38°23'44", Long. 77°18'39" and the marker was used for Del Norte Calibration. The position disagrees with the charted position on C&GS 559 approximately 150 meters. A search was conducted in the area of the charted position and no evidence of the marker was found. Recommend charting markers in accordance with the present survey.

L-1486/71

PSI-4 - "Subm. Piles" Lat. 38°23'26", Long. 77°18'48" still exist and were delineated by both this party and Photo Party 61 (see Vol. 22, Page 10, and the boatsheet). The charted position on C&GS 559 is correct. Recommend charting present survey delineation. PSI #4

"Subm. Piles" Lat. 38°22'21", Long. 77°17'56" still exist and were delineated by this party and Photo Party 61 (see Vol. 22, Page 10, and the boatsheet). The charted position is correct. Recommend charting the present survey delineation.

K. COMPARISON WITH THE CHART

A comparison was made with C&GS Chart 559 dated February 1971. Soundings are in general agreement except in the northeastern area mentioned in "Comparison of Prior Survey" of this report. (The area is marked as a spoil area on the chart.)

L. ADEQUACY OF SURVEY

This survey is considered complete and adequate to supersede prior surveys for charting. Fathogram scanning, done under supervision of launch chiefs, is adequate.

M. AIDS TO NAVIGATION

All aids to navigation were found to be on Chart C&GS 559 and listed in the Coast Guard Light list. They adequately served the purpose for which they are intended.

N. STATISTICS

Launch No.	Miles of Hydrography
Launch 1260	181.6
Launch 1259	24444
Skiff 570	13.0

O. REFERENCES TO REPORTS

1. Control Report by Photo Party 61 (enclosed).
2. HFP-742's Field Season Report 1972 - OPR-409.
3. Electronic Control Calibration Report for OPR-409, 1972.

Respectfully submitted,

J. Scott Bradford

APPENDIX E

Approval Sheet to Accompany
Hydrographic Survey 742-10-2-72 (H-9301)

The field work, hydrographic records, and processing are complete and adequate.

Approved and forwarded,

Ned C. Austin
CDR, NOAA
OIC, HFP 742

CONTROL REPORT
Boat Sheet HFP-742-10-2-72

Triangulation and Intersection Stations

Pos #	Latitude (mins.)	Longitude (mins.)	Name	Use
101	38 20 23.827	77 12 01.774	GRIMES 4	
102	38 20 58.417	77 11 52.412	Maryland Point Lighthouse	
113	38 19 57.544	77 15 59.051	TANZY 3, R.M. 2	Del Norte
114	38 21 35.296	77 12 26.218	MARYLAND 2, R.M. 4	Del Norte
115	38 23 50.5[illegible]	77 18 41.085	BRENT POINT, R.M. 4	Del Norte
116	38 22 57.950	77 15 02.288	104 (USE)	DEL NORTE
118	38 22 26.705	77 13 57.457	Md. Point USNRL Antenna	
119	38 23 44.574	77 18 38.772	PRV 11B	Calibration
120	38 24 56.369	77 15 57.756	Clifton Beach Light	Calibration
122	38 26 26.316	77 15 28.911	Douglas Point PEPCO Weather Mast	
123	38 27 48.595	77 16 15.669	TWIN, 1928, 1956	
222	38 20 38.156	77 16 41.406	Potomac Creek Light #2	Calibration

CONTROL REPORT
Boat Sheet HFP-742-10-2-72

Photo-Hydro Stations

Pos #	Latitude (meters)	Longitude (meters)	T-sheet	
202	38 20 1353.3	77 21 637.0	330	
204	38 20 1854.3	77 21 352.1	330	
206	38 20 1326.8	77 21 ~~843.4~~ 113.2	330	
208	38 20 1746.0	77 20 1274.9	330	
210	38 20 1322.5	77 20 1087.1	330	
212	38 20 1917.6	77 20 569.1	330	
214	38 21 206.5	77 19 1112.1	331	
216	38 20 1336.2	77 19 1294.5	331	
218	38 20 1066.2	77 19 1179.5	331	
220	38 20 617.0	77 19 828.4	331	
223	38 20 1464.0	77 17 591.4	331	Daybeacon 3
224	38 20 1572.9	77 17 1186.2	331	Daybeacon 4
225	38 20 1353.7	77 18 281.0	331	Daybeacon 5
226	38 20 1284.0	77 18 993.4	331	Daybeacon 6
227	38 20 1161.4	77 18 1560.1	331	Daybeacon 7
228	38 20 1271.5	77 19 584.2	331	Daybeacon 8
230	38 20 1616.4	77 19 571.3	331	
232	38 20 1860.3	77 18 759.5	331	
234	38 21 422.6	77 18 258.3	331	
236	38 21 609.3	77 17 1385.4	331	
238	38 21 1194.5	77 17 1366.4	331	
240	38 21 1308.6	77 17 1379.4	331	
242	38 21 1419.5	77 17 1502.4	331	
244	38 21 1132.4	77 18 258.1	331	
246	38 21 1673.3	77 18 525.4	331	
248	38 21 1870.0	77 18 1306.4	331	

Boat Sheet HFP-742-10-2-72

Photo-Hydro Stations (continued)

Pos #	Latitude	(meters)	Longitude	(meters)	T-sheet	
250	38 20	1052.2	77 18	451.2	331	
252	38 20	1924.0	77 17	1395.0	331	
254	38 21	521.5	77 17	747.0	331	
256	38 21	146.7	77 17	406.0	331	PRV 10B
258	38 20	1107.5	77 17	147.3	331	PRV 10A
561	38 22	1284.0	77 18	632.0	331	PRV 11A
562	38 22	1775.1	77 18	412.0	331	Aquia Creek Light
563	38 23	849.0	77 18	1037.1	331	Aquia Creek Light
565	38 23	966.4	77 18	1165.3	331	Daybeacon 5
566	38 23	1212.8	77 18	1289.1	331	Daybeacon 6
568	38 23	1212.0	77 19	68.9	331	Daybeacon 8
572	38 23	578.3	77 19	685.7	331	
574	38 23	1190.6	77 19	779.7	331	
576	38 24	406.0	77 18	400.0	331	
578	38 24	844.8	77 19	941.7	331	
580	38 24	46.6	77 19	1172.9	331	Daybeacon 10
586	38 23	116.0	77 20	336.0	330	
588	38 24	516.0	77 19	883.0	330	
590	38 24	1650.8	77 21	271.8	330	
702	38 20	1705.0	77 11	278.9	332	
704	38 21	1557.0	77 11	835.5	332	
706	38 21	1323.4	77 11	1434.9	332	
708	38 19	1617.3	77 14	1229.4	332	
710	38 20	668.8	77 11	1321.0	332	
712	38 20	786.5	77 11	1045.8	332	
714	38 20	854.5	77 10	1371.3	332	
720	38 22	822.4	77 13	1241.9	332	South Tel. Antenna

SVY TP-00332		RPT UNIT CMD ROCKVILLE, MD.	PAGE 3 OF 3
JOB PH-7012	LANDMARKS FOR CHARTS	STATE VA. AND MARYLAND	
PRJ 834201	TO BE DELETED	LOCALITY POTOMAC ROVER	ORIGINATING ACTIVITY
DTM NA 1927		DATE 09/01/76	COMPILATION

THE FOLLOWING OBJECTS HAVE BEEN INSPECTED FROM SEAWARD TO DETERMINE THEIR VALUE AS LANDMARKS

CHARTING NAME	DESCRIPTION RECORD REASON FOR DELETION PUT TRIANGULATION NAMES IN ( )	POSITION LATITUDE DM LONGITUDE DP	CODES C-C SEQ	METHOD AND DATE OF LOCATION OFFICE	FIELD	CHARTS AFFECTED
UPPER GABLE	N GABLE IS INSIGNIFICANT AND HARD TO IDENTIFY FROM SEAWRD	38 19 54.00 approximate 77 14 54.00 1311.6	1665.0 NOT DGTZD			559 101SC
	BUILDING WILL BE CARRIED AS LANDMARK BUILDING.	* position not accurate [redacted]				

76-40
LISTING

PHOTOGRAMMETRIC BRANCH
COASTAL MAPPING DIVISION

NATIONAL OCEAN SURVEY NOAA
PARTMENT OF COMMERCE USA

TERMINAL VERSION
/09/76

SVY TP-00332
JOB PH-7012
PRJ 834201
DTM NA 1927

LANDMARKS FOR CHARTS
TO BE CHARTED

RPT UNIT CMD ROCKVILLE, MD.
STATE VA. AND MARYLAND
LOCALITY POTOMAC ROVER
DATE 09/01/76

ORIGINATING ACTIVITY
COMPILATION

THE FOLLOWING OBJECTS HAVE BEEN INSPECTED FROM SEAWARD TO DETERMINE THEIR VALUE AS LANDMARKS

CHARTING NAME	DESCRIPTION RECORD REASON FOR DELETION PUT TRIANGULATION NAMES IN ( )	POSITION LATITUDE LONGITUDE	DM DP	CODES C-C SEQ	METHOD AND DATE OF LOCATION OFFICE	FIELD	CHARTS AFFECTED
TELEM. ANT.	(MARYLAND POINT USNRL TELE-METRY ANTENNA,1959) HT=90(120)	38 22 26.70 77 13 57.45	823.3 1394.5	NOT DGTZD	TRIANG REC 06/29/72	559 101SC	
TELEM. ANT.	USNRL TELEMETRY ANTENNA HT=119(144)	38 22 26.60 77 13 51.10	820.2 1240.4	NOT DGTZD	~~VERIFIED~~ located by field method unknown 06/29/72 71LC9972	DITTO	

(11)

Lch 1259, 1260
Skiff 570

CONTROL REPORT
Boat Sheet HFP-742-10-2-72

Prepared by
NATIONAL OCEAN SURVEY
PHOTO PARTY 61

September, 1972
POTOMAC RIVER, MARYLAND

1. Authority

Hydro support was performed in accordance with project instructions OPR-409-742-72 Potomac River, Maryland, dated March 1, 1972.

2. Purpose

To provide shore stations and calibration stations for Del Norte control, and provide photo-hydro signals for visual control on boatsheet HFP-742-10-2-72 Potomac River. Boat sheet preparation, except for transferring of photo-hydro signals, was not performed by this party.

3. Locality of Control

Potomac River from Maryland Point to Brent Point including Potomac Creek, Accokeek Creek and the lower portion of Aquia Creek.

4. Control

Hydrographic control consisted of triangulation stations, intersection stations and photo-hydro stations.

a) Del Norte control requirements

The Del Norte electronic control system required that there be complete visibility between the mobile and the shore stations. It also required calibration stations that could be reached with the launch so the mobile station could be calibrated directly. Shore stations were placed directly on triangulation stations where possible. Where it was necessary, due to visibility limitations, the shore stations were placed on existing or new reference marks of existing triangulation stations. Calibration stations were located by intersections from existing triangulation stations, except in the case of Station #222 (Potomac Creek Light 2). This was located by three tellurometered distances to Del Norte shore stations.

4. Control Cont.

b) Photo-hydro control
Photo-hydro control stations were located in accordance with Photogrammetry Instructions No. 45, using photographs flown in October, 1971.

5. Recommendations

None.

6. Disposition of Data

Original Cronaflex signal sheets TP00330, TP00331, and TP00332 containing all photo-hydro positions have been transmitted with this report to HFP 742 for inclusion in survey records for this boatsheet. All data related to inter section and position computations will be transmitted to Photogrammetry Division, AMC Attn: CAM 21 upon completion of field work in the area.

7. Attached

A signal list is attached including positions for all Del Norte stations, calibration stations, and photo-hydro signals.

Respectfully submitted,

Richard D. Olson
LT NOAA
Chief, Photo Party 61

VELOCITY TABLE TAPE

DEPTH	IND	VEL CORR	TABLE NO	UNIT	VESSEL	SHEET
000395	1	0002	0001	000	742300	010272
001000	0	0000				
999999	0	0000				
000450	0	0000	0002	000	742300	010272
000510	0	0002				
001000	0	0004				
999999	0	0004				
000090	1	0004	0003	000	742300	010272
000180	1	0006				
000395	1	0004				
001000	1	0002				
999999	1	0002				
000460	0	0000	0004	000	742300	010272
000510	1	0002				
001000	1	0004				
999999	1	0004				
001000	0	0000	0005	000	742300	010272
999999	0	0000				
000120	1	0006	0006	000	742400	010272
001000	1	0004				
999999	1	0004				
000048	1	0004	0007	000	742200	010272
000120	1	0002				
000180	0	0000				
001000	0	0002				
999999	0	0002				

VESSEL 7423 – LAUNCH 1260 (MONARK)

TABLE #1 FATH #1885 "A" SCALE

2 1885 "B" SCALE

3 535 "A" SCALE

4 535 "B" SCALE

5 1889 "A" SCALE

VESSEL 7424 – SKIFF 570

TABLE #6 FATH #806

VESSEL 7422 – LAUNCH 1259 (PENNYAN)

TABLE #7 FATH #535

SQUAT AND SETTLEMENT CORRECTION TABLE TAPE

DEPTH	IND	CORR	TAB NO	UNIT	VESSEL ID	SHEET
000055	0	0002	0001	000	742300	010272
001000	0	0000				
999999	0	0000				
000045	0	0006	0002	000	742300	010272
000060	0	0004				
000085	0	0002				
001000	0	0000				
999999	0	0000				
000045	0	0006	0003	000	742300	010272
000100	0	0004				
001000	0	0002				
999999	0	0002				
000045	1	0002	0004	000	742300	010272
000070	0	0000				
000075	0	0002				
000080	0	0004				
000120	0	0006				
001000	0	0004				
999999	0	0004				
001000	0	0002	0005	000	742200	010272
999999	0	0002				
001000	0	0003	0006	000	742400	010272
999999	0	0003				

APPENDIX A

Tide Note
742-10-2-72 (H-9301)

Tide reducers for all boat sheet soundings are from predicted tides at Aquia Creek Entrance, Virginia (Tide Table #2213).

Fisher-Porter ADR Tide Gages, installed for a special study were kept in operation for this project. Smooth sheet tide reducers are to be supplied by Rockville from these gages.

Supplemental tide staff readings were made in accordance with instructions for hydrography in Potomac Creek. A copy of these readings is included with this report.

Three Fisher-Porter ADR Tide Gages are near but outside the area of hydrography:

Riverside, Md Lat 38-23-12, Long 77-08-30

Aquia Creek, Va Lat 38-25-10, Long 77-21-10

Quantico, Va. Lat 38-31-30 Long 77-17-25

The output of the ADR gages was not available to the party for analysis but from the Tide Tables it appears tidal zoning will be required. Also the output should be compared with the tide staff readings in Potomac Creek to determine if local zoning is needed here.

9/26/75

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL OCEAN SURVEY

TIDE NOTE FOR HYDROGRAPHIC SHEET

Processing Division: Atlantic Marine Center:

Hourly heights are approved for

Tide Station Used (NOAA Form 77-12): Riverside, Brent Marsh, Potomac Creek staff

Period: May 18-August 22, 1972

HYDROGRAPHIC SHEET: H-9301

OPR: 409

Locality: Potomac River

Plane of reference (mean ~~lower~~ low water): 1.41 ft. - Riverside
1.01 ft. - Brent Marsh
2.0 ft. - Potomac Creek

Height of Mean High Water above Plane of Reference: 1.3 ft.

Remarks: Recommended zoning:

		Time Correction	Reference Station
(1)	East of 77°13'.4	+40 min.	Riverside
(2)	77°13'.4 to 77°15'.2	+1 hr.	Riverside
(3)	West of 77°15'.2 and south of 38°23'.3	-30 min.	Brent Marsh
(4)	North of 38°23'.3	-15 min.	Brent Marsh

(5) Potomac Creek - zone direct on the staff.

James C Hubbard
for Chief, Tides Branch

NOAA FORM 76-155
(11-72)

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

SURVEY NUMBER

H-9301

GEOGRAPHIC NAMES

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	
ACCOKEEK CREEK	X	-								1
AQUIA CREEK	X	-								2
BELLE PLAINS	X	-								3
BELVEDERE BEACH	X	-								4
BIG MARSH	X	-								5
BLACK SWAMP	X	-								6
BOYKINS ISLAND	X	-								7
BRENT POINT	X	-								8
BULL BLUFF	X	-								9
CROWS NEST POINT	X	-								10
FAIRVIEW BEACH	X	-								11
INDIAN POINT	X	-								12
MARLBORO POINT	X	-								13
MARYLAND POINT	X	-								14
OLD LANDING POINT	X	-								15
PASSAPATANZY CREEK	X	-								16
POTOMAC CREEK	X	-								17
POTOMAC RIVER	X	-								18
SIMMS POINT	+	-								19
SPILLMANS LANDING	X	-				APPROVED				20
STONE POINT	X	-				Chas. E. Harrington				21
THOMAS POINT	X	-				STAFF GEOGRAPHER - C3x8				22
THORNEY POINT	X	-				12 MAY 1978				23
WAUGH POINT	X	-								24
WELLINGTON BEACH	X	-								
WHIPSAWASONS POINT	X	-								
YOUREDAMN LANDING	X	-								25

☆ U.S. G.P.O. 1972-769-565/5165 REG. #6

APPROVAL SHEET
FOR
SURVEY H-9301

A. All revisions and additions made on the smooth sheet during verification have been entered in the magnetic tape records for this survey. A new final position printout has/~~has not~~ been made. A new final sounding printout has/~~has not~~ been made.

B. The verified smooth sheet has been inspected, is complete, and meets the requirements of the Provisional Hydrographic Manual. Exceptions are listed in the Verifier's Report.

Date: Feb 10, 1978

Signed: for R. O. Sawyer

Title: Chief, Verification Branch

NOAA FORM 77-27 (5-77) | U. S. DEPARTMENT OF COMMERCE NOAA | HYDROGRAPHIC SURVEY NUMBER

HYDROGRAPHIC SURVEY STATISTICS

H-9301

RECORDS ACCOMPANYING SURVEY: To be completed when survey is registered.

RECORD DESCRIPTION	AMOUNT	RECORD DESCRIPTION	AMOUNT
SMOOTH SHEET	1	BOAT SHEETS & PRELIMINARY OVERLAYS	34
DESCRIPTIVE REPORT	1	SMOOTH OVERLAYS: POS, ARC, EXCESS	3

DESCRIPTION	DEPTH RECORDS	HORIZ. CONT. RECORDS	PRINTOUTS	TAPE ROLLS	PUNCHED CARDS	ABSTRACTS SOURCE DOCUMENTS
ENVELOPES	2		2			2-misc.
CAHIERS	1 & printouts		1			
VOLUMES	23					
BOXES			1-smooth			

T-SHEET PRINTS (List)

SPECIAL REPORTS (List)

OFFICE PROCESSING ACTIVITIES

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

PROCESSING ACTIVITY	AMOUNTS PRE-VERIFICATION	AMOUNTS VERIFICATION	AMOUNTS TOTALS
POSITIONS ON SHEET			1805
POSITIONS CHECKED		180	
POSITIONS REVISED		15	
SOUNDINGS REVISED		80	
SOUNDINGS ERRONEOUSLY SPACED		0	
SIGNALS (CONTROL) ERRONEOUSLY PLOTTED		0	
	TIME – HOURS		
CRITIQUE OF FIELD DATA PACKAGE (PRE-VERIFICATION)	4		
VERIFICATION OF CONTROL		14	
VERIFICATION OF POSITIONS		82	
VERIFICATION OF SOUNDINGS		78	
COMPILATION OF SMOOTH SHEET		0	
APPLICATION OF TOPOGRAPHY		40	
APPLICATION OF PHOTOBATHYMETRY		0	
JUNCTIONS		8	
COMPARISON WITH PRIOR SURVEYS & CHARTS		20	
VERIFIER'S REPORT		10	
OTHER		0	
TOTALS	4	252	256

Pre-Verification by C. Meekins	*Beginning Date* 08/19/74	*Ending Date* 08/19/74
Verification by M. Johnson, R. Hill, R. Cram R. Cram	*Beginning Date* 04/10/75	*Ending Date* 01/27/78
Verification Check by R. D. Samocki	*Time (Hours)* 8	*Date* 02/09/78
Marine Center Inspection by Hydrographic Inspection Team (AMC)	*Time (Hours)* 16	*Date* 02/09/78
Quality Control Inspection by R.W. DeVazeville	*Time (Hours)* 76	*Date* 4/21/78
Requirements Evaluation by J Baumgardner	*Time (Hours)* 5	*Date* 8/11/78

- DR Engle 18 7/5/78

Reg. No. 9301

The Computer and Excess Sounding Cards for this survey have not been corrected to reflect the changes made to the Computer Card and Excess Card Printouts at this time of the review.

When the cards have been updated to reflect the final results of the survey the following shall be completed:

CARDS CORRECTED

DATE 4/85 TIME REQ'D _____ INITIALS [illegible]

REMARKS:

Reg. No. H - 9301 (1972)

The magnetic tape containing the data for this survey has not been corrected to reflect the changes made during evaluation and review.

When the magnetic tape has been updated to reflect the final results of the survey, the following shall be completed:

MAGNETIC TAPE CORRECTED

DATE 4/85 TIME REQ'D. _____ INITIALS [illegible]

REMARKS:

H-9301

Information for Future Presurvey Reviews

The present survey is very well developed, with no particular items needing special attention except the piers mentioned in paragraphs 4 and 5 of the Quality Evaluation Report. Future surveys should possibly expect continued shoaling of the Potomac River and channel.

Position Index		Bottom Change Index	Use Index	Resurvey Cycle
Lat.	Long.			
382	772	3	4	25 years
382	773	1	2	50 years

ATLANTIC MARINE CENTER
VERIFIER'S REPORT

REGISTRY NO. H-9301 FIELD NO. 742-10-2-72

Virginia and Maryland, Potomac River; Maryland Point to Brent Point

SURVEYED: May 18 through August 22, 1972

SCALE: 1:10,000 PROJECT NO.: OPR-409

SOUNDINGS: Raytheon DE-723 and Sounding Pole

CONTROL: Del-Norte (Range-Range and Range-Visual) Visual (Sextant Fixes on Shore Signals and See Boatsheet)

Chief of Party ..... N. C. Austin
Surveyed by ..... R. L. Baker
..... J. L. Stokoe
..... J. S. Bradford
Automated Plot by ..... CALCOMP-618 Plotter (AMC)
Verified and Inked by ..... L. G. Cram L.G.Cram
January 26, 1978

1. Introduction

a. There were no unusual problems encountered during verification.

b. The Descriptive Report was written in three parts, as the survey was separated into three parts. This is not a standard procedure; however, it was done by the field to expedite the field processing.

c. The only revision made during verification was to the projection parameters.

2. Control and Shoreline

a. The control is adequately described in Section F of the Descriptive Report and the Control Report, except for two areas:

(1) The smooth position overlay was plotted with all electronic control stations and arcs except station #260 (116). This station and arcs were put on a separate control overlay to accompany the survey to Rockville.

(2) There are two electronic control stations that appear on the smooth sheet which have two numbers. One of these numbers was assigned to the electronic control station and another was assigned to the same station when it was used for visual control. The numbers are: Electronic Control Station Number 114 with Visual Control Signal Number 200 and Electronic Control Station Number 116 with Visual Control Signal Number 260.

b. The shoreline for this survey was transferred from final reviewed Photogrammetric Manuscripts TP-00330, TP-00331, and TP-00332 of 1971-76. In verifying this, survey differences between photogrammetric and hydrographic locations of piles, piers, stakes, etc. were resolved by using the photogrammetric location and the hydrographic elevations. The differences, when they occurred, were noted in the sounding volumes.

3. Hydrography

a. The agreement of soundings at crossings on this survey is adequate.

b. The depth curves are adequate to delineate the basic bottom configuration.

c. The field unit adequately developed the bottom configuration and least depths.

4. Condition of Survey

The smooth sheet and accompanying overlays, hydrographic records, and reports are adequate and conform to the requirements of the Provisional Hydrographic Manual, with the following exceptions:

a. No Log Sheets M, "Bottom Sediment Data", were included with the survey.

b. The Descriptive Report did not reflect the edition and date of the chart used for field comparison.

5. Junctions

Adequate junctions were effected with the followings surveys:

H-9321 (1972) to the north
H-8706 (1962) to the south

The junction with H-8706 was made without any of the hydrographic records for that survey. It will be necessary to evaluate this junction further when the present survey records and H-8706 records are in the same place. See O.C. Report

6. Comparison With Prior Surveys

See Q.C. Report

H-0812 (1862) 1:20,000
H-2706 (1904) 1:10,000
H-2707 (1904) 1:10,000
H-2709 (1904) 1:10,000

These surveys, taken together, cover the area of the present survey. A comparison between the present and prior surveys reveals a general shoaling of from one to three feet outside the general channel area. The depths in the channel appear to be pretty much the same.

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

7. Comparison With Chart C&GS 559 (9th Edition, February 27, 1971)

See Q.C. Report

a. Hydrography

The charted hydrography originates with the previously discussed prior surveys, with the exception of the soundings in Potomac Creek, whose source was not readily determined at this time. The Presurvey Review dated March 13, 1972 states that "a considerable amount of hydrography is charted from numerous Corps of Engineers surveys". The line spacing and hydrography in these areas is adequate to supersede these soundings.

The Presurvey Review items for this survey are adequately discussed in the Descriptive Report, with the exception of PSR Item 1 and PSR Item 2 which are discussed below: See Des. Rep "A", "B" and "C" para J.

(1) PSR Item 1; visible wreck charted in latitude 38° 20' 28", longitude 77° 12' 30" was reported by the Corps of Engineers in Chart Letter No. 405, 1963. See Des. Report "B" page 3

(2) PSR Item 2; visible wreck, charted in latitude 38° 20' 20", longitude 77° 12' 51" originates with 1967 Air Photo Corrections (BP-98600). See Des. Report "B" page 3

Insofar as this survey made extensive efforts to locate both of these items and came up with only one wooden wreck (Volume 11, page 52), recommend that the source of these two wrecks be examined closely for the fact they are possibly one and the same.

b. Controlling Depths

There was only one controlling depth note on the chart: a 24 foot controlling depth in an unnamed channel off Thomas Point in the vicinity of latitude 38° 23' 00", longitude 77° 15' 00". Present survey depths are up to four feet shoaler than the charted controlling depth. It is recommended that present survey depths be charted unless subsequent chart information Concur indicates otherwise.

c. Aids to Navigation

The aids to navigation on this sheet are discussed under Section M of the Descriptive Report. The position of the aids adequately mark the intended features. See also Fld Report Sheet C page 2 Section J

This survey is adequate to supersede the charted information within the common area. Exceptions noted in QC Report Section 5.

8. Compliance With Instructions

This survey adequately complies with the Project Instructions dated March 1, 1972.

9. Additional Field Work

This is an excellent basic survey. No additional field work is recommended.

Inspection Report
H-9301

Any verification errors regarding procedures and presentation of survey data detected during inspection by the Hydrographic Inspection Team have been corrected before submission for administrative approval. HIT comments regarding quality of field work, compliance with instructions, and adequacy of the survey have been incorporated within the Verifier's Report.

Examined and Approved:
Hydrographic Inspection Team
Date:

Robert A. Trauschke, CDR, NOAA
Chief, Processing Division

Charles H. Nixon, CAPT, NOAA
Chief, Operations Division

R. D. Sanocki
Technical Assistant
Processing Division

absent
C. Douglas Mason, LT, NOAA
Chief, Electronic Data
Processing Branch

Billy J. Stephenson
Team Leader
Verification Branch

Approved/Forwarded

Robert C. Munson
RADM, NOAA
Director, Atlantic Marine Center

UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL OCEAN SURVEY
Rockville, Md. 20852

C352/RWD

April 21, 1978

TO: A. J. Patrick
Chief, Marine Surveys Division

THRU: Chief, Quality Control Branch

FROM: R. W. DerKazarian
Quality Evaluator

SUBJECT: Quality Control Report for H-9301 (1972), Maryland Point to Brent Point, Potomac River, Virginia-Maryland

A quality control inspection of H-9301 was accomplished to monitor the survey for obvious deficiencies with respect to data acquisition, delineation of the bottom, determination of least depths, navigational hazards, junctions, sounding line crossings, shoreline transfer, smooth plotting, decisions and actions taken by the verifier, and the cartographic presentation of data.

The junction with H-8706 (1962) to the east was completed at the time of the quality evaluation. Several soundings and curves were revised on the present survey, thereby effecting an adequate junction.

In general, the survey was found to conform to the National Ocean Survey's standards and requirements except as stated in the report by the verifier and the Hydrographic Inspection Team and as follows:

1. The supplemental 24-foot curve was added to the smooth sheet during the quality evaluation.

2. The smooth tide printout was not forwarded to Headquarters with the records.

3. Form 76-40 was not included with the Descriptive Report; however, a copy was obtained from T-00332 Descriptive Report on which the field editor recommends deletion of landmark N. GABLE (erroneously labeled on the chart as N. CAB.) in latitude 38°19'52", longitude 77°14'52" and charting of the building instead.

4. The following information should be included in the "Comparison with Prior Surveys" of the Verifier's Report:

A comparison between prior and present depths indicates that shoaling of 1 to 2 feet in prior depths of 12 to 20 feet has occurred, and that in prior depths greater than 20 feet in the main channel a maximum shoaling of 6 feet has occurred in some areas. In the vicinity of latitude 18°22.0', longitude 77°14.3', prior depths of 20 feet existed; present depths are 15 feet. These changes are attributed basically to large quantities of soil and sewage being carried downstream and deposited.

5. The following information should be included in the "Comparison with Charts" of the Verifier's Report:

a. Hydrography

Charted hydrography in Potomac Creek and Accokeek Creek originates with C/L 1152 (1958), a Coast Pilot Inspection report. The charted hydrography from this letter, numerous other chart letters and blueprints, and the prior surveys previously mentioned in the Verifier's Report require no further consideration.

Attention is directed to the following:

(1) Several piers charted in the following positions from an unascertainable source have not been disproved by the present survey and should be charted as submerged pier ruins:

Latitude	Longitude
38°21.96'	77°13.25'
38°20.4'	77°19.25'
38°19.9'	77°14.79'

(2) Potomac Creek contains numerous temporary unsurveyed fish nets and traps which may be dangerous to the mariner.

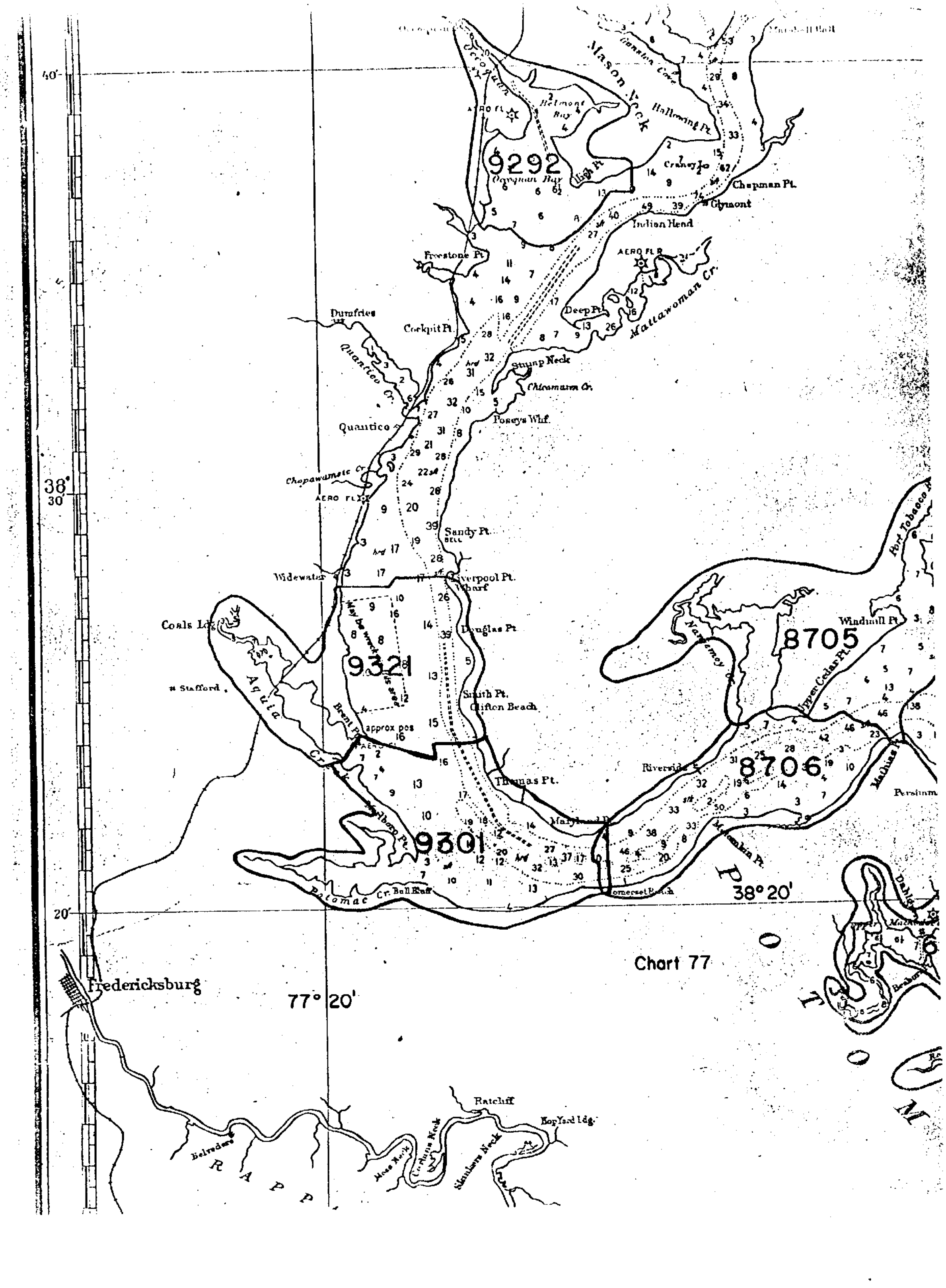
With the exceptions noted above, the present survey is adequate to supersede the charted information.

c. Aids to Navigation

The fixed and floating aids to navigation adequately mark their intended features; however, nun buoy "24" was located approximately 40 meters northeast of its charted position.

6. Several elevations obtained from hydrographic data, erroneously shown in red on the smooth sheet, were revised during quality evaluation.

cc:
C35
C351



9292
9321
9301
8705
8706
Chart 77
38° 20'
77° 20'
Mason Neck
Occoquan Bay
Freestone Pt.
Dumfries
Cockpit Pt.
Quantico Cr.
Quantico
Chopawamsic Cr.
Sandy Pt.
Widewater
Liverpool Pt. Wharf
Douglas Pt.
Coals Ldg.
Stafford
Aquia Cr.
Brent Pt.
Smith Pt.
Clifton Beach
Thomas Pt.
Marlboro Pt.
Maryland Pt.
Potomac Cr.
Somerset Beach
Riverside
Windmill Pt.
Upper Cedar Pt.
Port Tobacco R.
Nanjemoy Cr.
Mathias Pt.
Chapman Pt.
Glymont
Indian Head
Deep Pt.
Mattawoman Cr.
Stump Neck
Chicamuxen Cr.
Poseys Whf.
High Pt.
Hallowing Pt.
Gunston Cove
Fredericksburg
Ratcliff
Belvedere
RAPP
POTOM
approx pos

FORM C&GS-8352
(3-25-63)

NAUTICAL CHART DIVISION

RECORD OF APPLICATION TO CHARTS

FILE WITH DESCRIPTIVE REPORT OF SURVEY NO. 9301

INSTRUCTIONS

A basic hydrographic or topographic survey supersedes all information of like nature on the uncorrected chart.

1. Letter all information.
2. In "Remarks" column cross out words that do not apply.
3. Give reasons for deviations, if any, from recommendations made under "Comparison with Charts" in the Review.

CHART	DATE	CARTOGRAPHER	REMARKS
12288	9/1/78	Richard L. Hogan	Full ~~Part Before~~ After Verification Review Inspection Signed Via
(559)			Drawing No. 26
12285	9/11/78	Richard L. Hogan	Full ~~Part Before~~ After Verification Review Inspection Signed Via
(101)			Drawing No. 21 THRU CHART 12288 DWG # 26
30'c			
77	4-17-79	M. PANAS	Full ~~Part Before~~ After Verification Review Inspection Signed Via
			Drawing No. 39
			Full Part Before After Verification Review Inspection Signed Via
			Drawing No.
			Full Part Before After Verification Review Inspection Signed Via
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			Full Part Before After Verification Review Inspection Signed Via
			Drawing No.

FORM C&GS-8352 SUPERSEDES ALL EDITIONS OF FORM C&GS-975.

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