

8323

8324

Daig. Cht. No. 78-1.

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-8323
T-8324

LOCALITY

State Virginia
General locality Chickahominy River
Locality Brandon - Norge

1946-53

CHIEF OF PARTY

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

LIBRARY & ARCHIVES

DATE June 5, 1958

B-1870-1 (1)

DATA RECORD

T-8323 and 8324

Project No. (II): CS-289 W1 Quadrangle Name (IV): T-8323 = BRANDON
 T-8324 = NORGE

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):

Copy filed in Division of
 Photogrammetry (IV)

(II) = Photogrammetry Instructions No. 17
 (III) = Photogrammetry Manual

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): FEB 26 1952

Date reported to Nautical Chart Branch (IV): MAR 4 1952

Applied to Chart No. 495

Date: 1953

Date registered (IV): 1 April 1958

Publication Scale (IV): 1:24000

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:

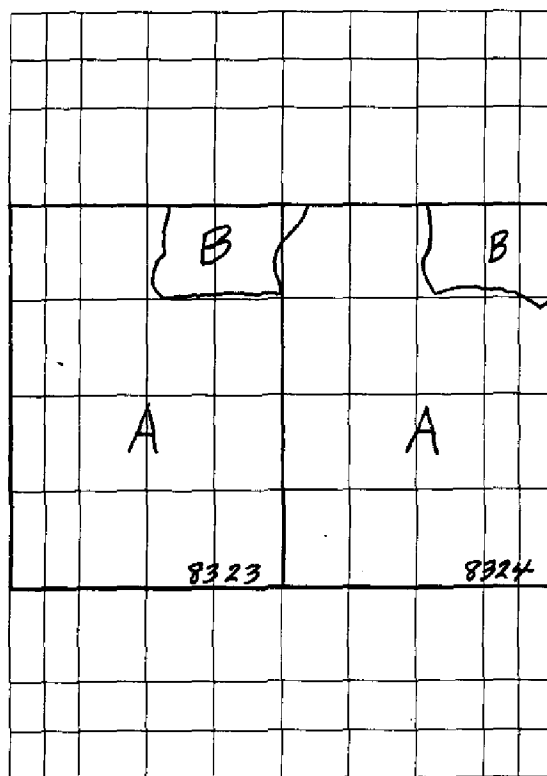
Y=

X=

1. Virginia State Grid, South (10,000 ft interval)
2. U.S. Military Grid, Zone A (1,000 yd 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)

(X) (III)

Area A: Contoured on the Reading Plotter,
model B, by Orvis N. Dalbey and Louis Levin.

Area B: Contoured on the Reading Plotter,
model A, by Clarence E. Misfeldt and
William D. Harris.

DATA RECORD

Field Inspection by (II): Fred E. Peacock (*Cravat*)

Date:

*Wor Mapping
Party No 1*
~~1944~~ 1945

Planetable contouring by (II): None

Date:

Completion Surveys by (II): E. T. Jenkins

Date:

T 8 3 2 3 - 1953
T 8 3 2 4 - 1952

Mean High Water Location (III) (State date and method of location): The MHWL was indicated on 1942 9-lens photos during 1944 field inspection, and used as a guide during 1951 delineation using 1948 photographs. Therefore this shoreline is dated 1944.

Projection and Grids ruled by (IV): Jack Allen on the Reading Ruling Machine.

Date: 3 Dec 51

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

Date: 4 Dec 51

Control plotted by (III): Robert L. Sugden

Date: 30 Jan 52

Control checked by (III): Louis J. Reed

Date: 30 Jan 52

Radial Plot ~~not~~ Stereoscopic
Control extension by (III):Roscoe J. French and
William D. Harris

Date: 9 Nov 51

Stereoscopic Instrument ~~not~~ *delineation*
Control extension by (III):Planimetry Orvis N. Dalbey
Louis Levin
Contours Clarence E. Misfeldt
William D. Harris

Date: 31 Jan 52

compiled
Manuscript ~~not~~ *revised* by (III):Robert L. Sugden
John B. McDonald

Date: 18 Feb 52

Photogrammetric Office Review by (III): Louis J. Reed

Date: 20 Feb 52

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

Louis J. Reed

Date: 20 Feb 52

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

PHOTOGRAPHS (III)

Number	Date	Time	Scale	Stage of Tide
22283				
284				
285				
286				
287				
288				
22301		Clock		
302	30 Mar 48		20,000	
303		Stopped		
304				
305				
22314				
316				
317				
318				
319				

See Field Inspection Reports and
Field Edit Reports for additional photographs.

Tide* (III)

Reference Station:

Subordinate Station:

Subordinate Station:

Hampton Roads
Chickahominy River Bridge (Barrett's Bridge)
Shipyard Landing

Ratio of Ranges	Mean Range	Spring Range
.8	1.9	2.3
.9	2.2	2.6

Washington Office Review by (IV): C. Thewer

Final Drafting by (IV):

M. Day
J. Frazier

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

Proof Edit by (IV):

Date: T-8323-11/12/53

T-8324-11/5/53

Date: T-8323-2/12/58

T-8324-2/14/58

Date: T-8323-2/24/58

T-8324-2/20/58

Date:

Land Area (Sq. Statute Miles) (III): 60 per quad

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:

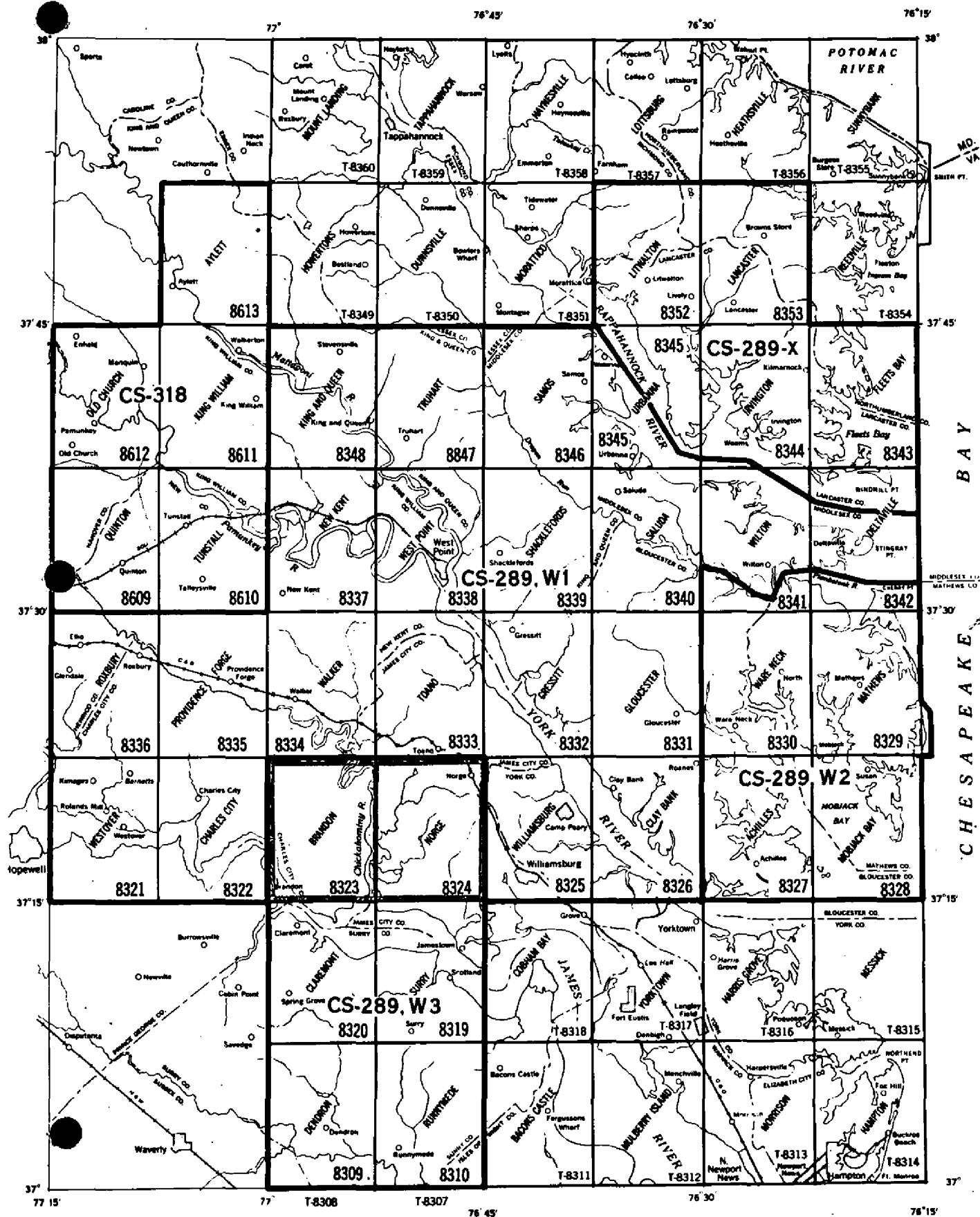
Number of Recoverable Photo Stations established (III):

Number of Temporary Photo Hydro Stations established (III):

Remarks:

TOPOGRAPHIC MAPPING PROJECT CS-289-318 (47)

VIRGINIA, Rappahannock River to James River



MAP T-T-8323 PROJECT NO. CS 289 W1 SCALE OF MAP 1:20,000 SCALE FACTOR

MAP T-T-8323 PROJECT NO. CS 289 W1 SCALE OF MAP 1:20,000 SCALE FACTOR

MAP T-T-8323 PROJECT NO. CS 289 W1 SCALE OF MAP 1:20,000 SCALE FACTOR

[illegible]

SCALE FACTOR

1 FT. = 3048006 METER	COMPUTED BY:	DATE	CHECKED BY:	DATE	M - 2388 - 12
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Summary T- 8323 + 8324

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- 8323 and T- 8324 are two of six standard 7.5 minute quadrangles that are included in CS-289 W-3. This area was compiled by Reading Plotter.

This subproject covers an area along the James River between Brandon Point and Jamestown and includes most of the Chickahominy River. Principal towns in this area are Surry, Claremont and Dendron.

These quadrangles were compiled in 1952 and 1953 and field edited 1952-1954.

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.

Descriptive Report to Accompany

Quadrangle T 8323

Projects CS 289 W-1

Virginia

Harland R. Cravat, Chief of Field Party

5. Vertical Control:

Date started 8-2-45

Date completed 11-6-45

3rd Order levels 7 linear miles

4th Order levels 37 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 the field edit party would pick up any discrepancies which might exist.

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

A 295 1945
B 295 1945
C 295 1945
D 295 1945
E 295 1945
F 295 1945
G 295 1945

Photograph Nos.

The following photos were used for new fly leveling: 13010--13012--12983

Methods:

About 7 linear miles of New Third Order Levels were completed by Mr. Alfred R. Knaack, Engineering Aid, using instruments and methods as prescribed by the Division of Geodesy.

About 38 linear miles of 4th Order Levels were completed by Mr. John R. Smith, Engineering Aid. Elevations were carried by Wye Level methods to the nearest 0.01 of a foot.

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

- 1.- Elevations circled indicate loop not closed on known elevation.
- 2.- Elevations underscored by a dashed line indicates the loop was closed on tidewater.
- 3.- Elevations underscored by a full line indicates the loop was closed by an approved elevation or a Bench Mark.

A few Wye Level lines less than one mile in length were not closed. These, however, are felt to be well within required limits of accuracy. No level loops were closed in excess of 2.0 feet allowable error. The average error of closure was about 0.4 of one 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 information: Loop, Page, Closure, Field notes checked by, Adjustment checked by, Inked on photo #, Copy checked by, and Remarks.

Submitted by,

John R. Smith
John R. Smith

Approved December 6, 1945 by:

Harland R. Cravat
Harland R. Cravat
Photogrammetric Engineer.

Descriptive Report to Accompany

Quadrangle T 8324

Project CS 289 W-1

Harland R. Cravat, Chief of Field Party

5. Vertical Control:

Date started October 11, 1945

Date completed November 30, 1945

3rd Order Levels 9.8 linear miles.

4th Order Levels 60 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 the leveling progressed. New Bench Marks are as follows:

H 296 1945

J 296 1945

K 296 1945

Photograph Nos:

The following nine lens photos were used: # 12912 --
12942 -- # 12985

Methods:

About 9.7 linear miles of new 3rd Order Levels were completed by Mr. Robert R. Kim, Photogrammetric Aid, using instruments and methods as prescribed by the Division of Geodesy.

About 60 linear miles of 4th Order Leveling was completed by Messers Thomas W. Merriken Jr., Engineering Aid, and John R. Smith, Engineering Aid. Elevations were carried by both direct leveling methods and trigonometric methods using a Berger 7" theodolite, equipped with stadia hairs, and Simons-Adams leveling rods. Loops longer than a mile were closed on either an existing Bench Mark, a previously determined elevation, or tidewater. Spurlines less than a mile in length were double rodged. (Double rodged is when a foot scale was read on the front of the rod, then a meter scale was read on the back of the rod. At the terminal point the spread between the foot and meter values was computed. If the spread exceeded one foot, the spur was re-run).

Level information appears on the photos in blue ink. The code letters NR prefix all spot elevations. The following system 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 dashed line indicate the loop is closed on tidewater, or is a double rodged line.
- 3.- Elevations underscored by a solid line indicate the loop is closed on a previously determined elevation or a Bench Mark.

The average closure of the 4th Order loops was 0.7 of one foot. There were no 4th Order loops known to exceed the required limits of accuracy, except the loop with spot elevations NR 22 to NR 26* inclusive being involved. The loop was run twice, on different days, and since they agreed very closely no further investigation was made. The loop started at TA 156 and ended at tidewater. The error of closure, as computed by the field party, was 3.5 feet. Since an elevation line checked reasonably well, it was felt the tide prediction was improperly interpreted.

On the eastern junction and central part of the quadrangle is a power line. Spot elevations were requested on the power line by the Washington office. Due to the heavy growth of vegetation, a continuous level line was not run; however, a few spot elevations were established where access was possible.

*The error located on 12/12/45 — closure OK — ~~NR 26~~

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 information: Loop, Closure, Page, Field notes checked by, Adjustment checked by, Inked on photo #, Copy checked by, and Remarks.

Respectfully submitted,

Thomas W. Merriken Jr.

Thomas W. Merriken Jr.,
Engineering Aid

Approved December 7, 1945 by:

Harland R. Cravat

Harland R. Cravat
Photogrammetric Engineer

COMPILATION REPORT31. Delineation:

These two quads were delineated as a unit on the two Reading Plotters, models A and B, both instrumentants being employed simultaneously with model B doing a majority of the work as pictured on page 2 of this report. Photograph coverage was complete and field inspection was complete although neither were up-to-date; field inspection was accomplished in 1945 on 1942 photos. It was used as a guide during instrument delineation which used a later set of photo coverage taken in 1948. This complicated matters in that ground features had changed in spots and judgement had to be used to delineate the more up-to-date features though contrary to field inspection information. None-the-less, the entire area was delineated leaving no incomplete areas. A considerable amount of field completion work will be necessary to bring these maps up-to-date.

T-8324 was wanted on high priority and was taken from the Section with no more on the manuscript than a compilation of instrument worksheets. The second quad, T-8323, was given the usual full compilation treatment and therefore was as complete as possible with the information at hand before leaving the section.

32. Control:

Horizontal control was considered adequate for the control of the radial plot which included the two quads of this report plus six others to the north and east. For details, see the Radial Plot Report included in the Descriptive Report to accompany map T-8325.

Vertical control was not altogether satisfactory and caused much concern and delay. Possibly the primary reason for this was the hurried and haphazard field operations establishing this control under the stress of war-time conditions. The spacing of the elevations was quite adequate with level lines run along nearly all the roads in the area, with spur lines extended into inaccessible areas within the road network; for details, see Field Leveling Report on pages 7 thru 10 of this report. The immediate problem was that isolated elevations or even a whole line of elevations would not agree with the instrument datum established by many lines of elevations thruout a given model. In each case the field books were checked step by step as far as possible for busts in lines; when found, the situation was rectified; when not found the only thing to be done was to disregard the sour elevation or line of elevations and continue with what appeared to be the reliable datum.

33. Supplemental Data:

a. Special Reports: None

b. Instrument Photography (metal-mounts):

T-8323 = 22286, 287, 288, 301, 302, 303, 316, 17, 18, 19.

T-8324 = 22283, 284, 285, 286, 303, 304, 305, 14, 15, 16, 17.

c. Field Inspection Photos:

T-8323 = 12982, 983, 984, 985, 13010, 011, and 012.

T-8324 = 12912, 13, 14, 41, 42, 43, 44, 82, 83, 84, 85.

d. Shoreline Surveys: T-8079 and T-8080. These two quads were compiled in 1940 at 1:10,000 scale. 1:20,000 scale film positives were made of each for comparison purposes. Several differences were noted in the shoreline but no changes were made to the shoreline of these two quads because of the 10 years lapse between the compilations. The two shoreline surveys covered T-8323 only.

34. Contours and Drainage:

Instrument photography was suitable for contouring purposes and no areas of questionable contours remain. The 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 exist in the area but they were not in such large groups that contouring thru them was impossible. The only drawback to the instrument photography was in the assembly of the photos themselves; the junctions within each photo were not too well made which required the use of more correction curves than normal with better calibrated photos.

35. Shoreline and Alongshore Details:

The shoreline was indicated on the field inspection photos, and it was used as a guide during instrument delineation. The inspection was out-of-date at the time of compilation and will require close attention during field edit to bring it up-to-date. Shoal lines are shown along the Chickahominy River as instrument delineated.

36. Offshore Details:

Lone trees and groups of trees growing in the river have been positioned by the plotting instrument and are symbolized and labeled on the manuscript. This matter is brought to the attention of the Edit Section since the compilation photos used were over three years old and the condition of these trees could have changed.

37. Landmarks and Aids: None recommended.
 38. Control for Future Surveys: None. *Chart Letter 103(53) recommends the deletion of 2 landmarks and the addition of 2 new landmarks and the retention of 3 aids.*
 39. Junctions:

All existing junctions are in agreement; no quads exist to the south. On the other three sides, the quads were compiled simultaneously with the two of this report and have been made to agree at the junctions during the normal compilation procedure. *The quad to the south has been compiled and the junction checked during review.*

40. Horizontal and Vertical Accuracy:

These maps are believed to meet mapping standards in both respects, barring serious errors caused by conditions mentioned in side-heading 32 of this report. The scale of these two maps is 1:20,000 and the contour interval is 20ft. *See Field Edit Report for accuracy test results.*

41. Compilation Procedure:

To meet special time limits, quad T-8324 was delineated first and released without the normal finishing and reviewing steps being applied following compilation. The other quad, T-8323, received the full treatment. No short-cuts were taken in any of the delineation or compilation phases actually applied to either map.

46. Comparison with Existing Maps:

USGS Quad Map "TOANO, VA", 1:62,500, 1930 edition.

47. Comparison with Nautical Charts:

JAMES RIVER - JAMESTOWN ISLAND TO JORDON POINT,
No. 530, 1:40,000, September 1940.

48. Geographic Name List: Follows.

49. Notes for the Hydrographer: None

50. Compilation Office Review: Follows for T-8323, only.

Submitted by:

William D. Harris
 William D. Harris
 Cartographer-Photogrammetric

Approved and Forwarded by:

Louis J. Reed
 Louis J. Reed, Chief
 Stereoscopic Mapping Section
 Photogrammetric Engineer

PHOTOGRAMMETRIC OFFICE REVIEW

T. 8323

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. ☒

41. Remarks (see attached sheet)

Louis J. Reed
Supervisor, Review Section or Unit
Louis J. Reed, Chief
Stereoscopic Mapping Section
Photogrammetric Engineer

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

127-1
GEOGRAPHIC NAMES

Survey No.

T 8323

Name on Survey

	A	B	C	D	E	F	G	H	K	
Bachelor Point										1
Barrets Ferry Bridge										2
Barrows Creek										3
Bethany Church										4
Big Marsh Point										5
Binns Hall										6
Black Tavern — on 8322										7
Brandon										8
Brandon Point										9
Bush Neck										10
Charles City Co.										11
Chickahominy River										12
Eagle Bottom										13
Ferry Point										14
Gordon Island										15
Holdcroft										16
Holdcroft Road										17
Horse Bridge										18
Horse Bridge Road										19
James City Co.										20
James River										21
Jerusalem Church										22
Kennon										23
Kennon Creek										24
Kennon Marsh										25
Liberty Cemetery										26
Lower Trees Point Wharf										27

GEOGRAPHIC NAMES

Survey No.

T 8323

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	
Morris Creek									1
Mount Airy									2
Nattles Creek									3
Old Ferry Road									4
Old Neck									5
Old Neck Creek									6
Oldfield									7
Parsons Creek									8
Parsons Island									9
Prince George Co.									10
Ritchie Wharf									11
River Road									12
Rustic.									13
Sunken Marsh									14
The Row									15
Trees Point									16
Tomahund Creek									17
Watts Point									18
									19
									20
									21
									22
									23
									24
									25
									26
									27

Names approved

11-6-53

A. J. W.

GEOGRAPHIC NAMES

Survey No.

8324

Name on Survey	A On Chart No.	B On previous survey No.	C On U. S. quadrangle Maps	D From local information	E On local Maps	F P. O. Guide or Map	G Rand McNally Atlas	H U. S. Light List	K
Barrets Ferry Bridge									
✓ Blackstump Swamp				✓ Barrets Ferry (locality)					1
✓ Bush Neck									2
✓ Brickbat School									3
✓ Centerville									4
✓ Centerville Road									5
✓ Charles City County									6
✓ Chickahominy Church									7
✓ Chickahominy River									8
✓ Chisels Run									9
✓ Claybank Landing									10
✓ Colby Swamp									11
✓ Cranstons Pond									12
✓ Five Forks									13
✓ Gordon Creek									14
✓ Gordon Island									15
✓ Hog Neck Creek									16
James River Church									
✓ James City County									17
✓ Jolly Pond									18
✓ Lightfoot									19
✓ Little Creek									20
✓ Long Hill Swamp									21
✓ Mill Creek									22
✓ Mt. Pleasant Church									23
✓ Nayses Bay									24
✓ Nettles Creek									25
✓ New Zion Church									26

FIELD EDIT REPORT
Quadrangle T-8323 (Brandon)
Project CS-289
J. C. Sammens, Chief of Party

51. Methods.--All roads were ridden out to check their classification, to investigate questioned areas, to reclassify buildings and to visually check contours and planimetry.

Shoreline delineation was visually inspected with a skiff running close inshore.

Landmarks recommended for charting were viewed from the water and identified on the photographs.

Offshore features that could not be identified were located by cuts from triangulation stations or eccentrics thereof.

Fixed aids to navigation were located unless a check revealed they had not been rebuilt since having been located by triangulation in 1938.

Field edit information is shown on one double weight matte print used as a field edit sheet, cut into four sections and numbered 1, 2, 3 and 4, one discrepancy print, two 9 lens, 1-20,000 scale photographs #13011 and 22285 and nine single lens photographs #50-0-61, 63, 74, 76, 78, 138, 140, 142 and 144.

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.--No horizontal or vertical accuracy test was required to be made for this map. However, from visual inspection and short plane table traverses the accuracy appears to be well within specifications.

54. Recommendations.--None offered.

55. Examination of proof copy.--No one was requested to examine a proof copy of this map.

Placement of geographic names was brought to the attention of the Field Editor by residents living along the Chickahominy River. All residents contacted declare the Federal and State maps of Chickahominy River shows Watts Point and Big Marsh Point as being misplaced. A thorough investigation was

made and the placement of the names as they should be is shown on photograph #22285. A list of reliable residents for references is shown on the back of that photograph.

The name "Walkers Store" has become extinct. Local residents declare the name is no longer used.

The name "Blanks Store or Blanks Tavern" is misplaced. The name does not apply to the area shown and local information declares it never has. An enclosed county map shows the correct placement of the name.

Respectfully submitted,

Elgan T. Jenkins
Elgan T. Jenkins
Cartographic Survey Aid

Approved and Forwarded:
5 February 1953

Jack C. Sammons
Jack C. Sammons,
Capt. U.S.C. & G. S.
Officer in Charge
Sam

FIELD EDIT REPORT
Quadrangle T-8324(NORGE)
Project CS 289 W-1

H. A. Paton, Chief Of Party

51 METHODS

All roads and trails were ridden or walked over to check their classification, to investigate questioned areas, to re-classify buildings and to visually check contours and planimetry.

Shoreline delineation, shoreline features and offshore features were inspected wherever roads permitted access.

Reliable local information was relied upon to verify the number of piers along Chickahominy River.

All deletions, additions and corrections have been either shown on the field edit sheet or cross referenced to the photographs. A legend, explaining the colored inks used, is shown on the field edit sheet.

Field edit information is shown on 1 double weight matte print, used as a field edit sheet, cut into four sections and numbered 1, 2, 3 and 4, 1 discrepancy print and 4 1-20,000 scale photographs numbered 22302, 22317, 36072 and 36073.

52 ADEQUACY OF COMPILATION

The map compilation is adequate, with the exception of a few additions and corrections, and will be complete with the application of the field edit data.

53 MAP ACCURACY

The horizontal positions of the mapped details appear to be good. Plane table traverses in several areas checked well with all shown features.

Two vertical accuracy tests were made, directly on the field edit sheet, using standard plane table profile methods.

Accuracy test # 1, made near the S.W. corner, tested 43 points with no error greater than $\frac{1}{2}$ a contour interval being found.

Accuracy test # 2, made near the N.E. corner, tested 39 points 97% of which were within $\frac{1}{2}$ a contour interval or better and 3 % with an error of $\frac{1}{2}$ to 1 contour interval.

One test point was allowed for each ridge or bottom with all other test points being directly upon the contours.

53 MAP ACCURACY CONT'D.

The accuracy tests, combined with visual inspection of contours, throughout the quadrangle, indicates the vertical accuracy as being excellent.

A few incorrect elevations were noted on the map. Part of these errors were from compilation and part from the original field work. These errors appear to have caused little trouble and the contours have been checked in these areas. (See item # 32 of the Compilation Report.)

54 RECOMMENDATIONS

None

55 EXAMINATION OF THE PROOF COPY

No one, within the limits of the quadrangle, was asked to examine a proof copy of the map. However, Mr. V. D. McManus, Engineer, of 108 Washington Street, Williamsburg, Va., is interested in all maps published near Williamsburg. It is suggested that he be sent a copy of the map for examination.

No discrepancies were noted in geographic names.

Respectfully submitted by,

Elgan T. Jenkins
Elgan T. Jenkins
Oct. 13, 1952

Approved and forwarded
21 October 1952

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

JS

VERTICAL ACCURACY TEST # 1

TOPOGRAPHIC MAPPING

Summary & Abstract of Vertical Accuracy Test

Project No. CS 289W-1 Quad. No. T-8324 Quad. Name NORGE
 Method of Testing Planetable Profile
 Tested by E. T. J. Date 10/2/52 Evaluated by E. T. J.
 Contour interval 20 ft. 0.06M.M. allowable shift at 1-20,000
 map or manuscript scale.

43 Total number of points tested
100 % of points within $\frac{1}{2}$ contour interval or better
43 Test points correct within $\frac{1}{2}$ contour interval
0 Test points in error between $\frac{1}{2}$ 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
79	80	1.0	0.0		77	80	3.0	2.0	Good Express.
80	72	8.0	7.0	Con. Corr.	81	81	0.0	--	
63	60	3.0	0.0		78	80	2.0	1.0	
42	40	2.0	0.0		66	60	6.0	0.0	
36	36	0.0	--		28	38	10.0	8.0	
39	40	1.0	0.0		48	48	0.0	--	
65	60	5.0	0.0		76	76	0.0	--	
80	70	10.0	10.0	Con. Corr.					
65	60	5.0	1.0						
54	40	14.0	10.0	Con. Corr.					
26	26	0.0	--						
43	40	3.0	0.0						
59	60	1.0	0.0						
82	80	2.0	1.0						
89	88	1.0	1.0						
81	80	1.0	0.0						
76	76	0.0	--						
79	80	1.0	0.0						
78	80	2.0	1.0						
73	70	3.0	2.0						
74	80	6.0	5.0	Con. Corr.					
89	89	0.0	--						
76	80	4.0	2.0						
78	85	7.0	6.0	Con. Corr.					
81	80	1.0	0.0						
83	83	0.0	--						
75	80	5.0	3.0						
81	80	1.0	0.0						
58	60	2.0	0.0						
36	36	0.0	--						
22	20	2.0	0.0						
12	12	0.0	--						
16	20	4.0	0.0						
36	40	4.0	0.0						
60	60	0.0	--						

VERTICAL ACCURACY TEST # 2
TOPOGRAPHIC MAPPING

Summary & Abstract of Vertical Accuracy Test

Project No. CS289W-1 Quad. No. T-8324 Quad. Name NORGE
 Method of Testing Planetable Profile
 Tested by E. T. J. Date 10/3/52 Evaluated by E. T. J.
 Contour interval 20 ft. 0.6 M.M. allowable shift at 1-20,000
 map or manuscript scale.

39 Total number of points tested
97 % of points within $\frac{1}{2}$ contour interval or better
38 Test points correct within $\frac{1}{2}$ contour interval
1 Test points in error between $\frac{1}{2}$ 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
102	100	2.0	1.0		86	78	8.0	8.0	Con. Corr.
110	110	0.0	--		87	80	7.0	6.0	
101	100	1.0	1.0		119	120	1.0	0.0	
104	104	0.0	--		113	113	0.0	--	
99	100	1.0	0.0						
74	75	1.0	0.0						
78	80	2.0	0.0						
79	80	1.0	0.0						
65	60	5.0	0.0						
48	48	0.0	--						
67	60	7.0	0.0						
80	80	0.0	--						
86	86	0.0	--						
77	80	3.0	0.0						
62	60	2.0	0.0						
65	60	5.0	0.0						
73	80	7.0	0.0						
87	87	0.0	--						
82	80	2.0	1.0						
81	80	1.0	0.0						
62	60	2.0	0.0						
64	60	4.0	0.0						
80	71	9.0	4.0						
87	80	7.0	4.0						
96	100	4.0	4.0						
78	80	2.0	0.0						
68	60	8.0	0.0						
58	58	0.0	--						
82	60	22.0	13.0	Con. Corr.					
90	80	10.0	8.0	" "					
96	100	4.0	3.0						
100	101	1.0	1.0						
102	102	0.0	--						
98	100	2.0	1.0						
89	80	9.0	8.0	Con. Corr.					

Review Report T-8323
Topographic Map
November 12, 1953

62. Comparison with Registered Topographic Surveys.-

T-1337a	1:20,000	1873-75
T-1391b	"	1875
T-8079	1:10,000	1943
T-8080	"	"

This map supersedes these surveys for interior detail. The shoreline on T-8079 and T-8080 is shown in greater detail because of the scale difference and should be used for nautical charting purposes. The map manuscript should be used for recent cultural changes along shore.

63. Comparison with Maps of Other Agencies.-

USGS Toano Quadrangle 1:62,500 1930
No extensive differences were noted.

64. Comparison with Contemporary Hydrographic Surveys.-

H-7610	1:10,000	1948
H-7714	"	1946-47
H-7021	"	1944

Stumps and snags shown alongshore on the hydrographic surveys are not visible on the photographs.

Several substantial duck blinds shown on the map manuscript are not shown on the hydrographic surveys.

65. Comparison with Nautical Charts.-

Chart No. 530 1:40,000 1940

Landmark, Cupola, should be substituted for charted landmark, House (N. Chy). See Chart Letter 103(53).

The wreck charted at Ferry Point and the snag north of Barrets Ferry Bridge could not be found by the Field Editor.

66. Adequacy of Results.- See Field Edit Report, T-8324, for results of vertical accuracy test in this vicinity. This map complies with the National Standards of Map Accuracy.

Reviewed by:


C. Theurer

T-8323

APPROVED

L. C. Landy
Chief, Review Branch
Div. of Photogrammetry

Chief, Nautical Chart Branch
Division of Charts

Chief, Div. of Photogrammetry

Chief, Div. of Coastal Surveys

AD

Review Report T-8324
Topographic Map
November 5, 1953

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

62. Comparison with Registered Topographic Surveys.-

T-1337 a	1:20,000	1873-75
T-8074	1:10,000	1943
T-8075	"	1943

This map supersedes these surveys for interior detail. The shoreline on T-8074 and T-8075 is shown in greater detail because of the scale difference and should be used for nautical charting purposes. The map manuscript should be used for recent cultural changes alongshore.

The wreck shown on T-8075, south of Barrets Ferry, is not visible on the photographs.

63. Comparison with Maps of Other Agencies.-

USGS Toano Quad. 1:62,500 1930

No extensive differences were noted.

64. Comparison with Contemporary Hydrographic Surveys.-

H-7021	1:10,000	1944
H-7714	"	1946-47

Hydrography was added to the map manuscript from these surveys. No discrepancies were noted.

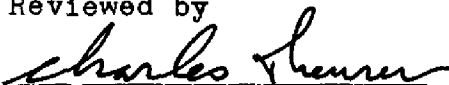
65. Comparison with Nautical Charts.-

Chart No. 530 1:40,000 1940

Landmark, Barn (S.Gab), should be deleted. See Chart Letter 103(53). Add vertical clearance for Barrets Ferry Bridge.

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

Reviewed by


C. Theurer.

APPROVED

L. C. Lande
Chief, Review Branch
Div. of Photogrammetry

Max G. Skelton
Chief, Nautical Chart Branch
Div. of Charts

J. S. Sull
Chief, Div. of Photogrammetry

J. S. Sull
Chief, Div. of Coastal Surveys

see report of T-8319 for application
of hydrography to T-8323