



## **Selkirk Remote Sensing Ltd.**

**#1660 – 18799 Airport Way**

**Pitt Meadows, BC**

**Canada**

**V3Y 2B4**

Tel (604)460-8115

Fax (604)460-8135

E-Mail <mailto:selkirk@selkirk.com>

Website <http://www.selkirk.com/>

### **TECHNICAL SYSTEMS BRIEFING**

<b>Aircraft</b>	Type:	Piper Chieftain, turbocharged, w/ long range fuel tanks Cessna TU206F, turbocharged
	Working Altitudes:	Chieftain maximum – 24,000 feet, night and IFR capable Cessna maximum – 19,000 feet, day VFR only
	Crew:	One pilot and one camera operator, additional co-pilot or trainee may be carried in Chieftain
<b>Film Cameras</b>	Drive Unit:	Wild Leica RC30 with Forward Motion Compensation (FMC)
	Lenses:	f/4 maximum aperture RC30 153mm focal length (qty: 1 with 2008 USGS calibration) RC20 153mm focal length (qty: 1 with 2007 USGS calibration) RC30 303mm focal length (qty: 1 with 2009 USGS calibration)
<b>Digital Cameras</b>	Sensor unit:	Imacom Ixpress 132C (37mm x 49mm 4080x5440 pixels) 22 Mega Pixel (qty: 2)
	Lens:	Rodenstock Apo-Sironar Digital HR Lens (60mm) (qty: 2)
<b>Camera Leveling</b>	Piper Chieftain:	Automatic pitch and roll using an INS, Manual drift and backup
	Cessna TU206:	Manual pitch, roll and drift
<b>Navigation and Photo Control</b>		Cessna TU206: Proprietary software operating on a modified PC attends to automatic camera leveling, eliminating drift, and generating velocity/height signals to operate the FMC. This software, in combination with a Novatel GPS receiver, provides flight line navigation and triggers the camera at predetermined stations. The uncorrected position and GPS-time is logged at the time of exposure. A video system is used as a backup for navigation, drift and camera station control.
<b>Film Processing</b>		All black-and-white films are processed in house using a Kodak 11CM Versamet. The processor is reserved exclusively for film products to eliminate contamination from paper products. All colour films are processed at HAS Images in Dayton, Ohio.
<b>Annotation</b>		Film is annotated with a CAD driven plotter. This permits complex, low-cost customized annotation for each client.
<b>GPS for Perspective Centre Recovery</b>		Two Novatel Millennium dual-frequency receivers and the network of BC Active Control Stations allow for recovery of the coordinates of each perspective centre with precisions of 15 cm RMS or better. Processing is completed using GrafNav software by Waypoint Consulting Inc.