

8087

Diag. Cht. No. 78-4

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey Air Photographic (Shoreline)

Field No. \_\_\_\_\_ Office No. T-8087

LOCALITY

State Virginia

General locality James River

Locality Herring Creek - Eppes Island

1941-'43

CHIEF OF PARTY

F.L. Peacock

LIBRARY & ARCHIVES

DATE \_\_\_\_\_

B-1870-1 (1)

7808

## DATA RECORD

T-8087

## Quadrangle (II):

~~Charles City, Virginia, (15\*)~~ U.S.C.S.

## Project No. (II):

CS-283

## Field Office:

Air Photographic Party No. 2  
Baltimore, Maryland

## Chief of Party:

~~L. W. Swensen & F. B. Lewey~~  
~~Fred. L. Peacock~~ H. O. Fortin

## Compilation Office:

Air Photographic Party No. 2  
Baltimore, Maryland

## Chief of Party:

Fred. L. Peacock

Instructions dated (II III): March 26, 1942

Supplemental Instructions dated:

July 15, Sept. 30, Nov. 14, 1942

Copy filed in *Div. of Photogrammetry*  
~~Descriptive~~  
~~Report No. T-~~ (VI)

Completed survey received in office: 3-14-44

Reported to Nautical Chart Section: Mar. 1944

Reviewed: 21 Mar 46

Applied to chart No. 530  
(partially)

Date: 7/15/44

Redrafting Completed: 12-14-49

Registered: 6 Mar 50

Published:

Compilation Scale: 1:10,000

Published Scale:

Scale Factor (III): None

## Geographic Datum (III):

North American 1927 ✓

## Datum Plane (III):

Mean Sea Level ✓  
High Water

## Reference Station (III):

Cardine, 1910, r. 1942

## Lat.:

37° 19' 30.190" (930.7 m.)

## Long.:

77° 12' 32.526"

## Adjusted ✓

800.8 ~~unadjusted~~

State Plane Coordinates (VI): Virginia South Zone

X = 2,375,369.92 ft.

Y = 363,632.44 ft.

Military Grid Zone (VI)

PHOTOGRAPHS (III)  
(Unmounted)

<u>Number</u>	<u>Date</u>	<u>Time</u>	<u>Scale</u>	<u>Stage of Tide</u>
7541 - 7552, Incl.	11/25/41	11:34 A.M.	1:10,000	1.0' abv. M.L.W.
7626 & 7627	11/25/41	1:12 P.M.	1:10,000	0.2' abv. M.L.W.
7642 - 7644, Incl.	11/25/41	1:33 P.M.	1:10,000	0.1' above M.L.W.
7648 - 7653, Incl.	11/25/41	1:33 P.M.	1:10,000	0.1' abv. M.L.W.
13032-13033 } 13036-13037 }	12/31/42	3:36	1:20,000	0.2' above MLW

**Tide from (III):** Tide Tables - Atlantic Ocean, Reference Station - Hampton Roads, Va.  
Mean of Sub-Stations - Harrison's Landing and Jordan Point, Virginia.  
**Mean Range:** 2.6' **Spring Range:** 3.0-3.1'

**Camera:** (Kind or source) U. S. Coast & Geodetic Survey nine lens camera,  
(focal length  $8\frac{1}{4}$ "). All negatives are on file in the Washington Office.

**Field Inspection by:** Lieut. E. B. Lewey & Lieut. Henry O. Fortin **date:** Summer, 1942  
Season, 1943  
The Season Reports of Lieutenants E. B. Lewey & Henry O. Fortin have been  
**Field Edit by:** previously submitted. **date:**  
*None*

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

Photographs taken on: November 25, 1941

Supplemented by the field inspection data

**Projection and Grids ruled by (III) B.R.C. & F.L.T.** **date:** 10-6-43

" " " **checked by:** B.R.C. **date:** 10-7-43

**Control plotted by:** Ada May Hobine **date:** 10-22-43

**Control checked by:** Walter E. Schmidt **date:** 10-23-43

**Radial Plot by:** Walter E. Schmidt **date:** 11-43

**Detailed by:** Florence M. Hammond **date:** 12-24-43 to 1-15-44,  
(Shoreline and Rough Draft) Incl.

**Reviewed in compilation office by:** **date:**  
Michael G. Misulia March, 1944

**Elevations on Field Edit Sheet**  
**checked by:** *Not applicable* **date:**

STATISTICS (III)

Land Area (Sq. Statute Miles): 1

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

Shoreline (Less than 200 meters to opposite shore):  $10\frac{1}{2}$  statute miles

Number of Recoverable Topographic Stations established: 4

Number of Temporary Hydrographic Stations located by radial plot: 52

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:

## Field Inspection

Field inspection data for the area of T-<sup>8087</sup> are contained in the "Report on Field Inspection of Air Photographs, James River and Tributaries, Virginia" by Henry O. Fortin, dated April 20, 1943.  
Filed in Division of Photogrammetry, General Files

26 CONTROL:

The details concerning the horizontal control for the area of Map Drawing, Survey No. T-8087, have been reported in Appendix B of the Descriptive Report for Map Drawing, Survey No. T-8083, previously submitted. It is deemed unnecessary to repeat them in this report. *see Review*

27 RADIAL PLOT:

The facts concerning the Radial Plot for Map Drawing, Survey No. T-8087, have been fully brought out in Appendices A and B of the Descriptive Report for Survey No. T-8083, previously submitted.

28 DETAILING:

The shoreline and immediate adjacent culture, as shown on the Map Drawing with the conventional symbols, have been detailed from nine-lens photographs in accordance with the written instructions, and also in accordance with the field inspection data which were considered adequate unless otherwise mentioned in this report.

The main body of water shown on the Map Drawing is a portion of the James River. In addition to this, Herring, Eppes, and Kimages Creeks have been shown.

The number of photographs covering the area of the Map Drawing was sufficient for office detailing. The scales of the photographs and the Map Drawing were in good agreement. However, it was necessary to detail a few areas by use of the vertical projector.

Relatively strong, radially plotted positions of minor detail points, temporary hydrographic stations, and Recoverable Topographic Stations have been shown on the glossy side of the Map Drawing with small purple ink circles, while the relatively weak positions of such points and stations were shown with small green ink circles.

All geographic names and descriptive notes pertaining to the planimetric detail have been lettered on the Map Drawing, and the use of a celluloid overlay sheet was thereby eliminated.

Most of the drainage immediately adjacent to the Mean High-Water Line was not delineated by the Field Inspection Party. The presence of such topographic features was indicated by notes only, which were recorded on the field inspection photographs. In such cases the detail of the drainage as shown on the Map Drawing is in accordance with

28 DETAILING (Cont'd.)

information obtained from stereoscopic examination of the office photographs. Kimages Creek, a pond at approximately Latitude  $37^{\circ} 21' 30''$  and Longitude  $77^{\circ} 14' 30''$ , and the upper reaches of Herring Creek were not field inspected. The detail of these features, as shown on the Map Drawing, is in accordance with the office interpretation of the photographs.

A list of abbreviations accompanied by explanatory notes has been shown on the Map Drawing to assist in the interpretation of the abbreviations used.

30 MEAN HIGH-WATER LINE:

In general, along the Mean High-Water Line on both shores of that portion of James River included within the detail limits of the Map Drawing, are tree covered dirt bluffs ranging in height from eight to sixty feet. The bluffs have been symbolized and their heights have been shown by notes on the Map Drawing.

The outer limits of marsh areas bordering the Mean High-water line, as shown on the Map Drawing, is not to be considered the Mean High-Water Line but is only an indication of the limits of low wet land which were visible on the photographs and which were detailed therefrom.

Where either the Mean High-Water Line or outer limits of bordering marsh areas were indefinite as recorded in the field inspection data, they have been shown on the Map Drawing with dashed heavy-weight and dashed light-weight black acid ink lines respectively accompanied by explanatory notes.

31 LOW-WATER AND SHOAL LINES:

The approximate outer limits of shoal areas bordering the Mean High-Water Line have been detailed in accordance with office interpretation of the photographs, and noted as "Shoal" on the Map Drawing. Grass-in-water areas have also been shown, and have been detailed in accordance with field inspection data.

32 DETAILS OFFSHORE FROM MEAN HIGH-WATER LINE:

The positions of several offshore wrecks have been determined by radial intersection and their shapes have been detailed and shown on the Map Drawing accompanied by descriptive notes.

32 DETAILS OFFSHORE FROM MEAN HIGH-WATER LINE (Cont'd.)

Five floating aids (buoys), the positions of which have been radially plotted, have been shown on the Map Drawing with the conventional symbols.

The positions of all the duck blinds identified and recommended by the Field Inspection Party as temporary hydrographic stations, except those determined by triangulation, have been radially plotted and shown on the Map Drawing with  $2\frac{1}{2}$  m.m. black acid ink circles. In addition to these, the compiler of the Map Drawing radially plotted a position of an object which was believed to be a duck blind, the shape of which has been detailed and shown on the Map Drawing accompanied by the note "Believed to be a duck blind".

The approximate location of other offshore features such as stake and piling areas which were not visible on any of the photographs were detailed in accordance with the field inspection data, and were shown on the Map Drawing with dashed light-weight black acid ink lines accompanied by descriptive notes. It is recommended that the operating hydrographic parties determine the correct position of such features.

33 WHARVES AND SHORELINE STRUCTURES:

All wharves, piers, ruins of piers, fences, etc., have been shown on the Map Drawing accompanied by descriptive notes.

34 LANDMARKS, FIXED AIDS TO NAVIGATION, AND AERONAUTICAL AIDS:

There were no new landmarks, fixed aids to navigations, or aeronautical aids recommended for the area of this Map Drawing. The landmark "WATERTOWER" appearing on Chart No. 530 has been noted as "gone" by the 1942 Field Inspection Sub-Party. Form 567 has been submitted for its deletion. The existence of other previously charted landmarks was verified by the 1942 Field Inspection Sub-Party.

*outside  
survey  
limits*

35 HYDROGRAPHIC CONTROL:

The Field Inspection Sub-Party recommended fifty-two (52) temporary hydrographic stations, and four (4) Recoverable Topographic Stations within the detail limits of the Map Drawing. The positions of forty-seven (47) of the temporary hydrographic stations, and the four (4) Recoverable Topographic Stations have been radially plotted and shown on the Map Drawing with  $2\frac{1}{2}$  m.m. black acid ink circles. The remaining five (5) temporary hydrographic stations are also U. S. Coast and Geodetic Survey Triangulation Intersection Stations, the positions of which have been shown on the Map Drawing with the triangulation symbol accompanied by the name of the Station.

*To Reviewer: Mr. Jones requests that the descriptions of H&T stations be inked on the manuscript so as to be consistent with other sheets. The descriptions are found in the sketch books on Proj 283. D.S.S. 2-21-46 This has been done. J.R.*

35 HYDROGRAPHIC CONTROL (Cont'd.)

Form 524 has been submitted for each of the following four (4)  
Recoverable Topographic Stations:

*Filed in Division of Photogrammetry General Files.*

<u>No.</u>	<u>Name</u>
532	Dolphin
593	"Posted" Sign on tree
468	S.W. Chy. on brick manor dark roof
554	Small double tree

37 JUNCTIONS:

The junction of shoreline and adjacent planimetric detail with Map Drawing Survey No. T-8083 to the east is in agreement.

The compilations for Map Drawings, Surveys Nos. T-8088 - to the North; T-8086 - to the South; and T-8090 to the West have not been started. The junctions will be discussed in the respective Descriptive Reports of the Map Drawings just mentioned. *Compilations completed and all junctions verified.*

38 RECOMMENDATIONS FOR FUTURE SURVEYS:

It is believed that Map Drawing Survey No. T-8087 is complete in all details of importance for charting, and, no future surveys are recommended except in the areas where the position of the Mean High-Water Line could not be accurately determined by air photo-compilation as previously discussed in this report.

The probable error in the relative positions of detail points, the Mean High-Water Line, and well-defined objects is believed to be within the limits of satisfactory accuracy.

39 GEOGRAPHIC NAMES:

Only a partial investigation of the geographic names for the area of the Map Drawing was made by the Field Inspection Sub-Parties. The field inspection data was recorded in a copy of the "U. S. Coast Pilot". The geographic names shown on the Map Drawing are in accordance with the data obtained from the investigation, and from other best known available sources. The geographic names, disputed and undisputed, have been alphabetically compiled in two lists and submitted herein.

44 COMPARISON WITH EXISTING TOPOGRAPHIC QUADRANGLES:

Charles City, Virginia, (15') U.S.G.S., Scale 1:62,500, Edition of 1918, Reprinted 1931.

Since the scale difference between the Map Drawing and the quadrangle was very large, small planimetric details could not readily be compared. However, the following disagreements were apparent:

In the vicinity of the mouth of Kimages Creek a marsh area appears on the quadrangle. However, a lake has now been formed and is shown as such on the Map Drawing.

A marsh area appearing on the quadrangle at approximately Latitude  $47^{\circ} 21' 30''$  and Longitude  $77^{\circ} 14' 30''$  is shown on the Map Drawing as a pond.

Kimages Wharf appearing on the quadrangle is now in ruins.

Ferry Slips as shown on the Map Drawing in the vicinities of Jordan and Harrison Points do not appear on the quadrangle.

A marsh area as shown on the Map Drawing at approximately one mile due east of Jordan Point does not appear on the quadrangle.

45 COMPARISON WITH NAUTICAL CHARTS:

Chart No. 530, Scale 1:40,000, Published September 1940, corrected to March 25, 1942.

Comparisons of small planimetric detail could not readily be made between the Map Drawing and the above-mentioned chart because of the large difference in scale. However, the following differences were apparent:

In the vicinity of the mouth of Kimages Creek, a marsh area appears on the Chart. However, a lake has now been formed and is shown as such on the Map Drawing.

In general, the courses of small streams draining into Herring Creek, as shown on the Map Drawing, are in disagreement with those appearing on the chart.

A marsh area approximately one mile due east of Jordan Point, as shown on the Map Drawing, does not appear on the chart.

Numerous roads and buildings in the vicinities of Herring and Kimages

45 COMPARISON WITH NAUTICAL CHARTS (Cont'd.)

Creeks as shown on the Map Drawing, do not appear on the chart.

Three wrecks as shown on the Map Drawing do not appear on the chart.

Ferry Slips, as shown on the Map Drawing, in the vicinities of Jordan and Harrison Points, do not appear on the chart.

Chart No. 531, scale 1:20,000, Published August 1940 - corrected to November 15, 1941.

The following differences were apparent:

A small marsh area appearing on the chart at approximately Latitude  $37^{\circ} 21' 30''$  and Longitude  $77^{\circ} 14' 30''$  is now a pond as shown on the Map Drawing.

Two wrecks approximately one-half mile due west of Jordan Point, as shown on the Map Drawing, do not appear on the chart.

A Ferry Slip at Jordan Point, as detailed on the Map Drawing, does not appear on the chart.

In general, the planimetry appearing on the chart is in disagreement with that as shown on the Map Drawing. It is recommended that the planimetry shown on the Map Drawing supersede that as appears in the corresponding area on the chart.

Respectfully submitted:  
March 11, 1944

Florence M. Hammond  
Florence M. Hammond  
Photogrammetric Aid

Compilation & Descriptive  
Report Reviewed By:

Michael G. Misulia

Michael G. Misulia  
Jr. Topographic Engineer

Supervised By:

Walter E. Schmidt  
Walter E. Schmidt  
Asst. Photogrammetric Eng.

Approved and Forwarded:  
March 14, 1944

Fred. L. Peacock  
Fred. L. Peacock  
Chief, Air Photographic Party No. 2  
Baltimore, Maryland

# LIST OF GEOGRAPHIC NAMES

(Undisputed)

- Bucklers Point (off limits)
- Eppes Creek\*
- Eppes Island\*
- Ducking Stool Point (off limits)
- Harrison Point
- Harrisons Landing
- Haxall\*
- Herring Creek
- James River\*
- Jordan Point\*
- Kimages Creek
- Kimages Hill
- Kimages Wharf (ruins only)
- Rolands Mill
- Turkey Island\*
- Va Highway No. 5

(disputed)

- Berkley
- Berkeley\* (USB-G-N decision)
- Harden's Wharf - Harden's Landing - Haxall Landing
- Turkey I. Bend
- Turkey Bend
- Hardens Wharf (at Haxall, as on latest chart 531)

\* = decision of  
U.S.B. G-N.

Names precoded by \*  
are approved 8-16-49  
L Hck

Review Report of T-8087

26. Control:-The horizontal control falling within the limits of this survey are:

Berkley House, West Chimney, 1871  
Eppes, 1910 (this is also J.C.A. (USE))  
Jordan, 1910 ( " " " J.C.B. (USE))  
Major, 1910 " " " " J.C.C. (USE))  
Cardine, 1910( " " " J.C.C. (USE))  
Harrison 2, 1942  
Major 2, 1942  
Water Tank, white with red top, 1942  
Jordan Point, Rear Range, (Light), 1942  
Richmond Y.M.C.A. Bldg. South Chimney, 1942  
Harrison's Landing, Fishing Shack, West Gable, 1942  
Harrison (USE), 1942  
JCE (USE)  
JCF (USE) falls on adjoining sheet T-8086. JR  
Wayside 4 ft. Oak tree, on south edge of road,  
35 feet northwest of Bimm's store, 1942 (USGS)  
Lane south, 12 feet northwest to cedar tree at  
west edge of road, 1942 (USGS).

Duck Blind No. 12, 1942 was considered less than third order accuracy by Geodesy so a circle has been substituted for the triangle symbol.

28. Detailing:-Since compilation, 1:20,000 scale photographs of more recent date have become available. These were used in making corrections to the shoreline although field inspection was confined to the older 1:10,000 photographs. The boundary between swamp and marsh areas has been shown with a dashed red line.

34. Landmarks and Aids to Navigation:-The name given to the fixed light was taken from the 1945 Light List. See paragraph 26 above.

40. Comparisons with Previous Topographic Surveys:-T-1438(1877) 1:10,000 and T-1391b(1875) 1:20,000 are superseded for nautical charting purposes except for the contours, fence lines, and detail in the interior.

41. Use of This Survey:-It is planned to use the shoreline of this survey in the compilation of T-8321 (1:20,000). The survey has been partially applied to Chart No. 550 before review.

Reviewed by:

Jack Rihn  
 Jack Rihn -- 21 March 1946

Approved by:

L. V. Griffith  
 Chief, Review Section *L.V.G.*  
 Division of Photogrammetry *mg*

O. S. Reading  
 Chief, Div. of Photogrammetry

H. R. Edmonston  
 Chief, Nautical Chart Branch  
 Division of Charts

W. M. Scaife  
 Chief, Div. of Coastal Surveys *W.M.S.*

## NAUTICAL CHARTS BRANCH

SURVEY NO. 8087

## 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.