

original

8313

Diag. on Diag. Ch. No. 78-3

8313

Form 504
U. S. COAST AND GEODETIC SURVEY DEPARTMENT OF COMMERCE
DESCRIPTIVE REPORT
Type of Survey <u>Air Photographic Topographic</u>
Field No. _____ Office No. <u>T-8313</u>
LOCALITY
State <u>Virginia</u>
General locality <u>James River</u>
Locality <u>Morrison</u>
<u>194 4</u>
CHIEF OF PARTY <u>FL. Gallen and</u> <u>Fred. L. Peacock</u>
LIBRARY & ARCHIVES
DATE <u>September 16, 1946</u>

DATA RECORD

T-8313

Quadrangle (II): 7½ minute

Project No. (II): C.S. 289

Field Office: Suffolk, Va.

Chief of Party: F. L. Gallen

Compilation Office: Balto., Md. Chief of Party: Fred. L. Peacock

Instructions dated (II III):
Mar. 13, Oct. 20, and Nov. 25, 1943
Jan. 18, 1944Copy filed in Descriptive
Report No. T- (VI)

Completed survey received in office: 5/5/44

Reported to Nautical Chart Section: 5/6/44

Reviewed: 6/6/44

Applied to chart No.

Date:

Redrafting Completed: 8/1/44

Registered: 8/46

Published: 1944

Compilation Scale: 1:20,000

Published Scale: 1:25,000

Scale Factor (III): None

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

Reference Station (III): BUZ, 1934

Lat.: 37° 04' 41.424" (1277.0m) Long.: 76° 25' 38.231" (944.3m) Adjusted
~~Standard~~

State Plane Coordinates (VI): VIRGINIA So. Zone

X = 2,604,620.26 ft.

Y = 277,818.44 ft.

Military Grid Zone (VI) A

Harbor Defense Grid

PHOTOGRAPHS (III)

<u>Number</u>	<u>Date</u>	<u>Time</u>	<u>Scale</u>	<u>Stage of Tide</u>
12642 to 12645 Inc. ✓	11/28/42	2:05 P.M.	1:20,000	2.5 ft. above M.L.W.
12628 (11)	11/28/42	1:40 P.M.	"	2.5 ft. above M.L.W.
12628 (9)	11/28/42	1:40 P.M.	"	2.5 ft. above M.L.W.
12628 (8)	11/28/42	1:40 P.M.	"	2.5 ft. above M.L.W.
12690 to 12692 Inc. ✓	11/28/42	3:18 P.M.	"	2.1 ft. above M.L.W.
12857 and 12858	12/31/42	10:54 A.M.	"	0.2 ft. above M.L.W.

Tide from (III): Predicted tables, Reference stations, Hampton Roads, Va.
with correction to Newport News and Warwick River.

Mean Range: 2.6 ft.

Spring Range: 3.1 ft.

Camera: (Kind or source) U. S. Coast & Geodetic Survey, 9 lens
(focal length 8 $\frac{1}{4}$ ")

Field Inspection by: Joe. N. Henningsen
Marvin C. Jenkins
Orvis N. Dalbey

date: Nov. Dec. 1943
Jan. 1944

Field Edit by:

date:

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

Same as date of nine lens photographs

Projection and Grids ruled by (III) B.R.C. - P.S.H. date: 2-28-44

" " " checked by: L.V.E. date: 2-28-44

Control plotted by: S. Mittleman date: 3-7-44

Control checked by: Ruth E. Rudolph & Henry P. Eichert date: 3-9-44

Radial Plot by: Joseph Steinberg & J. Edward Deal, Jr. date: 4/7 to 4-13-44

Detailed by: Michael G. Misulia date: 4-14 to 5/3/44

Reviewed in compilation office by: Wm. H. Van Loon date: 5-2 to 5-3-44

Elevations on Field Edit Sheet

checked by: *Harlan C. Rees*

date: 6-3-44

STATISTICS (III)

Land Area (Sq. Statute Miles): 50.5

Shoreline (More than 200 meters to opposite shore): 6 Statute Miles

Shoreline (Less than 200 meters to opposite shore): $11\frac{1}{2}$ Statute Miles
(Center line of streams only)

Number of Recoverable Topographic Stations established: 19
(All bench marks)

Number of Temporary Hydrographic Stations located by radial plot:

Leveling (to control contours) - miles:

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:

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

This quadrangle, together with similar adjoining maps produced under Project C.S. 289-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.

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 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 "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.

FIELD INSPECTION REPORT
QUADRANGLE T-8313
Project CS-289-A
F. L. Gallen, Chief of Party

1. DESCRIPTION OF AREA:

This quadrangle, which lies within the limits of York, Warwick, and Elizabeth City Counties, is bounded on the southwest by the James River. Morrison, which lies in the west part of this survey, and Hilton Village in the southwest portion are the only villages of importance within this quad, although the area is thickly populated. There is a congested area in the southeast part of this quadrangle, in the vicinity of Newport News, which is shown on photos for this area. A portion of Camp Patrick Henry, a military reservation, is to be found in the northwest corner of the quad. A part of Langley Field, a U. S. Army Air Force Bomber Base, is located in the northeast part of this survey. Mariners Museum and Park, the boundaries of which are shown on photo No. 12692, is to be found in the west central part of the quadrangle. The four main highways which serve the area are U. S. Highway No. 1 and Virginia 170 in the north and east; U. S. Highway No. 17 running north and south in the west central part of the quad; U. S. Highway No. 60 in the southwest; and Virginia Highway No. 168, a four-lane road to the north and running parallel with the Chesapeake and Ohio R. R. The two outside lanes are concrete and the inner lanes are macadam. Brick Kiln Creek and its tributaries drain the northern portion, and Newmarket Creek drains the central and southeast part of this area. Waters Creek flows into the James River and drains the west portion of the quadrangle.

2. COMPLETENESS OF FIELD INSPECTION:

The field inspection is thought to be complete. All topographic features have been classified. The color scheme for buildings that were inked on the topo photos is as follows: dwelling (red), barns (purple), stores (green), and public buildings (blue). Only the buildings inked in are to be shown on the map drawing. Trails are shown by a dashed line, thus ----, and generally labeled "trail". The drainage and marsh areas inked on the photographs are correct as shown. Highways and roads have been classified and shown on the topo photographs. It is thought that all necessary information is shown on the field sheet that should be shown on the map drawing. Classification of bridges and culverts which have been designated on the photos, and any other small items erroneously omitted will be noted by the field edit party. Information on military reservations is listed below:

CAMP PATRICK HENRY MILITARY RESERVATION--see report for T-8317 for information on this installation.

LANGLEY FIELD--see report for T-8314 for information on this installation.

MARINERS MUSEUM--the boundaries of this Museum are shown on the photos covering the area.

3. INTERPRETATION OF PHOTOGRAPHS:

See report for T-8317.

4. HORIZONTAL CONTROL:

See report for T-8317.

5. VERTICAL CONTROL:

See report for T-8317.

6. CONTOURS AND DRAINAGE:

See report for T-8317 and add: The contours were checked on topo photograph No. 12642 and found to be well within the accuracy requirements.

7-13. The items under these headings in the field inspection report do not apply to this area.

14. ROAD CLASSIFICATION:

See report for T-8317.

15. BRIDGES AND CULVERTS:

See report for T-8317.

16. BUILDINGS AND STRUCTURES:

See report for T-8317.

17. BOUNDARY MONUMENTS AND LINES:

This quadrangle is located in York, Cape Elizabeth and Warwick Counties, Va. All boundaries shown on the photographs for this quadrangle are correct with the exception of the county line between York and Warwick County, after the county line, which follows Brick Kiln Creek, crosses U. S. highway #17, and in the vicinity of Harpersville. This portion of the line in the northwest corner of the quadrangle should be treated in accordance with the description of establishing the county line in the report for T-8317. The boundary line for Camp Patrick Henry is correct as shown.

18. GEOGRAPHIC NAMES: *LA*

See report for T-8317.

19. JUNCTIONS:

Junctions with quadrangle T-8312 to the west, T-8316 to the north, T-8314 to the east and T-8303 to the south have been made and are in agreement.

20. PHOTOGRAPHS USED:

Photographs used in surveying this area were Nos. 12642, 12643, 12644,
12645, 12690, 12691, 12692.

Approved and forwarded:

F. L. Gallen

F. L. Gallen,
Chief of Party.

Submitted by:

Orvis N. Dalbey for F. L. G.

Orvis N. Dalbey
Sr. Photo. Aid.

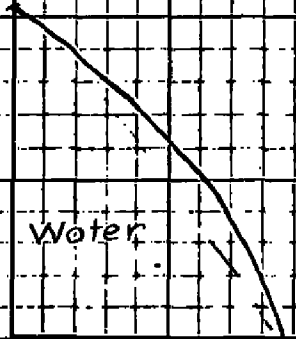
SHEET NO. T-8513

Breakdown of Field Completion Operations

Shoreline: --- Joe N. Henningsen, Asst. Photo. Eng. --- Jan. 1944.
Recovery: --- Marvin C. Jenkins, Sen. Eng. Aid. --- Nov.-Dec. 1943 &
Jan. 1944.
Boundaries: --- Joe N. Henningsen, Asst. Photo. Eng. --- Jan. 1944.

Orvis N. Dalbey

Water



26 CONTROL:

The following horizontal control stations were recovered and identified on the 1:10,000 field photographs of Project C.S. 283. They were transferred, by the Compilation Office from these field photographs to the 1:20,000 office photographs of Project C.S. 289. They are:

DENBIGH, 1932
MONUMENT, 1938
HOUSE, 1941
BLACK TANK NO. 1, 1941
JAMES RIVER BRIDGE S. TOWER, 1932
JAMES RIVER BRIDGE N. TOWER, 1932
DUGGER, 1934 (ALSO ALUMINUM TANK, 1941, r.1942)
TANK NO. 1, 1932
NEWPORT NEWS N. BASE, 1927, r.1932
BIG BETHEL RADIO RANGE CENTRAL TOWER, 1938
BIG BETHEL RADIO RANGE N.E. TOWER, 1938

The following horizontal control stations were recovered and identified on the 1:20,000 field photographs by the Field Inspection Party responsible for horizontal control for Project C.S. 289. They are:

SHAW, 1934
WILSON, 1934
BUZ, 1934
NETTLE, 1934

The Field Inspection Party established field inspection points at well defined points of detail near stations,

BUZ, 1934
SHAW, 1934

All of the horizontal control stations mentioned were used for the establishment of photograph centers, secondary, and detail points.

27 RADIAL PLOT:

The radial plot for this Map Manuscript is part of Main Radial Plot No. 3, Project C.S. 289. The descriptive report

27 RADIAL PLOT: (Continued)

for Main Radial Plot No. 3 will be included in the descriptive report for Survey No. T-8316 and will be submitted to the Washington Office in the near future.

28 DETAILING:

The field inspection data furnished the Compilation Office for this Map Manuscript was in general, satisfactory. Camp Morrison was not field inspected. Many roads were unclassified. Appropriate notes have been made on the discrepancy overlay calling for investigation of these discrepancies by the Field Edit Party.

Drainage and limits of marsh areas which were not well defined on the photographs were delineated by use of the stereoscope.

All buildings, except those shown in Camp Morrison, were detailed in accordance with field inspection data.

The Compilation Office was furnished the following plans:

Map of Warwick Co., Va. Scale 4" equals 1 mile
Hampton Rhodes, Port of Embarkation, Newport News, Va.,
Scale 1" equals 300'

These plans were used to aid the compiler in detailing the areas.

29. SUPPLEMENTAL DATA:

The following previous surveys covering portions or all of this Map Manuscript have been made by the U. S. Coast & Geodetic Survey. They are:

T-497	1853	1:20,000
T-1265	1871-72	1:20,000
T-2632	1903-07	1:20,000
T-2801	1906-07	1:20,000
H-3045	1910	1:20,000
T-3761	1918-19	1:10,000
T-8056	1941-42	1:10,000

29 SUPPLEMENTAL DATA: (Continued)

Only Survey No. T-8056 was available to the Compilation Office.

30 MEAN HIGH-WATER LINE:

The stage of tide of all the photographs used in the process of detailing this Map Manuscript was computed and found to be at Mean High-Water for all of the photographs except Nos. 12857 and 12858, which were found to be 0.2 ft. above M.L.W.

31 LOW-WATER AND SHOAL LINES:

Approximate low-water and shoal lines were not indicated by field inspection data. They were not sufficiently defined to detail from the 1:20,000 photographs with any certainty.

32 DETAILS OFFSHORE FROM THE HIGH-WATER LINE:

A house on piling is shown 2 miles north of the James River Bridge and 1 mile off the mouth of Waters Creek.

33 WHARVES AND SHORELINE STRUCTURES:

All wharves, piers and other shoreline structures have been detailed in accordance with field inspection data and office inspection of the nine lens photographs.

34 LANDMARKS AND AIDS TO NAVIGATION:

See Chart Letter 917(49) Copy enclosed

The Compilation Office was not furnished any data on landmarks or fixed aids to navigation. However, upon examination of nautical chart No. 529 it is evident that a fixed aid to navigation exists just north of the James River Bridge on the east shore of the James River, just off the end of the Huntington Park Pier. According to the 1944 Light List this light is Huntington Park Pier F. R. This aid to navigation is not visible on the nine lens photographs. The Compilation Office has established the end of this pier by radial intersections and it is believed that the Field Edit Party will have little trouble in locating this light. It is assumed that Form 567 will be submitted by the Field Inspection Party for this light if found necessary.

Handwritten note:
A. T. to Naut. Chart
Letter 917(49)
381
X

35 HYDROGRAPHIC CONTROL:

19 recoverable topographic stations, all of which are bench marks, have been established by radial intersections. Form 524 is being submitted for each of these stations. Of these 19 stations only two stations namely: B.M. G-27 and B.M. F-27 have limited value as partial hydrographic control, as long as they remain in position. The remainder are too far inland to be of any value for hydrographic control.

36 LANDING FIELDS AND AERONAUTICAL AIDS:

Langley Field has been detailed in accordance with data furnished by the Field Inspection Party. The Compilation Office has not been furnished any data for aeronautical aids.

37 DISCREPANCY OVERLAY:

A discrepancy overlay has been prepared to accompany this Map Manuscript. On it are such notes as are deemed to be of assistance during the field edit. A set of general notes has been included to aid in the interpretation of the symbols shown on the Map Manuscript and the discrepancy overlay.

38 GEOGRAPHIC NAMES:

The results of a geographic names investigation have been furnished the Compilation Office on the U. S. Geological Survey Hampton, Va. 15 minute quadrangle. Only the undisputed names have been shown on the Map Manuscript. A list of undisputed, disputed and recommended names is attached to this descriptive report. LA

39 HORIZONTAL ACCURACY:

The horizontal accuracy of this Map Manuscript is believed to be within the limits set forth for well defined and less well defined points of detail for War Mapping Map Manuscripts.

40 RECOMMENDATION FOR FUTURE SURVEYS:

The planimetry as presented on this Map Manuscript is believed to be complete, but is subject to corrections, additions and deletions at the time of the field edit.

The horizontal accuracy test showed five points outside the allowable error. These points were corrected by the reviewer in the Wash. office.

*See acc test report
filed in Division of Photogrammetry
for details. B.G.G.*

41 REMARKS:

The description of the area of this Map Manuscript, as prepared by the Field Inspection Party in the field report, is adequate.

42 JUNCTIONS:

The following satisfactory junctions have been made:

To the North with Map Manuscript for Survey No. T-8316
To the West with Map Manuscript for Survey No. T-8312
To the South with Map Manuscript for Survey No. T-8304
To the East with Map Manuscript for Survey No. T-8314

44 COMPARISON WITH EXISTING TOPOGRAPHIC QUADRANGLES:

Comparison was made with planimetric map drawing for Survey No. T-8056. Common detail was in excellent agreement except the Huntington Park Pier, just north of the James River Bridge. The War Mapping Map Manuscript shows this pier about 20 meters north of that shown on the planimetric map. According to the descriptive report for Survey No. T-8056, this pier was not existing on the photographs and was detailed from field inspection data. The pier shown on this Map Manuscript has been detailed directly from the 1:20,000 photographs and is believed to be in its correct position.

Due to scale difference only a visual comparison could conveniently be made with the U. S. Geological Survey, Hampton, Va. 15 minute quadrangle. Common topographic features are, in general, in fair agreement. Many man made changes are evident.

45 COMPARISON WITH NAUTICAL CHARTS:

Comparison was made with Chart No. 529, Scale 1:40,000, Reissued Mar. 6, 1944. The high-water line along the Eastern Shore of the James River for about 200 meters south of the James River Bridge, has receded about 30 meters from that shown on the chart.

Lake Maury and Waters Creek contain a greater area of water than that shown on the chart.

The fixed aid to navigation mentioned in Paragraph 34 is shown on the chart about 300 meters north of the location of

45 COMPARISON WITH NAUTICAL CHARTS: (Continued)

Huntington Park Pier. This pier is not shown on Chart No. 529. The Field Edit Party should establish the correct position of this fixed aid to navigation.

Comparison was made with Chart No. 400, Scale 1:20,000, reissued Mar. 6, 1944. Common detail is in excellent agreement.

Respectfully submitted
May 4, 1944

Michael G. Misulia

Michael G. Misulia
Jr. Topographic Engineer

Map Manuscript, Discrepancy
Overlay and Descriptive Report
Reviewed by:

Wm. H. Van Loon

Wm. H. Van Loon
Prin. Photogrammetric Aid

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 and Forwarded
May 5, 1944

Fred. L. Peacock
Fred. L. Peacock
Commander C. & G. Survey
Officer-in-Charge
Baltimore Photogrammetric Office

FIELD EDIT REPORT
TO ACCOMPANY
QUADRANGLE T-8313
F.L. Gallen. Chief of Party

5. The designation and elevation of each bench mark has been checked. The fly-level elevations are to be checked by the Washington Office.
6. The drainage has been completed at Latitude 37-06, Longitude 76-27, as asked for on the discrepancy overlay. At Latitude 37-04.5, Longitude 76-25 many of the intermittent streams shown on the map manuscript have been deleted. Local inquiry reveals that much of this area can be classed as low ground and during wet seasons considerable water stands in the wooded areas. The land is flat and poorly drained and the drainage is in three directions, to the north, east and south. There are a number of small drainage ditches in the area but none of sufficient size to show on the map manuscript. A local inhabitant thought he knew of one large drainage ditch but on making a circuit of the area by truck he was unable to point out the ditch.
11. The two Landmarks shown on Chart 529 within the limits of this quadrangle are triangulation stations and their charted position checks the geographic position and Form 567 is not being submitted. Forms 524 and 567 are being submitted for the light on the end of Huntington pier.
14. Unclassified roads appearing on the map manuscript have been classified. Some class 5 trails have been deleted but others have been left on the map manuscript. Only a few of these class 5 trails should be carried forward to the final map.
15. Bridges have been classified where omitted by the field inspection party.
16. All buildings added to the map manuscript have been classified unless they are dwellings in which case the classification was omitted.
18. The name "Sawyers Swamp" shown on the map manuscript in Latitude 37-04.5, Longitude 76-26, was investigated in the field. Local information discloses that this name is sometimes used as a locality name for the area but there are place names a short distance to the north and south and it is not believed advisable to carry this name forward to the final map. Under paragraph No. 6 above the drainage in this area is discussed. The land in this area is wet enough in the summer to make mosquito control necessary but it still would not be classed as a swamp in the true sense of the word but would be more in the nature of Low Ground.

Little Bethel Church shown in the Report on Geographic Names in Latitude 37-02.5, Longitude 76-26, has been superseded by Liberty Baptist Church. The name "Little Bethel" is sometimes applied to the community shown on the map manuscript as "Fox's Store" and a choice can be taken between the two names although the Report On Geographic Names lists "Fox's Store" as undisputed. The name "Little Bethel Church" is sometimes applied to a colored church a short distance to the north to distinguish it from Big Bethel Church which is in quadrangle T-8316.

Big Bethel Church is shown on the map manuscript for quadrangle T-8316 and is correct as shown.

46. The field edit was accomplished by visual inspection in the field. All notes were made on an ozalid print of the map manuscript and were transferred to a duplicate ozalid print. The various field edit notes have been inked on the ozalid print, using the following color scheme:

Deletions	Green
Additions, classifications, names and notes	Black
Water culture	Blue
Political subdivisions	Violet

47. The detail, as compiled on this sheet, was complete and adequate with few additions, classifications or deletions necessary.
48. One test was made to determine the accuracy of contours in this quadrangle. On the upper part of topo. photo. No. 12642 a stretch of contour about two miles long was rodged in. This was done because there was very little relief and the major discrepancy in this type of country would be horizontal displacement. The contour was checked by placing a tracing of the contour from the contour photograph over the accuracy traverse.

The test was run by Wm. M. Reynolds: on topo. photograph No. 12642 to check the work of Orvis N. Dalbey on topo. photograph No. 12643. The results of this test were satisfactory and indicate that the contours in this quadrangle are well within the requirements of the national standard map accuracy specifications.

49. The junction with T-8304 has been checked. The other junctions will be checked at the time the adjoining quadrangles are field edited.

Louis Levin, Sr. Photo. Aid, assisted in the field edit of this quadrangle.

Approved and Forwarded by:

F.L. Gallen

F.L. Gallen
Chief of Party

Submitted by:

Kenneth F. Phelps per J.L.

Kenneth F. Phelps
Sr. Photo. Aid

HORIZONTAL ACCURACY TEST
 PACIFIC COAST RAILROAD (South) ALVARADO LINE NO. 5
 Quadrangles Nos. T-8512, T-8513 and T-8514

This test consists of a traverse between triangulation stations DEBBIGH, 1932 and VIO LITTLE ROCK RAILROAD, COLUMBIA RIVER, 1932 and the latter station and HARRIS, 1934. The first part of the traverse is 5.0 statute miles long and the closing error is 1.50 meters or 1 part in 6200. The second part of the traverse is 3.8 statute miles long and the closing error is 1.00 meters or 1 part in 7300. The closing error was adjusted through the traverse. 25 test points were computed. In the tabulation the geodetic positions from the traverse computations is referred to as T. No. and the scaled position from the map manuscript is referred to as M. No. The "direction of displacement" refers to the direction of the scaled position from the geodetic position.

Test point No. 1 is in quadrangle No. T-8513, points Nos. 2 to 23 are in quadrangle T-8515 and points Nos. 24 to 25 are in quadrangle T-8514.

TABULATION OF TEST POINTS

Description of point	Test point number	Latitude	Longitude	Displacement in mm	Direction of displacement.
X-road Int.	T-1	37-06+522.4	76-29+968.2		
	M-1	$\begin{array}{r} 26.12 \\ 26.25 \\ +.13 \end{array}$	$\begin{array}{r} 48.41 \\ 48.8 \\ +.39 \end{array}$		41
T-road Int.	T-2	37-06+589.2	76-29+279.1		
	M-2	$\begin{array}{r} 29.46 \\ 29.75 \\ +.29 \end{array}$	$\begin{array}{r} 13.96 \\ 13.92 \\ -.04 \end{array}$		29
T-road Int.	T-3	37-06+582.6	76-28+952.5		
	M-3	$\begin{array}{r} 29.13 \\ 28.75 \\ +.38 \end{array}$	$\begin{array}{r} 47.63 \\ 47.35 \\ +.28 \end{array}$		47
Center of road and power-line	T-4	37-06+388.5	76-28+532.9		
	M-4	$\begin{array}{r} 19.33 \\ 19.13 \\ +.20 \end{array}$	$\begin{array}{r} 16.65 \\ 15.95 \\ +.70 \end{array}$		71
Center of house	T-5	37-05+1770.6	76-27+1361.9		
	M-5	$\begin{array}{r} 88.53 \\ 88.45 \\ +.08 \end{array}$	$\begin{array}{r} 68.10 \\ 68.10 \\ 0.0 \end{array}$		.08
Y-road Int.	T-6	37-05+1618.9	76-27+678.8		
	M-6	$\begin{array}{r} 80.95 \\ 80.90 \\ +.05 \end{array}$	$\begin{array}{r} 33.94 \\ 34.25 \\ -.31 \end{array}$		.31
Y-road Int.	T-7	37-05+1307.4	76-27+73.8		
	M-7	$\begin{array}{r} 65.37 \\ 65.2 \\ +.17 \end{array}$	$\begin{array}{r} 3.69 \\ 3.4 \\ +.29 \end{array}$		34
Center of road and culvert over Creek	T-8	37-05+1020.7	76-28+900.5		
	M-8	$\begin{array}{r} 51.04 \\ 51.2 \\ +.16 \end{array}$	$\begin{array}{r} 45.03 \\ 45.25 \\ +.22 \end{array}$		.27

Description of point	Test point number	Latitude	Longitude	Displacement in mm	Direction of displacement.
Center of house	T-9 M-9	37-05+750.4 $\begin{array}{r} 37.52 \\ 38.9 \\ \hline 76.42 \end{array}$	76-26+217.5 $\begin{array}{r} 10.88 \\ 11.0 \\ \hline 21.88 \end{array}$	.89	*
T-road Int.	T-10 M-10	37-05+471.9 $\begin{array}{r} 471.9 \\ 23.6 \\ \hline 495.5 \end{array}$	76-25+1058.0 $\begin{array}{r} 1058.0 \\ 52.9 \\ \hline 1110.9 \end{array}$	} Not identified	
T-road Int.	T-11 M-11	37-05+477.8 $\begin{array}{r} 477.8 \\ 23.89 \\ \hline 501.69 \end{array}$	76-25+723.1 $\begin{array}{r} 723.1 \\ 36.16 \\ \hline 759.26 \end{array}$	.31	
T-road Int.	T-12 M-12	37-05+709.2 $\begin{array}{r} 709.2 \\ 35.46 \\ \hline 744.66 \end{array}$	76-25+750.8 $\begin{array}{r} 750.8 \\ 36.54 \\ \hline 787.34 \end{array}$	.84	*
T-road Int.	T-13 M-13	37-05+903.7 $\begin{array}{r} 903.7 \\ 45.19 \\ \hline 948.89 \end{array}$	76-24+1307.8 $\begin{array}{r} 1307.8 \\ 65.39 \\ \hline 1373.19 \end{array}$	.37	
T-road Int.	T-14 M-14	37-05+527.3 $\begin{array}{r} 527.3 \\ 26.37 \\ \hline 553.67 \end{array}$	76-24+854.4 $\begin{array}{r} 854.4 \\ 41.72 \\ \hline 896.12 \end{array}$	.40	
Y-road Int.	T-15 M-15	37-05+204.6 $\begin{array}{r} 204.6 \\ 19.23 \\ \hline 223.83 \end{array}$	76-24+299.5 $\begin{array}{r} 299.5 \\ 14.98 \\ \hline 314.48 \end{array}$	.57	*
Center of road	T-16 M-16	37-05+812.8 $\begin{array}{r} 812.8 \\ 40.64 \\ \hline 853.44 \end{array}$	76-23+1436.1 $\begin{array}{r} 1436.1 \\ 71.81 \\ \hline 1507.91 \end{array}$	} Not identified	
X-road Int.	T-17 M-17	37-05+1130.9 $\begin{array}{r} 1130.9 \\ 56.55 \\ \hline 1187.45 \end{array}$	76-23+916.1 $\begin{array}{r} 916.1 \\ 45.81 \\ \hline 961.91 \end{array}$	.41	
T-road Int.	T-18 M-18	37-05+760.0 $\begin{array}{r} 760.0 \\ 38.0 \\ \hline 798.0 \end{array}$	76-23+224.3 $\begin{array}{r} 224.3 \\ 11.22 \\ \hline 235.52 \end{array}$	.12	
T-road Int.	T-19 M-19	37-04+1462.1 $\begin{array}{r} 1462.1 \\ 73.11 \\ \hline 1535.21 \end{array}$	76-22+1176.8 $\begin{array}{r} 1176.8 \\ 58.84 \\ \hline 1235.64 \end{array}$	1.10	*
T-road Int.	T-20 M-20	37-04+740.1 $\begin{array}{r} 740.1 \\ 37.01 \\ \hline 777.11 \end{array}$	76-22+1573.7 $\begin{array}{r} 1573.7 \\ 68.69 \\ \hline 1642.39 \end{array}$	.28	
T-road Int.	T-21 M-21	37-04+215.9 $\begin{array}{r} 215.9 \\ 10.7 \\ \hline 226.6 \end{array}$	76-23+142.3 $\begin{array}{r} 142.3 \\ 7.12 \\ \hline 149.42 \end{array}$	.15	
T-road Int.	T-22 M-22	37-03+1409.6 $\begin{array}{r} 1409.6 \\ 70.48 \\ \hline 1480.08 \end{array}$	76-23+290.9 $\begin{array}{r} 290.9 \\ 14.55 \\ \hline 305.45 \end{array}$	.44	

Description of point	Test point number	Latitude	Longitude	Displace- ment in mm	Direction of dis- placement.
T-road Int.	T-23	37-03+439.1	72-22+1157.3		
	L-23	$\begin{array}{r} 21.95 \\ 22.18 \\ +.2 \end{array}$	$\begin{array}{r} 57.86 \\ 57.9 \\ +.04 \end{array}$		.20
T-road Int.	T-24	37-03+745.1	76-22+498.2		
	M-24	$\begin{array}{r} 37.26 \\ 37.55 \\ +.29 \end{array}$	$\begin{array}{r} 24.91 \\ 24.90 \\ +.01 \end{array}$		.29
T-road Int.	T-25	37-03+1223.1	76-21+1162.4		
	L-25	$\begin{array}{r} 61.16 \\ 61.05 \\ -.11 \end{array}$	$\begin{array}{r} 58.12 \\ 58.15 \\ +.03 \end{array}$		.11

Submitted by

G. R. Fish

G. R. Fish
Lieut. Comdr., U.S.C. & G. S.

Approved and forwarded by

F. L. Gallen

F. L. Gallen
Chief of Party

GEOGRAPHIC NAMES

Undisputed

✓ Aberdeen Road
✓ ~~Back River (Northwest Branch)~~
✓ Back River Road
✓ Baines Lane
✓ Beaconsdale
✓ Big Bethel Battlefield
✓ Big Bethel Church
 (not shown on Map Manuscript)
✓ Big Bethel Reservoir
✓ Briarfield Road
✓ Brick Kiln Creek
✓ Buzzards Roost
✓ Carey Chapel
✓ ~~Cedar Point~~
✓ Cedar Creek
✓ Chesapeake and Ohio R.R.
✓ Elizabeth City County
✓ Fox's Store
✓ Freemans Crossing
✓ Harpersville
✓ Harpersville Road
✓ Hilton Village
✓ James River
✓ James River Bridge
✓ Joynes Road
✓ Lake Maury
✓ Langley Field
✓ Little Bethel Church *(at new position)*
 (not shown on Map Manuscript)

✓ Mellen
✓ Messick *Road*
✓ Moores Creek
✓ Morrison
✓ Newmarket Corners
 ~~N.N.H. & O.P. Elec. R.R.~~
 (not shown on Map Manuscript)
✓ Newmarket Creek
✓ Newmarket Road
✓ Newport News Airport
 (not shown on Map Manuscript)
✓ North Newport News
✓ Pine Chapel Road
✓ Pocahontas Trail
✓ Salters Road
✓ Sawyers Swamp
✓ Scones Road
✓ Semple Farm Road
✓ Shell Road
✓ Sinclair's Corner
✓ Spegalville
✓ Tabbs Creek
✓ The Cedars
✓ Tide Mill Road
✓ Todds Road
✓ Virginia Avenue
✓ Waters Creek
✓ Warwick County
✓ York County
✓ Yorktown Road

GEOGRAPHIC NAMES

Recommended

Broken Bridge
Curtis Corner
✓ Tide Mill Creek

Disputed

Big Bethel Bridge
Topping Corner
Hampton Creek

STRIKE OUT ONE

Suffolk, Virginia

May 25 1944

I recommend that the following objects which have (have not) been inspected from seaward to determine their value as landmarks, be charted on (deleted from) the charts indicated.

The positions given have been checked after listing.

H. L. Callen

Chief of Party.

Superseded by Chart Letter 917(49)

This form shall be prepared in accordance with 1934 Field Memorandum, "LANDMARKS FOR CHARTS." Positions of charted landmarks and nonfloating aids to navigation, if redetermined, shall be reported on this form. The data should be considered for the charts of the area and not by individual field survey sheets. Information under each column heading should be given.

T-8313

76 26
+ 37-06

+ 37-05



Remarks

Decisions

1		USGB
2		
3		
4		
5		
6		
7		
8		
9		USGB
10		Railway Guide
11		Road Maps
12		"
13		370763
14		370763
15		"
16		"
17		"
18		"
19		"
20		"
21		"
22		"
23		"
24		"
25		"
26		"
27		"

GEOGRAPHIC NAMES

Survey No. T-8313

MORRISON quadrangle

1	Name on Survey	A	B	C	D	E	F	G	H	K	
	Virginia										1
	Warwick County ✓										2
	Elizabeth City County ✓										3
	York County ✓										4
	Newport District (Warwick Co.)										5
	Denbigh "	"									6
	Posucon " ✓ (York Co.)										7
	Arthe " ✓ (Elizabeth City Co.): check whether it was not Wyeth on Field Edit Sheet of T-8304										8
	James River ✓										9
	Chesapeake & Ohio Ry ✓										10
	U.S. 60, U.S. 17										11
	State Nos. 168, 170, 171, 239										12
	Copeland Park ✓										13
	Shell Road ✓										14
	Freemans Crossing ✓										15
	Salters Road ✓										16
	First Baptist Church of Riverview ✓										17
	Newmarket Corners ✓										18
	Newmarket Road ✓										19
	Newmarket Creek ✓										20
	Pine Chapel Road ✓										21
	Sinclair Corner ✓										22
	Back River Road (No. 170) ✓										23
	Back River School ✓										24
	Tide Mill Road ✓										25
	Tide Mill Creek ✓										26
	Spegalville ✓										27

T-8313

2

Remarks

Decisions

1		370763
2		"
3		"
4		371763
5		"
6		"
7		"
8		"
9		371764
10		"
11		"
12		
13		"
14		
15		"
16		37-764
17		"
18		"
19		"
20		"
21		"
22		"
23		"
24		"
25		"
26		"
27		"

GEOGRAPHIC NAMES

Survey No. T-8313

GEOGRAPHIC NAMES											
Survey No. T-8313											
		<div>On Chart No.</div> <div>On previous survey No.</div> <div>On U. S. quadrangle Maps</div> <div>From local information</div> <div>On local Maps</div> <div>P. O. Guide or Map</div> <div>Rand McNally Atlas</div> <div>U. S. Light List</div>									
2	Name on Survey	A	B	C	D	E	F	G	H	K	
	Morning Star Baptist Church		✓								1
	Curtis Corner		✓								2
	Langley Field		✓								3
	Northwest Branch		✓								4
	Tabbs Creek		✓								5
	Cedar Creek		✓								6
	The Cedars		✓								7
	Cedar Point	belongs on T-8, 14									8
	Massick Road	✓	(No. 171)								9
	Moorea Creek	✓	✓								10
	Carey Chapel	✓	per names report, it is a negro settlement: apparently deleted on Field Edit Sheet, perhaps as not a church								11
											12
	Little Bethel Church	✓	F.E. Sheet has name here, instead of at older location farther south, where it has another church name								13
											14
	Bethlehem Baptist Church	✓									15
	Harpersville	✓	✓								16
	Harpersville Road	✓	✓								17
	Brick Mill Creek	✓	✓								18
	Big Bethel Battlefield	✓	✓								19
	Big Bethel Church										20
	Big Bethel Reservoir	✓	✓								21
	Broken Bridge	✓	✓								22
	Sapt Semple Farm Road	✓	✓								23
	Semple Farm School	✓	✓								24
	Ebenezer Baptist Church	✓	✓								25
	Snyers Swamp	✓	✓								26
	Torktown Road	✓	✓								27

M 234

Remarks

Decisions

1		370764: all names on this section sheet
2		
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11		
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18		
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21		
22		
23		USGB
24		"
25		
26		
27		

GEOGRAPHIC NAMES

Survey No.

T-8, 15

3	Name on Survey	A	B	C	D	E	F	G	H	K	
	<u>Wox's Store</u>	✓									1
	<u>Liberty Baptist Church</u>	✓									2
	<u>Baines Lane</u>	✓									3
	<u>Scenes Road</u>	✓									4
	<u>Jovnes Road</u>	✓									5
	<u>Aberdeen Road</u>	✓									6
	<u>Aberdeen Gardens School</u>	✓									7
	<u>Mt. Holly Church</u>	✓									8
	<u>Newport News Airport</u>										9
											10
	<u>Briarfield Road</u>	✓									11
	<u>Parkview Baptist Church</u>	✓									12
	<u>Parkview School</u>	✓									13
	<u>Camp Hill</u>	✓									14
	<u>Virginia Avenue</u>	✓									15
	<u>James River Bridge</u>	✓									16
	<u>Huntington Park</u>										17
	<u>North Newport News</u>	✓									18
	<u>Hilton Village</u>	✓									19
	<u>Morrison</u>	✓									20
	<u>Todd's Road</u>	✓									21
	<u>Beaconsdale</u>	✓									22
	<u>Morrison First Baptist Church</u>	✓									23
	<u>Maters Creek</u>	✓									24
	<u>Wicks Laury</u>	✓									25
	<u>Mariners Museum Park</u>	✓									26
	<u>Pocahontas Trail</u>										27
	<u>Wellen</u>	✓									28

Remarks

Decisions

1		370764
2		371764
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GEOGRAPHIC NAMES

Survey No. T-8313

4	Name on Survey	A	B	C	D	E	F	G	H	K	
✓	Peninsula Memorial Park	✓									1
✓	Camp Patrick Henry	✓									2
✓	Blooming Zion Church	✓									3
											4
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											28

Map by L. Heck on 6/9/44

M 234

Names listed on this sheet
 by L. Heck on 6/9/44

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.

Division

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 Section

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.

DIVISION OF CHARTS

SURVEYS BRANCH

REVIEW OF AIR PHOTOGRAPHIC SURVEY T- 8313

MORRISON 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

A horizontal accuracy test was run in this quadrangle and found to be satisfactory. See the files in the Division of Photogrammetry.

A vertical accuracy test was run in this quadrangle and found to be satisfactory. See Item 48 in the Field Edit Report enclosed in this Descriptive Report.

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-497	1:20,000	1853
T-1265	1:20,000	1871-72
T-2632	1:20,000	1903-07
T-3761	1:10,000	1918-19

Comparison with Nautical Charts Nos. 400, 494, 529.

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:

T-8313 has been partially applied to charts 494 and 529.

The details of T-8313 are complete and adequate for chart correction.

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

Only changes of a minor nature were necessary during the review of this map manuscript.

Reviewed June 6, 1944 By Harlow E. Peas
under direction of D. H. Benson (per p.m.)

Inspected by B. G. Jones B.G. Jones 8/46

Examined and approved:

K.T. Adams

Chief, ~~Surveys Branch~~
Division of Photogrammetry

~~Chief, Topography Section~~

Robert W. Knox

Chief, Div. of Charts
Nautical Chart Branch

Raymond E. Gorman

Chief, Div. of Coastal
Surveys

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

NONFLOATING AIDS OR LANDMARKS FOR CHARTS

TO BE CHARTED

STRIKE OUT ONE

~~TO BE DELETED~~

I recommend that the following objects which have ~~(insert name)~~ been inspected from seaward to determine their value as landmarks be charted on ~~(insert name)~~ the charts indicated.

The positions given have been checked after listing by C. Theurer

Washington Office~~4-8312~~ November 8, 1949Chart Letter 917 (49)S. V. Griffith Chief of Party.

STATE	CHARTING NAME	DESCRIPTION	SIGNAL NAME	POSITION				METHOD OF LOCATION AND SURVEY No.	DATE OF LOCATION	HARBOR CHART	INSHORE CHART	OFFSHORE CHART	CHARTS AFFECTED
				LATITUDE		LONGITUDE							
				°	'	°	'						
T-8056	Huntington Park Pier Lt (1942)			37 00	1515	76 27	815	NA 1927	Photo 8313	1944			529
	Tank			37 00	156.9	76 26	611.4	"	Triang. GP-423	1941			400 ✓ 529
	Tank			37 00	944.9	76 26	940.3	"	Triang. GP-422	1941			400 ✓ 529
	Tower			37 00	283.6	76 28	271.7	"	Triang. GP-417	1932			529
	Tower			37 00	353.0	76 28	209.7	"	Triang. GP-417	1932			529
	Tank			37 02	624.8	76 27	1228.6	"	Triang. GP-417	1927			529
	Tank			37 03	120.7	76 28	413.4	"	Triang. GP-48	1932			529
	Monument			37 02	994.0	76 29	465.5	"	Triang. GP-309	1938			529
Note: Two radio towers shown on Chart 529 (Triang. locations) have not been recommended for charting or deletion on T-8312.													
					cht 400 ✓ 2 na			8-4-60					

NAUTICAL CHARTS BRANCH

SURVEY NO. T. 8313

Reviewed June 6, 1944

Record of Application to Charts

[illegible]

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.