

AGAP-S

C-FSJB

December 2008/January 2009

OPERATOR FLIGHT LOG

Flight Number	Flight 10
Date (ZULU)	12/28/08
Pilot/Co-Pilot	Brian / Rebecca
Operator(s)	Nick
Line Numbers	360/340

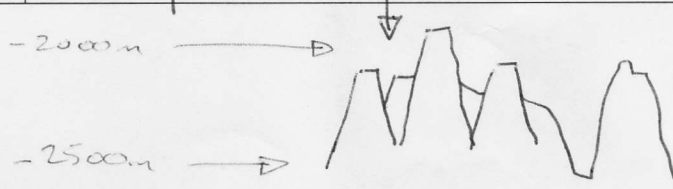
Start GPS and magnetic base stations at least 30 mins before takeoff. Start recording with aircraft GPS receivers at least 30 mins before takeoff.

Event	GPS Time	Comments
GPS SJB-1	19:25	Start recording. CF Card: Job name: C-FSJB1-F10
		Battery charge: A: 100 % B: 100 % External: 73 %
		Available memory: 739098 KB.
		No Sat tracked: L1: 12 L2: 12
GPS SJB-2	19:26	Start recording. CF Card: Job name:
		Battery charge: A: 100 % B: 100 % External: 73 %
		Available memory: 740074 KB.
		No Sat tracked: L1: 12 L2: 12

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AGIS on	19:57	Start recording. Project name: B8122819.P57.
	19:58	Engines on
	20:02	Taxi
	20:08	Takeoff
Laser on	19:59	Start recording. Project name: AGAP_F10
Radar on	19:59	Start recording. Filename(s): FLIGHT10
Event	GPS Time	Comments
	20:13	INVERTER 1 (PA's) 27.1V 18A INVERTER 2 (GRAV RAC) 27.7V 22A
	20:14	Laser ok during take off but looks frosted on both sides at 1000ft. Temp 4.2°.
	20:19.	1305 Pressure Alt Outside temp = -32°C. Scanner temp = -5.5°C
	20:20	Right hand side of scanner cleared. Left side clearing.
	20:30	Left hand side of scanner almost cleared. Speckle between -250m and -200m = Max = -250m
	20:33	WP 2. Turn onto line SL 360. Also AGIS line SL 360!! according to the WP list. RADAR File 038
	20:34	WP 3 reached. RADAR File 039.
	20:41	Noticed that the Ground Speed indicator appears to be showing twice the real value. Also Alt is now in metres.
	20:44	Laser scanner almost clear. Scanner temp 6.5°C.
	20:48	RADAR File 048, 2000ft high mountains. Base @ -3500m. → TO 062.
	20:55	PA Inverter = 27.1V 18A GRAV Inverter = 27.7V 34A
	20:55	End of mountains - large lake - like pealium + island. RADAR Files 062 → 072.

Event	GPS Time	Comments
	21:05	Tip tanks off
	21:08	Small lake at file 081 → 082.
	21:13	Icing increasing on the Scanner. Scanner temp = 6.6°C .
	21:13	Large Magnetic anomaly $>200\text{ nT}$ evident over mountains seen in the radar @ file 089.
	21:18	Scanner temp = $+6.5^{\circ}\text{C}$ Outside temp = -35°C . Bleed heat = Pull. Turn bleed heat down to $\frac{1}{2}$ inch.
	21:21	Scanner temp = -11.8°C . Scanner still functional. Just left side shows speckle, (external on top).
	21:28	Scanner temp = -17°C . Scanner functional & showing minor speckle on left hand side.
	21:30	Mag anomaly over mountain in radar file 109.
	21:32	Scanner temp = -18.1°C . Speckle increasing on left side. Some speckle on right-hand side.
	21:48	Scanner temp = -21.1°C . Speckle only on the left hand side. Outside temp = -35°C . @ 200-250m.
	21:54	Laser data shows outlier to the right. Recorded in file 007.
	21:58	Scanner temp = -22°C Outside temp = -35°C . Speckle on right hand side of scanner. Large vapour trail after a/c.
	22:08	Scanner temp = -23.4°C . Speckle comes & goes on the right side of the scanner according to the amount of icing outside.
	22:19	Scanner temp = -23.3°C . Speckle on r/h/s of scanner.
	22:30	WP4 EOL
	22:31	WP5 EOT
	22:33	WP6 SOF SL 340 (This is also the ACIS line)
	22:34	WP7 SOL SL 340
	22:49	Scanner bleed air mixture tweaked to provide just a little bit of warmer air to scanner. Scanner temp -23.7°C .
	23:00	Scanner heat tweaked up again. Scanner temp -23.7°C .
	23:09	Scanner temp -19.5°C .
	23:11	Several mountains with the tips chopped off. Radar file 235.



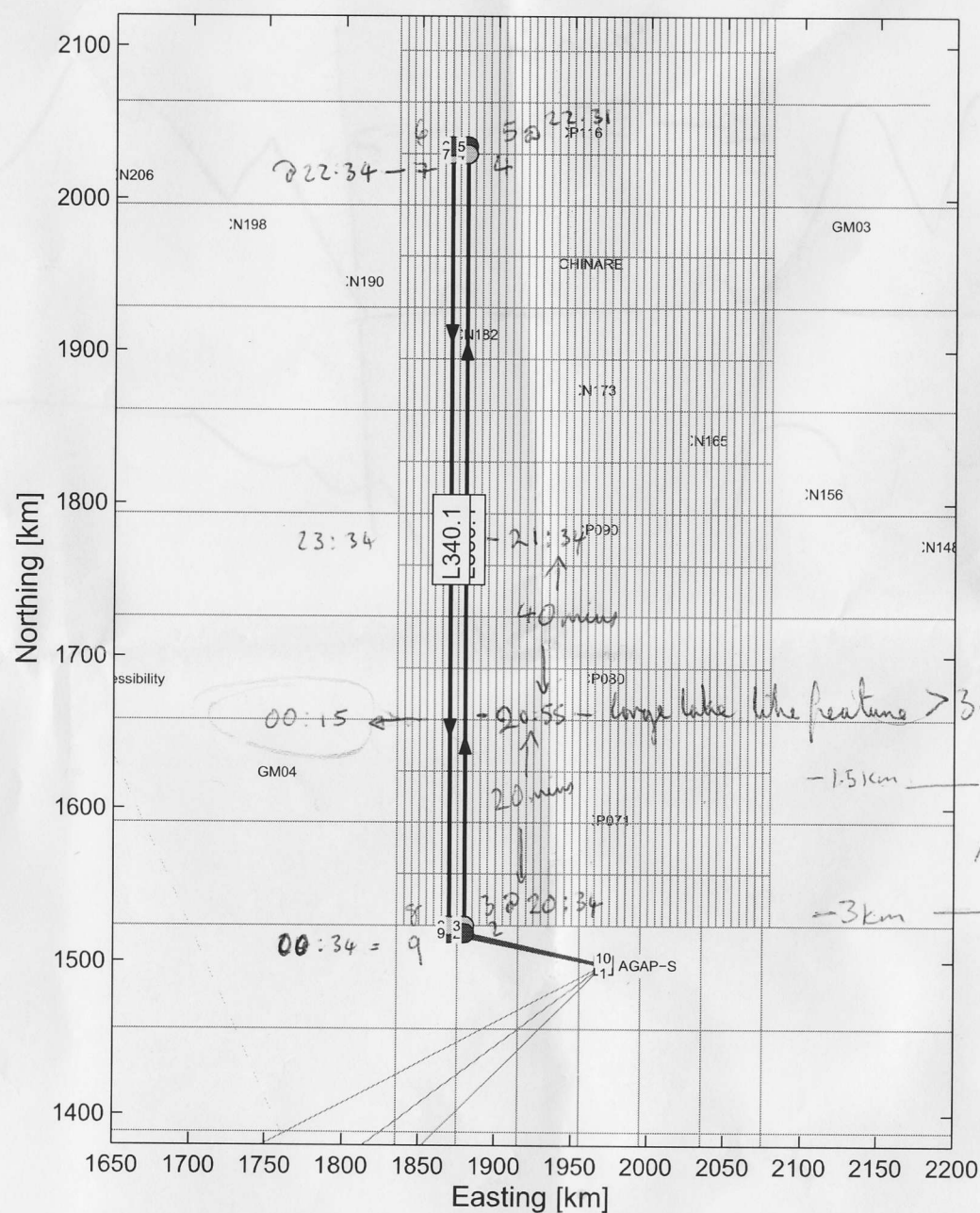
Operator Flight Log | F10/4

Event	GPS Time	Comments
	23:24	Speckle (icing) has increased on the left-hand side of the scanner. Scanner temp = -17.9°C
	23:34	Speckle reducing on the scanner as we move off the top of the dome - clear view to horizon now. - reduced icing 1.
	00:04	Scanner temp = -16.7°C . Small amount of speckle on left hand side of the scan.
	00:08	Radar file 307-308 Water on bed about 4 Km long at -3000m on SL340
		The timing is right for this to be the end of the feature seen at 20:55 on SL360.
	00:27	Scanner temp = -15.3°C Speckle nearly disappeared.
	00:33	WP8 - EOL SL340
	00:34	WP9 - EOL SL340.
	00:34	
		<u>Notes:</u> SL 360 + SL340 both correspond to the same lines in AGIS.
		T10090 + T10240 also correspond to the same lines in AGIS. ☺
	00:59	LANDED AT:
		STOP AT:
	01:01	AGIS OFF
	01:01	LIDAR OFF
	00:51	RADAR OFF FOR COMMS AND LEFT OFF SINCE ONLY MINUTES FROM CAMP.
		NOTE: GPS WILL REMAIN ON UNTIL AFTER FLIGHT II.

FLIGHT 10

TOTAL DISTANCE: 669.6 nm

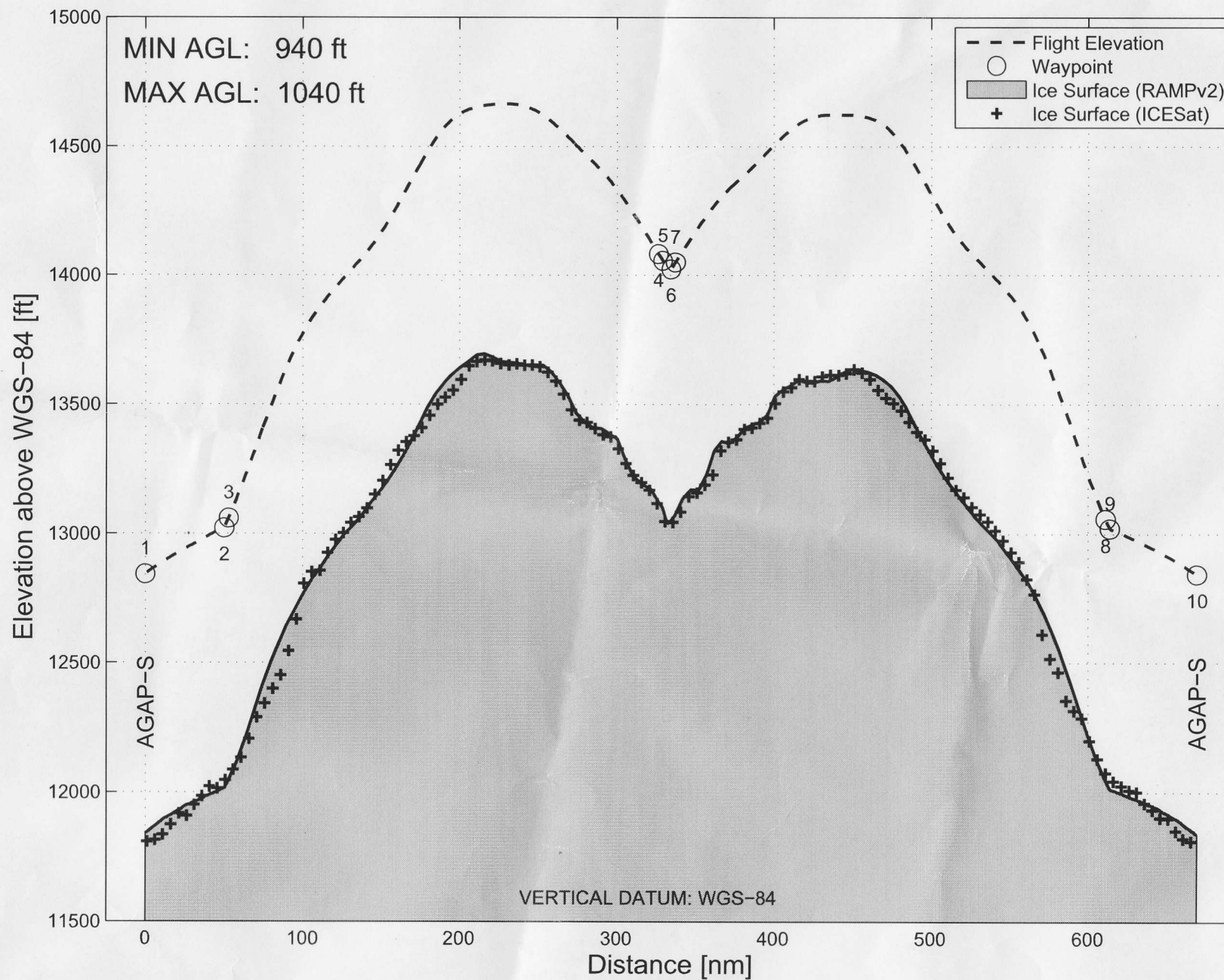
C-FSJB



FLIGHT 10

MAX ALT: 14660 ft

C-FSJB



AM Flight

Nick / Michael

C-FSJB		AGAP-S					MISSION PROFILE: AGAP_LineDS18	
		FLIGHT 10						
NR	LATITUDE (DM)	LONGITUDE (DM)	LINE	TYPE	X-LINE	DIST (nm)	COMMENT	
1*	84° 29.40' S	77° 21.18' E		AGAP-S		50.6	TRANSIT TO NEXT WAYPT	
2*	84° 12.87' S	69° 17.92' E	L360.1	SOT		2.7		
3	84° 10.24' S	69° 22.75' E	L360.1	SOL	T10090	273.5		
4	79° 40.65' S	73° 59.09' E	L360.1	EOL	T10240	2.7		
5*	79° 37.97' S	74° 00.63' E	L360.1	EOT		5.4	TRANSIT TO NEXT WAYPT	
6*	79° 37.40' S	73° 30.92' E	L340.1	SOT		2.7		
7	79° 40.07' S	73° 29.25' E	L340.1	SOL	T10240	273.5		
8	84° 09.22' S	68° 30.97' E	L340.1	EOL	T10090	2.7		
9*	84° 11.85' S	68° 25.77' E	L340.1	EOT		55.8	TRANSIT TO NEXT WAYPT	
10*	84° 29.40' S	77° 21.18' E		AGAP-S		0.0		
TOTAL DISTANCE (nm):						669.6		
TOTAL DISTANCE (km):						1240.1		

This is also equal to the AGAP line number!

* = waypoint relevant for aircraft navigation.

Lead-in distance (km): 5

Flight plan created on 12/27/2008 18:28