

ORIGINAL

8348

Diag'd. on diag. ch. No. 78-3

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Topographic
Quadrangle

Type of Survey

Field No. King & Queen Office No. T-8348

LOCALITY

State Virginia

General locality King and Queen County

Locality Stevensville

9 lens Photos { 1:10,000 Scale 11-27-42
1:20,000 Scale 12-31-42

194 5

CHIEF OF PARTY

K. T. Adams and R. W. Knox

LIBRARY & ARCHIVES

DATE December 30, 1947

B-1870-1 (1)++

8348

DATA RECORD

Form T-1

T- 8348

Quadrangle (II): King and Queen, 7 $\frac{1}{2}$ '

Project No. (II): 289-W1

Field Office: Washington Office

Chief of Party: K. T. Adams

Compilation Office: Washington

Chief of Party: R. W. Knox

Instructions dated (II III):

See Field Inspection Report

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

~~Completed survey received in office:~~

Survey completed in office: August 17, 1945

Reported to Nautical Chart Section: —

Reviewed: Feb. 1946

Applied to chart No.

Date:

Redrafting Completed: 7/2/46

Registered:

Published:

Compilation Scale: 1:20,000

Published Scale: 1:31,680

Scale Factor (III): 1.0

Geographic Datum (III): N. A. 1927

Datum Plane (III): MSL

Reference Station (III): Columbus, 1934

Lat.: 37°41'28" .710

Long.: 76°53'25" .344

Adjusted
~~Unadjusted~~

State Plane Coordinates (VI):

X = 2,465,744.43 feet

Y = 498,391.65

Military Grid Zone (VI) A

PHOTOGRAPHS (III)

<u>Number</u>	<u>Date</u>	<u>Time E.W.T.</u>	<u>Scale</u>	<u>Stage of Tide</u>
12989-12992	12-31-42	2:09 - 2:14	1:20,000	0.2'
13002-13005	12-31-42	2:31 - 2:35	1:20,000	0.2'
12400-12404	11-27-42	12:06 - 12:10	1:10,000	1.1'
12415	11-27-42	12:21	1:10,000	1.3'

Tide from (III): At Wakema, ref. Hampton Roads

Mean Range: 3.4

Spring Range: 3.9

Camera: (Kind or source) U. S. Coast and Geodetic Survey Nine Lens
Geodetic

Field Inspection by: Commander Ray L. Schoppe

date: 1944

Vertical Control by H. R. Cravat

Spring 1945

Field Edit by: H. R. Cravat

date:

Date of Mean High-Water Line Location (III): 1944

Projection and Grids ruled by (III) Stephen Rose

date: Dec. 1944

" " " checked by: Stephen Rose

date: Dec. 1944

Control plotted by: A. H. Faulds

date: May 1945

Control checked by: G. B. Willey

date: May 1945

Radial Plot by: A. H. Faulds & G. B. Willey

date: May 1945

Detailed by: ^{*Stereo*} W. D. Harris, O. N. Dalbey

date: June 1945

Reviewed in compilation office by:
R. M. Berry

date: Aug. 1945

Elevations on Field Edit Sheet

checked by: Brooks

date: Feb. 10, 1946

STATISTICS (III)

Land Area (Sq. Statute Miles): 57.5

Shoreline (More than 200 meters to opposite shore): 6.9 st. mi.

Shoreline (Less than 200 meters to opposite shore): None

Number of Recoverable Topographic Stations established: None

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:

STATEMENT TO ACCOMPANY DESCRIPTIVE REPORT T-8348

1. This summary of survey methods used and the method of handling T-8348 and adjoining quadrangles is provided for the convenience of those processing and using the map in the future.

2. The several mapping operations were:

- (a) Nine-lens aerial photography and laboratory processing.
- (b) Field surveys for identification of shore-line, clarification of photographic details, and establishment and identification of horizontal control.
- (c) Compilation of planimetry and contours on a 1:20,000 scale manuscript by stereoscopic instrument methods.
- (d) Preliminary office review of the compiled manuscript.
- (e) Field edit and accuracy tests.
- (f) Final office review of the manuscript to insure completeness and conformance with specifications. This included correction of the manuscript in accordance with the field edit survey.
- (g) Drafting, reproduction, and publication. See paragraph 3.
- (h) Registry in archives. See paragraph 4.

3. T-8348 and the adjoining quadrangles will be smooth drafted, published, and distributed by the Geological Survey in accordance with the agreement of March 25, 1947.

4. The following data for T-8348 may be needed from time to time either in the U. S. Geological Survey or the Coast and Geodetic Survey. They are filed and may be obtained as follows:

- (a) Original manuscript corrected after field edit. - The manuscript is being forwarded to the Geological Survey at this time for smooth drafting. It

will be eventually returned to the Coast and Geodetic Survey and will be filed in the Division of Photogrammetry. Meanwhile, it may be obtained from the Geological Survey if needed for nautical chart correction or other purposes.

- (b) Field edit sheet - The field edit sheet is filed in the Division of Photogrammetry. It will be loaned to the Geological Survey or other Divisions of the Coast Survey upon request.
- (c) Descriptive report. - The descriptive report together with a 1:20,000 scale photographic print of the manuscript (a above) is being registered in the Coast and Geodetic Survey archives at this time. When T-8348 is published a cloth-backed colored print will also be registered. The descriptive report will be withdrawn from the archives and loaned to the Geological Survey upon request.



B. G. Jones
Technical Assistant to the
Chief, Div. of Photogrammetry

SUPPLEMENTAL FIELD INSPECTION REPORT

T-8348, King & Queen Quadrangle, (3737.5/7652.5/7.5)

This supplemental field inspection report for quadrangle T-8348 was prepared October 8, 1945 by Asiel LaFave in conjunction with his field edit report of this quadrangle. It is to supplement the general field inspection report submitted in 1944 by War Mapping Party No.1. This latter report covered project 289-W which included quadrangle T-8348.

1. Description of Area.

Quadrangle T-8348 is located in the Tidewater Section of Virginia and is drained by the Mattaponi River which flows through the quadrangle in a southeasterly direction. The south border of the quadrangle is about 14 miles north of West Point and the north border is about a mile north of Stevensville. There are no densely populated areas in the quadrangle. The needs of the rural population are served by the numerous country stores and post-offices.

The land is comparatively flat upland dissected with many deep gullies. The headwaters of most streams are from 80 to 120 feet above sea-level. The steeper drainage areas are covered with mixed pine and hardwood. The ridges and flat areas are covered with pine. About 70% of the area is wooded, the remainder being cultivated.

At present, pulpwood is being cut on a large scale hence the woods classification is continually undergoing a change.

2. Completeness of Field Inspection.

3. Interpretation of Photographs.

For the above items, see 1944 Field Inspection Report for Project CS-289-W.

4. Horizontal Control

In the 1944 general field inspection report for Project CS-289-W, it gives station King William, 1934 as being in Quadrangle T-8348. It is West of this quadrangle.

5. Vertical Control.

See 1944 field inspection report.

The following bench marks were added to the field edit sheet.

B-274	S-291
D-274	T-291
E-274	U-291
F-274	V-291
G-274	Q-273
H-274	

6. Contours and Drainage

See 1944 field inspection report and also item 6 under field edit report.

7. Mean High Water Line.
8. Mean Low Water Line.
9. Wharves and Shore Line Structures
10. Details Off Shore From High Water Line.
For the above listed items, see 1944 Field Inspection Report for Project CS-289-W

11. Landmarks and Aids to Navigation.
There are no landmarks nor aids to navigation in this quadrangle.

12. Hydrographic Control.
See 1944 Field Inspection Report.

13. Not applicable to this quadrangle.

14. Road Classification.
See item 14 of field edit report.

15. Bridges.
There are no bridges over navigable waters in this quadrangle.

16. See ^{Buildings} 1944 field inspection report and also item 16 in the field edit report.

17. Boundary Monuments and Lines.
See 1944 field inspection report and also item 17 in the field edit report.

18. Geographic Names.
Geographic Names in this quadrangle were investigated in 1944 by J¹⁴ W. Stingley, Jr. Topo. Engr. A special geographic name report, which included this area, was submitted by him in 1944.

Compilation

Items 26 through 35 reported in a special report by G. C. Tewinkel of the Washington Office.

Respectfully submitted October 9, 1945

Harland R. Cravat
Photogrammetric Engr.

SUPPLEMENTAL FIELD INSPECTION REPORT

T-8348, King & Queen Quadrangle, (3737.5/7652.5/7.5)

This supplemental field inspection report for quadrangle T-8348 was prepared October 8, 1945 by Azel LaFave in conjunction with his field edit report of this quadrangle. It is to supplement the general field inspection report submitted in 1944 by War Mapping Party No.1. This latter report covered project 289-W which included quadrangle T-8348.

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Quadrangle T-8348 is located in the Tidewater Section of Virginia and is drained by the Mattaponi River which flows through the quadrangle in a southeasterly direction. The south border of the quadrangle is about 14 miles north of West Point and the north border is about a mile north of Stevensville. There are no densely populated areas in the quadrangle. The needs of the rural population are served by the numerous country stores and post-offices.

The land is comparatively flat upland dissected with many deep gullies. The headwaters of most streams are from 80 to 120 feet above sea-level. The steeper drainage areas are covered with mixed pine and hardwood. The ridges and flat areas are covered with pine. About 70% of the area is wooded, the remainder being cultivated.

At present, pulpwood is being cut on a large scale hence the woods classification is continually undergoing a change.

2. Completeness of Field Inspection.

3. Interpretation of Photographs.

For the above items, see 1944 Field Inspection Report for Project CS-289-W.

4. Horizontal Control

In the 1944 general field inspection report for Project CS-289-W, it gives station King William, 1934 as being in Quadrangle T-8348. It is West of this quadrangle.

5. Vertical Control.

See 1944 field inspection report.

The following bench marks were added to the field edit sheet.

B-274	S-291
D-274	T-291
E-274	U-291
F-274	V-291
G-274	Q-273
H-274	

6. Contours and Drainage

See 1944 field inspection report and also item 6 under field edit report.

7. Mean High Water Line.
8. Mean Low Water Line.
9. Wharves and Shore Line Structures
10. Details Off Shore From High Water Line.
For the above listed items, see 1944 Field Inspection Report for
Project CS-289-W

11. Landmarks and Aids to Navigation.
There are no landmarks nor aids to navigation in this quadrangle.

12. Hydrographic Control.
See 1944 Field Inspection Report.

13. Not applicable to this quadrangle.

14. Road Classification.
See item 14 of field edit report.

15. Bridges.
There are no bridges over navigable waters in this quadrangle.

16. ^{Buildings} See 1944 field inspection report and also item 16 in the
field edit report.

17. Boundary Monuments and Lines.
See 1944 field inspection report and also item 17 in the field
edit report.

18. Geographic Names.
Geographic Names in this quadrangle were investigated in 1944 by J. W. Stingley, Jr. Topo. Engr. A special geographic name report, which included this area, was submitted by him in 1944.

Compilation

Items 26 through 35 reported in a special report by G. C.
Tewinkel of the Washington Office.

Respectfully submitted October 9, 1945

Harland R. Cravat
Photogrammetric Engr.

COMPILATION REPORT T-8348

26. Control:

Stations on quadrangle T-8348 which were used:

- * COLUMBUS, 1934, 1945
- * FERRY, 1912, 1944
- * FRAZIER, 1911, 1944
- * LANDING, 1912, 1944
- * SANDY, 1911, 1944

Stations surrounding T-8348 which were used:

- * BESTLAND, 1934
- * BULLOCK, 1934
- * CLIFTON 2, 1934
- * DRAGON, 1942
- * HILL, 1911
- * KING WILLIAM, 1934
- * LANESVILLE, 1934
- OLD SHIPYARDS W. T. 1934
- * PITTS, 1934
- * SHANGHAI, 1942
- * SWEET, 1912
- * WIBBLE 2, 1934

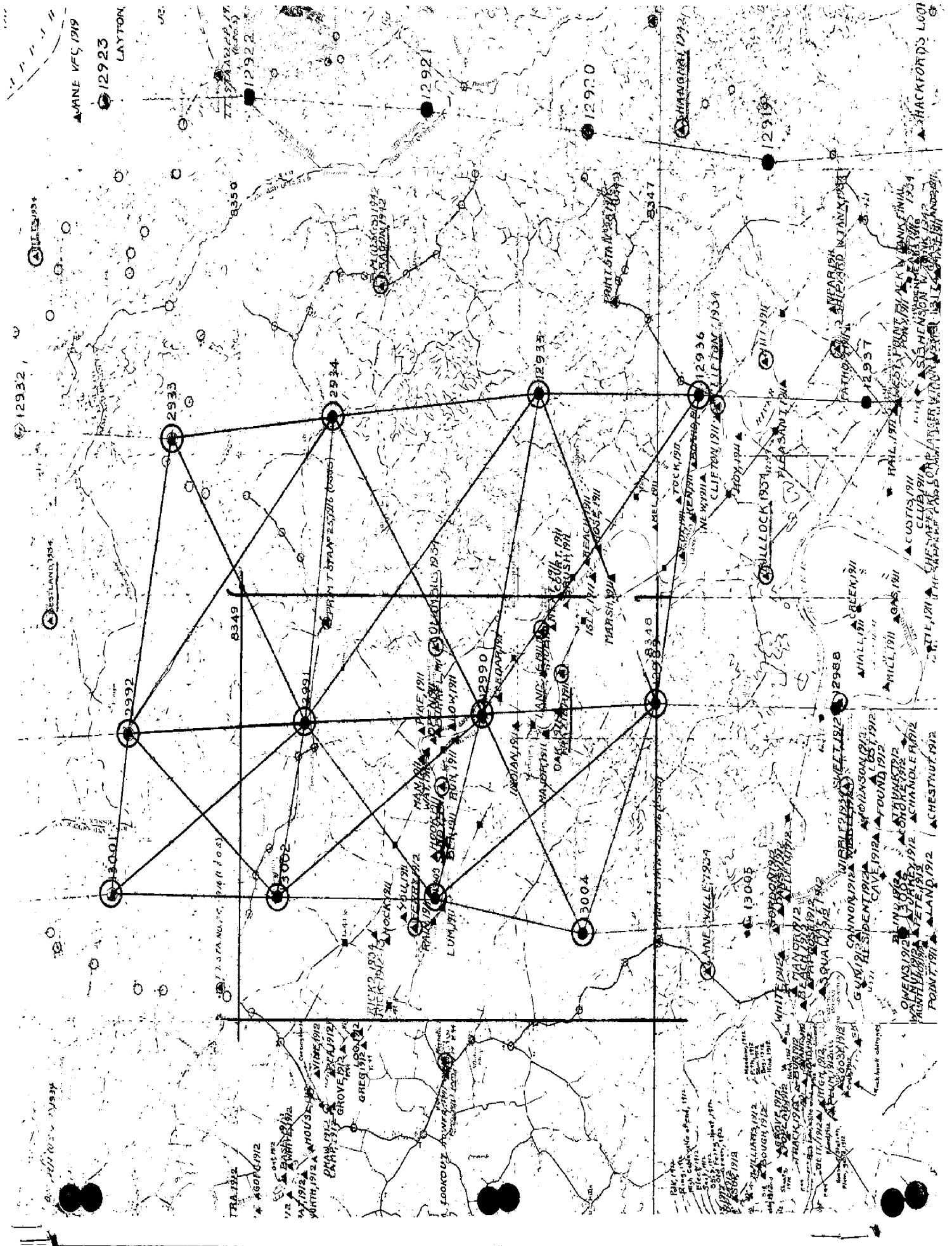
Note: (*) indicates that a field inspection point was used.

Horizontal Control: There are five U. S. C. & G. S. triangulation stations in the area covered by this quadrangle and twelve others in the area covered by the radial plot. All of these stations were identified satisfactorily and were "held" in the radial plot.

All control was either pricked direct or else a field inspection point was used. No stations were located by reference points which depend for their accuracy upon the scale of the photographs and the precision with which the distances are measured. A graphic index showing the distribution of control and photographs has been included in this report.

Vertical Control: Spirit levels, trigonometric levels, and barometer elevations furnished one hundred or more miles of level lines for this quadrangle. Elevations were obtained about every half mile along level lines, which were run on roads at approximate intervals one mile. For large areas in which no roads existed, spot elevations were obtained.

In general, the vertical control was sufficient. But there were instances where more control in particular small areas



AVANE VFC 1919
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LAYTON

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*Photograph
and
Control
Index*

T- 8348

would have been beneficial. Such control would perhaps have been impractical to obtain since the places were usually wooded areas where the cost would have been comparatively large, the identification of suitable points questionable, and the ultimate value doubtful. Considering the quadrangle as a whole, fewer elevations possibly could have been supplied, but all were used to an advantage. With more careful planning, these points would have been more exacting and the reduction of total mileage doubtful.

27. Radial Plot:

This quadrangle was plotted alone since the distribution of control was favorable.

The following twelve metal mounted 1:20,000 scale nine-lens photographs were used, extreme care having been exercised in the transforming process since they were to be used for instrument contouring as well as for the radial plot:

12933 - 12936
12989 - 12992
13001 - 13004

The methods used in the laying of this radial plot were the same as for quadrangle T-8339. A detailed description will be found in the "Descriptive Report" for that sheet.

28. Detailing:

This quadrangle was compiled by means of the Reading Stereocartograph No. 1. A full description of the method is given in the descriptive report T-8339.

This is the second quadrangle to be compiled on this instrument. The procedure on this quadrangle (T-8348) was somewhat different than used on the first quadrangle (T-8339) and as described in the report for T-8339:

Approximate tilt and rectifier settings were computed and rectifier templates made for each photograph by A. H. Faulds, who also made the radial plot. The instrument operators had no part in this phase of the work.

The rectifier templates as discussed above were used by the photogrammetric laboratory to determine, first, an approximate adjustment of the rectifying camera. The final setting was then determined empirically. This work was done entirely by the photogrammetric laboratory without supervision of the stereoscopic mapping unit.

On this quadrangle larger unit areas were contoured at one setting than previously on sheet T-8339. It was necessary to sub-divide the sheet into only six overlapping areas. The stereoscopic instrument compilation was accomplished in pencil on separate sheets and traced on to the map manuscript in ink by N. A. Cluff.

The last unit area was re-contoured because of an abnormally large differential shrinkage of the acetate upon which the contours were drawn. A change in weather conditions had changed the dimensions of the sheet by large amounts in a peculiar irregular manner so that it could not be fitted to the radial plot positions of the map manuscript. Subsequent detailing is now all done on vinylite to prevent a recurrence of this trouble. The second sheet fit very well.

Some difficulty was encountered in drawing contours in the heavily wooded areas between flights, but by working more slowly, the accuracy standards are believed to have been maintained. In wooded areas near the center

of the photographs little difficulty was experienced in sensing the surface of the ground, but extreme caution was required midway between the flight lines. This phenomenon was caused by the relief displacement of the trees whose images obliterated the spaces through which the ground might have been seen. This seems to show that the theoretical principle of having a long air base length for precise elevation determination tends to have less practical value where there are high trees or steep slopes.

The shoreline consisted of the banks of the Mattaponi River which flows across the quadrangle. The field inspection of shoreline as well as other features was satisfactory and complete. The photographs were satisfactory except for the usual elevation discrepancies on chamber junctions which were impossible to remove by transformation since they resulted chiefly from large and irregular film shrinkage. It was these discrepancies which required that an abundance of vertical control be obtained.

A total of 329 man-hours was used to detail the quadrangle with the instrument. This is equivalent to $23\frac{1}{2}$ days plotting time since two operators worked two shifts for a total of 14 hours operating time per day. The large flat areas near the river accounted somewhat for the rapid completion.

29. Supplemental Data:

No other data were used to supplement the control, field inspection, and plotting instrument.

G. C. Tewinkel
Chief, Stereoscopic Instru-
ment Unit

FIELD EDIT REPORT

T-8348, King & Queen Quadrangle, (3737.6/7652.5/7.5)

Project CS 289 W - 1

Harland R Cravat, Chief of Party

The field edit survey was made by Mr. Aziel La Fave, Photogrammetric Engineer, from September 10, 1945 to October 8, 1945 in accordance with the Director's Field Edit Instructions dated August 24, 1945. During this time, vertical accuracy tests were also made (see item 48).

46. Methods.

The field edit man rode in a truck over every passable road in the quadrangle, checking roads, buildings, drainage, and contours. When a large area had no adequate roads traversing it, the area was covered on foot. Geographic names were checked with posted signs or with local residents. Political boundaries were checked by consulting local residents and the county clerk of King William County.

All results of the field edit survey are shown on the field edit sheet.

The following information resulting from the field edit survey is reported by item numbers, supplementing information under corresponding item numbers in the 1944 field inspection report for Project CS 289 W - 1 or the compilation report.

6. Contours and Drainage.

All contours visible from the roads and all in cleared areas were examined for shape and relative position. Any contour which appeared to be out of position with reference to a known elevation was checked either by hand level or plane table methods. No attempt was made to check all the contours in every wooded area, however the field edit man walked over many of the woods roads, along which a good check was obtained.

In most cases the contour changes were of a minor importance. It is thought the errors were probably due to the dense woodland cover which made it difficult for the stereoscopic instrument operator to see the ground. Also when the ground was flat and the elevation near a contour interval, it was difficult to show it correctly.

In the vicinity of Lat. 37 41' and Long. 76 56' the fourth and sixty foot contours were off about a contour interval. The field edit man was unable to find any apparent reason for the discrepancy.

The drainage pattern is satisfactory and complete and aids in giving the proper topographic expression to the map. The position of streams were checked by plane table during vertical accuracy tests and other completion work and in all instances their positions checked within a few tenth of a M. M.

14. Road Classification.

In 1944 roads were classified on the field inspection photographs according to instructions dated November 16, 1942. During the field edit, many roads were deleted or their classification changed to comply with the general instructions dated June 30, 1945, and clarifying letter from Mr. B. G. Jones dated August 17, 1945.

16. Buildings

The addition and deletion of buildings may be attributed to the following reasons:

1. Newly constructed.
2. Difference in opinion between field edit party and field inspection party.
3. Overlooked by field inspection party.
4. Overlooked in compilation.

Of the approximately 380 buildings on the sheet, 20 (5%) were added during the field edit and 12% were deleted. Of the 20 buildings added, 12 were not marked at all or marked incorrectly on the field inspection photos. Six were recently constructed and 2 were overlooked by the compilers.

17. Boundary Monuments, and Lines.

The line between the Acquinton and West Point Magisterial Districts was changed from its location as approximately shown by the Bureau of the Census. The line now shown on the field edit sheet was put on in the presence of and under the direction of Mr. B. C. Garrett Jr., County Clerk of King William County.

The 1944 Field Inspection Report states that the Mattaponi Indian Reservation has no marked boundary, - which is correct. On the field edit sheet however is shown the boundary line as now occupied, according to Mr. George Custalow, Chief of the Tribe. The field edit man feels that the natural boundaries on the East, North, and West are correct, but the south boundary line could be in error. It was located according to Mr. Custalow's directions which were rather vague and incoherent. The boundaries of this reservation are not recorded with the county clerk.

There are no other discrepancies in political boundaries in this quadrangle.

18. Geographic Names. 814

Referring to the geographic names listed by Mr. Jack Stingley on the New Kent Quadrangle of the U. S. G. S., the following changes are recommended:

1. Virginia State Fish Hatchery instead of U. S. Fish Hatchery.
2. Delete Walkers Mill Pond as it is included as part of the hatchery and now the ponds are referred to as "the hatchery". It is not commonly known by that name.
3. Mr. H. C. Hall, county clerk of King & Queen County and life long resident of that county, recommends that Old Fraziers Ferry Landing be deleted. It is known as a locality name by only a few old residents.

19. Telephone and Power Lines.

The power and telephone lines as added to the field edit sheet deviate from the field edit instructions of August 25, 1945. These features are relatively rare in the more rural sections and there are but few along the roads. For this reason and as a result of a verbal discussion with The Chief of Topography, all roadside power and telephone lines have been shown.

47. Adequacy of the Compilation.

The compilation seemed to be satisfactory. Roads and buildings were correctly located. The shape of the buildings however, could be improved. Many of the buildings look like blobs and some difficulty was incurred differentiating blobs from buildings.

The position of streams and buildings were checked with relation to other detail at every opportunity by plane table methods. No large discrepancies were found.

48. Accuracy Tests (Vertical).

Three vertical accuracy checks were made on the quadrangle by planetable traverse methods. Several difficulties were encountered and for this reason each check is taken up independently with a brief discussion.

#1 is located in the vicinity of north lat. 37-37-36.5 and west long. 76-52-33. The test was made on Sept. 25, 1945 by Mr. Harland R Cravat. About 2 miles of planetable profile levels were run on an area about equally divided between open rolling land and wooded ravines, which is fairly representative of the quadrangle as a whole.

The test was started at A and an adjustment made at B, where the vertical closure was 0.1 feet low, and the position 0.55 mm long. From B the traverse continued 1.3 miles to C where it terminated on BM G284. The vertical closure was 1.3 feet high and the horizontal position 0.25 mm long.

RESULTS

39 points tested
36 points in error less than 10 feet
3 points in error from 10 to 20 feet
0 points in error over 20 feet
93% of points tested in error less than $\frac{1}{2}$ contour interval

³⁷
#2 is located in the vicinity of north lat. 37-52-34, and west long. 77-52-36. The test was made by Mr. Asiel La Fave, Sept. 26-28, 1945. About 0.7 miles of plane table traverse was run over the steep and densely wooded area, starting at D and closing back on D, with a vertical closure of 0.5 feet high, and a horizontal closure of 0.50 mm short.

RESULTS

13 points tested
10 points in error less than 10 feet
2 points in error from 10 to 20 feet
1 point in error over 20 feet
80 % of points tested in error less than $\frac{1}{2}$ contour interval.

#3 is located in the vicinity of north lat. 37-37-31, and west long. 76-52-32. The steep wooded area was selected and tested by Mt. Cravat on Oct. 3, 1945, by planetable traverse methods.

The traverse started at G, and ended at H. Difficulty was encountered with the spot elevations as furnished on the field edit sheet, by the field party. The starting elevation was found to be in error by 11.4 feet and the closing elevation by 5 feet.

New corrected elevations have been shown on the field edit sheet as determined by the field edit party with closed level loops between the following bms.

BM T291, 1945 to BM S291, 1945
BM S291, 1945 to BM V291, 1945

The vertical closure at H was 0.0 feet and the horizontal closure 0.30 mm.

RESULTS

13 points tested
16 points in error less than 10 feet
1 point in error 10 to 20 feet
1 point in error over 20 feet
90 % of points tested in error less than $\frac{1}{2}$ contour interval

Results of the 3 vertical accuracy tests

70 points tested
62 points in error less than 10 feet
6 points in error from 10 to 20 feet
2 points in error over 20 feet
88.5% of points tested in error less than $\frac{1}{2}$ contour interval.

In arriving at the above results the apparent vertical error has not been decreased by assuming a horizontal displacement within the permissible horizontal error for the map scale. Even so, the vertical accuracy tests give results only slightly below the National Standards of Accuracy.

(Horizontal)

No horizontal accuracy tests.

49. Review of First Proof.

Mr. G. L. Evans, Surveyor for the Chesapeake Corp., whose address is P. O. Box 203, West Point, Va. has expressed a desire to review one of the first proofs of this quadrangle.

Mr. Evans is believed to be well qualified to make the review, as the firm he is working for has extensive timber holdings in the area and is constantly planning new roads and settings for logging their pulp wood. He is well acquainted with the area and is also interested in the map in connection with his work.

Respectfully submitted Oct. 24, 1945



Harland R. Cravat
Photogrammetric Engineer

REVIEW REPORT FOR T-8348
PROJECT CS-289W1
KING AND QUEEN, VIRGINIA QUADRANGLE

The final review of this quadrangle was considerably hindered by an insufficient Office Inspection of the manuscript. This situation is explained under heading 28 (Detailing) below.

All headings omitted are not applicable or are fully covered in other sections of this report or the Project Report for Project CS-289W.

2. Completeness of Field Inspection.

A cross flight (east-west) of nine-lens photographs following the Mattaponi River, scale 1:10,000 was not mentioned in the Descriptive Report as having been utilized in the compilation of this quadrangle. The numbers of these photographs and pertinent data have been recorded on page 2 of Form T-1 in the Descriptive Report.

4. Horizontal Control.

Additional horizontal control stations platted on the manuscript during review are indicated on a list attached to this Review Report.

6. Contours and Drainage.

A few contours located inaccurately by the plotter operators were relocated correctly by planetable methods during the field edit and transferred graphically to the manuscript during review.

28. Detailing.

Most of the cultural and shoreline features adjacent to the Mattaponi River and located below the twenty foot contour interval were not detailed by the plotter operators, but were left for completion by graphic methods. The compiler who did this phase of the work was inexperienced and consequently the features were located very poorly. Similarly, the reviewer who performed the Office Inspection lacked sufficient experience to make a rapid and thorough check. When this manuscript reached the final review stage, it was evident at a glance that many ^{minor} discrepancies ^{in shore line} existed. It was returned to the Stereoscopic Mapping Section for a week of recompilation. Upon its return to the Review Section so many more errors were located by the reviewer that it was considered more expeditious to make a further recompilation there, than to return it to an uninitiated compiler. Two weeks were spent by the reviewer making the necessary corrections. *This paragraph refers to cultural and shoreline details*

30. Mean High Water Line.

This feature was located in several instances at the base of steep bluffs and was indicated very accurately by the plotting instrument. It is suggested for further practice that the plotter operators, even though they deem it unnecessary to draw the Mean High Water Line where it is located in an area of average low elevation, locate ticks

30. along this line approximately two inches apart. This would establish a fair amount of control to which the compiler can fit his photographs for compilation.

44. Comparison with Existing Topographic Quadrangles.

This manuscript has been compared with surveys and maps of the same area and it supersedes them in all common areas. Maps and surveys compared were:

- a. U.S.C. & G.S. T-722a, 1:60,000 Dated 1862
- b. U.S.C. & G.S. T-3254, 1:20,000 Dated 1912
- c. U.S.C. & G.S. T-3256, 1:20,000 Dated 1912
- d. U.S.G.S. Quadrangle (New Kent", 1:62,500 dated 1919, edition of 1930, reprinted in 1943.

45. Comparison with Nautical Charts.

This manuscript has not been applied to charts. It has been compared with the following chart and supersedes that chart for all topographic detail.

U.S.C. & G.S. #504, 1:40,000 dated March 1936.

48. Vertical Accuracy

This map complies with National Standards of Accuracy.

During the review, a careful examination of the vertical accuracy tests, executed by the field edit party was made and a 0.76 M.M. horizontal shift was applied. ^{on 1:20,000 scale} _{Manuscript.}

The results are as follows:

70 Points tested

66 Points in error less than $\frac{1}{2}$ contour interval.

4 Points in error from $\frac{1}{2}$ to 1 full contour interval.

0 Points in error over 1 full contour interval.

94% of points in error less than $\frac{1}{2}$ contour interval

Reviewed by:

Harold R. Brooks

Harold R. Brooks
Photogrammetrist
18 February 1946
and

Reviewed under direction of:

Harland R. Cravat

Harland R. Cravat
Photogrammetrist
June 1947

S. V. Griffith

S. V. Griffith
Chief, Review Section

APPROVED BY:

V. J. Jones

Technical Assistant to the
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Chief, Div. of Photogrammetry

C. K. Green

Chief, Div. of Coastal Surveys

Horizontal Control Stations plotted on manuscript during review.

<u>Station</u>	<u>G. P. Page No.</u>
Ben, 1911	603
Brush, 1911	600
Cedar, 1911	601
Court, 1911	600
Hillsboro, 1911, 1944	604
Hock, 1911	604
Hook, 1911, 1944	603
Horse, 1912	604
Hut, 1911	601
Indian, 1911	601
Law, 1911	601
Lum, 1911	603
Man, 1911	602
Next, 1911	600
Oak, 1911	601
Pike, 1911	602
Rain, 1911, 1944	603
Rick, 1911, 1934	604
Rick-2, 1934	160
Run, 1911, 1944	601
You, 1911, 1944	604

GEOGRAPHIC NAMES

Survey No. T-8348

KING AND QUEEN quadrangle

1	Name on Survey	A On Chart No.	B On previous survey No.	C On U. S. quadrangle Maps	D From local information	E On local Maps	F P. O. Guide or Map	G Rand McNally Atlas	H U. S. Light List	K
	Virginia									1
	King William County									2
	West Point District									3
	Accquinton District									4
	King and Queen County									5
	Stevensville District									6
	Newtown District									7
	Mattaponi River								USGB	8
	State No. 14									9
	State No. 30									10
	Pamunkey Trail									10
	Washington Burgess Route									10
	King and Queen									11
	Immanuel Chapel									11
	Mitchell Hill Creek									12
	Courthouse Landing									13
	Courthouse Creek									14
	Bunker Hill School									15
	Mattaponi									16
	Mattaponi Church									16
	Cumner									17
	Zion Church									18
	Zion School									19
	Erol Swamp									19
	Stevensville									20
	Stevensville Academy									21
	Virginia State Fish Hatchery									22
	Dahlgrens Corner									23
	Mantapike Road									24
	Mantapike									25
	Mantapike Creek									26
	Garnetts Creek									27

GEOGRAPHIC NAMES

Survey No. **T-8348**

GEOGRAPHIC NAMES											
Survey No. T-8348											
Name on Survey		A	B	C	D	E	F	G	H	K	
		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		
2											
Market Swamp											1
Mill Road	(from original names report)										2
River Road	(" " ")										3
Horse Landing											4
Hillsboro											5
Rickahook											6
Mentua Ferry											7
White Oak Landing											8
Scotland Landing											9
De Farges Bar											10
Woodland Creek											11
Sandy Point											12
Sandy Point Barrens											13
Brooks Creek											14
Mattaponi Indian Reservation											15
Wakema											16
Colosse Church											17
Mt. Zion Church	(or Zion Hill Church ?)										18
Rose Garden											19
Willies Millpond											20
Bull Swamp											21
Ochoke Creek											22
Mill Creek											23
Shanty Creek											24
Madison Creek											25
											26
											27

Names underlined in red approved

by L. Heck 5/2/47

M 234

Names underlined in red approved
by L. Heck 6/6/47

J. P. Moore was in the
Loughlin report.

SURVEY NO. 8348

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.