

11227

Diag. Cht. No. 78-4.

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey Shoreline (Photogrammetric)

Field No. Ph-118 Office No. T-11227

LOCALITY

State Virginia

General locality Back River

Locality Windmill Point to Flat Gut

1947-52

CHIEF OF PARTY

J.H. Brittain, Chief of Field Party
J.C. Sammons, Balto. Photo. Office

LIBRARY & ARCHIVES

DATE May 12, 1958

DATA RECORD

T -11227

Project No. (II): Ph-118

Quadrangle Name (IV):

Field Office (II): Ship COWIE

Chief of Party: J. H. Brittain

Photogrammetric Office (III): Baltimore, Md.

Officer-in-Charge: J. C. Sammons

Instructions dated (II) (III):

Field: CS-350, 15 Aug. 1952

Office: 8 May 1953

Copy filed in Division of
Photogrammetry (IV)

Office Files

Method of Compilation (III): Graphic

Manuscript Scale (III): 1:10,000

Stereoscopic Plotting Instrument Scale (III):

Scale Factor (III): 1.000

Date received in Washington Office (IV): *6-15-53*

Date reported to Nautical Chart Branch (IV): *6-26-53*

Applied to Chart No.

Date:

Date registered (IV): *16 Oct 1957*

Publication Scale (IV):

Publication date (IV):

Geographic Datum (III): N.A. 1927

Vertical Datum (III): MHW

Mean sea level except as follows:
Elevations shown as (25) refer to mean high water
Elevations shown as (5) refer to sounding datum
i.e., mean low water or mean lower low water

Reference Station (III): USHER, 1934

Lat.: 37° 04' 22.677" (699.1m)

Long.: 76° 21' 05.368" (132.6m)

Adjusted
~~unadjusted~~

Plane Coordinates (IV):

State: Virginia

Zone: South

Y=

X=

Roman numerals indicate whether the item is to be entered by (II) Field Party, (III) Photogrammetric Office,
or (IV) Washington Office.

When entering names of personnel on this record give the surname and initials, not initials only.

DATA RECORD

Field Inspection by (II): R. A. Parker

Date: Sept. 1952

Planetable contouring by (II):

Date:

Completion Surveys by (II):

Date:

Mean High Water Location (III) (State date and method of location):

Photographs 9 Feb. 1952

22 Feb. 1947 (Southwest Branch)

Projection and Grids ruled by (IV): S. Rose

Date: 8 May 1953

Projection and Grids checked by (IV): H. D. Wolfe

Date: 11 May 1953

Control plotted by (III): J. C. Richter

Date: 18 May 1953

Control checked by (III): J. C. Cregan
L. A. Senasack

Date: 20 May 1953

Radial Plot or Stereoscopic A. Queen
Control extension by (III):

Date: 4 June 1953

Planimetry
Stereoscopic Instrument compilation (III):
Contours

Date:

Date:

Manuscript delineated by (III): J. C. Richter

Date: 10 June 1953

Photogrammetric Office Review by (III): R. Glaser

Date: 11 June 1953

Elevations on Manuscript
checked by (II) (III):

Date:

U. S. C. & G. S. nine-lens
Camera (kind or source) (III): U. S. C. & G. S. Cameras "C" & "J"

Number	Date	Time	Scale	Stage of Tide
34710 to 34712	9 Feb. 1952	1046	1:10,000	1.3 above MLW
51-J-984 to 991	11 Apr. 1951	1200	"	1.8 " "
51-J-2850 to 2857	2 May 1951	0939	"	0.9 " "
47-C-65 to 68	22 Feb. 1947	1100	"	2.1 " "
47-C-72 to 76	"	1120	"	2.1 " "
47-C-81 to 84	"	1130	"	2.1 " "

Tide (III)
From predicted tide tables

Reference Station: Hampton Roads, Va.,
Subordinate Station: Messick Point, Back River
Subordinate Station: Langley Field, Back River

Ratio of Ranges	Mean Range	Spring Range
	2.5	3.0
0.9	2.3	2.8
1.0	2.4	2.9

Washington Office Review by (IV): *Everett H. Ramey*

Date: *26 Oct 1954*

Final Drafting by (IV):

Date:

Drafting verified for reproduction by (IV):

Date:

Proof Edit by (IV):

Date:

Land Area (Sq. Statute Miles) (III):

Shoreline (More than 200 meters to opposite shore) (III): 27

Shoreline (Less than 200 meters to opposite shore) (III): 20

Control Leveling - Miles (II):

Number of Triangulation Stations searched for (II): 17

Recovered: 17

Identified: 17

Number of BMs searched for (II):

Recovered:

Identified:

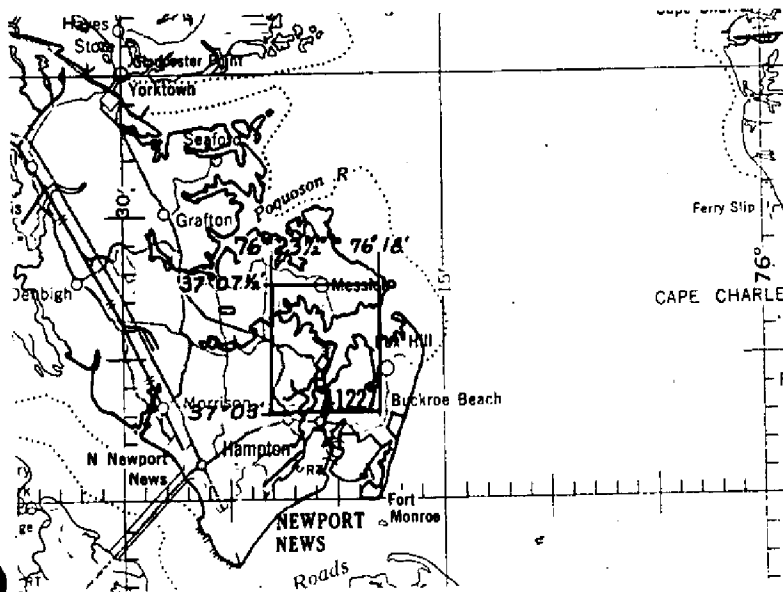
Number of Recoverable Photo Stations established (III): 5

Number of Temporary Photo Hydro Stations established (III):

Remarks:

SHORELINE MAPPING PROJECT PH- 118

BACK RIVER, VA.



OFFICIAL MILEAGE FOR COST
 Sheet No. Lin. Miles Shoreline
 1122 7 41
 TOTAL 41

Summary to Accompany Shoreline Survey T-11227

Shoreline survey T-11227 covers shoreline in the Back River of Virginia including all of the Northwest Branch, the Southwest Branch, and Harris Creek. It is the only survey of Project Ph-118.

Project Ph-118 is a graphic compilation project. It was undertaken in order to furnish control and shoreline for a hydrographic survey (Project CS-350) done in 1952. Field work in advance of this compilation consisted only of control identification and the establishment of some additional control.

This survey was compiled at a scale of 1:10,000 using single-lens photographs taken in 1947 and 1951 and nine-lens photographs taken in 1952. Except for aids to navigation which were taken from graphic control boards, all features were compiled by an office study of the aerial photographs.

Items registered under T-11227 will be a descriptive report and a copy of the survey manuscript at a scale of 1:10,000.

IDENTIFICATION OF TRIANGULATION ON PHOTOGRAPHS IN BACK RIVER

The identification of triangulation stations was done in conjunction with the graphic control surveys of Project CS-350, Supplemental Instructions dated 15 August 1952.

There are many triangulation stations in this area which are very prominent although not all of these were used for control of the hydrographic survey. The stations used, for the most part, were standard discs along the banks of the river. These discs are on marsh land or brush covered points and few definite substitute stations could be pricked.

Control Station Identification cards for the following stations have been filled out and all stations or sub-stations have been pricked on the corresponding photographs.

Each station except Langley View Water Tank was visited and all distances were taped and angles taken with a sextant.

✓ GREEN, 1934 - Photo. 34712	✓ MESSICK 3, 1934 - Photo. 34712
✓ SCHOOL, 1934 - Photo. 34711	✓ HOSPITAL, 1941 (direct) Photo. 34712
✓ OAK, 1934 - Photo. 34710	✓ LANG, 1934 (direct) - Photo. 34712
✓ SHAW, 1934 - Photo. 34710	✓ LANGLEY FIELD SQUAT TANK, 1947 (direct) - Photo. 34712
✓ GRASS, 1934 - Photo. 34712	✓ LANGLEY VIEW WATER TANK, 1941 (direct) - Photo. 34712
✓ FENCE, 1941 - Photo. 34712	
✓ CURTIS, 1934 - Photo. 34712	<u>TOPOGRAPHIC STATIONS:</u>
✓ USHER, 1934 - Photo. 34712	✓ TANK ^{FNR} WATER, 1952 (direct) - Photo. 34711

IDENTIFICATION OF TRIANGULATION

ON PHOTOGRAPHS IN BACK RIVER

TRIANGULATION STATIONS:

- ✓ KETCHUM, 1934 - Photo. 47-C-75
- ✓ HARRIS, 1934 - Photo. 47-C-75
- ✓ STAVE, 1934 - Photo. 34711
- ✓ WILL 2, 1934 - Photo. 34712

TOPO. STATIONS:

- ~~GAB~~ ^{GABLE SHR} 1952 (direct) - Photo. 34712
- ~~Tall~~ ^{CHIMNEY SHR} 1952 (direct) - Photo. 34710
- Chy, 1952 (direct) - Photo. 47-C-75
- Silo, 1952 (direct) - Photo. 47-C-75

Respectfully submitted,

Robert A. Parker
Robert A. Parker,
Ensign, USC&GS.,
Ship COWIE.

DESCRIPTIVE REPORT

TO ACCOMPANY

GRAPHIC CONTROL SURVEYS T-

FIELD NO. CO-A-52

FIELD NO. CO-B-52

FIELD NO. CO-C-52

SHIP COWIE

BACK RIVER

SCALE: 1/10,000

J. H. BRITAIN, COMDG.

A - PROJECT:

Project CS-350, Supplemental Instructions dated 15 August 1952.

B - SURVEY LIMITS AND DATES:

These are graphic control surveys made for the hydrographic survey of Back River.

The surveys, including Northwest Branch, Southwest Branch and Harris Creek were conducted between 15 September and 19 September 1952.

C - GENERAL:

(1) Landmarks - Landmarks for charts will be submitted with the hydrographic sheets.

(2) Character of control - The control used for these surveys consisted of previously established triangulation stations.

(3) Aids to navigation - All non-floating aids to navigation West of Longitude $78^{\circ} 19' 30''$ were located by these surveys and all aids East of $76^{\circ} 19' 30''$ were located by triangulation except Red Beacon No. 6 which was located by sextant fix and check.

(4) Methods - Standard methods of graphic control were used. Resection or three point fixes were used where possible.

A combination graphic triangulation and traverse survey was run in Harris Creek.

C - GENERAL: (CONT.)

(5) Description of Auxiliary Methods - No auxiliary methods were in the graphic control.

(6) Form Lines - No form lines or contouring was done.

(7) Revision - The area was photographed in March 1952 and these photographs show the general erosion of the Southern and Eastern banks of the river.

Triangulation station FENCE 1941 will soon be lost due to erosion of the bank. Reference Mark No. 2 for station HOLT 1934, was not found and was presumed to have been washed away. Reference Mark No. 1 for station KETCHUM 1934 is partially washed away and will soon be lost. Station SHARMAN 1934 and both reference marks are lying in the water, the station has toppled over. Station STONEY POINT 1934 is also in the water due to erosion.

See § 68

(8) Adequacy of Survey - The surveys of Sheets CO-A-52, CO-B-52 and CO-C-52 are considered complete and adequate. Coast Pilot information, landmarks for charts and aids to navigation for this area are discussed in Descriptive Report to Accompany Hydrographic Survey H_____, (Field No. CO-1852).

(9) Deviation from Standard Procedure. - The graphic control was established by standard methods.

(10) Geographic Names - None.

(11) Photographs - None.

(12) Changes in Shore Line - No shore line topography was done in this survey.

(13) Magnetics - No stations were occupied.

Respectfully submitted,

Robert A. Parker,
Ensign, USC&GS.,
Ship COWIE.

PHOTOGRAMMETRIC PLOT REPORT
Project Ph-118
Survey T-11227

21. AREA COVERED

This radial plot covers the area of survey number T-11227. It is a shoreline survey located on Back River in Virginia.

22. METHOD - RADIAL PLOT

Map Manuscripts:

An acetate sheet with polyconic projection in black and Virginia State Grid, south zone, in red, at a scale of 1:10,000, was furnished by the Washington office. The base sheet was prepared in this office.

All control stations, topographic stations, and substitute stations, except substitute stations MESSICK 3, 1934 and WILL 2, 1934, were plotted using the beam compass and meter bar. Substitute stations MESSICK 3, 1934 and WILL 2, 1934 were plotted graphically, using a templet.

A sketch, showing the layout of the survey, the distribution of control, and photograph centers, is attached to this report.

Photographs:

Single lens unmounted photographs taken at a scale of 1:24,000 and ratioed to a scale of 1:10,000 and nine-lens unmounted photographs at a scale of 1:10,000 were used in the radial plot. Sixteen (16) photographs were used, numbered as follows:

Three (3) nine-lens:
34710 thru 34712

Thirteen (13) single-lens:
47-C-65 thru 47-C-68
47-C-72 thru 47-C-76
47-C-81 thru 47-C-84

Standard symbols were used on the photographs.

Templets:

Vinylite templets were made for all photographs using a master templet to correct for film and paper distortion.

Closure and Adjustment to Control:

A vinylite base sheet was prepared by transferring all identified control to the base sheet from the manuscript.

The radial plot was constructed on the base sheet.

The flight of nine-lens photographs was laid first holding to the best combination of control. Then the middle flight of single lens photographs was laid, adding the eastern flight and the western flight in that order. Difficulty was encountered in the area between OAK, 1934 and STAVE, 1934. By disregarding OAK, 1934; SCHOOL, 1934; and STAVE, 1934 a satisfactory plot was obtained in that area.

22. METHOD - RADIAL PLOT (cont'd)

Transfer of Points:

The positions of all pass points and photograph centers were pricked on the manuscript by superimposing the manuscript on the plot and matching control stations.

23. ADEQUACY OF CONTROL

There was adequate control for a satisfactory plot.

As previously mentioned all of the control stations could not be held in the radial plot.

OAK, 1934.* The radially plotted position of the substitute station falls 0.7 mm southwest of the computed position. This point is a free on the edge of a group and was indefinite. **According to 1952 recovery this station mark was above ground, units side. Deleted. ENR*

SCHOOL, 1934. The radially plotted position of the substitute station falls 0.5 mm west of the computed position. This point, some bushes, is quite indefinite. An attempt was made to re prick it in this office, but the new point would not hold in the plot by 0.5 mm. The field-identified *ENR* position missed the computed position by approx. 2.5 mm.

STAVE, 1934. The radially plotted position of the substitute station is 0.4 mm southwest of the computed position. This station could not be held with other control stations in the area. The point, the corner of a building, is indefinite. *Apparently this discrepancy results from misidentification on photograph 34710 as other photographs appear to hold point. ENR*

WILL 2, 1934. The radially plotted position of the substitute station falls 1.2 mm southwest of the computed position. This station, a box in the marsh, was very difficult to identify. The box was probably moved since photography.

MESSICK 3, 1934. The radially plotted position of its substitute station falls 0.8 mm southwest of the computed position. This station could not be held with other control in the area. No reason could be found for this discrepancy.* Identification of the station appears to be good.

HARRIS, 1934. The substitute station could not be held as identified in the field, but after investigation the station was re pricked and held with the other stations.

KETCHUM, 1934. This substitute station as pricked in the field would not hold with the remainder of the plot. After investigation, the station was found to be mis-identified. It was re pricked and held in the plot.

GAS PLANT CHIMNEY, 1918. This station was labeled INCINERATOR STACK on the field photographs. The position of GAS PLANT CHIMNEY, 1918 was held in the plot.

** Messick 3. - If the supplement of the angle given by the field party were used in computing the position of the substitute station, the position thus obtained would agree very closely with the radial plot position. ENR*

23. ADEQUACY OF CONTROL

TABB, 1934 and TOPPING, 1934. No control identification cards, form M-2226-12, were available for these stations. Therefore, no substitute stations could be computed.

24. SUPPLEMENTAL DATA

Seven (7) topographic stations were furnished on form 524's to be used as control. Five (5) were 1952 stations and two (2) were 1943 stations.

Stations ~~GABLE~~^{TANK} 1952 and ~~WATER~~, 1952 were found to be in error.

~~GABLE~~ 1952. The longitude position on the form 524 was five (5) minutes in error. The correct position should be 76° 21' 605 m. The new position of the station could not be held in the plot. The station appears to be misidentified on another gable of the building. *The form 524 is also vague without a detailed sketch of the building. EHN*

~~WATER~~^{TANK}, 1952. The station could not be held in the plot. After investigation it was found the station falls 100 meters south of the position on the form 524. The correct position for the latitude should be 37° 05' 1482 m. * The new position of the station was held in the plot and corresponds to the graphic control sheet.

** Form 524 was corrected. EHN*

CHY, 1952. The station was mis-identified in the field. The chimney could not be identified, so the station was not pricked. KETCHUM 1934 was near by and was held.

See §67

CHY, 1943. The radially plotted position of the station falls 2.1 mm southeast of the geographic position. The position falls near the flight line and is weak.

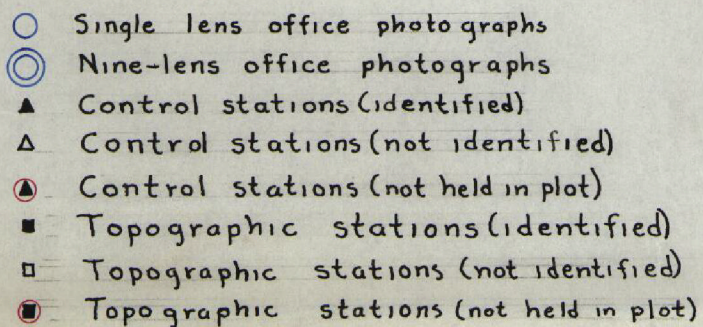
25. PHOTOGRAPHY

The coverage, overlap, and definition were adequate for a satisfactory radial plot. There were no badly tilted photographs.

Respectfully submitted
5 June 1953

Albert Queen Jr.
Albert Queen, Jr., *7.8.53*
Carto. Photo. Aid

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MAP T-11227

PROJECT NO. Ph-118

SCALE OF MAP 1:10,000

SCALE FACTOR

STATION	SOURCE OF INFORMATION (INDEX)	DATUM	LATITUDE OR ν -COORDINATE LONGITUDE OR x -COORDINATE	DISTANCE FROM GRID IN FEET. OR PROJECTION LINE IN METERS	DATUM CORRECTION	N.A. 1927 - DATUM DISTANCE FROM GRID OR PROJECTION LINE IN METERS	FACTOR DISTANCE FROM GRID OR PROJECTION LINE IN METERS
				FORWARD (BACK)		FORWARD (BACK)	FORWARD (BACK)
GREEN, 1934	G-2726 200	N.A. 1927	37 05 52.267			1611.2 (238.4)	
SCHOOL, 1934	G-2726 202	"	76 19 10.958			270.6 (1211.0)	
			37 06 39.063			1204.2 (645.4)	
			76 22 04.475			110.5 (1370.9)	
OK , 1934	G-2726 202	"	37 06 47.004			1449.0 (400.6)	See § 23
			76 22 19.713			486.7 (994.6)	
SHAW, 1934	G-2726 202	"	37 06 23.700			730.6 (1119.0)	
			76 22 46.246			1141.9 (339.6)	
GRASS, 1934	G-2726 203	"	37 04 31.235			962.9 (886.7)	
			76 20 17.059			421.4 (1060.7)	
FENCE, 1941	G-4805 P. 6	"	37 04 06.179			190.5 (1659.1)	
			76 20 35.260			871.1 (611.2)	
CURTIS, 1934	G-2726 203	"	37 04 03.257			100.4 (1749.2)	
			76 21 00.853			21.1 (1461.2)	
USHER, 1934	G-2726 203	"	37 04 22.677			699.1 (1150.5)	
			76 21 05.368			132.6 (1349.5)	
MESSICK 3, 1934	G-2726 201	"	37 06 29.566			911.4 (938.2)	
			76 19 09.774			241.3 (1240.1)	
HOSPITAL, 1941	G-4805 P. 7	"	37 04 35.500			1094.4 (755.2)	
			76 00 42.621			1052.8 (429.3)	
LANG, 1934	G-2726 199	"	37 04 47.601			1467.4 (382.2)	
			76 20 34.559			853.6 (628.4)	
LANGLEY FIELD	G-7444	"	37 04 46.45			1431.9 (417.7)	
SQUAT TANK, FINIAL 1947	P. 769	"	76 20 33.58			829.4 (652.6)	

1 FT = 3048006 METER

COMPUTED BY J. C. Richter

DATE 14 May 1953

CHECKED BY A. Queen

DATE 15 May 1953

M-2388-12

MAP T. 11227 PROJECT NO. PH-118 SCALE OF MAP 1:10,000 SCALE FACTOR

STATION	SOURCE OF INFORMATION (INDEX)	DATUM	LATITUDE OR ν -COORDINATE LONGITUDE OR λ -COORDINATE	DISTANCE FROM GRID IN FEET, OR PROJECTION LINE IN METERS FORWARD (BACK)	DATUM CORRECTION	N.A. 1927 - DATUM DISTANCE FROM GRID OR PROJECTION LINE IN METERS FORWARD (BACK)	FACTOR DISTANCE FROM GRID OR PROJECTION LINE IN METERS FORWARD (BACK)
LANGLEY VIEW WATER TANK, 1941	G-4805 p. 6	N.A. 1927	37 04 04.763 76 19 57.965			146.8 (1702.8) 1432.0 (50.3)	
STAVE, 1934	G-2726 202	"	37 05 57.436 76 21 08.583			1770.6 (79.0) 211.9 (1269.7)	
HARRIS, 1934	G-2726 204	"	37 03 42.188 76 21 42.804			1300.5 (549.1) 1057.5 (424.9)	
KETCHUM, 1934	G-2726 204	"	37 03 20.088 76 21 17.498			619.3 (1230.3) 142.3 (1050.2)	Man. tilted - disturbed. ϵHx
WILL 2, 1934	G-2726 201	"	37 05 27.131 76 20 15.710			836.4 (1013.2) 388.0 (1093.8)	
NETTLES, 1934	G-2726 206	"	37 02 37.688 76 24 16.881			1161.8 (687.8) 417.2 (1065.5)	out of area of map.
WILSON, 1934	G-2726 203	"	37 06 28.949 76 23 37.318			892.4 (957.2) 921.4 (560.0)	
WILL 2, Sub. Pt., 1934				PLOT GRAPHICALLY			
MESSIOK 3 Sub Pt., 1934				PLOT GRAPHICALLY			
GREEN SUB PTL, 1934	Comp	N.A. 1927	37 05 76 19			1564.4 (285.2) 294.1 (1187.5)	
SCHOOL SUB PT, 1934	"	"	37 06 76 22			1216.8 (632.8) 110.6 (1370.8)	1 F 1

1 FT. = .3048006 METER
COMPUTED BY: J. C. Richter

DATE 14 May 1953

CHECKED BY: A. Queen

DATE 15 May 1953

M-2388-12

MAP T- 11227

PROJECT NO. PH-118

SCALE OF MAP 1:10,000

SCALE FACTOR

[illegible]

1 FT. = .3048006 METER

COMPUTED BY: J. C. Richter

DATE 14 May 1953

CHECKED BY: A. Queen

DATE 15 May 1953

M. 2388-12

From Boat Sheets

MAP T. 11227

PROJECT NO. PH-118

SCALE OF MAP 1:10,000

SCALE FACTOR

STATION	SOURCE OF INFORMATION (INDEX)	DATUM	LATITUDE OR μ -COORDINATE LONGITUDE OR x -COORDINATE	DISTANCE FROM GRID IN FEET. OR PROJECTION LINE IN METERS FORWARD (BACK)	DATUM CORRECTION	N.A. 1927 - DATUM FROM GRID OR PROJECTION LINE IN METERS FORWARD (BACK)	FACTOR DISTANCE FROM GRID OR PROJECTION LINE IN METERS FORWARD (BACK)
NECK, 1934	G-2726 203	N.A. 1927	37 06 43.507 76 22 52.180			1341.2 (508.4) 1288.3 (193.1)	
RUN, 1934	G-2726 202	"	37 07 02.924 76 21 49.337			90.1 (1759.5) 1218.0 (263.3)	
TOPPING, 1934	G-2726 202	"	37 06 53.444 76 21 35.009			1647.5 (202.1) 864.3 (617.0)	Destroyed 1952. <i>ENR</i>
TABB, 1934	G-2726 202	"	37 06 14.946 76 21 41.512			460.7 (1388.9) 1025.1 (456.5)	Destroyed 1952. <i>ENR</i>
TAN, 1918	G-2726 201	"	37 06 00.919 76 20 36.897			28.3 (1821.3) 911.1 (570.5)	Disturbed. <i>ENR</i>
GAS PLANT CHIMNEY, 1918	G-5918 p. 667	"	37 05 56.306 76 21 23.250			1735.7 (113.9) 574.1 (907.5)	
STONY POINT, 1934	G-2726 201	"	37 05 46.968 76 19 26.334			1447.9 (401.7) 650.3 (831.3)	<i>Sec-368</i>
MEARS, 1934	G-2726 201	"	37 05 16.108 76 19 43.140			496.6 (1353.0) 1065.5 (416.4)	
NORMAL, 1934	G-2726 203	"	37 04 02.820 76 21 29.848			86.9 (1762.7) 737.4 (744.9)	
HOLT, 1934	G-2726 203	"	37 03 44.003 76 21 10.287			1356.5 (493.1) 254.2 (1228.2)	Mon. found disturbed - lying outside. ENR
TOW, 1947	G-7444 767	"	37 07 12.122 76 17 59.260			373.7 (1475.9) 1463.0 (18.2)	16

1 FT. = 3048006 METER

COMPUTED BY: J. C. Richter

DATE 14 May 1953

CHECKED BY: A. Queen

DATE 15 May 1953

M-2388-12

From Boat Sheets

5 of 8

MAP T. 11227 PROJECT NO. PH-118 SCALE OF MAP 1:10,000 SCALE FACTOR

STATION	SOURCE OF INFORMATION (INDEX)	DATUM	LATITUDE OR y -COORDINATE LONGITUDE OR x -COORDINATE	DISTANCE FROM GRID IN FEET. OR PROJECTION LINE IN METERS		DATUM CORRECTION	N.A. 1927-DATUM DISTANCE FROM GRID OR PROJECTION LINE IN METERS		FACTOR DISTANCE FROM GRID OR PROJECTION LINE IN METERS	
				FORWARD	(BACK)		FORWARD	(BACK)	FORWARD	(BACK)
LOW, 1918	G-2726 201	N.A. 1927	37 06 38.369 76 18 23.633				1182.8 583.5	(666.8) (897.9)		
BACK RIVER LT. HSE, 1852	G-1550 44	"	37 05 13.407 76 16 12.545				413.3 309.8	(1436.3) (1172.0)	E. of area, E. of area,	
FOX HILL MUNICIPAL TANK FINIAL, 1939	G-4279 299	"	37 04 54.897 76 17 15.253				1692.3 376.7	(157.3) (1105.2)	E. of area, E. of area,	
CAST, 1947	G-7444 767		37 07 36.227 76 17 52.201				1116.8 1288.6	(732.8) (192.5)	E. of area, E. of area,	
OAK SUB PT., 1934	Comp.	N.A. 1927	37 06 76 22				1477.7 488.1	(371.9) (993.2)		
SHAW SUB PT, 1934	Comp.	"	37 06 76 22				839.3 1225.8	(1010.3) (255.7)		
BAKE, 1944	G-7444 p. 767	"	37 07 23.429 76 17 51.702				722.2 1276.3	(1127.4) (204.8)	E. of area, E. of area,	
GRASS SUB PT, 1934	Comp.	"	37 04 76 20				957.2 432.3	(892.4) (1049.8)		
FENCE SUB PT, 1941	"	"	37 04 76 20				186.0 860.9	(1663.6) (621.4)		
CURTIS SUB PT. 1934	"	"	37 04 76 21				125.2 8.1	(1724.4) (1474.2)		
NORTHEND, 1952		"								

1 FT. = 3048006 METER
COMPUTED BY.

J. C. Richter

DATE 14 May 1953

CHECKED BY: A. Queen

DATE 15 May 1953

MAP T. 11227 PROJECT NO. Ph-118 SCALE OF MAP 1:10,000 SCALE FACTOR

STATION	SOURCE OF INFORMATION (INDEX)	DATUM	LATITUDE OR μ -COORDINATE LONGITUDE OR x -COORDINATE	DISTANCE FROM GRID IN FEET. OR PROJECTION LINE IN METERS		DATUM CORRECTION	N.A. 1927 - DATUM DISTANCE FROM GRID OR PROJECTION LINE IN METERS		FACTOR DISTANCE FROM GRID OR PROJECTION LINE IN METERS	
				FORWARD	(BACK)		FORWARD	(BACK)	FORWARD	(BACK)
BACK RIVER SOUTH- WEST BRANCH 3, 1943	Form 524	N.A. 1927	37 05				447.6	(1402.0)		
			76 20				193.5	(1288.3)		
TIDAL BENCH MARK 11, 1943	"	"	37 00				200.0	(1649.6)		
			76 18				1049.6	(434.0)		
TIDAL BM 1 1943	"	"	37 01				15.0	(1834.6)		
			76 20				559.6	(923.7)		
BACK RIVER 16, 1943	"	"	37 06	18.22			561.6	(1288.0)		
			76 18	52.45			1295.0	(186.5)		
BACK RIVER NORTH- WEST BRANCH 1, 1943	"	"	37 05				1670.6	(179.0)		
			76 20				295.6	(1186.0)		
BACK RIVER SOUTH- WEST BRANCH 5, 1943	"	"	37 04				1098.0	(751.6)		
			76 20				610.0	(872.1)		
BACK RIVER NORTH- WEST BRANCH 3, 1943	"	"	37 05				1160.6	(689.0)		
			76 20				885.5	(596.2)		
ELEVATED WATER TANK, 1944	"	"	37 00	25.11			774.0	(1075.6)		
			76 18	17.96			444.0	(1039.4)		
BUC, 1943	"	"	37 03				237.0	(1612.6)		
			76 17				196.0	(1286.6)		
ED, 1943	"	"	37 05				1753.6	(96.0)		
			76 16				952.0	(529.6)		
FOX, 1943	"	"	37 04				46.0	(1803.6)		
			76 16				1212.0	(270.3)		
TIN, 1943	"	"	37 05				1435.6	(414.0)		
			76 17				1051.5	(430.0)		

1 FT. = 3048006 METER

COMPUTED BY: J. C. Richter

DATE 14 May 1953

CHECKED BY: A. Queen

DATE 15 May 1953

M. 2388-12

MAP T-11227 PROJECT NO. PH-118 SCALE OF MAP 1:10,000 SCALE FACTOR

STATION	SOURCE OF INFORMATION (INDEX)	DATUM	LATITUDE OR y -COORDINATE LONGITUDE OR x -COORDINATE	DISTANCE FROM GRID IN FEET. OR PROJECTION LINE IN METERS		DATUM CORRECTION	N.A. 1927 - DATUM DISTANCE FROM GRID OR PROJECTION LINE IN METERS		FACTOR DISTANCE FROM GRID OR PROJECTION LINE IN METERS
				FORWARD	(BACK)		FORWARD	(BACK)	
SILO, 1952	Form 524	N.A. 1927	37 03	42.24			1302.0	(547.6)	
			76 21	50.23			1241.0	(241.4)	
CHY, 1952	"	"	37 03	27.22			839.0	(1010.6)	
			76 21	10.48			259.0	(1223.4)	
CHIMNEY ¹¹⁴² TANK, 1952	"	"	37 06	18.75			578.0	(1271.6)	
			76 22	43.66			1078.0	(403.5)	
GABLE ¹¹⁴² GAB, 1952	"	"	37 04	17.91			552.0	(1297.6)	
			76 26	24.49			605.0	(877.2)	
TANK ¹¹⁴² WATER, 1952	"	"	37 05	51.31			1582.0	(267.6)	
			76 21	28.42			702.0	(779.7)	
CHY, 1943	"	"	37 04	42.71			1316.6	(533.0)	
			76 18	23.12			571.0	(911.0)	
BM Q, 27, 1943	"	"	37 00	05.00			154.0	(1695.6)	S. of area
			76 18	41.08			1014.1	(469.5)	
BM U, 265, 1943	"	"	37 01	53.22			1640.6	(209.0)	S. of area
			76 21	24.88			615.0	(867.0)	
BM E, 266, 1943	"	"	37 07	20.72			638.6	(1213.0)	
			76 20	47.64			1176.0	(305.2)	
BACK RIVER 4, 1943	"	"	37 06	04.43			136.6	(1713.0)	E. of area
			76 15	47.58			1175.0	(306.6)	
B.M. R.M.1 1943	"	"	37 06	29.03			894.9	(954.7)	
			76 19	10.13			250.0	(1231.5)	
BM N-27 1943	"	"	37 01	32.10			989.6	(850.6)	S. of area
			76 20	32.85			812.0	(671.1)	

1 FT. = 3048006 METER
COMPUTED BY: J. C. Richter

DATE 14 May 1953

CHECKED BY: A. Queen

DATE 15 May 1953

MAP T-11227 PROJECT NO. Ph-118 SCALE OF MAP 1:10,000 SCALE FACTOR

STATION	SOURCE OF INFORMATION (INDEX)	DATUM	LATITUDE OR ν -COORDINATE LONGITUDE OR x -COORDINATE	DISTANCE FROM GRID IN FEET, OR PROJECTION LINE IN METERS		DATUM CORRECTION	N.A. 1927 - DATUM DISTANCE FROM GRID OR PROJECTION LINE IN METERS		FACTOR DISTANCE FROM GRID OR PROJECTION LINE IN METERS
				FORWARD	(BACK)		FORWARD	(BACK)	
BM-F-266 1943	Form 524	N.A. 1927	37 07 76 20				601.0 (1248.6)		
BM-M-27 1943	"	"	37 01 76 20				11.2 (1470.0)		
BM, P-27 1943	"	"	37 00 76 18				1843.6 (6.0)		S. of area
TOWER, No. 2 1944 Same as BAKF 1947	"	"	37 07 76 17				956.3 (526.6)		
WILLOUGHBY POINT LIGHT 1 AK, 1943	"	"	37 06 76 19				94.6 (1755.0)		S. of area
HAMPTON CREEK LT. "10", 1944	"	"	37 01 76 00				1085.0 (398.6)		
BACK RIVER SOUTH WEST BRANCH 1, 1943	"	"	37 05 76 19				714.6 (1135.0)		
BACK RIVER 13, 1943	"	"	37 06 76 17				1282.2 (199.0)		
BACK RIVER 15, 1943	"	"	37 06 76 18				21.0 (1828.6)		Destroyed
BACK RIVER 12, 1943	"	"	37 06 76 17				1368.6 (113.0)		
BACK RIVER 5, 1943	"	"	37 06 76 16				86.0 (1763.6)		E. of area
							601.0 (882.3)		
							1725.0 (124.6)		
							980.6 (501.0)		
							1281.3 (568.3)		
							908.4 (573.0)		
							823.0 (1026.6)		
							253.2 (1228.3)		
							1545.0 (304.6)		
							404.2 (1077.2)		
							269.6 (1580.0)		
							203.0 (1278.6)		
									20

1 FT. = 3048006 METER

COMPUTED BY: J. C. Richter

DATE 14 May 1953

CHECKED BY: A. Queen

DATE 15 May 1953

M-2388-12

MAP T. 11227

PROJECT NO. Ph-118

SCALE OF MAP 1: 10000

SCALE FACTOR.

[illegible]

1 FT. = 3048006 METER
COMPUTED BY:

DATE:

CHECKED BY:..

DATE _____

M-2388-12

COMPILATION REPORT

T-11227

31. DELINEATION

Graphic methods were used to delineate this manuscript.

In accordance with project instructions, delineation was limited to the MHWL, offshore details and non-floating aids to navigation.

32. CONTROL

Refer to radial plot report.

33. SUPPLEMENTAL DATA

Locations of aids to navigation were taken from the following graphic control sheets:

CO-A-52	scale 1:10,000
CO-B-52	" "
CO-C-52	" "

Also some are third-order or better and are shown as triangulation. ^{SMR}

34. CONTOURS AND DRAINAGE

Contours: Inapplicable.
Drainage: No comment.

35. SHORELINE AND ALONGSHORE DETAILS

There was no field inspection. Survey T-8314 (1943) was used to aid in the interpretation of the photographs.

36. OFFSHORE DETAILS

Attempts were made to delineate as much offshore detail as possible, that is visible, on the photographs. It is believed that more features exist than are shown on the manuscript.

37. LANDMARKS AND AIDS

No Forms 567* for landmarks or aids to navigation are submitted. Refer to Descriptive report for the graphic control surveys, copy of which is part of this report.

** Included as part of chart Letter L750(1952) ^{SMR}*

The latest Light List available was dated 1952, which was not up to date with respect to the aids in this area. Chart 1222 published 26 Jan. 1953, corrected to 2 Feb. 1953, conflicted with the character of some of the aids on the graphic control sheets.* Names for most of the aids were not furnished.

** In agreement now (corrected at review) ^{SMR}*

37. LANDMARKS AND AIDS (Cont'd)

The triangulation positions for the aids east of longitude 76° 19' 30" were not available at the compilation office. *Added during review. EHR*

The positions of lights in Back River established in 1943, are shown with red circles on the back. The positions of all the aids on the graphic control sheets, (some of which conflict with the 1943 positions) were transferred holding the projection lines. No further information is shown. It is expected that the hydrographic party will submit the completed Forms 567. *See above.*

It was not clear whether the recoverable topographic stations established were the recommended landmarks. No landmarks were shown on the manuscript.

No landmarks were recommended. EHR

38. CONTROL FOR FUTURE SURVEYS

Five Forms 524, are submitted for recoverable topographic stations located by planetable surveys. They are listed in the field report which is part of this report.

Hydrographic stations were established in this area and located on the graphic control sheets but in accordance with compilation instructions, are not shown on this manuscript.

39. JUNCTIONS

There are no contemporary surveys to the north, east, south and west.

Surveys RS 441 and 442 (1952) Ph-86 are adjacent to this survey on the north edge.

40. HORIZONTAL AND VERTICAL ACCURACY

No comment.

See §66

41. thru 45.

Inapplicable

46. COMPARISON WITH EXISTING SURVEYS

This manuscript was compared with survey T-8314 (1943) scale 1:20,000 and with Corps of Engineers, Hampton, Va., quadrangle, scale 1:25,000 edition of 1944. *See §62 & §63*

47. COMPARISON WITH CHARTS

This manuscript was compared with Chart 494, scale 1:40,000 published 26 May 1952, corrected to 23 June 1953, and with Chart 1222, scale 1:80,000 published 26 January 1953, corrected to 2 February 1953.

Items to be applied to Nautical Charts immediately:

Character of the aids to navigation.

Bridges across Tabbs Creek.

Items to be carried forward:

Offshore details not visible on the photographs.

See § 65

Respectfully submitted
10 June 1953

John C. Richter
J. C. Richter
Carto. Photo. Aid

Approved and forwarded

Jack C. Sammons
Jack C. Sammons,
Capt. U.S.C. & G. S.
Officer in Charge
Baltimore Photo. Office

48. GEOGRAPHIC NAMES LIST

- Amorys Wharf
- Back Creek
- Back Landing
- Back River
- Brick Kiln Creek
- Cedar Creek
- Cedar Point
- Elizabeth City Co. *Not mapped. ^{SHR}*
- Flat Gut
- Fore Landing Creek
- Harris Creek
- High Cedar Creek
- Langley Field Bridge
- Long Creek
- Marsh Point
- Messick Point
- Muddy Creek
- Newmarket Creek
- Northwest Branch
- Oak Island
- Southwest Branch
- Stony Point
- Tabbs Creek
- Tabbs Point
- Tide Mill Creek
- Tin Shell Point
- Topping Creek
- Watts Creek
- Willoughby Point
- Windmill Point
- York Co. *Not mapped. ^{SHR}*

*Names approved
10-8-54
Q. J. W.*

All names from Hampton, Va., quadrangle.

50-
PHOTOGRAMMETRIC OFFICE REVIEW

T- 11227

1. Projection and grids
- ☒
2. Title
- ☒
3. Manuscript numbers
- ☒
4. Manuscript size
- ☒

CONTROL STATIONS

5. Horizontal control stations of third-order or higher accuracy
- ☒
6. Recoverable horizontal stations of less than third-order accuracy (topographic stations)
- ☒
7. Photo hydro stations
- ☒
8. Bench marks
- ☒
9. Plotting of sextant fixes
- ☒
10. Photogrammetric plot report
- ☒
11. Detail points
- ☒

ALONGSHORE AREAS

(Nautical Chart Data)

12. Shoreline
- ☒
13. Low-water line
- ☒
14. Rocks, shoals, etc.
- ☒
15. Bridges
- ☒
16. Aids to navigation
- ☒
17. Landmarks
- ☒
18. Other alongshore physical features
- ☒
19. Other along-shore cultural features
- ☒

PHYSICAL FEATURES

20. Water features
- ☒
21. Natural ground cover
- ☒
22. Planetable contours
- ☒
23. Stereoscopic instrument contours
- ☒
24. Contours in general
- ☒
25. Spot elevations
- ☒
26. Other physical features
- ☒

CULTURAL FEATURES

27. Roads
- ☒
28. Buildings
- ☒
29. Railroads
- ☒
30. Other cultural features
- ☒

BOUNDARIES

31. Boundary lines
- ☒
32. Public land lines
- ☒

MISCELLANEOUS

33. Geographic names
- ☒
34. Junctions
- ☒
35. Legibility of the manuscript
- ☒
36. Discrepancy overlay
- ☒
37. Descriptive Report
- ☒
38. Field inspection photographs
- ☒
39. Forms
- ☒

40. R. E. Blum
Reviewer40. Joseph Steinberg
Supervisor, Review Section or Unit

41. Remarks (see attached sheet)

Very hasty review

FIELD COMPLETION ADDITIONS AND CORRECTIONS TO THE MANUSCRIPT

42. Additions and corrections furnished by the field completion survey have been applied to the manuscript. The manuscript is now complete except as noted under item 43.

Compiler_____
Supervisor

43. Remarks:

M-2623-12

Review Report
Shoreline Survey T-11227
26 October 1954

62. Comparison with Registered Topographic Surveys:

T-499	1:20,000	1853-54
T-502	"	1853-54-'92
T-2801	"	1906 - '07
T-8313	"	1944
T-8314	"	1944

Except for cultural changes, Survey T-11227 agrees closely with T-8313 and T-8314. Differences noted were: T-11227 shows islands in the mouth of Tabbs Creek which are not shown on T-8314; T-8314 shows a channel connecting Back Creek, Long Creek and Fort Landing Creek which is not shown as connecting on T-11227; T-8314 shows two islands in Tide Mill Creek which are included as one on T-11227; and a datum difference of approximately 20 meters for which much the shoreline of Harris Creek is indicated between T-8314 and T-11227. For a discussion of this latter difference, see item 66. Survey T-11227 is to supersede these prior surveys for nautical charting purposes for the features covered by T-11227.

63. Comparison with Maps of Other Agencies:

Hampton, Va. (C.of E.)	1:25,000	1944	(Same as T-8314)
Morrison, Va. (C.of E.)	"	"	(" " T-8313)

64. Comparison with Contemporary Hydrographic Surveys:

Because the hydrographic survey was in the process of compilation at the time of this review, comparison is deferred until the smooth sheet is reviewed.

65. Comparison with Nautical Charts:

494	1:40,000	1943	corrected to 53-3/23
1222	1:80,000	1953	corrected to 53-10/12

No significant differences were detected. Features noted under Item 62 above have been shown on these charts as mapped by T-11227 except for the island in Tide Mill Creek. Changes made to T-11227 during this review are shown in red.

66. Adequacy of Results and Future Surveys:

An attempt was made during this review to reconcile the position discrepancy of up to 20 meters noted under Item 62 above. The descriptions of the stations positioned by Graphic Control Board Co-C-52 were not available but the discrepancy appears to exist in the same sense as with T-8314. This area is the weakest

66. Adequacy of Results and Future Surveys (continued):

part of the photogrammetric plot for survey T-11227. However, it appears adequately controlled to obtain the required accuracy. Unless the hydrographic survey definitely indicates it to be in error, Survey T-11227 is recommended for positions in this area. *Hydro. & 4 signals from G.C. revised to agree with new H.W. RHC contents*

Other than the above indicated possible error, this survey is adequate for nautical charting and for hydrographic surveying.

67. Supplemental Data:

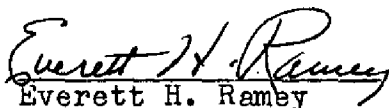
Reference Item 24. Station "CHY, 1943": Apparently this station was not identified in conjunction with this survey. Because of a possibility of error in identification or by radial plot, the 1943 position is recommended for use. The photogrammetric plot position has been deleted from the manuscript.

Positions for Stations: "GABLE 1952" and "CHY 1952" are shown as obtained from the graphic control boards.

68. Control:

The 1952 recovery note for triangulation station "STONY POINT, 1934" is ambiguous. It states that the station was recovered and is covered at MHW and also that an old monument stamped "STONEY POINT 1934" was lying on its side in the water. The station is shown on the manuscript.

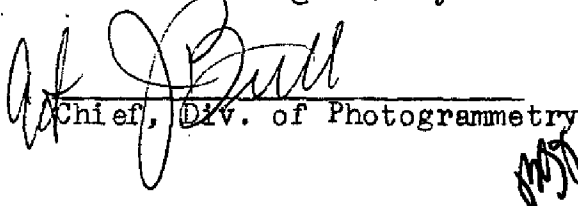
Reviewed by:

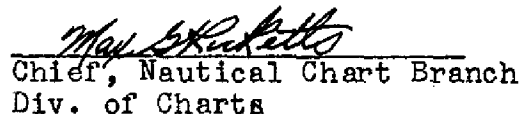

Everett H. Ramey

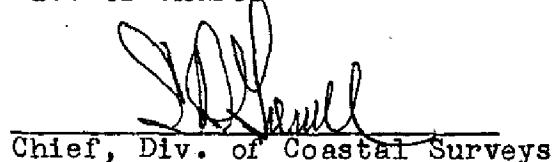
Approved by:


L. C. Lande

Chief, Cartographic Branch
Div. of Photogrammetry


Chief, Div. of Photogrammetry


Chief, Nautical Chart Branch
Div. of Charts


Chief, Div. of Coastal Surveys

NAUTICAL CHARTS BRANCH

SURVEY NO. T-11227

Record of Application to Charts

[illegible]

M-216B-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.