<table>
<thead>
<tr>
<th>Type of Survey</th>
<th>Topographic Quadrangle</th>
</tr>
</thead>
<tbody>
<tr>
<td>Field No.</td>
<td>King &amp; Queen Office No. T-8348</td>
</tr>
<tr>
<td>State</td>
<td>Virginia</td>
</tr>
<tr>
<td>General locality</td>
<td>King and Queen County</td>
</tr>
<tr>
<td>Locality</td>
<td>Stevensville</td>
</tr>
<tr>
<td>Lens Photos</td>
<td>1/10,000 Scale</td>
</tr>
<tr>
<td></td>
<td>11-27-42</td>
</tr>
<tr>
<td></td>
<td>1/20,000 Scale</td>
</tr>
<tr>
<td></td>
<td>12-31-42</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CHIEF OF PARTY</th>
</tr>
</thead>
<tbody>
<tr>
<td>K. T. Adams and R. W. Knox</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>LIBRARY &amp; ARCHIVES</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>DATE</th>
</tr>
</thead>
<tbody>
<tr>
<td>December 30, 1947</td>
</tr>
</tbody>
</table>
DATA RECORD

T- 8348

Quadrangle (II); King and Queen, 7th Project No. (II); 289-WL
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

Completed-survey-received-in-office.
Survey completed in office: August 17, 1945
Reported to Nautical Chart Section:

Reviewed; 7/2/46 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

State Plane Coordinates (VI):

\[ X = 2,465,744.43 \text{ feet} \]

\[ Y = 498,391.65 \]

Military Grid Zone (VI) A
<table>
<thead>
<tr>
<th>Number</th>
<th>Date</th>
<th>Time E.W.T. Scale</th>
<th>Stage of Tide</th>
</tr>
</thead>
<tbody>
<tr>
<td>12989-12992</td>
<td>12-31-42</td>
<td>2:09 - 2:14, 1:20,000</td>
<td>0.2</td>
</tr>
<tr>
<td>13002-13005</td>
<td>12-31-42</td>
<td>2:31 - 2:35, 1:20,000</td>
<td>0.2</td>
</tr>
<tr>
<td>12400-12404</td>
<td>11-27-42</td>
<td>12:06 - 12:10, 1:10,000</td>
<td>1.3</td>
</tr>
<tr>
<td>12415</td>
<td>11-27-42</td>
<td>12:21</td>
<td></td>
</tr>
</tbody>
</table>

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

Field Inspection by: Commander Ray L. Schoppe
Vertical Control by H. R. Gravatt
Field Ed by: H. R. Gravatt

Date of Mean High Water Line Location (III): 1944
Projection and Grids ruled by (III) Stephen Rose
" " " checked by: Stephen Rose
Control plotted by: A. H. Faulds
Control checked by: G. B. Willey
Radial Plot by: A. H. Faulds & G. B. Willey
Detailed by: W. D. Harris, O. N. Dalbey
Reviewed in compilation office by: R. M. Barry
Elevations on Field Edit Sheet checked by: Brooks
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 shoreline, 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. E. Jones
Technical Assistant to the
Chief, Div. of Photogrammetry
SUPPLEMENTAL FIELD INSPECTION REPORT

T-8348, King & Queen Quadrangle, (3737.5/7652.6/7.5)

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 50 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 pines. 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:

<table>
<thead>
<tr>
<th>B-274</th>
<th>S-291</th>
</tr>
</thead>
<tbody>
<tr>
<td>D-274</td>
<td>T-291</td>
</tr>
<tr>
<td>E-274</td>
<td>U-291</td>
</tr>
<tr>
<td>F-274</td>
<td>V-291</td>
</tr>
<tr>
<td>G-274</td>
<td>Q-273</td>
</tr>
<tr>
<td>H-274</td>
<td></td>
</tr>
</tbody>
</table>

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

-1-
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-269-W

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

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 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. Gravat
Photogrammetric Engr.
SUPPLEMENTAL FIELD INSPECTION REPORT
T-8548, King & Queen Quadrangle, (3737.5/7652.5/7.5)

This supplemental field inspection report for quadrangle T-8548 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-8548.

1. Description of Area.
Quadrangle T-8548 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 Stevenson. 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 pines and hardwoods. The ridges and flat areas are covered with pines. 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-8548. 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.

-1-
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.
    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 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 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. Teminkel of the Washington Office.

Respectfully submitted October 9, 1945

Harland R. Gravat
Photogrammetric Engr.
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
* LAKESVILLE, 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
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 23½ 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 Instrument Unit
FIELD EDIT REPORT
T-3348, King & Queen Quadrangle, (3737.6/7652.6/7.5)

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. Whenever 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 forty 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. C. 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.


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.

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 refered 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 Frazier's Ferry Landing be deleted. It is known as a locality name by only a few old residents.


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.


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

#3 is located in the vicinity of north lat. 37-31-56.5 and west long. 76-52-33. The test was made on Sept. 25, 1945 by Mr. Harland H Gravat. About 2 miles of plane table 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 feet long. From B the traverse continued 1.3 miles to C where it terminated on BM G234. The vertical closure was 1.3 feet high and the horizontal position 0.25 feet 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.

#2 is located in the vicinity of north lat. 37-34-34, and west long. 77-52-36. The test was made by Mr. Aziel La Fave, Sept. 25-26, 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 feet 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 Mr. Gravat on Oct. 3, 1945, by plane table 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 111 feet and the closing elevation by 6 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 bases:

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

The vertical closure at H was 0.0 feet and the horizontal closure 0.50 feet.

RESULTS
18 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 1 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. C. 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-3348
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-289W1.

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 plotted 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 planetary methods during the field edits and transferred graphically to the manuscript during review.

   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 discrepancies 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

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.

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.
   The results are as follows:
   70 Points tested
   66 Points in error less than $\frac{1}{2}$ contour interval.
   4 Points in error from $\frac{1}{3}$ 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
Photogrammetrist
18 February 1946

and

Harland R. Cravat
Photogrammetrist
June 1947

Reviewed under direction of:

S. V. Griffith
Chief, Review Section
Horizontal Control Stations plotted on manuscript during review.

<table>
<thead>
<tr>
<th>Station</th>
<th>G. P.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ben, 1911</td>
<td>603</td>
</tr>
<tr>
<td>Brush, 1911</td>
<td>600</td>
</tr>
<tr>
<td>Cedar, 1911</td>
<td>601</td>
</tr>
<tr>
<td>Court, 1911</td>
<td>600</td>
</tr>
<tr>
<td>Hillsboro, 1911, 1944</td>
<td>604</td>
</tr>
<tr>
<td>Hook, 1911</td>
<td>604</td>
</tr>
<tr>
<td>Hook, 1911, 1944</td>
<td>603</td>
</tr>
<tr>
<td>Horse, 1912</td>
<td>604</td>
</tr>
<tr>
<td>Hut, 1911</td>
<td>601</td>
</tr>
<tr>
<td>Indian, 1911</td>
<td>601</td>
</tr>
<tr>
<td>Law, 1911</td>
<td>601</td>
</tr>
<tr>
<td>Lum, 1911</td>
<td>603</td>
</tr>
<tr>
<td>Man, 1911</td>
<td>602</td>
</tr>
<tr>
<td>Next, 1911</td>
<td>600</td>
</tr>
<tr>
<td>Oak, 1911</td>
<td>601</td>
</tr>
<tr>
<td>Pike, 1911</td>
<td>602</td>
</tr>
<tr>
<td>Rain, 1911, 1944</td>
<td>603</td>
</tr>
<tr>
<td>Rick, 1911, 1934</td>
<td>604</td>
</tr>
<tr>
<td>Rick-2, 1934</td>
<td>160</td>
</tr>
<tr>
<td>Run, 1911, 1944</td>
<td>601</td>
</tr>
<tr>
<td>You, 1911, 1944</td>
<td>604</td>
</tr>
<tr>
<td>Name on Survey</td>
<td>A</td>
</tr>
<tr>
<td>--------------------------------</td>
<td>---</td>
</tr>
<tr>
<td>Virginia</td>
<td></td>
</tr>
<tr>
<td>King William County</td>
<td></td>
</tr>
<tr>
<td>West Point District</td>
<td></td>
</tr>
<tr>
<td>Acquinton District</td>
<td></td>
</tr>
<tr>
<td>King and Queen County</td>
<td></td>
</tr>
<tr>
<td>Stevensville District</td>
<td></td>
</tr>
<tr>
<td>Newtown District</td>
<td></td>
</tr>
<tr>
<td>Mattapom River</td>
<td></td>
</tr>
<tr>
<td>State No. 14</td>
<td></td>
</tr>
<tr>
<td>State No. 30</td>
<td></td>
</tr>
<tr>
<td>Pamunkey Trail</td>
<td></td>
</tr>
<tr>
<td>Washington Burgess Route</td>
<td></td>
</tr>
<tr>
<td>King and Queen</td>
<td></td>
</tr>
<tr>
<td>Immanuel Chapel</td>
<td></td>
</tr>
<tr>
<td>Mitchell Hill Creek</td>
<td></td>
</tr>
<tr>
<td>Courthouse Landing</td>
<td>13</td>
</tr>
<tr>
<td>Courthouse Creek</td>
<td>14</td>
</tr>
<tr>
<td>Bunker Hill School</td>
<td>15</td>
</tr>
<tr>
<td>Mattapom Church</td>
<td>16</td>
</tr>
<tr>
<td>Quinlan</td>
<td>17</td>
</tr>
<tr>
<td>Zion Church</td>
<td>18</td>
</tr>
<tr>
<td>Zion School</td>
<td>19</td>
</tr>
<tr>
<td>Erol Swamp</td>
<td></td>
</tr>
<tr>
<td>Stevensville</td>
<td>20</td>
</tr>
<tr>
<td>Stevensville Academy</td>
<td>21</td>
</tr>
<tr>
<td>Virginia State Fish Hatchery</td>
<td>22</td>
</tr>
<tr>
<td>Dahlgren Corner</td>
<td>23</td>
</tr>
<tr>
<td>Mantapke Road</td>
<td>24</td>
</tr>
<tr>
<td>Mantapke</td>
<td>25</td>
</tr>
<tr>
<td>Mantapke Creek</td>
<td>26</td>
</tr>
<tr>
<td>Garnetts Creek</td>
<td>27</td>
</tr>
<tr>
<td>Name on Survey</td>
<td>A</td>
</tr>
<tr>
<td>--------------------------------</td>
<td>---</td>
</tr>
<tr>
<td>Market Swamp</td>
<td></td>
</tr>
<tr>
<td>Mill Road</td>
<td></td>
</tr>
<tr>
<td>River Road</td>
<td></td>
</tr>
<tr>
<td>Horse Landing</td>
<td></td>
</tr>
<tr>
<td>Hillsboro</td>
<td></td>
</tr>
<tr>
<td>Rickabook</td>
<td></td>
</tr>
<tr>
<td>Mantua Parry</td>
<td></td>
</tr>
<tr>
<td>White Oak Landing</td>
<td></td>
</tr>
<tr>
<td>Scotland Landing</td>
<td></td>
</tr>
<tr>
<td>Da Vargas Bar</td>
<td></td>
</tr>
<tr>
<td>Woodland Creek</td>
<td></td>
</tr>
<tr>
<td>Sandy Point</td>
<td></td>
</tr>
<tr>
<td>Sandy Point Barrens</td>
<td></td>
</tr>
<tr>
<td>Brooks Creek</td>
<td></td>
</tr>
<tr>
<td>Mattaponi Indian Reservation</td>
<td></td>
</tr>
<tr>
<td>Wakama</td>
<td></td>
</tr>
<tr>
<td>Colosse Church</td>
<td></td>
</tr>
<tr>
<td>Mt. Zion Church</td>
<td></td>
</tr>
<tr>
<td>Rose Garden</td>
<td></td>
</tr>
<tr>
<td>Millies Millpond</td>
<td></td>
</tr>
<tr>
<td>Bull Swamp</td>
<td></td>
</tr>
<tr>
<td>Gehaka Creek</td>
<td></td>
</tr>
<tr>
<td>Mill Creek</td>
<td></td>
</tr>
<tr>
<td>Shanty Creek</td>
<td></td>
</tr>
<tr>
<td>Madison Creek</td>
<td></td>
</tr>
</tbody>
</table>

Names underlined are not approved:

by L. Hock 8/26/47
Department of Commerce  
U. S. Coast and Geodetic Survey  
General Delivery  
West Point, Va.  
Reference: 78-ear  
9 August 1947

To: The Director  
U. S. Coast & Geodetic Survey  
Washington 25, D. C.

Subject: County Line Discrepancy between T-8348 and T-8611

The boundary line between King and Queen and King William Counties follows the main channel of the Mattaponi River. This was verified by Mr. B.C. Garrett, Clerk of the Court, King William County; and Mr. H.C. Hall, Clerk of the Court, King and Queen County.

The records of King William County were destroyed by fire prior to the Civil War. The records of King and Queen County were destroyed in an action during the Civil War. As all records have been destroyed it was impossible to obtain the legal descriptions of this boundary.

The statements of the Clerks of Court of the respective Counties are based upon their knowledge of the boundary but not necessarily based upon a knowledge gained from the records.

A search was made for any deeds in which the boundary in question might form a part of the property line. Attention was centered on owners of the islands through which the county line is shown on old surveys. The only deed found was dated 19 June 1944. Part of the property covered by this deed is a large island just south of the bridge over the Mattaponi River at Walkerton. The deed states the property is bounded on the south by the line between King and Queen and King William Counties. All properties covered by the deed "lying and being in King and Queen County". Although this property is situated well within the limits of T-8611 it is given here to corroborate in part the statements of the Clerks of Court.

Isaiah Y. Fitzgerald,  
Cartographer

Enc:  
G. P. chart in the  
Executive files.
### Record of Application to Charts

<table>
<thead>
<tr>
<th>DATE</th>
<th>CHART</th>
<th>CARTOGRAPHER</th>
<th>REMARKS</th>
</tr>
</thead>
<tbody>
<tr>
<td>10-19-51</td>
<td>504</td>
<td>Bruce Hall</td>
<td>Before After Verification and Review</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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.