



Geometric Verification
DMC III 27542



Camera Geometric Verification Certificate
No: DMC III 27542



For

Peregrine Aerial Survey
#201 2555 Townline Road
Abbotsford, British Columbia V2T 6E1

Canada

**DMC III 27542 Geometric
Verification**

Camera: DMC III 27542
Manufacturer: Leica Geosystems Technologies, D-73430 Aalen, Germany
Reference: PAN
Serial Number: 00128301 (PAN Head)
Date of Calibration: 20 June 2017
Date of Report: 25 June 2026
Number of Pages: 5

This camera system is certified by Leica Geosystems Technologies and is fully functional within its specifications and tolerances.

Date of Calibration: 20 June 2017

Date of Certification: 25 June 2026



Dipl.Ing. Christian Müller, Product Manager

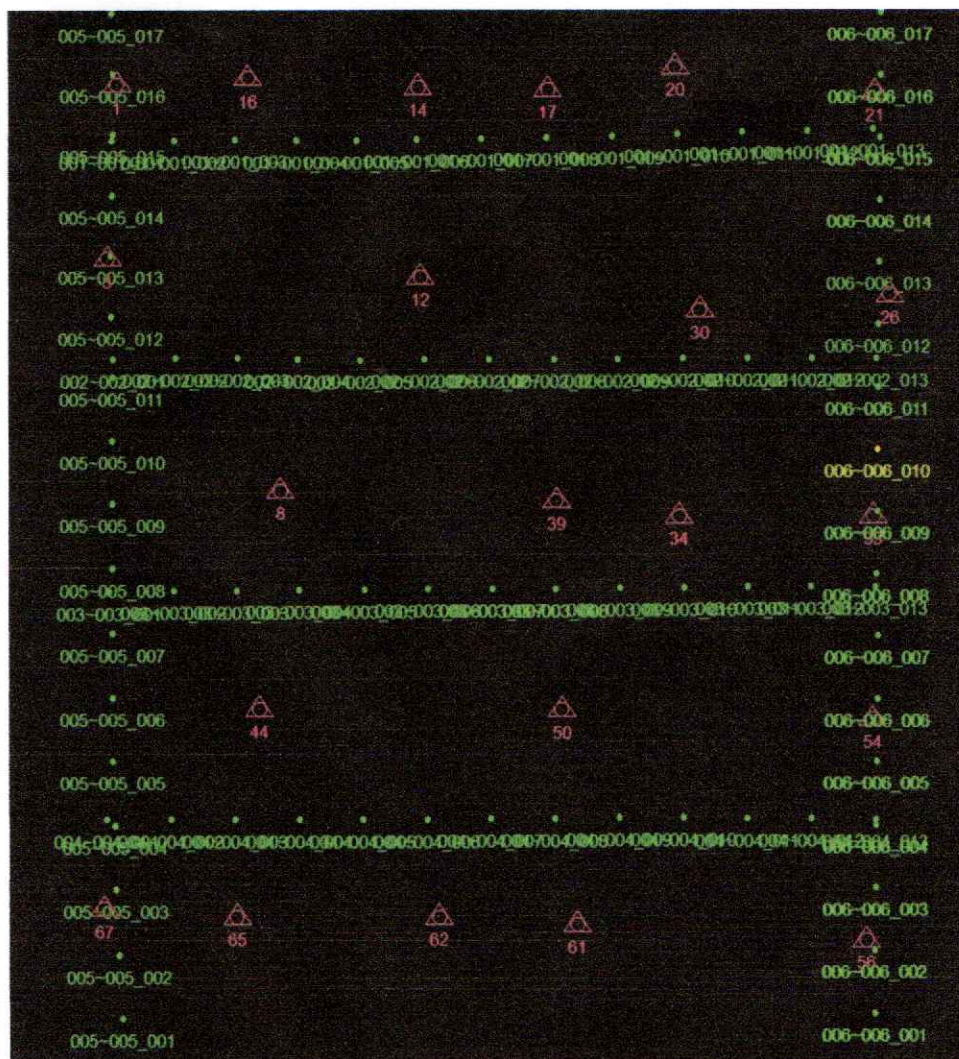
Michael Reading, Customer Support Consultant

Camera Serial Numbers and Burn-In flight

Camera Head	Serial Number	Calib. Date
PAN (reference)	00128301	20.06.2017
MS1 (NIR)	00128770	20.06.2017
MS2 (Blue)	00128798	20.06.2017
MS3 (Red)	00128775	20.06.2017
MS4 (Green)	00128801	20.06.2017

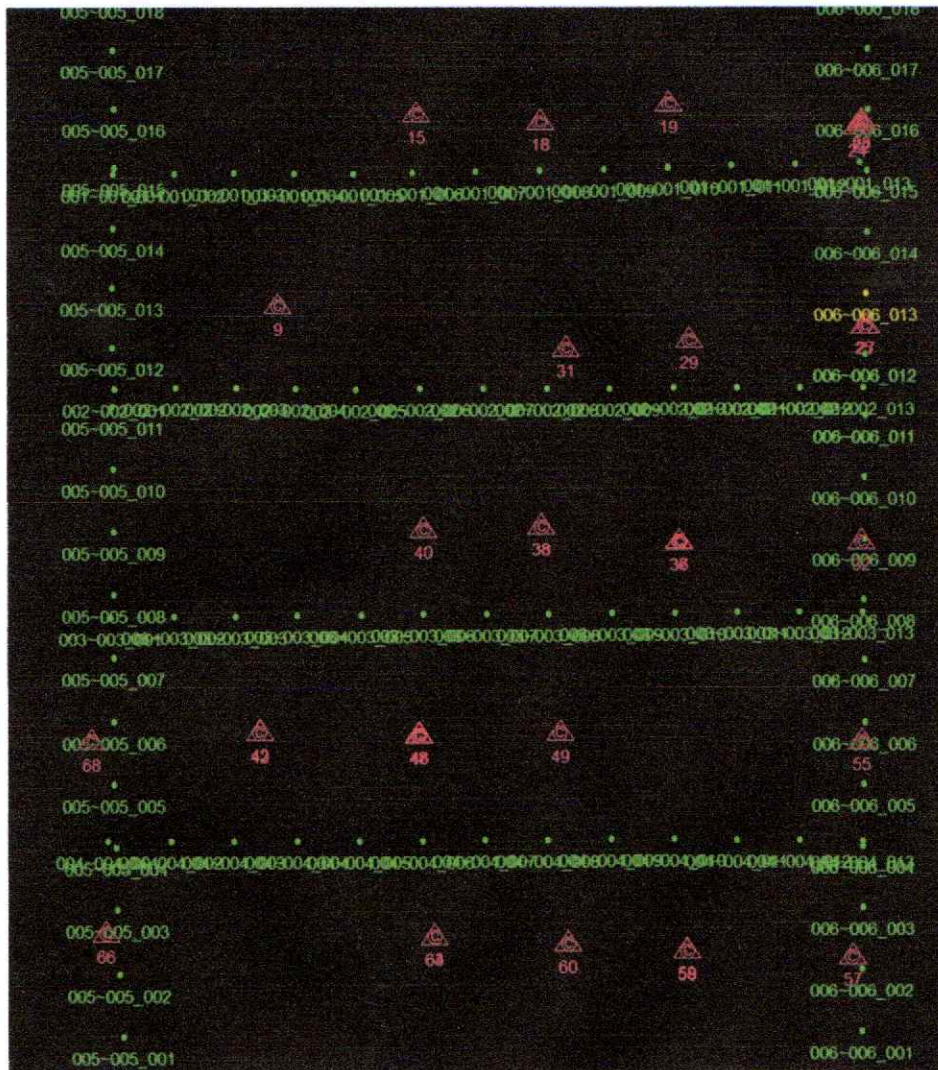
Verification flight performed: 19 June 2026

Flight parameters of 5 cm Verification Flight – Control Points



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Flight parameters of 5 cm Verification Flight – Check Points



Parameter	Validation Flight
GSD (cm)	5
End-lap (%)	70
Side-Lap (%)	40
Number of Exposures	88
Number of Flight Lines	4
Number of Cross Flight Lines	2
Number of Control Points	22
Number of Check Points	33
GNSS / INS	Yes

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Application

Parameter	Validation Flight
Weighting for manual measured image points (um)	4.0
Weighting for automatic measured image points (um)	4.0
Weighting for Control Points (m)	0.100/ 0.100 / 0.100
Weighting for GPS (m)	0.100 / 0.100 / 0.100
Weighting for INS (deg)	0.010 / 0.010 / 0.020
Modeling of GPS systematic residuals	YES
Bore Sight Alignment (YES/NO)	YES
Camera Self Calibration (YES/NO)	NO

Statistics –Bundle Block Adjustment

Parameter	Validation Flight
Sigma0 [μm]	0.74576
Mean Std Dev Photo Position [m]	0.01496 / 0.01421 / 0.01812
Mean Std Dev Photo Attitude [deg]	0.00060 / 0.00066 / 0.00031
Mean Std Dev Control Points [m]	0.00966 / 0.00929 / 0.02638
Mean Std Dev Check Points [m]	0.02754 / 0.02519 / 0.04242
RMS Photo Position [m]	0.01496 / 0.01421 / 0.00856
RMS Photo Attitude [deg]	0.00212 / 0.00181 / 0.00141

Statistics – Results From Independent Reference Measurements

Parameter	Validation Flight
RMS of Control Points - horizontal [m]	0.01921 / 0.02408
Max Ground Residual of Control Points - horizontal [m]	0.05793 / 0.04728
RMS of Control Points - vertical [m]	0.03005
Max Ground Residual of Control Points - vertical [m]	0.08052
RMS of Check Points - horizontal [m]	0.02938 / 0.02606
Max Ground Residual of Check Points - horizontal [m]	-0.07418 / -0.05710
RMS of Check Points - vertical [m]	0.04180
Max Ground Residual of Check Points - vertical [m]	0.08045

The results of the aerial triangulation were generated with ImageStation Automatic Triangulation (ISAT), 2023, Version 16.8.0, Build 215 from Hexagon Geospatial.

Aerial Triangulation performed by


Michael Reading

06.25.2026
Date