DESCRIPTIVE REPORT

AIR PHOTO
Topographic
Hydrographic

Sheet No. 1 - 5653

State
MARYLAND

Locality
East
North Shore of ELK RIVER
ELKTON TO CHESAPEAKE CITY

Photograph taken April 1937
1939

Chief of Party
L. W. SWANSON

U.S. GOVERNMENT PRINTING OFFICE 1936
Partially applied to Ch. 570 by H.R.E. i. 1938 (p. 3R)
Applied to Ch. 570 S.R. May 8/41 S.R.
The Topographic Sheet should be accompanied by this form, filled in as completely as possible, when the sheet is forwarded to the Office.

Field No. T-5653

REGISTER NO. T5653

State: Maryland

General locality: East Shore-ELK RIVER

Locality: Elkton to Chesapeake City

Photographs: 11:20 to 11:30 a.m.

Scale: 10,000 x 0.965

Date of Survey: April 30, 1937

Vessel: Air Photographic Survey Party No. 2

Chief of party: L.W. Swanson

Surveyed by: Shoreline Inspected by J.G. Partington & E.L. Jones

Surveyed by: Interior inspected by D.A. Jones

Inked by: I.M. Zeskind

Heights in feet above...***...to ground to tops of trees...***...feet

Contour, Approximate contour, Form line interval...***...feet

Instructions dated: September 1938

May 13, 1938

Remarks: ...

...
DATA RECORD T - 5653

Photographs

<table>
<thead>
<tr>
<th>Nos.</th>
<th>Date</th>
<th>Time</th>
<th>Scale</th>
<th>Altitude</th>
<th>Stage of Tide</th>
</tr>
</thead>
<tbody>
<tr>
<td>1188-91</td>
<td>4-30-37</td>
<td>11:29 to 11:32</td>
<td>1:9650</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1194-96</td>
<td>do</td>
<td>11:34 to 11:35</td>
<td>1:9650</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1135-51</td>
<td>do</td>
<td>10:55 to 10:56</td>
<td>1:9650</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Tide from predicted tables (Chesapeake City), mean range - 2.3 ft.

Camera: U.S. Coast & Geodetic Survey Nine Lens (focal length 8 1/4")
Negatives on file in the Washington Office.

Supplemental Surveys (see below)

Graphic Control surveys: H 6339 and H 6360  Sept 1935
Hydrographic Surveys: H 6387 and H 6360  Date: Sept 1928
Field Inspection: J.C. Partington & E.L. Jones (Shoreline), Sept. 1937.
D.A. Jones (Interior)----------------, June, 1937.

General Information

Chief of Party: L.W. Swanson-----------------------------
Projection by: Ruling Machine-----------------date Unknown
Projection checked by: Washington Office-----------------date Unknown
Radial points pricked by: Party of S.B. Grenell-----------------date Unknown
Additional points pricked by: I.M. Zeskind-----------------
Control plotted by: E.L. Latham & J.D. Lushene-----------------date Unknown
Control checked by: Unknown-----------------
Radial plot by: S.B. Grenell-----------------date unknown
Shoreline inks by: I.M. Zeskind-----------------May 4-15, 1939.
Detail inks by: I.M. Zeskind-----------------May 14-23, June 5-26, July 12-25, 1939.

STATISTICS

Area (land)-----------------24.0 square statute miles.
Shoreline (more than 200 m. from opposite shore)----------6.5
Shoreline (streams)-----------------11.0
Roads, streets, trails & railroads-----------------55.0

Reference Station: ELKTON BRICK STACK, CENTER, 1934
Latitude: 39° 36' 12.790" (394.4 m.)  Datum: North American 1927.
Longitude: 75° 50' 05.846" (139.5 m.) (Adjusted)

Maryland system of plane coordinates: X = 1,128,291.29 Ft.,
Y = 646,801.55 Ft.
Delaware system of plane coordinates: X = 382,132.88 Ft.,
Y = 564,291.14 Ft.

Details on T5653 are of the date of the photographs.

Except as follows:
1. Back Creek - shoreline corrections, location of aids, U.S. Engineer
   Stations, and pilings to Sept. 1933, from T5652 and T6.
3. Inshore spoil dumps in Back Creek area corrected from
   US Engineer Surveys date not given.
DESCRIPTIVE REPORT

to accompany

AER PHOTOGRAPHIC SURVEY SHEET NO.T-5653

STATE OF MARYLAND

North Shore of Elk River

ELKTON TO CHESAPEAKE CITY.

Date of this report - - - - - - - - - - - - - - July 28, 1939.

INSTRUCTIONS:

The topography on this sheet is a part of Project ET - 215, dated May 13, 1938.

CONTROL:

The control consists of eight stations shown on the sheet by the triangulation symbol. The following is a list of the control and its source.

1. U.S.C & G.S. Elkton Bridge, Center, 1934
   Elkton, 1934
   Williams, 1934
   Chesapeake City Bridge, N. Counterpoise, 1934
   Chesapeake City Bridge, S. Counterpoise, 1934
   Catholic Church Spire, 1898
   Richardson, 1934

2. U.S. Army Engineers field observations. Geographic positions computed from the original data by Air Photographic Survey Party No. 2 and submitted by J.S. Partington, U.S.C & G.S., in 1937.

Bethel, 1934

Triangulation station CATHOLIC CHURCH SPIRE, 1898, was added to this sheet by the Baltimore Office, and it is not known whether or not it was used on the original plot. The station was not pricked on the pictures.

RADIAL PLOT:

The radial plot of this sheet was run by the party of S.B. Grenell, Norfolk, Va., during the summer of 1937. No information concerning the method of running this plot was forwarded to this office. It is assumed that this plot is O.K., as only a few corrections to radial points were necessary during the process of detailing.

Some of the radial points in the N.E. corner of this sheet are shown by blue circles (3 or more cuts) and should have been shown by green circles (3 slim or 2 cuts). Since these points were good, the color of the symbol was not changed.

Points in red squares on this sheet represent the centers of pic-
ictures; recoverable centers are shown by concentric blue circles.

The centers of pictures were only shown at 2 places on the sheet containing the shoreline (see below) which was forwarded to this office for completion, i.e., Nos. 1168 and 1194. In all other cases it was necessary to plot the centers. This was done on the west side of the sheet by making templates of the pictures involved, holding to control and radial points on the new sheet as well as that on the adjoining sheet No. T-5652. The other centers were gotten by placing pictures beneath the sheet, holding control and radial points.

Sheet T - 5653 which had only the shoreline on it was sent to this office for completion. It was thought by this office that shoreline was not properly delineated in some places, and it would be necessary to revise same. Since this revision was apt to leave acid stains which would show up in reproduction, and it would not require much time to do this shoreline over, a new projection was procured and the radial points and control were replotted. The control was plotted by the usual method, and the radial points by adjusting block by block.

DETAIL:

Additional radial points shown by blue and green circles were plotted during the detailing of this sheet in areas where the photographs were off scale or where there were large differences in relief.

Except for control and spoil areas, all information shown on this sheet was taken from the field inspection photos.

It will be noted that 3 areas along Back Creek and Chesapeake and Delaware Canal are marked "Spoil Areas". These areas were delineated from the pictures and the U.S. Engineers topographic maps of these localities. The blue lines shown on the reverse side of sheet represent the 40 ft. contours, which were taken as the approximate limits of fill. The dikes shown on this sheet were taken from the Engineer maps when not shown on our pictures; otherwise, they are represented as shown on our pictures.

COMPARISON WITH PREVIOUS SURVEYS:

T-2717

1. Little Elk & Big Elk Creeks. These Creeks have filled in considerably with marsh.

2. Old Froncort Wharf. This point of land is building up to the southward with marsh.
3. Perch Creek.
   (a) Lat. 39° 34.0' and Long. 75° 50.0'. The stream in this vicinity is filling in with marsh.

   (b) Lat. 39° 34.3' and Long. 75° 49.5'. The course of the stream has moved northward.

4. Locust Point. Between Lats. 39° 50.6' and 39° 51.0', the shoreline is making out northward to a maximum of 36 meters. South of 39° 33.9' the shoreline is making out westward an average of about 30 meters.

5. Baok Creek. In general the contour of the stream is the same as shown on the present survey. The present survey shows that some points of land have been cut away and the stream widened.

   (a) Grass Point, Lat. 39° 31.8' and Long. 75° 49.8'. This point of land has been cut away.

   (b) Marsh Point, Lat. 39° 31.7' and Long 75° 49.0'.

   (c) Chesapeake City, west of bridge. The Chesapeake and Delaware Canal has been widened for a distance of about 400 or 500 meters west of this vicinity, and some of the former street system and locks have been eliminated.

   (d) The stream south of the canal and west of the above bridge has filled in considerably with marsh.

H - 6359, 1938.

The shoreline shown on this sheet was taken from T - 5653 as originally delineated by party of S.R. Grenell. Marsh was added from H - 6359 to the present sheet (T - 5653) along the shoreline of Baok Creek at the following places:

North Shore
Long. 75° 49.2' 149.5'
49.5'
50.6'

South Shore
Long. 75° 48.8' 149.4'
50.2'
50.4'
50.8'

Piling and dolphins shown on H - 6359 and not plotted on T - 5653 should be plotted in the Washington Office, as

<signature>
L.C.B.
these objects were evidently cut in by sextant and the angles should appear in the hydrographic records.

COMPARISON WITH CHART NO. 1226 (Corrected to April 5, 1939):

The shoreline of this chart in general is in good agreement with the present survey. The notes under "Comparison with Previous Surveys T - 2717", paragraphs 1, 2, 3, 4 and 5 d apply to this chart.

COMPARISON WITH CHART NO. 570 (Corrected to Nov. 15, 1938):

Within the limits of the chart, there is good agreement between it and the present survey.

JUNCTIONS:

The following junctions were made:

On the West by T - 5652. Agreement is good, except for the following:

Lat. 39° 34'.9" and Long. 75° 51'.0", south shore of creek on T - 5652 is 5 meters north of that on T - 5653. The discrepancy has been caused by error.

On the South by T - 5656. The agreement is good.

NAMES:

Geographic names shown on this sheet are listed on form M - 234 in the appendix.

LANDMARKS:

See form 567 in the appendix.

RECOMMENDATION FOR FUTURE SURVEYS:

This sheet is believed to be complete in all detail of importance for charting and no additional surveys are required.

The probable error is not greater than 5 meters for radial points and well defined objects along the water front and in the areas well controlled. The error of other detail of importance on this sheet is not greater than 10 to 12 meters.

Respectfully submitted,

Forwarded approved:  
L. W. Swanson  
Chief of Party.

by James N. Jones,  31.4.06.E.
<table>
<thead>
<tr>
<th>Remarks</th>
<th>Decisions</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Little Elk &quot;River&quot; on 2717.</td>
<td>395 758</td>
</tr>
<tr>
<td>2</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td></td>
</tr>
<tr>
<td>6 not named on this sheet.</td>
<td>USGO</td>
</tr>
<tr>
<td>7 This point of land has been cut away, and, therefore, was</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td></td>
</tr>
<tr>
<td>10 Known locally as Riddles Point.</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>395 758</td>
</tr>
<tr>
<td>12</td>
<td>394 759</td>
</tr>
<tr>
<td>13</td>
<td>396 758</td>
</tr>
<tr>
<td>14</td>
<td>397 755</td>
</tr>
<tr>
<td>15 On T - 2717 as &quot;Elk Landing&quot;. Also known locally as such.</td>
<td>395 758</td>
</tr>
<tr>
<td>16</td>
<td></td>
</tr>
<tr>
<td>17</td>
<td></td>
</tr>
<tr>
<td>18</td>
<td></td>
</tr>
<tr>
<td>19</td>
<td></td>
</tr>
<tr>
<td>20</td>
<td></td>
</tr>
<tr>
<td>21 a Mr. L.T. Boulden, Post Office employee, Elkton, Md.</td>
<td></td>
</tr>
<tr>
<td>22 b Mr. Charles W. Cooling, Chesapeake City, Md.</td>
<td></td>
</tr>
<tr>
<td>23 c Mr. J.G. Steele, Chesapeake City, Md.</td>
<td></td>
</tr>
<tr>
<td>24</td>
<td></td>
</tr>
<tr>
<td>25</td>
<td></td>
</tr>
<tr>
<td>26</td>
<td></td>
</tr>
<tr>
<td>27</td>
<td></td>
</tr>
<tr>
<td>Name on Survey</td>
<td>A</td>
</tr>
<tr>
<td>----------------</td>
<td>---</td>
</tr>
<tr>
<td>Little Elk Creek</td>
<td>x</td>
</tr>
<tr>
<td>Big Elk Creek</td>
<td>x</td>
</tr>
<tr>
<td>Old Fenschtown Wharf</td>
<td>x</td>
</tr>
<tr>
<td>Perch Creek</td>
<td>x</td>
</tr>
<tr>
<td>Locust Point</td>
<td>x</td>
</tr>
<tr>
<td>Chesapeake City</td>
<td>x</td>
</tr>
<tr>
<td>Marsh Point</td>
<td>x</td>
</tr>
<tr>
<td>Green Point</td>
<td>x</td>
</tr>
<tr>
<td>East Point</td>
<td>x</td>
</tr>
<tr>
<td>Emily Point</td>
<td>x</td>
</tr>
<tr>
<td>Back Creek</td>
<td>x</td>
</tr>
<tr>
<td>Elk River</td>
<td>x</td>
</tr>
<tr>
<td>Elkton</td>
<td>x</td>
</tr>
<tr>
<td>Chesapeake &amp; Delaware Canal</td>
<td>x</td>
</tr>
<tr>
<td>Elkton Landing</td>
<td>x</td>
</tr>
<tr>
<td>Cedar Point</td>
<td>x</td>
</tr>
<tr>
<td>Bag Creek</td>
<td>x</td>
</tr>
<tr>
<td>Long Creek</td>
<td>x</td>
</tr>
<tr>
<td>Grass Pt.</td>
<td>x</td>
</tr>
<tr>
<td>Back Creek Neck</td>
<td>x</td>
</tr>
<tr>
<td>Grays Hill</td>
<td>x</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: The table contains various names and their corresponding codes or notes.
I recommend that the following objects which have (removed) been inspected from seaward to determine their value as landmarks, be charted on (deleted) the charts indicated.

The positions given have been checked after listing.

L.W. Swanson
Chief of Party

<table>
<thead>
<tr>
<th>NAME AND DESCRIPTION</th>
<th>LATITUDE</th>
<th>LONGITUDE</th>
<th>DATUM</th>
<th>METHOD OF LOCATION</th>
<th>DATE OF LOCATION</th>
<th>CHARTS AFFECTED</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chesapeake City Bridge, North</td>
<td>39 31 1360.7 75 48 1027.5</td>
<td>NA 1927</td>
<td>Tri</td>
<td>1934</td>
<td>x 1226</td>
<td>570</td>
</tr>
<tr>
<td>Counterpoise, 1934</td>
<td>39 31 1265.0 75 48 1075.0</td>
<td>NA 1927</td>
<td>Tri</td>
<td>1934</td>
<td>x 1226</td>
<td>570</td>
</tr>
<tr>
<td>Catholic Church Spire, 1898</td>
<td>39 31 1645.3 75 48 922.8</td>
<td>NA 1927</td>
<td>Tri</td>
<td>1898</td>
<td>x</td>
<td>1226</td>
</tr>
</tbody>
</table>

This form shall be prepared in accordance with 1934 Field Memorandum, "LANDMARKS FOR CHARTS." The data should be considered for the charts of the area and not by individual field survey sheets. Information under each column heading should be given.
REVIEW OF AIR PHOTOGRAPHIC SURVEY T-5653

Scale 1:10,000

Contemporary Graphic Control Surveys.
T-6556a (September, 1938) 1:5,000.
T-6556b (September, 1938) 1:5,000.

The graphic control surveys cover Back Creek and the Chesapeake and Delaware Canal to Chesapeake City. These surveys were made for the location on a 1:5,000 scale of signals for hydropgraphy, aids to navigation and Engineer stations. Sections of H.W. line were located where changes had occurred since the date of the photographs.

All details on T-6556a and T-6556b have been reduced to 1:10,000 scale and plotted on T-5653 except temporary topographic stations, magnetic meridian, and floating aids. Stations transferred in projector by L. C. Lands and checked with dividers by L. C. Lands.

Declinatoire readings on T-6556a and b are 8°50' W. 10°50' W. and 11°02' W. as compared to 8°45' shown on chart 570. The declinatoire was not checked. Reported to Magnetics October 19, 1939.

Contemporary Hydrographic Surveys.
H-6359 (September, 1938) 1:5,000.
H-6360 (September, 1938) 1:10,000.

Shoreline on H-6359 was enlarged from T-5653 except for details located on graphic control surveys T-6556a and b (scale 1:5,000).

T-5653 has been corrected to agree with the graphic control surveys and is in agreement with H-6359 except for minor additions noted in pencil on H-6359. Shoreline in Long Creek has been revised on 5-6533 from additional field inspection since the H-6359 was plotted. H-6359 should be corrected to agree with T-5653.

Shoreline and part of the hydrographic control on H-6360 are from T-5653. Shoreline in the marsh areas on T-5653 has been revised to agree with changes indicated by the hydrographic party. The marsh in this area is subject to rather considerable seasonal change and areas corrected from the hydrographic survey have been shown on T-5653 as indefinite marsh. T-5653 and H-6360 are now in agreement except for a few additions to H-6360 as noted in pencil on the smooth sheet.

H-6359 and H-6360 have not yet been reviewed. Corrections mentioned above have been reported to the Assistant Chief, Field Records Section, October 19, 1939.

Previous Topographic Surveys.
T-126 (1855) 1:20,000
T-2352 (1898) 1:5,000
T-2411 (1899) 1:10,000
T-2717 (1905) 1:10,000
The shoreline of the above surveys agree closely with T-5653 except in the Chesaapeake and Delaware Canal which has been recently dredged.

T-5653 is more complete for interior details. Air Photographic Survey T-5653 is complete and adequate to supersede the portions of the above surveys which it covers except for form lines on T-185 and T-2717.

Landmarks and Aids to Navigation.

Landmarks and aids to navigation have been made subject of a special report. See Chart Letter 198 (1939). Aids shown on T-5653 as topographic stations were located in September, 1938 by the graphic control surveys.

Described Topographic Stations.

The described topographic stations within the area covered by T-5653 are filed under T-5653.

Comparison with Charts 570 and 1226.

T-5653 shows numerous minor shoreline changes and considerable additional interior detail for correction of charts 570 and 1226.

General.

The drafting on T-5653 is very good except for a few places where the ink has partly rubbed off.

The descriptive report and compilation of details were complete as submitted from the field with the exception that details from the graphic control surveys T-6356a and b were not added. This has been done in the office.

Reviewed by L. C. Lande.

Inspected by B. G. Jones, October 19, 1939.

T. E. Reed, Chief, Section of Field Records.

K. T. Adams, Chief, Division of Charts.

Fred L. Bacon, Chief, Section of Field Work.

Edie, Chief, Division of H. & T.
PLANE COORDINATE GRID SYSTEM

Positions of grid intersections used for fitting the grid to this compilation were computed by Division of Geodesy and the computation forms are included in this report.

Positions plotted by S. Kass

Positions checked by S.K. (on ruling machine)

Grid inked on machine by S. K.

Intersections inked by S. K.

Points used for plotting grid:

Minute intersections (same used for both Md & Del. grids)

\[ \begin{align*}
\theta & \quad 39^\circ - 36' \\
\varphi & \quad 75^\circ - 51'
\end{align*} \]

\[ \begin{align*}
\theta & \quad 39^\circ - 36' \\
\varphi & \quad 75^\circ - 47' \\
\theta & \quad 39^\circ - 32' \\
\varphi & \quad 75^\circ - 51'
\end{align*} \]

Triangulation stations used for checking grid:

\begin{align*}
1. & \quad \Delta Williams 1934 (Md) \\
2. & \quad \Delta Bethel (U.S.E.) (Md & Del.) \\
3. & \quad \Delta Chesapeake City (Md) \\
4. & \quad Bridge N. Counterp. \\
5. & \quad \Delta Elkton Brick Stack, center, 1934 (Ref. Sta) (Md & Del.) \\
6. & \quad \Delta 1128, 291, 294 ft. \\
7. & \quad Del 1128, 291, 294 ft.
\end{align*}