



AGAP-S

C-FSJB

December 2008/January 2009

OPERATOR FLIGHT LOG

Flight Number	13
Date (ZULU)	Dec. 29, 2008
Pilot/Co-Pilot	Lex./Rory
Operator(s)	Beth
Line Numbers	L310 + L290

Start GPS and magnetic base stations at least 30 mins before takeoff. Start recording with aircraft GPS receivers at least 30 mins before takeoff.

Event	GPS Time	Comments
GPS SJB-1		Start recording. CF Card: Job name:
left on from F12		Battery charge: A: 100 % B: 100 % External: 75 %
	12:57	Available memory: 450874 KB.
(on ground for > 1 hr)		No Sat tracked: 10 L1: 10 L2: 10
GPS SJB-2		Start recording. CF Card: Job name:
		Battery charge: A: 100 % B: 100 % External: 73 %
	12:57	Available memory: 470314 KB.
		No Sat tracked: 10 L1: 10 L2: 10

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AGIS on	13:01	Start recording. Project name: B8122913.P01
	13:03	Engines on
	13:03 13:12	Taxi
	13:14	Takeoff
Laser on	13:04	Start recording. Project name: 081229-130424-F130000.2dd
Radar on	13:05	Start recording. Filename(s): Flight.20081229010220.0200.raw
Event	GPS Time	Comments
	13:15	radar Tx on
	13:15	tip tanks on
	13:17	graw batt to 'charge'
	13:48:50	WP2 - ^{SOT} L310 (strong headwind en route to WP2)
	13:30	low bed reflectivity on radar en route to WP2
	13:41	dropped in alt. to go below cloud (thick) layer (2000 500 ft)
	13:50:00	WP3 - SOL L310 (strong crosswinds)
	13:52	~600 ft AGL (persistent clouds)
	~13:54	small lake in steep valley (much better bed reflectivity) + another on other side of mtn (photo)
	~14:06	rugged mtn range, shallow (~2 km) w/ v. little mag signature (photo)
	14:10	tip tanks off (~30 nT jump)
	14:16	~500 ft AGL due to clouds (have been e. this alt. for awhile)
	~14:25	2 small lakes ~3.5 km deep in lrg valley (10 mag activity)

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Event	GPS Time	Comments
	14:32/15:13	O ₂ on/off O ₂ on/off 16:13/17:42
	~14:30	6 small lakes in every valley in 10 mins. time (photo)
	14:46	scanner temp: -5.7°C / outside: -25°C / racks: 23°C
	15:03	clouds still pretty thick - keeping 500 ft AGL - laser seems OK
	~15:04	big mag anomaly (~150 nT swing) (photo)
	15:10	pushed thru clouds - going back up to 1000 ft AGL (e 15:11:30 e 1000 ft AGL) (LHS of laser spotty)
	15:28	(lower radar bed reflectivity) crosswinds have diminished
	~15:33	2 cascading lakes on valley edge (large valley) (photo)
	15:48:00	WP 4 - EDL L310
	15:49:05	WP 5 - EDT L310
	15:	WP 6 - SOT L290 (bypassed WP 6 on long turn)
	15:53:15	WP 7 - SOL L290
	~15:51-16:00	~200 nT mag anomaly
	16:05	scanner temp: -7.7°C / outside: -24.3°C / racks: 24°C
	16:05-16:13	low radar bed reflectivity
	16:21	beginning to enter clouds again - laser seems OK - will maintain 1000 ft AGL as long as possible
	~16:32	small lake ~4 km deep (low reflectivity in this area)
	16:43	~200 nT mag (↓) anomaly → several v. pointy mtns in area (photo)
	16:50	v. minor turbulence
NOTE: Mag 2 seems to be bit spiky (intermittent) (single spikes (~30 nT))		

Event	GPS Time	Comments
	17:03	- clouds have lifted a bit - clearer view of ice s/c (remained $\approx 1000'$ AGL) - scanner temp: -0.8°C / outside: -23.5°C / racks: 25.5°C
	17:11	out of clouds
	$\sim 17:22$	start of strong, continuous mtn range - not a large mag signature
	17:50 $\rightarrow$ $\sim 17:55$	back into thin clouds - didn't affect laser
	17:54:17	WP 8 - EOL L290
	17:55:00	WP 9 - EOL L290 $\rightarrow$ turned toward AGAP S
	18:05	scanner temp: 0.4°C / outside: -20.9°C / racks: 29°C
	18:08	grab batt to 'backup'
	18:22	radar Tx off ($\approx 500'$ AGL)
	$\sim 18:14$ - Tx off	v. low bed reflectivity
	18:23	landed
	18:26	parked $\approx$ fueling str
	18:27	AGIS off
	18:27	laser off
	18:28	radar off
	19:20	GPS rover 1 + 2 stopped
	18:48	moved to parking spot
	18:50	final parking