

8548

Diag. cht. No. 77-5

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey PLANIMETRIC AIR PHOTOGRAPHIC

Field No. _____ Office No. T-8548

LOCALITY

State MARYLAND

General locality PATUXENT RIVER

Locality HOLLAND CLIFF TO HUNTING CREEK

1946

CHIEF OF PARTY

D. E. Strumer

F. L. Peacock

LIBRARY & ARCHIVES

DATE

Mar 15 - 1951

8548

DATA RECORD

T-8548

Quadrangle (II):

Project No. (II): CS-307

Field Office:

Chief of Party: *D. E. Sturmer*
~~Fred. L. Peacock~~

Air Photographic Party No. 2

Compilation Office:

Chief of Party: Fred. L. Peacock

Baltimore Photogrammetric Office

Instructions dated (II III):

August 26, 1943, Supplemented by
September 9, 1943, and March 2, 1944.*Division of*
Copy filed in Descriptive
Report No. ~~T~~ *(VI)*
Photogrammetry Office
Files.

Completed survey received in office: 4-15-46

Reported to Nautical Chart Section: 4-22-46

Reviewed: 1-19-49

Applied to chart No. 553

Date: 9-49

Redrafting Completed: 12-12-49

Registered: 2-5-51

Published: 1-22-51

Compilation Scale: 1:10,000

Published Scale: 1:10,000

Scale Factor (III): None

Geographic Datum (III): N.A. 1927

Datum Plane (III): ~~Mean Sea Level~~
MHW

Reference Station (III): DOWELL, 1943, r. 1945

Lat.: 38° 33' 18.014" 555.5 Long.: 76° 41' 38.893" 941.7 Adjusted
(1294.6) m. (511.1) m UnadjustedState Plane Coordinates (VI): *Maryland*

X =

Y =

Military Grid Zone (VI)

PHOTOGRAPHS (III)

<u>Number</u>	<u>Date</u>	<u>75th Meridian Time</u>	<u>Scale</u>	<u>Stage of Tide</u>
12500-12502, incl.	11-27-42	1318	1:10,000	0.25' above M.L.W.
12518-12520, "	11-27-42	1318	1:10,000	0.25' above M.L.W.
12538-12542, "	11-27-42	1356	1:10,000	0.5' above M.L.W.

Tide from (III); Predicted Tables, Reference Station - Baltimore, Maryland, with corrections for Benedict, Patuxent River.

Mean Range: 1.6'

Spring Range: 1.9'

Camera: (Kind or source) U. S. Coast and Geodetic Survey Nine Lens Camera (focal length $8\frac{1}{4}$ inches) and single lens camera.

Field Inspection by: Lieut. Dale E. Sturmer
J. Steinberg and L.A. Senasack

date: Jan-Mar. 1945
Feb-Mar. 1946

Field Edit by: *NONE*

date:

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

Same as date of photographs, supplemented by date of field inspection.

Projection and Grids ruled by (III) S.R.

date: 6-9-45

" " " checked by: S.R.

date: 6-9-45

Control plotted by: Mildred M. Trautman

date: 6-15-45

Control checked by: James L. Harris

date: 6-18-45

Radial Plot by: Henry P. Eichert
John M. Reinoldi

date: July-Sept. 1945

Detailed by: Ruth E. Audolph

date: 10-19-45 - 1-11-46
3-18-46 - 3-27-46

Reviewed in compilation office by: Raymond Glaser

date: 4-1-46 - 4-12-46

~~Elevations on Field Edit Sheet~~
~~checked by:~~

~~date:~~

STATISTICS (III)

Land Area (Sq. Statute Miles); 26

Shoreline (More than 200 meters to opposite shore); $9\frac{1}{2}$ statute miles.

Shoreline (Less than 200 meters to opposite shore); 6 statute miles.
(Measured along approximate centerline only).

Number of Recoverable Topographic Stations established; 8

Number of Temporary Hydrographic Stations located by radial plot; None

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;

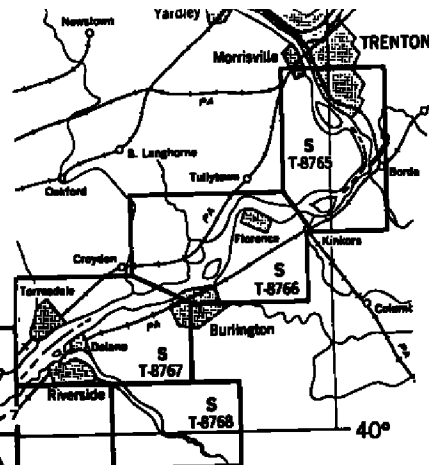
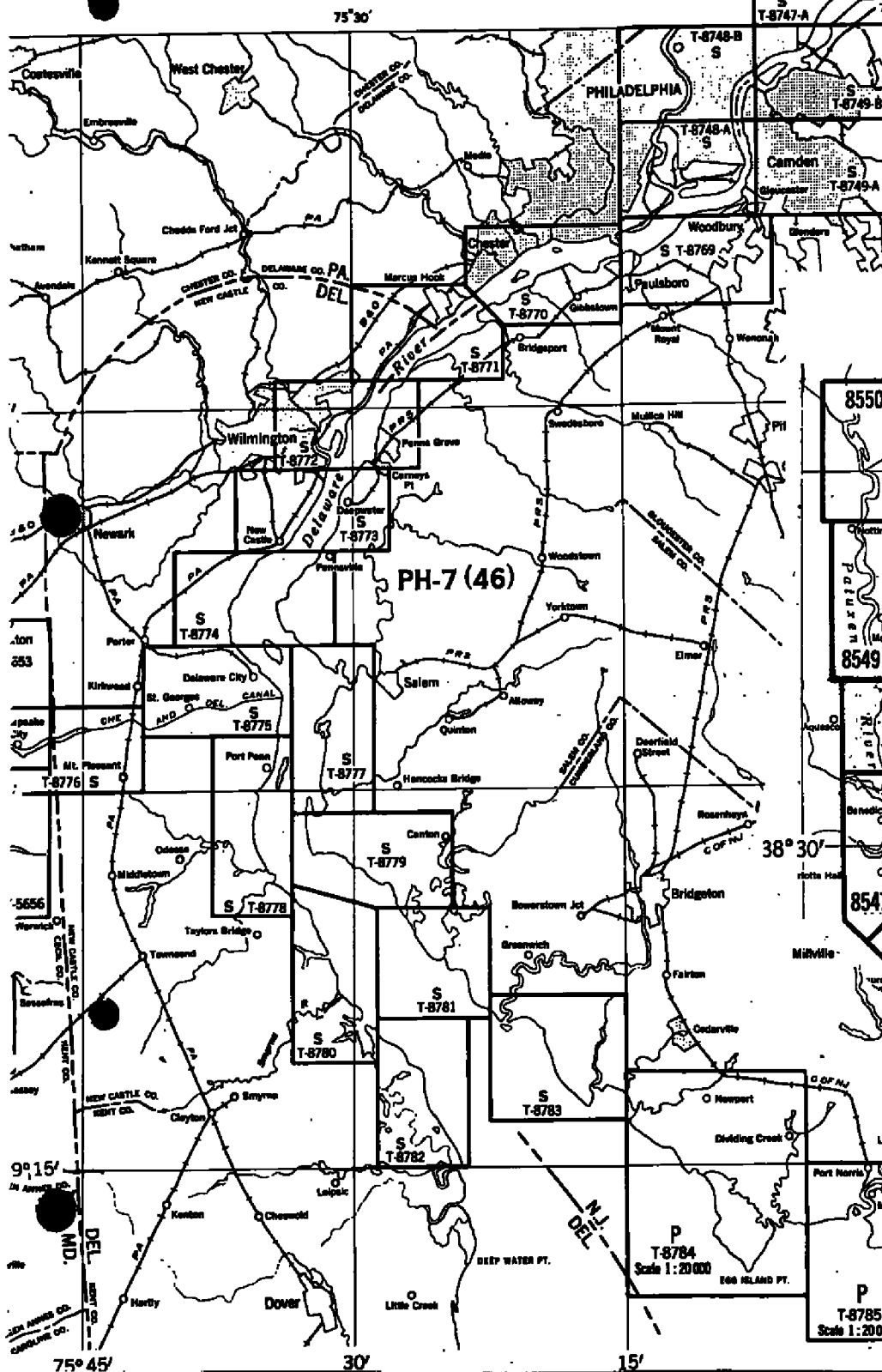
PLANIMETRIC AND SHORELINE MAPPING PROJECTS

PH-7 (46) CS-307 (43)

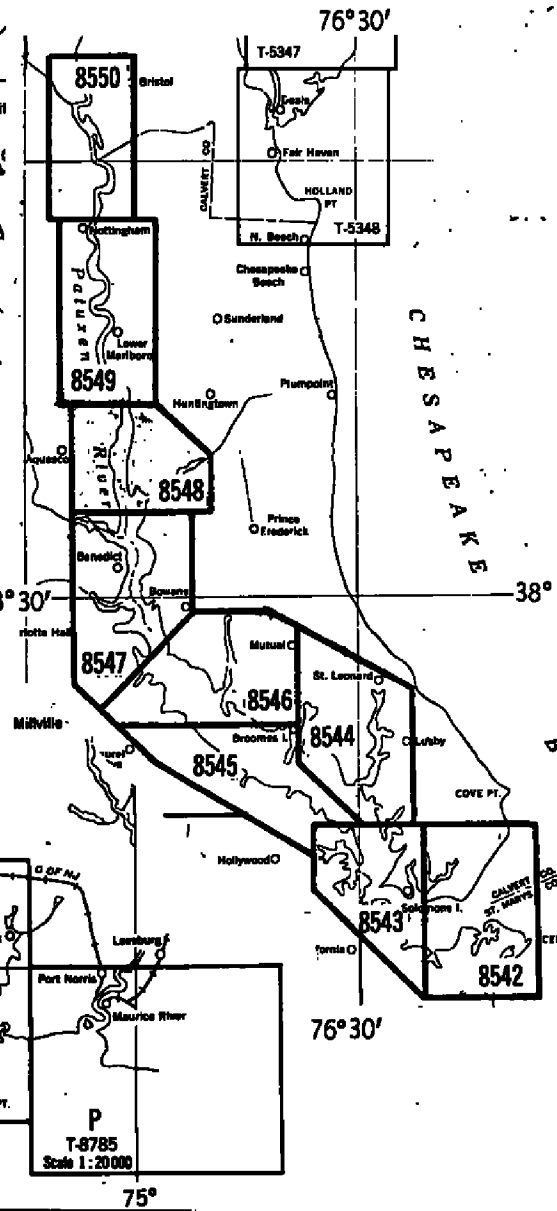
PH-7 (46) DEL - N.J. - PA., Delaware River

(P) Indicates Planimetric Survey

(S) Indicates Shoreline Survey



CS-307 (43) MARYLAND, Patuxent River PLANIMETRIC



FIELD INSPECTION

Field inspection data for the area of T- *8548* are contained in the "Report on Field Inspection of Air Photographs, Patuxent River, Maryland" by Dale E. Sturmer. Field inspection was accomplished January to , May, 1945. This report is filed in the Division of Photogrammetry general files.

FIELD REPORT

SURVEY No. T-8548

PATUXENT RIVER, MD.

PROJECT No. CS-307

1. DESCRIPTION OF THE AREA:

Survey No. T-8548 includes an area along the Patuxent River from just north of Holland Cliff to Hunting Creek, as far west as Aquasco and as far east as Maryland State Highway #2.

Immediately adjacent to the Patuxent River, the terrain is low, grass covered marsh and fast land. Inland is rolling farm land. The elevation in this area ranges from sea level to a maximum of 180 feet. The streams in the area are long and a part of an extensive drainage system, all flowing into the Patuxent River or into Hunting Creek and then into the Patuxent.

2. COMPLETENESS OF FIELD INSPECTION:

The field inspection of the area of this survey was worked on by two different Field Units at different times. In 1945 the Field Unit in the immediate charge of Irving Zirpel working under the direct supervision of Lieutenant Dale E. Sturmer was engaged in the field inspection of the Upper Patuxent River. This Field Unit completed the field inspection of the Mean High-Water Line, most of the Mean Low-Water Line, Foreshore and Offshore features and most of the interior inspection with the exception of the greater part of the drainage. The field work was not completed when the field season closed. *See reference to field inspection on preceding page*

The remainder of the interior field work was completed in the spring of 1946 by a Field Unit operating directly from the Baltimore Photogrammetric Office.

3. INTERPRETATION OF THE PHOTOGRAPHS:

Sufficient notes have been made on the photographs to enable the Compilation Office to augment the field interpretation by analogy where necessary.

4. HORIZONTAL CONTROL:

All of the Horizontal (Control) Stations searched for within the area of this survey were recovered in good condition with the following exceptions:

T.T. 1385 (U.S.G.S.) - destroyed
T.T. 1394 (W. O. 25, 1933) (U.S.G.S.) - destroyed
T.T. 1398 (U.S.G.S.) - destroyed
T.T. 3724 (U.S.G.S.) - not found

Form No. 526, Recovery Note, has been submitted for five of the horizontal control stations. *Filed in Division of Geodesy*

5. VERTICAL CONTROL:

B.M. WO-17, 1933 (T.T.869)(U.S.G.S.) was recovered and identified on the field photographs.

Three marked Bench Marks were recovered but were not identified on the field photographs. They are as follows:

Y-36, 1941

Z-36, 1941

A-37, 1941

Form No. 685, Report on Condition of Bench Mark is being submitted for each of the four above mentioned Bench Marks and also for WO 25, 1933, (TT 1394) (U.S.G.S.) which was not recovered. *Filed in Division of Geodesy*

6. DRAINAGE:

Drainage was delineated on the field photographs in the office with white ink and checked in the field after which it was inked in blue. The checking was done by inspection or by measuring in from some identifiable point. A few of these check points are circled on the field photographs. In some areas, especially where the streams ran through heavy wooded areas and could not be identified by stereoscopic examination, or measured in from identifiable points, drainage was located by the pedograph. *Refer to Special Desc. Report "Pedograph Traverses" filed in Div. Photogrammetry General Files*

7. MEAN HIGH-WATER LINE:

All of the Mean High-Water Line has been identified on the photographs in accordance with instructions for shoreline inspection. All inspection was done either from a dinghy kept close to shore or by traversing by foot. When the Mean High-Water Line could not be identified on the photographs, reference measurements were taken or the distance estimated from the grass line, tree line, or some other identifiable feature. The Mean High-Water Line is shown either with a dashed line or with reference measurements.

There is much marsh area along the river's edge which is just about flooded at Mean High-Water. In such places, the marsh line has been delineated on the photographs. In some areas where there is no definite line at the outer limits of the marsh, the marsh line changes with the season. In the spring and summer, the marsh grass grows out farther to the center of the river and also much of the area is covered with lily pads. In the fall and winter, the lily pads die off and the marsh line recedes toward the shore. With respect to this, local residents were interviewed as to where the outer limits of marsh might be, but there was no agreement among them. The marsh line is shown with an alternate dot and dashed line. Where the marsh line changes with the season, the area is merely termed "grass in water".

8. MEAN LOW-WATER LINE:

As the tide range is small, the Mean Low-Water line in some areas is very close to the Mean High-Water Line and has not been shown.

All the Mean Low-Water Line was inspected at or near Mean Low-Water.

8. MEAN LOW-WATER LINE: (Continued)

In the areas where the Mean Low-Water Line is close to the Mean High-Water Line, it was determined within an accuracy of 10 meters and is shown with an alternate dot and dashed line.

9. WHARVES AND SHORELINE STRUCTURES:

All of the wharves, piers, and other shoreline structures, visible on the photographs, within the area of this survey have been identified on the field photographs.

10. DETAILS OFFSHORE FROM THE MEAN HIGH-WATER LINE:

All detail outside the Mean High-Water Line, revealed by photography has been identified on the field photographs, accompanied by appropriate notes.

11. LANDMARKS AND AIDS TO NAVIGATION:

There are no previously charted Landmarks or Non-Floating Aids to Navigation within the area of the survey and none are recommended.

12. HYDROGRAPHIC CONTROL:

Enough Recoverable Photo (Topographic) Stations of either discs or natural objects were selected to give at least a station per mile along the water way. Eight of these stations lie within the area of this survey. Descriptions have been furnished.

14. ROAD CLASSIFICATION:

Roads were classified, by the 1945 Field Inspection Unit, according to instructions dated September 9, 1943. The Sub-Party of 1946 classified roads in accordance with "General Instructions for Classification and Compilation of Roads" dated June 30, 1945. *Filed in Div. Photogr Office Files.*

15. BRIDGES:

The positions of numerous culverts and a few small bridges have been marked with symbols and notes on the field photographs. There were no bridges over navigable waters in the area of this survey.

16. BUILDINGS AND STRUCTURES:

All public buildings are identified on the photographs. Buildings along the shoreline and buildings identified by the Sub-Party of 1946 are classified as follows: "a" indicates abandoned and is used in connection with "b" (barn) and "d" (dwelling). Several new buildings have been located by pedograph in 1946.

18. GEOGRAPHIC NAMES:

A complete investigation of geographic names was made and is the subject of a separate report.

COMPILATION REPORT
MAP MANUSCRIPT, SURVEY No. T-8548
PATUXENT RIVER, MARYLAND

HOLLAND CLIFF TO HUNTING CREEK
Project No. CS-307

26. CONTROL:

The horizontal control in the area of the Map Manuscript for Survey No. T-8548 consists of ten stations. They are as follows:

Five within the detail limits

- ✓ * DOWELL, 1943, r. 1945
- ** T.T. 861+ (U.S.G.S.) 1933, r. 1945 —
- ✓ T.T. 869 (W.O. 17, 1933) (U.S.G.S.) 1933, r. 1945
- ** T.T. 3732+ (U.S.G.S.) 1934, r. 1945 —
- T.T. 3741 (U.S.G.S.) 1934, r. 1945 —

Five just outside the detail limits

- * HUNTINGTOWN, 1943, r. 1945
- * PRINCE 2, 1943, r. 1945
- ✓ T.T. 852+ (U.S.G.S.) 1933, r. 1945
- ✓ T.T. 863+ (U.S.G.S.) 1933, r. 1945
- T.T. 1365 (W.O. 24, 1933) (U.S.G.S.) r. 1943, r. 1945

* Identified by a substitute point. The position of these substitute points have been shown on the Map Manuscript with a small black acid ink circle, accompanied by the note "Sub. Sta".

** Not used to control Radial Plot.

Eight of the above mentioned Horizontal (Control) Stations were used to control the radial plot.

27. RADIAL PLOT:

The radial plot for the area of Survey No. T-8548 is part of a combined plot made with celluloid templates for that part of Project No. CS-307 assigned to the Baltimore Photogrammetric Office, which includes the area covered by Surveys Nos. T-8547 to T-8550, inclusive. Satisfactory results were obtained.

For further information, refer to the separate Radial Plot Report for Patuxent River, Chesapeake Bay area, Maryland, submitted to the Washington Office on February 25, 1946, which explains thoroughly the plotting method, the difficulties encountered, and the results obtained.

— = unmarked stations deleted from map manuscript.

28. DETAILING:

The field data, horizontal control stations, and horizontal pass points available for the compilation of the survey were adequate.

Due to the large amount of topographic relief in the area of this survey, delineation from the outer wings of the nine lens photographs was not satisfactory, and since the photographic coverage was insufficient, ratio prints of single lens photographs, were ordered from the Washington Office. These ratio prints, approximately 1:10,000 scale, were furnished the Compilation Office for use in the delineation of the outer limits of this survey. These ratio prints were found to be of great aid, but care had to be exercised due to numerous cultural changes which occurred during the four year interval between the date of the ratio prints and that of the nine lens photographs.

The limits and field classification symbols of all woodland areas have been delineated on an overlay with fine solid black acid ink lines, according to Instructions dated June 30, 1945.

The instructions to the Field Unit of 1945, dated September 2, 1943, called for a two road classification only and all roads classified by the 1945 Field Unit have been shown on the Map Manuscript in that manner. However, the Field Unit in 1946 classified roads according to the instructions dated June 30, 1945 and those roads have been shown on the Map Manuscript in that manner.

On the western side of the Patuxent river, drainage clearly visible on the single lens photographs was delineated by the Compilation Office in preference to that shown on the nine lens field prints by the 1945 Field Unit if their interpretation did not agree with the images as seen on the single lens photographs by the Compilation Office.

29. SUPPLEMENTAL DATA:

Survey No. T-814, dated 1859-1908, scale 1:10,000, was the only previous survey of the area of this Map Manuscript made by the United States Coast and Geodetic Survey. This survey was not available to the Compilation Office.

30. MEAN HIGH-WATER LINE:

The Mean High-Water Line bordering along firm ground has been delineated in accordance with the field inspection data and is shown with a continuous heavy-weight black acid ink line. The outer limits of marsh areas, bordering the Mean High-Water Line, have been delineated with a full light-weight black acid ink line and the included area shown with the conventional symbol.

31. LOW-WATER AND SHOAL LINES:

The position of the Mean Low-Water Line has been delineated in accordance with the field data and has been shown with an alternate dot and dash line. The position of the mean Low-Water Line, which was delineated, within the area of the Map Manuscript, was interpreted as being within an accuracy of 10 meters by the Field Party.

The approximate limits of shoal areas were not shown on the Map Manuscript because no field data were furnished the Compilation Office.

32. DETAILS OFFSHORE FROM THE MEAN HIGH-WATER LINE:

All piling, duckblinds, wrecks, and other offshore details have been shown in accordance with the field data.

33. WHARVES AND SHORELINE STRUCTURES:

All wharves, piers, fences, jetties, and other shoreline structures have been delineated in accordance with the field data and accompanied by descriptive notes.

34. LANDMARKS AND AIDS TO NAVIGATION:

There are no recommended or previously charted Landmarks or Non-Floating Aids to Navigation within the area of the Map Manuscript.

35. HYDROGRAPHIC CONTROL:

8 Recoverable Photo (Topographic) Stations.

Descriptions are lettered on the left hand margin on the Map Manuscript.

Form No. 524 is being submitted for each of the eight stations.
Filed in Div. Photogr General Files.

36. GEOGRAPHIC NAMES:

The results of a geographic names investigation were furnished the compilation Office in a sketch book by the Field Party. Undisputed names and recommended names have been shown on the Map Manuscript. A list of undisputed, disputed, and recommended names is attached to this report. *Report filed in Geographic Names Section, Chart Division.*

39. JUNCTIONS:

The junctions with Map Manuscript, Survey No. T-8547 to the south and Survey No. T-8549 to the north have been made and are in agreement. There are no contemporary surveys to the east or to the west.

40. POSITION ACCURACY OF IMPORTANT PLANIMETRIC DETAILS:

Believed to be within 0.5 mm. with the exception of the outer limits of the survey where, due to insufficient photographic coverage, it is believed to be within 1.0 mm.

41. RECOMMENDATIONS FOR FUTURE SURVEYS:

Map Manuscript, Survey No. T-8548, is complete with respect to all known details necessary for charting, except the charted features not definitely revealed by photography, which should be investigated during the next Hydrographic survey. These features have been noted in "Notes to Hydrographic Parties" attached to this report and indicated on a section of Nautical Chart No. 539 also attached to this Report.

42. REMARKS:

The description, as furnished in the field report, adequately describes the area of this Map Manuscript.

44. COMPARISON WITH EXISTING TOPOGRAPHIC QUADRANGLES:

United States Geological Survey, Prince Frederick, Maryland, 15' Quadrangle, scale 1:62,500, edition of 1938.

In general, planimetry common to the Quadrangle and to the Map Manuscript is in good agreement. ~~Minor differences are discussed in the "Notes to Reviewer" attached to this Descriptive Report.~~

45. COMPARISON WITH NAUTICAL CHARTS:

United States Coast and Geodetic Survey Chart No. 539, scale 1:40,000, published at Washington, D. C., September 1934, reissued October 1938, corrected to January 6, 1945.

In general, planimetry common to the Chart and to the Map Manuscript is in poor agreement. Differences are discussed in the ~~"Notes to Reviewer"~~ and in the "Notes to Hydrographic Parties" attached to this Descriptive Report.

Respectfully Submitted,
April 12, 1946

Ruth E. Rudolph
Ruth E. Rudolph,
Photogrammetric Aid

Map Manuscript and Descriptive
Report Reviewed By:

Raymond Glaser
Raymond Glaser,
Engineering Draftsman

Compilation of Map Manuscript
Supervised By:

Harry R. Rudolph
Harry R. Rudolph,
Photogrammetric Engineer

Approved and Forwarded:
April 17, 1946

Fred. L. Peacock
Fred. L. Peacock
Chief of Party, C. & G. Survey
Officer-in-Charge,
Baltimore Photogrammetric Office

IDENTIFICATION REPORT
HORIZONTAL CONTROL
MAP MANUSCRIPT, SURVEY No. T-8548
Project No. CS-307

<u>Station</u>	<u>U.S.G.S. Quadrangle</u>	<u>Recovery Date</u>	<u>Pricking Data</u>
* DOWELL, 1943	Prince Frederick	1-15-45	Positive
** T.T. 861+ (U.S.G.S.) 1933	Prince Frederick	1-25-45	Not pricked
* T.T. 869 (W.O.17, U.S.G.S.) 1933	Prince Frederick	1-24-45	Positive
** T.T. 1385+ (U.S.G.S.) 1933	Prince Frederick	Destroyed	
** T.T. 1394 (W.O.25, U.S.G.S.) 1933	Prince Frederick	Destroyed	
** T.T. 1398 (U.S.G.S.) 1933	Prince Frederick	Destroyed	
** T.T. 3724 (U.S.G.S.) 1934	Prince Frederick	Not found	
** T.T. 3732+ (U.S.G.S.) 1934	Prince Frederick	1-18-45	Not pricked
T.T. 3741 (U.S.G.S.) 1934	Prince Frederick	3-8-45	Positive

* Identified by a substitute point. The position of this substitute point has been shown on the map manuscript with a very small black acid ink circle.

** Not used to control the Radial Plot.

NOTES
FOR
HYDROGRAPHIC PARTIES

PATUXENT RIVER, MD.

MAP MANUSCRIPT, SURVEY NO. T-8548

PROJECT NO. CS-307

The 2½ millimeter black acid ink circles are the positions of Recoverable Photo (Topographic) Stations. Their descriptions are listed on the left hand margin of the Map Manuscript.

The very small black acid ink circles accompanied by the note, "Sub.Sta." are the positions of Substitute Stations. A brief description of these Substitute Stations may be found on the pricking cards, Form No. M-982-1, submitted to the Washington Office.

The alternate dot and dash acid ink line is the position of the Mean Low-Water Line.

Only one charted feature, a floating aid to navigation, was not definitely revealed by photography and should be investigated. For location see section of Chart No. 539 attached to this report. This feature has been indicated by a red ink line around the area in which it falls.

Respectfully submitted:
April 12, 1946

Ruth E. Rudolph
Ruth E. Rudolph
Photogrammetric Aid

Approved and Forwarded
April 17, 1946

Fred. L. Peacock
Fred. L. Peacock
Chief of Party
Officer in Charge
Baltimore Photogrammetric Office

(Undisputed)

- . - . Aquasco ✓
- . - . Cedarhaven ✓
- . - . Deep Landing ✓
- . - . Eagle Harbor ✓
- . - . Holland Cliff * ✓
- . - . Hunting Creek ✓
- . - . Huntington ✓
- . - . Jacks Creek ✓
- . - . Kennedy Run ✓
- . - . Little Lyons Creek ✓
- . - . Mill Creek ✓
- . - . Patuxent River ✓
- . - . Potts Point ✓
- . - . Sewell Branch ✓
- . - . Stanley Run ✓
- . - . Summerville Creek ✓
- . - . Swanson Creek ✓
- . - . Stoakley ✓
- . - . Thomas Creek ✓
- . - . Trueman Point * ✓
- . - . Tucker Creek ✓
- . - . Maryland *

✓ . . . " " 381 ✓ and 521.

✓ • " No. 507 ✓

✓ . . . Patuxent M.E. Church ✓

→ . . • youngs church ✓

✓. - Lower ~~Elementary~~ school ✓

✓ - • Aguasco School ✓

✓ ... " Elementary School ✓

- Catholic Church

— • Belts Branch

✓ • • Lowry (not Cox)

Names preceded by .
are approved 1/12/49

L. Heck

✓ Names rechecked & approved
2-17-50 A.J.W.

GEOGRAPHIC NAMES

(Disputed)

Recommended

✓ • Belts Branch ✓

✓ • Lowry ✓

Disputed

~~Belts Branch~~

~~Cox~~



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Division of Photogrammetry
Review Report of
Planimetric Map Manuscript T-8548

Subject numbers not used in this report have been adequately covered in other parts of the descriptive report.

26. Control. - Unmarked temporary traverse stations were deleted from the map manuscript. These deletions have been noted on Page 7 of the Compilation Report.

28. Detailing. - Two methods of classifying roads had been used by the field inspection parties (see item 14, page 6 of the Field Report). In order to unify the road classes, a key to the road class numbers has been noted on the map manuscript for the aid of the smooth draftsman.

43. Comparison with Previous Surveys. -
T-814 1:10,000 1859 - 1908

Common features in common areas on this survey are superseded by the map manuscript for nautical charting purposes.

44. Comparison with Existing Topographic Quadrangles. -

Refer to Item 44 of Compilation Report.

45. Comparison with Nautical Charts. -

Chart No. 539 1:40,000, 1934, latest revised date 1/14²/48

(A number of duck blinds and several piers and barge wrecks shown on the map are not on the chart. The shape and location of Hunting Creek is not in agreement with that shown on the chart. Other differences of lesser significance, not critical to navigation, occur between the map and the chart.)

51. Application to Nautical Charts. - The map manuscript has not been applied to Chart 539.

Reviewed by:

K. N. Maki
K. N. Maki 1/19/49

Approved by:

A. V. Griffith
Chief, Review Section

H. C. Edmonson
Chief, Nautical Chart Branch
Division of Charts

O. S. Reading
Chief, Div. of Photogrammetry

G. E. Edwards
Chief, Division of Coastal
Surveys

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NAUTICAL CHARTS BRANCH

SURVEY NO. _____

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.