9808-9814 INCL

Form 504
U. S. COAST AND GEODETIC SURVEY
DEPARTMENT OF COMMERCE
PECCEIPTUE PEPCET
DESCRIPTIVE REPORT
Type of Survey TOPOGRAPHIC
Field No. Ph-70A(51) Office No. T-9E68-14, Incl
LOCALÌTY
StateVIRGINIA
General locality FAIRFAX
Control 1000my mercuning the management of the control of the cont
Locality PENDER
'
194/51
CHIEF OF PARTY
H. A. Paton, Chief of Field Party.
H. A. Paton, Baltimore PhotogrammetricOffic
LIBRARY & ARCHIVES
Ø 00 10 E)
DATE Dec 28-1951

DATA RECORD

T-9808 to T-9814 incl.

Project No. (ii): Ph=70A (51)

Quadrangle Name (IV):

Field Office (II):

Baltimore, Md.

Chief of Party:

H.A.Paton

Photogrammetric Office (III): Baltimore, Md.

Officer-in-Charge:

H.A.Paton

Instructions dated (II) (III): 9 March 1951

Copy filed in Division of

Photogrammetry (IV)

Method of Compilation (III): Graphic and Kelsh Plotter

Manuscript Scale (III):

1:4,800

Stereoscopic Plotting Instrument Scale (III): 1:4,800

Scale Factor (III): None

Date received in Washington Office (IV): May, 1951 Date reported to Nautical Chart Branch (IV):

Applied to Chart No.

Date:

Date registered (IV): 11-27-51

Publication Scale (IV):

Publication date (IV):

Geographic Datum (III): N.A. 1927

Vertical Datum (III):

Mean sea level except as follows: Elevations shown as (25) refer to mean high water Elevations shown as (5) refer to sounding datum i.e., mean low water or mean lower low water

Reference Station (III): PENDER, 1943

Lat. 38° 52' 55.073"(1698.2m) Long.: 77° 22' 13.973"(336.8m)

Adjusted XXXXXXXXXX

Plane Coordinates (IV):

State: Va.

Zone:

N. (Lambert)

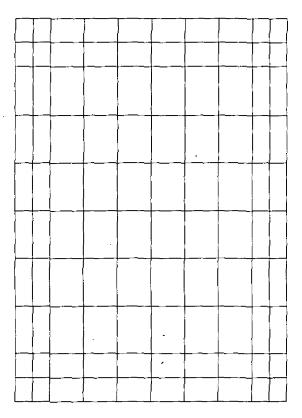
X=

Roman numerals indicate whether the item is to be entered by (II) Field Party, (III) Photogrammetric Office, or (IV) Washington Office.

When entering names of personnel on this record give the surname and initials, not initials only.

Form T- Page 1

M-2618-12(4)



Areas contoured by various personnel (Show name within area)
(II) (III)

See field records and Kelsh Plotter work sheets

DATA RECORD

Field Inspection by (11): Partial - by Various partie:	S Date: Jan-April 1951
Planetable contouring by (II):	Date: 4 ** 7
Completion Surveys by (ii):	Date: 15 11 11
Mean High Water Location (III) (State date and method of location):	
Projection and Grids ruled by (IV): $\mathbf{T.L.J.}$	Date: 2-13-51
Projection and Grids checked by (1V): $H_{\bullet}D_{\bullet}W_{\bullet}$	Date: 2-15-51
Control plotted by (III): J.Honick	Date: 2-26-51
Control checked by (III): R.M. Whitson	Date: 2-27-51
Radial Plot destablished F. J. Tarcza	Date: 3-22-51
Planimetry	Date:
Stereoscopic Instrument compilation (III): Contours Wash. Office	Date:
Manuscript delineated by (III): D.M.Brant R.R.Hartley A.C.Rauck L.A.Senasack J.Y.Councill J.Honick J.C.Richter R.M.Whitson J.D.McEvoy	Date: 5-7-5/
Photogrammetric Office Review by (III): R.Glaser	Date: 5-8-51
Elevations on Manuscript	Date:
checked by (II) (III): R.Glaser	5-8-51

Form T-Page 3

M-2618-12(4)

U.S.C.& G.S. type "O" camera-focal length, 6" Camera (kind or source) (NI): U.S.C.& G.S. type "D" camera-focal length, 12"

Number 2 2 5 1 PHOTOGRAPHS (III) Date Time Scale Stage of Tide 51-0-36 to 51-0-60 incl 1:4800 51-0-99 to 51-0-123 incl. 51-0-130 to 51-0-154 incl. 51-0-163 to 51-0-189 incl. 51-0-206 to 51-0-225 incl. 51-D-43, 45, 47, 48, 50, & 66 51-D-68 to 51-D-73 incl.)Field 51-D-125 to 51-D-133 incl.)only 51-D-167 to 51-D-174 incl. 51-D-327 and 51-D-329 Tide (III) Ratio of Mean | Spring Ranges Range Range Reference Station: Subordinate Station: Subordinate Station: Washington Office Review by (IV): Charles Hanarich Date: 3/ May 1954 Final Drafting by (IV): Date: Compilation
Disting verified for reproduction by (IV): Date: Proof Edit by (IV): Land Area (Sq. Statute Miles) (III): Shoreline (More than 200 meters to opposite shore) (III): Shoreline (Less than 200 meters to opposite shore) (III): Control Leveling - Miles (II): Number of Triangulation Stations searched for (II): Recovered: Identified: 17 Identified: Number of BMs searched for (II): Recovered: 6 none Number of Recoverable Photo Stations established (III): Number of Temporary Photo Hydro Stations established (III): none

Remarks:

Form T-Page 4

M-2618-12(4)

Summary to Accompany Descriptive Report for T-9808 to T-9814 incl.

Topographic maps T-9808 to T-9814 inclusive comprise project Ph-70A(51); it is in the vicinity of Pender about 3 miles west of Vienna, Virginia. The field operations consisted of the recovery and establishment of horizontal and vertical control, limited field inspection, and planetable work for the whole area except for a narrow strip along the west edges of sheets T-9812 and T-9814, and the east edges of sheets 9811 and 9813, which was done by the Kelsh Plotter. All the sheets were field edited.

This special work was initiated by and executed for the CAA within the limits of the area designated by them, and chiefly for the purpose of obtaining 5-foot contour intervals at a scale of 1:4800. These maps will not be published. Each sheet is 23 in latitude and 23 in longitude.

No specific field project instructions were written; the organization of the work, including general supervision and other related phases, were directed by the Washington Office. No field inspection, field edit, or other special reports were submitted from the field.

The registered copies under T-9808 to T-9814 will include one cloth-back copy for each map manuscript.

> Charles Hanavick Charles Hanavich

PHOTOGRAMMETRIC PLOT REPORT

PROJECT PH-70A(51)

SURVEYS T-9808 to T-9814, incl.

21. AREA COVERED

This radial plot covers the areas of Surveys T-9808 to T-9814, inclusive, located west of Fairfax, Virginia. All of these are topographic surveys.

22. METHOD - RADIAL PLOT

<u>Map Manuscripts</u> - The map projections are on vinylite sheets, at a scale of 1:4800, ruled with polyconic projections in black, and Virginia North (Lambert) grid in red. No base sheets were furnished.

The control stations and substitute stations were plotted using beam compass and meter bar.

A sketch showing the layout of surveys, distribution of control and photograph centers, and a list of control stations are attached to this report.

Photographs - All photographs used in this radial plot are single lens photographs taken with the Type O camera, focal length 152.37 mm (6 inches). These are ratioed prints at a scale of 1:4800, the contact scale being about 1:8000. One hundred and twenty-two (122) photographs were used, numbered as follows:

51-0-36 to 51-0-60, incl. 51-0-99 to 51-0-123, incl. 51-0-130 to 51-0-154, incl. 51-0-163 to 51-0-189, incl. 51-0-206 to 51-0-225, incl.

There was another flight of photographs furnished for the western edge of this radial plot, 51-0-70 to 51-0-90, incl. Since the limit of compilation is east of the survey limits as ruled and the photographs used adequately cover the required area of compilation, this flight was not prepared for use.

All symbols used on the photographs are standard as prescribed in the Topographic Manual.

Templets - Acetate templets were made of all photographs used. Several photographs were checked by using the master templet furnished by the Washington Office. The errors due to paper and film distortion were found to be very small, or negligible and it was decided to omit the use of a master templet in order to expedite the making of templets due to the urgency of the work.

Closure and Adjustment to Control

Vinylite base sheets, previously furnished for other projects were adapted for use in this radial plot. A 2000 foot grid was ruled on the map manuscript. This does not correspond to the base grid but it was possible to use every fifth grid line for matching the base sheets.

The radial plot was begun on the middle flight, photographs 51-0-113 to 51-0-120, where there was a fix in two areas on this flight. It was found that considerable adjustment was necessary in order to hold all control stations even on this flight where good control was available. Other flights required more time and adjustment to obtain a satisfactory radial plot. A large number of photographs show evidence of tilt. A tilt determination was made on one, 51-0-55, and a tilt of 1° 50' was determined. About 20% of the photographs were tilted by what appears to be a similar amount, or about 2°. Many others show evidence of smaller amounts of tilt. This made it difficult to construct an accurate radial plot. In two areas, near the junction of Surveys T-9809 and T-9811, and on the western side of Survey T-9812, the tilted photographs made it impossible to get good intersection of radial lines although adequate control was available. In the latter area, three consecutive photographs, 51-0-108 to 51-0-110 were considerably tilted. All control stations were held in the radial plot. The northern part of Survey T-9803 and the southern half of Survey T-9814 are known to be weak due to lack of control. However, in these areas the radial plot was extended beyond the designated limits of compilation to include all photographs available. The northeast area of Survey T-9810, also outside the area of compilation, may be weak too, though the radial plot appears good.

23. ADEQUACY OF CONTROL

Control stations furnished were adequate for a normal radial plot. However, with the large number of tilted photographs, there was difficulty in obtaining a satisfactory radial plot in some areas where there were gaps between control stations. All control stations were held in this plot, though some adjustment was necessary to hold several of them. A small error in control could not be isolated with the photography available and no serious discrepancies were found. Outside the area designated for compilation (as indicated in red on sketch) the radial plot was extended in three areas, without adequate control, to include all office photographs furnished within the limits of the surveys.

24. SUPPLEMENTAL DATA

No graphic control surveys were available for use in this radial plot.

25. PHOTOGRAPHY

The photographic coverage is adequate and definition of photographs is good. There was snow on the ground at time of photography. There is svidence of tilt in a large number of photographs. About 20% of them appeared considerably tilted, probably about 2°. A tilt determination, made on one of these, 51-0-55, showed 1°50' of tilt. A few appeared to be tilted to a greater degree than this. With photographs taken at a low altitude (about 4000') and at a large scale, the relief of terrain in this area causes considerable displacement. In tilted photographs this

introduces lateral errors in radial lines which caused difficulty in laying a good radial plot. Due to urgency of the work, it was considered impractical to make tilt determination on all tilted photographs.

Respectfully submitted

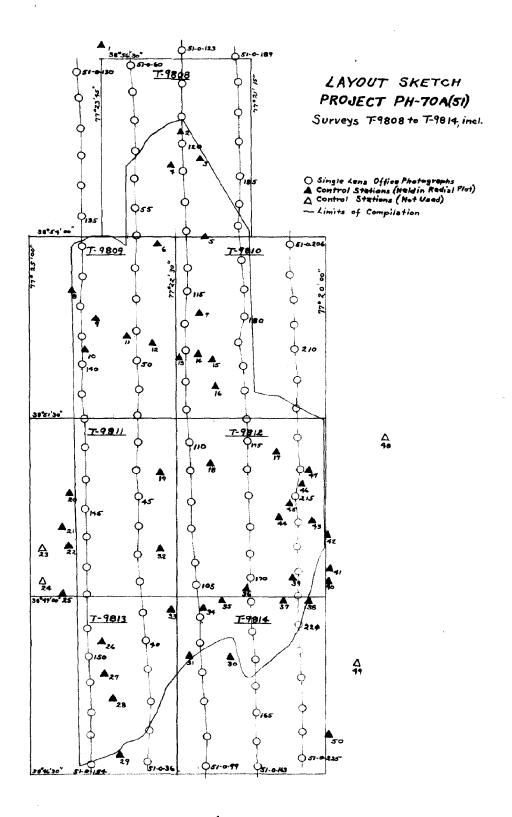
rank J. Tarcza

Cartographic Engineer

NO.	STATION STATION	IDENTIFICATION
1. 2. 3. 4. 5.	32 WSM 400, (USGS), 1949 33 WSM 431, (USGS), 1949 33 WSM " " 33 WSM " " 34 WSM 481, (USGS) 1949	Sub. Pt. No. 3 Sub. Pt. No. 2 Sub. Pt. No. 1 Sub. Pt. No. 2
• 7. 8. 9.	34 WSM 481 (USGS) 1949 PENDER, 1943 CONTROL POINT 70A-6 CONTROL POINT 70A-4 CONTROL POINT 70A-5	Sub. Pt. No. 1 Sub. Pt. Direct Direct Direct
11. 12. 13. 14.	CONTROL POINT 70A-3 CONTROL POINT 70A-2 CONTROL POINT 70A-1 PENDER LOOKOUT TOWER, 1943 PENDER LOOKOUT TOWER, 1943	Direct Direct Direct Direct Sub.Pt.
16. 17. 18. 19. 20.	PTS. NO.6 (USGS) 1949 TT4 HDW (USGS) 1948 TT6 RCD (USGS) 1949 TT6 RCD (USGS) 1949 TT 5 HDW (USGS) 1948	Sub.Pt. Sub.Pt. No.2 Sub.Pt. No.1 Sub.Pt.
21. 22. 23. 24. 25.	CONTROL POINT 70A-7 CONTROL POINT 70A-8 CONTROL POINT 70A-9 CONTROL POINT 70A-10 CONTROL POINT 70A-11	Direct Direct Direct (Not used) Direct (Not used) Direct
26. 27. 28. 29.	CONTROL POINT 70A-12 CONTROL POINT 70A-13 CONTROL POINT 70A-14 D 232 (USGS) 1949 CONTROL POINT 70A-15	Direct Direct Direct Sub.Pt. Direct (Not used)
30. 31. 32. 33. 34. 35.	TT4 RCD (USGS) 1949 CONTROL POINT 70A-24 TT5 RCD (USGS) 1949 CONTROL POINT 70A-17 CONTROL POINT 70A-18 CONTROL POINT 70A-19	Sub.Pt. Direct Sub.pt. Direct Direct Direct
● 36. 37. 38. 39. 40.	CONTROL POINT 70A-20 CONTROL POINT 70A-23 CONTROL POINT 70A-22 CONTROL POINT 70A-21 CONTROL POINT 70A-16	Direct Direct Direct Direct Direct
41. 42. 43. 44. 45.	CONTROL POINT 70A-31 CONTROL POINT 70A-25 CONTROL POINT 70A-26 CONTROL POINT 70A-27 CONTROL POINT 70A-28	Direct Direct Direct Direct Direct

No.	Name	Identification
46.	CONTROL POINT 70A-29	Direct
47.	CONTROL POINT 70A-30	Direct
48.	TT 3 HDW (USGS) 1948	Sub. Pt. (Not used)
49.	PTS NO. 12 S (USGS) 1920	Sub. Pt.
50.	FAIRFAX, 1943	Sub. Pt.
51.	TT3 RCD (USGS) 1949	Sub.pt. (Not used)
52.	TT2 RCD (USGS) 1949	Sub.Pt. (Not used)

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Photogrammetry

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MAP I-		PROJE	PROJECT NO. : " (C TYLE)	SCALE OF MAP = 33000		SCAPE FACTOR)R
STATION	SOURCE OF INFORMATION (INDEX)	DATUM	LATITUDE OR V-COORDINATE LONGITUDE OR x-COORDINATE	DISTANCE FROM GRID IN FEET, OR PROJECTION LINE IN METERS FORWARD (BACK)	DATUM	N.A. 1927 - DATUM DISTANCE FROM GRID OR PROJECTION LINE IN WETERS FORWARD (BACK)	FACTOR DISTANCE FROM GRID OR PROJECTION LINE IN METERS
33 WSM 431	USGS Fairfax Duad P.11	N.A. 1927,	38 55 27.52			7 0	
(((((((((((((((((((P. II.	# #	3 52				
SUB PT. 32 WSW-460			56				
SUB. PT. No. 2 34 WSM - 481	V						
SUB.PT. NO. 1:33			38 55				
SUB PT. No.2 33 WSM 431				- 79716		1617.6 (232.6) 918.8 (526.5)	
SUB. PT. No. 3			38 55 77 22			853.8 (996.4) 483.0 (962.39)	
* Beyond Survey	Survey Limits		,				
I FT = 3048006 METER STEP COMPUTED BY	aj nberg reley	70	DATE 3/83/51	CHECKED BY. R.M.	R.M.Whitson	DATE 2-26-51	M-2388-12

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STATION	SOURCE OF INFORMATION	DATUM	LATITUDE OR V-COORDINATE LONGITUDE OR x-COORDINATE	DISTANCE FROM GRID IN FEET. OR PROJECTION LINE IN METERS	DATUM	N.A. 1927 - DATUM DISTANCE FROM GRID OR PROJECTION LINE IN METERS		FACTOR DISTANCE FROM GRID OR PROJECTION LINE IN METERS
	(2001)			FORWARD (BACK)		FORWARD		FORWARD (BACK)
(nsgs)	USGS	N.A.	38 53 52.62			1622.59	(227.57)	
1949	Quado P.	Pre:443.	77 22 53.03			1277.92	(167.96)	
			38 53			1611.1	(239.1)	
34 WSM-481			77 22			1274.7	(171.2)	
CONTROL POINT 70-Traverse	Traverse	×χ	2,318,394			12081	(1,89,5)	
A-2		Ϋ́	441.736			529.1	(80.5)	
CONTROL POINT 70-A		×	2,316,142			43.3	(566.3)	
3	.	Yr	442,879			267.9	(341.7)	
CONTROL POINT		≠ X	2,313,745			531.9	(77.7)	
70-A.4	=]= [444,027			8.2	(4.109)	
CONTRUL POINT	, E	=X	2,311,988			605.9	(3.7)	i i
70-A.5		Τ=	441,416			431.6	(178.0)	
CONTROL POINT		×	2,311,556			474.3	(135.3)	i
70-A-6	=		446,168			51.2	(558.4)	
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Photogrammetry

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MAP T. 9810		PROJECT NO	T NO. Ph-70-A(51)	SCALE OF MAP 1:4800	90	SCALE FACTOR	JR.
STATION	SOURCE OF INFORMATION	DATUM	LATITUDE OR y-COORDINATE LONGITUDE OR x-COORDINATE	DISTANCE FROM GRID IN FEET,	DATUM F	N.A. 1927 - DATUM DISTANCE FROM GRID OF PROJECTION LINE IN METERS	FACTOR DISTANCE FROM GRID OF PROJECTION LINE
	(INDEX)			FORWARD (BACK)		FORWARD (BACK)	FORWARD (BACK)
PENDER, 1943	(SSSSSS)	N.A.	38 52 55.073			1698.23 (151.93)	
	626	1927	77 22 13.973			336.79 (1109.39)	
PENDER LOOKOUT	(NSC&GS)	*	38 52 20.83			642.32 (1207.85)	
7442	153 ₇	:	77 22 06.28			151.39 (1295.03)	
	USGS Fairfax	=	38 52 04.24			1	
(U.S.G.S.) 1911		Pre.Adj.	77 21 52.55		. ,		
		١	38 52			540.1 (1310.1)	
TOOUTON TOMER			77 21		•		
SUB. PT. PENDER,			38 52			1698.42 (151.74)	
1943			77 22			205.39 (1240.79)	
CONTROL POINT	Traverse	=X	2,320,875				
70-A-1	7	<u>;</u>	440,631			192.3 (417.3)	
SUB, PT.			Flotted graphically				
PTS No.6(USGS) 1911	11						
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1 FT. * 3048006 METER	, , , , , , , , , , , , , , , , , , ,		11/00/0	The second of th			M - 2388 - 12
COMPUTED BY: 0.000	Lunerg	V O	DATE 4/23/51	CHECKED BY. R.M. Whitson	hitson	DATE 2-26-51	.51

STATION	SOURCE OF	DATUM	LATITUDE OR y-COORDINATE LONGITUDE OR x-COORDINATE	DINATE	DISTANCE FROM GRID IN FEET. OR PROJECTION LINE IN METERS	DATUM	N.A. 192. DISTA FROM GRID OR P	N.A. 1927 - DATUM DISTANCE FROM GRID OR PROJECTION LINE IN METERS	FACTOR DISTANCE FROM GRID OR PROJECTION LINE IN METERS
	(INDEX)		-		FORWARD (BACK)		FORWARD		FORWARD (BACK)
T.T. 5 HDW	USGS FA TRFAY	N.A.	38 50 22,53	53			72.769	(1155.42)	
(USGS) 1948	90459	Fre.Adj.	77 24 18.91	91			456.07	(661.01)	
T.T. 5 R.C.D.	=		38 49 38.	05			1173.31	(676.85)	
(USGS) 1949	Pg. 8	=	77 23 05.24	77	•		726.40	(1320,92)	
SUB. PT. TT 5		۰ ۴					1172.4	(677.8)	
KCD		•	77 22				1150.3	(297.0)	
CONTROL POINT	=		426,610				185.9	(423.7)	
/ J_w_o/	:		2,311,388				423.1	(186.5)	
CONTROL POINT	:		425,365				416.1	(193.5)	
70-4-8	2:		2,311.948				593.8	(15.8)	
CONTROL POINT	r		424,804				245.1	(364.5)	
70-A-9	=		2, 309, 630				496.8	(112.8)	
CONTROL POINT	f		44رمرم مرلاویکه				594.4	(15.2)	
70-A-10	H		2,309,527				7-597	(2,4/1)	
SUB. PT.	Plotted graphically	=	38 50						:
TT 5 HDW (USGS)	•		77 24						
		•							
			•						

1.17.11		1					
STATION	SOURCE OF INFORMATION (INDEX)	DATUM	LATITUDE OR y-COORDINATE LONGITUDE OR x-COORDINATE	TE DISTANCE FROM GRID IN FEET. TE OR PROJECTION LINE IN METERS FORWARD (BACK)	DATUM	N.A. 1927 - DATUM DISTANCE FROM GRID ON PROJECTION LINE IN METERS FORWARD (BACK)	FACTOR DISTANCE FROM GRID OR PROJECTION LINE IN METERS FORWARD (BACK)
TT-4-HDW	USGS	N.A.	38 51 02.12			65.37 (1784.79)	
(nsgs)_1948	Kalriax Quad P. 28 Pre. Adj	3Pre.Ad	77 20 32.71			788.77 (658.07)	
TT-6-RCD	#	#	38 50 42.90			1322.86 (527.30)	
(USGS) 1949	Pg. 9		77 22 27.56			664.64 (782.32)	
SUB. STA.		'				1837.4 (12.8)	
TT-4-HDW			77 20			1242.8 (204.1)	
Sub. Sta. No. 2			38 50			1563.2 (286.9)	
TT-6 RCD			77 21,			1190.0 (257.0)	
SUB. STA. No. 1	۲		38 50			1166.6 (683.6)	
TT-6-RCD	181 -1 40		77 22			1062.9 (384.0)	
CONTROL POINT	Field	N.A.	421,995.78			١.	
70-A-16	P. 4	1927	2,332,345.11			105.2 (504.4)	
CONTROL POINT			420,855.56				
70-4-19	=	#	2,324,424.25			129.3 (480.3)	
CONTROL POINT	r	, :	421,688.77			514.7 (94.9)	
70-A-20	=	#	2,326,679.44			207.1 (402.5)	
CONTROL POINT		,	422,548.80	1		167.3 (442.3)	
70-A-21	=	=	2,329,874.81			571.4 (38.2)	
CONTROL POINT	•	,	426,258,18			78.7 (530.9)	
70-A-25	11	=	2,331,864.17				
CONTROL POINT	, :	1	427,172.07			357.2 (252.4)	
70-A-26	=	=	2,330,596.37			181.8 (427.8)	
CONTROL POINT	4	,	427,179.75			359.6 (250.0)	
70-A-27	=	=	2,328,174.71			53.3 (556.3)	
1 FT3048006 METER							M - 2388-12

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STATION Supparation Control							000	H	
Communication Communicatio Communication Communication Communication Communication	STATION	SOURCE OF INFORMATION		LATITUDE OR ""COORDINATE LONGITUDE OR ""COORDINATE	DISTANCE FROM GRID IN FEET. OR PROJECTION LINE IN METERS	DATUM	N.A. 192 DIST FROM GRID OR	7 - DAIUM FANCE PROJECTION LINE	FACTOR DISTANCE FROM GRID OR PROJECTION LINE IN METERS
N. A. 1,23,109,17 216.2 (393.4) P. A. 1,239,304,87 397.7 (211.9) R. 1,230,204,87 397.7 (211.9) R. 2,320,577.52 512.9 (438.6) R. 2,322,397.02 121.0 (488.6) R. 2,322,397.02 225.4 (342.2) R. 2,322,397.02 225.4 (348.2) R. 2,322,397.02 235.4 (348.2) R. 2,329,052.17 235.7 (288.9) R. 2,329,052.17 235.7 (288.8) R. 2,329,052.17 235.7 (288.8) R. 2,329,052.17 235.7		(INDEX)			FORWARD (BACK)		FORWARD	(BACK)	FORWARD (BACK)
1927 2,329,304,87 397.7 (211.9)		Field	N.A.	428,709.17			216.2	(393.4)	
1	70-A-28	Comp P.4	1927	2,329,304.87			397.7	(211.9)	
1,329,939.27 591.1**(18.5) 4,33,705.17 519.7 (89.9) 1,42,907.75 776.0 (433.6) 1,42,907.75 776.0 (433.6) 1, 2,332,397.02 776.0 (488.6) 1, 2,332,397.02 725.4 (884.2) 1, 2,332,397.65 343.7 (265.9) 1, 2,323,052.17 320.7 (288.9) 2,323,052.17 320.7 (288.9) 3,30,73,73,73,73,73,73,73,73,73,73,73,73,73,	CONTROL POINT	=		430,142.21			43.3	(566.3)	
	70-A-29		:	2,329,939.27			1*165	(18.5)	-
	CONTROL POINT			431,705.17		1	519.7	(89.9)	
121.0 (488.6) 121.0 (488.6	70-A-30	=	t	2,330,577.52			176.0	(433.6)	
" 2,332,397,02 121.0 (488.6) " 420,739,55 225.4 (384.2) " 2,331,127.66 343.7 (265.9) " 2,329,052.17 249.2 (360.4) " 2,329,052.17 220.7 (288.9) " 320.7 (288.9) " 340.51	CONTROL POINT		,	422,907.75			276.7	(332.9)	
" " 2,331,127.66 34.2) " " 2,331,127.66 34.2) " " 2,329,052.17 320.7 (265.9) " " 2,329,052.17 320.7 (288.9) " " " 2,329,052.17 320.7 (288.9) " " " " 3,329,052.17 320.7 (288.9) " " " " " " " " " " " " " " " " " " "	10-A-31	E	F	2,332,397.02			121.0	(9.884)	
" " 2,331,127.66 343.7 (265.9) "	CONTROL POINT			420,739.55				(384.2)	
### ### ##############################	70-4-22	=	z	2,331,127.66				(265.9)	
2,329,052.17 320.7 (288.9)	CONTROL POINT	, 3		420,817.61				(360.4)	
	(C-4-2)	•	=	2,329,052.17			320.7	(288.9)	
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Photogrammetry

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R. M. Whitson DATE 2-23-51 CHECKED BY J.Steinberg DATE								
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STATION	SOURCE OF	DATUM	LATITUDE OR , LONGITUDE OR	LATITUDE OR y.COORDINATE LONGITUDE OR x.COORDINATE	DISTANCE FROM GRID IN FEET, OR PROJECTION LINE IN METERS	DATUM	N.A. 1927 DISTA FROM GRID OR P	N.A. 1927 - DATUM DISTANCE FROM GRID ON PEFERS IN MEFERS	FACTOR DISTANCE FROM GRID OR PROJECTION LINE IN METERS
	(INDEX)	ļ			FORWARD (BACK)	,	FORWARD	(BACK)	
UDH-7-LL	ຮູ້ຮູ້ວິ	N.A.	38 48	21.86			20.476	(1176.09	
646	Guad. P. 7Pre. Adj.	Pre. Kaj.	77 22	19.44			469.07	(978.67)	
FAIRFAX, 1943	0-5732 0-5732	N.A.	947 85	53.196			1640,35	(209.81)	
	625	1927	47 19	44.385			1071.32	(376.90)	
SUB. PT.			38 48				388.13	(37,62.03)	
TT-4-RCD			77 21				1085,33	(362.41)	
SUB. PT.			38 47				72.37	(1777.79)	
FAIRFAX			77 19	l			57"9171	(31.77)	
CONTROL POINT	Field	N.A.	419,580.89	6	-		481.9	(127.7)	
70-A-18	Comp F. 4	1927	2,322,047.66	9			74.5	(595.1)	
CONTROL POINT	Field		416,380.49	6:			1) 0.911	(93.6)	
70A-24	P.4	=	2,321,650.38	80			503.0 (106.6)	(106.6)	
CONTROL POINT		ŕ	419,430.23	33		!	435.9	(173.7)	
70-A-17	t	±	2,320,193.48	8				(550.6)	
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1 FT = 3046006 METER Stainhong	phend		17/86/6		Ma	B. M. Whitson			M-2366-12
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COMPILATION REPORT

T-9808 to T-9814 inclusive

Up to the time of this writing, no field inspection report for the seven surveys in this project has been received at the compilation office. It is assumed that when the field report is completed it will become a part of this descriptive report. See "Sommery to Accompany."

Descriptive Report

31. DELINEATION

The greater part of the project was compiled graphically; however, the Kelsh plotter was used to compile planimetry and hypsometry in the area covered by photographs 51-0-102 through 51-0-109 and is contained on seven Kelsh plotter work sheets.

While the higher altitude "D" photographs were much more desirable for graphic compilation, some difficulty was encountered in locating the same pass points and detail points originally chosen for use with the "O" photographs and plotted on the manuscripts. In some areas where consecutive "D" photographs were available, their approximate centers were located on the manuscripts by holding to planimetric detail; and detail points common to both the "O" and "D" photographs were then radially plotted on the manuscripts.

Only partial field inspection was received for the areas of T-9808, T-9809, and T-9810. No field inspection whatever, except of course, for contours, was available for the areas of T-9811, T-9812, T-9813, and T-9814.

32. CONTROL

See Radial Plot Report. No further comment.

33. SUPPLEMENTAL DATA

None.

34. CONTOURS AND DRAINAGE

The only changes or adjustments made to the contouring other than those required by relief displacements were in reconciling the Kelsh plotter contours with those established by the planetable surveys. This was necessary only in the area where these surveys joined. In all cases the Kelsh plotter contours were adjusted to be consistent with spot elevations as shown on the contoured field inspection photographs.

It is noted that the topographic expression as depicted by the field survey portrays a gently rolling countryside while the Kelsh plotter contours represent a rather rugged terrain. The field edit party will no doubt dispose of this discrepancy. See see heading 61 of the Review Report.

35 thru 37 Not applicable.

38. CONTROL FOR FUTURE SURVEYS

None.

39. JUNCTIONS

All junctions between surveys in this project were carefully made and are in agreement.

HORIZONTAL AND VERTICAL ACCURACY

Weak areas, due to insufficient horizontal control and tilted photographs, has been adequately discussed in the photogrammetric plot report .

Any subnormality in vertical accuracy will probably be attributable to the use of low altitude, tilted photographs for graphic compilation.

41 thru 45.

Inapplicable.

46. COMPARISON WITH EXISTING MAPS

The manuscripts were compared with the USGS Fairfax, Va. quadrangle scale 1:62,500 edition of 1915, reprinted in1944.

47. Inapplicable

Respectfully submitted

9 May 1951

Raymond Glaser

Cartographic Aid

Approved and forwarded

Hubert Q. Paton

Hubert A. Paton

Comdr., C&GS

Officer in Charge

Baltimore Photo. Office

48. GEOGRAPHIC NAME LIST

Braddock Road

Castle Creek Clifton

* Colchester Road

Difficult Run

Johnny Moore Creek

* Lee Highway or Lee Boulevard Little Bifficult Run Little River Road Little Rocky Run

Pender Popes Head Creek

Rocky Run

Sisson Southern R.R.

U.S. 29 U.S. 50 U.S. 211

Warrenton Road

- * Willow Spring
- * Names to be verified

Verified during field edit of noted correctly on map manuscripts.

50 - PHOTOGRAMMETRIC OFFICE REVIEW

1. Projection and grids	
,	9. Manuscript numbers 9. 4. Manuscript size
	CONTROL STATIONS
5. Horizontal control stations of third-order o	or higher accuracy 6 Recoverable horizontal stations of i
than third-order accuracy (topographic statio	ons)7. Photo hydro stations8. Bench marks £
9. Plotting of sextent fixes 10. Pho	ons)7. Photo hydro stations8. Bench marks otogrammetric plot report11. Detail points
	ALONGSHORE AREAS
	(Nautical Chart Data)
12. Shoreline13. Low-weter line	14. Rocks, sheals, etc15. Bridges16.
	18. Other alongshore physical features 19. Other alon
shore cultural features	
1	PHYSICAL FEATURES
20. Water features 21. Natural gre	PHYSICAL FEATURES
instrument contours 24. Contours	in general 25. Spot elevations 26. Other phys
fe atures	
27. Roads 28. Buildings 1	CULTURAL FEATURES _ 29. Railroads 30. Other cultural features
	BOUNDARIES
31 . Boundary lines 32. Public tanc	d-lines
6	MISCELLANEOUS
33. Geographic names34. Junction	ns 35, Legibility of the manuscript 36. Discrepai
overlay 37. Descriptive Report	38. Field inspection photographs 39. Forms
40. Jurmond Tlase	Joseph Steinbrerg
/ Reviewer	Spervisor, Review Section or Whit
41. Remarks (see attached sheet)	
	DITIONS AND CORRECTIONS TO THE MANUSCRIPT
FIELD COMPLETION ADD	
42. Additions and corrections furnished by the	he field completion survey have been applied to the manuscript. I d under item 43.
42. Additions and corrections furnished by the	

Review Report T-9808 to T-9814 inclusive

Topographic 31 May 1951

62. Comparison with Registered Topographic Surveys

No prior surveys of this area were made by the Bureau.

63. Comparison with Maps of other Agencies

USGS; FAIRFAX QUADRANGIE; edition of 1915, reprinted 1944; scale 1:62,500.

64. Comparison with Contemporary Hydrographic Surveys

None

65, Comparison with Nautical Charts

Inapplicable since this is an inland survey.

66. Adequacy of Results and Future Surveys

Field edit corrections were applied during final review. Vertical accuracy tests were run on all maps but T-9812; the results of these accuracy tests indicate that the contours comply with the standard accuracy requirements. Only minor inadequacies were found, and they were corrected. These maps comply with the National Standards of Accuracy with the exception possibly of those areas referred to in the Photogrammetric Plot Report.

67. Contours

The second paragraph of sideheading 34 of the Compilation Report should be modified in that the terrain, on the whole, as depicted by both field and Kelsh plotter contours indicates a rolling terrain with moderate and gradual changes in relief with the steeper slopes to be noted along the more major drainages.

Reviewed by:

Charles Henomich

Approved by:

Chief, Review Spetion HR. 8. 12/5/5/ Chief, Div. of Photogramme try