Original

8143

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey Air Photographic Topographic

Field No. 57 Office No. T-8143

LOCALITY

State Virginia

General locality Chesapeake Bay (Western Shore)

Locality Rappahannock River

'CHAMPLAIN' Quad. Va.

1943

CHIEF OF PARTY

F. L. Gallen

Fred. L. Peacock

LIBRARY & ARCHIVES

DATE February 6, 1945

8-1870-1 (1)

8143

Form T-1

DATA RECORD

T-8143

Quadrangle (II):
Va. Champlain ~~7½'~~ Quadrangle N3800.0 – W7652.5/7.5
~~Wakefield 15' Quadrangle~~

Project No. (II): CS-278-A

Field Office: War Mapping Field Party No. 1

Chief of Party: Wm. D. Patterson, F. L. Gallen

Compilation Office: Baltimore Field Office

Chief of Party: Fred. L. Peacock

Instructions dated (II III): March 4, 27; June 5, 24;) Aug. 13, 27; Sept. 3, 4;) 1942

~~Copy filed in Descriptive Report No. T-~~ (VI)

Completed survey received in office: 3/3/43

Reported to Nautical Chart Section: 3/43

Reviewed: 5/22/43 Applied to chart No. Date:

Redrafting Completed: 10/4/43

Registered: 1/23/45 Published: 4/4/44

Compilation Scale: 1:20,000 Published Scale: 1:31,680

Scale Factor (III): none

Geographic Datum (III): N.A. 1927 Datum Plane (III): Mean Sea Level

Reference Station (III): ~~Peed, 1934~~ OK ~~[illegible]~~ Peed, 1934

Lat.: 38° 05' 53.690" 1655.4 (194.5)m Long.: 76° 55' 37.095" 903.9 (558.1) Adjusted ~~Unadjusted~~

Va. State Plane Coordinates (VI): (South Zone)

X = 2,452,686.90 Y = 646,376.43

Military Grid Zone (VI) 'A'
overlapping 'B' zone shown by ticks

PHOTOGRAPHS (III)

Number	Date	Time	Scale	Stage of Tide
Nine Lens				
8848 - 8851 Inc.	4/15/42	12:15 - 12:19p.m.	1:20,000	0.4' above M. L. W.
8868 - 8871 Inc.	4/15/42	12:42 - 12:46p.m.	1:20,000	0.6' above M. L. W.
8872 - 8876 Inc.	4/15/42	12:50 - 12:56p.m.	1:20,000	0.7' above M. L. W.
Single Lens Soil Conservation Service Photos.				
FG 104-39 - 104-47 Inc.	4/1/37	Unknown	1:20,000	Unknown
FG 104-68 - 104-76 Inc.	4/1/37	Unknown	1:20,000	Unknown
FG 109-40 - 109-48 Inc.	4/17/37	Unknown	1:20,000	Unknown
FG 109-67 - 109-76 Inc.	4/17/37	Unknown	1:20,000	Unknown

Tide from (III): Predicted table of tides; reference station Washington, D.C. with correction to Leedstown, Va.

Mean Range: 1.5' Spring Range: 1.7'

Camera: (Kind or source) U. S. Coast & Geodetic Survey Nine lens camera

Field Inspection by: Horizontal Control: G. B. Wood date: May-June, 1942
Shoreline: C. O. Rector August, 1942
Cultural Features: G. B. Wood, H. R. Cravat, & J. N. Henningsen Aug-Dec., 1942

Field Edit by: Louis Levin date: Apr. 1943

Date of Mean High-Water Line Location (III):

Same as date of nine lens photographs

Projection and Grids ruled by (III) Washington Office date: 9/9/42

" " " checked by: Washington Office date: 9/9/42

Control plotted by: Harry L. Spaulding date: 9/24/42

Control checked by: George O. Fellers date: 9/24/42

Radial Plot by: J. Edward Deal, Jr. & Joseph Steinberg date: 10/3-9/42

Detailed by: George O. Fellers date: 10/20/42 to 2/1/43

Contours by: George O. Fellers "

Reviewed in compilation office by: Henry P. Eichert date: 2/16 - 3/1/43

Elevations on Field Edit Sheet checked by: L. G. Chambers date: Apr. 1943

STATISTICS (III)

Land Area (Sq. Statute Miles): 52.3

Shoreline (More than 200 meters to opposite shore): 20 Statute Miles

Shoreline (Less than 200 meters to opposite shore): 64 Statute Miles

Number of Recoverable Topographic Stations established: 2 stations
(T.T. sta. 18 W. also falls on Survey but no position can be given because of its proximity to Triangulation station "PEED")
Number of Temporary Hydrographic Stations located by radial plot:
Eight

Leveling (to control contours) - Statute miles: 34.6

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

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

Remarks: Contours by: G. B. Wood -- Northern Part
J. N. Henningsen -- East Side
H. R. Cravat -- South side and Southwest corner

FIELD INSPECTION REPORT
QUADRANGLE T-8143
F. L. Gallen, Chief of Party

1. DESCRIPTION OF AREA - The Rappahannock River flows across the southwestern part of the quadrangle. Adjacent to the river, except for the central part of the eastern shore, the land is low and flat or gently sloping for a few miles back from the river or until approximately the forty foot contour is reached. There is a low bank along part of the shoreline but there are several moderately extensive areas of marsh protruding into the river and there are small amounts of marsh along the tributary streams. At about the forty foot contour the land slopes steeply up to a flat or gently rolling upland with a maximum elevation of about 160 feet. This upland is deeply eroded and cut-up by streams which have steep-sided valleys north of the river and more moderate slopes south of the river, but the valleys are similar to those described in the Report for T-8114. Along one section of the eastern shore of the river the river flows along the edge of this upland and the land breaks down steeply from a maximum elevation of about 140 feet.

   Much of the flat lowland that is not too wet and the flatter ridge tops back from the river are cleared and farmed. There are evidences of farming in prior days in some areas now heavily timbered. The land not cleared is heavily timbered and has a moderate to heavy undergrowth of brush. Pine predominates on the high land and deciduous trees in the lowland.

   The soil is a mixture of sand and clay on top of sandstone and many of the Class 4 U roads are not passable in the winter.

2. COMPLETENESS OF FIELD INSPECTION - The field inspection is complete on all items and only minor field inspection of the map manuscript should be necessary.

3. INTERPRETATION OF THE PHOTOGRAPHS - The photographs are typical for this section of the country.

4. HORIZONTAL CONTROL - No supplemental control stations were established.

   The necessary information to supply the names of lost and unlocated stations is not available.

5. VERTICAL CONTROL - Same as for T-8148

   The following errors in level lines were found:

Change point CAC 8 from 23.5 to 24.5
Change point CAG 12 from 23.1 to 24.1

At CAC 6 the ground is sloping and the ground elevation could not be checked, but a temporary bench mark left by the level party checks satisfactorily. The topographer established a new elevation at this point.

6. CONTOURS AND DRAINAGE - Same as for T-8148.

The following is by H. R. Cravat and covers the area southwest of the river:

In the southwest corner of this quadrangle it was necessary to contour on parts of photographs located at excessive distances from the principal point of the photograph due to insufficient overlap in the flight lines. In steep country the bottoms of the valleys were often out as much as 100 feet from the traverse position. In these instances the streams were checked for position by comparison with vegetation changes. Some of the drains have broad bottoms nearly 400 feet across. In these places the streams meander from side to side and there is evidence of the drainage shifting from season to season. The position of the drainage as shown on the photographs is in the correct position for the present time.

No main drainage as drawn in under the stereoscope was accepted without a field check, and in two cases where stereopsis could not be obtained the draws were traversed with the planetable. Most of the drainage as drawn under the stereoscope was less than 50 feet in error from the photographic position.

All vertical traverses were closed with less than a 1.0 foot error or else the errors have been found in the field and corrected, with one exception. This exception is a traverse along the south boundary of the quadrangle from the western boundary to bench mark T-47. This vertical traverse closed 4 feet low. The starting elevation was checked by a line from Champlain and the error is apparently in the woods. At the mid-point in the traverse an elevation on a stream bottom indicated that the planetable elevation might be about 2 feet low and this was considered in sketching from here to the end of the line. No other adjustment was made.

Due to the insufficient overlap in flight lines it was necessary to use the best available photograph for each area; hence junction lines are irregular, but no known gaps exist. On Photograph 8871, at the western limit of the contoured area, it was not possible to obtain stereopsis and both drains and ridges are controlled by planetable traverses.

The low, wooded area between the 20 and 40 foot contours, near the eastern edge of photograph 8848 was inspected on foot for possible isolated contours.

The following is by J. N. Henningsen and covers the area east of the river:

All draws visible with the stereoscope were placed on the photograph in the area to be contoured. Stream locations were checked by planetable shots, vegetation changes and many times after field inspection the stream could be more accurately located with the stereoscope.

There are no large vertical closures in this area and the average closure was about 0.5 feet. Vertical traverses closed on marsh areas indicated an average elevation of 4 feet.

7. to 11. Same as for T-8148.

12. HYDROGRAPHIC CONTROL - No topographic stations were established along the Rappahannock River as per verbal instructions from the Chief, Topography Section.

13. to 15. Same as for T-8148.

16. BUILDINGS AND STRUCTURES - All buildings and structures have been classified by the contour parties. With the exception of an area at the north edge of the quadrangle which was field inspected prior to the receipt of the Clarifying Instructions all of the quadrangle has been field inspected as per the most recent instructions.

17. BOUNDARY MONUMENTS AND LINES - The Essex-Westmoreland County Boundary follows the middle of the Rappahannock River and will be added to the Map Manuscript.

18. GEOGRAPHIC NAMES - Same as for T-8114.

The Westmoreland - Richmond Co. Boundary line between Cat Point Creek & Birkenbough Creek was changed, July 21, 1945, by a Commission appointed by the Judge of the Circuit County of the two counties. For complete information see the U.S.C.&G.S. library files. The change has been noted on the necessary maps.

D. Morley

Submitted by,

G R Fish

G. R. Fish,
Lieut. U. S. C. and G. S.

Approved and forwarded:

F. L. Gallen

F. L. Gallen,
Chief of Party.

26 Control:

Two U. S. Coast & Geodetic Survey Triangulation Stations lie within the limits of this map manuscript. Two U. S. Coast & Geodetic Survey Triangulation Stations lie over four minutes to the west and one Reference Monument lies approximately 1½ minutes to the north of the limits of this map manuscript. All of these stations were used as control for secondary and detail points.

Triangulation stations within the limits of this map manuscript are:

Peed, 1934
Nash, 1934

Triangulation stations beyond the limits of this map manuscript are:

Hale, 1934
Hustle, 1934
George R.M. No.1, 1934

27 Radial Plot:

The radial plot for T-8143 is described in Section I of the descriptive report for Sub-Project CS-278-A, which has been previously submitted.

28 Detailing:

Most of the detailing was done from the nine lens photographs using the center chambers as much as possible. In detailing, that portion of the map manuscript lying east of the Rappahannock River, where the relief was exceptionally great, the single lens photographs received from the Soil Conservation Service were relied upon to a large extent. Most of the drainage was detailed from these single lens photographs.

Field inspection is satisfcatory for the entire area of the map manuscript. Discrepancies between the field inspections of different groups of the field inspection party have been indicated on the discrepancy overlay.

All drainage was determined by stereoscopic examination of the office photographs, the single lens pictures being used in most cases. Where very slight discrepancies occured between this examination and the field inspection, the drainage was adjusted to agree with the field inspection. This was done in order to facilitate more accurate contouring. Where drainage discrepancies were considerable however, the contours were adjusted to fit the office interpretation of the drainage.

29 Supplemental Data:

T-515, T-516, T-517, H-3029, H-3011 are previous surveys covering the area of this map manuscript. None of these surveys are available to the compilation office.

In addition, General Highway and Transportation Maps of Westmoreland, Richmond and Essex counties have been furnished the compilation office by the field party.

30 Mean High Water Line:

The mean high water line was detailed according to the field inspection except where stereoscopic examination revealed disagreement. These discrepancies were noted on the discrepancy overlay.

31 Low Water and Shoal Lines:

No low water or shoal lines are either indicated by the field inspection or discernible from the photographs within the limits of the map manuscript.

32 Details Offshore from the High Water Line:

Offshore details shown on the field inspection have been indicated on the map manuscript. Careful examination of the photographs did not reveal any additional details. A sand bar, piling, and grass are shown. No further investigation is believed necessary.

33 Wharves & Shoreline Structures:

Several Wharves, piers, and docks were indicated on the field inspection. Others could be plainly seen on the photographs. All of these have been shown on the map manuscript.

34 Landmarks and Aids to Navigation:

No landmarks or aids to navigation appear on this map manuscript and none were indicated by field inspection.

35 Hydrographic Control:

Three Recoverable Topographic stations fall within the limits of this map manuscript. Only one, however, is suitable to use for future hydrographic surveys. It is:

Temporary Traverse Station No. 13W

Another lies too close to triangulation station "Peed" to be plotted as a separate point; and consequently, no position is furnished. It is:

Temporary Traverse Station No. 18W

The third, which lies too far inshore for hydrographic control is:

Temporary Traverse Station No. 6W

In addition, eight Temporary Hydrographic Signals were pricked and located by the radial line method. Descriptions of these are furnished on the overlay.

37 Geographic Names:

A list of disputed and undisputed geographic names is attached to this descriptive report.

38 Discrepancy Overlay:

A discrepancy overlay has been prepared to accompany the map manuscript. On it are noted questions concerning correct interpretation, comments, and such notes as are deemed likely to be of assistance during the field edit. Discrepancies between field inspection submitted by different units of the field party are indicated. Also shown, for the use of the Baltimore Compilation Office, are the names or numbers of all bench marks.

39 Horizontal Accuracy:

Horizontal accuracy of the location of well-defined and less well-defined points of detail is believed to be within the limits set forth in the instructions for Project CS-278, Paragraph 54, dated March 4, 1942.

40 Recommendation for future surveys:

The planimetric detail as presented on this map manuscript is believed to be complete; but is subject to field edit for corrections, additions, and deletions.

41 Junctions:

No contemporary surveys border this map manuscript to the south. A complete junction was made with T-8142 to the North. T-8144 to the east is incomplete as of the date of this report; but common points were established and junction made with the completed portion of the planimetric detail.

A contemporary survey to the west of this map manuscript has been made by the Soil Conservation Service of the Department of Agriculture. A partial inspection of the junction has been made and it appears to be in fair to good agreement.

42 Remarks:

The description of the area covered by the map manuscript as submitted by the field party is adequate.

44 Comparison with existing Topographic Quadrangles:

Because of great difference in scale, no accurate comparison of this map manuscript with the U. S. Geological Survey Quadrangle map of this area could be made. In general, the agreement appears good.

45 Comparison with Nautical Charts:

The map manuscript was compared with Chart No. 535, reissued May 17, 1938. A discrepancy in the location of the shoreline was noted in the northern part of "Beverly Marsh". Approximate position: Latitude 38° 04' 30"; Longitude 76° 56' 30".

Along the eastern shore of the Rappahannock River, at approximate Latitude 38° 04' there is a break in the bluff shown on No. T-8143 but not shown on Chart 535.

45 Comparison with Nautical Charts: (cont'd)

On the eastern shore of the Rappahannock River at the mouth of Brockenbrough Creek at approximate Latitude 38° 05', T-8143 shows a marsh area not shown on Chart No. 535.

Several discrepancies in geographic names also were noticed. These have been indicated on the discrepancy overlay. Otherwise, the agreement was good.

It is recommended that map manuscript No. T-8143, supersede the charted topographic information for the area covered.

Respectfully submitted,
March 1, 1943

George O. Fellers
George O. Fellers
Photogrammetric Aid

Map Manuscript, Discrepancy Overlay, and descriptive report reviewed by,

Henry P. Eichert
Henry P. Eichert
Junior Photogrammetric Engineer

Compilation of Map Manuscript Supervised by,

Joseph Steinberg
Joseph Steinberg
Asst. Photogrammetric Engineer

and

J. Edward Deal Jr.
J. Edward Deal, Jr.
Asst. Photogrammetric Engineer

Approved & Forwarded,
March 2, 1943

Fred. L. Peacock
Fred. L. Peacock
Officer-in-Charge
Baltimore Field Office

FIELD EDIT REPORT
T-8143

46. The field edit was done by visual inspection using the map manuscript in the field and transferring all additions, deletions and corrections to the smooth copy while inking.

The inking was done in accordance with the following scheme.

Features	Colors
Additions, bench marks, wye level elevations and crosses	Black

47. The position and amount of detail on this sheet is believed to be complete and accurate.

48. The horizontal accuracy test is the subject of a special report by L. G. Chambers for Project 278-A.

The vertical accuracy test is the subject of a report by Lieut. G. R. Fish on Project 278-A.

Submitted by,

Louis Levin per F.L.G.

Louis Levin,
Photogrammetric Aid.

Approved and forwarded:

F. L. Gallen

F. L. Gallen,
Chief of Party.

Horizontal Accuracy Tests

Comparison of U.S.G.S. Transit Traverse Points with Plotted Positions on U.S. Coast and Geodetic Survey Quadrangles

Quad T-8143 Project 278-A.

Point	Lat.	G.P. m.	Plotted Position m.	Long.	G.P. m.	Plotted Position m.	Position Diff. in mm.	Direction
1.	38°04'	1795.04	1814	76°54'	1110.8	1110	.95 mm.	N.
2.	38°05'	1780.1	1787	76°55'	1293.2	1300	.50 mm.	N.W.
3.	38°04'	943.8	954	76°59'	1127.0	1154	1.44 mm.	W.N.W.
4.	38°06'	1000.6	986	76°58'	1084.3	1017	3.40 3.25 mm.	S E.N.E.
5.	38°07'	445.9	457	76°58'	763.7	760	.57 mm.	N.N.E.
6.	38°03'	496.4	517	76°52'	1102.8	1106	1.04 mm.	N.N.W.
7.	38°03'	1262.0	1275	76°52'	1401.2	1404	.66 mm.	N.N.W.
8.	38°04'	1135.0	1158	76°52'	908.6	932	1.63 mm	N.W.
9.	38°00'	1123.6	1130	76°59'	1337.9	1367	1.48 mm.	W.N.W.
T.T. Sta. No 13-W.	38°05'	294.5	316	76°59'	523.3	551	1.76 mm.	N.W.
T.T. Sta. No. 6-W.	38°04'	935.8	954	76°53'	553.9	570	1.26 mm.	N.W.
T.T. Sta. No 18W (3' S.W. of △ Peed)	This station was not plotted but the G.P. of T.T. No. 18W checks the plotted Position of △ PEED within .5 meter for both Lat. and Long.							

See review of back
BJJ

Computed by L.G.C.
Checked by O.N.D.

(Page 9)

LIST OF GEOGRAPHIC NAMES

Undisputed

Baird Landing
Bald Eagle Hill
Beaverdam Creek
Beverly Marsh
Beverly Marsh Creek
Blandfield Point
Bottoms Neck
Brick Hill Creek
Bridge Creek
Brockenbrough Creek
Burnett Creek
Carters Wharf
Cedar Hill
Champlain
Chance
China Hill
Dangerfield Landing
Essex County
Farmers Hall Creek
Finch's Road
Fones Cliffs
Foneswood
Handpole Creek
Horners
Horners Pond
Hutchinson Swamp
Indian Peter Swamp
Island Point
Jones Creek
Jones Landing
Lawson Neck
Leedstown
Lindsay Hall Farm
Lukes Island
Malvale Farm
Margaret Lee Swamp
Oak Row Road
Occupacia Creek
Otterburn Marsh
Paynes Island
Pea Ridge
Peedee Creek
Peeds
Perpertocks Creek
Porridge Pot
Rappahannock River
Richmond County
Rouzie Swamp
Singerly
Sluice Creek
Smith Mount Branch
Smith Mount Landing
Smoots Landing
Smoots Mill Run
Smoots Pond
Stoney Hill
The Chute
Thomas Neck
U. S. Highway No. 17
~~Waterview Creek~~ Va. State Hgwy No. 38B
Waverly Branch
Waverly Hill
Westmoreland County
Wilna Creek

LIST OF GEOGRAPHIC NAMES

Recommended	Disputed
Garlands Creek	Mint Bottom Creek
Layton Landing (USFB)	Layton Layton Wharf
Mitchell Run	Marriner Swamp

T-8143
No .I.

	Remarks	Decisions
1		380769
2		"
3		"
4		"
5		"
6		"
7		"
8		"
9		"
10		"
11		"
12		"
13		380769
14		"
15		"
16		"
17		"
18		" U.S.G.B.
19		"
20		"
21		"
22		"
23		"
24		"
25		"
26		"
27		

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GEOGRAPHIC NAMES

NO.I. Survey No. T. 8143

CHAMPLAIN Quadrangle

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	
Blandfield Point										1
Dangerfield Landing										2
Island Point										3
Paynes Island										4
Brick Hill Creek										5
Bridge Creek										6
Bottoms Neck										7
Beverly Marsh										8
Beverly Marsh Creek										9
Occupacia Creek										10
Thomas Neck										11
Handpole Creek										12
Chance										13
Malvale Farm										14
Hutchinson Swamp										15
Lawson Neck										16
Otterburn Marsh										17
Layton										18
~~Layton Landing~~										19
~~Layton Wharf~~										20
Champlain										21
Rouzie Swamp										22
Farmers Hall Creek										23
Lindsay Hall Farm										24
Margaret Lee Swamp										25
~~Brick Hill Creek~~										26
Baird Landing										27

M 234

T-8143

No. 2.

	Remarks	Decisions
1		380769
2		"
3		"
4		"
5	deleted from black plate HSC.	"
6		"
7		"
8		"
9		"
10		"
11		"
12		"
13		"
14		"
15		381769
16		"
17		"
18		"
19		"
20		"
21		" U.S.G.B.
22		" U.S.G.B.
23		"
24		"
25		"
26		"
27		

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GEOGRAPHIC NAMES

Survey No. T-8143

NO. 2.

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	
~~Rappahannock River.~~										1
~~Richmond Creek~~	✓									2
Jones Landing										3
Smoots Landing										4
The Chute										5
Garlands Creek										6
Jones Creek										7
Lukes Island										8
Pea Ridge										9
Carters Wharf										10
Smith Mount Landing										11
Beaverdam Creek										12
Brockenbrough Creek										13
Peeds										14
Smoots Pond										15
Foneswood										16
Smoots Mill Run										17
Horners Pond										18
Horners										19
Perpertocks Creek										20
Peedee Creek										21
Leedstown										22
Smith Mount Hill										23
~~Smith Mount Landing~~										24
Smith Mount Branch										25
Cedar Hill										26
Waverly Hill										27

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T-8143

No. 3.

	Remarks	Decisions
1		381769
2		"
3		"
4		"
5		380768
6		"
7		"
8		"
9		"
10		"
11		"
12		"
13		"
14		"
15		"
16		"
17	omitted from black plate file.	"
18		"
19		"
20		
21		
22		
23		
24		
25		
26		
27		

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GEOGRAPHIC NAMES

Survey No. T-8143

No. 3.

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	
Waverly Branch										1
Fones Cliffs										2
Indian Peter Swamp										3
Sluice Creek										4
Wilna Creek										5
Burnett Creek										6
Bald Eagle Hill										7
Porridge Pot										8
Oak Row Road										9
Singerly										10
Oak Row										11
China Hill										12
Mitchell Run										13
Waterview Creek										14
China Hill Road										15
Stony Hill										16
Finchs Road										17
Finchs Branch										18
Snyder Road										19
										20
Essex County										21
Richmond County										22
Westmoreland County										23
Washington District										24
Montross District										25
Stonewall District										26
Occupacia District										27

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GEOGRAPHIC NAMES

Survey No. T-8143

No. 4.

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	
~~State~~ Co Highway No,38 B	Not shown on black plate Hle.									1
~~State~~ Co Highway No.637										2
Rappahannock River ✓										3
U.S. Highway no.17										4
										5
										6
										7
										8
										9
										10
										11
										12
										13
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										26
										27

Names underlined in red approved by W.F.H on 15/6/43

M 234

RECORDS

Between January, 1942 and July, 1944, this Bureau completed 323 quadrangles. These maps have been published, or are in the process of being published on scales of 1:31,680 or 1:25,000. This series of quadrangles includes a land area of approximately 15,000 square miles. Incident to this work, a considerable volume of survey records and data has accumulated which will be filed for future reference. This material is filed as follows:

<u>Registered and Filed in the Vault</u>

Cloth-mounted copy of the published quadrangle.

Black and white cloth-mounted copy of the published quadrangle at 1:20,000 scale ~~map~~ manuscript. This copy is filed to preserve original survey detail shown on the manuscript at 1:20,000 scale which may not have been shown on the published sheet. For ~~political boundaries~~, woodland, ~~marsh, and swamp limits~~, refer to the published quadrangle for the finally adopted positions.

Descriptive Report.

<u>Filed in the Photogrammetric Section - Surveys Branch</u>

Field inspection photographs.

Contoured photographs (on which planetable contouring work was performed.)

Field edit sheet.

Descriptions of recoverable topographic stations (Form 524), filed in Reviewing Unit.

Supplementary traverse and level records.

Field notes, computations, lists of positions, and tabulations of results of horizontal and vertical accuracy tests.

Reproduction proof.

Correction sheet (copy of quadrangle showing in red changes to be made when next printed.)

Check lists of work performed on each sheet in the Washington Office during review, drafting, edit, and reproduction.

Original celluloid manuscript.

Copies of specifications and all instructions to field parties and field offices.

Filed in Reproduction Branch

Glass negatives of the color separation drawings.

Filed in the Library

~~Special report on field work by Commander K. T. Adams, 1944.~~

Special report on office work by B. G. Jones, 1944.

Season's report on field work by Commander F. L. Gallen, 1944.

Season's report on field work by Commander R. L. Schoppe, 1944.

Delivered to the Army Map Service in accordance with the contract

Film negatives and film positives of the color separation drawings.

All color separation drawings.

~~Original celluloid manuscript.~~

A correction sheet consisting of a copy of the first edition of the quadrangle with notes in red indicating changes desirable at the next printing.

General Procedure in the Production of Topographic Quadrangles for the War Department

This quadrangle, together with similar adjoining maps produced under Project C.S.278-A, was prepared by the Coast and Geodetic Survey for the War Department under "General Specifications for War Department Mapping Program" issued about December 1941, in which is incorporated the "Standard of Accuracy for a National Map Production Program" issued by the Bureau of the Budget under date of June 10, 1941.

The general procedure in the production of this and the adjoining quadrangles was:

FIELD SURVEYS

Aerial photography with the Coast and Geodetic Survey nine-lens camera, with airplane and flight crew furnished by the U. S. Coast Guard. The photographs were taken to the scale of 1:20,000. This photography was supplemented by use of single-lens photographs. Ground inspection of the photographs for identification of control points, and classification and clarification of planimetric details on the photographs.

Contouring by planetable directly on the photographs. Supplementary vertical control was established by means of an extensive subordinate level net, furnishing unmarked elevations at road intersections, driveways, and numerous other points identifiable on the photographs.

COMPILATION OF MANUSCRIPT

Compilation on the map manuscripts by radial plot methods (celluloid hand templets) of all planimetry and contours. These manuscripts were drawn on the scale of 1:20,000 on celluloid sheets on which polyconic projections had been ruled with the Projection Ruling Machine in the Washington Office. Compilation was accomplished in the Baltimore Tampa Photogrammetric Office.

FIELD EDIT

Comparison of a copy of the manuscript with the ground. This included inspection for completeness and accuracy as well as the location by planetable methods of additional details, checking of nautical and aeronautical aids to navigation, etc.

Accuracy Tests - Application of systematic horizontal and vertical accuracy tests to check the maps for conformity with the specifications. These tests consisted of comparison of the map position and elevation of selected random points with the true position and elevation as independently determined by standard survey methods.

PROCESSING IN THE WASHINGTON OFFICE

Review - Examination of the manuscript for accuracy and completeness of compilation and compliance with specifications, correcting where necessary; addition of military and state grids and other special features; and verification of the general adequacy of the manuscript as a basis for the production of a finished map.

Drafting and Reproduction - Preparation of smooth color separation drawings on 1:20,000 scale on metal-mounted "blueline" copies of the manuscript. From these drawings, negatives and printing plates were prepared for reproduction of the finished map on the scale of 1:31,680 or 1:25,000.

DIVISION OF CHARTS

SURVEYS BRANCH

REVIEW OF AIR PHOTOGRAPHIC SURVEY T-8143

CHAMPLAIN QUADRANGLE

This quadrangle manuscript has been examined for completeness, accuracy, and conformity with the specifications. It is adequate for smooth drafting, reproduction and publication. Revisions found to be necessary in this office are discussed on the next page.

Horizontal and Vertical Accuracy See next page for the discussion of the horizontal accuracy test. See page 9 of this Descriptive Report for a copy of the horizontal accuracy test comparisons. The closest vertical accuracy test was performed on T-8142 on field photograph 8867. This test showed the original field work to be adequate.

Previous Surveys

This manuscript has been compared with the following previous topographic surveys of this Bureau and other agencies. This map is satisfactory to supersede the previous surveys over the common area.

T-515	1:10,000	1855
T-516	1:10,000	1855
T-517	1:10,000	1855

T-8143 supersedes the above surveys except for the e, 5, 7, 15, and 30 foot contour lines.

"Wakefield"	1:62,500	1932	U.S.G.S.

Comparison with Nautical Charts Nos. 535

The manuscript has not been applied to the charts at the date of this review. The following comments are pertinent to the compilation and correction of nautical charts:

Only small differences in shoreline exist.

The following revisions of the map manuscript were found to be necessary and were accomplished as a part of this review:

An attempt was made to use a 1929 U.S.G.S. traverse as a horizontal accuracy test. The results were not good. The radial plot was made holding U.S.C.& G.S. control and no indication of gross error in the plot was discovered during the review.

Either the traverse points were not sufficiently well identified on the photographs or the traverse itself was not reliable.

The office review disclosed no reason to suspect the plot to be in error as indicated by comparison with this traverse. The manuscript was accepted without further field investigation.

Reviewed 5/20/43 By Jack L. Rihn
under direction of D. H. Benson

Inspected by B. G. Jones B.G. Jones

Examined and approved:

Robert W. Knox
Chief, Surveys Branch

F. P. Gordon
Chief, Div. of Charts

K.T. Adams
Chief, Topography Section

G. Rude
Chief, Div. of Coastal Surveys

NAUTICAL CHARTS BRANCH

SURVEY NO. T-8143

Record of Application to Charts

DATE	CHART	CARTOGRAPHER	REMARKS
1/3/46	535	H. MacEwen	~~Before~~ After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review

M-2168-1

A basic hydrographic or topographic survey supersedes all information of like nature on the uncorrected chart. Give reasons for deviations, if any, from recommendations made under "Comparison with Charts" in the Review.