

8331

Diag. Cht. No. 78-4.

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey Topographic

Field No. CS-289 W1 Office No. T-8331

LOCALITY

State Virginia

General locality York River

Locality Gloucester

1948-52

CHIEF OF PARTY

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

LIBRARY & ARCHIVES

DATE May 15, 1958

8331

DATA RECORD

T-8331

Project No. (II): CS-289W1 Quadrangle Name (IV): GLOUCESTER

Field Office (II): Baltimore, Md

Chief of Party: Fred E. Peacock

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

Radial Plot = Leslie E. Lande
Officer in Charge:

Compilation = Louis J. Reed

Instructions dated (II) (III):

(II) = Photogrammetry Instructions No. 17
(III) = Photogrammetry ManualCopy filed in Division of
Photogrammetry (IV)

Office Files

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

DEC 19 1957

Date received in Washington Office (IV):

Date reported to Nautical Chart Branch (IV):

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 (5) refer to sounding datum

i.e., mean low water or mean lower low water

Reference Station (III):

Lat.:

Long.:

Adjusted

~~Unadjusted~~

Plane Coordinates (IV):

State:

Zone:

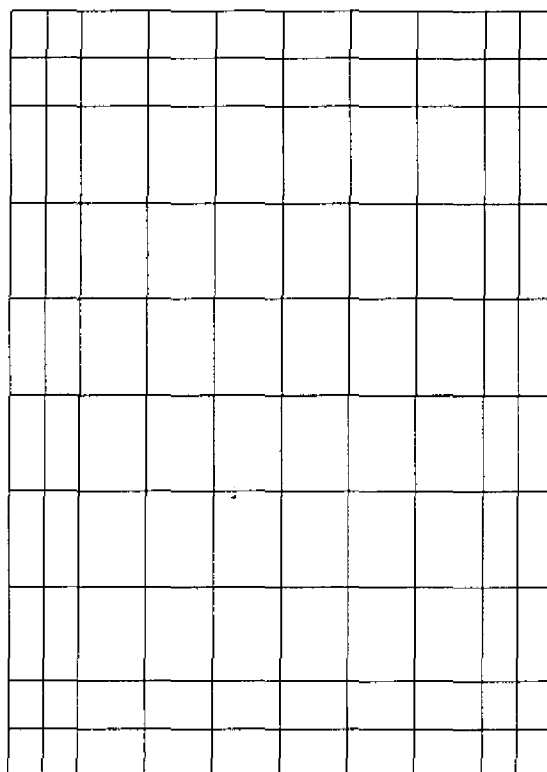
Y=

X=

1. Virginia State Grid, South (10,000 ft interval)
2. U.S. Military Grid, Zone A (1,000 yard interval)
3. Universal Transverse Mercator, Zone 18 (1,000 meter interval)

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)
(H) (III)

The contours were delineated on the Reading Plotter, model A, by Clarence E. Misfeldt assisted by Robert L. Sugden as student instrument operator.

DATA RECORD

Field Inspection by (II): Fred E. Peacock Date: 1944

Planetable contouring by (II): None Date:

Completion Surveys by (II): E.T. Jenkins Date: May 1952

Mean High Water Location (III) (State date and method of location): *Apparent shoreline along two small streams on western edge of quad is all the shoreline on the quad. This line was taken from 1948 photographs.*
~~The shoreline must be dated 1944. The MHWL was indicated on 1942 9-lens photographs during 1944 field inspection, which was used as a guide during 1952 delineation using 1948 instrument photographs.~~

Projection and Grids ruled by (IV): Jack Allen on the Reading Ruling Machine Date: 31 Oct 51

Projection and Grids checked by (IV): Howard D. Wolfe Date: 1 Nov 51

Control plotted by (III): John B. McDonald Date: 9 Nov 51

Control checked by (III): Charles E. Cook and Louis J. Reed Date: 9 Nov 51

Radial Plot of ~~Stereoscopy~~ ~~Control Extension~~ by (III): Roscoe J. French and William D. Harris Date: 9 Nov 51

~~delineation by~~ ~~Stereoscopic Instrument~~ ~~contouring~~ (III): ~~Planimetry~~ ~~Contours~~ Clarence E. Misfeldt Date: 12 Dec 51

~~compiled~~ ~~Manuscript delineated~~ by (III): Henri Lucas and Robert L. Sugden Date: 19 Dec 51

Photogrammetric Office Review by (III): None Date:

Elevations on Manuscript checked by (II) (III): Louis J. Reed Date: 19 Dec 51

Camera (kind or source) (III): USC&GS 9-lens camera, model B, f=8.25 inches.

Number	Date	PHOTOGRAPHS (III) Time	Scale	Stage of Tide
22,261				
62				
63				
65		clock		
66	30 Mar 48		1:20,000	
67		stopped		
68				
89				
22,290				

Tide (III)

Reference Station:
Subordinate Station:
Subordinate Station:

Ratio of Ranges	Mean Range	Spring Range

Washington Office Review by (IV): *C. Theurer*

Date: *12-16-52*

Final Drafting by (IV): *J Frazier*

Date: *2-10-58*

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

Date: *2-20-58*

Proof Edit by (IV):

Date:

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

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:

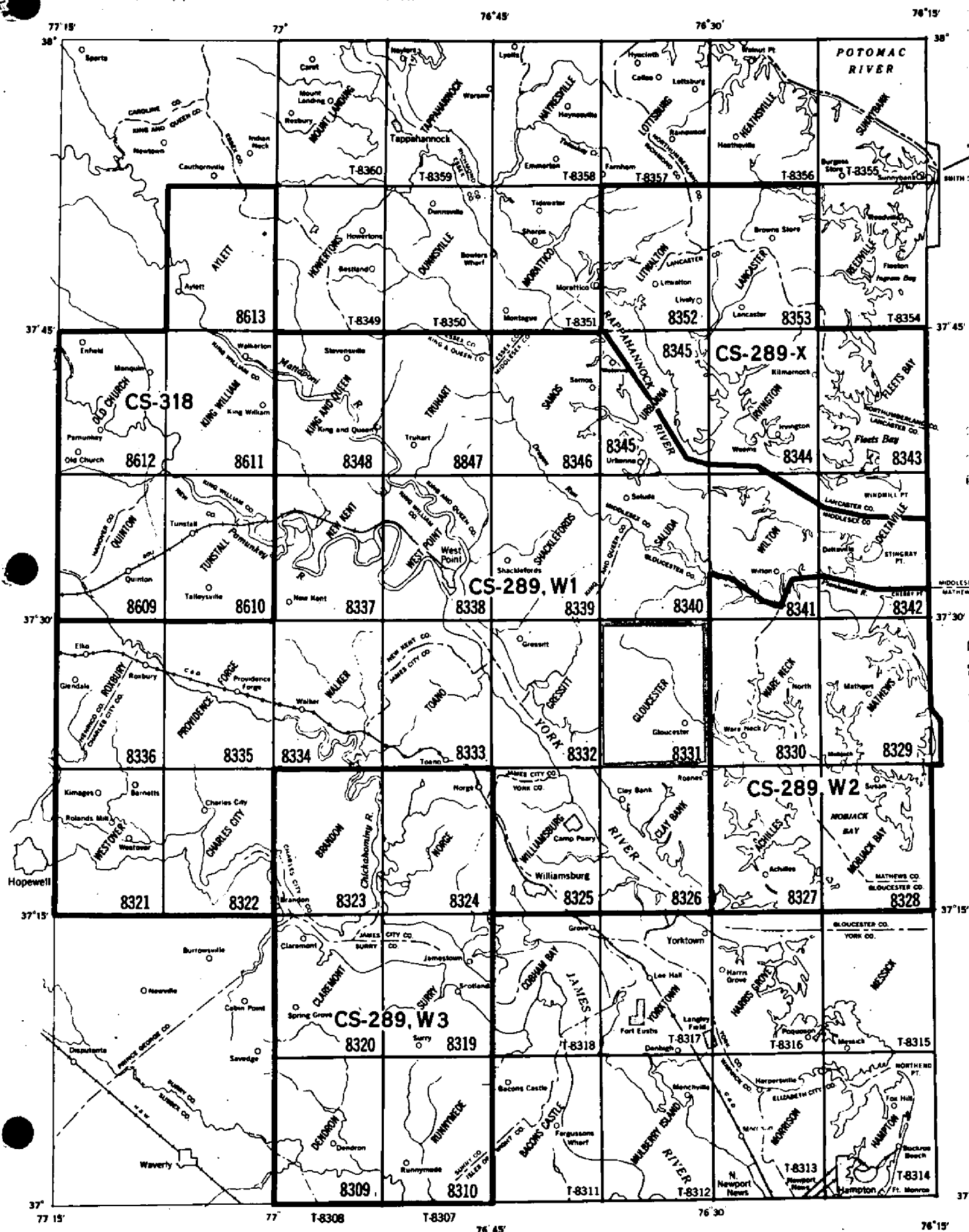
Number of Recoverable Photo Stations established (III):

Number of Temporary Photo Hydro Stations established (III):

Remarks:

TOPOGRAPHIC MAPPING PROJECT CS-289-318 (47)

VIRGINIA, Rappahannock River to James River



Summary T- 8331

Topographic mapping Project CS-289 is divided into six subprojects: CS-289a, b, x, W-1, W-2, and W-3. Information concerning Project 289 in its entirety will be included in the Project Completion Report. T-8331 is one of seventeen standard 7.5 minute quadrangles and parts of three quadrangles that are included in CS-289 W-1. This area was compiled by the Reading Plotter.

This subproject covers an area between the Rappahannock and the James Rivers including the York, Pamunkey, Mattaponi and Piankatank Rivers. Principal cities of the area are West Point and historically important Williamsburg and Yorktown.

The portion of CS-289 W-1 north of latitude $37^{\circ} 30'$ was completed in 1947 through 1949 and the maps were published by the Geological Survey 1949 through 1951. The compilation of the southern part of this subproject was resumed and completed in 1952. It will be field edited in 1952 and 1953. The Army Map Service published preliminary copies of T-8325, T-8326, and T-8332 that will be revised when the field edit is complete.

The maps of this project are to be published at 1:24,000 scale by the Geological Survey. A cloth-backed lithographic print of the original map manuscript at compilation scale, 1:20,000 and a cloth-backed color print of the published quadrangle, together with the descriptive report, will be filed in the Bureau Archives.

LEVELING
FIELD ~~INFORMATION~~ REPORT

5. Vertical Control

Date Started October 29, 1945

Date Completed January 1, 1946

3rd Order Levels 6.0 linear miles

4th Order Levels 54.6 linear miles

Recovery:

Existing vertical control was recovered and pricked in the spring of 1944 by the War Mapping Field Party. No attempt was made to determine the adequacy of the work; it was felt the Field Edit Party would pick up any discrepancies which might exist.

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

B-296-1945	E-296-1945
C-296-1945	F-296-1945
D-296-1945	G-296-1945

Photo Nos.:

The following nine lens photos were used: Nos. 12683, 12863, 12864, 12865.

Methods:

About 6.0 linear miles of 3rd Order Levels were completed by Mr. Alfred R. Knaack, Photogrammetric Aid; using Instruments and methods as prescribed by the Division of Geodesy.

About 54.6 linear miles of 4th Order Levels were completed by Mr. Thomas W. Merriken Jr., Engineering Aid. Elevations were carried by trigonometric methods using a 7" Berger Theodolite equipped with stadia hairs and Simmons-Adams leveling rods. All loops were closed on either an existing bench mark or a previously determined elevation with the exception of the loop involving spot elevation GL - 89. This loop was closed on tidewater.

Level Information appears on photos in blue ink. The code letters GL prefix all spot elevations. The following code was used to segregate the closed elevations from the unclosed elevations:

1. Elevations circled indicate the loop was not closed on a known elevation.
2. Elevations underscored by a solid line indicate the loop was closed on a previously determined elevation or an existing bench mark.

The average closure of the 4th order loops was 0.5ft. There was no 4th order loops known to exceed the required limits of accuracy.

Near the eastern junction and northern part of the quad is a spot elevation requested by the Washington Office. Due to the excessive cutting of timber after photography it was not possible to determine position economically, so the line was not run.

On the eastern limits of the area the 4th order spot elevations from proj CS 289-W2 were accepted and transferred in purple ink. The code symbols for the transferred points are JC, JE, JR, JF, JQ, and JU.

For transferring the junction a request was made for level photos, and contouring photos were furnished, which showed elevations in the areas to be contoured. It is noted on the level layout index sheet, that INDIAN ROAD was not completed at this time. If the level photos for proj CS 289-W2 are examined it is felt that spot elevations will be found for this road.

Submitted with photos is a layout showing the approximate position of the elevations. Also on the first page of each volumn is the following information: Loop (spot elevation) page, closure, linear miles, field notes checked by, adjustment, checked by, inked on photo No., copy checked by, and remarks.

submitted by:

Thos W. Merriken, Jr
Engrn Aid

Approved 1 Jan 46 by:

Harland R. Cravat
Photogrammetric Engr.

SUPPLEMENTAL VERTICAL CONTROL REPORT

5. Vertical Control:

To determine the accuracy of the trig levels of this quad about ten linear miles were rechecked by Matthew A. Stewart, using wye leveling methods.

A total of 18 spot elevations were tested and the correct wye level elevations entered on the photos in red ink under the trig spot elevations. For all use the elevations entered in red ink is to be considered correct. The blue may be stricken out after the office has had an opportunity to inspect the values.

-Results-

12 spot elevations fell within an accuracy of 0 and 0.5 feet of error.

4 spot elevations fell within an accuracy of 0.5 to 1.0 feet of error.

2 spot elevations exceeded one foot of error with the maximum error being 2.4 feet.

submitted by:

Hal and R. Cravat
Photogrammetric Engr

RADIAL PLOT REPORT

21-30:

Refer to Descriptive Report to accompany Map
Manuscript T-8325. The area of this quad is
included in that radial plot.

Louis J. Reed, Chief
Stereoscopic Mapping Section
Photogrammetric Engineer

MAP T. 8331 PROJECT NO. 289 (47) SCALE OF MAP 1:2000 SCALE FACTOR 1

STATION	SOURCE OF INFORMATION (INDEX)	DATUM	LATITUDE OR Y-COORDINATE LONGITUDE OR X-COORDINATE	DISTANCE FROM GRID IN FEET, OR PROJECTION LINE IN METERS		1' in M 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)
P.T.S. 173A USGS	USGS		37 29 56.4	30.829 ✓		1849.7	1738.8 ✓	111.0 ✓	869.3 ✓	655.5
ARKLOOKOUT TOWER, 1942	463 113 769-14		76 31 50.5	24.563 ✓		1473.8	7240.4 ✓	233.4 ✓	620.2 ✓	116.7
GLoucester MON. Water Tank 1942	464 113 769-14		37 26 17.377	30.829 ✓		1849.7	535.7 ✓	1314.0 ✓	267.8 ✓	637.0
WOODS, 1942	456 111 769-15		76 34 43.976	24.584 ✓		1475.0	1081.1 ✓	393.9 ✓	540.6 ✓	196.9
WOODS, 1942 Sub Point.			37 24 54.612	30.829 ✓		1849.7	1683.6 ✓	166.1 ✓	84.8 ✓	83.0
			76 32 08.431	24.590 ✓		1475.4	207.3 ✓	1268.1 ✓	103.6 ✓	634.0
			37 29 27.737	30.829 ✓		1849.7	855.1 ✓	794.6 ✓	427.6 ✓	497.3
			76 36 20.050	24.566 ✓		1474.0	492.5 ✓	981.5 ✓	246.2 ✓	490.8

Plotted & checked by Carl 10 Nov 51

1 FT. = 3048006 MICRONS
COMPILED BY McDonald
of Boston

DATE 9 Nov 51

CHECKED BY Good

DATE 9 Nov 51

COMPILATION REPORT31. Delineation:

This map was delineated on the Reading Plotter, model A, using 1948 9-lens photos. Photo coverage and field inspection were complete, but the field inspection was rather old having been done in 1944. However, it was used as a guide during instrument delineation and superseded whenever the instrument photos indicated a change. No areas in this quad have been left incomplete but a thorough field edit will be required to bring the work up to date.

32. Control:

Horizontal control was considered adequate for the control of the plot which included this quad. For details see side-heading 23 of the radial plot report included in the Descriptive Report accompanying T-8325.

Vertical control for contouring purposes was adequate although additional elevations would have been useful in particular locations. Vertical control was furnished as photo-identified points in level lines run along nearly all roads in the area with spur lines extended into inaccessible areas within the network of roads. Refer to the Field Leveling Report included in this report.

33. Supplemental Data:

a. Special Reports: None.

b. Instrument Photos (metal-mounts):

22,261, 62, 63, 65, 66, 67, 68, 89, and 90.

c. Field Inspection Photos:

12,682, 683, 684, 863, 864, and 865.

34. Contours and Drainage:

Instrument photography was suitable for contouring purposes and no areas of questionable contours remain. The instrument photos were exposed in the spring when the majority of the leaves were off the trees permitting maximum vision of the ground. Some coniferous trees were in the area but they did not exist in such large groups that contouring thru them was impossible. The only drawback to the instrument photos was in the assembly of the photos themselves, requiring the use of more correction curves than normal.

35. Shoreline and Alongshore Details:

This Quadrangle is entirely inland except for 2 small tidal streams.

The shoreline was indicated on the field inspection photos and it was used as a guide during instrument delineation. It was out-of-date at the time of compilation and therefore should be revised before publication of the map. No low-water or shoal lines were indicated or delineated.

36. Offshore Details: Not applicable. *The apparent shoreline along these streams was taken from the 1948 photographs.*37. Landmarks and Aids: None38. Control for Future Surveys: None39. Junctions:

Only one of the four junctions with this quad is not in complete agreement. It is T-8330 to the east which was worked by planetable methods which may account for the varying scale at the match edge; it would agree for a few inches, then fall off, etc. T-8332 to the west and T-8326 to the south are in good agreement since they were compiled simultaneously with this quad. T-8340 was made a few years ago by the 9-lens method and agreed very well; it lies to the north and a good junction remains. Not attempt has been made at this time to correct the poor junction with T-8330; the positioning of detail by this survey is considered very strong and it is left in that position at the junction on the manuscript.

40. Horizontal and Vertical Accuracy: *All junctions were corrected during field edit and review.*

This map is believed to meet map accuracy standards in both respects, the horizontal scale being 1:20,000, and the contour interval being 20ft.

46. Comparison with existing Maps:

USGS Quad Map "WILLIAMSBURG, VA", 1:62,500, 1906 edition, reprinted 1945.

47. Comparison with Nautical Charts:

YORK RIVER * YORKTOWN TO WEST POINT, No.495 1:40,000, August 1931.

48. Geographic Name List: See separate page, following.49. Notes for the Hydrographer: Not applicable.50. Compilation Office Review: Time element would not permit.

Approved and Forwarded by:

Louis J. Reed
 Lewis J. Reed, Chief

Stereoscopic Mapping Section
 Photogrammetric Engineer

Submitted by:

William D. Harris
 William D. Harris
 Cartographer-Photogrammetric

GEOGRAPHIC NAMES

Survey No. T-8321

GEOGRAPHIC NAMES										
Survey No. T-8331										
Name on Survey										
	On Chart No.	On previous survey No.	On U. S. quadrangle Maps	From local information	On local Maps	P. O. Guide or Map	Rand McNally Atlas	U. S. Light List		
A	B	C	D	E	F	G	H	K		
✓ Virginia										1
Gloucester County										2
James River										3
✓ U.S. 17										4
✓ Titamnor Trail - George Washington Memorial Highway										5
✓ Va. No. 14										6
(north of Gloucester same as U.S. 17)										
✓ Va. N. 217										7
✓ Allmondsville Road										8
✓ Gloucester										9
✓ Gloucester County Training School										10
✓ Short Lane										11
(crossroads settlement)										
✓ Ice Pond										12
✓ Zion Poplar Church (Baptist)										13
✓ Money										14
✓ Evans Aerfield										15
✓ Fox Mill Run										16
✓ Deacons Neck										17
✓ Edgehill										18
✓ Ware Church										19
(Episcopal)										
✓ Wan										20
✓ Beaverdam Swamp										21
✓ Botetourt High School										22
✓ Church of the Little Flower										23
(Catholic)										
✓ Indian Road										24
✓ Fiddlers Bridge										25
✓ Fiddlers Bridge Road										26
✓ Bellamy P.O.										27

GEOGRAPHIC NAMES

Survey No.

GEOGRAPHIC NAMES											
Survey No.											
Name on Survey		A	B	C	D	E	F	G	H	K	
Walter Reed's Birthplace ✓											1
Belroi ✓											2
York River Road ✓											3
Walter Reed School (Aband) ✓											4
Bellamy Memorial Museum ✓											5
Bellamy Church ✓ (Methodist)											6
Leigh Pond ✓											7
Capahosic Road ✓											8
Valley Front ✓											9
Sassafras ✓											10
Bland Creek ✓										(B&N)	11
Stubbs Pond ✓											12
Craney Creek ✓											13
Ark ✓											14
Union Chapel ✓											15
Wareham ✓											16
Beech Swamp ✓											17
Pinero ✓											18
Ebenezer Church ✓											19
Ashley Hill Road ✓											20
Petersworth Church (Ruins) ✓											21
Church Hill ✓ (Settlement)											22
Poplar Spring Branch ✓											23
Woods Crossroads ✓											24
Bacon's Quarters ✓ (historical site)											25
Woods Mill Swamp ✓											26
Names underlined in red approved 12-12-52. L. Heck											27
											M 234

FIELD EDIT REPORT

QUADRANGLE T-8331

PROJECT CS 289-W-1

H. A. Paton, Chief of Party

The field edit of this quadrangle was accomplished, intermittently, during the period 11 February to 9 May 1952.

51. METHODS

The detail in this quadrangle was checked visually from a truck by travelling all passable roads, and by walking, where necessary, in those areas that required inspection.

The field edit information is shown on double weight field edit sheet sections numbered 1 to 4, on the discrepancy print, and on nine lens photographs Nos. 22262, 22263, 22266, and 22267.

All additions were made on the photographs by measurements from the nearest identifiable feature. Deletions, contour corrections, and vertical accuracy tests were made on the field edit sheets.

A legend of the colored inks used is shown on the field edit sheet.

52. ADEQUACY OF COMPILATION

The map compilation will be complete with the application of the field edit information.

53. MAP ACCURACY

No horizontal accuracy test was required but from visual observations and check points used for plane table traverses, the horizontal accuracy appears to be well within map accuracy standards.

Two vertical accuracy tests were made in this quadrangle. The tests were by standard plane table profile methods, and the location of the ties is shown on double weight sections of T-8331.

Test No. 1 was made near the southwest corner of the survey and of the 68 points tested 4% were in error between 1/2 and a full contour interval and 96% were within 1/2 contour interval or better.

Test No. 2 was made near the southeast corner and of the 52 points tested approximately 10% were in error between 1/2 and a full contour interval and 90% were from one half contour interval or better. A summary and abstract of the vertical accuracy tests is attached to this report.

It is believed that the map meets National Map Accuracy Standards after corrections by the field editor.

54. RECOMMENDATIONS

None

55. EXAMINATION OF PROOF COPY

The field editor is of the opinion that none of the residents in the area are capable enough to examine a proof copy of the map for possible errors.

Respectfully submitted
9 May 1952

Elgan T. Jenkins
Elgan T. Jenkins
Carto. Survey Aid

Approved and Forwarded

Hubert A. Paton

Hubert A. Paton,
Comdr. U.S.C. & G. S.
Officer in Charge

TEST No. 1 SW Corner

TOPOGRAPHIC MAPPING

Summary and Abstract of Vertical Accuracy Test

Project No. CS-289-W1 Quad. No. T-8331 Quad Name Gloucester
 Method of Testing Standard Plane Table
 Tested by E.T.J. Date Feb. 19 & 20, 1952 Evaluated by E.T.J.
 Contour interval 20 ft. 0.6 M.M. allowable shift at 1:20,000
 map or manuscript scale.

68 Total number of points tested
 95.6% of points within 1/2 contour interval or better
 65 Test points correct within 1/2 contour interval
 3 Test points in error between 1/2 and full contour interval
 0 Test points in error over full contour interval

Ft. Test Elev.	Ft. Map Elev.	Ft. Error	Ft. Error after shift	Remarks	Ft. Test Elev.	Ft. Map Elev.	Ft. Error	Ft. Error After shift	Remarks
58.0	58.0	0.0	-	-	74.0	79.0	5.0	0.0	--
40.0	40.0	0.0	-	-	43.0	39.0	4.0	0.0	--
55.0	47.0	8.0	0.0	-	78.0	80.0	2.0	0.0	--
29.0	29.0	0.0	-	-	78.0	78.0	0.0	0.0	--
37.0	40.0	3.0	0.0	-	62.0	60.0	2.0	0.0	--
51.0	31.0	20.0	13.0	Contour corr.	35.0	40.0	5.0	3.5	--
38.0	40.0	2.0	0.0	-	75.0	80.0	5.0	0.0	--
28.0	25.0	3.0	3.0	-	79.0	80.0	1.0	0.0	--
37.0	40.0	3.0	0.0	-	81.0	80	1.0	0.0	--
45.0	50.0	5.0	0.0	-	65.0	65.0	0.0	--	--
61.0	60.0	1.0	0.0	-	60.0	60.0	0.0	--	--
58.0	60.0	2.0	0.0	-	58.0	60.0	2.0	0.0	--
65.0	65.0	0.0	0.0	-	36.0	40.0	4.0	0.0	--
64.0	60.0	4.0	0.0	-	21.0	22.0	1.0	0.0	--
68.0	64.0	4.0	3.0	-	54.0	48.0	6.0	0.0	--
80.0	80.0	0.0	--	-	50.0	40.0	10.0	8.0	-- Contour corr.
81.0	75.0	6.0	3.0	-	43.0	40.0	3.0	0.0	--
75.0	70.0	5.0	3.0	-	18.0	20.0	2.0	0.0	--
55.0	60.0	5.0	0.0	-	76.0	80.0	4.0	2.0	--
62.0	60.0	2.0	0.0	-	81.0	84.0	3.0	3.0	--
64.0	58.0	6.0	5.0	-	82.00	78.0	4.0	4.0	--
62.0	62.0	0.0	--	-	76.0	81.0	5.0	2.0	--
62.0	58.0	4.0	3.0	-	78.0	80.0	2.0	2.0	--
32.0	36.0	4.0	4.0	-	60.0	72.0	12.0	11.0	-- Contour corr.
41.0	40.0	1.0	0.0	-	51.0	60.0	9.0	8.0	--
51.0	60.0	9.0	1.0	-	40.0	50.0	10.0	8.0	-- Contour corr.
38.0	46.0	8.0	3.0	-	60.0	60.0	0.0		
53.0	60.0	7.0	3.0	-	45.0	60.0	15.0	13.0	Contour corr.
74.0	75.0	1.0	0.0	-	74.0	78.0	4.0	3.0	
77.0	80.0	3.0	2.0	-	59.0	60.0	1.0	0.0	
67.0	60.0	7.0	0.0	-	83.0	80.0	3.0	0.0	
45.0	40.0	5.0	3.0	-	82.0	80.0	2.0	0.0	
33.0	35.0	2.0	0.0	-	75.0	84.0	9.0	8.0	Contour corr.
33.0	35.0	2.0	0.0	-					
59.0	59.0	0.0	--	-					

TEST NO. 2 - SE Corner

TOPOGRAPHIC MAPPING Summary & Abstract of Vertical Accuracy Test

Project No. CS-289W-1 Quad. No. T-8331 Quad. Name Gloucester
Method of Testing Standard Plane Table
Tested by E.T.J. Date Feb. 12 & 13, 1952 Evaluated by E.T.J.
Contour Interval 20 ft. 0.6 M.M. allowable shift at 1:20,000
map or manuscript scale.

52 Total number of points tested
90.4% of points within 1/2 contour interval or better
47 Test points correct within 1/2 contour interval
5 Test points in error between 1/2 and full contour interval
0 Test points in error over full contour interval

Test Elev.	Map Elev.	Error	Error after shift	Remarks	Test Elev.	Map Elev.	Error	Error after shift	Remarks
72.0	67.0	5.0	4.0		37.0	40.0	3.0	1.0	
58.0	55.0	3.0	1.0		31.0	40.0	9.0	8.0	
62.0	51.0	11.0	11.0	Contour corrected	31.0	40.0	9.0	8.0	
26.0	30.0	4.0	3.0		27.0	29.0	2.0	1.0	
55.0	58.0	3.0	0.0		22.0	19.0	3.0	0.0	
66.0	60.0	6.0	5.0		20.0	24.0	4.0	2.0	
68.0	63.0	5.0	4.0		61.0	52.0	9.0	6.0	
36.0	16.0	20.0	16.0	Contour corrected	45.0	51.0	6.0	3.0	
36.0	16.0	0.0			62.0	62.0	0.0		
37.0	26.0	9.0	4.0		62.0	60.0	2.0	1.0	
34.0	37.0	3.0	1.0		68.0	60.0	8.0	7.0	
60.0	63.0	3.0	2.0		60.0	44.0	16.0	7.0	
56.0	58.0	2.0	1.0		30.0	33.0	3.0	2.0	
23.0	30.0	7.0	5.0		44.0	42.0	2.0	2.0	
28.0	35.0	7.0	1.0		72.0	72.0	0.0		
46.0	49.0	3.0	0.0		60.0	60.0	0.0		
65.0	64.0	1.0	0.0		56.0	53.0	3.0	1.0	
47.0	55.0	8.0	4.0						
64.0	64.0	0.0							
71.0	71.0	0.0							
71.0	71.0	0.0							
72.0	72.0	0.0							
70.0	70.0	0.0							
43.0	57.0	14.0	11.0	Contour corrected					
31.0	53.0	22.0	12.0	Contour corrected					
20.0	37.0	17.0	16.0	Contour corrected					
57.0	62.0	5.0	5.0						
55.0	60.0	5.0	0.0						
17.0	26.0	9.0	9.0						
41.0	42.0	1.0	0.0						
43.0	50.0	7.0	6.0						
59.0	58.0	1.0	0.0						
55.0	60.0	5.0	0.0						
41.0	40.0	1.0	0.0						
4.0	59.0	5.0	3.0						

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Topographic Map

61. General Statement.-This map is one of ^{Six} ~~four~~ topographic quadrangles. that were compiled on the Reading Plotter, given a preliminary review, smooth drafted and forwarded to the Army Map Service for publication in February 1952. This map was not published as one of this group. A final copy of this manuscript after field edit and review will be forwarded to the A.M.S. so that the preliminary copy can be corrected.

62. Comparison with Registered Topographic Surveys.-

T-2745 1:20,000 1906

This map supersedes this survey for nautical charting purposes.

63. Comparison with Maps of other Agencies.-

USGS Williamsburg Quadrangle 1:62,500 1904
No extensive differences were noted.

64. Comparison with Contemporary Hydrographic Surveys. - None

65. Comparison with Nautical Charts.-

Chart No. 495	1:40,000	1931	Corr. to 1951
" " 494	"	1943	" " "

Only a small area of this quadrangle is within the detail limits of the charts. Two narrow streams on the western edge of this manuscript are tidal.

66. Adequacy of Results.-See Field Edit report for results of accuracy tests on this quadrangle. This map conforms with the National Standards of Map Accuracy.

Reviewed by: *Charles Shaver*

L.C. Lande

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Div. of Photogrammetry

Max B. Little

Chief, Nautical Chart Branch
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