

5723

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Topographic

Type of Survey Air Photo Survey

T5723

Field No. T5723

Office No.

LOCALITY

State Maryland

General locality Eastern Shore Chesapeake Bay

Locality Poplar Island to Harris Creek

194 1

CHIEF OF PARTY

L. W. Swanson

5723

5723

5723

Form 504 Rev. Dec. 1933	
DEPARTMENT OF COMMERCE U.S. COAST AND GEODETIC SURVEY R. S. PATTON, Director	
DESCRIPTIVE REPORT	
Topographic } Hydrographic }	Sheet No. T-5723
T5723	
State MARYLAND	
LOCALITY	
Eastern Shore, Chesapeake Bay	
Poplar Island and Vicinity in - Harris Creek	
Talbot County	
Photographs taken May 1, 1937 - 9 lens June 6, 1937 - single lens July 8, 1937 - 9 lens	
41	
193	
CHIEF OF PARTY	
L. W. Swanson	

Applied to chart divg. 550 before review. May 10, 1941. F.A.W.
Applied to chart divg. 1225 before review May 21, 1941. F.A.W.
Minor changes to Ch. 550 after review - 7/17/43 - J.D.W.

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

REG. NO. **T5723**

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-5723

REGISTER NO. **T5723**

State Maryland

General locality Eastern Shore, Chesapeake Bay

Locality Poplar Island and Vicinity, Talbot County

Scale 1:10,000 Date of ^{photographs} ~~survey~~ May, June, July, 1937

~~Vessel~~ Air Photo Party #2

Chief of party L.W. Swanson

Surveyed by (Field Inspection) D.A. Jones, R.A. Gilmore

Inked by N.L. Kaslow

Heights in feet above _____ to ground to tops of trees

Contour, Approximate contour, Form line interval _____ feet

Instructions dated May 13, June 1, 1938; August 28 1939

Remarks: This sheet superseeds sheet T-5400, dated 1/19/1935

TS723

request as soon
as review is typed.

withdraw TS400 from table

Photo. No : Date : Time : Scale : Alt : Stage of tide

1484,85,86 : 5/1/37 : 2:40-48 : 1:10,000 : ^{Approx 6,875 feet} Unknown: Approx. 0.2ft. above MLW
 *AHY 6-71,72; 6/24/37: Unknown : 1:10,000 : " : Unknown
 73,74,75,76,: *Single lens 1/20,000 enlarged to 1/10,000*
 77,78,79,80,:
 81,82,83,84,:
 85. :
 1634 : 7/8/37 :10:13-26 : 1:10,000 : Unknown: Approx. 0.3 ft above MLW.
 **

Camera: U.S. Coast & Geodetic Survey Nine Lens - Focal Length $8\frac{1}{4}$ inches
 *U.S. Dept of Agriculture Single Lens- Focal Length Unknown- These pictures were enlarged from a scale of 1:20,000.

Tides: From predicted tide tables for Baltimore, Md. reduced for Claiborne, Md.

date of survey: details on T 5723 are of the date of the photographs.

General Information

Chief of Party..... L.W. Swanson
 Projection by..... Washington Office (Sheet T-5400)
 Control Pricked on Photos..... I. Zeskind, N.L. Kaslow 6/40
 Control Plotted on Smooth Sheet..... Washington Office
 Radial Points Pricked..... N.L. Kaslow, Dec 2, 1940
 Radial Plot Made..... C. Supp, N.L. Kaslow 12/3/40
 Additional Radial Points..... N.L. Kaslow 12/40
 Hydrographic Signals..... L.W. Swanson 4/41
 Inked By..... N.L. Kaslow 3/31 ; 33 days
 Preliminary Review..... L.W. Swanson

Statistics

Area (land)..... 7 sq. stat. miles
 Shoreline (more than 200 m. from opposite shore). 27 Stat. miles
 Shoreline (less " " " " ") 5 Stat. miles
 Roads, trails, and streams..... 21.1 Stat. miles

Reference Station

Pine, 1933 } ~~(unadjusted)~~

Datum- N.A. 1927 ~~32,444"~~ (1000.4 m)

Lat. 38 - 46' - ~~42.49"~~ (1001.4 m.)

Long. 76 - 20' - ~~04.62"~~ (112.0 m.)

~~04.631"~~ (112.2 m)

Instructions

Dated..... May 13, June 1, 1938

Rough Draft Instructions..... August 28, 1939

* adjustment to N.A. 27 slightly in error
 as made by field. Figures in red furnished
 by Division of Geodesy. N.L.W.

adjusted.

~~thru: Field Computations~~

Field Adjusted

X coordinate: 989,695.18

Y coordinate: 343,870.97

A check of the radial plot in the vicinity of Roe + Eva →
resulted in a slight change in positions of these stations on T-5723.
There is sufficient triangulation close by to control the plot
without Roe + Eva. The nearest radial points check with the
triangulation.

In order to augment the control available for orientation of the photographs a combined plot with sheet T-5711 (Joins 5723 on the east) was run. The celluloid template method was used. Available over the mainland were, a single flight of three nine lens, and a single flight of eleven single lens AAA pictures. Over the islands (Poplar, Coaches, and Jefferson) there were a single flight of four single lens AAA, and one isolated nine lens pictures. The nine lens picture No. 1634 was the only one having any overlap from the islands to the mainland.

Before laying down the plot all pictures were inspected for excessive tilt. Photo. 1484 appearing to have some tilt, the iso center was determined and used as a ray center with satisfactory results. The exact location of the principle points on the single lens pictures could not be determined due to the absence of collimation marks. By drawing diagonal lines from the corners of the pictures points of intersection were obtained which were used as ray centers. When the plot was laid down these points proved to be fairly satisfactory.

Due to the lack of overlap an insufficient number of radial points were obtained in the vicinity of the islands. To correct this deficiency a supplementary plot was run, making use of the old five lens pictures which were employed in the compilation of T-5400. The center chambers of these together with the single lens and nine lens pictures gave sufficient amount of overlap to obtain additional strong radial points.

Control

The following triangulation stations, in the area of this sheet, were recovered in the field and used for control:

Lon, 1933	Mid, 1933	Mot, 1933
Haddaway, 1909	Knapp, 1933	Spring, 1933
Pine, 1933	Mats, 1934	Hawk R.M. 1909
Peoples Chapel, Tilghman Island, 1909		

Also used , were the topographic stations
Eva, 1933* Roe, 1933

The pricking of these two stations on photographs 1481 + 1634 is doubtful, as the stations are far out on the wing prints and the detail is indistinct.

Information received from the Coast Guard indicated that the light beacons in this area were rebuilt and they were consequently not used for control. New scaled positions will be found on the "Aids to Navigation" sheet, form 567.

Notes on Detailing

An air photo compilation from five lens pictures, completed in 1935, covering the same area was available. An Attempt was made to make the necessary revisions on a celluloid blue line print of T-5400. For this purpose sufficient number of radial points were obtained to permit an independent complete delineation of shoreline and other topographic features. So many changes had to be made, (see comparison with previous survey) that it was decided to reink the entire sheet.

The following notes , appearing on the celluloid sheet, are here repeated 3
in order to make for completeness of report:

1. Blue lines outside of the H.W.L. are the approximate limits of the offshore shoal areas as they appear on the photographs.
2. Light lines outside of the solid lines (H.W.L.) indicate the edge of hard marsh.
3. All areas unless otherwise symbolized are under cultivation
4. The type of growth in the wooded areas is as symbolized on their peripheries
5. Double full and double dashed line roads are shown by solid center lines, labeled with the width. Single dashed line roads are so shown.
6. Fences are shown by larger dashes than those for single dashed roads and have the letter "f" written in.

Comparison with Previous Surveys

T- 5400

This compilation was completed on January 19, 1935 from five lens air photos taken on November 28, 1933 and plane table surveys T-4769 A and B, made Sept 23 to Oct 12, 1933.

An attempt was made to prick the topo stations which appeared on the blue line print and for which descriptions on form 524 were available. Most of these stations could not be checked with a degree of accuracy commensurable with the rest of the plot. This was due to the fact that in the process of enlarging the single lens pictures the sharpness of such images as houses, gables, and chimneys, was lost. In several ^{cases} where an accurate pricking could be made, very good three or four line intersections were obtained. With the exceptions of stations Roe, 1933 and Eva, 1933, these radial points did not check with the plotted positions given on the blue line print. *See notes in blue on preceding page in regard to Roe & Eva.*

In general, however, except for the weight of lines, about 80% of the eastern shoreline checked very accurately with that given. Wherever changes were made along the shoreline they were of about 10 to 20 meters in magnitude and appear to be due mainly to a difference in interpreting the location of the H.W.L. A somewhat greater percentage of the shoreline was changed on the western side. This probably due to the fact that the shoreline on this side was originally drawn directly from the plane table survey and not from the air photos. A similar condition prevails at Poplar, Jefferson, and Coaches Island. The entire western side of Poplar Island appears to have receded about 40 meters. The western portion of Knapps Narrows appears to have been widened somewhat. A new boat basin, west of the bridge, has been dug out.

Nearly all the roads, fences, and trails were redrawn to conform with the radial points obtained from the present plot. In general a difference of from 5 to 15 meters in azimuth was noted. Since the compilation of T-5400 was made by using the shoreline obtained from the plane table survey for control, it is believed that the present compilation is more nearly correct.

For comparison with older surveys see report T-5400 and T-4769 A

Geographic Names

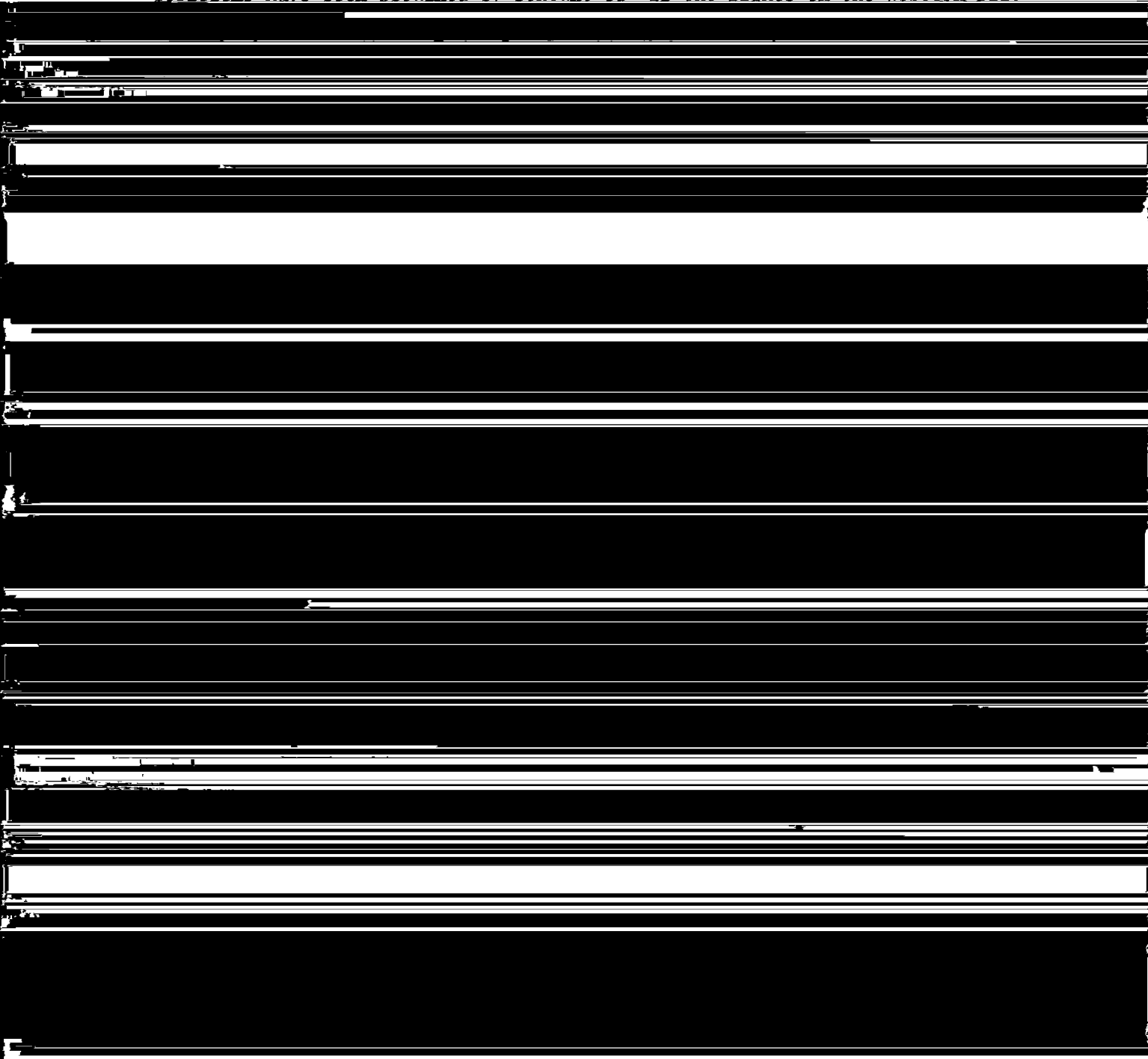
No Changes of names appearing on T-5400 have been made. A field investigation was made by Lieut.(j.g.) J.N. Jones in the summer of 1939. The name Long Point does not seem to be in common use locally. Haddaway Cove is preferred locally to Ferry Bay. For authority on usage of names see report T-5400 and 4769 A.

Landmarks

The landmarks appearing on chart 1225 were identified on the photographs and their positions determined by radial intersections. These did not check with those given on print T-5400. New positions are listed. Other objects which have been recommended for use as landmarks in report T- 4769 A and which could be readily identified on the air photos have been plotted. As in the previous case the positions obtained in the present compilation do not check with those previously given. New positions are listed.

Aids to Navigation

As has been noted above, information from the Coast Guard was received that the lights in this area have been moved since the last compilation. New positions have been obtained by sextant of all the lights on the western side



Scale: C.S.

4523

CHARTS

41
198
April 9, 1984

inspected from seaward to determine their value as landmarks.

L. H. SWANSON

Chief of Party.

LATITUDE		D. P. METERS	DATUM	METHOD OF LOCATION	DATE OF LOCATION	HARBOR CHART	INSHORE CHART	OFFSHORE CHART	CHARTS AFFECTED
186	N.A.	1927	Air Photo	1941					1225
1184-	"	"	"	"					"
1190-	"	"	"	"					"
278	"	"	"	"					"
277	"	"	"	"					"
668	"	"	"	"					"
136	"	"	"	"					"
Charted.									

um, "LANDMARKS FOR CHARTS." The data should be
s. Information under each column heading should be given.

IT
BOSTON

Column heading: *Secaled: M.X.C.*
 checks: *C.D.*

T5723

19 November, 1940

L.W. Swanson,
 Chief of Party U.S.C. & G.S.,
 307 Detention Building,
 Fort McHenry,
 Baltimore, Md.

Subject: Positions, various lighted structures.

Reference: (s) Your letter 14 November, 1940

1. In reply to your request, the following is forwarded for your information:

Light List Number	Name of Light
1949	Blackwalnut Cove. Established 1929, original structure
1951	Upper Bar Neck. Destroyed 1940, not yet rebuilt.
1952	Middle Ground Bar. Destroyed 1938, 1940, not yet rebuilt
1953	Broad Creek. Rebuilt 1934, 1936, 1938, position doubtful
1954	Balls Creek. Established 1930, rebuilt 1938, 9' S.E. of old structure.
1968	Knappe Narrows West Entrance. Established 1930, rebuilt 1936
1969	Hoffman Point. Established 1935.
1970	Back Creek Cut. Established 1935
1971	Knappe Narrows East Entrance. Rebuilt 1936, 1940, position doubtful.
1972	Knappe Narrows East Channel. Rebuilt 1934.
1973	Knappe Narrows Canal. Established 1935.
1974	Poplar Island Narrows. Rebuilt 1934, 1935, 1936, position doubtful.
1975	Ferry Bay Light (Ferry Cove). Rebuilt 1934, 1938.

2. These lights until recently were very susceptible to destruction by heavy ice during the winter months. In most cases, where lights are destroyed by ice, they are rebuilt as nearly as possible on their charted locations but their position is in general not positive enough for control purposes, since they are usually relocated by means of sextant angles and three-arm protractors. It appears that Blackwalnut Cove Light and Balls Creek Light are the only structures which may be safely used for control purposes.

Lucien J. Ker, Captain (E)
 United States Coast Guard
 By direction

REVIEW OF AIR PHOTO COMPILATION NO. T-5723

T5723

Chief of Party: *L.W. SWANSON*Compiled by: *N.L.K.*Project: *H.T. 215*Instructions dated: *May 13, 1938*
June 1, 1938
Aug. 28, 1938

1. The charts of this area have been examined and topographic information necessary to bring the charts up to date is shown on this compilation. (Par. 16a, b, c, d, e, g and ~~h~~; 26; and 64)
2. Change in position, or non-existence of wharfs, lights, and other topographic detail of particular importance to navigation which affect the chart, is discussed in the descriptive report. (Par. 26; and 66 g, n)
3. Ground surveys by plane table, sextant, or theodolite have been used to supplement the photographic plot where necessary to obtain complete information, and all such surveys are discussed in the descriptive report. (Par. 65; and 66 ~~d, e~~)
- ~~4~~ Blue-prints and maps from other sources which were transmitted by the field party contain sufficient control for their application to the charts. (Par. 28)
5. Differences between this compilation and contemporary plane table and hydrographic surveys have been examined and rectified in the field before forwarding the compilations to the office and are discussed in the descriptive report.
NO CONTEMPORARY SURVEYS.
6. The control and adjustment of the photo plot are discussed in the descriptive report. Unusual or large adjustments are discussed in detail and limits of the area affected are stated. (Par. 12b; ~~44~~; and 66 c, ~~h, i~~)
7. High water line on marshy and mangrove coast is clear and adequate for chart compilation. (Par. 16a, 43, and ~~44~~)

NOTE: Strike out paragraphs, words or phrases not applicable and modify those requiring it. Paragraph numbers refer to those in the Topographic Manual. Refer also to the pamphlet "Notes on the Compilation of Planimetric Line Maps from Five Lens Air Photographs."

~~8.~~ The representation of low water lines, reefs, coral reefs and rocks, and legends pertaining to them is satisfactory. (Par. 36, 37, 38, 39, 40, 41)

9. Recoverable objects have been located and described on Form 524 in accordance with circular 30, 1933, circular letter of March 3, 1933, and circular 31, 1934. (Par. 29, 30, and 57)

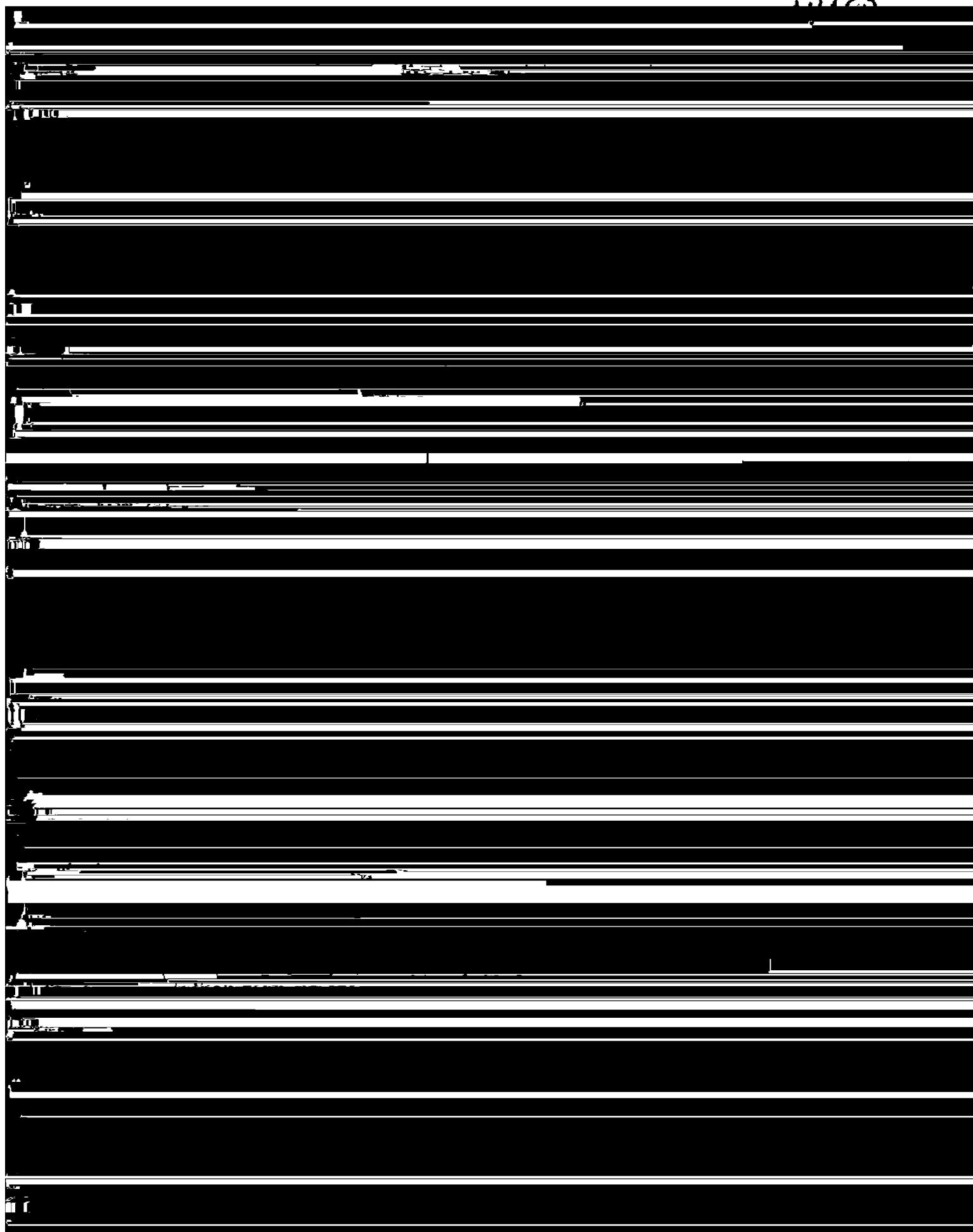
Form 524 is not submitted.

10. A list of landmarks was furnished on Form 567 and instructions in the Director's letter of July 16, 1934, Landmarks for Charts, complied with. (Par. 16d, e, and 60)

11. All bridges shown on the compilation are accompanied by a note stating whether fixed or draw, clearance, and width of draw if a draw bridge. Additional information of importance to navigation is given in the descriptive report. (Par. 16c)

12. Geographic names are shown on the overlay tracing. The accepted local usage of new names has been determined and they are listed in the report, together with a general statement as to source of information and a specific statement when advisable. Complete discussion of place names differing from the charts and from the U. S. G. S. Quadrangles is given in the descriptive report, together with reasons for recommendations made. (Par. 64, and ~~65~~)

13. ✓ The geographic datum of the compilation is N.A. 1927 and the



GEOGRAPHIC NAMES

Survey No.

T5723

T-5723

No. 1

Name on Survey

	A.	B.	C.	D.	E.	F.	G.	H.	K.	
✓ <u>Coaches Island</u>										1
✓ <u>South Bar Point</u>										2
✓ <u>Peplar Harbor</u>										3
✓ <u>Poplar Island</u>										4
✓ <u>Jefferson Island</u>										5
✓ <u>Valliant Point</u>										6
✓ <u>North Point</u>										7
✓ <u>Tilghman</u>										8
✓ <u>Knapps Narrows</u>										9
✓ <u>Back Creek</u>										10
✓ <u>Amy's Marsh Point</u>										11
✓ <u>Front Creek</u>										12
✓ <u>Bald Eagle Point</u>										13
✓ <u>Dun Cove</u>										14
✓ <u>Seaths Point</u>										15
✓ <u>Green Marsh Point</u>										16
✓ <u>Goat Island</u>										17
✓ <u>Punch Point</u>										18
✓ <u>Cabin Cove</u>										19
✓ <u>Ferry Cove</u>										20
✓ <u>Lowas Wharf</u>										21
✓ <u>Sherwood</u>										22
✓ <u>Waterhole Cove</u>										23
✓ <u>Smith Point</u>										24
✓ <u>Briary Cove</u>										25
										26
										27

T5723

T-5723, No. 1

Remarks.

Decisions

1		387763 U S G B
2		
3		U S G B
4		U S G B
5		U S G B
6		
7		
8		
9		U S G B
10		U S G B
11		
12		U S G B
13		
14		
15		
16		U S G B
17		
18		
19		
20	Not Ferry Bay nor Haddaway Cove	U S G B
21		U S G B
22		
23		
24		
25		U S G B
26		
27		
M 23+		

GEOGRAPHIC NAMES

15723

Survey No. T-5723
No. 2

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	
Long Point									1
Harbor Cove									2
Lones Point									3
Harris Creek									4
Eastern Bay									5
Chesapeake Bay									6
									7
									8
									9
<i>Poplar Island Narrows</i>									10
									11
									12
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T5723

T-5723, No. 2

Remarks

Decisions

1	Already deleted from charts 550, 1225	387763
2		"
3		" U S G B
4		"
5		388763
6		U S G B
7		
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DIVISION OF CHARTS

SURVEYS SECTION

November 25, 1941

Review of Air Photo Survey T-5723.

There are no contemporary graphic control surveys or hydrographic surveys within the area covered by T-5723.

Previous Topographic Surveys:

T-5400 1:10,000 1935 (Air Photo Survey)

A comparison is made between T-5723 and T-5400 on page 3 of the Descriptive Report accompanying T-5723.

In addition it should be noted that there is now a long pier extending into Poplar Harbor from Jefferson Island and that Knapps Narrows has apparently been dredged out west of the highway bridge and the marsh on the south side of the Narrows filled in.

The most notable signs of erosion have occurred on the west side of Poplar Island where the shoreline has receded up to a maximum of 40 meters.

The pond on Jefferson Island has apparently been drained - it is not shown on T-5723.

The tower formerly on the east side of Jefferson Island and shown as a landmark on chart 550 is not shown on T-5723 and cannot be identified on the photographs. Nothing is said about this tower either on the field inspection photographs or in the report. It is recommended that it be removed from charts 550 and 1225.

Likewise the target on Lowes Point cannot be identified under the stereoscope and is not mentioned in the report. This also should be removed as a landmark on the charts.

A break in neck of land between Back Creek and Chesapeake Bay has occurred at lat. $38^{\circ}43.6'$ according to the photographs.

A small pier on Bald Eagle Point at lat. $38^{\circ}44'$ has either been destroyed or is in ruins, as it appears on T-5723 only as point in the marshy shoreline.

Note: No report was made on this tower by the subsequent field edit on T-8257 (1942) and it is evidently gone.

T-5723 supersedes T-5400. T-5400 will be removed from sales as soon as T-5723 is published.

For a comparison of surveys made before 1935 see the Descriptive Report for T-5400.

Comparison with Charts 1225 and 550:

1225 Air photographic survey T-5723 was applied to chart drawing 1225 May 21, 1941 prior to the review of T-5723. The published copies of 1225 are in agreement with T-5723. No change has been made in T-5723 during this review which affect the chart.

550 T-5723 was also applied to chart drawing 550 May 10, 1941, prior to this review. However, chart 550 as now published does not show the changes listed as follows:

- (1) Landmarks to be deleted
 - (a) Tower on east side of Jefferson Island
 - (b) Target on Lowes Point
 - (c) E. chimney of house on Poplar Island
- (2) Remove pond on east side of Jefferson Island
- (3) Lengthen pier on S. W. end of Jefferson Island
- (4) Show break in neck of land between Back Creek and Chesapeake Bay at lat. $38^{\circ}43.5'$
- (5) Remove small piers on east side of Bald Eagle Point at lat. $38^{\circ}44.1'$

Radial Plot:

The radial plot was checked in the office by drawing radial lines in blue on the compilation with the photographs laid under the celluloid and properly oriented on the triangulation. The main plot checked closely, as did most of the secondary radial points. There were a few secondary points and several topographic points which did not agree exactly with the plot and which were changed in the office to agree with the plot. These places are listed as follows:

- (1) The south east tip of Poplar Island
- (2) Goat Island
- (3) Topo station "Eva" and "Roe" plotted slightly north of the original position.
- (4) North Gable of Barns east of Cabin Cove plotted slightly north of original position.

-3-

There was sufficient control for a good plot except at the north end of Poplar Island, which is weak.

As stated in the Descriptive Report the single lens photographs were taken at a 1:20,000 scale and enlarged to 1:10,000 with a consequent loss in sharpness of detail which caused some difficulty in the identification of radial points on the photographs.

Landmarks and Aids to Navigation:

A list of landmarks and aids to navigation was submitted to Nautical Charts Section on form 567 (Chart letter #208 - 1941)

and is included in the back of this report.

