

5427

U. S. COAST & GEODETIC SURVEY
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DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY
R. S. PATTON, DIRECTOR

DESCRIPTIVE REPORT

Air Photo
Topographic
~~Hydrographic~~

Sheet No. 5427

State Maryland

LOCALITY

Chesapeake Bay

~~East Shore~~ Swan Point Creek

~~Swan Creek~~

Project HT-175

1935

CHIEF OF PARTY

J.C. Partington Jr. H. & G.E.

U. S. GOVERNMENT PRINTING OFFICE: 1934

5427

Applied to Chart 5118 1/12/30 T. B. C.

Applied to New Comp. of Chart 549 5/31/39 Chas. P. Bush Jr.

DEPARTMENT OF COMMERCE
U.S. COAST AND GEODETIC SURVEY

REG. NO.

AIR PHOTO
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. 5127

REGISTER NO.

State Maryland

General locality Chesapeake Bay

Locality East Shore Swan Point and Swan Creek Swan Creek

Scale 1:10,000 Date of Photographs November 16 1933
Date of Compilation April 20, 1935

Vessel Photo Compilation Party # 25

Chief of party Lieut. (i.s.) J.C. Partington Reviewed and recommended for approval April 25, 1935

Photographs plotted by R.D. Cross March 26, 1935

Inked by A.F. Corrito April 20, 1935

Heights in feet above _____ to ground to tops of trees

Contour, Approximate contour, Form line interval _____ feet

Instructions dated March 11, 1934

Remarks: Compilation of aerial photographs 67-83

* Blueprint on scale 1:9615

-STATISTICS-

on

SHEET, FIELD NO. 5427, REG. NO. 7-5427

Photos No. 67-83

Date of Photographs November 16, 1933

10:15 A.M. to 12:00 N.

	<u>BY</u>	<u>FROM</u>	DATE <u>TO</u>
ROUGH RADIAL PLOT	S.M. Stoler	11- 2-34	11-15-34
SCALE FACTOR (1.040)	S.M. Stoler	11- 2-34	11-15-34
SCALE FACTOR CHECKED	<i>R.D. Cross</i> R.D. Cross	11-16-34	11-16-34
PROJECTION	Projection Machine--Washington Office		
PROJECTION CHECKED	<i>J.W. Seager</i> J.W. Seager	2-16-35	2-16-35
CONTROL PLOTTED	<i>J.W. Seager</i> J.W. Seager	3- 8-35	3-11-35
CONTROL CHECKED	<i>R.D. Cross</i> R.D. Cross	3-22-35	3-22-35
TOPOGRAPHY TRANSFERRED	No recent data available.		
TOPOGRAPHY CHECKED			
SMOOTH RADIAL LINE PLOT	<i>R.D. Cross</i> R.D. Cross	3-22-35	3-26-35
RADIAL LINE PLOT CHECKED	<i>J.C. Partington</i> J.C. Partington	3-27-35	3-27-35
DETAIL INKED	<i>A.F. Cerrito</i> A.F. Cerrito	4- 3-35	4-20-35
AREA OF DETAIL INKED 9.12 sq. Statute Miles (Land Area)			
AREA OF DETAIL INKED .19 sq. Statute Miles (Shoals in Water Area)			
LENGTH OF SHORELINE (more than 200 m. from nearest opposite shore) 8.05 Statute Miles			
LENGTH OF SHORELINE (rivers and sloughs less than 200 m. wide) 8.62 Statute Miles			
LENGTH OF STREETS, ROADS, TRAILS, R.R., etc. 28.75 Statute Miles			
GENERAL LOCATION Chesapeake Bay, Maryland			
LOCATION East Shore: Swan Point and Swan Creek.			
DATUM North American 1927			
STATION	Swan Point Tower 1919 r'33	Latitude: 39° 08' 56.294"	= 1736.0 m.
		Longitude: 76° 16' 31.126"	= 747.6 m.

Field Computations

PROJECTION DIAGRAM

SHEET NO. 5427

Scale = 1:10,000

Scale Factor = 1.040

Distances Multiplied by Scale Factor Are Given in Red

	19'	18'	17'	16'	76° 15'	14'	13'	12'	11'
13'					(1497.0) 1439.4				13'
12'				(5772.8) 5550.8	(1497.3) 1439.7	(2994.6) 2879.4	(4492.0) 4319.2		12'
11'				(3848.6) 3700.6	(1497.7) 1440.1	(2995.3) 2880.1	(4493.0) 4320.2	(5990.7) 5760.3	11'
39°10'				(1924.3) 1850.3	(1498.0) 1440.4	(2996.0) 2880.8	(4494.2) 4321.3		39°10'
09'		(4495.2) 4322.3	(2996.8) 2881.5	(1498.4) 1440.8	(3848.6) 3700.6				09'
08'	(5995.0) 5764.4	(4496.2) 4323.3	(2997.5) 2882.2	(1498.7) 1441.1	(5772.8) 5550.8				08'
07'			(2998.1) 2882.8	(1499.0) 1441.4	(7697.1) 7401.1				07'
06'					(1499.5) 1441.8				06'
	19'	18'	17'	16'	76° 15'	14'	13'	12'	11'

Skew Projection.

Layout by R.D.C.
Checked by J.W.S.

SHEET NO. 5427

SCALE FACTOR COMPUTATIONS
Photos 31-83
- - -

<u>Station</u>	<u>to</u>	<u>Station</u>	<u>Measured Distance</u>	<u>Computed Distance</u>	<u>Scale Factor Meas./Comp.</u>
Plum Point Tower No. 7 1918		Worton Point Tower No. 8 1918	3225	3086	1.045
Plum Point Tower No. 7 1918		Stoops Point Tower No. 9 1918	7549	7240	1.043
Plum Point Tower No. 7 1918		Fairlee, Tower No. 10 1919	11238	10773	1.043
Plum Point Tower No. 7 1918		Mitchells Bluff Tower No. 11 1918 r'33	14892	14272	1.043
Stoops Point Tower No. 9 1918		Worton Point Tower No. 8 1918	4726	4537	1.042
Stoops Point Tower No. 9 1918		Fairlee, Tower No. 10 1919	3696	3540	1.044
Stoops Point Tower No. 9 1918		Mitchells Bluff Tow- er No. 11 1918 r'33	7345	7035	1.044
Worton Point Tow- er No. 8 1918		Fairlee, Tower No. 10 1919	8304	7964	1.043
Mitchells Bluff Tower No. 11 1918 r'33		Swan Point Tower No. 14 1919 r'33 *	9214	8876	1.038
Mitchells Bluff Tower No. 11 1918 r'33		Treasure 1909 *	9057	8723	1.038
Mitchells Bluff Tower No. 11 1918 r'33		Elliason 1909 *	8174	7872	1.038
Mitchells Bluff Tower No. 11 1918 r'33		Gales Farm Tower No. 12 1919 *	2195	2102	1.044
Mitchells Bluff Tower No. 11 1918 r'33		Steel Tower No. 13 1919 r'33 *	5521	5310	1.040
Steel Tower No. 13 1919 r'33 *		Swan Point Tower No. 14 1919 r'33 *	3750	3618	1.037

SHEET NO. 5427

SCALE FACTOR COMPUTATIONS (Cont'd)
Photos 31-83
- - - -

<u>Station</u>	<u>to</u>	<u>Station</u>	<u>Measured Distance</u>	<u>Computed Distance</u>	<u>Scale Factor Meas./Comp.</u>
Steel Tower No. 13 1919 r'33 *		Gales Farm Tower No. 12 1919 *	3348	3228	1.037
Steel Tower No. 13 1919 r'33 *		Treasure 1909 *	4121	3975	1.037
Swan Point Tower Rail No. 14 1919 r'33*		1909 *	2081	2006	1.037
Swan Point Tower Elliason No. 14 1919 r'33*		1909 *	1670	1611	1.037
Average Scale Factor				=	1.040

This average scale factor computed for entire flight
but only part of this flight (67 to 83) falls on the tracing
area of this sheet No. 5427.

Triangulation stations marked (*) fall on this sheet.

Computed by S.M.Stoler 11/15/34

SHEET NO. 5427

CONTROL DATA

Station	North American Datum				1927 Datum	x Scale Factor
	°	'	"	m.	m.	m.
Corr 1909	39	09	31.904	985.7	(875.6) 974.7	(910.6) 1013.7
	76	15	15.430	370.5	(1066.3) 374.5	(1109.0) 389.5
Elliason 1909	39	09	16.434	506.8	(1354.5) 495.8	(1408.7) 515.6
	76	15	28.861	693.0	(743.7) 697.0	(773.4) 724.9
Gales Farm Tower No. 12 1919	39	12	22.013	678.8	(1182.4) 667.8	(1229.7) 694.5
	76	14	50.692	1216.3	(219.4) 1220.3	(228.2) 1269.1
Haven 1909	39	08	50.591	1560.1	(301.2) 1549.1	(313.2) 1611.1
	76	15	00.465	11.2	(1425.9) 15.2	(1482.9) 15.8
Rail 1909	39	09	05.787	178.5	(1682.8) 167.5	(1750.1) 174.2
	76	15	08.245	198.0	(1238.8) 202.0	(1288.4) 210.1
Spike 1909	39	09	19.299	595.1	(1266.1) 584.1	(1316.7) 607.5
	76	15	15.652	375.8	(1060.9) 379.8	(1103.3) 395.0
Steel Tower No. 13 1919 r'33 *	39	10	50.60		(289.9) 1560.4	(301.5) 1622.8
	(N.A. 1927 Datum)	76	15	57.26	(65.8) 1374.6	(68.4) 1429.6
Swan Point Tower No. 14 1919 r'33 *	39	08	56.294		(114.3) 1736.0	(118.9) 1805.4
	(N.A. 1927 Datum)	76	16	31.126	(693.5) 747.6	(721.2) 777.5
Treasure 1909	39	08	46.416	1431.4	(429.9) 1420.4	(447.1) 1477.2
	76	15	14.581	350.1	(1086.9) 354.1	(1130.4) 368.3
Urie 1909	39	09	29.552	911.3	(950.0) 900.3	(988.0) 936.3
	76	15	29.076	698.1	(738.7) 702.1	(768.2) 730.2

(*) Computed directly on N.A. 1927 Datum.

DESCRIPTIVE REPORT

To Accompany

PHOTO COMPILATION SHEET NO. 5427

Chesapeake Bay, Md.: East Shore; Swan Point and Swan Creek

Director's Instructions Dated March 14, 1934

- - - - -

1. GENERAL INFORMATION: *

- (a) Title. Refer to Title Sheet.
- (b) Statistics. Refer to Statistics Sheet.
- (c) No general report covering this area is available. The area is a strip of land approximately 2 miles wide that extends along the Eastern Shore of Chesapeake Bay from Swan Point on the south to within one-half mile of Tolchester Beach on the north.
The area is a typical agricultural section. It is covered almost entirely by cultivated fields and small wooded areas.
- (d) The following photographs were used in plotting this sheet:

<u>Photo Numbers</u>	<u>Flight Strip Location</u>	<u>Date</u>	<u>Time</u>	<u>Stage of Tide</u>
67 to 83	Along the shore of Chesapeake Bay beginning at Swan Pt. and extending northward.	11-16-33	10:15 AM to 12:00 N	High-- 5:08 AM Low---11:26 AM

- (e) Refer to Statistics Sheet.

2. CONTROL: *

(a) Sources:

The triangulation stations "Steel Tower No. 13 1919 r'33" and "Swan Point Tower No. 14, 1919 r'33" were obtained from the ~~progress sketch~~ of Lieut. Roland D. Horne, Project No. G-136, 1933-34. These stations are on N.A. 1927 Datum. All the other stations were obtained from the publication "Triangulation in Maryland" and their positions were adjusted to N.A. 1927 Datum by subtracting 11 meters from the forward latitude position and adding 4 meters to the forward longitude position.

- (*) N.B. The paragraphs (numbers and letters) listed refer to those shown on pages 22 and 23 of Notes on Compilation of Planimetric Line Maps.

DESCRIPTIVE REPORT

SHEET NO. 5427

- - -

(b) Errors:

except Haven 1909

All the triangulation stations shown on the celluloid were used in running the plot and no error was discovered in the position of any station. Triangulation Station "Haven 1909" was not tied in by the field party and was not used in running the plot.

(c) Discrepancies:

No discrepancies in position of any control station established by other organizations were found.

3. COMPILATION:

(a) Method:

The usual radial line plot was used to determine the position of all radial points.

(b) Adjustment of plot:

Between photographs 65 and 78 there are no triangulation stations in the east wing of the flight. This leaves a group of 13 photos that have control in only one or two wings. These photos were plotted using the available control and they were adjusted until all intersections were excellent. Since most of the control in this section is along the shore of Chesapeake Bay, it is believed that the radial points along the shore of the Bay are very accurately located. The radial points along the eastern boundary of the sheet were obtained from excellent intersections but there is no control in this area and there is a possibility of 5 or 10 meters error in the position of detail shown.

(c) Interpretation:

Considerable difficulty was encountered in tracing the houses in the southeastern corner of the sheet. The pictures were blurred and there is a possibility that some of the houses are not shown.

(d) Information from other sources:

All the information shown on the compilation except names was obtained directly from the photographs.

(e) Conflicting Names:

The names appearing on this compilation were obtained from U.S. Coast and Geodetic Survey Charts and from U.S. Geological Survey Quadrangles. The only discrepancy in names is as follows: Rockhall Landing is shown on the U.S. Geological Survey, ~~North Point~~ ~~Chesapeake~~ Quadrangle at the mouth of Swan Creek. On the U.S. Coast and Geodetic Survey Charts, this is called Deep Landing.

* A closer estimate of the amount of error would be from 0.3 to 0.5 mm for intersected points and from 0.5 to 1.0 mm. for other points

fam.

DESCRIPTIVE REPORT

SHEET NO. 5427

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4. COMPARISON WITH OTHER SURVEYS:

- (a) The only available topographic sheet of this area is the U.S. Coast and Geodetic Survey, Topographic Sheet No. 2296. This topographic sheet is very old and so many changes have taken place since it was compiled that it cannot be used to check the accuracy of the photo compilation. In general the positions of the various creeks etc. check very accurately on the two sheets but the shore line and inland detail have changed considerably. It is recommended that the photo compilation be accepted as correct.
- (b) Junctions with adjoining compilations have been examined and are satisfactory.

5. LANDMARKS:

except Swan Creek Front and Rear Range Lights

- (a) At present no landmarks/are shown on the charts of this area. The field party recommended the four objects listed below to be used as landmarks. Copy of Form No. 567, Landmarks for Charts, is enclosed:
 - Swan Point Front Range Light
 - Gales Farm Tower No. 12
 - Steel Tower No. 13
 - Swan Point Tower No. 14
 - Water Tank, Gratitude, Md.
 - Swan Point Rear Range Light
- (b) No additional objects show with sufficient prominence under the stereoscope to be recommended as landmarks.

6. RECOMMENDATIONS FOR FURTHER SURVEYS: * See opposite page.

- (a) Except as noted under Paragraph 3, sub-paragraph (b), the compilation is believed to have a probable error of 3 meters in position of well defined detail of importance for charting and of 5 meters for other data.
- (b) The width of roads has been exaggerated where necessary to procure well defined lines when the sheet is reproduced.
All the houses that could be seen on the photographs have been shown. However, it was difficult to identify the houses in the southeastern corner of the sheet and possibly some of them have been omitted.

DESCRIPTIVE REPORT

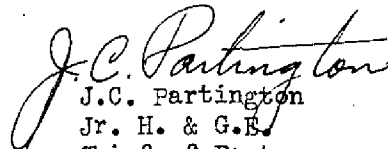
SHEET NO. 5427

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7. RECOVERABLE OBJECTS:

There are no recoverable topographic stations in this area and the field party did not submit any descriptions of objects on Form No. 524 for this area.

Respectfully submitted,


J.C. Partington
Jr. H. & G.E.
Chief of Party

REVIEW OF AIR PHOTO COMPILATION T 5427 (1936)
Scale 1:10,000

Comparison with Previous Topographic Surveys

Comparison with the old surveys listed below shows that the compilation is complete and adequate in order to supersede the sections of those surveys which it covers.

T 187 (1845), 1:20,000

T 199 (1846), 1:20,000

T 2241 (1896), 1:20,000

T 2296 (1897), 1:20,000

The survey for T 2296 covers the eastern shore of Chesapeake Bay between Swan Point and Still Pond. T 2296 is a very detailed survey of the interior area, shows contours, hachures and fence lines. There are no prominent changes of the shoreline ~~except at the entrance to Fairlee Creek.~~ ^{over the common area.} A large number of the orchards shown on T 2296 are no longer in existence. Except for contours, some of the hachures, and fence lines, T 2296 is superseded by this compilation over the common area.

There are no recent plane table surveys or hydrographic surveys in the area of this compilation.

Widths of roads on this compilation have been exaggerated more than necessary for clear printing.

March 16, 1936.

Leonard A. McIsaac
B. J. Jones

REVIEW OF AIR PHOTO COMPILATION NO.

Chief of Party: *J.C. Partington*

Compiled by: *A.F. Cerrito*

Project: *HT-175*

Instructions dated: *March 14, 1934*

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, ~~x~~, d, e, g and i; 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)

No ground surveys.

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)

No blue-prints or maps transmitted.

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 of this area.

Survey of Topographic Sheet #2296 made about 1897.

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)

Highwater line on sand beach was traced from the photographs after notes and sketches had been made on the field photographs by the field inspection party. Ram.

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)
No recoverable objects described on Form 524 ✓
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)
No bridges on this compilation ✓
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 66k) ✓
13. The geographic datum of the compilation is *North American 1927* and the reference station is correctly noted. ✓
14. Junctions with adjoining compilations have been examined and are in agreement. (Par. 66j) ✓
15. The drafting is satisfactory and particular attention has been given the following:
 1. Standard symbols authorized by the Board of Surveys and Maps have been used throughout except as noted in the report. ✓
 2. The degrees and minutes of Latitude and Longitude are correctly marked. ✓

3. All station points are exactly marked by fine ✓
black dots.
4. Closely spaced lines are drawn sharp and clear ✓
for printing.
5. Topographic symbols for similar features are of ✓
uniform weight.
6. All drawing has been retouched where partially ✓
rubbed off.
7. Buildings are drawn with clear straight lines ✓
and square corners where such is the case on
the ground.

(Par. 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 48) ✓

16. No additional surveying is recommended at this time. ✓

17. Remarks:

18. Examined and approved;

J. C. Partington
Chief of Party

19. Remarks after review in office:

Reviewed in office by: Lemard A. Mulsant March 16, 1936.
✓ B. G. Jones

Examined and approved:

C. H. Green.
Chief, Section of Field Records
L. O. Zolbat
Chief, Division of Charts

Fred. R. Peacock
Chief, Section of Field Work
Glunde
Chief, Division of Hydrography
and Topography.

Survey No. H- 5427

Date. July 30, 1935

GEOGRAPHIC NAMES

Chart No. **549 - 1226**

MARYLAND

Diagram No. _____

Approved by the Division of Geographic Names, Department of Interior. *

Referred to the Division of Geographic Names, Department of Interior. R

Under investigation. Q

[illegible]