

11060

Diag. Cht. No. 78-4.

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey Photogrammetric

Field No. Ph-101(52) Office No. T-11060

LOCALITY

State Virginia

General locality Piankatank River

Locality Roane Point to Anderson Point

194/52-53

CHIEF OF PARTY

L.C. Lande, Div. of Photo., Washington
D.C.

LIBRARY & ARCHIVES

DATE June 23, 1958

B-1870-1 (1)

11060

DATA RECORD

T - 11060

Project No. (II): Ph-101(52) Quadrangle Name (IV): Roane Pt. to Anderson Pt.
Piankatank River, Virginia

Field Office (II):

Chief of Party:

Photogrammetric Office (III): Washington

Officer-in-Charge:

Instructions dated (II) (III):

Copy filed in Division of
Photogrammetry (IV)

Method of Compilation (III): Graphic

Manuscript Scale (III): 1:10,000

Stereoscopic Plotting Instrument Scale (III):

Scale Factor (III):

Date received in Washington Office (IV):

Date reported to Nautical Chart Branch (IV):

Applied to Chart No.

Date:

Date registered (IV): 21 Jan 1958

Publication Scale (IV):

Publication date (IV):

Geographic Datum (III): NA 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): STAMPERS 1942

Lat.: 37° 32' 14" 679 (452.5) Long.: 76° 25' 35" 677 (875.9)

Adjusted
UNRECORDED

Plane Coordinates (IV):

State:

Zone:

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.

Areas contoured by various personnel
 (Show name within area)
 (II) (III)

Inapplicable

DATA RECORD

Field Inspection by (II): **None**

Date:

Planetable contouring by (II): **Inapplicable**

Date:

Completion Surveys by (II):

Date:

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

Interpreted in office on photographs taken 1952

Projection and Grids ruled by (IV): **Jack Allen**

Date: **16 Feb. 1953**

Projection and Grids checked by (IV): **Howard Wolfe**

Date: **16 Feb. 1953**

Control plotted by (III): **C. Hanavich
E. H. Ramey**

Date: **20 May 1953**

Control checked by (III): **C. Hanavich
E. H. Ramey**

Date: **20 May 1953**

Radial Plot or Stereoscopic

Date: **May 1953**

Control extension by (III): **R. J. French**

Planimetry

Date:

Stereoscopic Instrument compilation (III):

Contours

Date:

Manuscript delineated by (III): **E. H. Ramey**

Date: **20 May 1953**

Photogrammetric Office Review by (III):

Date:

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

Inapplicable

Date:

Camera (kind or source) (III): USC&GS, Single-lens camera "0"

Number	Date	Time	Scale	Stage of Tide
52-0-1940 thru 1942	13 Oct. 1952	1120	1:24,000 ratioed to 1:10,000	1.0 above MLW
52-0-1930 thru 1932	"	1112		"
52-0-1878 thru 1880	"	1047		"

Tide (III)

Reference Station: Hampton Roads
Subordinate Station: Horse Point, Piankatank River
Subordinate Station:

Ratio of Ranges	Mean Range	Spring Range
	2.5	3.0
0.6	1.4	1.7

Washington Office Review by (IV):

Date:

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):

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

Control Leveling - Miles (II):

Number of Triangulation Stations searched for (II):

Recovered:

Identified:

Number of BMs searched for (II):

Recovered:

Identified:

Number of Recoverable Photo Stations established (III):

Number of Temporary Photo Hydro Stations established (III):

Remarks:

PHOTOGRAMMETRIC PLOT REPORT

Project Ph-101(52)

Shoreline Sheets T-11060, T-11058, T-11056, T-11054, T-11052, T-11226.

Refer to "control index" attached to this report.

Area Covered:

This radial plot report covers the sheets listed above and extends from control just south of the Piankatank River, north to a line of U.S.C.&G.S. 3d order traverse just north of the headwaters of the Corrotoman River and ties to a nine-lens radial plot on the East.

Photography:

The "O" camera was used and ratio prints were made on positype paper at compilation scale of 1:10,000. It was not considered necessary to use a distortion correction templet in making the templets after an inspection of several photographs indicated they were relatively free of angular distortion. Side lap between flights was a maximum of 10 percent with some flights just meeting. This in itself was not conducive to a strong plot where control was not specifically distributed for a single lens plot.

Methods:

Acetate templets were used and when the plot did not lay satisfactorily, new projections were ordered on vinylite and an attempt was made to hold control better. Intersections between flight lines were not of the best to be desired, but an overall adjustment was accomplished such as to distribute any large inherent errors that might exist.

The intersections were drilled with a number 80 twist drill, and the pass points and photo centers were inked with GPO blue ink on the back side of the manuscript.

A sheet layout index to control used is attached to this report, and a summary of the control and the tolerances obtained are listed with side remarks on control not held.

The distribution of control is not adequate for a single lens plot of this kind, but the side lap coverage of the photography is more delinquent than the deficiency in control since it was necessary to bridge from control on the north bank of the Rappahannock River north to Slaters RM No. 1, 1942 and on to the traverse along State Highway No. 3 near Lancaster.

An accuracy test will be made with the stereoplanigraph bridging between control. Compilation will be delayed pending the outcome of that work.*

Approved by:

L. C. Lande
L. C. Lande

Submitted by:

Roscoe J. French
Roscoe J. French

*only for T-11052, 054, 056 and T-11226 R/JF

SEE RADIAL PLOT REPORT BY STEREO MAPPING BRANCH FOR
SHORELINE SHEETS T-9898, T-11052, T-11054, T-11056 & T-11226.

SUMMARY

Control used in the Radial Plot - T-11052, T-11054, T-11056,
T-11058, T-11060, T-11226.

Station Name	Tolerance	Remarks
Piankatank 19(v) 1932 Sub.pt.	Held *	
Pts - 1 (USGS) 1916	Held *	
Piankatank 17(v) 1932 Sub.pt.	Held *	
Air Beacon WNAB-4, 1942	Held *	
Stampers 1942	Held *	plot
Mill, 1953	Held	4th order used to control radial/
Harmony, 1942	Held	plot
Har, 1953, Sub.pt.	Held	4th order used to control radial/
Grey Pt. Lt., 1944	Held	
Grey 3, 1942	0.7mm	Int. falls NW of sta.
Cherry 3, 1944, Sub.pt.	Held	
Cherry 3, 1944	Held	
Whitestone ME Ch.Sp., 1942	Held	plot
Pon, 1953	Held	4th order used to control radial/
Orchard 3, 1942	Held	
Old House, (v) 1919, Sub.pt.	Held	
Towles 3, 1942 sub.pt.	Held	
Slaters, 1942, RM1	Held	
Slaters, 1942, 1944 sub.pt.	Held	
Kilmarnock Mun.W.T., 1942	0.3mm	Falls SW of computed position
PP18F, 1944	Held	
PP17F, 1944	Held	
BM 18, 1944		Falls NE of computed position
BM K 270, 1944 sub.pt.		Falls SW of " "
BM J 270, 1944 sub.pt.	Held	
BM H 270, 1944 sub.pt.	Held	
PP 7 F, 1944	Held	
PP 6 F, 1944	Held	3rd order Trav.
Rog, 1944	Held	
Bar Pt. Lt.	.8 mm	Falls SW of 1944 position
Har, 1944		Falls NW " " " 2 cuts
West Pt. Lt.	1.4 mm	West of 1944 position

* Fall on T-11060

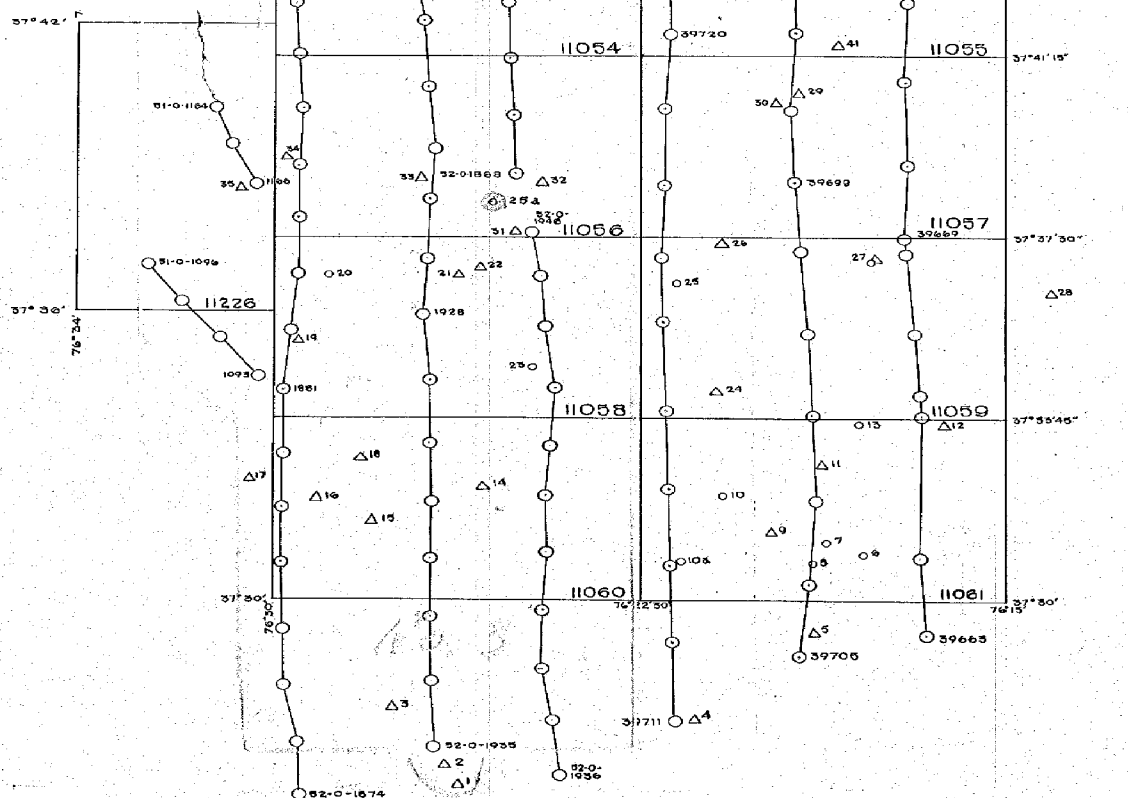
KEY TO NUMBERED CONTROL STATIONS
ON INDEX FOR PH-101(52)

1. Sand (VFC), 1936
2. Darling (VFC), 1936
3. James, 1943
4. Mathews Lookout Tower, 1942
5. Rook (VFC), 1936
6. Cher, 1953
7. Cherry Point Light, 1953
8. Stove Point Light, 1953
9. Stove "R", 1920, sub.pt.
10. Mos, 1953
- 10a. Sill, 1953
11. Boas, 1920, sub.pt.
12. Stingray Point L.H. 1900
13. Stan, 1953
14. Stammers, 1942
15. Plankatank 19 (VFC), 1932
16. Plankatank 17 (VFC), 1932
17. P.T.S. No. 1 (USGS), 1916
18. Wm-Norfolk Airway Bn. No. 4, 1942
19. Harmony, 1942
20. Har, 1953, sub. pt.
21. Gray 3, 1942
22. Gray Point Light, 1944
23. Mill, 1953
24. Jackson RM-3, 1944, sub.pt.
25. Mos, 1953
- 25a. Pon, 1953
26. Oyster House South Cable, 1944
27. Windmill RM-3, 1932 and
- 27a. Win, 1953
28. Windmill Point L. H., 1898
29. Old Stone Light, 1944
30. Dime 2, 1944, RM-1
31. Cherry 3, 1944 and
- 31a. Cherry 3, 1944, sub.pt.
32. White Stone, M. E. Church, Spiro, 1942
33. Orchard 3, 1942
34. Old House (VFC), 1919
35. Towles 3, 1942
36. Slaters RM-1, 1942 and
- 36a. Slaters, F.I.P., 1944
37. BM. 18 (USGS), 1944
38. PP 17F, 1944
39. PP 13F, 1944
40. Kilmarnock Municipal Water Tank, 1942
41. Bluff 3, 1944, sub.pt.
42. Marsh, 1944
43. BM. K270, 1944, sub.pt.
44. BM. J270, 1944, sub.pt.
45. BM. H270, 1944, sub.pt.
46. PP 7F, 1944
47. PP 6F, 1944
48. PP 3F, 1944
49. Miskimon Lookout Tower, 1942
50. Wisconsin RM-1, 1942
51. Great Wisconsin L. H., 1898
52. Old Man (VFC), 1931, sub.pt.
53. Globe, 1931
54. Cedar Point (VFC), 1931
55. Burgess Store, Shiloh Baptist Church, Spiro, 1942
56. Smith Point, 1934
57. Miller, 1920, sub.pt. and
- 57a. Miller, 1920, sub.pt. C
58. Boundary 3, Mon. 4, 1934, sub.pt.
59. G-C, 1944
60. Sisson, RM-2, 1942
61. Boundary Mon. No. 5, 1929
62. Bluff (VFC), 1931
63. Downing, 1931
64. Navy, RM-1, 1942

* Note

All 1953 stations are
4th order transit positions
for photo identification.

PH-101 (52)

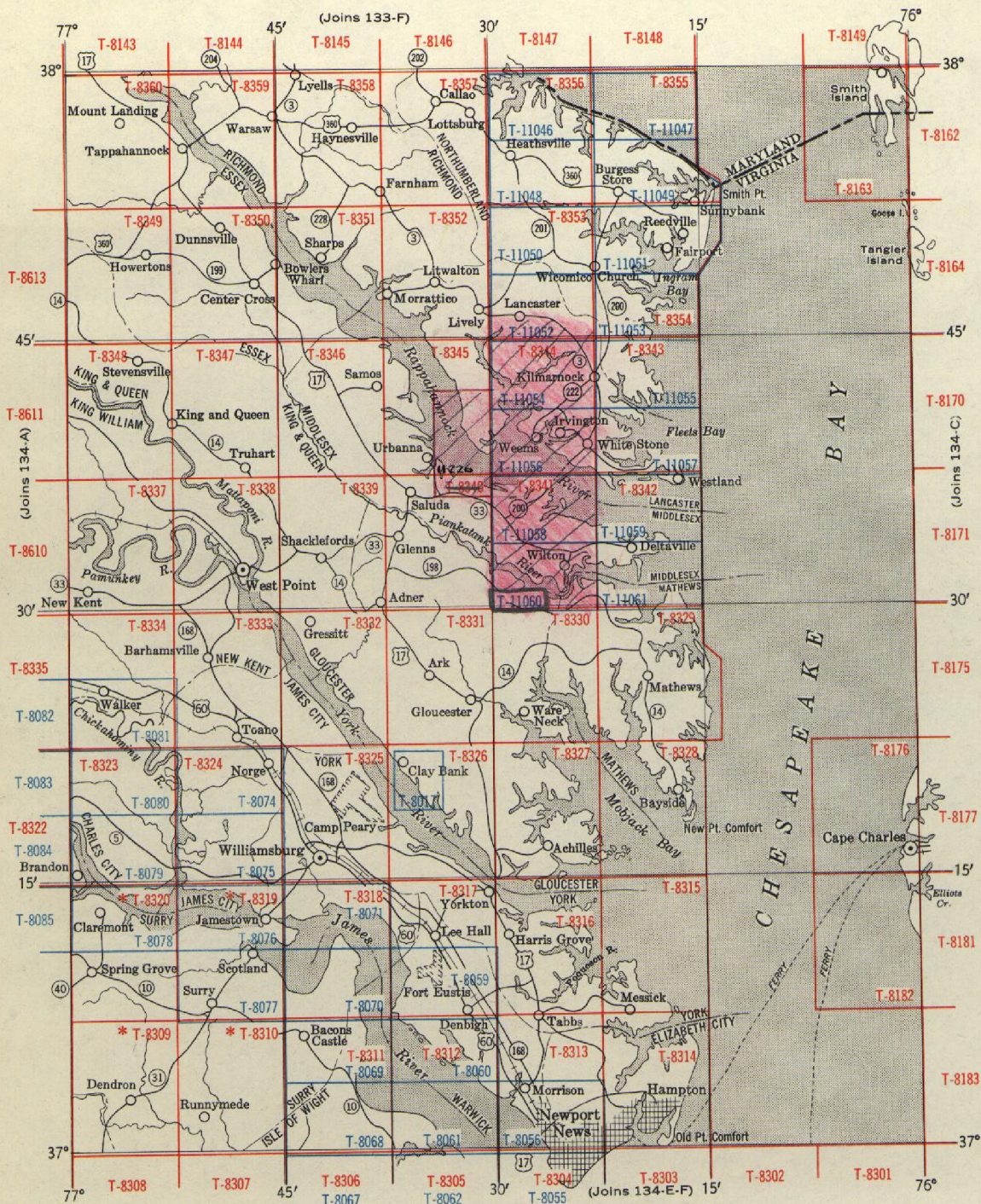


VIRGINIA
MARYLAND

UNITED STATES
DEPARTMENT OF COMMERCE
Coast and Geodetic Survey
Washington, D. C.

MAP INDEX 134-B

T-11060



AREA OF SINGLE LENS
RADIAL PLOT
(PLOT No. 3)
PHOTOG 52

SHORELINE SURVEYS: Show natural and cultural features, except contours and elevations, but cover only the shoreline and the land area immediately adjacent thereto. Surveys T-8056, T-8059 to T-8061, T-8068 to T-8071, T-8074 to T-8081, scale 1:10,000, prepared from aerial photographs taken August 1941; T-8017, scale 1:5,000, from photographs of 1945; T-11046 to 11061, scale 1:10,000, from photographs taken October 1952. Not to be published but photographic copies of the original manuscripts can be furnished by the U. S. Coast and Geodetic Survey at 75c each.

TOPOGRAPHIC MAPS: Part of the 7½-minute series of standard topographic quadrangle maps of the United States. Maps T-8163, T-8176, T-8182 (from aerial photographs taken April 1942); T-8311 to T-8318, T-8327 to T-8330, T-8337 to T-8342, T-8346 to T-8360 (from aerial photographs taken December 1942); T-8343 to T-8345 (photographs taken February 1944); T-8309, T-8310, T-8319, T-8320, T-8323 to T-8326, T-8331 to T-8334 (photographs taken March 1948), compiled by the U. S. Coast and Geodetic Survey at scale 1:20,000. Printed and distributed by the U. S. Geological

Shoreline

PROJECT NO.....	Ph-101	SCALE OF MAP.....	1:10,000	SCALE FACTOR.....	1.00
MAP T-11060					

PROJECT NO.....	Ph-101	SCALE OF MAP.....	1:10,000	SCALE FACTOR.....	1.00
MAP T-11060					

PROJECT NO.....	Ph-101	SCALE OF MAP.....	1:10,000	SCALE FACTOR.....	1.00
MAP T-11060					

[illegible]

1 FT. = 3048006 METER

COMPUTED BY: S. J. Hathorn

DATE April 1953

CHECKED BY: N. S. Schultz

DATE Apr. 1953

MAP T. 11060 PROJECT NO. Ph-101 SCALE OF MAP 1:10,000 SCALE FACTOR

STATION	SOURCE OF INFORMATION (INDEX)	DATUM	LATITUDE OR ψ -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	
Roan (VFC) 1920	G-5646 P.536	NA 1927	37 31 32.569 76 22 35.891		1004.1 881.3						
Marchant (VFC) M 20	G-5646 P.537	"	37 31 38.252 76 23 25.813		1179.3 633.8						
Ginny (VFC) 1920	G-5646 P.541	"	37 31 45.69 76 24 13.63		1408.6 334.7						
Shipley (VFC) 1920	G-5646 P.537	"	37 31 37.533 76 24 15.047		1157.1 369.5						
Cedar (VFC) 1920	"	"	37 31 18.972 76 24 30.476		584.9 748.4						
Lower (VFC) 1920	"	"	37 30 57.582 76 24 55.241		1775.2 1356.6						
Wilton A (VFC) 1920	G-5646 P.538	"	37 30 48.387 76 25 12.026		1491.7 295.3						
Wilton B (VFC) 1920	"	"	37 30 51.153 76 25 01.165		1577.0 28.6						
Nail (VFC) 1920	"	"	37 30 31.917 76 24 46.580		984.0 1144.0						
Pianka Tank 4 (VFC) 1932	"	"	37 30 44.877 76 25 24.691		1383.5 606.4						
Piankatank 6 (VFC) 1932	G-5646 P.539	"	37 30 45.630 76 25 58.812		1406.7 1444.4						
Piankatank 7 (VFC) 1932	"	"	37 31 18.599 76 25 37.486		573.4 920.5						

1 FT. = .3048006 METER

COMPUTED BY: C.H.

DATE 13 May 1953

CHECKED BY: C.H.

DATE 13 May 1953

MAP T-11060 PROJECT NO. Ph-101 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)	
Piankatank 9 (VFC), 1932	G-5646 P.539	NA 1927	37 31 04.483 76 26 26.411	138.2	648.6				
Piankatank 8 (VFC) 1932	"	"	37 31 48.382 76 25 59.581	1491.6	1462.9				
Piankatank 23 (VFC), 1932	"	"	37 30 44.450 76 26 47.938	1370.3	1177.3				
Piankatank 10 (VFC) 1932	"	"	37 31 07.228 76 26 47.304	222.8	1161.6				
Piankatank 22 (VFC) 1932	"	"	37 31 03.466 76 27 10.302	106.9	253.0				
Piankatank 11 (VFC) 1932	"	"	37 31 22.511 76 27 20.386	694.0	500.6				
Piankatank 21 (VFC) 1932	G-5646 P.540	"	37 31 10.807 76 27 39.682	333.2	974.5				
Piankatank 20 (VFC) 1932	"	"	37 31 30.760 76 27 48.698	948.3	1195.8				
Piankatank 13 (VFC) 1932	"	"	37 31 57.223 76 28 06.475	1764.1	159.0				
Piankatank 18 (VFC) 1932	"	"	37 31 42.772 76 28 52.282	1318.6	1283.7				
Piankatank 15 (VFC) 1932	"	"	37 32 15.874 76 28 28.218	489.4	692.8				

1 FT. = 3048006 METER

COMPUTED BY: C.H.

DATE 13 May 1953

CHECKED BY: C.H.

DATE

13 May 1953

H-2388-12

MAP T...	PROJECT NO...	SCALE OF MAP	SCALE FACTOR
111060	Ph-101	1:10,000	

PROJECT NO. Ph-101..

SCALE OF MAP.....1:10,000.

SCALE FACTOR:

[illegible]

1 FT = 3048006 METER

COMPUTED BY: C. H.

DATE 13 May 1953

CHECKED BY: C.H.

DATE 13 May 1953

M-2388-12

Compilation Report
Shoreline Survey T-11060

31. Delineation.-- Features were delineated by the graphic method and include only shoreline, waterfront structures, the low-water line and shallow lines. Delineation was done without the benefit of field inspection and is subject to errors in office interpretation. Single-lens photographs taken in October 1952 were used for the compilation.

32. Control.-- Only four triangulation stations in this survey were identified and used in the radial plot (see the Photogrammetric Plot Report for listing). The remainder which the Division of Geodesy reports as extant were plotted as part of this compilation. Some of these plotted at or offshore from the MHW line and are referred to the hydrographic party for checking. These are: Yellow (VFC) 1920, Lower (VFC) 1920, Piankatank 6 (VFC) 1932, Piankatank 7 (VFC) 1932, Piankatank 26 (VFC) 1932.

33. & 34. Inapplicable.

35. Shoreline and Alongshore Details.--These details were interpreted on the photographs. Shallow lines represent tone lines on the photographs which may be of possible value to the hydrographic party.

36. & 37. Inapplicable.

38. Control for Future Surveys.--Identifiable alongshore details were positioned during this compilation for use by the hydrographic party. These are identified and labeled on photographs 52-0-1940 and 1941, 52-0-1931, and 52-0-1879 and 1880. They are also listed under paragraph 49.

39. Junctions.--This survey junctions with T-11058 to the northward and with T-11061 to the eastward.

40. Horizontal Accuracy.--See the Photogrammetric Plot Report.

41. to 45. Inapplicable.

46. Comparison with Registered topographic surveys.--

T-8340	1:20,000	1946
T-8341	"	"

Except for minor differences in shoreline and cultural changes, this survey is in close agreement with these prior surveys. Examples of some shoreline differences are the north shoreline of Piankatank River at longitude $76^{\circ} 30' 12''$ and $76^{\circ} 31' 1''$. Here the prior survey apparently chose some line for mean high water instead of showing an apparent shoreline along marsh.

47. Comparison with Nautical Charts.-

534 1:40,000 1951 corrected to 53-2/9
See items listed under par. 46.

Items to be applied to charts immediately: None

Items to be carried forward: None

Submitted by:

Everett H. Ramey

Everett H. Ramey

22 May 1953

APPROVED BY:

L. C. Lande

L. C. Lande

Chief, Compilation Section

Div. of Photogrammetry

Hydrographic Signals
Project Ph-101
Sheet T-11060

Photo - 52-0-1941

700 thru 704 - inadvertently were not used
705 Pier end
706 E corner of dk. spot
707 Pier end
708 Veg. end at point
709 Pier end
710 Pier end
711 N. Gable of House
712 Mound
712A N.W. Corner of pier
713 N.W. Gable House
714 Bush
715 Lone tree
716 N.W. Corner "T" pier
717 Pier end
718 Pier end
719 Pier end
720 Pier end
721 Dark Spot
722 E. Gable
723 E. end of pier
724 Pier end
725 Pier end
427 N. Gable
428 S. Gable
429 N. end of pier
430 Tree
431 Corner of sand

52-0-1940

726 Pier end
727 Pier end
728 E. Gable
729 Pier end
730 Pier end
731 Pier end
732 E. end of Pier
733 Fender of bridge
734 W. end of pier
735 Pier end

52-0-1931

736 S. shore end of dock
737 N. corner of pier
738 Pier end

739 Tree
740 N.W. corner of pier boathouse
741 Bush
742 Bush
743 Bush at point
744 Lone tree
745 Pier end
746 End tree at point
747 Offshore Gab of Boat House
748 Pier end
749 Center of white Sand spot
750 Offshore Gab. of Bo.Ho.
751 Pier end
752 S. Corner dock
753 End tree
754 Bush at Point
754A N.E. edge of sand

52-0-1879

755 Pier end
756 Dark Spot
756A Pier end
757 E. corner of pier
758 Dark Spot
759 Offshore gable
760 (Piankatank 17 sub pt) pier end
761 Offshore gable
762 Pier end
763 Lone tree
764 Center of dark spot
765 Lone tree
766 ~~Lone shrub~~ Shed
767 N.W. corner of pier

52-0-1880

768 Dark spot
769 N.E. corner of pier
770 Pier end
771 Lone bush
772 Dark spot
773 Dark spot
774 Fence at MHWL
775 Lone tree
776 Dark Spot
777 Pt of vegetation
778 Pt of vegetation
779 Lone tree
780 Easterly tree
781 Dark spot
782 Lone tree
783 Pt at crook of stream

GEOGRAPHIC NAMES
T-11060

Berkley Island

Wilton Point

Cobbs Creek

Fairfield Landing

Coach Point

Dixie

Cooper Point

Stampers Wharf

Creek Point

Dancing Creek

Deep Point

Doctor Point

Ferry Creek

French Creek

Ginney Point

Glebe Neck

A.J.W.
4/6/55

Healy Creek

Hell Neck

Holland Point

Horse Point

Iron Point

Plankatank River

Pond Point

Roanoke Point

Wilton Creek

711-aa1

Cartographie Branch

4 March 1957

Chief, Photogrammetry Division

Review of Shoreline maps, Project #2130 (Washington Branch
Mobjack Bay to Potomac River)

It is my understanding that the project instructions call for the compilation of any new roads or road realignments in the project area, but that compilation has actually been limited to shoreline and signals for hydrographic support and has not covered any interior details.

In view of the press of work now on hand, I do not think that we should compile additional information on these maps. If such is needed for a chart revision, Mr. Brooks' Unit can take care of it as a chart correction job.

In reviewing the project, please be concerned only with the shoreline and information for hydrography and ignore the omission of interior details.

L. W. Swanson, Chief,
Photogrammetry Division

Nov 1952

REVIEW REPORT T-11060
Shoreline Survey
5 March 1957

62. Comparison with Registered Topographic Surveys

T-1100	1:20,000	1869
T-2869	"	1907-1908
T-2870	"	"
T-8341	"	1942-1946

The manuscript delineates shoreline only and was prepared to establish signals for hydrography. Inshore revision of nautical charts is not possible.

63. Comparison with maps of other agencies

USGS Wilton, Virginia quad 1:24,000 1946

The base for this quadrangle was T-8341.

64. Comparison with Contemporary Hydrographic Surveys

8081 November 1953

The shoreline, as compiled, was accepted without change by the hydrographer.

65. Comparison with Nautical Charts

Chart # 1223	1:80,000 5th edition 8/22/55	revised 8/27/56
Chart # 534	1:40,000 3rd edition 7/2/51	revised 10/31/55

66. Map accuracy


For the purpose of establishing hydrography, the manuscript was evidently of sufficient accuracy as no difficulties were encountered by the hydrographer.

The national standards of map accuracy cannot be guaranteed due to the unsatisfactory photo coverage and lack of control. (See the photogrammetric plot report). The planned accuracy test by stereoplanigraph was never accomplished in this area.

The junction of the manuscript with T-11209 was not perfect and minor correction was necessary. T-11209 was compiled with more recent photography than this manuscript.

The manuscript conforms with the project instructions as amended.

Reviewed by:


Hammond Rau

REVIEW REPORT T-11060

Approved:

L. C. Lande
Chief, Review Section
Photogrammetry Division

Max S. Kett
Chief, Nautical Chart Branch
Division of Charts

Act J. B. Bull
Chief, Photogrammetry Division
398

J. D. Lunn
Chief, Division of Coastal Surveys