



Additional Equipment

Film Camera:

- **Drive Unit:** original RC30, PTW s/n 5227
- **Lenses:**
 - 152mm RC30 S Lens, s/n 13242, Filters: 420, 505, 525 nm
 - 1005 AWAR
 - Last USGS calibration 14 February 2008 (report available on website)
 - 305mm RC30 S Lens, s/n 17118, Filters: 420, 525 nm
 - 100+ AWAR
 - Last USGS calibration 10 March 2009 (report available on website)
 - 152mm RC20 F Lens, s/n 13122, Filters 400, 525 nm
 - ~80 AWAR
 - NRC calibration 22 February 2007 * (please note that in Canada the AWAR is computed using the medium contrast target field which gives AWAR at 49. This will be in the order of 80 AWAR using a USGS high contrast target field)
- **Film Cassettes:**
 - Two RC30 cassettes, s/n 4333 and 4334
 - Two RC20 cassettes modified from RC10, s/n 2496 and 2497
- **Tool Box:**
 - User's Guide
 - Film tensioning lever and spring balance
 - Film transport simulator
 - Assortment of screw drivers

Auto Leveling Camera Mount:

- Manual or auto leveling, operator's choice
 - INS sensor for auto leveling
 - Joystick control for manual leveling using video image of level bubble
 - Sized for RC30 Camera
 - Suspension spring rates variable to accommodate any sensor mass
 - Vertical video camera on the inner gimbal ring for drift control
- Removable in 20 minutes for aircraft inspection

Digital Cameras:

- Two SRS made DACs (Digital Aerial Camera) complete with camera mount fixtures
 - Can be quickly (during flight) transitioned to either vertical or simultaneous bicamera mode.
- Each camera has a 60mm focal length.
- Each sensor is 22mp Imacon Ixpress with 9 micron pixels.
- Sensor size is 36.9mm x 49mm - 4080 x 5440 pixels.
- The cameras are photogrammetrically stable and have been repeatedly calibrated by Ayman Habib of the University of Calgary. All distortions fall within one pixel (report available on website).
- Image storage hard drives are Hasselblad/Imacon and each holds ~400 images.
- Four Hasselblad proprietary hard drives. They are carried in pressurized cases for use above 14,000 feet, and may be changed in flight in ~ two minutes.



Instrumentation Mounting Rack:

- Transport Canada approved, removable in 20 minutes for aircraft inspection. This holds:
 - Track'Air
 - Computer
 - Operator's keyboard
 - Three flat screen monitors
 - All electronics enclosures
 - Camera mount control
 - GPS receivers
 - Power Supplies for 12vdc, 120vac
 - Power distribution service for remote sensing instrumentation

Remote Sensing Equipment:

- **Track'Air navigation system (XTRACK Comprehensive 32 bit flight management system)** for flight line navigation, camera triggering, perspective center recovery consisting of:
 - TRACKER software suite (snapVIEW-snapLIM-snapXYZ-snapPLAN-snapSHOT-snapBASE-snapPLOT)
 - TECI camera interface with all required camera cables
 - Integrated 12 channels Garmin 15 GPS receiver (WAAS enabled)
 - 8.4 inch colour TFT pilot display with yoke clamp
 - RCEDI Data annotation and hardware interface for RC 30 cameras
 - **NovAtel PROPAK-V3-L1/L2 dual frequency GPS receiver** (RT-2 corrections and raw data, DGPS, OmniSTAR, HP/XP/VBS, CDGPS and SBAS, 20 HZ), Receiver specifics:
 - OSN: 794999
 - PSN: NBG08100011
 - P/N: 01017751
 - H/W Rev: 3.00
 - **Portable GPS Base Station** consisting of:
 - NovAtel Millenium dual-frequency GPS receiver s/n CGT99100002
 - IBM ThinkPad, Type 2647, s/n 2647 8MU 78AY W9t
 - GPS 512 Rev 2 GPS antenna s/n 512-6508 DOW 5/02 TSO-C 144
 - Cable connecting GPS receiver to antenna
 - Cable connecting GPS receiver to ThinkPad
- The base station can be mounted on the survey tripod. The survey tripod not included.

General aircraft equipment are the following:

- Tow tractor with tow bar
- Ground power unit
- Motorized crane for changing cameras

Ancillary Assets:

- **Selkirk.com** domain name
- **Computer Software**
 - Selkirk Solar Angle Calculator



Other Equipment and Spare Parts:

- **Airplane Spare Parts**
 - Cessna 206 spare parts taken to Lindair for resale or restocking
 - Piper Chieftain parts

- Acer Computer , s/n PSV570Z07
- MSI Wind Notebook U100 series, Windows XP, Model MSN011
- 2 Mini Keyboards RoHS, s/n 712223799V3(USB) and 712223802V3(USB)
- 3 flat screen monitors
- NovAtel L1/L2 Antenna and cable

- 2 industrial shelving units (narrow)
- 1 office shelving unit on wheels
- 2 aluminum survey tripods used for DACs calibration and focusing.