

BC Government Camera Calibration Reporting

CAMERA CALIBRATION PARAMETERS							
PROJECT #:	Boresite Calibration Flight	GEOID MODEL:	CVGD 2013 (NAD83)	CAMERA NAME:	DMC III	PRINCIPAL POINT OFFSET ppx [mm]:	0
COMPANY NAME:	Peregrine Aerial Survey	IMU TYPE:	LCI-100C	CAMERA SERIAL #:	27542	PRINCIPAL POINT OFFSET ppy [mm]:	0
DATE OF CALIBRATION:	24-Apr-18	IMU orientation [ENU/NED]:	DD	# PIXEL (WIDTH)	14592		
CALIBRATION LOCATION:	Abbotsfoed, BC	BASE/ROVER GPS TYPE:	None	# PIXEL (LENGTH)	25728		
NAME OF PERSON PERFORMING CALIBRATION:	Paul Gagnon	GPS SOLUTION :	PPP	PIXEL SIZE [µm]:	3.9		
GEODETIC DATUM:	NAD83 (CSRS) epoch 2006	MAX BASELINE LENGTH [Km]:	Not Applicable	A-Priory FOCAL LENGTH "f" [mm]:	92		
VERTICAL DATUM:	CVGD 2013 (NAD83)	A-Priory Spatial boresight offsets dX dY dZ [m;m;m]:	.016, -.002, -.387	#CHANNELS [R/G/B/iR/nIR]	R/G/B/NIR/Pan		
PROJECTION:	UTM 10N	A-Priory Angular boresight offsets dR dP dH [°]:	0, 0, 0	BIT DEPTH [bit]:	14		

BUNDLE BLOCK ADJUSTMENT (BBA)					
SOFTWARE NAME AND VERSION:	ImageStation Automatic Orientations 2016	Variance Components Image Points [µm] (RMS):	0.9	Variance Components GPS positions [mm] (RMS):	19.5 cm
BUNDLE BLOCK ADJUSTMENT PARAMETER ESTIMATES USED DURING ADJUSTMENT:	X0, Y0, Z0, omega, Phi, Kappa	Variance Components Image points x [µm] (RMS):	0.8	Variance Components GPS positions X-EASTING [mm] (RMS):	13.2 cm
IMAGE MEASUREMENT WEIGHTING [µ]/[PIXELS]:	3 µm	Variance Components Image points y [µm] (RMS):	0.7	Variance Components GPS positions Y-NORTHINGS [mm] (RMS):	14.3 cm
GROUND CONTROL WEIGHTING in dN dE dZ [±m;±m;±m]:	.05 / .05 / .05 meters	Variance Components Coordinates [µm] (RMS):	4.3 cm	Variance Components GPS positions Z-ELEVATION [mm] (RMS):	16.7 cm
GPS POSITION WEIGHTING in dN dE dZ [±m;±m;±m]:	.5 / .5 / .5 meters	Variance Components Coordinates X-EASTING [mm] (RMS):	3.7 cm		
# 3D GROUND CONTROL POINTS:	8 control / 162 check points	Variance Components Coordinates Y-NORTHING [mm] (RMS):	2.2 cm		
		Variance Components Coordinates Z-ELEVATION [mm] (RMS):	1.9 cm		

BBA RESULTS	
A-Priory FOCAL LENGTH [mm]:	92 mm
A-Posteriori FOCAL LENGTH [mm]:	92 mm
A-Priory PRINCIPAL POINT OFFSET ppx [mm]:	0 mm
A-Posteriori PRINCIPAL POINT OFFSET ppx [mm]:	0 mm
A-Priory PRINCIPAL POINT OFFSET ppy [mm]:	0 mm
A-Posteriori PRINCIPAL POINT OFFSET ppy [mm]:	0 mm
Achieved angular Exterior Orientation Parameter Std.Dev Om/Phi/Kappa [±°;±°;±°]	.004 / .004 / .001 deg
Achieved positional Exterior Orientation Parameter Std.Dev in EAST/NORHT/ELEVATION [±m;±m;±m]	.012 / .012 / .037 meters
Sigma Naught [µm]:	0.9 µm
Average Residuals of control points dE dN dZ [m;m;m] (RMS):	.004 / .007 / .002 meters

Full software and residuals output to be submitted with this report