

# 8013

# 8013

Form 504	
U. S. COAST AND GEODETIC SURVEY	
DEPARTMENT OF COMMERCE	
DESCRIPTIVE REPORT	
Type of Survey	Shoreline (Photogrammetric)
Field No.	Office No. T-8013
LOCALITY	
State	Virginia
General locality	Chesapeake Bay
Locality	Nandua Creek
194 9	
CHIEF OF PARTY	
R. H. Tryon, Jr., Chief of Party Div. of Photogrammetry, Wash., D.C.	
LIBRARY & ARCHIVES	
DATE	March 14, 1952

# DATA RECORD

T -8013

Project No. (II): \_\_\_\_\_ Quadrangle Name (IV): Nandua Creek, Va.  
 Field Office (II): \_\_\_\_\_ Chief of Party: R. H. Tryon, Jr.  
 Photogrammetric Office (III): Div. of Photogram- Section  
 metry Officer-in-Charge: L. C. Lande  
 Instructions dated (II) (III): Washington, D. C. Copy filed in Division of  
 Photogrammetry (IV)

Method of Compilation (III): Graphic

Manuscript Scale (III): 1:10,000

Stereoscopic Plotting Instrument Scale (III):

Scale Factor (III): 1.000

Date received in Washington Office (IV): 7-11-49 Date reported to Nautical Chart Branch (IV):

Applied to Chart No. \_\_\_\_\_

Date: \_\_\_\_\_

Date registered (IV): 2-27-52

Publication Scale (IV): \_\_\_\_\_

Publication date (IV): \_\_\_\_\_

Geographic Datum (III): N.A. 1927

Vertical Datum (III): MHW

Mean sea level except as follows:  
 Elevations shown as (25) refer to mean high water  
 Elevations shown as (5) refer to sounding datum  
 i.e., mean low water or mean lower low water

Reference Station (III): MASON, 1942.

Lat.: 37° 36' 38" 574

Long.: 75° 52' 16" 237

Adjusted  
 Unadjusted -

Plane Coordinates (IV): \_\_\_\_\_

State: \_\_\_\_\_

Zone: \_\_\_\_\_

Y=

X=

Roman numerals indicate whether the item is to be entered by (II) Field Party, (III) Photogrammetric Office,  
 or (IV) Washington Office.

When entering names of personnel on this record give the surname and initials, not initials only.


*Not  
Applicable*

Areas contoured by various personnel  
 (Show name within area)  
 (II) (III)

## DATA RECORD

Field Inspection by (II): None

Date:

Planetable contouring by (II):

Date:

Completion Surveys by (II):

Date:

Mean High Water Location (III) (State date and method of location):

MHW line delineated from single-lens  
photographs dated 5-3-49

Projection and Grids ruled by (IV): W. E. Ward

Date: May, 1949

Projection and Grids checked by (IV): W. E. Ward

Date: May, 1949

Control plotted by (III): C. Hanavich

Date: June, 1949

Control checked by (III): R. W. Williams

Date: June, 1949

Radial Plot or Stereoscopic

Control extension by (III): C. Hanavich

Date: June, 1949

Planimetry

Date:

Stereoscopic instrument compilation (III):

Contours

Date:

Manuscript delineated by (III): C. Hanavich

Date: June, 1949

Photogrammetric Office Review by (II):

Date:

Elevations on Manuscript  
checked by (II) (III):

Date:



Camera (kind or source) (III):

USC&GS Single-lens Camera "0"

PHOTOGRAPHS (III)

Number	Date	Time	Scale	Stage of Tide
604 to 610 incl.	5-3-49	1442	1:10,000 (ratioed)	High Tide

Tide (III)

Reference Station: Hampton Roads  
Subordinate Station: Occohannock Creek  
Subordinate Station:

Ratio of Ranges	Mean Range	Spring Range
0.7	1.8	2.2

Washington Office Review by (IV): K. N. Maki

Date: 10 April 1951

Final Drafting by (IV): *Battley, Lucas, Webber*

Date: *Sept. 17, 1951*

Drafting verified for reproduction by (IV): *C. Kupiec*

Date: *Sept. 20, 1951*

Proof Edit by (IV):

Date:

Land Area (Sq. Statute Miles) (III):

Shoreline (More than 200 meters to opposite shore) (III): 20

Shoreline (Less than 200 meters to opposite shore) (III): 6

Control Leveling - Miles (II):

Number of Triangulation Stations searched for (II): 2

Recovered: 2

Identified: 1 (in 1942)

Number of BMs searched for (II):

Recovered:

Identified:

Number of Recoverable Photo Stations established (III):

Number of Temporary Photo Hydro Stations established (III):

Remarks:

SUMMARY TO ACCOMPANY T-8013

Data pertaining to T-8013 is filed as follows:

A. Division of Photogrammetry General Files.

1. Acetate manuscript for T-8013
2. Duplicate of the descriptive report.

B. Bureau Archives

Registered data under T-8013 will include the descriptive report and a lithographic print of the map manuscript at compilation scale.



(Nautical Charts)

MAP T. 8013

PROJECT NO. Nandua, Va.

SCALE OF MAP 1:10,000

SCALE FACTOR 1.000

STATION	SOURCE OF INFORMATION (INDEX)	DATUM	LATITUDE OR $y$ -COORDINATE LONGITUDE OR $x$ -COORDINATE	DISTANCE FROM GRID IN FEET. OR PROJECTION LINE IN METERS FORWARD (BACK)	Value 1' DATUM-CORRECTION	N.A. 1927 - DATUM DISTANCE FROM GRID OR PROJECTION LINE IN METERS FORWARD (BACK)	FACTOR DISTANCE FROM GRID OR PROJECTION LINE IN METERS FORWARD (BACK)
* HER, 1898	Va 683	NA 1927	37 39 54.479'		1849.8	1679.6 170.2	
HARBORTON, 1932 ✓	Va 31	"	75 52 23.524		1470.8	576.5 894.3	
** MASON, 1942 ✓	Va 487	"	37 39 58.561		1849.8	1805.4 44.4	
* BUTCH 2, 1914	Va 683	"	75 49 55.528		1470.5	1360.9 109.6	
* PUNGOTEAGUE CREEK, BEACON, 1911	Va 683	"	37 36 38.574		1849.8	1189.2 660.6	
			75 52 16.237		1471.6	398.2 1073.4	
* Station plotted but not coverage.			37 38 46.726				
** Station was transferred			75 53 37.966				
			37 39 47.609				
			75 53 53.668				
			used in radial plot -- did not fall within limits of photographic				
			from topographic (graphic control) sheet T-7106.				
** NAR 2, R.M., 1914							
			Positions not listed on			From Plane table sheet	
			from 283-Topographic Positions			T-7106	
			also see item #67, Review Report				

1 FT. = 3048006 METER

COMPUTED BY R.W.W.

COPY CHECKED: C.H.

DATE

5-27-49

CHECKED BY: C.H.

DATE

6-2-49

M-2388-12



MAP T-8013 PROJECT NO. — SCALE OF MAP 1:10,000 SCALE FACTOR 1.000

[illegible]

1 FT. = .3048006 MEYER

COMPUTED BY: \_\_\_\_\_

DATE:

**CHECKED BY:**

DATE \_\_\_\_\_

M-2388-12



Compilation Report  
Nandua Creek  
T-8013

27. Radial Plot:

Seven transparent acetate templets, which were prepared from single-lens ratioed prints (scale 1:10,000), were used for the radial plot of Nandua Creek. The single-lens photographs - contact scale 1:24,600 - were flown on 3 May 1949.

A recent graphic control survey (Topographic Sheet T-7106, 1949) of Nandua Creek provided the majority of the control for the plot. It was possible to identify enough of these stations on the photographs to provide the density of control desired. Two triangulation stations (MASON, 1942 and HARBORTON, 1932), which were identified in 1942 on Project CS-278-C, were used also.

A listing of the control stations used in the plot and held to, except as noted, follows: Triangulation stations MASON, 1942 and HARBORTON, 1932. Topographic stations MAN, MILL, NANDUA, and VIM. The identification of VIM was doubtful; although the two available rays to this station held in the plot, its location on the photographs, however, could not be adhered to rigidly during the compilation. Hydrographic stations GAS, JAP, JAR, JOB, FOB, RUB, SOW, TUB, LONE CEDAR Westernmost, Chy on small house, WIN, ZOO, KEY (all 3 rays intersected about 5 meters E of planetable location; identification of chy on house questionable), DUCK blind (all rays were close but identification in question), and MAT (all 3 rays intersected about 8 meters E of planetable position; identification doubtful).

The accuracy of the plot is believed to be satisfactory. On the whole, the intersections of the rays at the control stations were good. In several instances, some of the rays shaded the topographic and hydrographic stations, especially in those cases where the station was a chimney on a house which could not be identified definitely on the photographs. Another cause for this might be attributed to a traverse error of 5.6 meters which was not adjusted on the graphic control survey sheet as noted in the field descriptive report (T-7106, 1949).

*Topographic stations with descriptions on form 5-24  
filed in the Div. of Photogrammetry general files:*

NC 2 (USE) 1948	Nandua, 1948
NC 1 (USE) 1948	5, 1948
Ray, 1948	Pot, 1948
Vim, 1948	Mill, 1948
Pep, 1942	
MAN, 1948	



Photographic coverage can be considered as adequate. A little difficulty was found in distinguishing buildings from other detail due to poor definition as a result of ratioing the contact prints 2.46 times.

28. Detailing:

No field inspection work was done on the new photographs. The field inspection work accomplished on single-lens and nine-lens photographs in 1942, Project CS-278-C, was investigated and utilized to a minor extent. The occasional short stretches of shoreline located during the graphic control survey work were found to be of great help in identifying and classifying by analogy the remaining shoreline.

For additional information refer to the last paragraph of side heading 27.

29. Supplemental Data:

For the most part, very satisfactory junctions were made with the shoreline located during the graphic control survey work. The important discrepancies were these:

- (1) The location of a pier in the vicinity of Nandua.
- (2) The position and extent of a marshy point in Back Creek near station DOG.
- (3) Shoreline location just NW of the mouth of Back Creek at station DIP.
- (4) The location of the shoreline at station VIM on Craddock Neck.

Shoreline and other detail transferred to the map manuscript from Topographic Sheet T-7106, 1949, and from Hydrographic Sheet (boat sheet) H-7680, 1949, are indicated in a differing color - red.

30. Mean High-Water Line:

No field inspection was made of the mean high-water line on the 1949 single-lens photographs; it was interpreted in the office with the use of the stereoscope. The photographs were taken at high tide and no difficulty was experienced in delineating the shoreline. However, the extensive use of the stereoscope was necessary, because of poor definition, to distinguish the limits of marsh and fast land.

For additional information refer to the first paragraph of side heading 28.

31. Low Water and Shoal Lines:

Shoal and channel lines were added to supplement the recent hydrographic work which has been done.

32. Details Offshore from the High-Water Line:

No additional offshore obstructions were discerned except for those noted by the graphic control and hydrographic survey parties.

33. Wharves and Shoreline Structures:

These structures were noted during the work on graphic control except for a few small piers.

34. Landmarks and Aids to Navigation:

Aids to navigation were located by the graphic control party.

*Form 567 attached to Desci' Report for Hydro. Survey H-7680*  
There were no landmarks.

35. Hydrographic Control:

Inapplicable.

36. Landing Fields and Aeronautical Aids:

None.

44. Comparison with Existing Topographic Quadrangles:

Except for minor natural changes, the configuration of the shoreline is in agreement with that of topographic quadrangles T-8169 to T-8172 inclusive. Differences were found in the interpretation of marsh and fast land limits along the shoreline.

45. Comparison with Nautical Charts:

A comparison was made with Chart 1223 (scale 1:80,000) and was found to be in general agreement when the difference in scale between the map manuscript and the chart is considered.



Page 4  
Compilation Report  
T-8013

Respectfully submitted:

*Charles Hanavich*  
Charles Hanavich

Approved by:

*L. C. Lande*  
L. C. Lande



## GEOGRAPHIC NAMES

Survey No. T-8013

GEOGRAPHIC NAMES											
Survey No. T-8013											
Name on Survey											

Names underlined in red  
are approved. 4-10-51

L. Heck

# REVIEW REPORT T-8013

## Shoreline Map

10 April 1951

### 62. Comparison with Registered Topographic Surveys

T-307	1:20,000	1850
T-2654	1:20,000	1903-04
T-7106	1:10,000	1948
T-8169	1:20,000	1942
T-8170	"	"
T-8171	"	"
T-8172	"	"

In the area of hydrographic signal stations Dip, Dog, and Daw and topographic station Nandua, 1948, there are differences in shoreline between the planetable survey T-7106 and T-8013. The photogrammetric shoreline supersedes the shoreline on T-7106 in these instances only. T-8013 supersedes the other listed previous surveys for nautical charting purposes.

### 63. Comparison with Maps of Other Agencies

None

### 64. Comparison with Contemporary Hydrographic Surveys

H-7680,	1:10,000	1948
---------	----------	------

There are no conflicting details between T-8013 and the hydrographic survey.

### 65. Comparison with Nautical Charts

1223	1:80,000, ed. 1943, corr. 10/30/50
------	------------------------------------

There are no significant differences between T-8013 and the chart.

### 66. Adequacy of Results and Future Surveys

T-8013 is adequate as a base for hydrographic surveys and the construction of nautical charts and meets the requirements of the Bureau for shoreline maps.

### 67. Control

A number of triangulation stations falling within the limits of this map were not plotted, but have been listed on Form M-2388-12 attached to this descriptive report. These additional stations all have no check positions and are not described.

*The Division of*

Nan 2 RM, 1914 was transferred as such from T-7106. However, the station is lost and Geodesy does not publish a position for the reference mark although the reference mark is described in descriptive list number 376, p. 55, for the 1948 recovery which listed the station properly as lost.

68. Road Classification

Roads were classified during review as either class 5 (double full) or class 7<sup>(double dash)</sup>. Previous surveys and office interpretation of the photographs furnished the basis for classifying the roads.

69. Geographic Names

A list of geographic names approved by the Geographic Names Section, Division of Charts is attached to this descriptive report.

Reviewed by:

K. N. Maki  
K. N. Maki 2/27/52

Approved by:

S. V. Griffin 2/28/52  
Chief, Review Section  
Division of Photogrammetry

P. S. Reading  
Chief, Div. of Photogrammetry  
P.S.R.

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

Carl O. Horton  
Chief, Div. of Coastal Surveys  
C.O.H.