

TEST OF AIR SURVEY CAMERA
TO
SPECIFICATION FOR AIR SURVEY PHOTOGRAPHY
for

Capital Air Surveys Ltd.
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Ottawa, Ontario

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Approved *J. P. ...*
Director

Manufacturer: Zeiss Camera Type: RMK A15/23 Lens Type: Pleogon A
Nominal Focal Length: 153 mm Maximum aperture: f/5.6 Body No.: 21115
Optical Unit No.: 21115 Lens No.: 98115
Date of calibration: 26 Mar 68 Calibration aperture: f/5.6
Camera received: 8 Mar 68 Order received: 15 Mar 68 Test finished: 28 Mar 68

FILM LOCATION SURFACE (Section 13.11.2.2.1):

Defined by: calibration frame Deviation from flatness: ± 0.005 mm.

FILTER (Section 13.11.2.11):

Number: 15251 Type: B, minus blue, anti-vignetting
Maximum deviation: 1 seconds.
Maximum change of deviation: 1 seconds.
Maximum departure from parallelism: 2 seconds.

'A'

FOCUS (Section 13.11.2.1):

Focus setting: Satisfactory

IMAGE ILLUMINATION (Section 13.11.2.10):

Minimum 43 % to 42.5° off axis.

FOCAL LENGTH (Section 13.11.2.3):

Calibrated focal length: 152.44 mm.
Equivalent focal length: 152.37 mm.

RADIAL MEASURED DISTORTION (Section 13.11.2.4.1):

Unit = 0.001 mm

Angle Degrees	Distortion at Semi-Diagonals				Average Distortion	Reference Distortion
	1	2	3	4		
5.62	-6	-7	-7	-7	-7	-5
11.25	-8	-8	-7	-8	-8	-7
16.88	-6	-10	-9	-8	-8	-5
22.50	-6	-6	-6	-4	-6	-2
28.12	0	-4	-4	+3	-1	+2
33.75	-1	-8	-7	+2	-3	-1
39.38	-7	-12	-8	+1	-6	-4
42.19	0	-2	+1	+11	+3	+8
45.00	+37	+29	+32	+44	+35	+25

Maximum departure of average from reference 0.005 mm to 42.5°, 0.010 mm to 45°.

ASYMMETRY ABOUT PRINCIPAL POINT OF AUTOCOLLIMATION (Section 13.11.2.4.2):

Maximum asymmetry 0.008 mm to 42.5°, 0.009 mm to 45°.

ASYMMETRY ABOUT PRINCIPAL POINT OF BEST SYMMETRY (Section 13.11.2.4.3):

Maximum asymmetry 0.003 mm to 42.5°, 0.004 mm to 45°.

TANGENTIAL MEASURED DISTORTION (Section 13.11.2.5):

Maximum tangential distortion 0.005 mm to 42.5°, 0.009 mm to 45°.

CAMERA SHUTTER (Section 3.7.2):

Operation: Satisfactory

Speeds:

Mark	100	200	400	600	800	1000
Total time Seconds	1/90	1/190	1/360	1/540	1/740	1/940
Effective time Seconds	1/110	1/230	1/450	1/670	1/940	1/1150

