8159

Form 504
Rev. June 1941
DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

DESCRIPTIVE REPORT

Air Photographic ~~*Plane Table*~~ ~~*Hydrographic*~~ Sheet No. T-8159
(Field) Quadrangle Hallwood

HALLWOOD
VA.-MD.

~~N3752.5 W8159~~?
N3752.5 W7530/7.5

LOCALITY

State Virginia

General locality Eastern Shore

Locality Hallwood

1942

CHIEF OF PARTY
Lieut. Comdr. Kenneth G. Crosby
Lieut. Comdr. Wm. D. Patterson

U. S. GOVERNMENT PRINTING OFFICE 815551

Feb. 6, 1945

8159

Form T-1

DATA RECORD

T-8159

Quadrangle (II): Hallwood

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

Field Office: Salisbury, Md.

Chief of Party: W. D. Patterson

Compilation Office: Tampa, Fla.

Chief of Party: K. G. Crosby

Instructions dated (II III): 3-4-1942

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

Completed survey received in office: 11/11/42

Reported to Nautical Chart Section: 11/11/42

Reviewed: 2/24/43

Applied to chart No.

Date:

Redrafting Completed: 5/10/43

Registered: 1/5/45

Published: 12/6/43

Compilation Scale: 1:20,000

Published Scale: 1:31,680

Scale Factor (III): 1.00

Geographic Datum (III): N.A. 1927

Datum Plane (III): Mean Sea Level

Reference Station (III): Taylor, 1942

Lat.: 37°55'15.620" (481.6 m.)

Long.: 75°36'47.322" (1155.8 m.)

~~Adjusted~~ Unadjusted

State Plane Coordinates (VI): Maryland and Virginia South.

P.C. to be added later (R.E.)

X =

Y =

Plane coordinates on this station not available.
J.N.S.

Military Grid Zone (VI) "A"

PHOTOGRAPHS (III)

Number	Date	Time	Scale	Stage of Tide
8573	4-13-42	12:27	1:20,000	No large bodies
8574	"	12:30	"	of water on
8575	"	12:33	"	sheet.
8701	4-14-42	12:00	"	
8699	No data	No data	"	
8675	"	"	"	

Tide from (III):

Mean Range: Spring Range:

Camera: (Kind or source) U.S.Coast & Geodetic Survey Nine-Lens (Focal length 8¼")

Field Inspection by: H.M.Eldridge, S. C. Dionisio, C. C. Fryer date: April & May '42

Field Edit by: Orvis N. Dalbey, photo. Aid date: Dec., 1942

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

Projection and Grids ruled by (III) Washington Office date: 9-12-42

" " " checked by: date:

Control plotted by: C. L. Bailey, Photo. Aid date: 9-15-42

Control checked by: A. L. Kidwell, Jr. Topo. Engr. date: 9-15-42

Radial Plot by: Tampa Office Personnel date: 9-17-42

Detailed by: L. C. Bonham, Photo Aid date: Sept. & Oct. '42

Reviewed in compilation office by: J. A. Giles, Prin. Photo. Aid date: Nov. '42

Elevations on Field Edit Sheet checked by: Orvis N. Dalbey, Photo Aid date: 12/19/42

STATISTICS (III)

Land Area (Sq. Statute Miles): 58.5

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

Shoreline (Less than 200 meters to opposite shore): 79.3 St. miles

Number of Recoverable Topographic Stations established: 4

Number of Temporary Hydrographic Stations located by radial plot:

Leveling (to control contours) - miles: 69.5

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:

COMPILATION REPORT
TO ACCOMPANY
SHEET NO. T-8159
Hallwood Quadrangle

CONTROL

Two triangulation stations lie within the boundaries of this sheet and were used for control. In addition to the radial points, four topographic stations and 13 bench marks were located by the main radial plot. No 524 cards with Report?

During compilation, approximately as many additional radial points as original radial points were located by the compiler.

RADIAL PLOT

The main radial plot is discussed in the compilation report for sheet T-8165. * See office review for additional discussion

DETAILING

Most of the photographs covering this sheet were clear, but the scale was poor and some difficulty was experienced in the detailing. Especially was this true along the northern border of the sheet due to the fact that the photographs falling just within sheet T-8153 were not available for use in laying the radial plot, or for detailing this sheet. Because of this, there are several discrepancies along the junction with sheet T-8153. On such places the compilation of T-8153 has been shown on the back of the sheet in blue ink.

The field inspection east of the New York, Philadelphia, and Norfolk railroad was satisfactory with a few exceptions. In several places contours and vegetation classifications are different for identical areas on two different field inspection photographs. In such instances, the most logical case was used.

West of the railroad there has been no vegetation or road classification. In this area unclassified roads are indicated by "Rd" and cultivated areas by "C". All unclassified vegetation has been marked "?" and should be classified by further field inspection.

COMPARISON WITH EXISTING TOPOGRAPHIC QUADRANGLES

The only topographic map of this area available is the Corps of Engineers Tactical Map of the Hallwood Quadrangle on a scale of 1:62,500. Due to scale difference, no accurate comparison could be made, but in general there is good agreement between the present compilation and the topographic map.

COMPARISON WITH NAUTICAL CHARTS

Due to the fact that this is an inland area, no nautical chart covers the area of this sheet.

Respectfully submitted,
Lawrence C. Bonham
Lawrence C. Bonham
Photogrammetric Aid

Forwarded by:
Kenneth G. Crosby
Kenneth G. Crosby,
Chief of Party.

FIELD EDIT REPORT
Quadrangle T-8159
Project CS-278- C
F.L.Gallen,Chief of Party

1. The area in this quadrangle is comprised of cultivated and wooded areas about equally distributed and consists of low rolling hills.

17. Political boundaries were obtained from maps issued by the Virginia State Roads Commission and were verified in the field.

18. Geographic Names were taken from a Special Report CS-278-B, submitted by A. J. Wraight, Photogrammetric Aid.

46. All additions, deletions and corrections were made on the map manuscript and transferred to the smooth copy after completion of field work.

The inking of the map manuscript was done in accordance with the following scheme:

FEATURES	COLORS
Additions, bench marks, wye level elevations, crosses	Black
Deletions	Green
Drainage features	Blue

47. The position and amount of detail on this manuscript is complete and accurate.

48. For horizontal accuracy test see statement attached to this report.

For vertical accuracy test see report on T-8166, on which the same topographer did the contouring.

Submitted by

Orvis H. Dalbey Jr.
Orvis H. Dalbey,
Photogrammetric Aid.

Approved by

F.L.Gallen.
F.L.Gallen,Chief of Party

For discussion of adopted position of Maryland-Virginia Boundary line see detailed report attached to the Descriptive Report T-8154

Ralph Moore Berry 4/14/43

TESTS FOR HORIZONTAL ACCURACY
QUADRANGLE NO. T-8159
PROJECT CS-278-C

This test consists of a traverse between Triangulation Station DUNTON (1942) and Triangulation Station CONQUEST (1942). The traverse is 7.16 miles in length and contains 15 test points; all of which are within the boundaries of this quadrangle. The traverse closure is one part in 5800 and a discrepancy of 2.0 meters was adjusted through the traverse. The test points are referred to in the computations as P. P. (Photograph point number) and the test points are scaled from the map manuscript and referred to M. M. No.

TABULATION OF TEST POINTS

	Description of Point	Test Point Number	Lat.	Long.	Difference in mm.
(1)	Inter. of road & road, 65 degrees	P. P. No. 1	37-56-447.1	75-30-1103.1	
		M. M. No. 1	37-56-442.8	75-30-1095.5	.436
(2)	Inter. of road & stream? 50 degrees	P. P. No. 2	37-56-754.9	75-31-508.3	
		M. M. No. 2	37-56-752.0	75-31-511.0	.198
(3)	Inter. of road & private drive, 90 degrees	P. P. No. 3	37-56-838.0	75-31-807.0	
		M. M. No. 3	37-56-833.7	75-31-801.3	.358
(4)	Center of house facing road	P. P. No. 4	37-56-1013.8	75-31-1347.5	
		Not compiled	add the house on the drawing ggg plotted by Berry		
(5)	Inter. of road & road, 90 degrees	P. P. No. 5	37-56-1382.7	75-32-633.8	
		M. M. No. 5	37-56-1383.0	75-32-638.5	.239
(6)	Inter. of road & road, 80 degrees	P. P. No.6	37-56-339.8	75-32-1154.3	
		M. M. No. 6	37-56-345.0	75-32-1149.8	.343
(7)	Inter. of road & private drive, 90 degrees	P. P. No. 6½	37-55-1737.7	75-32-1295.4	
		M. M. No. 6½	37-55-1736.1	75-32-1296.0	.087
(8)	Inter. of road & road, 85 degrees	P. P. No. 7	37-55-1126.0	75-32-1393.7	
		M. M. No. 7	37-55-1129.8	75-32-1397.3	.264
(9)	Inter. of road & road, 80 degrees	P. P. No. 8	37-55-584.8	75-32-1454.2	
		M. M. No. 8	37-55-588.0	75-32-1455.2	.168
(10)	Inter. of road & road, 65 degrees	P. P. No. 9	37-54-1659.7	75-32-1439.7	
		M. M. No. 9	37-54-1657.1	75-32-1444.6	.278

(con.)

(con.)

(11) Inter. of road & road, 80 degrees	P. P. No. 10	37-54-872.8	75-32-1425.1	
	M. M. No. 10	37-54-875.6	75-32-1424.7	.142
(12) Inter. of road & tree line, 60 degrees	P. P. No. 11	37-53-1745.3	75-32-1406.3	
	M. M. No. 11	37-53-1738.1	75-32-1403.0	.396
(13) Inter. of road & road, 60 degrees	P. P. No. 12	37-53-1801.0	75-32-1392.1	
	M. M. No. 12	37-53-1072.1	75-32-1385.3	.561
(14) Center of house facing road, 90 degrees	P. P. No. 13	37-53-556.3	75-33-180.4	
	M. M. No. 13	37-53-557.1	75-33-182.2	.096
(15) Inter. of road & road, 55 degrees	P. P. No. 14	37-52-1627.4	75-33-572.7	
	M. M. No. 14	37-52-1626.6	75-33-569.6	.110
(16) Inter. of road & road, 60 degrees	P. P. No. 15	37-52-972.3	75-33-776.9	
	M. M. No. 15	37-52-970.4	75-33-769.6	.377

It may be noted that test point number 4 was not compiled; this point could not be accurately located on the compilation. And except for test point number 12 which was a less well defined point, the remaining points are all well defined and the map manuscript error is less than .5 mm at these points tested. The horizontal accuracy of this map is good and within the requirements of the instructions.

Submitted by:

Charles Hemerich

Approved by: F. L. Gallen

F. L. Gallen, Chief of Party

GEOGRAPHIC NAMES LIST FOR T-8159

Assawaman Creek
Atlantic
Bullbeggar
Bullbeggar Creek
Greta
Hallwood
Hancock Branch
Holdens Creek
Horsey
Jenkins Bridge
Johnsons Corner
Makemie Park
Messongo Bridge
Messongo Creek
Miona
Nash Corner
New Church
North Branch
Oak Hall
Pitts Creek
Pocomoke River
Sandy Bottom Branch
Temperenceville
The Oaks
Tunnels Mill
Tunnels Mill Branch
Wagram Mill Pond
Withams

Conghest-Cornors (ch. 1221)

T-8159

No. 1

	Remarks	Decisions
1		378755
2		"
3	Not located by edit	"
4		" USGB
5	Settlement	"
6		378757
7		378756
8		379755
9		"
10		"
11		"
12		"
13		"
14		"
15		"
16		"
17		"
18		"
19		"
20		"
21		"
22		"
23		379756
24		"
25		"
26		"
27	Name of town	"

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GEOGRAPHIC NAMES

Survey No. T-8159

Hallwood quadrangle
No. 1
Name on Survey

Name on Survey	On Chart No. A,	On previous survey No. B,	On U. S. quadrangle Maps C,	From local information D	On local Maps E	P. O. Guide or Map F	Rand McNally Atlas G	U. S. Light List H	K	
Hallwood										1
Temperanceville										2
Conquest Corners										3
Assawaman Creek										4
The Oaks										5
Messongo Creek										6
Messongo Bridge										7
Atlantic										8
Makemie Park										9
Greta										10
Horsey										11
Oak Hall										12
New Church										13
Wagram Mill Pond										14
Withams										15
Nash Corner										16
Johnson Corner										17
Hancock Branch										18
Tunnels Mill										19
Tunnells Mill Branch										20
Miona										21
Sandy Bottom Branch										22
Bullbegger										23
Bullbegger Creek										24
Pocomoke River										25
Pitts Creek										26
Jenkins Bridge										27

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T-8159

No. 2

	Remarks	Decisions
1		379756
2		"
3		Railway Guide
4		" "
5		" "
6		
7		
8		Md. County Maps
9	Deleted "S" on map	" "
10	Decision by Virginia Legislature Jan. 15, 1940.	
11		
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27		

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GEOGRAPHIC NAMES

Survey No. T-8159

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,	
Holdens Creek										1
North Branch										2
Pennsylvania R.R.										3
Oak Hall Station	(at Horsey)									4
Lecato Station	(at Oak Hall									5
										6
Md. Political subdivisions:										7
Brinkleys No. 3			[illegible]							8
Costens No. 1			[illegible]	L Heck 1/7/43						9
Accomack County (Va.)										10
										11
										12
										13
										14
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										27

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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:

Registered and Filed in the Vault

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.

Filed in the Photogrammetric Section - Surveys Branch

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-C, 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.

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 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-8159

HALLWOOD 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 pages 3 and 4 of this report for a copy of the results of the horizontal accuracy test over this area. Of the 15 points tested, only one exceeded 0.5 mm, the maximum displacement being 0.561 mm.

Refer to the field edit sheet for quadrangle T-8166 for the nearest vertical accuracy test.

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-2680	1:20,000	1905	
T-890a	1:20,000	1860	
T-890b	1:20,000	1860	
T-890c	1:20,000	1860	
Halwood	1:62,500	1919	U.S.E.

Comparison with Nautical Charts Nos.

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:

This is an inland sheet. This area, therefore, is not covered by any of the charts.

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

For a discussion of the finally adopted position of the Maryland-Virginia boundary line, refer to the detailed report on page 7 of the Descriptive Report for quadrangle T-8154.

Only minor changes were necessary during the review of this quadrangle.

Reviewed 2/24/43 By Ralph Thone Berry
under direction of D. H. Benson

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

Examined and approved:

Robert W. King
Chief, Surveys Branch

F. S. Borden
Chief, Div. of Charts

K. T. Adams
Chief, Topography Section

G. F. Rude
Chief, Div. of Coastal Surveys

NAUTICAL CHARTS BRANCH

SURVEY NO. _____

Record of Application to Charts

DATE	CHART	CARTOGRAPHER	REMARKS
3-8-48	1221	E. A. Hewitt	Before After Verification and Review
1/12/54	568	J. P. Walker et al	~~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.