

AGAP-S

C-FSJB

December 2008/January 2009

# OPERATOR FLIGHT LOG

Flight Number	FLIGHT 04 (AGAP).
Date (ZULU)	DEC 26TH 08.
Pilot/Co-Pilot	BRIAN / REBECCA.
Operator(s)	NICK F.
Line Numbers	280 / 330.

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	20:19	Start recording. CF Card: <sup>20:19 UTC</sup> Job name: C-FSJB1-F04.
		Battery charge: A: 100 % B: 100 % External: 75 %
		Available memory: 648794 . KB.
		No Sat tracked: L1: 9 L2: 9.
GPS SJB-2	20:22	Start recording. CF Card: <sup>20:22 UTC</sup> Job name: C-FSJB2-F04.
		Battery charge: A: 100 % B: 100 % External: 73 %
		Available memory: 649290 . KB.
		No Sat tracked: L1: 9 L2: 9.

Nick F.

## Operator Flight Log | FOY/SH2

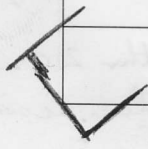
AGIS on	20:50	Start recording. Project name: B8122520.P50
	20:55	Engines on
	21:00	Taxi → FUEL
	21:22	* FUEL → TAKEOFF.
	21:27	Takeoff
Laser on	21:20	Start recording. Project name: AGAP-FOY.
Radar on	21:18	Start recording. Filename(s): FLIGHT 04.
Event	GPS Time	Comments
	21:33	All systems up & recording - No orange light on the Gravimeter.
		LEFT-HAND SIDE OF LASER profile showing significant dropout from 150m out.
	21:44	Call to AGAP-5 on Iridium
	21:45	Laser profile clearing up
	21:47	Tip tanks on.
	21:52	Peak mountains on Radar.
	21:53	Big Mountain - radar file 46 ~ 2.5km down.
	22:00	-26°C 1303 Pressure Amp.
	22:02	Radar file 054 large mountain.
	22:03	Note diff. altitude appears to be about 11,600ft off so flying 1000ft
→	22:05	on line according to waypoints but # waypoints set up for time 290. so will fly this one.
	22:07	MF. transmission
	22:20	large mountain radar file 76-77 but not much magnetic activity!

Event	GPS Time	Comments
	22:22	Jump in mag -
	22:24	3 peak mountain rises up to about 11km from surface. Brian reports crevassing along Grid North which is too bad to land on. Radar file <u>084</u> Laser file <u>005</u>
	22:34	Peak in the radar at file 094 + anomaly in mag at file 181
	22:47	Jump in the mag date. Pilot on ice drum.
	22:55	@ 14'000 ft
	22:57	large magnetic anomaly but not much on radar (file 125).
	22:58	large mountains have fallen away to <sup>down</sup> ~3km with only small peaks ~250m high evident.
	23:09	marker 1 (radar) is drawing 18Amps @ 27.1V. marker 2 (GrowPod) is drawing 31A @ 27.1V.
	23:09	<del>rad</del> 3km deep valley - radar file 139.
	23:38	Over the top of the dome @ 14600 ft. Big valley down to ~3000m Radar file 174
	23:40	Peak mountain <del>at</del> @ 3000m with big mag anomaly. Radar file 178
	23:44	Sharp mountain peak - Radar file 183. under Dome A on the flight path - 100 nT anomaly. Peak about 2km down. Flow line change in direction in the ice generates dark lines in the radar data. These can indicate mountains to one side of the flight path
	00:00	flew over peak close to dome top @ 2000m radar file 204 100nT deflection on mag.
	00:09	WP 4 - end of line
	00:10	WP 5 - lead out - note large mountain @ -1500m. Crevass
	00:16	WP 6 - lead in onto field 2 miles ahead of the turn. radar file
	00:18	WP 7 - online 340 radar file line 340. 223 } 220
		- Note: we have enough range to go another 20 miles if we want to see more of the large mountain, according to Brian.

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Event	GPS Time	Comments
	00:22	outside air temp = -25°C. No winds!
	00:49	Close to the top of the dome - radar file 260-270 Peaky mountains at 2000m. A range of them 500m high 1000m magnetic anomalies.
	00:51	some icing on laser data. File 015. This started soon after <del>055B</del> started back down line 340.
	00:53	There are 5 to 6 peaks of similar magnitude all in a row! + close together.
	00:59	200m mag anomaly over isolated <sup>500m</sup> mountain close to the top of the dome. Radar file 277-278. Peak of mountain is ~2.5k below the surface.
just after the dome ←	01:08	large mountains 1000m high (from a -3000m valley floor) radar files 283-298. 300mT mag anomaly. <del>File 5675 on AG15. File B8122600. P50.</del>
	01:30	Pilots observed crevasse field on the surface Mag anomaly (very short but ~150m) <sup>at 16550</sup> coincides with a peak on the radar data in files 315-317. Took photo of mag anomaly + radar image
	01:36	icing appears to have cleared up from the laser lens.
	01:51	Marine radar reflector - which is very flat - possible water. radar file 341-342. Lat -83.09 Lon 69.891. 4 occurrences in a small basin @ -3500m. Photo 609.
	02:01-02:10	radar file 352-355 <sup>Many</sup> peaks 1000m tall/500m tall Photo 611 - crevasse on surface. Very little mag activity Pressure waves visible on surface.
	02:20	WP/8
	02:22	WP/9 end of line.
	02:57.	Radar Tx off @ 02:53 Radar recording off. File.
	02:56	Laser off File
	02:57	AG15 off. File

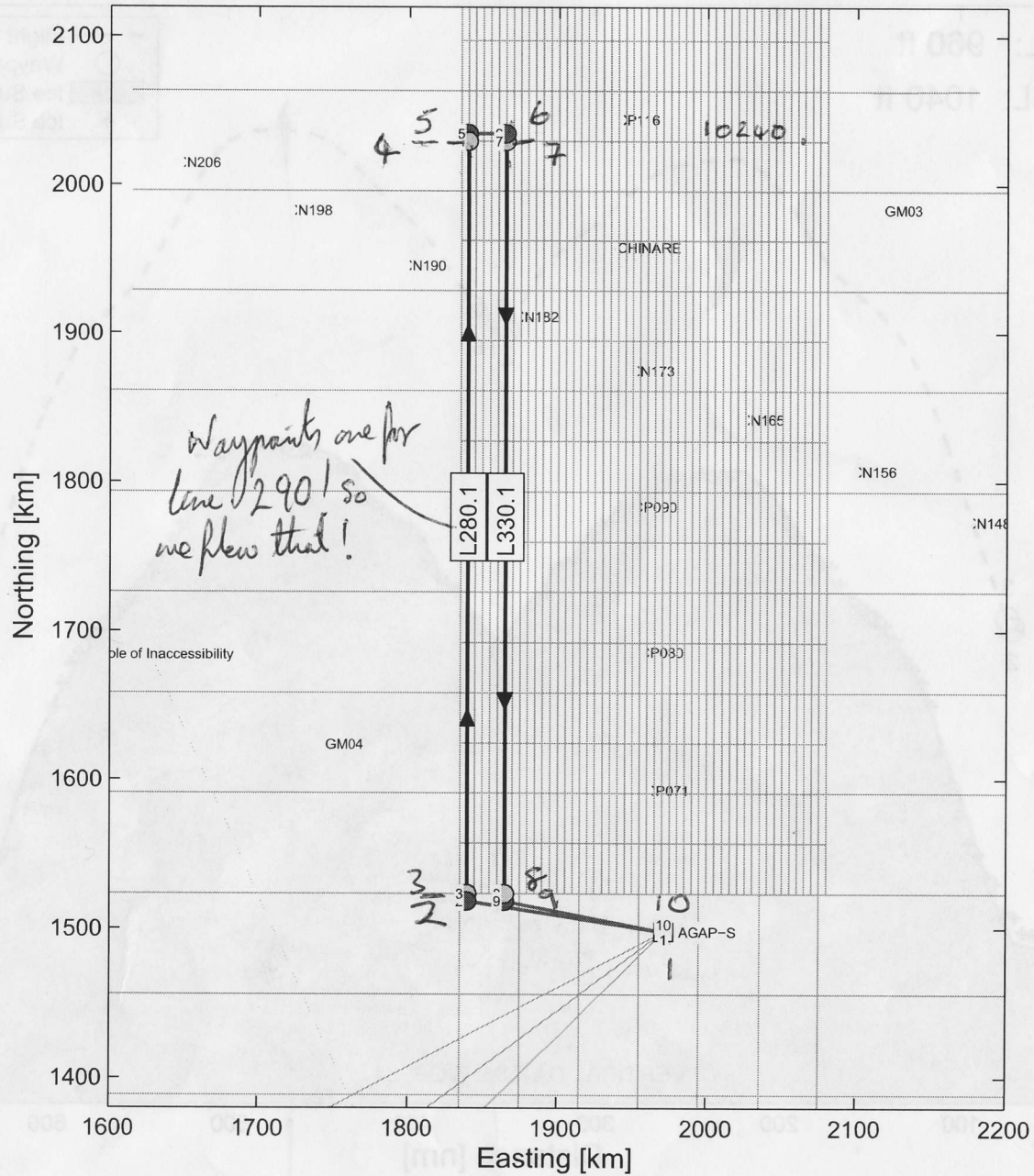
36dB  
36dB  
500m  
500m  
59dBm  
-27.  
-67.

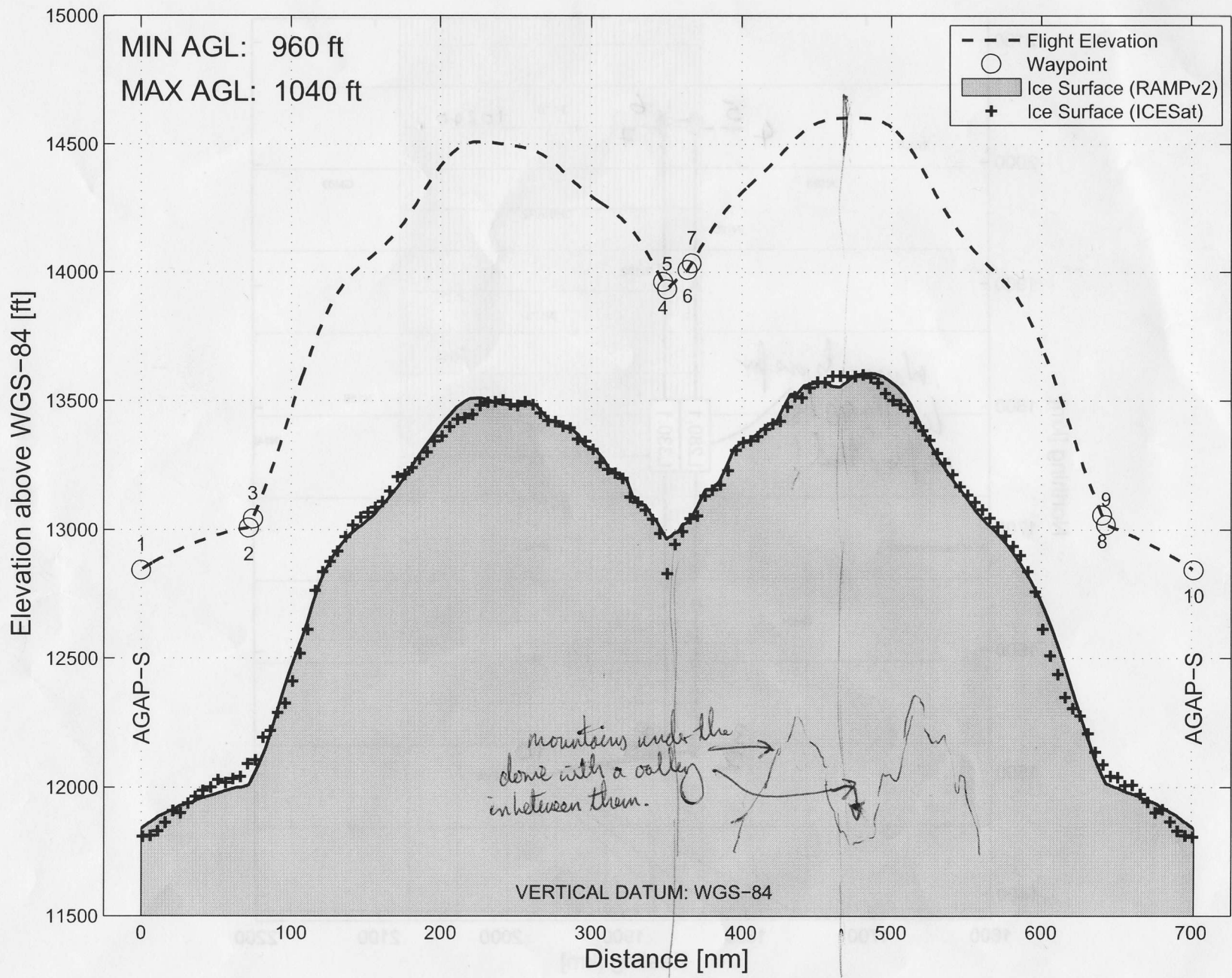


Nick F.

Operator Flight Log | F04/SHS

Event	GPS Time	Comments
		GPS STB1 off. GPS STB2 off.
	02:54.	Landed at Agap South
		Note: Radar on until <del>landed</del> <sup>500ft from</sup> landing.
	02:57	Stopped moving.





C-FSJB

MISSION PROFILE: AGAP\_LineDS1

*These coordinates are for line 290! So will fly this line*

AGAP-S

FLIGHT 04 04

# OPERATOR

NR	LATITUDE (DM)	LONGITUDE (DM)	LINE	TYPE	X-LINE	DIST (nm)	COMMENT
1*	84° 29.40' S	77° 21.18' E		AGAP-S		71.8	TRANSIT TO NEXT WAYPT
2*	84° 08.32' S	65° 51.25' E	L280.1	SOT		2.7	
3	84° 05.72' S	65° 57.53' E		L290 SOL	T10090	273.5	
4	79° 38.06' S	72° 00.11' E		EOL	T10240	2.7	
5*	79° 35.40' S	72° 02.15' E	L280.1	EOT		13.5	TRANSIT TO NEXT WAYPT
6*	79° 37.09' S	73° 16.09' E	L330.1	SOT		2.7	
7	79° 39.76' S	73° 14.36' E	L330.1	L340 SOL	T10240	273.5	
8	84° 08.69' S	68° 05.19' E	L330.1	EOL	T10090	2.7	
9*	84° 11.31' S	67° 59.80' E	L330.1	EOT		58.5	TRANSIT TO NEXT WAYPT
10*	84° 29.40' S	77° 21.18' E		AGAP-S		0.0	

TOTAL DISTANCE (nm): 701.6

TOTAL DISTANCE (km): 1299.3

\* = waypoint relevant for aircraft navigation.

Lead-in distance (km): 5

Flight plan created on 12/25/2008 14:13

*Note: for operators to tell pilots. There is no drop file so fly at 1000ft AGL*

2000m

3000m

*double peaks close together*

*Rad file 68-74*

*craving on surface.*

*flow lines*

*1000m*

*rad file 84*

*3500m*

