

8017

7100

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey Shoreline

CS 315

~~File~~ No. T-8017

LOCALITY

State Virginia

General locality York River

Locality Aberdeen Creek

194 7

CHIEF OF PARTY

R. C. Laube
~~K. T. Adams~~

LIBRARY & ARCHIVES

DATE January 10, 1948

DATA RECORD

T- 8017

Quadrangle (II):

Project No. (II): CS 315

Field Office:

Chief of Party:

Compilation Office: *Graphic Compilation Section*
Washington, D.C. *Chief of Party: L.C. Hardy*Chief of Party: ~~Capt. K. T. Adams~~

Instructions dated (II III): 4/29/47

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

Completed survey received in office:

Reported to Nautical Chart Section:

Reviewed:

Applied to chart No.

Date:

Redrafting Completed:

Oct. 26, 1951

Registered:

Published:

Compilation Scale: 1:5,000

Published Scale:

Scale Factor (III): 1.000

Geographic Datum (III): N.A. 1927

Datum Plane (III):

Reference Station (III): Claybank 2, 1911

Lat.: 37°-21'-08.706"

Long.: 76°-36'-48.217"

Adjusted
~~Unadjusted~~

State Plane Coordinates (VI):

X =

Y =

Military Grid Zone (VI)

PHOTOGRAPHS (III)

<u>Number</u>	<u>Date</u>	<u>Time</u>	<u>Scale</u>	<u>Stage of Tide</u>
45C-851	1/24/45	11:00	1:10,000	
852				
853				
854				
855				
856				

Tide from (III):

Mean Range:

Spring Range:

Camera: (Kind or source) U.S.C.&G.S. - Single Lens

Field Inspection by: Lt. Comdr. R.R. Moore

date: June, 1947

Field Edit by:

date:

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

Projection and Grids ruled by (III) T.L.Janson

date: 11/7/47

" " " checked by: T.L.Janson

date: 11/7/47

Control plotted by: N.A. Cluff

date: 11/20/47

Control checked by: G.B. Willey

date: 11/20/47

Radial Plot by: N.A. Cluff

date: 11/20/47

Detailed by: N.A. Cluff

date: Dec., 1947

Reviewed in compilation office by:

date:

Elevations on Field Edit Sheet
checked by:

date:

STATISTICS (III)

Land Area (Sq. Statute Miles):

Shoreline (More than 200 meters to opposite shore):

Shoreline (Less than 200 meters to opposite shore):

Number of Recoverable Topographic Stations established:

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:

Shoreline Survey T-8017
Aberdeen Creek, York River
Field Report

This is a single shoreline survey compiled for use in connection with a limited hydrographic investigation.

The necessary field identification of control and inspection of details was accomplished by the hydrographic party. No field inspection report was submitted. The field inspection was accomplished in accordance with the attached instructions.

L. C. Lande
Chief, Graphic Compilation
Section

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY
WASHINGTON 25

IN REPLY ADDRESS THE DIRECTOR
U. S. COAST AND GEODETIC SURVEY
AND NOT THE SIGNER OF THIS LETTER

AND REFER TO NO. 22/MEK
S-2-CO

29 April 1947

To: Commanding Officer
USC&GS Ship COWIE
418 U. S. Post Office Building
Norfolk 10, Virginia

Subject: SUPPLEMENTAL INSTRUCTIONS, PROJECT CS-315, York River, Virginia

1. These instructions cover a basic hydrographic survey in the vicinity of Aberdeen Creek, York River, Virginia. This survey is being made at the request of the District Office, United States Engineers, Norfolk, Virginia.

CONTROL

2. It is not contemplated to establish additional triangulation control in this area. Previously established triangulation should furnish adequate control for the location of hydrographic signals and the location of objects to control aerial photographs by graphic-control methods. If there should be need for additional control, this should be accomplished with not less than third-order accuracy.

TOPOGRAPHY

3. No additional topographic surveys need be made in this area since it is covered by aerial photographs. To assure rigid control for the hydrography, sufficient hydrographic signals shall be located by graphic-control methods. In this regard, a short section of shoreline shall be surveyed in the immediate vicinity of each planetable-setup and any hydrographic signal located by a rod reading. See also paragraph 7.

4. Any natural objects—which may be used as recoverable topographic or hydrographic stations—shall be located while executing this graphic control to supplement the triangulation when future revision surveys may be made, in order to obviate the necessity of additional triangulation or planetable work. Descriptions of these stations shall be submitted on Form 524. Any objects, or hydrographic signals, located by graphic control shall be positively identified on the photographs when possible. See paragraph 5.

5. During your graphic-control surveys for the location of points to control the hydrographic surveys, you will also locate and identify certain points which are required for the control of aerial photographs to be used for the delineation of shoreline. One ratio print, 1:5,000 scale, of each of the following single-lens aerial-photographs is being furnished to you:

45C-582	45C-584	45C-586
45C-583	45C-585	-

These photographs cover the northeastern shore of the York River and both shores of Aberdeen Creek within the limits of the project. On these prints the areas have been indicated—in red pencil—within which it is desired that you locate and identify points. The located points may consist of gables, chimneys, prominent trees, end of wharves, or any other type of feature that can be readily located during the graphic-control survey and that is also susceptible of positive identification on the photograph. The points so identified shall be indicated on the photographs and described by brief notes. The areas in which these points are desired have been spaced to afford adequate control for a radial plot, but if you find it difficult, or impossible, to locate points in all these areas, one or two may be omitted.

6. Two triangulation stations are included on these photographs and they should be identified if at all practicable. In case of the station that is a house chimney, it probably can be identified directly on the photograph. The other station is monumented and probably cannot be identified directly. In this case you should use the "substitute-station method," consisting of determining the azimuth and distance from the station to any nearby object that can be directly identified on the photograph. Determination of the azimuth by plane table and distance by stadia is acceptable, but this must be done carefully to assure the correct relationship to within approximately one meter.

7. In general, the shoreline along the York River is reasonably firm and it appears safe to assume that no significant changes have taken place since the date of the photographs—21 January 1945. It is, however, possible that some changes may have taken place at the mouth of the Aberdeen Creek, and you shall make a careful field inspection to determine if the photographs adequately show the shoreline as it now exists. If extensive changes have taken place, you shall determine the true position of the shoreline by actual survey using either your graphic-control sheet or the aerial-photograph as a plotting sheet on which to delineate the shoreline.

HYDROGRAPHY

8. These surveys shall be accomplished on a scale of 1:5,000. The spacing of sounding lines shall not exceed 50 meters in the channels and shall be reduced to a lesser spacing, when necessary, to adequately delineate the edges of same. In shoal areas adjacent to the channels, the line spacing may be increased to 100 meters.

9. An adequate junction shall be made with survey H-7022, scale 1:10,000, accomplished in 1945. This area has also previously been covered by surveys H-3310 and H-3311, scale 1:20,000, copies of which are being furnished to you.

10. Echo-sounding equipment will be used when practicable, but should it appear more feasible, or economical, to use the hand lead, or sounding pole, this work shall be accomplished in accordance with chapter 46 of the Hydrographic Manual.

11. Crosslines shall be run to the extent of 8-10% of the principal system of sounding lines.

12. Adjustments to the echo-sounding equipment, and the obtaining of data for reduction of soundings, shall be in accordance with chapter 5 of the Hydrographic Manual.

13. When echo-sounding equipment is used in developing a shoal within the channel areas, the hand lead will be used as a check for verifying the least depth on the shoal. In cases where fathometer-soundings appear doubtful, the hand lead will in all instances be used for verification.

14. Bottom characteristics will be determined in accordance with sections 384-3847 inclusive of the Hydrographic Manual and the circular letter dated 21 May 1942—Subject: Bottom characteristics.

15. It is expected that marked changes will be found when comparison is made with previous surveys. Careful attention shall be given to see that these changes are fully substantiated by the present survey. Care shall be exercised in the choice of objects to obtain strong three-point fixes, observe simultaneous angles, have the angle-observers stand close together, and any other precautions as may be necessary to avoid introducing appreciable errors in position which sometimes occur with large-scale surveys. Your attention is particularly directed to section 353, Depth Curves, of the Hydrographic Manual.

16. In all matters not specifically covered by these instructions, the work shall be done in accordance with the instructions contained in the Hydrographic Manual.

TIDES

17. A portable automatic tide gage shall be established at Claybank wharf, if practicable, and maintained during the period of this survey. A report on the establishment of this station shall be submitted to this office. For the control of soundings in Aberdeen Creek, a tide staff shall be established and maintained at a suitable location in the creek. Tide-staff observations need be recorded only during periods of hydrography in Aberdeen Creek proper and in the immediate entrance to same.

18. At least three standard disk bench marks shall be established at each of the above tide stations. The bench marks shall be connected by levels to the tide staff and the leveling record submitted to this office on Form 258.

19. Descriptions and elevations of three tidal bench marks established at Claybank in 1911 will be furnished. These bench marks shall be recovered, if possible, and connected to the staff. In the event any of the 1911 bench marks are recovered, paragraph 18 will still be complied with.

20. It is desired that at least two weeks of tide observations shall be obtained with the automatic tide gage, but if this is impracticable, then a period as long as possible should be observed while working in the area. The tidal records shall be forwarded to this office for determination of the datum. A preliminary plane of reference will be furnished from this office upon receipt of the tide and leveling records. The exact location of each tide station shall be shown on the hydrographic sheet.

21. All of the above work shall be done in accordance with the instructions in Special Publication No. 196—Manual of Tide Observations.

MAGNETICS

22. Magnetic observations, by compass declinometer, shall be obtained insofar as is practicable, preferably in the vicinity of Claybank. The observations shall consist of two complete sets of declination. Observations before 10:00 and after 13:00 (local time) are considered preferable to observations around noon, and it will be desirable, though not essential, to have one of the two sets in the morning and the other in the afternoon. However, any observations that can be obtained will be valued, even if not in conformity with the foregoing.

MISCELLANEOUS

23. Without delaying hydrographic work, and if practicable to do so, an investigation of landmarks in the general vicinity shall be made, particularly as regards charted landmarks which are no longer useful, or nonexistent.

24. The published Coast Pilot notes and supplement thereto for this area shall be verified, and recommended changes submitted to this office. It is not intended that a special examination be made for Coast Pilot purposes, but only those which become evident in the course of this survey.

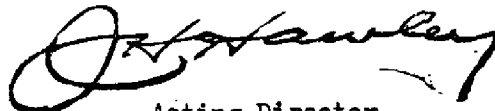
Page 5
Commanding Officer, Ship COWIE

25. If practicable to do so, verification of the charted geographic names shall be made. See paragraphs 162-165 of the Hydrographic Manual.

26. If at any time during the progress of field work it appears desirable that these instructions be modified, or changed, in any particular, you will please notify this office promptly and submit such recommendations as you may believe necessary.

27. Progress sketches will be submitted on the scale of chart No. 495.

28. You will please acknowledge the receipt of these supplemental instructions.

A handwritten signature in dark ink, appearing to read "J. H. Hawley". The signature is fluid and cursive, with a large initial "J" and a long, sweeping underline.

Acting Director.

PHOTO INSPECTION

Project CS-315

Vicinity of Aberdeen Creek, York River, Virginia.

Ship COWIE

Ronald R. Moore, Comdg.

The instructions for the field inspection of photographs were contained in Supplemental Instructions for Project CS-315 dated 29 April 1947.

The area covered was the northeast side of the York River on both sides of and including Aberdeen Creek, and is shown on single lens, aerial photographs 45C-581, 582, 583, 584, 585, and 586.

Using triangulation stations WALLER 2 (1911) and BIGLER 4, (1947) as a base, certain definite objects along the bank of the York River were observed from each station and the geographic position determined.

For objects in Aberdeen Creek, a graphic control sheet No. "A-47" on a scale of 1:5000 was made and using the Azimuth NED=CUP, points in the Creek were located by planetable methods.

The points recoverable as topographic stations are listed on a separate sheet, and description cards transmitted herewith.

Triangulation station "HOUSE D, above Green Point, Chimney 1911" is clearly shown on the photograph. Stations CLAYBANK 2 (1911) and ROSEWELL 2, (1911), come within the area of the photographs, were located by the substitute station method. "CEDAR TREE" was located as a substitute for station CLAYBANK 2. "TRI" was located as a substitute for station ROSEWELL 2. Geographic positions were computed for "CEDAR TREE" and "TRI".

Following is a list of control points that were identified on the photographs by field inspection. Geographic positions of these stations are furnished separately in a list of geographic positions.

CHIMNEY, House D, TRI, DIP, WAR, RAD, GAS, CHIM, DOC, CUP, BO, CEDAR TREE, BAN.

Points were located and identified in all of the red pencil areas on the photographs, except three, as required in paragraph 5 of Supplemental Instructions, Project CS-315, York, River.

No significant changes in the shoreline of the York River or Aberdeen Creek were found. The shoreline (highwater line - not grassline) was located by stadia readings in the vicinity of the planetable set-ups in Aberdeen Creek.

COMPILATION REPORT T-8017 - Project CS 315

Aberdeen Creek, York River, Virginia

Shoreline Manuscript

26. Control:

Triangulation stations House D, Above Green Point, Chimney, 1911, Roswell 2, 1911 (Sub. Station Tri) and Claybank 2, 1911 (Sub. Stations Cedar Tree, South Corner Dock, and West Corner Dock), the only stations in the area of this manuscript, were held by the radial plot. Stations Bo, Doc, Cup, Chim, Gas, Ban, War, Rad and Dip were transferred from Hydrographic Sheet H-7181 and are shown in red acid ink. They were all held by the radial plot.

27. Radial Plot:

The radial plot was made with acetate templates made from U.S.C. & G.S. single lens photos 45-C 851-856 ratioed from 1:10,000 scale to 1:5,000 scale and printed on positype paper. No difficulty was encountered in laying the radial plot. Six control stations on the shoreline made it possible to detail north of the stereoscopic photograph coverage.

28. Detailing:

The vertical projector was used in detailing most of this sheet. Some shoreline inspection was done on the field photographs. The remainder was interpreted by the compiler. There was no distinction made as to wood classification of the field photographs, so the mixed hardwood and deciduous tree symbol was used throughout. There was no road classification made in the field, so the roads are shown as they appeared on the photographs.

29. Supplemental Data:

Graphic Control Sheet T-6983 b and Hydrographic Sheet H-7181 were used to supplement the photos, particularly in swamp and grass areas.

31. Low Water and Shoal Lines:

Shoal areas as interpreted in the office are shown on the manuscript with the standard symbol.

33. Wharves and Shoreline Structures:

Hydrographic Sheet H-7181 was used to obtain the latest information regarding piers and wharves built since the photographs were taken.

35. Landmarks and Aids to Navigation:

The positions for Chimney on White House and Chimney, Ruins of Mansion were scaled from the radial line plot and entered on Form 567, Landmarks for Charts, which accompanies this report. These two landmarks were identified on the field photos.

45. Comparison with Nautical Charts:

A comparison was made with Nautical Chart No. 495, 1:40,000, printed Aug. 1931. No discrepancies were noted.

Detailed by: N. A. Cluff
N. A. Cluff

Verified by: G. B. Willey Approved by: L. C. Lande
G. B. Willey L. C. Lande

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

NOTIFICATION FOR LANDMARKS FOR CHARTS

TO BE CHARTED
~~FOR CHARTING PURPOSES~~

STRIKE OUT ONE

November 23

19 47

I recommend that the following objects which have ~~been inspected~~ been inspected from seaward to determine their value as landmarks, be charted on ~~(see 2885-7681)~~ the charts indicated.

The positions given have been checked after listing by _____

STATE VIRGINIA										Chief of Party				
CHARTING NAME	DESCRIPTION	SIGNAL NAME	POSITION						METHOD OF LOCATION AND SURVEY NO.	DATE OF LOCATION	CHARTS AFFECTED			
			LATITUDE		LONGITUDE		DATUM	HARBOR CHART			INSHORE CHART	OFFSHORE CHART		
			°	'	°	'							D. M. METERS	D. P. METERS
CHIMNEY, (RUINS OF MANSION)			37	19	1226.7	76	34	868.5	M.A. 1927	Photo Plot	11-21-47			
CHIMNEY, (HOUSE IN WOODS)			37	19	1802.0	76	35	740.5	"	"	"			

Chief of Party.

This form shall be prepared in accordance with Hydrographic Manual, pages 800 to 804. 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.

NAUTICAL CHARTS BRANCH

SURVEY NO. T-8017

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.