

5653

13 Cards

Form 504
Rev. Dec. 1933
DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY
R. S. PATTON, Director

DESCRIPTIVE REPORT

AIR PHOTO
Topographic
Hydrographic

Sheet No. T - 5653

State MARYLAND

LOCALITY

East

North Shore of ELK RIVER

ELKTON TO CHESAPEAKE CITY.

Photographs taken April 1937

1939

CHIEF OF PARTY

L. W. Swanson

U. S. GOVERNMENT PRINTING OFFICE: 1934

Partially applied to Cht. 570 by H.R.E. in 1938 (per S.R.)
Applied to Cht. 570 S.R. May 8/41 S.R.

DEPARTMENT OF COMMERCE
U.S. COAST AND GEODETIC SURVEY

REG. NO.

TOPOGRAPHIC TITLE SHEET

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 1:10,000 x 0.965 Date of ~~survey~~ April 30, 1937

Vessel Air Photographic Survey Party No. 2

Chief of party L.W. Swanson

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

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

Instructions dated September 28 May 13, 1938

Remarks:

DATA RECORD T - 5653

Photographs

Nos.	Date	Time	Scale	Altitude	Stage of Tide*
1188-91	4-30-37	11:29 to 11:32	1:9650		
1194-96	do	11:34 to 11:35	1:9650		
115D-51 1150	do	10:55 to 10:56	1:9650		

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

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

Supplemental Surveys (See Below)

Graphic Control surveys: ~~None~~ ~~T6556~~ T6556 a + b Sept. 1938
Hydrographic Surveys: H 6359 and H 6360 Date: Sept 1938
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.B. Latham & J.P. Lushene-----date Unknown
Control checked by:-----Unknown-----
Radial plot by:-----S.B. Grenell-----date unknown
Shoreline inked by:-----I.M. Zeskind-----May 4-13, 1939.
Detail inked by:-----I.M. Zeskind-----May 14-23, June 5-26, July 12-25, 1939.
Preliminary review by:-----J.M. Jones-----July 28, 1939.

STATISTICS

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

Reference Station: ELKTON BRICK STACK, CENTER, 1934
Latitude: $39^{\circ} 36' 12.790''$ (394.4 m.) Datum: North American 1927.
Longitude: $75^{\circ} 50' 05.846''$ (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 = 584,291.14 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 piling. To Sept. 1938 from T6556 a and b.
2. Marsh shore line corrected in Elk River from H 6360 Sept 1938.
3. Inshore spoil dumps in Back Creek area corrected from

DESCRIPTIVE REPORT
to accompany
AIR 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 HT - 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 Brick Stack, 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-

tures; 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. 1188 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.

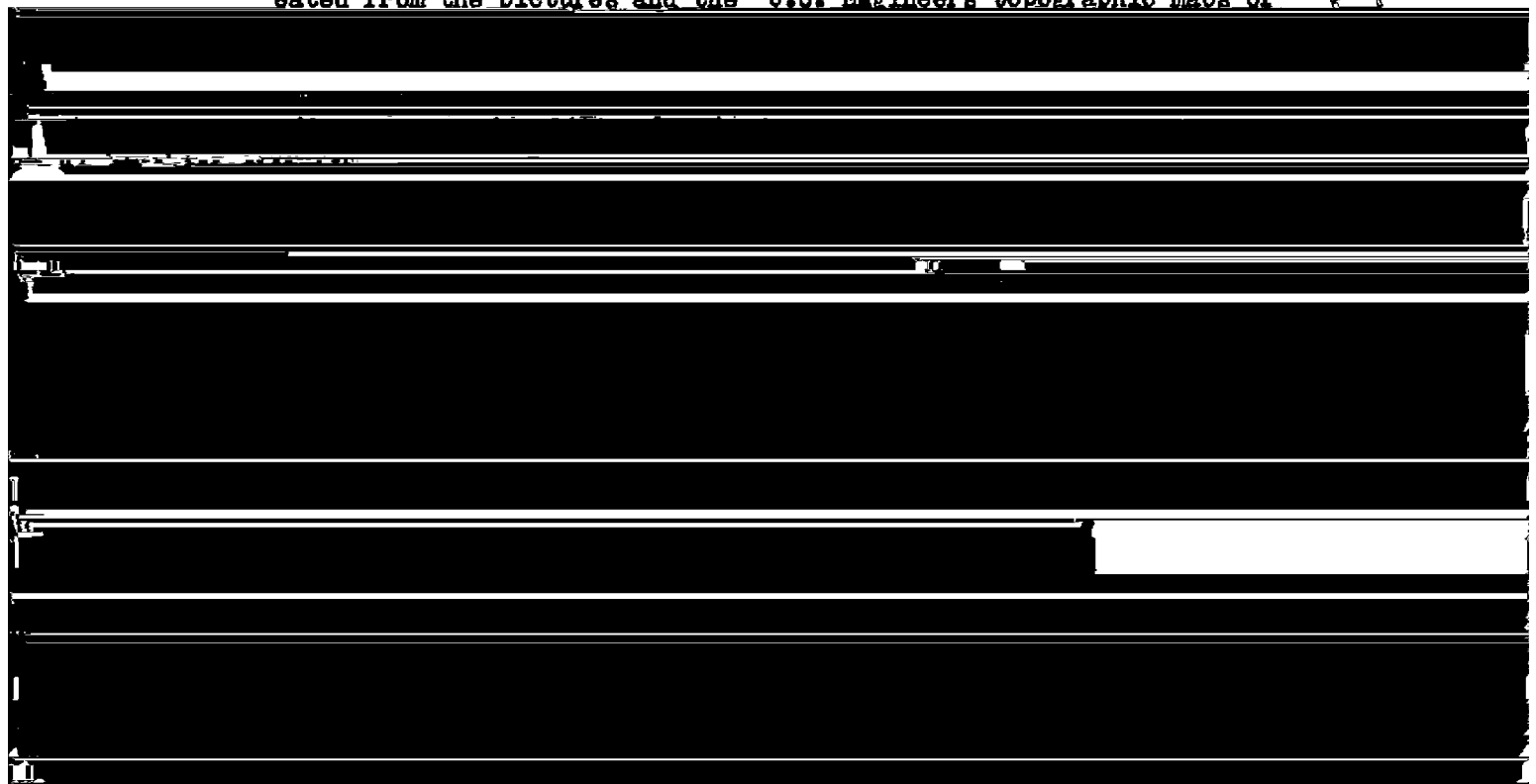
DETAILS

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

*are constantly being
due to changing in Back Creek
Bgg*



3. Perch Creek.

(a) Lat. $39^{\circ} 34.0'$ and Long. $75^{\circ} 50.0'$. The stream in this vicinity is filling in with marsh.

(b) Lat. $39^{\circ} 34.3'$ and Long. $75^{\circ} 49.5'$. The course of the stream has moved northward.


4. Locust Point. Between Lats. $39^{\circ} 50.6'$ and $39^{\circ} 51.0'$, the shoreline is making out northward to a maximum of 30 meters. South of $39^{\circ} 33.9'$ the shoreline is making out westward an average of about 30 meters.5. Back 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. $39^{\circ} 31.8'$ and Long. $75^{\circ} 49.8'$. G.N. ✓
This point of land has been cut away.

(b) Marsh Point, Lat. $39^{\circ} 31.7'$ and Long. $75^{\circ} 49.0'$. G.N. ✓
The same as above has occurred here.

(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.



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. $39^{\circ} 34.9'$ and Long. $75^{\circ} 51.0'$, south shore of creek on T - 5652 is 5 meters north of that on T - 5653. *This discrepancy has been corrected h.c.f.*

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,

Isadore M. Zeskind
Isadore M. Zeskind,
Draftsman.

Forwarded approved:

L. W. SWANSON
Chief of Party.

by *James D. Jones, J. H. G. E.*

Remarks

Decisions

1	Little Elk "River" on 2717.	395758	U.S.G.B.
2			

GEOGRAPHIC NAMES

Survey No. T-5653

GEOGRAPHIC NAMES										
Survey No. T-5653										
Name on Survey	<div>On Chart No. 1226</div> <div>On previous survey No. T-2717</div> <div>On U. S. quadrang. Maps</div> <div>From local information</div> <div>On local Maps</div> <div>P. O. Guide or Map</div> <div>Rand McNally Atlas</div> <div>U. S. Light List</div>									
	A.	B.	C.	D.	E.	F.	G.	H.	K.	
<u>Little Elk Creek</u> ✓	x	"River" x		a						1
<u>Big Elk Creek</u> ✓	x	x	x	a						2
<u>Old Ffenchtown Wharf</u> ✓	x	x		a						3
<u>Perch Creek</u> ✓	x	x	x	a						4
<u>Locust Point</u> ✓	x	x	x	a						5
<u>Chesapeake City</u> ✓	x	x	x	USE x	x	x				6
<u>Marsh Point</u>	x	x			x					7
<u>Green Point</u> ✓	x	x		e	x					8
<u>East Point</u> ✓	x	x			x					9
<u>Emily Point</u> ✓	x	"s" x	Biddles Pt. b,e		x					10
<u>Back Creek</u> ✓	x	x	x	a		x		x		11
<u>Elk River</u> ✓	x	x	x	a		x		x		12
<u>Elkton</u> ✓	x	x	x	a		x				13
<u>Chesapeake & Delaware Canal</u> ✓	x	x	x		x					14
<u>Elkton Landing</u> ✓	x	"Elk" x	x	a,b						15
<u>Cedar Point</u> ✓	x	x		a						16
<u>Hog Creek</u>	x			b,e	x					17
<u>Long Creek</u> ✓										18
<u>Grays Pt.</u> ✓										19
<u>Back Creek Neck</u> ✓										20
<u>Grays Hill</u> ✓		"L. Heck"			or 11/6/39					21
										22
										23
										24
										25
										26
✓										27
										M 2341 R

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

T - 5653

LANDMARKS FOR CHARTS

TO BE CHARTED } **STRIKE OUT ONE**
~~DOUBT DOUBT DOUBT~~

Baltimore, Md.

July 28, 1939

I recommend that the following objects which have ~~(been examined)~~ been inspected from seaward to determine their value as landmarks, be charted on ~~(the chart)~~ the charts indicated.

The positions given have been checked after listing.

L. W. Swanson

Chief of Party.

[illegible]

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 hydrography, 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. Lande and checked with dividers by L. C. Lande.

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 T-5653 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-186 (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 Chesapeake 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-186 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



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

General.

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)

ϕ 39°-36'
 λ 75°-51'

ϕ 39-34
 λ 75-49

ϕ 39-36
 λ 75-47

ϕ X
 λ Y

ϕ 39-32
 λ 75-51

ϕ X
 λ Y

ϕ 39-32
 λ 75-47

ϕ X
 λ Y

Triangulation stations used for checking grid:

Grid Checked

1. Δ Williams 1934 (Md)

5. Δ Elkton Brick Stack center, 1934 (Ref. Sta)
(Md & Del.)

2. Δ Bethel (U.S.E.) (Md & Del.)

6. Md $\begin{cases} x = 1,128,291.29 \text{ ft.} \\ y = 646,801.55 \text{ ft.} \end{cases}$

3. Δ Chesapeake City (Md)

7. Del $\begin{cases} x = 382,132.88 \text{ ft.} \\ y = 584,291.14 \text{ ft.} \end{cases}$

4. Bridge N. Counterpoise

8. _____