

Diag. Cht. No. 78-4.

Form 50

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey Topographic

Field No. CS-289 W1 Office No. T-8336

LOCALITY

State Virginia

General locality James River

Locality Roxbury

1948-53

CHIEF OF PARTY
F.E.Peacock, Chief of Field Party
L.J.Reed, Div. of Photo. Wash., D.C.

LIBRARY & ARCHIVES

DATE June 15, ,1958

B.1820.1 (I)







DATA RECORD

T-8336

Project No. (II):

Quadrangle Name (IV): Roxbury

CS-289 W1

Field Office (II):

Chief of Party: F. E. Peacock

Photogrammetric Office (III): Washington, D. C.

Officer-in-Charge: Louis J. Reed, Chief,

Stereoscopic Mapping Section

Copy filed in Division of

Instructions dated (II) (III):

#17 - 15 September 1947

Photogrammetry (IV)

Method of Compilation (III): Reading Plotter

Manuscript Scale (III): 1:20,000

Stereoscopic Plotting Instrument Scale (III): 1:20,000

Scale Factor (III): 1:1

Date received in Washington Office (IV):8:26-49 Date reported to Nautical Chart Branch (IV): 8-31-49

Applied to Chart No.

Date:

Date registered (IV): 1 April 1958

Publication Scale (IV):

Publication date (IV):

Geographic Datum (III):

NA 1927

Vertical Datum (III):

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

Reference Station (III):

SAMARIA, 1932

Lat.: N 37-25-07.372

Long.: W 77-08-18.561

Adjusted Unadjusted

Plane Coordinates (IV):

State: Virginia

Zone:

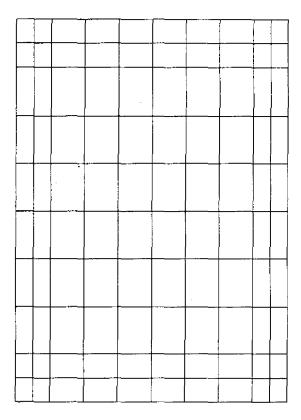
Y =

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.

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

100% by Orvis N. Dalbey on the Reading Plotter

DATA RECORD

Field Inspection by (II):

Fred L. Peacock

Date: 1944-5

Planetable contouring by (II):

None

Date:

Completion Surveys by (II):

None

Date:

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

Projection and Grids ruled by (IV):

Ruling Machine

Date: 9 Feb 49

Projection and Grids checked by (IV):

Wheatley E. Ward

Date:

9 Feb 49

Control plotted by (III):

John B. McDonald

11 Feb. 1949 Date:

Control checked by (III):

Louis J. Reed

Date:

11 Feb. 1949

Radial Plot or Stereoscopic

Graphic Compilation Section Division of Photogrammetry, Wash. D.C. 10 Jan. 1949

Control extension by (III):

Roscoe J. French

Date:

Stereoscopic Instrument compilation (III): Orvis N. Dalbey

18 March 1949

Contours

Planimetry

Date:

Manuscript delineated by (III):

John B. McDonald

19 Aug 49 Date:

Photogrammetric Office Review by (III):

Date:

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

Louis J. Reed

Date:

25 Aug 49

Camera (kind or source) (III): USC&GS Nine-lens Camera, 82" f

		PHOTOGRAPHS (II	1)	
Number	umber Date		Scale	Stage of Tide
Compilati	on Photograph	<u>ıy</u>		
22252 - 55 22276 - 78 22280 - 82	30-3-48	11:54 12:26 12:30	1:20,000	Not applicable

Tide (III)

Reference Station: Subordinate Station: Subordinate Station:

Washington Office Review by (IV): John M. Neaf

Final Drafting by (IV): M. Day

Drafting verified for reproduction by (IV): W.O. Hallum

Date: 8/1855 Date: 3/6/58

Date:

Ratio of Mean | Spring | Ranges Range

Range

Date: 3/10/58

Proof Edit by (IV):

Land Area (Sq. Statute Miles) (III): 60 Sq. mi.

Shoreline (More than 200 meters to opposite shore) (III): None

Shoreline (Less than 200 meters to opposite shore) (III): About 6 miles

Control Leveling - Miles (批): (55)

Number of Triangulation Stations searched for (11):

Recovered:

Identified: 1

Number of BMs searched for (tt): (15)

Recovered:

Identified:

Number of Recoverable Photo Stations established (III): None Number of Temporary Photo Hydro Stations established (III): None

Remarks:

No tide curve has been computed since the section of the river falling within this quadrangle is upstream from all the stations.

Photogrammetry

SOURCE OF INFORMATION CINDEX) NA 1927	LONGITUDE OR W. COORDINATE LONGITUDE OR W. COORDINATE 37 022 46.861 " 37 22 47.16 37 29 59.73 37 25 07.372 37 25 07.372	GM GRID IN FEET.	N.A. 1927 - DATUM DATUM FROM GRID OR FROJECTION LINE CORRECTION	Lam] XXX
	37°22°46.861" 77 10 00.243 37 22 47.16 77 09 59.73 37 25 07.372	FORWARD (BACK)		(BACK) FORWARD (BACK)
	25 07.37 25 07.37 25 07.37	2,387,387.88	2.0741. 6.0 5.0141.1	405.1 470.2
	25 07.37	2 387 428.85	1453.97 395	395.72 2264.3 783.69 6.56 1134.751913.25
	3	2 395 389.11 398 018.70	227.3 1622.4 456.4 1018.9	η·6-5
SAMARIA, 132	37 25 06.283 77 08 19.532	2 395 312.35 397 907.44	193.7 1656	1656.02 1619.2 1428.8 995.1 2410.2 637.9
HAXALL, 1942	37 22 32.482 77 14 37.618	2 365 021.69 381 930.93	1001.4 848	848.3 550.7
1 FT. = .3048006 METER COMPUTED BY: DATE.	DATE	CHECKED BY:	<u></u>	DATE

Description Report to Accompany

Quadrangle T 8336

Project CS 289 W -1

Harland R. Cravat, Chief of Field Party

5. Vertical Control:

Date completed 11-26-45

3rd Order Levels 14 linear miles

4th Order Levels 45 linear miles

Recovery:

Previous existing vertical control was pricked and recovered early in 1944 by the War Mapping Field Party. No attempt was made to determine the adequacy of the work. It was felt that the field edit party would pick up any descrepencies which might exist.

New 3rd Order Bench Marks were pricked as the leveling progressed. New Bench Marks are as follows:

T	296	1945		. •		. 1	J.	296	1945	
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		1945		. ".	,	1	₩.	296	1945	,
		1945			• • •				1945	
		1945				- 1	P	296	1945	-
		1045		••					•	

Photograph Nos:

The following nine lens photos were used for the new work: # 13030 -- # 13029 -- # 13031 -- # 13038

Methods:

About 14 linear miles of new 3rd Order Levels were completed by Mr. Robert R. Kim, Photo Aid, using instruments and methods as prescribed by the Division of Geodesy.

About 45 miles of 4th Order Levels were completed by Mr. John R. Smith, Engineering Aid. Elevations were carried by Wye Level methods and to the nearest 0.01 of one foot.

Level information appears on photos in blue ink. The code letters RK prefix all spot elevations. The following system was used to distinguish the closed elevations from the unclosed:

1.- Elevations circled indicate loop was not closed on a known elevation

2.- Elevations underscored by dashed line indicates the loop was closed on tidewater.

3.- Elevations underscored bu solid line indicates the loop was closed by an approved elevation or a Bench Mark.

One Wye Level line less than one mile in length was not closed. This, however, is felt to be well within the required limit of accuracy. No level loops were closed in excess of 2.0 feet allowable error. The average error of closure was 0.40 of a foot.

Submitted with the photos is a layout showing the approximate positions of the spot elevations. Also, on the fly leaf of each volume is the following: Leop, Page, Closure, Field notes checked by, Inked on photo #, Copy checked by, and Remarks.

Respectfully submitted,

John R. Smith Engineering Aid

Approved December 6, 1945 by:

Harland R. Cravat

Photogrammetric Engineer

Compilation Report

26. Control: Details regarding control have been incorporated in a separate Radial Plot Descriptive Report to accompany this report.

Three horizontal control stations exist in this quadrangle and are listed on a separate page herein. Stations outside the quadrangle used in controlling the plot are described and listed in the Radial Plot Report mentioned above.

Vertical control, as covered in paragraph 5, this report, was adequate and served as a basis for establishing a datum for instrument compilation of the contours shown on the manuscript.

- 27. Radial Plot: See separate Radial Plot Report to accompany this quadrangle, T-8336. Filed with Report of T 8335
- 28. Detailing: Planimetry and contours were compiled on the Reading Plotter from rectified metal-mounted 9-lens prints of the original photographs used in laying the radial plot. Cultural details were delineated on the instrument guided by data from field inspection photographs. The field inspection was accomplished in 1944 and 1945 and was quite obsolete at the time of compilation as evidenced by new highways and woodland changes apparent in the 1947 compilation photographs. A thorough field edit will be required to verify the details not covered by the field inspection.

The photography used in compilation was quite adequate for the required purpose.

- 29. Supplemental Data: Shoreline Survey T-8088 at 1:10,000 scale furnished the basic shoreline on this compilation and compared favorably with the 1:20,000 compilation. Where small differences existed due to natural water action of the river as evidenced by the later photography, the later data was incorporated in the manuscript shoreline.
- 37. Quadrangle Junctions: An attempt was made to have all four edges agree with adjoining quadrangle sheets. A good junction was made with T-8321 to the south which was compiled in 1947. T-8335 to the east agrees since it was compiled in conjunction with this quadrangle and is therefore one and the same compilation. T-8609 to the north, compiled in 1946 on the multiplex, is in agreement with this quadrangle except for a small area about an inch from the eastern end of the match-edge where ground elevations furnished on either side of the junction do not agree; field edit should correct this matter of disagreement. The fourth edge, to the west, should have matched USGS quadrangle

"Dutch Gap, 1938", but a very poor junction was possible. Detail on the manuscript is as compiled on the instrument and is considered correct within the allowable limits of accuracy. Field edit will be required to verify this match-edge or to establish it correctly in the case this compilation is found to be in error.

38. Quality of Contours: All contours on this manuscript conform to the national map standards of accuracy for a contour interval of twenty feet.

Louis J. Regd, Chief,

Stereoscopic Mapping Section

T= 8336

Geographic Names (based on Project
61 Names Report, but
Prior to Field Edit

Virginia James River Chichahominy River. Chesipenke and Ohio Ry U.S. Mo. 60 State Nos. 5 and 156. New Kent County Black Crook District St. Peters District Henrico county Varina District - not on Charles City County (Harrison Wistrict) Chesterfield county
(Dermuda Bistrect) a East Run Montpelier County 140.601 (apparently 609, on other road maps) Salem Murch Salem Kun West Run Stagg Run (uppersection of West Run)

T-836 (#L) Stagg Road (Xillmord Schorl) St. Johns Church County No. 607 Turkey Ishand Crook Turkey Bend Malvern Hill Western Run (+ rin Turkey I. Cr.) BatHefeeld Park Road. Willis Church National Cametary Warriner Road Glandale Glandale School Longbridge Rond Darbytown Road. Charles City Road Hines Kond White Oaksmap Hass every Hughes Rond =1Ko Elko Union Church.

T-8336 (#3)
Portugue

Portuguese Road Canal Smamp White day Road Scandin Road Windsor Road Elvo Community House Crumps Swamp TOR INK Swamp Wrights Corner Long Bridge Koxbury Nance Possum Run Mrt. Pleasant Church (netschool, partxumsstoport) Samuria Co. No. 602 Samaria Indian Church. .. school to be deleted, Por LEbirt) Union Church Union School Pallard Fre Cometony (private)

8336 (#4)

Allanson Comotory (private)

Names underlined in red are those approval on basis of Project Names Report. Other names listed to receive a further checkin field. 11-28-52 L. Heck

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FIELD EDIT REPORT QUADRANGLE T-8336 (Roxbury) Project CS-289 J. .C. .Sammons, Chief of Party

51. Methods -- The quadrangle was inspected by riding over all passable roads to check their classification, to classify buildings, to examine questioned areas and to visually check contours and planimetry. Trails, to be shown, were checked for delineation and use by walking over them and by utilizing local information.

All additions, corrections and deletions have been either indicated on the field edit sheet or cross referenced to the photographs. Red ink was used for additions and corrections, green ink was used for deletions and violet ink was used to indicate the points of elevations that were used for the vertical accuracy test. No legend is shown on the field edit sheet or photographs.

Field edit information is shown on two double weight matte prints, one discrepancy print and four nine lens 1:20,000 scale photographs numbered 22253, 22254, 22276 and 22277.

- 52. Adequacy Of Compilation -- The map compilation is near adequate and will be complete with the application of the field edit data.
- 53. Map Accuracy -- A horizontal accuracy test, composed of a transit and tape traverse, approximately three miles in length, testing seven points of horizontal position was made in the southwest corner of the quadrangle near its junction with the A.M.S. DUTCH GAP Quadrangle. The traverse was quite satisfactory and proves the horizontal position of quadrangle T-8336 to be correct.

One vertical accuracy test was made, approximately 1 miles south of Roxbury, testing 29 points of elevation with no error greater than 1 a contour interval being found. One test point was allowed for each top or bottom with all other points being directly on the contours. This test in addition to other general testing indicates the map to be of good quality.

- 54. Recommendations -- None offered.
- 55. Examination Of Proof Copy -- No one was requested to examine a proof copy of this map

Elgan T. Jenkins, Cartographic Survey Aid

Summary & Abstract of Vertical Accuracy Test

TOPOGRAPHIC MAPPING

Project No. <u>GS-289</u> Quad. No. <u>T-8336</u> Method of Testing Plane Table Profile	Quad. Name Roxbury
Montal by E.T.J. Data 5-29-53	Evaluated by E.T.J.
Contour interval 20 ft. 0.6 M.M. allowable	shift at 1:20,000
map or manuscript scale.	

Test points in error between \frac{1}{2} and full contour interval

Test points in error between \frac{1}{2} and full contour interval

Test points in error over full contour interval

△ Contour Corrected

* Good Expression

est lev.	Map Elev.	Error	Error after shift	Remarks	Test Elev.	Map Elev.	Error	Error after shift	Remarks
119	120	1.0	0.0		 				
	120	1.0	0.0		-111				
	100	2.0	1.0	Δ					
101	99	2.0	1.0	Δ					
101		1.0	0.0	Δ	<u> </u>				
116	120	4.0	3.0	Δ.					
120	121	1.0	0.0	Δ					
132	132	0.0		,					
	120	1.0	0.0		111			 	
	117	0.0			11				
	120	5.0	4.0	Δ					
101		1.0	0.0	,					
78		0.0						 	
62	60	2.0	0.0		111				
59		1.0	0.0		111				
72		8.0	6.0	Δ					
78		8.0	6.0	Δ					
	100	2.0	1.0	Δ					
	120	2.0	2.0	+	- 				
		3.0	2.0	Δ					
139	122 141	2.0	2.0	+,					ļ
	141	1.0	1.0	+			· · · · · · · · · · · · · · · · · · ·		
137		3.0	0.0	Δ					
	120	3.0	0.0					<u> </u>	l
	110	0.0]	l
	120	8.0	6.0	Δ				 	
	102	0.0		,					
	120		00						
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U.S. COAST AND GEODETIC SURVEY BOX 303 PROVIDENCE FORGE, VA.

County Clerk Charles City County Charles City, Va.

Dear Sir:

The U.S. Coast and Geodetic Survey is making a field edit survey of various counties of Virginia. A question has arisen concerning the county line between Charles City and Chesterfield.

Would you please inform me if the line is considered the center of James River or not.

Sincerely yours,

Elgan T. Jenkins, Cartographic Survey Aid

Dear Im Jenkins. I am hot positive but I think the Low water mark is the country boundry.

Hours truly

J. H. Brownis Clark

REVIEW REPORT T-8336 Topographic Map 18 August 1955

Summary:

T-8336 is one of the 17 standard 7.5-minute quadrangles of PROJECT CS-289-W-1. This quad was compiled on the Reading Plotter at a scale of 1:20,000. It is to be published at 1:24,000 scale by the Geological Survey. A cloth-backed lithographic print of the manuscript at compilation scale and a cloth-backed color print of the published quadrangle, together with the descriptive report, will be filed in the Bureau Archives.

62. Comparison with Registered Topographic Surveys:

Prior surveys are:

430	1:10,000	1853
1438	a ·	1877
3226	ti -	19 1 1
7021	ti	1946
8089	Tr ·	1941-43

A comparison with the most recent of the surveys indicates some changes in the marshy shoreline of James River. T-8336 supersedes all of above surveys in common areas for chart construction or maintenance use.

63. Comparison with Maps of Other Agencies:

Charles City, Virginia

1:62,500

1918, reprinted 1944

T-8336 completely supersedes the NW quarter of the above map.

- 64. Comparison with Contemporary Hydrographic Surveys: None
- 65. Comparison with Nautical Charts:

Chart 531

1:20,000

12th Edition 1947

Some shoreline changes as noted under 62, above, should be applied to the chart.

66. Adequacy of Results and Future Surveys:

This map complies with all instructions and with National Map accuracy standards as evidenced by map accuracy tests mentioned in the Field Edit Report.

67. Junctions:

East with T-8335 North with T-8609

South with T-8321 except for the Charles City-County and Chesterfield County line. There is still some question as to the legal location of this line, that

is, as to whether it follows the low water line along the south shore of James River as shown on the adjoining USGS quad "Dutch Gap" (Ed. of 1943) and T-8336 or the center of the river as shown on the 1918 edition of USGS "Charles City" and T-8321. The County Clerk of Charles Cith County states that he is not positive but is of the opinion the line follows the low water mark. (See note in reply to Field Editor's letter filed in this report)

West with AMS Dutch Gap, 1:25,000.

Edition of 1949 (copied from USGS Dutch Gap, 1:31,680 edition of 1943).

A horizontal position difference of about 2mm along the south half of this sheet edge makes the completion of this junction impractical without exceeding allowable accuracy tolerances. A horizontal accuracy test at the junction proves the accuracy of T-8336. (See 53 of Field Edit Report.)

Reviewed by:

APPROVED:

1

Chief, Review Photogrammetry Division Chief, Nautical Chart Branch

Charts Division

Report on application of hydrography filed with T 8319