

8542

Diag. Cht. No. 77-5

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey PLANIMETRIC

Field No. _____ Office No. T-8542

LOCALITY

State MARYLAND

General locality CHESAPEAKE BAY

Locality MOUTH OF PATUXENT RIVER

1942-'43

CHIEF OF PARTY

H.L. Schoppe, Chief of Party
Division of Photo., Wash., D.C.

LIBRARY & ARCHIVES

DATE Dec 27-1947

B-1870-1 (1)

8542

DATA RECORD

T- 8542

Quadrangle (II):

Project No. (II): G. S. 307

Field Office:

Chief of Party: Ray L. Schoppe
R. W. Knox
~~Chief of Survey Branch~~

Compilation Office:
Washington, D. C.

Chief of Party: Ray L. Schoppe
R. W. Knox

Instructions dated (II III):

Aug. 26, 1943

Sept. 4, 1943

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

Division of Photogrammetry
Office Files

Completed survey ~~received~~ ^{compiled} in office:

Oct. 1944

Reported to Nautical Chart Section:

Reviewed: Aug. 26, 1949 Applied to chart No.

Date:

Redrafting Completed: 3-27-50

Registered: November 28, 1950

Published:

1950

Compilation Scale: 1:10,000

Published Scale: 1:10,000

Scale Factor (III): 1.00

Geographic Datum (III): N.A. 1927

Datum Plane (III): ^{M H. W.} ~~Mean Sea Level~~

Reference Station (III): Collison, 1942

Lat.: 38°15' 30.743
(947.9 meters)

Long.: 76°26' 07.466
(181.5 meters)

Adjusted
~~Unadjusted~~

State Plane Coordinates (VI):

X =

Y =

To be added to plates during smooth drafting

Grid corner positions were computed by Geodesy - Plotted in review. Aug. 1949
R.L.F.

Military Grid Zone (VI) Not shown

PHOTOGRAPHS (III)

Number	Date	Time	Scale	Stage of Tide
12487	11-27-42	1:57	1:10,000 (approx.)	
12488	11-27-42	1:58	1:10,000	.65 above M.L.W.
12489	11-27-42	1:59	1:10,000	
12490	11-27-42	1:59	1:10,000	
12491	11-27-42	2:00	1:10,000	
12530	11-27-42	2:35	1:10,000	
12531	11-27-42	2:35	1:10,000	.50 above M.L.W.
12532	11-27-42	2:36	1:10,000	
12533	11-27-42	2:36	1:10,000	
43C419-43C433	12-30-43	1:00	1:24,000	.13 above M.L.W.
43C434-43C435	12-30-43	1:03	1:24,000	.15 " "

Single Lens Photos

Tide from (III):

Mean Range: 1.2

Spring Range: 1.4

Camera: (Kind or source) U.S.C. & G.S. 9-lens
camera (focal length 8 1/2 inches)
USC&GS "C" focal lenth. 6 inches

Field Inspection by: Wendell Bever Jr., Topo. Engr. date: September 1943
and C. O. Rector, Photo. Aid

Field Edit by: Not field edited

date: —

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

Sept. 1943

Projection and Grids ruled by (III) Wash. Office date: Sept. 10, 1943

" " " checked by: Wash. Office date: Sept. 10, 1943

Control plotted by: S.W. Trow, K.N. Maki date: Sept. 1943

Control checked by: S. W. Trow, K. N. Maki date: Sept. 1943

Radial Plot by: S. W. Trow, K. N. Maki date: Sept. 1943

Detailed by: F. Johnson, A. Lafave

date: Oct. 1943
Oct. 1944

~~Reviewed in compilation office by:~~

R.J. French

date: Aug. 1949

~~Elevations on Field Edit Sheet~~
~~checked by:~~

date:

-3-

STATISTICS (III)

Land Area (Sq. Statute Miles):

Shoreline (More than 200 meters to opposite shore):

Shoreline (Less than 200 meters to opposite shore):

Number of Recoverable Topographic Stations established:

12 planetable 11 photo compilation

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:

MAP T-8542

PROJECT NO. CS 307

SCALE OF MAP 1:10,000

SCALE FACTOR 1.00

STATION	G.P. page Desc. of page SOURCE OF INFORMATION (INDEX)	DATUM	LATITUDE OR Y-COORDINATE LONGITUDE OR X-COORDINATE		DISTANCE FROM GRID IN FEET. OR PROJECTION LINE IN METERS		DATUM CORRECTION	N.A. 1927 - DATUM DISTANCE FROM GRID OR PROJECTION LINE IN METERS		FACTOR DISTANCE FROM GRID OR PROJECTION LINE IN METERS	
: Collision, 1942	302 777-3	NA 1927	38 15	30.743							
			76 26	07.466							
: Cedar Pt. Lighthouse, 1897	274	"	38 17	57.397							
			76 22	04.924							
: Cedar Pt. 2, 1934	81 407-11	"	38 17	49.431							
			76 22	33.907							
: Stone, 1934	86-303 407-10	"	38 18	10.371							
			76 24	59.884							
: Drum Pt. Light- house, 1907	306 407-10	"	38 19	09.199							
			76 25	16.310							
: Bareda House Cupola, 1898	375 407-9	"	38 19	24.397							
			76 25	40.384							
: Wooden Elevated Water Tank, 1943	451 407-11	"	38 17	39.859							
			76 25	18.425							
: Control Tower NAB, 1943	451 407-12	"	38 17	21.843							
			76 25	23.600							
: AEDS Compass Rose, 1943	449 407-12	"	38 17	31.852							
			76 25	42.631							
: Skeleton Tower, 1943	451 407-11	"	38 16	56.302							
			76 26	00.790							
: Gray Tank, 1943	450 407-13	"	38 17	27.892							
			76 26	31.739							
: Light on Control Tower, S.P.B., 1943	450 407-11	"	38 17	09.704							
			76 26	57.214							4

1 FT. = 3048008 METER

COMPUTED BY: *Graphic Compilation Section, W.D.*Transferred
checked BY: *R. J. French*

DATE August 1949

M-2388-12

AND RADIAL PLOT
COMPILATION/REPORT

TO ACCOMPANY

SHEET NO. T-8542

26. Control: (Includes control for T-8542 to T-8546 incl.)

The following triangulation stations were used:

- ✓ COLLISON, 1942
- CHASE, 1942
- ✓ CEDAR PT. LIGHTHOUSE, 1897
- ✓ CEDAR PT. 2, 1934, F. I. P.
- ~~CEDAR PT. FARM WATER TANK, 1932~~ Destroyed. Retained as topo. sta.
"Intake, 1942"
- ✓ STONE, 1934
- ✓ DRUM PT. LIGHTHOUSE, 1907-08
- ✓ BAREDA HOUSE CUPOLA, 1898
- K. OF P. FLAGSTAFF, 1908
- SOLOMONS M.E. CH., 1907-08
- STUMP R. M., 1907
- GROVE, 1907
- ✓ PT. FARM, 1943, F. I. P. 8544
- ✓ SOTTLER, 1934 8543
- ✓ HUTCHINS 2, 1942 8545
- ✓ PEAK, 1908 8544
- Point = ISLAND R. M., 1908 (M. S. F. S.), 1907 8545
- BRISCOL, 1934
- ✓ COLE, 1942 8545
- ✓ DIXON, 1934 8545
- REKAR, 1942
- WILSON 2, 1934
- ✓ MARSHALL, 1942, F. I. P. 8544
- ✓ WOODEN WATER TANK, 1943
- ✓ CONTROL TOWER N. A. B., 1943
- ~~SEAPLANE RAMP ROSE, 1943~~ AEDS, Compass Rose, 1943
- ✓ SKELETON TOWER, 1943
- ✓ GRAY TANK, 1943
- CITY, M. S. F. C., 1943, F. I. P.
- TALL WATER TANK, ELEVATED, 1943
- WEST RADIO TOWER, 1943
- CENTER RADIO TOWER, 1943
- EAST RADIO TOWER, 1943
- SOLOMONS ISLAND WHARF LIGHT, 1943
- SANDY, 1943, F. I. P.
- ST. PETERS EPISCOPAL CHURCH CROSS, 1943
- ✓ MERRY, 1943 F. I. P.
- BEN, 1907, R. M.
- SOLOMONS IS. CATHOLIC CHURCH CROSS, 1943
- TELL, 1943, F. I. P.
- LEWIS, 1943 F. I. P.
- CAP, 1943, F. I. P.
- PT. PATIENCE LIGHT, 1943
- ✓ Broome Island Light, 1943 8545
- Island Creek Light, 1943 8545
- ~~Broome, 1907~~ LOST
- Battle Creek Shoal Light, 1943
- Petersons Point Lighthouse, 1943 8544

MSFC

CREEK, 1943, ~~F. I. P.~~
 HAM, 1943
 BERTON, 1943
 LARGE TANK, ESSO, 1943
 GYRO, 1944, ~~F. I. P.~~
 ✓ BERT, 1943 ~~on T-8544~~
 ✓ BRAD, 1943 ~~F. I. P.~~ ~~on T-8544~~
 HALLOWING, 1908, ~~F. I. P.~~
 SOTHORON, 1908, ~~F. I. P.~~
 CURTIS, 1943, ~~F. I. P.~~
 KITT, R. M., 1908
 SIMS, 1943, ~~F. I. P.~~
 ✓ = stations on T-8542

Triangulation Stations
 on T-8542
 Calvert 1854
 Barreda 1934
 Light on Control Tower 1943
 Aeds Compass Rose 1943
 Tall Red Stack 1943
 Checkered Tank 1943
 Checkered Elevated Tank 1943

The following U. S. G. S. traverse stations were plotted:

T. T.-1467
 T. T.-1476
 T. T.-2081
 T. T.-2086 } *not shown on manuscript of the review.*
 T. T.-2089 }
 T. T.-3848 - ~~T-8544~~
 T. T.-2128
 T. T.-2157
 T. T.-2153 - T-8545

Of the above stations only T. T.-2157 was held.

The F. I. P. angle on station Brad may be in error 10°. The radial plot locates the F. I. P. about 10 meters south making the angle read 103° instead of 113°. All other points in the vicinity held.

Ben R. M. could not be held. ~~Reason was~~ *Poor identification on photographs is the reason why the point can not be used.*

27. Main Radial Line Plot:

A continuous radial line plot was run in September 1943 for the purpose of locating all photograph centers, hydrographic stations, topographic stations, azimuth marks and radial points. The plot extended over the entire area covered by ~~sheet numbers~~ *maps* T-8542 to T-8546, inclusive.

The plot was made up of 26 templates. *of photographs.* All radial lines were ~~adjusted~~ *corrected* on the templates ~~in order to reduce any error~~ *eliminate the* due to shrinkage of the photographs. This was done by tracing the chamber divisions onto each template from a metal sheet on which the chamber divisions were accurately determined. Radial lines were then drawn by rotating the template, chamber by chamber.

Radial intersections and azimuth lines *erratic* generally were good. Although there were a number of ~~wild~~ rays, it was nearly always possible to pick a definite intersecting point made up of four or more rays.

8

Of a total of 64 available triangulation stations 54 were used. Stations not used could not be identified or would not hold. Lost stations, if plotted, are indicated by the word "lost" following the station name. Triangulation and photographic coverage was considered adequate although additional coverage would have been desirable where stations fell in the extreme wing sections of a photograph.

The radial plot for the entire area of sheets T-8542 to T-8544, inclusive was relaid November 6, 1943 using additional control established by the hydrographic party. The control strengthened the plot and resulted in changes of 0.2 to 1.2 millimeters in the area around Helen Creek approximately latitude $38^{\circ}22'$ and longitude $76^{\circ}28'$. See letter of February 23, 1944 to Commanding Officer, U. S. C. & G. S. Motor Vessel Cowie. *page 17 attached.*

A number of different colored inks and different sized circles were used on the celluloid sheets to designate plot points, detail points, hydrographic and topographic stations, etc.

Large red circle - original plot point

Large green circle - original plot point located by two intersecting rays only.

Small black circle - detailed hydrographic and / or topographic station.

Large black circle - plot point relocated from second plot laydown.

Medium sized blue circle - detail point for shoreline, etc.

No adjustments, except very minor ones were made to the plot other than those made as a result of the second laydown.

28. Detailing:

The areas of the ⁱⁿ ~~Map~~ ^{manuscripts} Drawings (T-8543 and T-8542) have been compiled in accordance with the instructions. The topographic features were detailed from U. S. Coast and Geodetic Survey 9-lens photographs (field inspection prints were used). However, in the vicinity of the Patuxent River Naval Air Station, single lens ratio prints were used. The following 9-lens photographs were used: 12488 to 12491 inclusive and 12529 to 12531 inclusive. The single lens ratio prints cannot be listed since no index numbers have been assigned to these prints.* Symbolization is in accordance with the recommended topographic symbols except in the case of the outlined wooded area; the latter is noted in green acetate ink.

* See data record

Details within the limits of the Patuxent River Naval Air Station are on the field edit sheet for T-8116. This field edit sheet was compared with the manuscript for T-8542 when T-8116 was registered, (9/46). Everything was in good agreement and no changes were necessary on the manuscript, (T-8542).

D. Mossley

The compiled area comprises the Patuxent River from its mouth to a point just north of Helen Creek, and extends inland to a depth of two or three miles on each side of the River. The interior consists of wooded areas (principally deciduous and pine), small farms, summer cottages along the shores of the water area, small marsh areas, and a number of small villages. The location of all the streams were determined by the use of the stereoscope; the stereoscope was used in the location, also, of other indistinct features, e. g., roads, buildings, etc.

The important features in the area are three Naval Reservations located near the mouth of the Patuxent River. These are the Patuxent River Naval Air Station*, the U. S. Naval Mine Warfare Test Station, and the U. S. Naval Amphibious Base. Additional detail points were established to aid in the detailing. Insufficient overlap necessitated some detailing from the outer wings of the 9-lens photographs 12489 and 12490. Although a proposed layout plan of the U. S. Naval Mine Warfare Test Station was available, it was decided to detail only those buildings that were visible on the photographs.

* See opposite page. N.A.S. is only one on T-8542.

All the buildings, which were visible on the photographs, have been shown. All first class^d, second class, and private roads were shown. Although some of the roads were classified on the field inspection prints, a few of these classifications were changed at the discretion of the compiler.

29. Supplemental Data:

Graphic control surveys T-6915A⁵¹ and T-6915B⁵¹, scale 1:10,000, have been applied to the air photographic compilation. Shoreline and shoreline structures, landmarks, etc. were applied directly by matching grids. Most changes were in the vicinity of the U. S. Naval Air Station. Plan drawings of the U. S. Naval Air Station were used for buildings and road layouts.

Graphic control surveys 6927A and 6927B, scale 1:5,000, were also reviewed. Sheet 6927B which falls on T-8542 indicated a discrepancy as compared with the radial plot. Minor differences have been brought into agreement with the planetable work. However, beginning just above the entrance to Mill Creek at approximately latitude 38°19.5' and extending northward and eastward there is an increasing difference between the two surveys. At the upper end of St. John's Creek this difference amounts to some 20 meters and at the eastward end of Mill Creek to approximately 25 meters. These differences have been measured at topographic stations common to the two surveys. See review report.

A careful check of the radial plot was made in the Washington Office and no further adjustment could be made other than that resulting from the second laydown. Therefore, it was concluded that the graphic control surveys were in error

and that they should be adjusted to the radial plot. A thorough discussion of the situation and procedure followed can be found in letters of March 20 and ~~October 23~~, 1944 to the Commanding Officer of the Cowie. ^{office memo of Oct. 23,}

34. Landmarks and Aids to Navigation: *see pages 17-22 attached.*

Landmarks and permanent aids to navigation are listed on Form 567 and made a part of this report. *Chart letter 125 (1944)*

35. Hydrographic Control:

No additional stations were located other than those established by planetable surveys.

44. Comparison with Existing Topographic Quadrangles:

the Drum Point quadrangle by U. S. Geological Survey surveyed in 1890, revised in 1900 and 1904, has been superseded by Solomons Island quadrangle ^{prepared} ~~done~~ ^{the} by Corps of Engineers in 1944 ~~with~~ a radial line plot from aerial photographs. The scale is 1:31,680. No apparent discrepancies are discernible between this latest U. S. E. quadrangle and ^{map manuscript} ~~sheet~~ T-8542.

45. Comparison with Nautical Charts:

^{Map manuscript} ~~Sheet~~ T-8542 was compared with Chart No. 539 of print date October 20, 1944. Only a visual inspection was made as ^{T-8542} chart 539 is 1:40,000 scale. The chart compares favorably and only minute discrepancies ~~were~~ ^{were} noted, such as the omission of several small piers in Mill Creek and St. John Creek. Their inclusion on the chart probably is not necessary because of the large scale involved. A slight discrepancy is present on the narrow neck of land joining Solomons Island to the mainland. The shoreline differs slightly and there is a small bridge ^{T-8543} ~~present~~. Also, wrecks in Mill Creek are not shown. The wrecks, however, are at the extreme end of the creeks and are no hazard to navigation. *not shown on the chart.*

Respectfully submitted,

Revised in red ink by
S. V. Lifford
Chief, Review Section

F. T. Maki
K. N. Maki
Ass't. Cartographic Engr.
L. C. Landy

T-8542

Hydrographic Stations (All located by planetable)

- Gate - Northerly gable white house.
- Ego - Westerly gable large white barn.
- Opal - Center chimney north roof farmhouse.
- Sow - Duck blind.
- Vega - Finial on small grey metal house. ?
- It - Center dormier window of three on farmhouse.
- Epic - Black stack, Southwest corner powerhouse.
- Cone - West gable farmhouse.
- Bid - Low chimney on highest section of boathouse.
- Pat - Duck blind.
- Pad - Outer end of fishtrap.
- Mill - Inshore end of fishtrap.
- Dot - Outer end of smaller fishtrap.
- Keg - Inshore end of smaller fishtrap.
- Doe - Cedar bush, end of fish stakes.
- Bif - Inshore end of fish stakes.
- Gun - Outer end of shortest line of fish stakes.
- Hot - Inshore end of shortest line of fish stakes.
- Irk - Chimney North Gable white house.
- Ant - Chimney on Southwest gable of red roofed house.
- Cow - Center chimney white house.
- For - Center chimney white house.
- Vie - Southwest gable white house.
- Net - Bow of wreck.
- Wag - Center red roofed cottage.
- Quo - South gable green roofed house.
- Meat - Southwesterly gable white house.

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

LANDMARKS FOR CHARTS

TO BE CHARTED } STRIKE OUT ONE
~~TO BE DELETED~~

M. V. CONIE

February 21, 1934

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

The positions given have been checked after listing.

GENERAL LOCALITY		NAME AND DESCRIPTION	POSITION					METHOD OF LOCATION	DATE OF LOCATION	HARBOR CHART	INSHORE CHART	OFFSHORE CHART	CHARTS AFFECTED			
			LATITUDE		LONGITUDE											
			O	I	D. M. METERS	O	I							D. P. METERS		
															DATUM	
Thomas B. Reed													Chief of Party.			
Patuxent River, Md.																
BARN, north gable (@ Up)																
TANK (ELEVATED) (@ Rag)													NA 1927	1943	X	539
HOUSE, center chimney (@ Yat)													ditto	1943	X	539
HOUSE, east gable, on beach (@ Ion)													ditto	1943	X	539
TANK (ELEVATED) (@ Tan)													ditto	1943	X	539
CHIMNEY, EAST, large house (@ Dad)													ditto	1943	X	539
HOUSE, southeast gable (@ Ben)													ditto	1943	X	539
*BARN, east gable (@ Are)													ditto	1943	X	539
*HOUSE, east gable (@ Aye)													ditto	1943	X	539
*STACK, brick (@ And)													ditto	1943	X	539
*WINDMILL (@ Tip)													ditto	1943	X	539
+ TANK, (ELEVATED) (@ Hub)													ditto	1943	X	539
NOTE: These Landmarks for Charts to be scaled from Compilations for this area.														1943	X	539

Thomas B. Reed

Chief of Party.

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.

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

LANDMARKS FOR CHARTS

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

M. V. CORTE

February 21, 1935

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

The positions given have been checked after listing.

Thomas B. Reed										Chief of Party	
GENERAL LOCALITY	NAME AND DESCRIPTION	POSITION				METHOD OF LOCATION	DATE OF LOCATION	HARBOR CHART	INSHORE CHART	OFFSHORE CHART	CHARTS AFFECTED
		LATITUDE		LONGITUDE							
		° ' "	D. M. METERS	° ' "	D. P. METERS						
	*TANK, (ELEVATED) (@ Yes)	38 24	85	76 35	724	NA 1927	1944	X			539
	CHIMNEY, SW (@ Hag)	38 21	1164	76 28	1245	ditto	1943	X			539
	HOUSE, chimney on south end <i>1850 500 ft. 1943</i>	38 21	291	76 30	000	ditto	1943	X			539
	HOUSE, chimney in center (@ Cams).	38 19	796	76 29	1116	ditto	1943	X			539
	*STACK, brick, square (@ Stack)	38 20	478	76 28	707	ditto	1943	X			539
	HOUSE, (CROSS on north gable) (@ Cpt)	38 22	892	76 31	384	ditto	1943	X			539
	*STACK, brick, square (@ Lap)	38 19	1517	76 27	283	ditto	1943	X			539
	*OIL TANK, TALLEST OF THREE (@ Large Tank, Esso - 1943) T-8543	38 19	455	76 27	289	NA 1927	1943	X			539
	RADIO MAST, silver (@ West Radio Tower - 1943)	38 16	1085	76 27	1083	ditto	1943	X			1223
	RADIO MAST, silver (@ Center Radio Tower - 1943)	38 16	1013	76 27	984	ditto	1943	X			1224
	RADIO MAST, silver (@ East Radio Tower - 1943)	38 16	1135	76 27	971	ditto	1943	X			1224

Thomas B. Reed

Chief of Party

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.

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEYTO BE CHARTED }
~~PERMANENT AID TO NAVIGATION~~ }
~~PERMANENT AID TO NAVIGATION~~ }

STRIKE OUT ONE

M. V. COMB

February 21, 1934

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

The positions given have been checked after listing. *Y.P.*

Thomas B. Reed												Chief of Party.			
GENERAL LOCALITY	NAME AND DESCRIPTION	POSITION								METHOD OF LOCATION	DATE OF LOCATION	HARBOR CHART	INSHORE CHART	OFFSHORE CHART	CHARTS AFFECTED
		LATITUDE		LONGITUDE				DATUM							
		°	'	°	'	D. P. METERS	D. P. METERS								
	Back Creek Light No. 2	38	19	541	76	27	470	NA	1927	Graphic Control	1944	X	X		539 1224
	Back Creek Light No. 6	38	19	1098	76	27	673	ditto	ditto	ditto	1944	X	X		ditto
	Solomons Island Wharf Light	38	19	61	76	27	122	ditto	ditto	Tran- sulation	1943	X	X		ditto
	Point Patience Light	38	19	1362	73	29	70	ditto	ditto	ditto	1943	X	X		ditto
	Petersen Point Light*	38	23	13	76	30	594	ditto	ditto	ditto	1943	X			539
	Island Creek Light*	38	24	913	76	32	998	ditto	ditto	ditto	1943	X			539
	Broom Island Light*	38	23	1689	76	33	475	ditto	ditto	ditto	1943	X			539
	Battle Creek Shoal Light*	38	25	1465	76	36	723	ditto	ditto	ditto	1943	X			539
	Drum Point Light House	38	19	284	76	25	398	ditto	ditto	T-8542	1907	X	X		539 1224
	Cedar Point Light House (abandoned)	38	17	57406, 1770	76	22	120	ditto	ditto	T-8542	1897	X	X		ditto
	*Temporarily extinguished														
															14

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.

526-ROR

February 23, 1944

To: The Commanding Officer
U.S.C.A G.S. Motor Vessel COWIE
Oxford Boatyard Company
Oxford, Maryland

From: The Director
U. S. Coast and Geodetic Survey

Subject: Replot of Air Photographic Surveys, Project 307

The field photographs and planetable sheet, Field No. C, borrowed from your office on January 27, 1944 were returned to you by mail on February 19, 1944.

The radial plot for the entire area of sheets T-8542, T-8543, and T-8544 has been relaid in this office using the additional triangulation recently established by your party. This additional control has strengthened the plot and resulted in changes in the positions of details from 0.5 to 1.2 millimeter in the area around Hellen Creek. The positions of all topographic stations have been relocated and the shoreline redetailed in this area. In addition to the changes at Hellen Creek, a few topographic stations on the west side of the river in the vicinity of Cuckold Creek have been changed slightly; that is, less than 0.5 millimeter.

The new radial plot held well to the field inspection position at station "Creek" and to the new position for "Stump Reference Mark." Apparently, this is an error in the geographic position of the old station "Stump," the cause of which has not yet been determined.

Filing and new piers shown on planetable sheet C have been transferred to T-8543 and T-8544. Sections of shoreline sketched on the back of sheet C, covering areas where the shoreline was obscured by trees on the photographs, also have been transferred to the air photographic survey sheets.

- 2 -

Topographic stations located on planetable sheet C which were also originally located by the air photographic plot have been transferred to T-8543 and T-8544, and have been tied in to the new air photographic plot. The planetable and air photographic locations are in agreement except for station "Chimney at west end of hotel (9)," latitude $38^{\circ}19.2'$, longitude $76^{\circ}29'$. There is a difference of about 0.6 millimeter between the planetable and air photographic location at this point. The planetable position is accepted. The difference may be due to erroneous identification on the photograph.

See Renew
Report for
T-8543

No changes have been made on air photographic surveys T-8545 and T-8546. One ozalid print each of T-8543 and T-8544 on which the changed areas have been circled in pencil will be forwarded to you. Reverse tracing paper prints and chart paper prints of T-8544 have been ordered to supersede those originally furnished to you. These will be forwarded within about one week.

Please forward the remaining planetable sheets between Point Patience and the bay as soon as they can be spared by your party. These sheets can be photographed and returned to you immediately if necessary. The remaining planetable sheets are desired so that all details common to the planetable and air photographic surveys may be brought to exact agreement. This is particularly desirable where certain of the marked topographic stations located on the 1:10,000 scale air photographic surveys are being relocated on the 1:5,000 scale planetable surveys.

Upon receipt of the 1:5,000 scale planetable surveys, it is intended to redetail the shoreline on the air photographic surveys at Back Creek and Mill Creek with a fine line so that it can be enlarged and used on the 1:5,000 scale hydrographic smooth sheets without loss of details.

As soon as the remaining planetable sheets are received and the additions and corrections made on air photographic surveys T-8542 and T-8543, new ozalid prints and new reverse tracing paper prints will be furnished to you.

To summarize, you will be furnished with new copies of T-8542, T-8543, and T-8544 which will include all corrections made after receipt of the additional triangulation and planetable surveys. These new prints shall supersede those originally furnished to you. Only the new prints of T-8542, T-8543, and T-8544 shall be forwarded to the processing office.

(Signed) L. O. COLBERT

Director

826-RCR

March 20, 1944

To: The Commanding Officer
Motor Vessel CONIE
U. S. Coast and Geodetic Survey
% Postmaster
Solomons, Maryland

From: The Director
U. S. Coast and Geodetic Survey

Subject: 1:5,000 Scale Graphic Control Surveys T-6927A
and T-6927B, Project 307

The above graphic control surveys have been reduced to 1:10,000 scale and applied to air photographic surveys T-8542 and T-8543.

In the entire area of Back Creek and at the entrance to Mill Creek the graphic control and air photographic surveys were in substantial agreement. Where minor differences exist, the air photographic surveys have in practically all cases been corrected to agree with the planetable work. However, beginning just above the entrance to Mill Creek at approximate latitude $38^{\circ}19.5'$ and extending northward and eastward there is an increasing difference between the two surveys. At the upper end of St. John's Creek this difference amounts to some 20 meters and at the eastward end of Mill Creek to approximately 25 meters. These differences have been measured at topographic stations common to the two surveys.

The radial plot has been checked in the office, but cannot be changed to agree with the planetable work. In this case the air photographs span across the area, reaching control in the neighborhood of Drum Point, Solomons, and Hellen Gut, thereby affording a fairly rigid plot. It is believed that the point locations on the air photographic plot are not in error in excess of 5 meters.

-2-

Since there was no triangulation control for the plane-table work above the entrance to Mill Creek, it is thought that the difference might be due to loss of distance and azimuth on the graphic control surveys.

Copies of the air photographic surveys at 1:10,000 scale and 1:5,000 scale covering the area will be forwarded to you, together with the graphic control sheets T-6927A and T-6927B, March 21 or 22. Please advise this office if you find any explanation for these differences other than stated in this letter. If it is reasonably easy to do so, the work might be checked by establishment of a triangulation intersection point at or near the head of St. Johns Creek and the head of Mill Creek. It might also be practicable to extend planetable azimuths from points near triangulation control up the axes of Mill Creek and St. Johns Creek and thereby test the accuracy of the graphic control work. It is realized, of course, that this may have been done during the progress of the original graphic control surveys.

In the case that additional field work appears to you to be impracticable or unwarranted at this time, it is thought that the graphic control and hydrographic work can be adjusted to the air photographic surveys shoreline and topographic stations without serious loss of accuracy.

The 1:10,000 scale graphic control surveys T-6951A and T-6951B have been applied to the air photographic surveys. There were no appreciable differences in position. Copies of the revised air photographic surveys will be furnished to you in a few days.

(Signed) J. H. HAWLEY

Acting Director

October 23, 1944

MEMORANDUM

To: Mr. Edmonston

Subject: Surveys of Back Creek and Mill Creek,
Project 307, Patuxent River

This project is covered by air photographic surveys T-8542 to T-8545, inclusive. The radial plot and detailing of shoreline on these sheets were completed in the fall of 1943, and copies furnished to the hydrographic party.

After beginning operations the hydrographic party decided to establish additional triangulation and to make graphic control surveys for additional hydrographic control. The graphic control surveys of the ~~Maine~~ River were on 1:10,000 scale. These were forwarded to this office together with the new triangulation and the air photographic surveys were checked and revised and new copies furnished to the hydrographic party. Details of this revision of the air photographic sheets are given in the attached copy of the letter to the Commanding Officer of the COWIE, dated September 23, 1944.

Graphic control surveys T-6927A and T-6927B covering Back Creek and Mill Creek were made on the scale of 1:5,000 for control of 1:5,000 scale hydrography. When submitted to this office, these graphic control surveys could not be made to agree with the air photographic sheets. After a careful check of the radial plots in this office, it was concluded that the graphic control surveys were appreciably in error. This situation is discussed in the attached copy of the letter of March 24, 1944, addressed to the Commanding Officer of the COWIE. Subsequently, the Commanding Officer of the COWIE left the boat sheet for this area, and the graphic control sheets, in this office for adjustment. This adjustment has been accomplished as follows:

- 2 -

The area is covered by air photographic surveys at 1:20,000 scale made for production of quadrangles as well as by the 1:10,000 scale sheets mentioned above. The two plots are in substantial agreement. The graphic control work agrees with neither. It is concluded that the graphic control work is in error due to lack of triangulation.

Attached to this memorandum is a tracing of the shoreline from air photographic surveys T-8542 and T-8543. The air photographic surveys contain a number of points common to the graphic control surveys. The signals on the graphic control surveys have been adjusted into position on the air photographic shoreline and are shown on the tracing in red. Signals in black were located by the air photographic surveys.

It is suggested that the smooth hydrographic sheets be plotted at scale 1:10,000 using the attached tracing as a base, and that the graphic control sheets T-6927A and T-6927B be superseded. The signals from the graphic control sheets have not been transferred to planimetric maps T-8542 and T-8543.

B. G. Jones

G2-SMP 061

3 August 1950

MEMORANDUM FOR: DIRECTOR, U.S. COAST AND GEODETIC SURVEY, DEPARTMENT
OF COMMERCE

ATTN: Administrative Planning Section

SUBJECT: Classification Clearance

1. Reference is made to your memorandum to the Director of Intelligence, U.S. Air Force, dated 12 December 1949, requesting security clearance of certain USC&GS maps being prepared for publication in unclassified form.

2. Returned herewith are maps Nos. T-8542 and T-8543, Patuxent River Area. There is no objection to their publication in unclassified form.

3. This transmittal completes the security clearance action on the maps forwarded with your memorandum referenced above.

FOR THE ASSISTANT CHIEF OF STAFF, G-2:

2 Incls

1. Map No. T-8542
2. Map No. T-8543

JOHN W. MIDDLETON

Colonel, GSC

Chief, Security & Training Division

GEOGRAPHIC NAMES

Survey No. T-8542

GEOGRAPHIC NAMES		Survey No. T-8542										24
1	Name on Survey	On Chart No.	On previous survey No.	On U. S. quadrangle Maps	From local information	On local Maps	P. O. Guide or Map	Rand McNally Atlas	U. S. Light List			
		A	B	C	D	E	F	G	H	K		
	Maryland								USCB	1		
	Patuxent River									2		
	Drum Point									3		
	Drum Point		(village)							4		
	Drum Point Pond									5		
	Little Fresh Creek									6		
	Fresh Creek									7		
	Parker Moore Creek									8		
	Rusby Hall Road									9		
	Ship Point									10		
	Little Ship Point									11		
	Bow Cove									12		
	Pancake Point									13		
	Mill Creek									14		
	Spring Cove									15		
	Leason Cove									16		
	Pile Driver Cove									17		
	Coles Creek									18		
	Brown Creek									19		
	Brooks Cove									20		
	Old House Cove									21		
	Olivet									22		
	Olivet Road		Ma. 503							23		
	Insby Point									24		
	St. John Creek									25		
	Hutchins Point									26		
	Hutchins Cove		(partly here)							27		

GEOGRAPHIC NAMES

Survey No. T-8542

GEOGRAPHIC NAMES											
Survey No. T-8542											
Name on Survey		On Chart No.	On previous survey No.	On U. S. quadrangle Maps	From local information	On local Maps	P. O. Guide or Map	Rand McNally Atlas	U. S. Light List		
2		A	B	C	D	E	F	G	H	K	
	<u>Lusby Cove</u>										1
											2
	<u>Cedar Point</u>										3
	<u>Hog Point</u>									USGB	4
	<u>Pearson Creek</u>									"	5
	<u>Harper Creek</u>										6
	<u>Fishing Point</u>										7
	<u>Pine Hill Run</u>										8
	<u>Patuxent River Naval Air Station</u>										9
	<u>Fresh Pond</u>										10
	<u>Chesapeake Bay</u>										11
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Names underlined in red are approved. 8-12-49

L. Heck

✓ 3-28-50

a.j.w.

Division of Photogrammetry

Review Report T-8542

26. Control

All USC&GS triangulation stations within the limits of this manuscript were recovered during field inspection and are listed on Form M-2388-12 with this report. They are plotted on the manuscript.

Eleven topographic stations which were located by the radial plot were scaled and listed on Form 524 cards during review.

Former triangulation station Cedar Point Farm Water Tank, 1932 (final) was destroyed in 1943, but has been retained as topographic station "Intake, 1943" and listed on a Form 524 under this survey.

28. Detailing

All sand and beach areas were determined by stereoscopic examination and added during review.

A woods cover classification was determined and interpreted from field inspection notes and stereoscopic examination to conform with the present practice for showing woodlands.

28a. Classification :

It is noted that at the time of field inspection the Navy requested that no cultural details within the NAS save landmarks be shown, and in keeping with the present classification of "Restricted" as per authority of the Security Classification Map dated December 16, 1946, these features should not be drafted.

The photographs, the map manuscript and the descriptive report are marked RESTRICTED. *Declassified 3 Aug 1950.*

29. Supplemental Data

Graphic control surveys T-6927A and T-6927B (1944) have been adjudged incorrect and have been destroyed by the Chart Division Archives. The descriptive reports have been retained in the general files for Project 307 in Photogrammetry.

Twenty-seven hydrographic stations of a permanent nature and eleven topographic stations located by planetable methods on T-6951a and b (1944), were transferred to the map manuscript and their descriptions are listed with this report and/or on Form 524 cards assigned to this survey.

The NAS reservation boundary was determined by a plan drawing submitted by the Navy as of 17 July 1943.

34. Landmarks and Aids to Navigation

The position of one landmark recommended by field inspection in 1943 was later determined by triangulation and is submitted on Form 567 for charting and reported to the Nautical Chart Branch, Division of Charts.

35. Geographic Names

All names shown on the map manuscript have been approved by the Geographic Names Section, Division of Charts, and are listed with this report.

44. Comparison with Previous and/or Contemporary Surveys

T-256	1:20,000	1848	
T-257	1:20,000	1848	
T-2107	1:5,000	1893	
T-2861	1:20,000	1907-8	
T-6754	1:10,000	1941	Graphic Control
T-6951a	1:10,000	1944) Contemporary Graphic
T-6951b	1:10,000	1944) Control
H-6876	1:10,000	1944) Shoreline from this survey (T-8542)
H-6966	1:5,000	1944) was applied to H-6876 and H-6966 in conjunction with hydrographic surveys in operation at that time.
T-8116	1:20,000	1943	
U.S.G.S.	Drum Point, Md.	Quadrangle	1:62,500 - 1904
U.S.E.	Solomons Island, Md.	Quadrangle	1:31,680 - 1944

45. Comparison with Nautical Charts

Wrecks mentioned in the text were added to the manuscript from the original field inspection photographs during review.

This survey was applied to hydrographic surveys H-6876 and H-6966 prior to review, but has not been applied to the nautical charts as of this date.

539	1:40,000	1-12-48
553	1:40,000	10-4-48
1224	1:80,000	12-20-48

47. Adequacy of the Compilation

This map (T-8542) has been brought up to the date of the field inspection and fulfills the instructions for Project 307. However, two test shots, nos. 645 and 646, at 1:20,000 scale were taken with the 9 lens camera in 1945. Inspection reveals only minor ~~changes~~ *differences* notably of which are (1) a dock at the outlet of Pine Hill Creek, (2) four large tanks near the landmark and triangulation station, "Checkered Tank Elevated, 1943", (3) additional taxiways and roads on the NAS and (4) Fresh Pond on Cedar Pt. appears to break through into Chesapeake Bay at seasonal intervals. *These differences have not been shown on T-8542.*

Reviewed by:

Under the direction of:

Roscoe J. French
R. J. French
August 26, 1949

S. V. Luff 11/30/50
Chief, Review Section

B. J. Jones 11/50
Technical Assistant to the Chief
Division of Photogrammetry

H. R. Edmonson
Chief, Nautical Chart Branch,
Division of Charts

O. S. Reading 4/Dec/50
Chief, Division of Photogrammetry

W. M. Acaife
Chief, Division of Coastal Surveys
A14

NAUTICAL CHARTS BRANCH

SURVEY NO. T-8542

Record of Application to Charts

[illegible]

M-216B-1

A basic hydrographic or topographic survey supersedes all information of like nature on the uncorrected chart. Give reasons for deviations, if any, from recommendations made under "Comparison with Charts" in the Review.