

Final Report of the Aircraft Accident Investigation Bureau

concerning the incident (Airprox)

between HB-GPC and J-3202

on 3 February 2004

south-west of ROMOM

FINAL REPORT

AIR TRAFFIC INCIDENT REPORT (ATIR)

AIRPROX (NEAR MISS)

THIS REPORT SERVES EXCLUSIVELY TO PREVENT ACCIDENTS. THE LEGAL ASSESSMENT OF ACCIDENT/INCIDENT CAUSES AND CIRCUMSTANCES IS NO CONCERN OF THE INCIDENT INVESTIGATION
(ART. 24 OF THE AIR NAVIGATION LAW)

PLACE/DATE/TIME 4 NM south-west of ROMOM in airway G5, on 3 February 2004 at 07:32 UTC

AIRCRAFT HB-GPC, Beech 58, from Berne to Geneva
Private IFR flight

J-3202, F5F Tiger, from Payerne to Payerne
Military VFR flight

ATC UNITS GENEVA Terminal Control, Sector INE
Geneva Approach Control, Arrival Sector
MAM Military Airspace Manager, Dübendorf

CONTROLLERS Radar Controller
Radar Coordinator

AIRSPACE E

HISTORY

On Tuesday 3 February 2004, a type Beech 58 aircraft, registration HB-GPC, took off from Berne at 07:16, destination Geneva. It used airway G5 on route Fribourg five Alpha Arrival and maintained flight level FL090, in accordance with the ATC clearance it had received.

At 07:30, a Tiger F5F aircraft, registration J-3202, took off from the military aerodrome at Payerne for a training mission over the "Préalpes". It was flying under VMC conditions, according to visual flight rules (VFR). After take-off, it was released from Payerne TWR control and made a left turn south towards the "Préalpes", to cross airway G5 in class E controlled airspace.

The F5F, which was transmitting transponder code A6100, climbed at a rate of 6000 FT/min and at a speed of about 420 KTS. Before entering the airway, when it was passing 6500 FT in a climb, the pilot made contact with the Military Airspace Manager (MAM) on the military information frequency. The MAM allocated the "Préalpes" sector to him for his training.

A few seconds after entering the airway, the pilot of the F5F considerably reduced his rate of climb which fluctuated between 3000 and 1800FT/min up to the time of the incident.

In the meantime, aircraft HB-GPC was handed over by Geneva radar control, Initial Approach East (INE) Sector, to the Approach control frequency, Geneva Arrival 136.25 MHz, which gave it clearance to continue its route as far as the Saint-Prex VOR at flight level FL090 in order then to make a direct ILS approach on runway 23.

Aircraft HB-GPC was at that time 1 NM east of ROMOM at flight level FL090 at a speed of 180 knots and its route would cross perpendicularly the envisaged route of the F5F, south-west of ROMOM.

At 07:32, the Arrival radar controller gave essential traffic information to the pilot of aircraft HB-GPC, indicating the conflicting military traffic at his 2 o'clock at a distance of 2 NM, crossing from right to left. The pilot reported that he had visual contact with the traffic and that he was maintaining flight level FL090.

At the same moment, the MAM informed the pilot of the F5F of the conflicting traffic at his eleven o'clock at a distance of 2NM, indicating 9000 FT heading west. The F5F was then passing flight level FL088 in a climb with a speed of 420 knots and a southerly heading which was causing it to intersect the route of aircraft HB-GPC perpendicularly.

The MAM once again informed the pilot of the F5F of the traffic when it was at the same altitude as him, i.e. at flight level FL090. The two aircraft were still converging and the lateral separation was no more than 1 NM.

According to the radar traces, the routes of the two aircraft converged with a minimum lateral separation of 0.7 NM with an altitude difference of 400 FT.

The MAM informed the pilot of the F5F when the two aircraft had crossed, to which the pilot replied that he had not seen the traffic.

The F5F then stabilised at flight level 100 as far as the southern limit of the airway, still in class E airspace.

The Arrival radar controller informed the pilot of aircraft HB-GPC that the ATC unit was submitting an ATIR report following this incident.

All times indicated in the report are in UTC format (local time -1)

FINDINGS

- Weather:
 - Geneva, 07:20 UTC
 - Wind calm
 - CAVOK
 - Temperature: - 1° C
 - QNH 1033 hPa
 - NOSIG (no significant change).
 - Wind at altitude: FL100: 320 degrees / 5 knots
- At 07:28:33, the pilot of aircraft HB-GPC called the Arrival sector of Geneva Approach Control on frequency 136.25 MHz, indicating his flight level FL090 and his route in the direction of ROMOM.
- At 07:28:42, the Arrival radar controller cleared the pilot of aircraft HB-GPC to maintain flight level FL090 in the direction of the Saint-Prex VOR with a view to a direct ILS approach on runway 23.
- The controller's report mentions that the traffic load was light.
- At 07:30:56, according to the radar recording, appearance of the uncorrelated radar trace of the military F5F aircraft transmitting transponder code A6100, at an altitude of 3300 FT, 2.5 NM south-west of Payerne.
- At 07:31:28, aircraft HB-GPC was passing point ROMOM at flight level FL090 and at a speed of 180 knots.
- At 07:31:36, the pilot of the F5F aircraft called the Military Airspace Manager (MAM) on frequency V31/U31. The aircraft was in class E airspace below airway G5 at an altitude of 6500 FT in a climb, on a southerly heading. Throughout this flight phase, his rate of climb and his ground speed calculated from the radar plots were 6000 FT/min and 418 knots respectively.
- At 07:31:57, the Short Term Conflict Alert (STCA) was triggered. According to the recording of the radar plots, the flight level of the F5F at that time was FL84.
- According to the recording of the radar plots, aircraft F5F stabilised its altitude for about ten seconds, then resumed climbing at a rate of 1800 FT/min.
- At 07:32:02, the Arrival radar controller telephoned the DELTA control sector to ask if the traffic transmitting transponder code A6100 at ROMOM was maintaining flight level FL080.
- The DELTA sector controller replied that he was unaware of this traffic and that he did not have contact with it on his frequency.
- The two conflicting aircraft were in radio contact on two different ATC frequencies.
- At 07:32:09, the Arrival radar controller informed the pilot of flight HB-GPC of the conflicting traffic, issuing essential traffic information: "Military traffic at your 2 o'clock, 2 miles, crossing right to left".
- At 07:32:12, the MAM informed the pilot of military aircraft F5F of the conflicting traffic, issuing essential traffic information: "at your 11 o'clock, distance 2 miles, indicating 9000 feet, direction west".

All times indicated in the report are in UTC format (local time -1)

- At 07:32:18, the pilot of aircraft HB-GPC acknowledged receipt of the radar controller's message, indicating that he was maintaining flight level FL090 and that he had visual contact with the traffic.
- At 07:32:19, the pilot of the F5F replied to the MAM operator that he was attentive: "looking out".
- At 07:32:20, the MAM informed the pilot of the F5F that the conflicting traffic was at the same altitude: "now same altitude".
- According to the recording of the radar plots, the F5F aircraft was at this time at a distance of 1 NM from aircraft HB-GPC, on a converging heading. The minimum distance before crossing was a lateral separation of 0.7 NM and an altitude difference of 400 FT. The F5F passed 0.7 NM in front of aircraft HB-GPC at a speed of 420 knots.
- At 07:32:39, the MAM informed the pilot of the F5F that the conflicting traffic was passing behind him at a distance of 2 NM.
- The F5F pilot replied that he did not have visual contact with the traffic.
- The pilot of flight HB-GPC stated, in a telephone interview with the investigator, that he was in VMC conditions and that he had noticed the conflicting traffic passing at very high speed, at the moment he was receiving the essential traffic information.

ANALYSIS

Payerne Control Tower cleared the F5F for take-off and, in accordance with the established procedure, the pilot then continued the flight in accordance with the mission he had received.

On this occasion, the MAM had allocated the "Préalpes" sector to him for a training mission.

In general, Payerne Control Tower does not know about pilots' missions and cannot influence flights when they are flying according to visual flight rules (VFR).

Clearance to cross airway G5 and where applicable traffic information in the airway do not form part of the tasks or competences of Payerne Control Tower.

The pilot was therefore free to make contact, or not, with an ATC unit during the flight phase according to visual flight rules which would cause him to cross the airway.

He chose to call the MAM operator just before entering the airway inside class E airspace. The MAM is exclusively a military information frequency and does not issue clearances.

Thanks to his attentive airspace observation and his quick reaction, the MAM was twice able to give traffic information to the pilot of the F5F aircraft. Unfortunately this information remained without effect, in that the military pilot was unable to establish visual contact with the conflicting aircraft.

According to the military pilot, the onboard radar of the F5F aircraft is not designed to identify conflicting traffic and the aircraft does not have a TCAS system.

According to his statements, the pilot of the F5F opted for a departure according to visual flight rules in order to be able to reach his training sector as quickly as possible without receiving any instructions from PAYERNE radar which might have delayed him. He also chose to enter class E airspace inside the airway in order not to fly below the airway, because of the often considerable VFR traffic in this airspace.

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The F5F aircraft flew into the airway, in class E controlled airspace, outside the lateral limits of Geneva TMA, inside the Geneva Initial Approach East (INE) sector.

The ATC's task regarding separation of IFR and VFR traffic within this airspace is limited to the provision of traffic information, in so far as this is feasible.

Within class E airspace, there is no obligation for ATC to initiate evasive actions for IFR traffic in possible conflict with VFR traffic (ref. ATM-M Switzerland).

An airprox within this airspace is therefore termed a legal encounter.

Extracts from Geneva ATM MIL section:

In Switzerland, military control is responsible for applying the necessary separation between controlled civil traffic and military traffic crossing or flying along airways. In order to do so, it receives from civil control the movement of controlled aircraft using airways.

Pursuant to the decree of 29 February 1992 concerning the collaboration between civil air security and air force command, the following regulation is applicable during coordination operations for the use of class A to E airspace:

Civil air traffic has priority:

on ATS routes and in airways designated as having a civil use priority;

in civil terminal control areas (TMA) ;

in civil control zones (CTR).

Military coordination with ACC is carried out by a radar controller at Payerne.

Positions MM1/MM2 deal with Payerne arrivals and departures.

These two control positions are responsible for crossings of route G5 / G5W (G5, N869, N871, Z669, Z60, Z61, Z63 between SPR/across SPR and across BER NDB) by military traffic from and to LSMP by separating it from civil air traffic.

The resources available are: a SYCO printer for the control strips, ACC internal telephone links, plus a direct line to Payerne aerodrome.

When Payerne asks about traffic, (PAY TFC), the following information is transmitted:

IFR traffic originating from CTA Zurich, destination an aerodrome of AoR Geneva.

PAYERNE Radar (Geneva ACC military coordination service) only controls military traffic flying according to instrument flight rules (IFR), on a radio link on its control frequency.

It does not receive information from Payerne Control Tower about VFR military traffic which intends to cross airway G5 in class E controlled airspace.

The PAYERNE military radar controller was not therefore able to warn the pilot of the F5F before or just after his departure.

Only attentive observation of his radar screen or possibly monitoring of the MAM frequency used by the pilot could have drawn his attention to the evolution of the incident.

In view of the very high speed of the F5F aircraft, the ARRIVAL radar controller was not able to initiate avoiding action by aircraft HB-GPC. It was only possible to issue essential traffic information.

The maximum speed imposed on civil flights below flight level FL100 is 250 knots IAS.

Military aircraft are not subject to this restriction.

Military aircraft flights below FL100 are subject to special speed regulations (ref. AIP ENR 1.1-5 § 1. 1.5 d)

Any coordination between Geneva Approach and PAYERNE radar or the Payerne Control Tower respectively could not have taken place within such a short time frame in order to be effective.

This feeling of powerlessness in a dangerous situation was described as very frustrating by the ARRIVAL radar controller.

The incident between aircraft HB-GPC and the F5F is not an isolated case. Legal encounters between military aircraft VFR flights and civil aircraft IFR flights within class E airspace in airway G5 occur frequently. However, in most cases no ATIR report is submitted.

The analysis of this incident and the statements of the people involved, pilots and civil/military air traffic controllers, indicates a clear unanimity, denouncing the mixing of VFR and IFR traffic inside the airway in class E controlled airspace.

The bilateral radio link between traffic in controlled airspace inside the airway and the ATC unit concerned is indispensable in order to ensure the safety of flights.

CAUSE

The incident is due to defective visual airspace monitoring by the pilot of the military F5F Tiger aircraft in an airway, inside class E controlled airspace.

Factors affecting the evolution of the incident:

- the absence of *ad hoc* coordination procedures between the civil and military ATS services.
- the high speed of the military aircraft

Safety deficit

Whilst crossing an air corridor within controlled class E airspace at a speed of 420 knots, an air force aircraft crossed perpendicularly the trajectory of a civil aircraft which was flying according to instrument flight rules (IFR) with an altitude difference of 400 FT and a lateral separation of 0.7 NM, without the military pilot noticing the civil aircraft.

The absence of a special procedure influenced this serious incident.

Safety recommendation Nr. 357

The Federal Office of Civil Aviation should study the possibility of making ATS services obligatory in all airspace within which aircraft are flying under instrument flight rules.

Berne, 12 May 2005

Aircraft Accident Investigation Bureau

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(ART. 24 OF THE AIR NAVIGATION LAW)

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

Investigation into the **incident** that occurred on **03.02.2004**

- Subject of transcript: **HBGPC / A6100**

- Centre concerned: Swiss Radar Area West

- Designation of unit: Terminal Control, Geneva Arrival, Delta & INI East

- Frequency / Channel: 128.9 MHz / 136.25 MHz

- Date and period (UTC) covered by attached extract: 03.02.2004
07:22 - 07:41 UTC

- Date of transcript: 12 Februry 2004

- Name of official in charge of transcription: Didier JAVET

- Certificate by official in charge of transcription:

I hereby certify:

- That the accompanying transcript of the telephony or radiotelephony communication tape-recordings, retained at the present time in the premises of the Analysis Department, has been made, examined and checked by me.
- 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, 12 Februry 2004


Didier JAVET

Abbreviations

<u>Sector</u>	<u>Designation of sector</u>
INE	- Terminal Control Geneva, Swiss Radar INI East
PRE	- Terminal Control, Geneva Arrival
DLT	- Terminal Control, Geneva Delta

<u>Aircraft</u>	-	<u>Callsign</u>	<u>Type of acft</u>	<u>Flight rules</u>	<u>ADEP</u>	-	<u>ADES</u>
HPC	-	HB - GPC	BE58	IFR	LSZB	-	LSGG
571V	-	Tyrolean 571V	CRJ2	IFR	LOWW	-	LSGG
NWS	-	N - 604WS	CL60	IFR	LSGS	-	LYBE
HTI	-	HB - LTI	PAY2	IFR	LFML	-	LSGG
998	-	Topswiss 998	A319	IFR	LFPO	-	LSGG
PJI	-	PH - CJI	C56X	IFR	LSMP	-	LSGG
3221	-	Régional 3221	SB20	IFR	LFLC	-	LSGG
902	-	Topswiss 902	A319	IFR	EGGW	-	LSGG

OGED / 12 Februry 2004

TRANSCRIPT SHEET

Occurrence: HBGPC / A6100 of 03.02.2004



To Col.1	From Col.2	Time Col.3	Communications Col.4	Observations Col.5
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Coupled Frequencies: 125.55 MHz & 128.9 MHz, Swiss Radar INI South & East

INE	HPC	07:22:49	Swiss Radar, Hotel Bravo Golf Papa Charlie, good morning, passed flight level seven zero on course to Fribourg.	
HPC	INE	56	Papa Charlie, good morning... then what is your cleared level?	
INE	HPC	07:23:01	Cleared level is niner zero.	
HPC	INE	03	Papa Charlie, roger, you're identified, cleared Fribourg five Alfa Arrival.	
INE	HPC	08	Via Fribourg five Alfa Arrival, flight level niner zero, Hotel Papa Charlie.	
HPC	INE	13	Correct.	
INE	571V	07:25:32	Swiss Radar, bonjour, Tyrolean five seven one Victor, flight level two five zero, inbound to BENOT.	
571V	INE	36	Tyrolean five seven one Victor, good morning, you're cleared NEMOS four Alfa transition, descend to flight level one six zero.	
INE	571V	43	Descend flight level one six zero, cleared NEMOS four Alfa transition, Tyrolean five seven one Victor.	
571V	INE	47	XXXXX.	Noise of microphone
571V	INE	07:26:21	Tyrolean five seven Victor, present position, direct VADAR to rejoin the transition.	
INE	571V	26	Direct to VADAR to join the transit, transition, Tyrolean five seven one Victor.	
571V	INE	30	XXXXX.	Noise of microphone
INE	NWS	55	Radar Control, November six O four Whiskey Sierra is one eight zero.	
NWS	INE	07:27:00	November six zero four Whiskey Sierra, good morning, climb flight level ... two six zero.	
INE	NWS	05	Up to two six zero for six O four Whiskey Sierra.	

Signature of person
in charge of transcription :

TRANSCRIPT SHEET

Occurrence: HBGPC / A6100 of 03.02.2004



To Col.1	From Col.2	Time Col.3	Communications Col.4	Observations Col.5
HPC	INE	07:27:56	Hotel Papa Charlie, contact Arrival, one three six decimal two five.	
INE	HPC	07:28:00	One three six two five, thank you, goodbye.	

Frequency: 136.25 MHz, Geneva Arrival

PRE	HPC	07:28:33	Geneva Arrival, Hotel Bravo Golf Papa Charlie, good morning, flight level niner zero ... on course to ROMOM, I have information Yankee.	
HPC	PRE	42	Hotel Papa Charlie, good morning, maintain flight level niner zero, proceed Saint-Prex, expect straight in ILS two three.	
PRE	HPC	48	Direct to Saint-Prex, expect ????? ILS two three, Hotel Papa Charlie, maintain niner zero.	Unreadable
HTI	PRE	54	Hotel Tango India, descend flight level one zero zero.	
PRE	HTI	57	Descending flight level one zero zero, Hotel Tango India.	
998	PRE	07:29:00	Topswiss nine nine eight, contact Tower, one one eight seven, goodbye.	
PRE	998	03	Eighteen seven, Topswiss nine nine eight... bonne journée, merci.	
998	PRE	06	Bonne journée.	
PJI	PRE	07	Papa Juliett India, speed one six zero knots or below, contact Tower, one one eight decimal seven, goodbye.	
PRE	PJI	13	Eight seven and one six zero knots or below, Juliett India, bye-bye.	Beginning may be cut
PRE	571V	37	Geneva Arrival, good morning, Tyrolean five seven one Victor, flight level one eight zero, descending one six zero, information Yankee.	
571V	PRE	42	Tyrolean five seven one Victor, good morning, descend flight level one one zero, direct to Saint-Prex, expect straight in ILS two three.	

Signature of person
in charge of transcription :

TRANSCRIPT SHEET

Occurrence: HBGPC / A6100 of 03.02.2004



To Col.1	From Col.2	Time Col.3	Communications Col.4	Observations Col.5
PRE	571V	07:29:49	Descend flight level one one zero, direct to Saint-Prex, for ... straight in ILS two three, Tyrolean five seven one Victor.	
571V	PRE	07:31:33	Tyrolean five seven one Victor, descend seven thousand feet, QNH one zero three three, cleared ILS approach two three.	
PRE	571V	38	Down to seven thousand feet, QNH one zero three three, cleared ILS approach runway two three, Tyrolean five seven one Victor.	
HPC	PRE	07:32:09	Hotel Papa Charlie, maintain flight level niner zero and for information a... military traffic, at your two o'clock, two miles, crossing right – left.	
PRE	HPC	18	Papa Charlie, maintain niner zero, traffic in sight.	Beginning may be cut
HPC	PRE	21	Roger.	
HTI	PRE	53	Hotel Tango India, descend seven thousand feet, QNH one zero three three.	
PRE	HTI	57	Seven thousand, one zero three three, Hotel Tango India.	
HTI	PRE	07:33:58	Hotel Tango India, descend seven thousand feet, QNH one zero three three.	
PRE	HTI	07:34:02	Descending seven thousand feet, one zero three three, Hotel Tango India.	
HPC	PRE	24	Hotel Papa Charlie?	
PRE	HPC	26	Go ahead, please.	
HPC	PRE	28	Just for information, the military traffic was in contact with... any... frequency, so... we are filing a report about but... you were in airspace... Echo, so... that's why he... could pass through your level.	
PRE	HPC	44	Hotel Papa Charlie, no problem.	
HPC	PRE	46	Roger.	
HPC	PRE	51	Hotel Papa Charlie, descend now seven thousand feet, QNH one zero three three, cleared ILS approach two three.	

Signature of person
in charge of transcription :

TRANSCRIPT SHEET

Occurrence: HBGPC / A6100 of 03.02.2004



To <u>Col.1</u>	From <u>Col.2</u>	Time <u>Col.3</u>	Communications <u>Col.4</u>	Observations <u>Col.5</u>
PRE	HPC	07:34:56	One zero three the QNH, ????? cleared down to seven thousand feet and cleared for the ILS approach runway two three.	Unreadable
571V	PRE	07:35:03	Tyrolean five seven one Victor, speed one eight zero knots or below to permit departure, contact Tower, one one eight decimal seven, goodbye.	
PRE	571V	11	Over to Tower, one one eight decimal seven and we are reducing one eighty or below, Tyrolean five seven one Victor, XXXXX.	Could be "goodbye" in Austrian
571V	PRE	18	XXXXX.	Could be "goodbye" in Austrian
PRE	3221	07:36:24	Genève Approche, bonjour, Régional trente-deux vingt et un, cent quatre-vingts en route sur BELUS.	
3221	PRE	32	Régional trente-deux vingt et un, bonjour, virez à gauche direct Charlie – Bravo – Yankee ensuite Chambéry six Alfa transition, piste vingt-trois, je vous rappelle pour la descente.	
PRE	3221	41	Donc à gauche sur Chambéry et Chambéry... six Alfa transition, on est... on vous attend pour la descente, Régio.	Transmission cut
PRE	902	52	Arrivée, bonjour, Topswiss nine zero two, passing level two hundred, descending level one six zero, information is Yankee.	
902	PRE	57	Topswiss nine zero two, bonjour, continue present heading, vectors two three, descend flight level eight zero and expect about five four track miles to go.	
PRE	902	07:37:04	Roger, five four track miles to go, we descend level eight zero and we keep present heading, Topswiss nine zero two.	
HTI	PRE	15	Hotel Tango India, turn left heading three six zero, descend to six thousand feet.	
PRE	HTI	19	Descending six thousand feet, turning left three six zero, Hotel Tango India.	
3221	PRE	44	Régional trente-deux vingt et un, descendez niveau de vol cent, unite zéro zéro.	

Signature of person
in charge of transcription :

TRANSCRIPT SHEET

Occurrence: HBGPC / A6100 of 03.02.2004

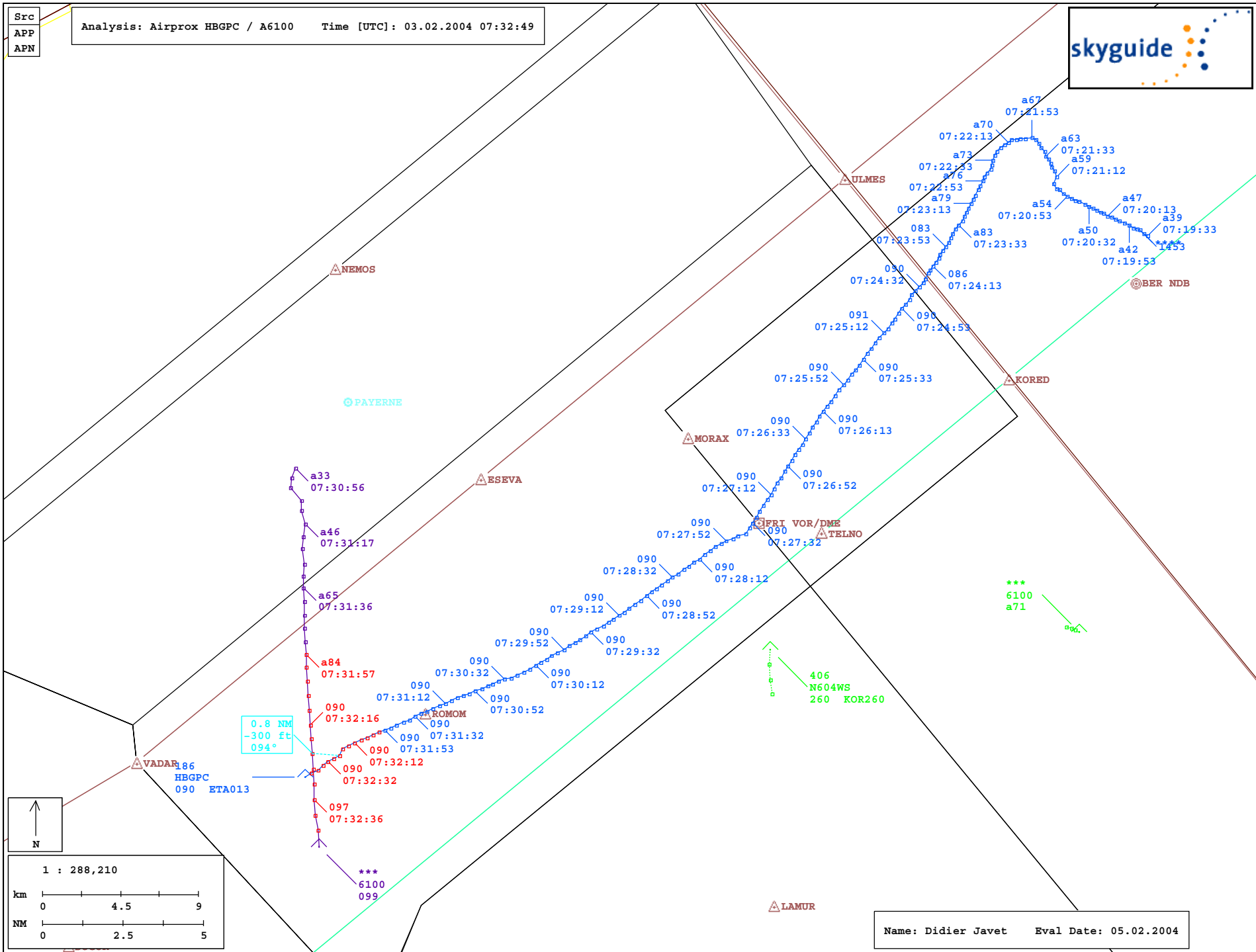


To <u>Col.1</u>	From <u>Col.2</u>	Time <u>Col.3</u>	Communications <u>Col.4</u>	Observations <u>Col.5</u>
PRE	3221	07:37:49	On débute la descente vers le cent, Régional trente-deux vingt et un.	
HTI	PRE	07:38:15	Hotel Tango India, left heading three two zero, descend four thousand feet.	
PRE	HTI	19	Left three two zero and descending four thousand, Hotel Tango India.	
HTI	PRE	45	Hotel Tango India, left heading two six zero, cleared ILS approach two three.	
PRE	HTI	49	Left two six zero and cleared for ILS approach two three, Hotel Tango India.	
PRE	HPC	07:39:52	XXXXX Papa Charlie is fully established.	Probably "Hotel"
HPC	PRE	54	Roger.	
PRE	HPC	58	And Papa Charlie, request after landing, parking position in front of TAG Aviation, please.	
HPC	PRE	07:40:05	Roger.	
PRE	HTI	08	Hotel Tango India, established two three.	
HTI	PRE	10	Hotel Tango India, reduce speed one eighty to maintain to six miles, contact Tower, one one eight seven, goodbye.	
PRE	HTI	15	One eighty to six and Tower, eighteen seven, Tango India, bye.	
HPC	PRE	07:41:04	Hotel Papa Charlie, report speed.	
PRE	HPC	07	It is one eighty now, reducing a little bit.	
HPC	PRE	11	Roger, not further than one sixty to four miles, contact Tower, one one eight decimal seven, goodbye.	
PRE	HPC	18	????? Tower, reduce the speed one sixty, Hotel Papa Charlie.	Unreadable

Signature of person in charge of transcription :

Src
APP
APN

Analysis: Airprox HBGPC / A6100 Time [UTC]: 03.02.2004 07:32:49



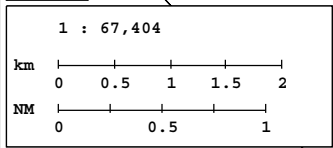
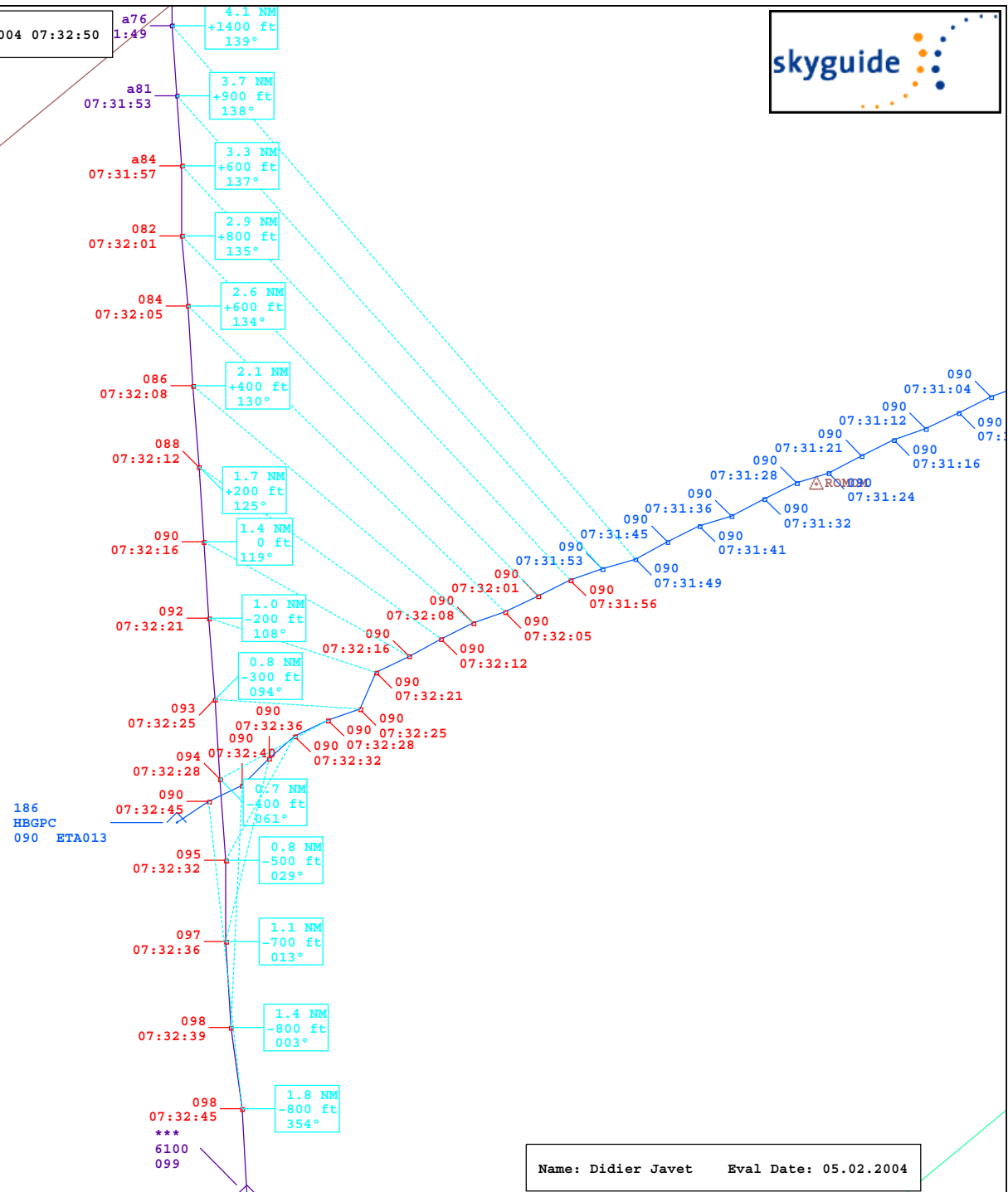
6100
a71

406
N604WS
260 KOR260

Name: Didier Javet Eval Date: 05.02.2004

Src
APP
APN

Analysis: Airprox HBGPC / A6100 Time [UTC]: 03.02.2004 07:32:50



Name: Didier Javet Eval Date: 05.02.2004