

8145

Original



8145

Form 504	
U. S. COAST AND GEODETIC SURVEY	
DEPARTMENT OF COMMERCE	
DESCRIPTIVE REPORT	
Type of Survey <u>Air Photographic Topographic</u>	
Field No. <u>55</u>	Office No. <u>T-8145</u>
LOCALITY	
State <u>Virginia</u>	
General locality <u>Potomac River, Nomini Creek to Lower Machodoc River</u>	
Locality <u>Machodoc, Virginia</u>	
<u>1943</u>	
CHIEF OF PARTY	
<u>F. L. Gallen</u>	
<u>Fred. L. Peacock</u>	
LIBRARY & ARCHIVES	
DATE <u>February 20, 1945</u>	

DATA RECORD

T-8145

Quadrangle (II):

Machodoc 7 $\frac{1}{2}$ ' Quadrangle~~Piney Point 15' Quadrangle~~

Field Office:

War Mapping Field Party No. 1

Compilation Office:

Baltimore Field Office

Instructions dated (II III):

March 4, 27; June 5, 24;

Aug. 13, 27; Sept. 3, 4;) 1942

Completed survey received in office: 4/8/43

Project No. (II):

CS-278-A

Chief of Party:

Wm. D. Patterson

F. L. Gallen

Chief of Party:

Fred. L. Peacock

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

Reported to Nautical Chart Section: 4/43

Reviewed: 6/7/43

Applied to chart No.

Date:

Redrafting Completed: 9/18/43

Registered: 2/16/45

Published: 2/14/44

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): Thompson, 1932

Lat.: 38° 06' 16.374" 504.8 Long.: 76° 42' 48.975" 1193.2 Adjusted
(1345.1)m (268.6)m Unadjusted

State Plane Coordinates (VI):

Virginia, north zone

X = 2,514,017.06 Ft. Y = 164,459.18 Ft.

Military Grid Zone (VI) "A" ~~"B"~~
overlapping zone 'B'

PHOTOGRAPHS (III)

<u>Number</u>	<u>Date</u>	<u>Time</u>	<u>Scale</u>	<u>Stage of Tide</u>
Nine Lens				
8891-8894 Inc.	4/15/42	1:16 - 1:22p.m.	1:20,000	1.9' above M. L. W.
8895-8898 Inc.	4/15/42	1:26 - 1:31p.m.	1:20,000	1.9' above M. L. W.
8905-8906 Inc.	4/15/42	1:42 - 1:44p.m.	1:20,000	2.0' above M. L. W.
8914-8915 Inc.	4/15/42	1:57p.m.	1:20,000	2.0' above M. L. W.
Single Lens Soil Conservation Service Photographs				
FG 108-31 - 108-39 Inc.	4/7/37	unknown	1:20,000	unknown
FG 108-49 - 108-56 Inc.	4/7/37	unknown	1:20,000	unknown
FG 108-124-108-131 Inc.	4/7/37	unknown	1:20,000	unknown
FG 129-26 - 129-34 Inc.	5/7/37	unknown	1:20,000	unknown

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

Mean Range: 1.9' Spring Range: 2.2'

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: H.R. Cravat, S.C. Dionisio Oct., 1942
Field Edit by: A.M. Jylha, H.M. Eldridge date: to Jan., 1943

Orvis N; Dalbey Apr. 1943

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

same as date of nine lens photographs

Projection and Grids ruled by (III) Wash. Off. C.H.R. date: Oct. 20, 1942

" " " checked by: Washington Off. J.O.N. date: Nov. 5, 1942

Control plotted by: J. Edward Deal, Jr. & Charles Bailey date: Nov. 24, 1942

Control checked by: Joseph Steinberg date: Nov. 25, 1942

Radial Plot by: J. Edward Deal, Jr. & Joseph Steinberg date: Dec. 15, 1942

Additional Radial

Points by: Calvert J. Cahn Jan. 18, 1943

Detailed by: Raymond Glaser date: 1-28 to 3/26/43
Contours by: Raymond Glaser 4/2 to 4/6/43

Reviewed in compilation office by: Henry P. Eichert date: 3/29 to 4/6/43

Elevations on Field Edit Sheet

checked by: L. G. Chambers date: Apr. 1943

STATISTICS (III)

Land Area (Sq. Statute Miles): 53

Shoreline (More than 200 meters to opposite shore): 19 Statute miles

Shoreline (Less than 200 meters to opposite shore): 13 Statute miles

Number of Recoverable Topographic Stations established: 3 stations

Number of Temporary Hydrographic Stations located by radial plot:

3 stations

Leveling (to control contours) ^{Statute} -/miles: 37.0

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: A. M. Jylha, H. R. Cravat, H. M. Eldridge, Oct., 1942 to Jan., 1943.

FIELD INSPECTION REPORT
QUADRANGLE NO. T-8145
Project CS-278 -A
F. L. Gallen, Chief of Party.

1. DESCRIPTION OF AREA - The southern part of this quadrangle is similar to T-8144 except that the principal drainage system is Nomini Creek and its tributaries. The northern part of the quadrangle is part of a large, low, flat area, adjacent to the Potomac River, similar to T-8140, and with a steep rise to the upland in the southern part of the quadrangle in the vicinity of the 40 foot contour. The timber is similar to that in the two quadrangles mentioned above.
2. 4. Same as T-8144
5. VERTICAL CONTROL - Same as for T-8148. CAL 17 was found to be in error and was rejected in the level record.
6. CONTOURS AND DRAINAGE Same as for T-8144 and T-8148
By A. M. Jylha, Photograph 8893.

A vertical closure of 4 feet was encountered between CAL 17 and 18 and CAL 17 was later found to be in error and was rejected in the level record. No adjustment was made in the contours due to the steep slope.
- 7-16 - Same as for T-8148.
17. BOUNDARY MONUMENTS AND LINES - There are no boundary lines in this quadrangle. *Political district boundaries added in Washington office from County Highway Map.*
18. Same as for T-8144.

Approved and forwarded:

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

Submitted by,

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

26 CONTROL:

Sixteen U. S. Coast & Geodetic Survey Triangulation Stations lie within the limits of this map manuscript. Five U. S. Coast & Geodetic Survey Triangulation Stations lie within one minute of the limits of this map manuscript. Eight U. S. Coast & Geodetic Survey Triangulation Stations lie approximately two minutes to the North and one station lies approximately two minutes to the South 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:

- ✓Vaughn, 1932
- ✓Green, 1932
- ✓Beale, 1932
- ✓Thompson, 1932
- ✓Herbert, 1932
- ✓Franklin, 1932
- ✓Nigger, 1932
- ✓Landing, 1932
- ✓Cupola, 1932
- ✓Cherry, 1932
- ✓Kilmon, 1932
- ✓Boyce, 1932
- ✓Parham, 1932
- ✓Church, 1932
- ✓Beacon No. 8 Wash. to Norfolk, 1942
- ✓Westmoreland Lookout Tower, 1942
- "B." (U.S.E.) - Added in Washington Office

Triangulation stations within one minute of the limits of this map manuscript are:

- Buckner, 1932
- Smarts, 1932
- Feddle, 1932
- Carey, Va., 1934
- Nehi, 1942

Triangulation stations approximately two minutes beyond the limits of this map manuscript are:

To the North

- Ragged Pt. L.H., 1901
- Grapevine, 1932
- Boundary Mon. Va., No. 19, 1929
- Calhoun, 1932
- Bettie, 1932
- Copsico, 1934
- Boundary Mon. Va., 1929
- Murray, 1919

To the South

- Collins, 1932

27 RADIAL PLOT:

The Radial Plot for T-8145 is described in Section 4 of the descriptive report for sub-projects CS-278-A and CS-278-D, which has been previously submitted. *Filed in Photogrammetric Section*

28 DETAILING:

The major portion of the detailing was done from the nine lens office photographs using the center chambers as much as possible. In detailing areas where relief was exceptionally great, the single lens photographs received from the Soil Conservation Service, were relied upon to a large extent. In some instances, it was necessary to use the Projector in detailing from these single lens photographs. The single lens photographs were also helpful in detailing drainage, buildings and marsh areas. The field inspection was satisfactory as a whole for the entire area of the map manuscript. Discrepancies between the field inspection and office examination 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 occurred between this examination and the field inspection, the field inspection interpretation was accepted. 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. *Drainages delineated by field office were very poor. Numerous changes were made by reviewer, after stereoscopic inspection of photos.*

29 SUPPLEMENTAL DATA:

Portions of the following previous surveys cover parts of the area of this map manuscript:

Survey No.	Date	Scale
T-2808	1906	1:20,000
T-1104	1868-1904	1:20,000
T-1581	1860-1904	1:20,000 (Does not cover the area)

These surveys are not available to the compilation office.

In addition, a General Highway and Transportation Map of Westmoreland County has been furnished the compilation office by the field party.

30 MEAN HIGH WATER LINE:

The stage of tide of all nine lens photographs was computed before any shoreline detailing was attempted. The field inspection party provided sufficient shoreline inspection data to facilitate the location of the mean high water line.

31 LOW WATER & SHOAL LINES:

The field inspection party did not supply any data as to the location of low water or shoal lines. There were however, small shoal areas in the northeast and northwest sections of this map manuscript which were delineated from the single lens soil conservation

31 LOW WATER & SHOAL LINES: (cont'd)

photographs. No low water lines were apparent on the office photographs.

32 DETAILS OFFSHORE FROM THE HIGH WATER LINE:

All offshore details indicated by field inspection have been shown. No other offshore detail is discernible on the office photographs.

33 WHARVES & SHORELINE STRUCTURES:

Several wharves, piers, docks, boat houses and fish houses were indicated on the field inspection. These, and others which could be seen on the photographs, were detailed on this map manuscript.

34 LANDMARKS & AIDS TO NAVIGATION:

Plumb Point Light was added in Washington Office

No information concerning landmarks or aids to navigation was available for the area covered by this map manuscript, nor were any indicated by the field inspection. *Also, Airway Beacon #8, Wash. to Norfolk is an aid.*

} Forms filed.

35 HYDROGRAPHIC CONTROL:

Three Recoverable Topographic Stations fall within the limits of this map manuscript. Two are unquestionably suitable for use in future hydrographic surveys. They are:

HOL. - 1942
U.S.E.D. 278 - 1942

The third, Hague Potomac Baptist Church, which may be too far inshore for hydrographic control, needs further investigation as noted on the discrepancy overlay.

Geographic position and detailed descriptions of these stations are submitted herewith on Form No. 524.

In addition, three Temporary hydrographic signals were picked and located by the radial line method. Descriptions of these are furnished on the overlay.

37 GEOGRAPHIC NAMES:

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

38 DISCREPANCY OVERLAY:

A discrepancy overlay has been prepared to accompany this map manuscript. On it are noted discrepancies, omissions, and such notes as are deemed likely to be of assistance during the field edit. Also shown, for the use of the Baltimore Compilation Office, are the numbers or names 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:

Complete satisfactory junctions of contours and planimetric detail were made with T-8140 to the north, T-8144 to the west and T-8146 to the east. No contemporary survey borders this map manuscript to the south. *T-8358 (1944) joins to south.*

42 REMARKS:

An adequate description of the area covered by this map manuscript has been submitted by the field party.

44 COMPARISON WITH EXISTING TOPOGRAPHIC QUADRANGLES:

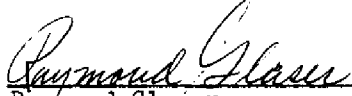
Comparison was made with Md.-Va.-Piney Point 15' Quadrangle, U. S. Geological Survey, edition of 1901, scale 1:62,500. In general, the agreement appears good. The only notable discrepancy was the location of drainage over the entire quadrangle.

45 COMPARISON WITH NAUTICAL CHARTS:


This map manuscript was compared with the U. S. Coast & Geodetic Survey Chart No. 558. Because of scale difference, minute comparison could not be made. General agreement appeared good with the following exception: Chart No. 558 shows an inlet immediately to the south of Church Point on the western shore of the Lower Machodoc River; which does not appear on T-8145.

It is recommended, that map manuscript T-8145 supersede the charted topographic information for the area covered.

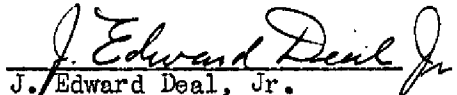
Respectfully submitted,
April 6, 1943


Raymond Glaser
Sr. Engineering Draftsman

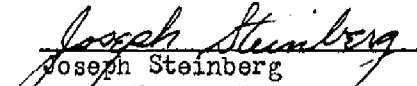
Map Manuscript, Discrepancy
Overlay and Descriptive Re-
port Reviewed by:


Henry P. Eichert
Jr. Photogrammetric Engineer

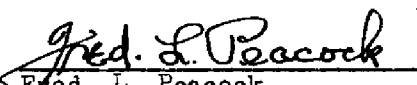
Compilation of Map Manu-
script Supervised by:


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

and


Joseph Steinberg
Asst. Photo. Engineer

Approved & Forwarded:
April 7, 1943


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

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-8145

Project. 278-A

Point	Lat.	G.P. N	Plotted Position N	Long.	G.P. N	Plotted Position N	Position Diff. in mm
34.	38° 01'	278	292	76° 38'	1406.5	1392	1.0 mm N.E.
35.	38° 00'	685	719	76° 39'	1226	1226	1.7 mm N
Quad. T-8146							
32	37° 59'	1826	04	76° 34'	1428.5	1426	1.6 mm N.E.
33	38° 01'	195	215	76° 36'	287	282	1.0 mm N.N.E.

See reverse of book

Computed by J.B.C.
Checked by Q.M.D.

FIELD EDIT REPORT
T-8145

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

The inking was done in accordance with the following scheme:

<u>Features</u>	<u>Colors</u>
Additions, bench marks, wye level elevations and crosses	Black
Deletions	Green
Contours, elevations by top.	Brown
Drainage features	Blue
Civil boundaries	Violet

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

48. The horizontal accuracy test is the subject of a special report by L. G. Chambers on Project 278-A. *G.S. traverse positions used, did not check very closely, see tabulation on preceding page.*

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

14. All County roads in Virginia have been taken over by the State.

17. Due to the controversial nature of the Maryland-Virginia boundary the exact location was left to be determined in Washington, D. C.

Respectfully submitted,

Orvis N. Dalbey
per T.A.G.

Orvis N. Dalbey,
Photogrammetric Aid.

Approved and forwarded:

F. L. Gallen

F. L. Gallen,
Chief of Party.

LIST OF GEOGRAPHIC NAMES

Undisputed

Acorn
Aimes Creek
Antioch Branch
Antioch Farm
Barnes Creek
Barnes Point
Beales Millpond
Beales Mill Run
Beales Wharf
Booths Bend
Boyse Point
Browns Cove
Buena Vista Branch
Bull Neck
Bull Neck Run
Bushfield Bend
Carys Point
Cherry Orchard Point
Church Point
Cupola Point
Davis Creek
Deep Point
Doyle Cove
Drum Bay
Erica
Glebe Creek
Greens Marsh
Griffiths Corner
Hague
Hanley Point
Harrison Point
Hester Cove
Hickory Point
Hinnom
Jenkins Cove
Jenkins Creek
Jenkins Point
Jones Branch
Jules Creek

Kirk Point
Kremlin
Lee Creek
Lower Machodoc River C.R.
Lyells
Machodoc
Machodoc Neck
Marshall Creek
McGuires Wharf
Meter
Mount Holly
Mount Pleasant Branch
Mount Pleasant Farm
Narrow Beach
Newtons Mill Run
Newtons Pond
Nigger Point
Nomini
Nomini Creek
Nomini Ferry Bridge
Nomini Grove
Nomini Hall
Oldham
Oldham Run
Palmers Cove
Palmers Point
Parham Point
Plumb Point
Prospect Hill
Prospect Hill Bridge
Public Landing
Shorts' Store
Stratter Point
Tavern Millpond
Tavern Run
Templeman Run
Thompsons Branch
Thompsons Hill
Tidwells

LIST OF GEOGRAPHIC NAMES

Recommended

Neenah

Pierce Creek

Disputed

Warrenville

Pierces Creek

T-8145

No. 1

Remarks

Decisions

1		380766
2		"
3		"
4		"
5		"
6		"
7		"
8		"
9		"
10		"
11		"
12		"
13		"
14		"
15		"
16		"
17		"
18		"
19		"
20		"
21		"
22		"
23		"
24		"
25		381766 USGB
26		" "
27		"

GEOGRAPHIC NAMES

Survey No. T-8145

MACHODOC quadrangle
No. 1 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	
Acorn	✓								1
Oldham	✓								2
Tavern Millpond	✓								3
Tavern Run	✓								4
Oldham Run	✓								5
Griffiths Corher	✓ (village)								6
Kremlin	✓								7
Bull Neck	✓								8
Bull Neck Run	✓								9
Newtons Pond	✓								10
Newtons Mill Run	✓								11
Nomini Hall	✓ (farm, old and famous)								12
Beales Millpond	✓								13
Beales Mill Run	✓								14
Buena Vista Branch	✓								15
Hague	✓								16
Machodoc	✓								17
Thompson Branch	✓								18
Jones Branch	✓								19
Drum Bay	✓								20
Lee Creek	✓								21
Mt. Pleasant Branch	✓								22
Mt. Pleasant Farm	✓								23
Shorts Store	✓								24
Coles Neck	✓								25
Lower Machodoc Creek	✓								26
Parham Point	✓								27

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No. 2

Remarks

Decisions

1		981766
2		"
3		"
4		"
5		"
6		"
7		"
8		"
9		"
10		"
11		"
12		"
13		"
14		"
15		"
16		"
17		"
18		"
19		381767
20		"
21		"
22		"
23		"
24		"
25		"
26		"
27		"

GEOGRAPHIC NAMES

Survey No. T-8145

No. 2

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	
Kirk Point ✓	✓								1
Hester Cove ✓	✓								2
Cunola Point ✓	✓								3
Water ✓	✓								4
Narrow Beach ✓	✓								5
Plumb Point ✓	✓								6
Ciehe Creek ✓	✓								7
Aimes Creek ✓	✓ (very little on this quadrangle)								8
Tidwells ✓	✓								9
Church Point ✓	✓								10
Nigger Point ✓	✓								11
Cherry Orchard Point ✓	✓								12
Boyse Point ✓	✓								13
Hanley Point ✓	✓								14
Doyle Cove ✓	✓								15
Harrison Point ✓	✓								16
Machodoc Neck ✓	✓								17
Erica ✓	✓								18
Nomini Creek ✓	✓								19
Hickory Point ✓	✓								20
Bushfield Bend ✓	✓								21
Jules Creek ✓	✓								22
Beales Wharf ✓	✓								23
Davis Creek ✓	✓								24
McGuires Wharf ✓	✓								25
Palmers Cove ✓	✓								26
Palmers Point ✓	✓								27

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No. 3

Remarks

Decisions

1		381767
2	—	" USGB
3		"
4		"
5		"
6		"
7		"
8		"
9		"
10		"
11		"
12		"
13		"
14		"
15		380767
16		"
17		"
18		"
19		"
20		"
21		"
22		"
23		" USGB
24		"
25		"
26		"
27		379767

GEOGRAPHIC NAMES

Survey No. T-8145

No. 3

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	
Stratter Point	✓								1
Peirce Creek	✓								2
Browns Cove	✓								3
Hinnom	✓								4
Deep Point	✓								5
Jenkins Cove	✓								6
Jenkins Creek	✓	too small							7
Jenkins Point	✓								8
Public Landing	✓								9
Carys Point	✓								10
Barnes Creek	✓								11
Greens Marsh	✓								12
Barnes Point	✓								13
Booths Bend	✓								14
Mount Holly	✓	✓							15
Nomini Ferry Bridge	✓								16
Nomini	✓	✓							17
Thompson Hill	✓								18
Prospect Hill Bridge	✓								19
Marshall Creek	✓								20
Templeman Run	✓								21
Prospect Hill	✓								22
Neenah	✓								23
Antioch Farm	✓								24
Antioch Branch	✓								25
Nomini Grove	✓								26
Lyells	✓								27

T-8145

No. 4

Remarks

Decisions

1		
2		
3		381768
4		
5		Road Maps
6		"
7		"
8		
9		
10		
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15		
16		
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21		
22		
23		
24		
25		
26		
27		

GEOGRAPHIC NAMES

Survey No. T-8145

No. 4

Name on Survey

	A	B	C	D	E	F	G	H	K	
<u>Westmoreland County</u>										1
										2
<u>George Washington Memorial Highway</u>										3
										4
<u>Va. Highway No. 3</u>										5
" <u>No. 203</u>										6
" <u>No. 202</u>										7
										8
										9
										10
										11
										12
										13
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										15
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										27

Names underlined in red approved
by W.H.H. 6-26-43

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.
published quadrangle at 1:20,000 scale.
Black and white cloth-mounted copy of the ~~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-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. (The photography was supplemented by use of single-lens photos of the Soil Conservation 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, drive-ways, and numerous other points identifiable on the photographs.

COMPILATION OF MANUSCRIPT

Compilation on the map manuscripts by radial plot methods (celluloid hand templates) 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 ~~Survey~~ 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 "blue-line" 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-8145

MACHODOC 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 Refer to page nine of the Descriptive Report for a copy of the results of the horizontal accuracy test. See page two of this supplement for a more detailed discussion of this test. The vertical accuracy test could not be identified on any of the field photographs covering this area. The results of this test, however, appear to be satisfactory as stated in the report Previous Surveys submitted by Lt. G. R. Fish.

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-1104	1868	1:20,000	
T-2808	1906	1:20,000	
"Piney Point"	1890	1:62,500	U.S.G.S.

Comparison with Nautical Charts Nos. 558 - 1940

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:

Most of the topographic detail in the vicinity of Church Point on the Lower Machodoc River is not correct as shown on the chart. With this exception, only minor discrepancies in shoreline were apparent.

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 by holding U.S.C. & G.S. control and no indication of gross error in the plot was discovered during review. Either the traverse points were not sufficiently well identified on the photographs or the traverse itself was not reliable.

Only minor changes in detail were necessary on this map manuscript.

The radial plot was well controlled by triangulation of this Bureau and has been accepted in preference to the accuracy test. The U.S.C. & G.S. control was not used for the radial plot.
B.G. Jones

Reviewed 6-17-43
under direction of D. H. Benson

By Walter B. Russell
for H.E.R.

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

Examined and approved:

Charles Lewis
Chief, Surveys Branch

K.T. Adams
Chief, Topography Section

J.S. Darden
Chief, Div. of Charts

G. W. Hilde
Chief, Div. of Coastal
Surveys