

5692

5692

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey Air Photographic Survey

Field No. T-5692 Office No. T-5692

LOCALITY

State Maryland

General locality Eastern Shore of Chesapeake Bay

Locality Worton Creek to Fairlee Creek

1943

CHIEF OF PARTY

L. W. Swanson

LIBRARY & ARCHIVES

DATE

5692

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-5692**

State **MARYLAND**

LOCALITY

WORTON CREEK TO FAIRLEE CREEK

Eastern Shore Chesapeake Bay

2
3
4
5

Applied (in part) to Ch. 572. April 1940 - H.S.G.

Applied to drawing of Chart 549 - Dec 20, 1940 - J. Walkey

" " Ch. 1226 Feb. 1943 H.P.G.

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

TOPOGRAPHIC TITLE SHEET

REG. NO.

T5692

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-5692

REGISTER NO.

T5692

State Maryland

General locality Eastern Shore Chesapeake Bay

Locality WORTON CREEK to FAIRLEE CREEK

Scale 1:10,000 ~~1:10,000~~ ^{Photographs} Date of ~~survey~~ May 1 & July 8, 1937

~~Method~~ Air Photographic Survey Party No. 2

Chief of party L.W. Swanson

Surveyed by Field Inspection --- W.C. Russell & D.A. Jones
Compilation --- D.A. Jones

Inked by D.A. Jones

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

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

Instructions dated May 13, 1938

Remarks: _____

T5692

DATA RECORD T-5692

PHOTOGRAPHS

No.	Date	Time	Scale	Altitude	*Stage of Tide
1367-1369	May 1, 1937	9:45 A.M.	1:10471	6900ft.	1.1ft. above M.L.W.
1394 & 1396	"	10:77 A.M.	"	"	1.2ft. " "
1680-1682	July 8, 1937	11:05 A.M.	"	"	1.1ft. " "

Camera: U.S. Coast and Geodetic Survey nine lens, F=8 $\frac{1}{4}$ inches.

Negatives on file in the Washington Office.

*Stage of the tide is from predicted tables, U.S. C. & G. S., mean range= 1.3 ft., spring range=1.5 ft.

SUPPLEMENTAL SURVEYS

Field Inspection, land areas -----W.C.Russell & D.A.Jones-- Sept.1938
 " " shoreline ----- D.A.Jones----- Sept.1939

The details T-5692 are of the date of the photographs except for items which were located by supplemental surveys as discussed under the descriptive report. ~~Field inspection~~ field inspection as follows: ~~at~~

note of field insp not stated.

1. New Road construction at Lat 39°18' Long 76°-06"
2. " " " " " 39°15.9' " 76°-11"

STATISTICS

CHIEF OF PARTY-----L.W.Swanson
 PLACE OF COMPILATION-----Baltimore, Md.
 SCALE FACTOR-----L.W.Swanson, R.A.Gilmore, & W.C.Russell-----4/20/39
 (1:10,000 x 0.955)
 PROJECTION-----Ruling Machine, Washington Office ----- 5/4/39
 PROJECTION CHECKED BY ----- Washington Office ----- 5/4/39
 CONTROL PLOTTED BY ---- L.W.Swanson & W.C.Russell ----- 5/8/39
 CONTROL CHECKED BY -----R.A.Gilmore----- 5/8/39
 RADIAL PLOT MADE BY-----W.C.Russell & A.L.Wardwell-----5/17/39
 RADIAL POINTS PRICKED BY --R.A.Gilmore & W.C.Russell-----5/17/39
 HYDROGRAPHIC SIGNALS PRICKED BY-----D.A.Jones----- 5/8/39
 ADDITIONAL RADIAL POINTS PRICKED BY -----D.A.Jones-----7/21/39
 AMENDED RADIAL PLOTBY -----A.L.Wardwell & I.M.Zeskind -----10/6/39
 SHORELINE INKED BY -----D.A.Jones -----8/8&9/ 39
 DETAIL INKED BY -----D.A.Jones -----Aug & Oct 39
 SHORELINE (more than 200 meters from opposite shore)-15.9 statute mi.
 SHORELINE (creeks) ----- 5.5 " "
 AREA (land) -----28.5 sq.statute mi.
 AREA (marsh) ----- 2.8 " " "
 ROADS, STREETS & TRAILS -----62.6 statute mi.
 TIME REQUIRED FOR COMPILATION
 PRICKING & LOCATING ADDITIONAL RADIAL POINTS ----- 7 days
 SHORELINE ----- 2 days
 DETAILING -----20 $\frac{1}{2}$ days
 RERUNNING POINTS FOR AMENDED RADIAL PLOT -----1 $\frac{1}{2}$ days
 OVERLAY SHEET ----- 1 day

Total Time required 32 days

DATUM ----- North American 1927

REFERENCE STATION ----- NEWTOWN, 1935 (N.A. 1927, unadjusted)

Lat. 39 18 34.690 1069.8 m.

Long. 76 08 17.882 428.4 m.

PRELIMINARY REVIEW ----- L.W.Swanson

X coordinate: 1,043,827.28 Ft.

Y coordinate: 538,799.50 Ft.

DESCRIPTIVE REPORT
to accompany

①
T5692

AIR PHOTOGRAPHIC SURVEY SHEET NO. T-5692

WORTON CREEK AND FAIRLEE CR.
EASTERN SHORE CHESAPEAKE BAY
MARYLAND

Date of this report ----- Nov. 10, 1939

INSTRUCTIONS

Instructions for Project HT-215, of which this sheet is a part, are dated May 13, 1939.

CONTROL

The control for this sheet consists of nine (9) triangulation stations shown on the sheet by the triangulation symbol. Following is a list of the control and its source:

1. Triangulation executed by J.C. Partington, 1935 (unadjusted, North American 1927 datum)
 NEWTOWN, 1935
 HANDY, 1935
 STOOPS POINT TOWER NO. 9, 1919, 1935
 WINDMILL YACHT CLUB, 1935
 FAIR, 1935
 BUCK, 1935
2. Triangulation from Special Publication No. 114, Triangulation in Maryland (adjusted North American datum)
 WORTON POINT TOWER NO. 8, 1918
 FAIRLEE TOWER NO. 10, 1919
 PLUM POINT TOWER NO. 7, 1918

A list of the above stations and the geographic positions used in plotting same on this sheet appear in the appendix of this report. Also, a copy of the recovery notes for the triangulation stations and the data used to prick the stations on the photographs are in the appendix.

Aside from the control noted on this sheet all available control was used that fell within the area covered by the five sheets radial plotted together, of which this sheet was the most northerly.

SCALE PLOT

The scale plot for this sheet was done in conjunction with the scale plot for sheets 5695, 5698, 5701 and 5703 and was run by flight lines. Proceeding from one end of a flight, celluloid templates made from the photographs showing flight lines and a minimum of radial lines to control points and well defined objects were layed down and oriented so that flight lines intersected adjacent centers and so that the best possible intersections of the most radials existed. In order to hold these orientations the templates were secured together by Scotch Tape.

A comparison then was made between distances taken from triangulation or scaled from charts and the corresponding distances (on 1/10,000 meter bar) as scaled from the resulting layout of templates. This method was carried out for each of the flight lines falling on the five sheets to be radial plotted together. The average resulting ratio, $\frac{\text{Photographic Distance (1/10,000)}}{\text{actual distance}}$ equaled 0.955. The scale factor to which the projections for the map drawings of these five sheets was drawn was therefore $1/10,000 \times 0.955$.

For a list of the distances as scaled and the corresponding distances used in determining the above scale factor see the appendix of this report.

RADIAL PLOT

The main radial plot for this sheet was run in conjunction with sheets 5695, 5698, 5701 and 5703 by the celluloid template method. A detailed description of the running of the plot is given in the descriptive report for sheet T-5698.

The main radial points, large blue circles, located by the above plot were spaced approximately every four inches. Additional points, small blue and green circles for detailing, were radial plotted using the triangulation control and main radial points for orienting the photographs.

Due to a discrepancy found in the main radial plot in the vicinity of the junction of sheets 5698 and 5701 the main radial plot was rerun and amended between the strong control vicinity of latitude $39^{\circ} 17'$ on this sheet and sheet 5701 to the south. The amended radial points are shown on this sheet by large, broken, blue circles.

Points changed on this sheet are in 35' section and show a difference of about 1 m.

There was considerable difficulty in using some of the photographs particularly 1680, in the radial plotting of additional points. This was believed to have been due to tilt. When necessary, therefore, the orientation of these photographs was adjusted proportionally between control and main radial points when additional radials were drawn.

Green circles mark radial points located by two cuts only or otherwise weak intersections.

Eight (8) points were radial plotted and scaled from this sheet to be used with the control for a 1/20,000 sheet covering the upper Chester River. A list of these points and their geographic positions as scaled appear in the appendix. These points are marked on this sheet by double blue circles.

FIELD INSPECTION

CONTROL Six (6) of the triangulation stations on this sheet were pricked on the photographs without difficulty. At three of the stations, however, it was necessary to locate Field Inspection Stations (F.I.S.) since the stations were either underground or were difficult to prick. For notes for the location of the Field Inspection Stations see appendix, also for the recovery notes of the triangulation.

SHORELINE AND HYDROGRAPHIC SIGNALS The entire shoreline of this sheet was field inspected by boat. Previous to the shoreline inspection the water areas adjacent had been sounded; at which time, the hydrographic

signals were pricked by the Hydrographic Party of F.L. Gallon, 1938 on field inspection photographs furnished by this party. No additional hydrographic signals were located. The descriptive notes for the signals appear on Field Inspection Photographs 1367, 1396 and 1397.

DETAIL

All detail was shown on this sheet in accordance with instructions regarding detailing of Chesapeake Bay Sheets dated May 13, 1938.

Marsh areas were shown in accordance to Field Memorandum No. 1, 1938 in general, except that an effort was made to show the mean high water line around all marsh areas. In cases of broken marsh or otherwise indefinite marsh a broken light line showing small indentations at the breaks in the marsh was used.

All buildings except small out-buildings were shown. There were no towns of sufficient area to show only the street layout. Wooded areas were in general small and rather irregular so that it was not considered advantageous to use the stick-up method of showing trees.

Bluffs as indicated by the field inspection were shown on this sheet. In cases of tree covered bluffs, the bluffs were shown with an indication of trees at the top. The bluff symbol on this sheet indicates the presence of a bluff and does not indicate the height of the bluff or its character.

It was necessary to use the projector for detailing from photographs 1680 and 1681 because of scale.

All detail shown on this sheet was taken from the photographs and from the field inspection.

COMPARISONS WITH PREVIOUS SURVEYS

MAP DRAWINGS T-5428 AND T-5436⁷ (1935)

On this sheet, T-5692, there was no justification either from the nine lens photographs or from the field inspection for showing sand shoaling outside the high water line as was shown on both T-5428 and T-5436.

The outer or Chesapeake Bay shoreline on both T-5428 and T-5436⁷ agreed extremely well with the shoreline on this sheet, as did the detail inshore such as roads, trails, fence lines, tree lines and buildings.

In Worton Creek there is as much as 35 meters discrepancy between the shoreline on this sheet and the shoreline on T-5428 and T-5436. Large discrepancies also exist in Tims Creek and Fairlee Creek. These discrepancies are not believed to be due to erosion since 1935. The shoreline on this sheet has been thoroughly checked, the interpretation of the photographs verified, and in so far as the data in this office is concerned, this sheet is believed to show the correct shoreline.

CHART 1226 (Corrected to May 6, 1939)

Gales Wharf at latitude 39° 17.75 and longitude 76° 10.35 is now in

ruins, only a few groups of piling remaining.

The two points at the entrance to Worton Creek latitude $39^{\circ} 17'.2$, longitude $76^{\circ} 10'.1$ and latitude $39^{\circ} 17'.1$, longitude $76^{\circ} 19'.2$ are much smaller than as shown on Chart 1226. These points are subject to considerable washing at ~~stoom~~ high water.

The west point at the entrance to Fairlee Creek latitude $39^{\circ} 16'.15$, longitude $76^{\circ} 12'.6$ has broken up and washed greatly, leaving a small island and shoal area; whereas, chart 1226 shows a solid prominent point.

JUNCTIONS

Complete junction was made with T-5657 to the north of this sheet. Also, shoreline junction was made with T-5695 to the south.

GEOGRAPHIS NAMES

Geographic names shown on this sheet are listed on form M234 appendix.

LANDMARKS

One landmark, Windmill Yacht Club, 1935, is recommended to be charted on chart 1226. It is listed on attached form #567.

REMARKS

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 all radial points and well defined objects along the shoreline and in areas well controled. The error of other detail of importance on the sheet is probably not greater than 10 meters

Respectfully submitted,

Don A. Jones
Don A. Jones,
Surveyor.

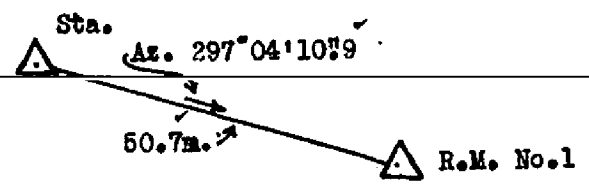
Forwarded approved,

L. W. Swanson
L. W. Swanson,
Chief of Party.

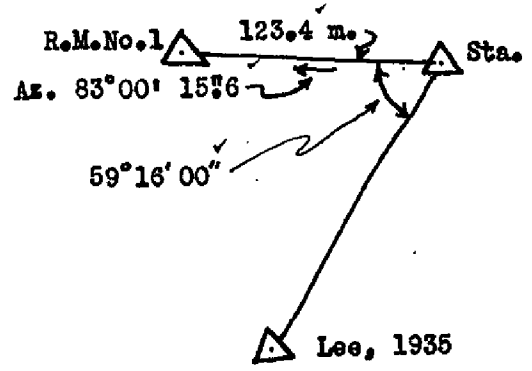
Nov. 10, 1939

NOTES FOR FIELD INSPECTION STATIONS

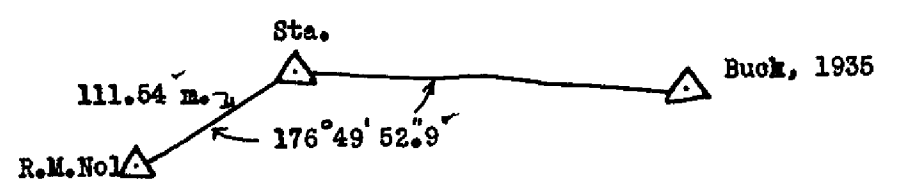
HANDY, 1935



BUCK, 1935



FAIR, 1935



CONTROL STATIONS

NAME	o	'	"	METERS (N.A. 1927 Datum)	SCALE FACTOR APPLIED (0.955) (meters)
✓ NEWTOWN, 1935 NA 1927	39	18	34.690	1069.8 (780.5)	1021.6 (745.4)
	76	08	17.882	428.4 (1009.1)	409.1 (963.7)
✓ HANDY, 1935 NA 1927	39	17	19.945	615.1 (1235.2)	587.4 (1179.6)
	76	10	58.910	1411.8 (26.1)	1348.3 (24.9)
✓ STOOPS POINT TOWER	39	16	45.860	1414.2 (436.1)	1350.6 (416.5)
NO. 9, 1919, 1935 NA 1927	76	12	00.411	9.8 (1428.6)	9.4 (1364.2)
✓ WINDMILL, YACHT CLUB, 1935 NA 1927	39	16	18.601	573.6 (1276.7)	547.8 (1219.2)
	76	10	20.677	496.6 (942.7)	473.3 (900.3)
✓ WORTON POINT TOWER	39	19	07.52	220.9 (1629.3)	211.0 (1556.0)
NO. 8, 1918 (N.A. Datum)	76	11	07.55	184.8 (1252.5)	176.5 (1196.1)
✓ FAIR, 1935 NA 1927	39	15	37.736	1163.7 (686.8)	1111.3 (655.9)
	76	11	51.503	1235.0 (203.7)	1179.4 (194.5)
✓ BUCK, 1935 NA 1927	39	15	42.915	1323.4 (526.9)	1263.8 (503.2)
	76	10	24.756	593.6 (845.1)	566.9 (807.1)
✓ FAIRLEE TOWER NO. 10, 1919 (N.A. Datum)	39	15	12.731	381.6 (1468.7)	364.4 (1402.6)
	76	13	25.882	624.6 (814.1)	596.5 (777.5)
✓ PLUM POINT TOWER NO. 7, 1918 (N.A. Datum)	39	20	07.274	213.3 (1637.0)	203.7 (1563.3)
	76	09	24.187	583.3 (853.7)	557.1 (815.3)

Copied by W.R.C. 4/29/39
 Ckd. by R.A.G. 5/6/39

COMPUTATION OF SCALE FACTOR
for sheets
5692, 5695, 5698, 5701 and 5703

	Actual dist. (meters)	Measured dist. on templates (meters)	Ratio Meas./Actual
HUNTINGFIELD BANK TOWER NO.15 to SWAN POINT TOWER NO.14	5098.1	4825	0.946
SPENCER to SWAN POINT TOWER #14	12728.1	12057	0.947
SPENCER to HUNTINGFIELD BANK TOWER #15	8075.8	7649	0.946
HUNTINGFIELD BANK TOWER NO.#15 to TOWER NO. 12	10652	10116	0.950
HUNTINGFIELD BANK TOWER # 15 to ASHLEY	5269	5030	0.955
BAY to PINE	1998	1905	0.953
BOG to BAY	2734	2567	0.939
SPENCER to LOVE PT. L.H.		4014	
HUNTINGFIELD BANK TOWER #15 to LOVE PT.L.H.	6826	6486	0.950
ASHLEY to ALPIN	1552	1497	0.964
PIONEER to ASHLEY	3651	3561	0.975
ALPIN to PIONEER	3253	3164	0.973
Average ratio			0.955

Scale factor equal 1:10,000 x 0.955

GEOGRAPHIC NAMES

Survey No. T-5692

T5692

[illegible]

Remarks

Decisions

1	* Spelled Fairlees Creek	392762 U.S.G.B.
2		392761
3		392761
4		"
5		"
6		"
7		392761
8	See note on Gales Wharf below.	"
9		393761
10		"
11		392761
12		392761
13		"
14		"
15		393761 U.S.G.B.
16		U.S.G.B.
17		
18		
19	Gales Wharf	} name already deleted from chart 1226.
20	It is recommended that this name be removed from the charts. The wharf is gone and the property is	
21	privately owned which eliminates any public access to the water.	
22		
23		
24	by L. Hector 5/17/41	
25		
26		
27		

RADIAL POINTS SCALED FROM T-5692
for use with control on
1/20,000 SHEET
VICINITY OF UPPER CHESTER R.

26892
T5692

(10)

REVIEW OF AIR PHOTO COMPILATION NO. T. 5692

T5692

Chief of Party: L. W. Swanson

Compiled by: D. A. Jones

Project: H. T. 215

Instructions dated: May 13, 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. 16~~a~~, ~~b~~, ~~c~~, ~~d~~, ~~e~~, ~~g~~ and ~~f~~; 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 were made.

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)

None are 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.

This party has not had access to the Hydrographic Survey made during the season of 1938.

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. 12~~b~~; ~~44~~; and 66 ~~c~~, ~~h~~, ~~i~~)
7. High water line on marshy and mangrove coast is clear and adequate for chart compilation. (Par. 16~~a~~, 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. 22, 23, and 57)

Form 524 is not submitted. Recoverable objects to be used or that were used are described on the overlay sheet.

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

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 North American 1927 the reference station is correctly noted.

14. Junctions with adjoining compilations have been examined and are in agreement. (Par. 66)

15. The drafting is satisfactory and particular attention has been given the following:

1. Standard symbols authorized by the Board of

~~Standard symbols authorized by the Board of~~

- 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:

It should be noted that the Hydrography was done in 1938. The shoreline was in all probability taken from T 5428 and T 5437. There are some changes as noted in this report. This should be checked on those sheets in this area. These changes were checked from all photographs of the areas in question and from them the shoreline as shown on this map drawing is correct.

18. Examined and approved; *The new shoreline was used on the hydrographic sheet 0398*

L. W. Swanson Nov. 10, 1939
Chief of Party

19. Remarks after review in office:

Reviewed in office by:

Examined and approved:

Chief, Section of Field Records

Chief, Section of Field Work

Chief, Division of Charts

Chief, Division of Hydrography and Topography.

DIVISION OF CHARTS

*copy to
field 5/2/41
pg 1*
T5692

Section of Field Records

REVIEW OF AIR PHOTOGRAPHIC SURVEY T-5692

May 1, 1941

There are no contemporary graphic control surveys in this area.

Hydrographic Surveys

H-6372 (1:10,000) 1938.

Comparison of T-5692 with the hydrographic survey was completed by the hydrographic verifying unit.

Previous Topographic Surveys

T-5428 (1:10,000) 1933, air photographic survey.

T-5437 (1:10,000) 1933, air photographic survey.

Refer to page 3 of the descriptive report for a detailed comparison made by the field party between T-5692 and the previous surveys. The discrepancies noted in Fairlee, Wortons, and Tim's Creek are not due to a difference in the main radial plots but are apparently due to errors in interpretation and detailing on the 1933 air photographic surveys. The field inspection in these creeks is more complete on T-5692 and the shoreline on T-5692 has been partially checked by the hydrography.

No comparison has been made between T-5692 and the topographic surveys prior to 1933, as these older surveys were superseded by the 1933 sheets.

T-5692 supersedes the sections of T-5428 and T-5437 which it covers.

Charts 572, 549 and 1226

T-5692 was applied to charts 572 and 549 prior to this review. No changes have been made in T-5692 since its application to these charts.

T-5692 shows numerous small changes in shoreline and interior details for correction of chart 1226.

Radial Plot

The radial plot for this area is discussed in detail on

- 2 -

page 4 of the descriptive report. This area is covered by the earlier nine lens photographs and the plot was ~~extremely difficult because of incomplete calibration of the camera and because of paper distortion of the photographs. Neither the celluloid coated paper nor aluminum mounted paper were available for the photographs used in plotting the sheets in this area.~~

The adjustments of the plot in the south east section of the sheet amounted to about 1 mm. The accuracy of the plot can be determined only by ground check. It is accepted as sufficiently good for charting, and recoverable points in the eastern half of the sheet are thought to be within 1 mm. of correct geographic position. There was more control on the western half of the sheet and a check against the previous surveys was available in this area. Recoverable points in this section of the sheet are probably within 1/2 mm. of correct position.

Field Inspection and Detailing

The field inspection and the detailing of T-5692 are complete.

Changes made in the roads at latitude 39-18.6, longitude 76-06 and latitude 39-15.9, longitude 76-11 are not indicated on the photographs or in the field inspection notes, but were, no doubt, made from local knowledge of the field party.

T-5692 was compiled as a smooth drawing and is in very good condition for reproduction.

Reviewed in office by D. H. Benson, March 1941.

Inspected by B. G. Jones, March 1941. *and Dec. 16, 1942.*

<i>Robert W. King</i> Chief, Section of Field Records.	Examined and approved: <i>J. B. Jordan</i> Chief, Division of Charts.
<i>K. T. Adams</i> Chief, Topography Section.	<i>G. H. Rose</i> Chief, Division of Coastal Surveys.

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 J. P. D.

Positions checked by J. P. D.

Grid inked on machine by J. P. D.

Intersections inked by J. P. D.

Points used for plotting grid:

$\phi = 39^{\circ}-18'$ $\lambda = 76^{\circ}-13'$	<u>X = 1,021,683.42</u> <u>Y = 535,090.09</u>	$\phi = 39^{\circ}-18'$ $\lambda = 76^{\circ}-07'$	<u>X = 1,049,982.60</u> <u>Y = 535,348.43</u>
$\phi = 39^{\circ}-16'$ $\lambda = 76^{\circ}-13'$	<u>X = 1,021,787.60</u> <u>Y = 522,949.71</u>	$\phi = 39^{\circ}-16'$ $\lambda = 76^{\circ}-07'$	<u>X = 1,050,100.08</u> <u>Y = 523,208.17</u>
$\phi = 39^{\circ}-17'$ $\lambda = 76^{\circ}-10'$	<u>X = 1,035,888.46</u> <u>Y = 529,145.21</u>		<u>X</u> <u>Y</u>
	<u>X</u> <u>Y</u>		<u>X</u> <u>Y</u>

Triangulation stations used for checking grid:

- | | | |
|--------------------------|--|----------|
| 1. <u>A Newton, 1935</u> | $X = 1,043,827.28$
$Y = 538,779.50$ | 5. _____ |
| 2. _____ | | 6. _____ |
| 3. _____ | | 7. _____ |
| 4. _____ | | 8. _____ |