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Aircraft Accident Investigation Bureau AAIB

Final Report No. 2045

by the Aircraft Accident Investigation Bureau

concerning the serious incident (AIRPROX)

between the aircraft

Pilatus PC-12/45, registration HB-FVZ

operated by Happy Lines

and

Pilatus PC-12/45, registration LX-LAB

operated by Jetfly

on 27 June 2007

near waypoint KINES,

approximately 80 NM SSE of Geneva

General remarks concerning this report

This report contains the AAIB's conclusions on the circumstances and causes of the accident/serious incident which is the subject of the investigation.

In accordance with art 3.1 of the 9th edition, applicable from 1 November 2001, of Annex 13 to the Convention on International Civil Aviation (ICAO) of 7 December 1944 and article 2001 of the Federal Air Navigation Law, the sole purpose of the investigation of an aircraft accident or serious incident is to prevent accidents or serious incidents. The legal assessment of accident/incident causes and circumstances is no concern of the incident investigation. It is therefore not the purpose of this investigation to determine blame or clarify questions of liability.

If this report is used for purposes other than accident prevention, due consideration shall be given to this circumstance.

The definitive version of this report is the original in the French language

All times in this report, unless otherwise indicated, follow the coordinated universal time (UTC) format. The *local time* (LT) in force in Switzerland at the time of the serious incident was *central European summer time* (CEST). The relation between LT, CEST and UTC is: $LT = CEST = UTC + 2 \text{ h}$.

Final report

Aircraft

	HB-FVZ, Pilatus PC-12/45
Owner:	Happy Lines SA
Operator:	Happy Lines SA
	Valencia LEVC – Geneva LSGG
	IFR private flight
	LX-LAB, Pilatus PC-12/45
Owner:	Jetfly
Operator:	Doublet & Cie SNC
	Geneva LSGG – Nice LFMN
	IFR private flight

Crews

	HB-FVZ
Pilot:	Swiss citizen, born 1955
	LX-LAB
Pilot:	French citizen, born 1968

Location Waypoint KINES

Date and time 27 June 2007, 17:15 UTC

ATS unit Terminal Control Geneva TCG, Sector INI S/E

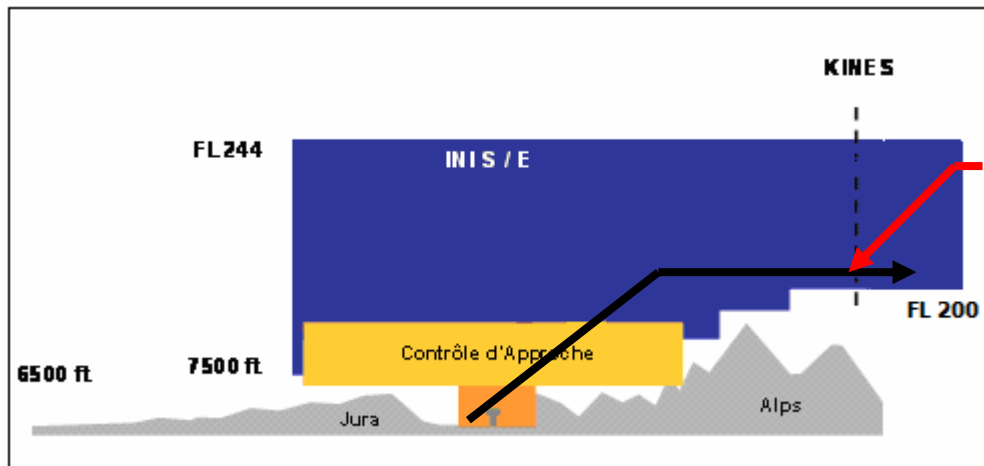
Controllers

Radar controller:	Swiss citizen, born 1978
Radar coordinator:	Swiss citizen, born 1954

Airspace **A**

0 Preamble

The incident occurred in combined sector INI S/E as shown below.



Trajectory LX-LAB

Trajectory HB-FVZ

1 Factual information

1.1 History of the flight

On Wednesday 27 June 2007, a Pilatus PC-12 type aircraft, registration LX-LAB, took off from Geneva on an IFR flight, destination Nice. In addition to the pilot, there were three passengers on board. The pilot called sector INI South on the 124.225 MHz frequency at 17:00:44 UTC. The controller cleared him to continue his climb to flight level FL 210. A little later, aircraft LX-LAB was cleared to fly to waypoint VEVAR. The INI South and INI East control sectors (frequency 126.900 MHz) were combined. According to the two controllers, the sector workload at the time of the incident was low.

Another type PC-12 aircraft, registration HB-FVZ, was en route from Valencia, Spain, to Geneva. It was maintaining flight level FL 240 and heading for waypoint KINES. On board were a pilot and six passengers. When the pilot made contact with sector INI South at 17:06:41 UTC, the aircraft was still in airspace controlled by Marseilles, approximately 40 NM south-west of waypoint KINES. The pilot reported to control that he was ready to begin his descent. The latter cleared him to follow arrival route KINES 1 ROMEO and informed him that he could expect his descent in about 20 nautical miles.

According to the radar recordings, aircraft LX-LAB reached its cruising flight level FL 210 at 17:09:55 UTC.

At 17:12:10 UTC, when aircraft HB-FVZ was crossing the line of responsibility – LoR – between Marseilles and Geneva, the pilot received clearance to descend to flight level FL 220. He read back this clearance correctly but entered flight level FL 200 on his altitude selector. At this time, the two aircraft were on converging and opposing routes and were 23 NM apart, i.e. two and a half minutes before their routes crossed.

At 17:13:26 UTC, i.e. a little more than one minute before the two aircraft would cross, control transmitted traffic information to the pilot of aircraft LX-LAB: *“And Lima Alfa Bravo, you have traffic at your one o’clock, 12 nautical miles, crossing right – left. Descending one thousand feet above.”* The pilot answered: *“I’ve got the traffic info, we don’t have visual, Lima Alfa Bravo.”*

Twelve seconds later, control transmitted traffic information to the pilot of aircraft HB-FVZ.

At 17:14:15 UTC, the Short Term Conflict Alert – STCA – was activated on the sector INI South screens, when the two aircraft were 4.8 NM apart, with an altitude difference of 900 ft. The radar controller stated that aircraft HB-FVZ was descending below the cleared flight level, i.e. flight level FL 220. He instructed the pilot to turn left immediately onto heading 280° and to maintain flight level FL 220. The pilot of aircraft LX-LAB received an instruction to turn left onto heading 080°. The pilot of aircraft HB-FVZ read back the heading but did not repeat the flight level. The pilot of aircraft LX-LAB did not read back the instruction given by control and continued his route.

The two aircraft were equipped with a proximity alert system – a Traffic Advisory System (TAS) - which only generates traffic advisories. The pilots of the two aircraft involved stated that they saw the other aircraft on their screen.

The two aircraft crossed at 17:14:47 UTC, at a horizontal distance of 1.3 NM and an altitude difference of 200 ft.

According to the radar recordings, aircraft HB-FVZ started to make a left turn at 17:14:55 UTC, after the aircraft had crossed. Following a remark by control to the pilot of aircraft HB-FVZ confirming that he had been cleared to flight level FL 220, the latter replied that he had understood he had been cleared to flight level FL 200.

The pilots of the two aircraft involved in this serious incident reported on the frequency that their aircraft crossed near to each other but that they had not had visual contact because of the IMC flying conditions.

1.2 Arrival route KINES 1 ROMEO

The standard arrival route STAR KINES 1 ROMEO is defined as follows:

From KINES proceed via GG519, ROCCA, GOLEB (IAF) VALBU, SUVEL, BIVLO (MAX IAS 250 kt), GG525, GG512 (MAX IAS 220 kt). Continue on track. On ATC instruction, proceed to SPR (IF, MAX IAS 210 kt). Intercept FINAL APCH 23.

1.3 The TAS system

PC-12 LX-LAB was equipped with the following instrument:

- Manufacturer: Bendix King Honeywell
- Model: TAWS/TAS KMH820/IHAS8808000

PC-12 HB-FVZ was equipped with the following instrument:

- Manufacturer: BF Goodrich Avionics Inc.
- Model: Skywatch HP TRC 899

The Pilatus Training Center, in its *Training Notes for Pilots*, gives the following instructions:

Response to TAS alerts

Traffic Advisory annunciations (TA) are shown in the following table.

<i>Aural</i>	<i>Visual</i>	<i>Pilot response</i>
<i>TRAFFIC, TRAFFIC</i>	<i>A filled yellow circle on the traffic display</i>	<i>Conduct a visual search for the intruder. If successful, maintain visual acquisition to ensure safe operation</i>

Note

In most situations no manoeuvring will be necessary to maintain safe separation. Manoeuvre only if it becomes apparent safe separation will not be maintained.

- *Attempt to visual acquire the intruder aircraft and maintain/attain safe separation in accordance with regulatory requirements and good operation practice*
- *If the intruder aircraft is not visually acquired, air traffic control should be contacted to obtain any information that may assist concerning the intruder aircraft.*

1.4 The air traffic control unit

1.4.1 The radar controller

On the day of the incident, the radar controller started work at 13.10 UTC. He occupied the position of INI S/E radar controller from 15:40 UTC to about 17:20 UTC.

1.4.2 The radar coordinator

The radar coordinator started work at 13:30 UTC. He occupied the radar coordinator position from 16:00 UTC to about 17:20 UTC.

Following the STCA alert in the control sector and the avoiding action instructions given by the radar controller, the radar coordinator listened to the real-time recording of the sector to determine the origin of the problem. He determined that the flight level which had been transmitted to the pilot of aircraft HB-VFZ was flight level FL 220 and that this had been read back correctly.

1.5 Meteorological conditions

According to MétéoSuisse (translated from the German)

General situation

Between an area of low pressure above the Baltic Sea and a ridge of high pressure west of the Bay of Biscay, cool, humid air from the west was flowing towards the northern side of the Alps.

LSGG Metar and Taf

271620Z 22005KT 160V280 9999 FEW035 BKN060 15/07 Q1015 NOSIG
271650Z 21010KT 160V240 9999 FEW040 BKN070 15/08 Q1015 NOSIG
**271720Z 20007KT 140V240 9999 FEW040 BKN070 15/08 Q1015
NOSIG**
271750Z 20005KT 110V240 9999 FEW040 BKN070 15/08 Q1015 NOSIG
271820Z 18004KT 130V240 9999 FEW038 BKN070 15/08 Q1015 NOSIG

270400Z 271212 23007KT 9999 FEW030 BKN060=
271200Z 271322 23008KT 9999 FEW020 BKN060 TEMPO 1314 80000 SHRA
BKN030 T17/15Z T19/18Z=

Conclusions

On the basis of the information made available, the following meteorological conditions prevailed in the region of Mt Blanc at the time of the incident:

Cloud: 1/8 at approximately 5000 ft AMSL, 6/8 at approximately 8000 ft AMSL

Weather: -

*Wind: FL180, approximately 300 degrees at 30 kt
FL210, approximately 290 degrees at 35 kt
FL240, approximately 290 degrees at 35 kt*

*Temp. / dewpoint: FL180, -17°C / -32°C
FL210, -23°C / -38°C
FL240, -31°C / -44°C*

Position of the sun: azimuth 282°, elevation 21°

Hazards: no perceptible hazard.

2 Analysis

2.1 Air traffic control aspects

2.1.1 The radar controller

Following the first call from the pilot of aircraft LX-LAB, the radar controller cleared him to continue his climb to flight level FL 210, in accordance with his flight plan.

A few minutes later, the pilot of aircraft HB-FVZ contacted sector INI South. At the time aircraft HB-FVZ crossed the line of responsibility between Marseille and Geneva control centres, the radar controller cleared the pilot to descend to flight level FL 220, i.e. 1000 ft above the altitude of aircraft LX-LAB.

When the distance between the two aircraft was 12 NM, the radar controller transmitted traffic information to them to indicate their imminent crossing.

This type of information is particularly appreciated by pilots in a situation in which aircraft are flying in opposite directions and their altitude difference is only 1000 ft.

The correct read-back by the pilot of aircraft HB-FVZ concerning the cleared flight level would not arouse the suspicions of the controller regarding a possible infringement of the cleared level.

Following the STCA alert, the radar controller noticed that the mode C of aircraft HB-FVZ successively displayed flight levels FL 218 and 217, descending. He then wisely issued immediate avoiding manoeuvres to the two aircraft, using the emergency phraseology. In this type of conflict situation, an avoiding manoeuvre in the horizontal plane is logical, to the extent that the onboard systems provide for avoiding action in the vertical plane.

2.1.2 The radar coordinator

The coordinator, having noted the action by the radar controller, had no reason to intervene.

2.2 Flight management aspects

A solo pilot was at the controls of each aircraft.

2.2.1 The pilot of aircraft HB-FVZ

At the time of the incident, the pilot of HB-FVZ possessed good aeronautical experience. In fact, he held a commercial IFR aircraft licence as well as a commercial helicopter licence with mountain rating. According to his statements, he had about 1,850 hours of flying time, 1,600 on aircraft and 250 on helicopters. His total IFR flying hours were close to 1,200. He flew regularly, making between one and two flights per week for a total of approximately 120 hours per year, on all types.

At the time of the serious incident, the pilot of HB-FVZ had only about sixty hours flying time on the PC-12.

The pilot was unable to explain the fact that he had selected flight level FL 200 instead of flight level FL 220, as requested by the ATC controller. He attributed this error to momentary "dyslexia", as the two levels are similar in terms of pronunciation. The absence of a second crew member meant that it was not possible for this input error to be detected.

In his statement, the pilot of aircraft HB-FVZ pointed out that he had detected the converging traffic on his screen and that he was following its progress well before the controller instructed him to take avoiding action. This involved adopting heading 280° to the left, initiated without delay.

The traffic information given by the ATC controller who specified, in particular, that the opposing traffic was stable 1000 ft below his cleared flight level, was in accordance with the traffic situation. Aircraft HB-FVZ was cleared to descend to flight level FL 220. The opposing traffic reported by ATC was maintaining flight level FL 210. The pilot of aircraft HB-FVZ mistakenly understood that he was cleared to flight level FL 200. He probably erroneously deduced from this that the aircraft reported by ATC was maintaining flight level FL 190.

A reading of the TAS information compared with that given by ATC control and the selected flight level could have made the pilot of HB-FVZ aware of the contradiction arising from these different sources of information.

The pilot also added that he felt perfectly at ease flying solo in this type of aircraft, a configuration he prefers, but that he appreciated the assistance of a second pilot if meteorological conditions were not favourable.

2.2.2 The pilot of aircraft LX-LAB

Shortly before the serious incident, the pilot of LX-LAB was maintaining flight level FL 210 and had received traffic information from ATC control stating that the opposing aircraft was cleared 1000 ft above his flight level. The pilot acknowledged, adding that he did not have visual contact with the aircraft. Shortly afterwards, he received the instruction from ATC control to turn immediately left onto heading 080°. For unexplained reasons, the pilot did not obey this instruction and in fact continued on his route. It is possible that the pilot was monitoring the convergence on his TAS and did not judge it necessary to deviate from his route.

The pilot said that he never felt in danger whilst emphasizing that the two aircraft crossed close to each other.

2.2.3 TCAS aspects

By design, the TAS equipment fitted to the two aircraft involved in this serious incident do not generate RA resolution advisories. However, they do make it possible to locate aircraft flying in their immediate vicinity and where necessary generate TA traffic advisories, which tend to draw the pilot's attention to the approach of an intruder. On the other hand, the type II TCAS system does additionally generate RA resolution advisories which make it possible to resolve a conflict in the vertical plane.

3 Conclusions

3.1 Findings

- At the time of the incident, control sectors INI South (124.225 MHz) and INI East (128.900 MHz) were combined.
- Aircraft HB-FZV and LX-LAB were flying according to IFR instrument rules and were on the 124.225 MHz frequency and under the control of Terminal Control Geneva sector INI S/E.
- The workload and complexity were deemed to be low by the controllers in charge of sector INI S/E.
- At 17:06:41 UTC, the first call from the pilot of HB-FVZ was recorded.
- At 17:12:10 UTC, the controller cleared the pilot of aircraft HB-FVZ to descend to FL 220. The pilot read back the clearance correctly.
- At 17:13:26 UTC, the pilot of aircraft LX-LAB received traffic information.
- At 17:13:38 UTC, the pilot of aircraft HB-FVZ received traffic information.
- At 17:14:15 UTC, the STCA was activated on the control sector screens.
- At 17:14:28 UTC, the controller instructed the pilot of aircraft HB-FVZ to take avoiding action and stated the flight level to be maintained. The pilot read back this avoiding action without repeating the flight level.
- At 17:14:37 UTC, the controller instructed the pilot of aircraft LX-LAB to take avoiding action. The pilot did not read back this instruction and continued on his route.
- The two Geneva sector INI S/E controllers each were in possession of an appropriate licence.
- The pilots of both aircraft were in possession of the appropriate licences.
- The two aircraft were equipped with a TAS.
- The incident took place 80 NM south-south-east of Geneva, at flight level FL 210, in class A controlled airspace.
- At 17:14:47 UTC, according to the radar recordings, the two aircraft crossed at horizontal distance of 1.3 NM and an altitude difference of 200 ft.

3.2 Cause

The serious incident is due to the incorrect execution by the pilot of aircraft HB-FVZ of an ATC clearance which he had read back correctly.

Payerne, 25 September 2009

Aircraft Accident Investigation Bureau

This report contains the AAIB's conclusions on the circumstances and causes of the accident/serious incident which is the subject of the investigation.

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**TRANSCRIPT OF TELEPHONY
OR RADIOTELEPHONY COMMUNICATION TAPE-RECORDINGS**

Investigation into the **incident** that occurred on **27.06.2007**

- | | |
|---|---|
| - Subject of transcript: | LXLAB - HBFVZ |
| - Centre concerned: | Swiss Radar Area West |
| - Designation of unit: | Terminal Control Geneva, coupled sector INI
South - East |
| - Frequency / Channel: | 124.225 MHz & 128.90 MHz |
| - Date and period (UTC) covered by attached extract: | 27.06.2007
17:00 - 17:23 UTC |
| - Date of transcript: | 9 July 2007 |
| - Name of official in charge of transcription: | skyguide Safety Reporting & Investigation
Management |
| | |
| - Certificate by official in charge of transcription: | |

We hereby certify:

- That the accompanying transcript of the telephony or radiotelephony communication tape-recordings, retained at the present time in the premises of the Safety Reporting & Investigation Management Department, has been made, examined and checked by one of its experts.
- That no changes have been made to the entries in columns 2, 3 and 4, which contain only clearly understood indications in their original form.

Geneva, 9 July 2007

skyguide
Safety Reporting & Investigation Management

Abbreviations

Sector Designation of sector

INSE - Swiss Radar Area West, Terminal Control Geneva, coupled sectors INI South - East

<u>Aircraft</u>	-	<u>Call sign</u>	<u>Type of aircraft</u>	<u>Flight rules</u>	<u>ADEP</u>	-	<u>ADES</u>
LAB	-	LX-LAB	PC12	IFR	LSGG	-	LFMN
HVZ	-	HB-FVZ	PC12	IFR	LEVC	-	LSGG

DSO / 9 July 2007

TRANSCRIPT SHEET

Occurrence: LXLAB - HBFVZ of 27.06.2007



To Col.1	From Col.2	Time Col.3	Communications Col.4	Observations Col.5
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Coupled Frequencies: 124.225 MHz & 128.90 MHz, sector INI South-East

INSE	LAB	17:00:44	Le Contrôle, Lima X-ray Lima Alfa Bravo, bonjour, en montée vers le cent quatre-vingts sur... MEDAM trois Alfa.
LAB	INSE	51	Lima X-ray Lima Alfa Bravo, bonsoir, identifié, montez niveau de vol deux unité zéro.
INSE	LAB	55	Heu, deux dix et ça nous suffira pour la croisière, Lima Alfa Bravo.
LAB	INSE	59	Reçu.

Sector in contact with:

- AUA8GP
- N10522
- EZS1303 (x2)
- AUA8GP (x2)
- HBLTI
- DLH4UV
- HBLTI
- DLH4UV
- AUA8GP
- N10522
- AUA8GP
- EZS1303

LAB	INSE	17:06:33	Lima Alfa Bravo, direct VEVAR.
INSE	LAB	36	Direct VEVAR, Lima Alfa Bravo.
INSE	HVZ	41	Genève Radar, Hotel Bravo Golf, Hotel Bravo Fox Victor Zulu pardon, niveau deux cent quarante sur KINES et on est prêt à commencer la descente.
HVZ	INSE	49	Hotel Bravo Foxtrot Victor Zulu, bonsoir, identifié, autorisé KINES – KINES un Romeo, maintenez niveau de vol deux quatre zéro et prévoyez la descente dans environ vingt nautiques.
INSE	HVZ	17:07:01	Descente dans vingt nautiques et KINES one Romeo, Hotel Foxtrot Victor Zulu.

Sector in contact with:

- DLH4UV
- AFR2003 (x2)

TRANSCRIPT SHEET

Occurrence: LXLAB - HBFVZ of 27.06.2007



To Col.1	From Col.2	Time Col.3	Communications Col.4	Observations Col.5
HVZ	INSE	17:12:10	<i>Hotel Victor Zulu, descendez niveau de vol deux deux zéro.</i>	
INSE	HVZ	13	<i>Deux deux zéro, Victor Zulu.</i>	
				Sector in contact with: - SWR561
LAB	INSE	17:13:26	<i>Et Lima Alfa Bravo, vous avez un trafic à vos une heure, douze nautiques, en croisée droite – gauche, en descente mille pieds en dessus.</i>	
INSE	LAB	17:13:34	<i>J'ai bien pris l'info de trafic, on a pas le visuel, Lima Alfa Bravo.</i>	
HVZ	INSE	38	<i>Hotel Victor Zulu, traffic at your eleven o'clock, ten miles, crossing... left to right, steady one thousand feet below your cleared level.</i>	
INSE	HVZ	46	<i>Victor Zulu, on... ouvre l'oeil.</i>	
				Sector in contact with - AZA577
HVZ	INSE	17:14:28	<i>Hotel Victor Zulu, maintain flight level two two zero, turn immediately to the left heading two eight zero.</i>	
INSE	HVZ	35	<i>Two eight zero immediately.</i>	
LAB	INSE	37	<i>Lima Alfa Bravo, turn immediately left heading zero eight zero.</i>	No reply
				Sector in contact with: - AFR5565 - AZA577
INSE	HVZ	17:15:05	<i>On s'est croisé..., Hotel Victor Zulu, mais il était pas loin.</i>	
HVZ	INSE	09	<i>Hotel Victor Zulu, vous étiez autorisé niveau de vol deux deux zéro.</i>	
INSE	HVZ	13	<i>Deux zéro zéro, j'ai compris.</i>	

TRANSCRIPT SHEET

Occurrence: LXLAB - HBFVZ of 27.06.2007



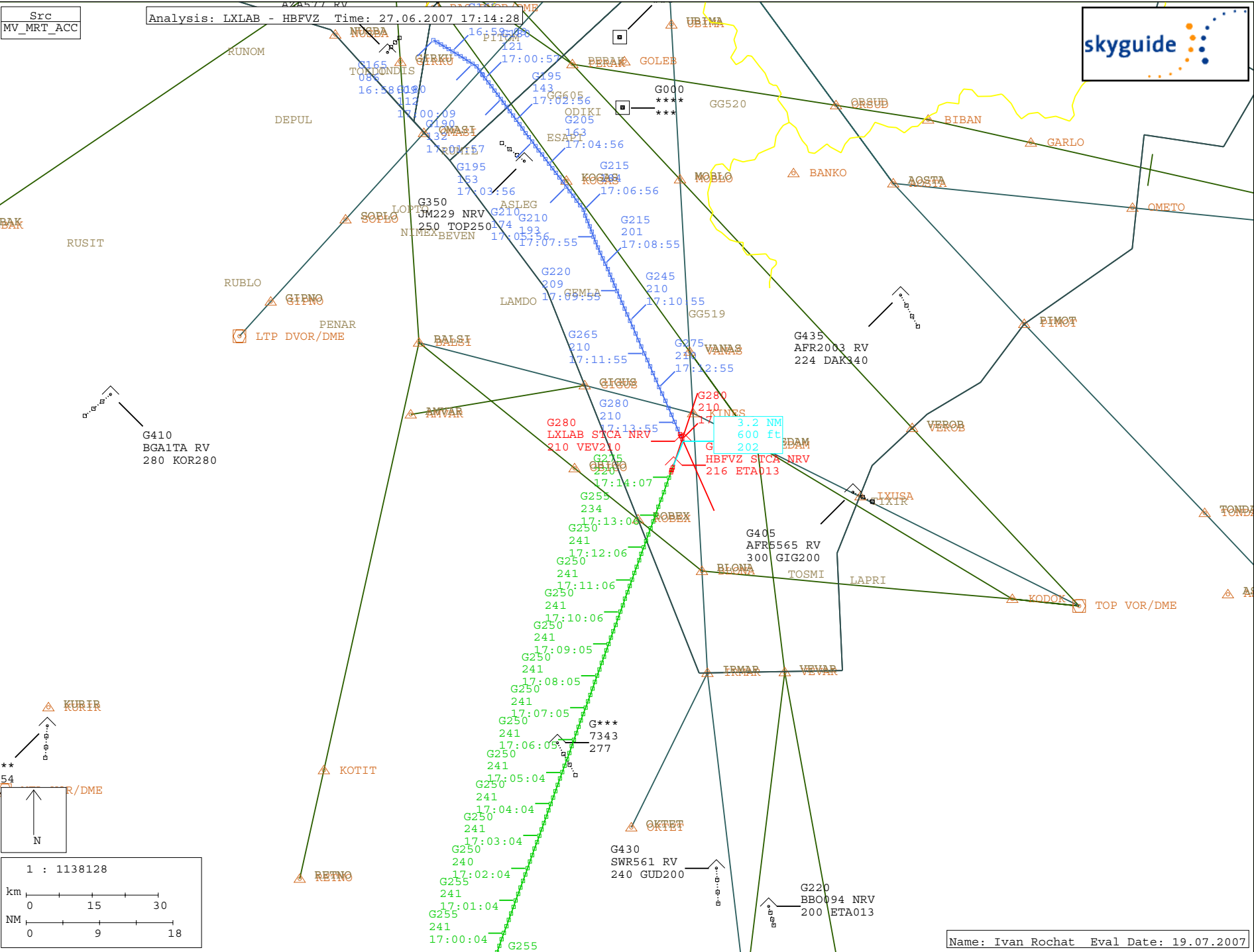
To Col.1	From Col.2	Time Col.3	Communications Col.4	Observations Col.5
HVZ	INSE	17:15:14	A deux deux zéro.	
INSE	HVZ	16	Excusez-moi, je reste alors au deux un zéro pour le moment?	
HVZ	INSE	19	Descendez deux zéro zéro.	
INSE	HVZ	21	Deux zéro zéro, parfait.	
LAB	INSE	25	Lima Alfa Bravo, reprenez la navigation autonome sur VEVAR.	
INSE	LAB	29	Heu... on est en route sur VEVAR..., Lima Alfa Bravo, et effectivement c'était près.	
LAB	INSE	33	Oui, il est descendu... à travers votre niveau, il était pas autorisé à votre niveau.	
INSE	LAB	37	Ouais, j'ai bien, j'ai bien compris, Monsieur.	
HVZ	INSE	42	Hotel Victor Zulu, prenez un cap de... trois six zéro.	
INSE	HVZ	48	Trois six zéro, Victor Zulu.	
			_____	Secor in contact with: - AFR5565 - N10522 - BBO094
LAB	INSE	17:17:00	Lima Alfa Bravo, appelez Marseille, cent vingt-cinq décimal six cent cinquante-cinq, au revoir.	
INSE	LAB	04	Cent vingt-cinq... six cent cinquante-cinq, Lima Alfa Bravo, au revoir.	
			_____	Sector in contact with: - AZA577 - N10522 - AFR5565
INSE	HVZ	17:18:30	Hotel Victor Zulu, on continue la navigation sur un cap?	
HVZ	INSE	33	Oui, pour le moment, continuez au cap trois six zéro.	
INSE	HVZ	36	Trois six zéro.	

TRANSCRIPT SHEET

Occurrence: LXLAB - HBFVZ of 27.06.2007

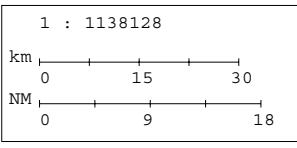


To Col.1	From Col.2	Time Col.3	Communications Col.4	Observations Col.5
				Sector in contact with: - SWR28KV - AZA577 - SWR561
HVZ	INSE	17:19:13	Hotel Victor Zulu, reprenez la navigation autino, autonome direct GOLEB.	
INSE	HVZ	17	Direct GOLEB, Hotel Victor Zulu.	
				Sector in contact with: - AZA577 (x2)
HVZ	INSE	17:21:03	Hotel Victor Zulu, descendez niveau de vol un huit zéro.	
INSE	HVZ	06	Un huit zéro, Victor Zulu.	
				Sector in contact with: - DAAAI - DLH3AJ - DAAAI
HVZ	INSE	17:23:14	Hotel Victor Zulu, descendez niveau de vol un <u>six</u> zéro.	
INSE	HVZ	17	Un six zéro, Victor Zulu.	
HVZ	INSE	20	Hotel Victor Zulu, si jamais, juste pour votre information, quand je vous avais autorisé au niveau deux deux zéro, vous m'aviez répondu niveau de vol deux deux zéro.	
INSE	HVZ	28	Excusez-moi alors, j'ai vraiment fait une erreur, pardon.	
HVZ	INSE	32	C'est rien, contactez maintenant Genève Approche, cent trente-six décimale deux cent cinquante, au revoir.	
INSE	HVZ	36	Trente six deux cent cinquante, au revoir Monsieur, merci.	



Src
MV_MRT_ACC

Analysis: LXLAB - HBFVZ Time: 27.06.2007 17:14:28



Name: Ivan Rochat Eval Date: 19.07.2007

Src
MV_MRT_ACC

Analysis: LXLAB - HBFVZ Time: 27.06.2007 17:14:49



G280
210
17:13:55

4.8 NM
900 ft
193

3.7 NM
700 ft
198

2.6 NM
600 ft
208

1.7 NM
400 ft
226

1.4 NM
300 ft
245

G280
210
17:14:15

G280
210
17:14:19

G280
210
17:14:23

G280
210
17:14:27

G280
210
17:14:31

G280
210
17:14:35

G280
210
17:14:39

1.3 NM
200 ft
267

G275
HBFVZ STCA NRV
212 ETA013

LXLAB STCA NRV
210 VEV210

G275
213
17:14:43

2.2 NM
-500 ft
35

3.2 NM
-600 ft
22

4.3 NM
-800 ft
16

G285
214
17:14:39

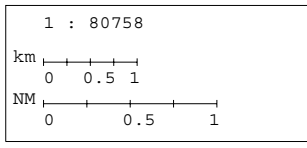
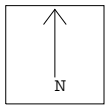
G295
216
17:14:31

G280
216
17:14:27

G280
218
17:14:19

G275
219
17:14:15

G275
220
17:14:07



Src
MV_MRT_ACC

Analysis: LXLAB - HBFVZ Time: 27.06.2007 17:15:06

