

# 8320

Diag. Cht. No. 78-4.

Form 504

## U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

### DESCRIPTIVE REPORT

Type of Survey Topographic

Field No. CS-289-W3 Office No. T-8320

#### LOCALITY

State Virginia

General locality James River

Locality Claremont

1947/52-54

#### CHIEF OF PARTY

L.C.Lande, Div. of Photo. Wash., D.C.  
L.J.Reed. " " " " " "

#### LIBRARY & ARCHIVES

DATE November 10, 1959

B-1870-1 (1)

# 8320

## DATA RECORD

78320

Project No. (II): **GS 289 W3** Quadrangle Name (IV): **CLAREMONT**

Field Office (II):

Chief of Party:

Photogrammetric Office (III): **Washington, D.C.** **Radial Plot = Lester C. Lande**  
Officer-in-Charge: **Compilation = Louis J. Reed**

Instructions dated (II) (III):

Copy filed in Division of  
Photogrammetry (IV)Method of Compilation (III): **Nine-Lens Plotter**Manuscript Scale (III): **20,000**Stereoscopic Plotting Instrument Scale (III): **20,000**

Scale Factor (III):

Date received in Washington Office (IV):

Date reported to Nautical Chart Branch (IV):

Applied to Chart No.

Date:

Date registered (IV): **7/8/58**

Publication Scale (IV):

Publication date (IV):

Geographic Datum (III): **NA 1927**

Vertical Datum (III):

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):

Lat.:

Long.:

Adjusted

~~XXXXXXXXXX~~

Plane Coordinates (IV):

State:

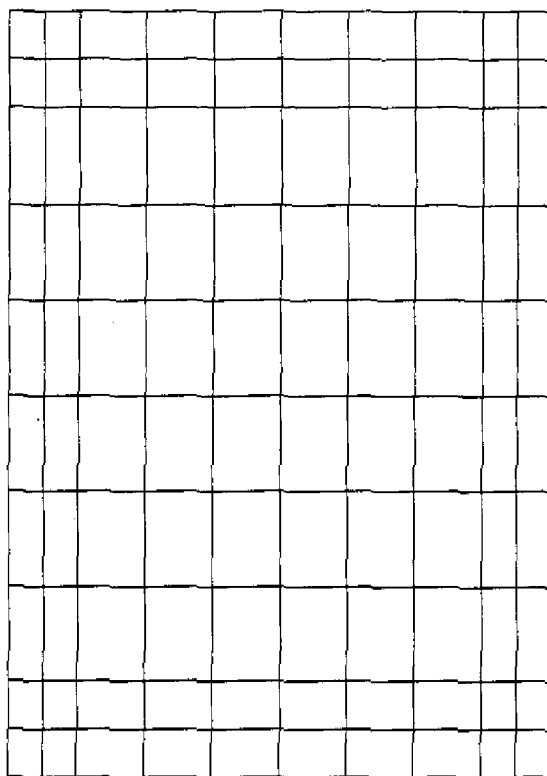
Zone:

Y=

X=

**Universal Transverse Mercator, Zone 18, 1,000 meter interval.**  
**Virginia State Grid South, 10,000 ft interval.**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.



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

Entire area compiled on the Reading  
Plotter, model "A", by:  
Clarence E. Misfeldt

## DATA RECORD

Field Inspection by (II):

Date:

Planetable contouring by (II):

Date:

Completion Surveys by (II):

Date:

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

The shoreline of this compilation is dated 1952 since it was compiled as it appeared on the 1952 photographs used on the plotting instruments. Tide range is not sufficient to be effective.

Projection and Grids ruled by (IV): Jack Allen on the Reading Ruling Machine

Date: 19 Nov 52

Projection and Grids checked by (IV): Howard D. Wolfe

Date: 20 Nov 52

Control plotted by (III):

Stanley J. Hathorn

Date: 25 Nov 52

Control checked by (III):

Jeeter P. Batley

Date: 30 Nov 52

Radial Plot or Stereoscopic  
Control extension by (III):

Sam G. Blankenbaker

Date: 6 Aug 53

Stereoscopic Instrument compilation (III):

Planimetry

Clarence E. Misfeldt

Date:

22 Sep 53

Contours.

Date:

Manuscript delineated by (III):

Robert L. Sugden

Date: 13 Nov 53

Photogrammetric Office Review by (III): Louis J. Reed

Date:

Elevations on Manuscript  
checked by (III):

Louis J. Reed

Date:

Camera (kind or source) (III): **USC&GS 9-lens Camera, model "B", f = 8.25 inches**

Number	Date	Time	Scale	Stage of Tide
36088 thru 36092	27 Mar 52	12:18	20,000	1.2ft above MSL
36099 thru 36103		12:33		

Tide (III)

Reference Station:  
Subordinate Station:  
Subordinate Station:

Ratio of Ranges	Mean Range	Spring Range

Washington Office Review by (IV):

Date:

Final Drafting by (IV):

Date:

Drafting verified for reproduction by (IV):

Date:

Proof Edit by (IV):

Date:

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

**sq mi**

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

**miles**

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

Control Leveling - Miles (II):

**54**

Number of Triangulation Stations searched for (II):

**X**

Recovered:

**X**

Identified:

**X**

Number of BMs searched for (II):

Recovered:

Identified:

Number of Recoverable Photo Stations established (III):

**None**

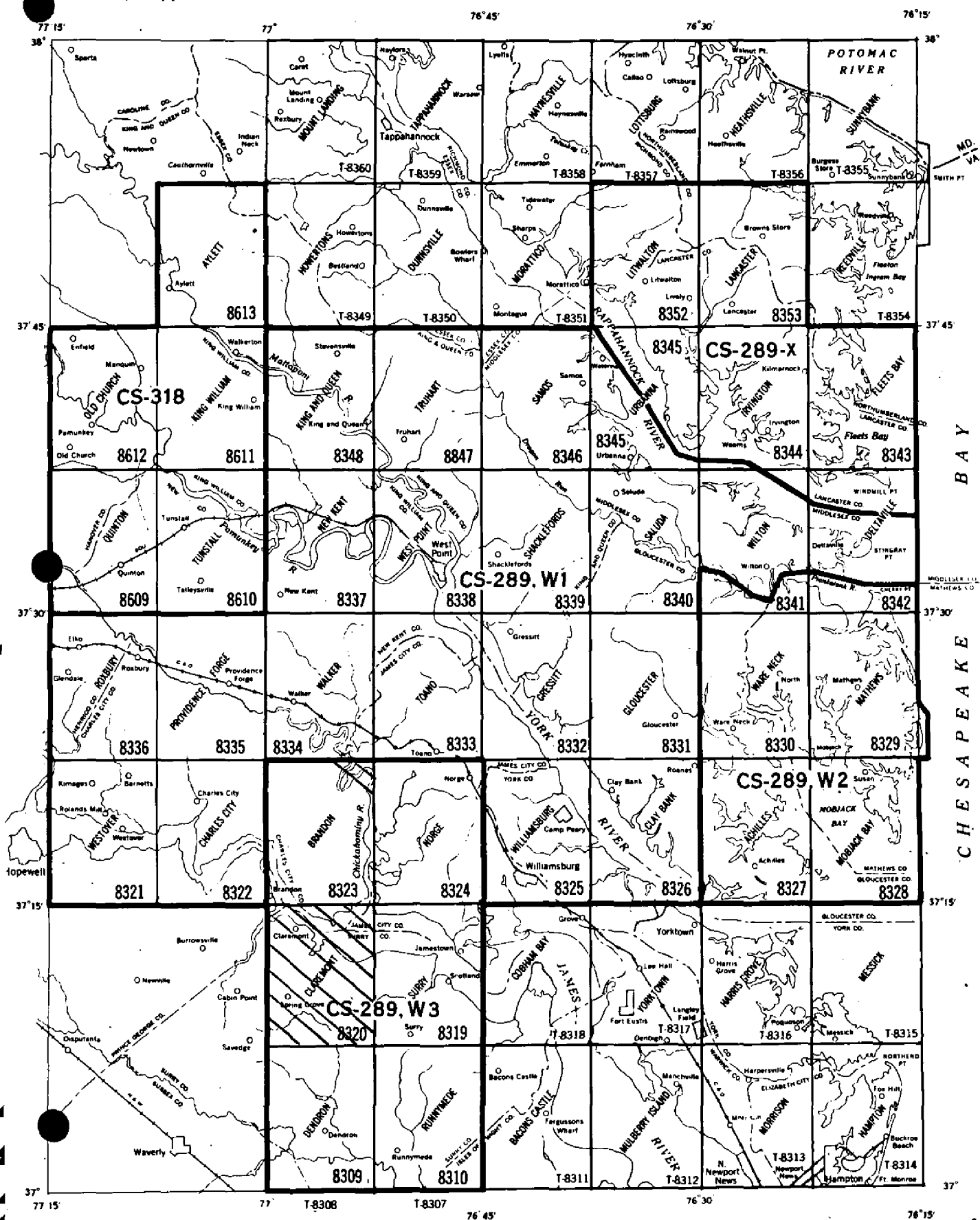
Number of Temporary Photo Hydro Stations established (III):

**None**

Remarks:

TOPOGRAPHIC MAPPING PROJECT CS-289-318 (47)

**VIRGINIA, Rappahannock River to James River**



1. Preface:

- 9 -

## FIELD INSPECTION REPORT

T-8320

5. Vertical Control

Date started .....	2-11-46
Date completed .....	3-7-46
Linear miles 4th Order Levels .....	47
Linear miles 3rd Order Levels .....	7

Recovery

Existing vertical control was recovered and pricked in 1944 by the War Mapping Party. No attempt was made to determine the adequacy of the work; it was felt the field edit party would pick up any discrepancies which might exist.

Photographs

The following nine-lens photographs were used: 13014, 13012, 12981, and 13015.

Methods3rd Order

About 7 linear miles of 3rd Order Levels were completed by Mr. Mathew A. Stewart, Engineering Aid, using instruments and methods as prescribed by the Division of Geodesy.

Permanent Bench Marks were placed at about one mile intervals along the level line, and supplemental spot elevations between them.

4th Order

About 47 linear miles of 4th Order Levels were completed by John R. Smith, Engineering Aid.

The leveling was accomplished by trigonometric methods. Computations were made to the nearest 1/10 of a foot. The average error of closure was less than one foot, and no level loop was known to exceed the allowable error of closure.

A line in the south center of the Quadrangle, running north and south, could not be traversed. It was grown over to the extent that levels in there would be of little value.



- 10 -

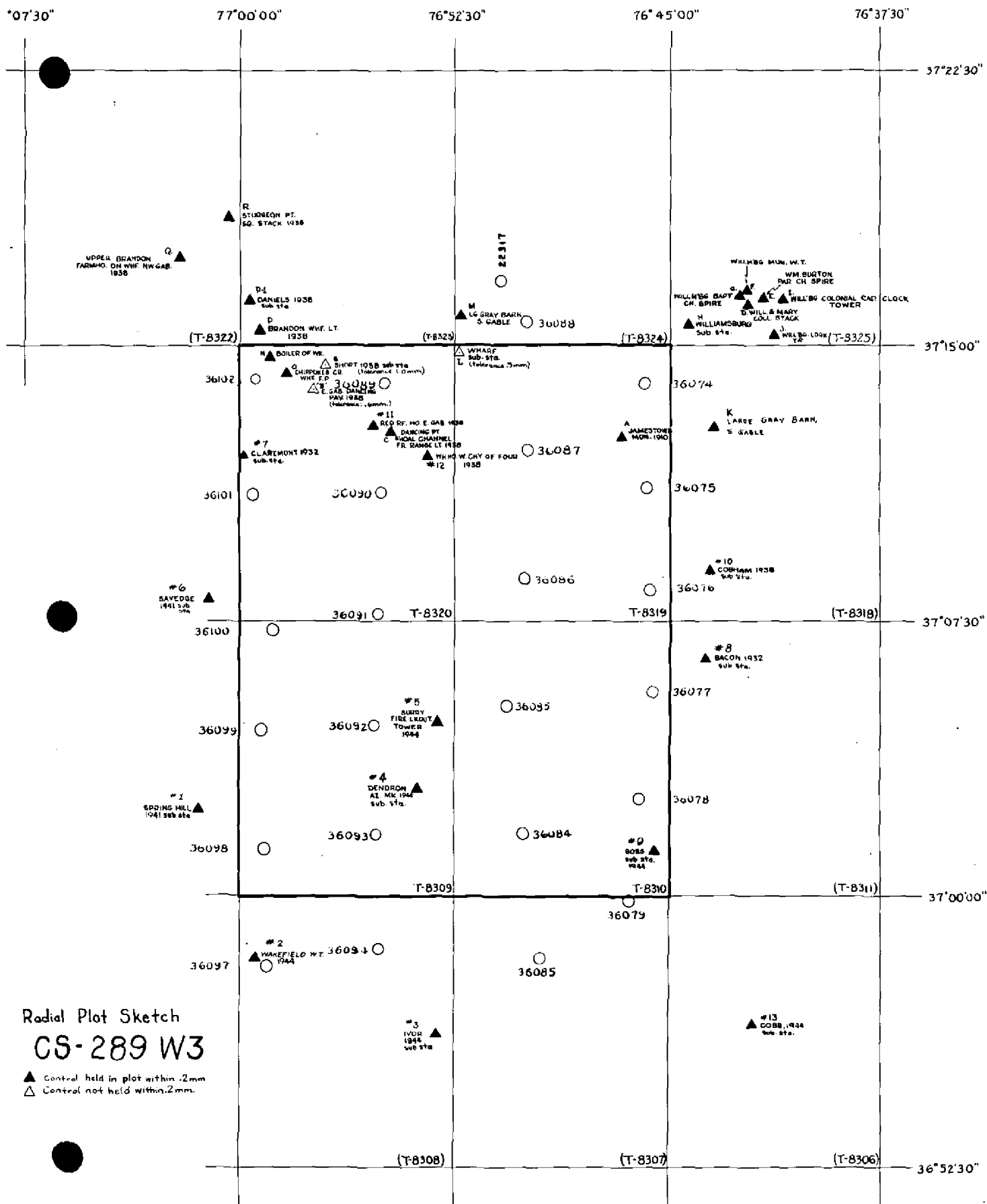
Level information appears on the photographs in blue ink. The code letters CL prefix all spot elevations. The following method was used to distinguish the closed elevations from the unclosed:

1. Elevations circled indicate the loop was not closed on a known elevation.
2. Elevations underscored by a dashed line indicate the loop was closed on tidewater and no adjustment made.
3. Elevations underscored by a solid line indicate the loop was closed on a previously determined elevation or an existing Bench Mark.

Submitted with the photographs is a layout sheet showing the approximate positions of the spot elevations. Also, on the front page of the level Volume is the following information: Loop, Page, Closure, Notes checked by, Photo Number.

Respectfully submitted,

/s/ John R. Smith  
Engineering Aid



RADIAL PLOT REPORT

21-30: The radial plot report covering the area of this quadrangle is to be found in the descriptive report for T-8319. A single plot and report was made for T-8319, T-8320, T-8309, and T-8310.

\* Used in Radial Plot  
 \*\*\* Used in plot (falls outside plot limits)

MAP T. 8320 PROJECT NO. CS 289 W3 SCALE OF MAP 1:20,000 SCALE FACTOR

STATION	SOURCE OF INFORMATION (INDEX)	DATUM	LATITUDE OR Y-COORDINATE LONGITUDE OR X-COORDINATE		DISTANCE FROM GRID IN FEET. OR PROJECTION LINE IN METERS		Description Book No. Page		DISTANCE FROM GRID OR PROJECTION LINE IN METERS		FACTOR DISTANCE FROM GRID OR PROJECTION LINE IN METERS	
RED ROOFED HOUSE, Vol. 1	N.A.		37 14	02.958			327		91.2			
CHV. ON RIDGE POLE, 1938	316	1927	76 57	53.404			pgs. 1, 19, 39		1316.4			
" "	Zone 2	"	331.604	.79		Plane Coordinates						
" "	81		2.446	.907.75								
CHIPPOKES CREEK Vol. 1	"		37 14	24.175			327		745.3			
WHARF FLAGPOLE # 1938	321		76 58	30.160			1.19.39		743.4			
" "	Zone 2		333.702	.12		Plane Coordinates						
" "	83		2.443	.901.06								
SHORT, 1938	Vol. 1		37 14	29.338			327		904.4			
" "	313		76 46	52.174			pgs. 1, 21		1286.0			
" "	Zone 2		334.353	.34		Plane Coordinates						
" "	80		2.451	.814.80								
* SHORT 1938 Sub. Sta.	Form M-2226-12		37 14						919.6			
BOILER OF WRECK, 1938	Vol. 1		76 56						1301.6			
BRANDON WHARF LT. 1938** (N. of 8320)	321		37 14	48.113			327		1483.2			
DANIELS, 1938 (N of Plot)	Vol. 1		76 58	46.951			pgs. 2, 19, 40		1157.2			
" "	323		37 15	24.577			327		757.7			
" "	317		76 59	17.255			2.19.40		125.2			
DANIELS, 1938 Sub. Sta. **	Vol. 1		37 16	18.102			327		558.0			
" "	317		76 59	39.041			2.20.40		961.9			
STURGEON PT. SQ. Vol. 1			Position transferred from T-8323.									
BRICK STACK 1938	322		37 18	26.266			327		809.7			
" "	322		77 00	20.958			3.21.40		516.1			

MAP T-8320 PROJECT NO. GS 289 W3 SCALE OF MAP 1:20,000 SCALE FACTOR 1.00

STATION	SOURCE OF INFORMATION (INDEX)	DATUM	LATITUDE OR Y-COORDINATE LONGITUDE OR X-COORDINATE	Description Book Nos. DISTANCE FROM GRID IN FEET. OR PROJECTION LINE IN METERS		N.A. 1927 - DATUM DISTANCE FROM GRID OR PROJECTION LINE IN METERS		FACTOR DISTANCE FROM GRID OR PROJECTION LINE IN METERS
				FORWARD	(BACK)	FORWARD	(BACK)	
CLAREMONT 1932	Vol. 1 27	N.A. 1927	37 11 58.812 76 59 43.750	327		1813.0		✓
CLAREMONT * 1932 Sub. Sta.			37 11 76 59	pg. 1		1078.9		✓
RED ROOFED HOUSE, E. GAB. 1938	Vol. 1 315		37 12 49.036 76 55 26.479	326		1658.2		X
DANCING PT. SIGNAL CHANNEL FRONT RANGE 1938	Vol. 1 312		37 12 43.272 76 54 56.770	17.21		1394.6		✓
RANGE 1910	Vol. 1 313			326		1511.7		✓
UTILITY 1938	Vol. 1 314			17.26.29		657.8		✓
WHITE HOUSE W. CHY OF FOUR 1938	Vol. 1 315		37 11 54.161 76 53 34.619	326		1669.6		X
SAVEDGE 1941 (W. of T-8320)	Vol. 1 434		37 08 01.660 77 01 10.407	17.27		853.8		✓
SAVEDGE 1941 Sub. Sta. (W. of T-8320)			293.969.66 2.431.065.74	754		51.17		W of
GREEN ROOFED HOUSE N. CHY 1938	Vol. 1 315		37 15 05.116 76 53 50.021	5.8		256.9		T 8320
WAKEFIELD 1938	Vol. 1 313							X
DANCING PAVILION	Vol. 1 313			326		158.6		✓
E. GABLE	Vol. 1 326		37 13 51.850 76 57 15.949	17.25		1232.7		✓
				18		393.2		✓

SCALE FACTOR 1.0.....

SCALE OF MAPL: 20,000...

PROJECT NOGS-289 W3

MAP T-8320...

[illegible]

COMPILATION REPORT31. Delineation:

The contouring and delineation of cultural features was accomplished simultaneously on the Reading Plotter, model "A". Photo coverage was complete. Field inspection was also complete but it was out-of-date since it was done in 1944 on 1942 photographs. For this reason the field inspection was used during instrument delineation for a guide only; Ground features had changed noticeably on the 1952 instrument photographs and it was drawn as judged correct by the operator. With this in mind the field editor should apply more than usual attention to compiled details. The entire land area of this quad has been compiled.

32. Control:

Horizontal control was adequate as stated in the Radial Plot Report, page 10, Descriptive Report for T-8319.

Vertical control for contouring purposes was not entirely satisfactory, but usable. Level lines had been run along nearly all the roads in the area, with spur lines extended into in-accessible areas within the road network. The spacing of points of elevation along the roads was adequate but more side shots into the inaccessible areas would have been helpful toward a more satisfactory solution. The overlay calls attention to one field elevation to be investigated.

33. Supplemental Data:

- a. Special Reports: None.
- b. Field Inspection Photos: 12980, 81, 82, 13012, 13, 14, 15.
- c. Shoreline Surveys: T-8038

34. Contours and Drainage:

An error in lens-setting existed when the instrument photographs were transformed. This produced fuzzy center chambers which resulted in rectified prints that were just usable. For this reason the quality of the photography was not very satisfactory for contouring purposes.

35. Shoreline and Alongshore Details:

Shoreline inspection was inadequate and the shoreline was delineated as it appeared on the instrument photographs. No low-water or shoal lines were compiled.

36. Offshore Details: Not applicable.

37. Landmarks and Aids:

No landmarks were recommended by the field inspector but four are noted on the shoreline survey T-8078 covering the same shoreline area. The four have been shown as landmarks on this compilation, as follows:

~~Δ DANCING PT SHOAL CHANNEL FRONT RANGE LT, 1938~~

~~Δ DANCING PT SHOAL CHANNEL REAR RANGE LT, 1942~~

Δ RED ROOFED HOUSE E GABLE, 1938

○ Institute Ruins, 1942 ← not plotted

Δ West Chimney of Fort 1438

Aids consist of three lights:

Δ BRANDON WRECK LT?, 1938

Δ DANCING PT SHOAL CHANNEL FRONT RANGE LT, 1938

⊙ DANCING PT SHOAL CHANNEL REAR RANGE LT, 1942

38. Control for Future Surveys: None.39. Junctions:

All junctions are in agreement except on the west border where no survey exists. The adjoining sheets are T-8323 on the north, T-8319 on the east, and T-8309 on the south.

40. Horizontal and Vertical Accuracy:

This compilation is believed to meet the National Map Accuracy Standards for a 1:20,000 scale map with 20ft contours.

45. Comparison with Existing Maps:

SURRY QUADRANGLE, Virginia, 1:62,500, 1919 edition.

47. Comparison with Nautical Charts:

JAMES RIVER? JAMESTOWN ISLAND TO JORDON POINT, No. 530, 1:40,000, 5th edition, Sept 1940, last corrected 23 Jul 51.

48. Geographic Name List: See page 16.49. Notes for the Hydrographer: Not applicable.50. Compilation Office Review: See page 17.

Submitted by:

*Orvis N. Dalbey*  
Orvis N. Dalbey, Chief,  
Nine-Lens Plotter Section

Approved by:

*Louis Reed*



# GEOGRAPHIC NAMES

Survey No.

T-8320

Name on Survey

Page 16

	On Chart No.	On previous survey No.	On U. S. quadrangle Maps	From local information	On local Maps	P. O. Guide or Map	Rand McNally Atlas	U. S. Light List	
A	B	C	D	E	F	G	H	K	
BRANDON GUT									
BURDICKS WHARF									1
CABIN POINT ROAD									
CHARLES CITY COUNTY									2
CHICKAHOMINY RIVER									
CHIPPOKES POINT									3
CLAREMONT ROAD									
CLAREMONT									4
CLAREMONT WHARF									
COURTHOUSE ROAD									5
CYPRESS SWAMP									
DURING POINT									6
DANCING POINT									
EASTOVER									7
FLORENCE CHURCH									
FLORENCE ROAD									8
GRAYS CREEK									
JAMES RIVER									9
JAMES CITY COUNTY									
MERCY SEAT CHURCH									10
PRINCE GEORGES COUNTY									
OLD SURRY ROAD									11
RIVER ROAD									
SANDY POINT									12
SUNKEN MARSH CREEK									
TELLURIDE SCHOOL									13
TETTINGTON									
SPRING GROVE									14
SPRING GROVE ROAD									
SPRING GROVE SWAMP									15
SPRING RUN									
SURRY COUNTY									16
TOMAHUND CREEK									
UPPER CHIPPOKES CREEK									17
									18
									19
									20
									21
									22
									23
									24
									25
									26
									27 17

→ Deleted by Field Edit

→ SWANN per Field Edit







FIELD EDIT REPORT  
Quadrangle T-8320 (Claremont)  
Project CS 289 W-3  
E. H. Kirsch, Chief of Party

51. METHODS-- This quadrangle was inspected by riding over all roads to check their classification, to classify buildings, to examine questioned areas and to visually check all mapped features and contours. All trails shown were checked by walking over them or by utilizing local information as to the trails use and importance. The vertical accuracy testing was made on a double weight matte print that was used as a field edit sheet, using standard plane table methods. The shoreline, along shore and off-shore features were checked from a skiff.

All additions, corrections and deletions were made on the field edit sheet or cross referenced to the photographs. Red ink was used for additions and corrections, green for deletions and violet for the vertical accuracy test points.

Field edit information is shown on four nine lens 1:20, 000 scale photographs numbered 36089, 36090, 36101 and 36102, one discrepancy print, one shoreline survey sheet T-8078 - and one and one half double weight prints cut into six sections and numbered 1, 1a, 2, 3, 3a and 4. Sections 1a and 3a were used only as a junction sheet.

52. ADEQUACY OF COMPILATION-- The map compilation is near adequate and will be complete with the application of the field edit data.

53. MAP ACCURACY-- The horizontal positions of the mapped features appear to be good. Plane table traverses in several areas checked well with all features shown.

Twenty nine points, whose elevation had been interpolated by the Reviewer, were checked. The average error found was three and one tenth feet, with the greatest error being seven feet.

54. RECOMMENDATIONS-- None offered.

55. EXAMINATION OF PROOF COPY-- No one was requested to examine a proof copy of this map.

The name Eastover is misplaced and has been changed to the correct position on the field edit sheet.

55. Cont'd.

Telluride School was a small private school, near Claremont, that has been closed for the past thirty years. The building is now a private home and the deletion of the name from the map is recommended.

The creek, at the east edge of section # 1, is known as Sunken Meadow, not Sunken Marsh.

Respectfully submitted,  
1/18/54

*Elgan T. Jenkins*  
Elgan T. Jenkins  
Cartographer

Approved and forwarded

*E. H. Kirsck*

E. H. Kirsck, Chief of Party

Review Report  
T-8320  
29 August 1955

61. General Statement:

See Summary, Page 20, of Descriptive Report, covering T-8323-24.  
T-8320 is one of the 6 standard 7.5-minute quadrangles of Project CS-289-W-3 described in the reference summary.

62. Comparison with Registered Topographic Surveys:

T-1391a) 1391b)	1:20,000	1874-75
8078	1:10,000	1941-42
7075a) 7075b)	"	1948

T-8320 supersedes all the above surveys for nautical chart construction or maintenance use.

The alongshore detail on T-8078 was field edited in 1954. Objects mapped on T-8078 that were not visible above MLW in 1954 do not appear on T-8320.

63. Comparison with Maps of Other Agencies:

USGS SURRY, Va.	1:62,500	1919
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No extensive differences were noted.

64. Comparison with Contemporary Hydrographic Surveys:

No contemporary hydrographic surveys exist; however, comparison was made during application of Hydrography with the following surveys:

H-7021	1:10,000	1944
7642	"	1948
7610	"	1948

No extensive conflicts with T-8320 were noted but it should be noted that no attempt has been made to re-locate the numerous fish traps that apparently were located in detail on the hydrographic surveys. Many of these temporary obstructions no doubt have been moved since 1944-1948. A few of the more substantial Duck Blinds were located by the Field Editor by intersection methods and appear on T-8320. These obstructions are not visible on the photographs.



65. Comparison with Nautical Charts:

530 1:40,000 5th Edition 1940 (last correction date 5/23/49)

No significant differences noted except one wreck off Dancing Point and another off Sloop Point were not found by the Field Editor. All fixed aids locations were verified by this survey.

66. Adequacy of Results:

See Field Edit Report for results of accuracy test. This map meets requirements of the National Standards of Map Accuracy.

67. Junctions:

This map junctions with contemporary surveys to North, East and South. Junction to West was made with AMS 7.5-minute quadrangle SAVEDGE, 1:25,000, 1949. The contours between lat. 37-12 and 37-13.6 could not be junctioned without exceeding map accuracy tolerances. Contours on T-8320 in this section were mapped in the field by the Field Editor. The correctly mapped contours are shown "overedge" on T-8320 to a junction with those on the AMS quadrangle.

<sup>^</sup>  
manuscript

Reviewed by:

John M. Neal  
John M. Neal

APPROVED:

L C Lande  
Chief, Review Section  
Photogrammetry Division

Max Shuckette  
Chief, Nautical Chart Branch  
Charts Division

W W Swanson  
Chief, Photogrammetry Division

[Signature]  
Chief, Coastal Surveys Division

3 Nov. 59

See report T 8319 for application of hydrography.

## NAUTICAL CHARTS BRANCH

SURVEY NO. T-8320

### 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.