

Final Report of the Aircraft Accident Investigation Bureau

concerning the incident (Airprox)

between IBE3513 and DAL154

on 27 November 2003

3 NM north-west of MILPA, UAC Geneva

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 3NM north-west of MILPA, UAC Geneva,
27 November 2003 at 07:55 UTC

AIRCRAFT IBERIA, IBE3513, Airbus 320, EC-IEF,
from Frankfurt-Main to Madrid (EDDF – LEMD)

 DELTA Airlines, DAL154, Boeing 763, N194DN,
from New-York to Venice (KJFK – LIPZ)

ATC UNIT Swiss Radar Area West, UAC sector MS4/MS5

CONTROLLERS Radar coordinator
 Controller in training
 Radar controller
 Controller in training

AIRSPACE A

HISTORY

On Thursday 27 November 2003, at 07:37, the crew of aircraft IBERIA 3513, a scheduled flight between Frankfurt and Madrid, called the Geneva control sector MS4/MS5 frequency 134.315 MHz. They were cleared by the controller to flight level 330 on route BENOT-MEBAK.

A few minutes later, the pilot requested a higher level, FL350. The radar controller was not able to clear him to climb to this flight level, which was occupied, but assigned him flight level 340 some four minutes later.

The crew of aircraft IBERIA 3513 received and read back the clearance to climb to flight level 340 but in error set flight level FL350 in the flight control unit (FCU) altitude window with a rate of climb of 1000 FT/min.

At 07:48, the crew of aircraft DAL154, a scheduled flight between New York and Venice, called the same Geneva control sector, at flight level 350. The pilot was cleared by the radar controller on route MILPA-ORSUD-SARONNO at flight level 350.

The routes followed by the two aircraft intersected perpendicularly in the region of point MILPA.

One minute later, after clearing the pilot of aircraft IBE3513 to climb to flight level 340, even though the aircraft had not yet reached it, the radar controller informed the pilot that he was to maintain this flight level and wait for one more minute before receiving clearance to continue the climb to the requested flight level.

About 20 seconds later, the STCA alert (an automatic alert predicting loss of separation between aircraft) was triggered and the radar controller, noting that the flight level of aircraft IBE3513 indicated FL343, confirmed to the pilot that he had cleared him to flight level 340.

The radar controller immediately informed the pilot of aircraft IBE3513 of the conflicting traffic, aircraft DAL154, issuing him with essential traffic information. The pilot apologised and informed the radar controller that he was descending to flight level 340. At this time the aircraft was at flight level 345.

The radar controller then informed the crew of aircraft DAL154 of the conflicting traffic and issued him with essential traffic information.

The crew of aircraft DAL154 informed the radar controller that he was leaving flight level 350 because of conflicting traffic, noticing the aircraft which was going to cross his route perpendicularly.

Aircraft DAL154 climbed to flight level 355, in accordance with its TCAS resolution advisory.

According to the radar traces, the minimum distance between the converging headings of the two aircraft was a horizontal separation of 4.6 NM and an altitude difference of 600 FT.

The radar controller informed the crew of aircraft DAL154 and IBE3513 that the ATC unit was submitting an ATIR report following this incident.

The crew of aircraft DAL154 informed the radar controller that it was going to submit a report with its company.

All times in this report follow the UTC format (local time – 1 hour)

FINDINGS

- The control frequencies of sector MOLUS/MILPA4 and MOLUS/MILPA5 124.030 MHz/134.315 MHz and 128.155 MHz/133.630 MHz were coupled.
- The radar controller in charge was a controller in training, under the direct supervision of an instructor.
- All radiotelephone exchanges between the aircraft and the controller took place using English phraseology.
- According to the controllers' reports, the traffic load was average. Eighteen aircraft were in radio contact with the control sector over a period of 29 minutes.
- At 07:37:11, the crew of aircraft IBE3513 called the radar sector, stating his flight level FL 330.
- At 07:37:16, the controller identified the aircraft and cleared it on route BENOT-MEBAK at flight level FL330. The pilot read back this clearance.
- At 07:48:01, the crew of flight IBERIA3513 asked the radar sector if flight level 350 was available.
- The radar controller replied that he would call him back within about one minute.
- At 07:48:56, the crew of aircraft DAL154 called the radar sector, stating his flight level FL 350.
- At 07:49:01, the radar controller identified flight DAL154 and cleared it on route MILPA-ORSUD-SRN at flight level FL 350. The pilot read back the authorised route.
- At 07:51:45, the radar controller cleared aircraft IBE3513 to climb to flight level 340.
- At 07:51:50, the crew of flight IBE3513 read back the clearance to climb to flight level 340.
- At 07:53:02, the radar controller informed the crew of flight IBE3513 that he should maintain flight level 340 when he had reached it. He informed him that he would subsequently receive clearance to continue the climb. The pilot acknowledged reception of the message.
- According to the radar recording, flight IBE3513 was at that time at flight level 339.
- At 07:53:24, the STCA alert (an automatic alert predicting loss of separation between aircraft) was triggered. According to the radar recording, the flight level of aircraft IBE3513 was at that time flight level 343.
- At 07:53:24, the controller warned the crew of flight IBE3513 that he had cleared him to flight level FL 340. The pilot replied "Sorry".
- At 07:53:32, the radar controller informed the crew of flight IBE3513 of the conflicting traffic, issuing essential traffic information. "Traffic at your one o'clock, one zero miles, eastbound".
- The crew of flight IBE3513 apologised and informed the controller that he was descending to flight level FL 340. At this time the flight level of the aircraft was indicated as FL345.
- At 07:53:46, the radar controller informed the pilot of flight DAL154 of the conflicting traffic, issuing essential traffic information: "Delta one five four, traffic at your eleven

All times in this report follow the UTC format (local time – 1 hour)

o'clock... six miles, crossing from left to right, now descending back to three four zero, out of three four five".

- At 07:53:56, according to the radar recordings, aircraft IBE3513 indicated flight level FL 345 and aircraft DAL154 indicated FL350. It was then 6.3 NM from the point of intersection with the conflicting aircraft.
- At 07:53:59, the crew of flight DAL154 informed the controller that he was leaving flight level FL 350 because of a conflict.
- The crew of flight DAL154 later stated, on the control frequency "we were clear, but I think he might have been IMC." He stated that he was in VMC conditions and that he had noticed the conflicting aircraft at the last minute, when he was starting his climb to flight level FL 355. In his incident report, the pilot mentions that a traffic advisory (TA) was triggered, followed by a resolution advisory (RA).
- At 07:54:12, according to the radar recordings, aircraft IBE3513 was indicating flight level FL 341 and aircraft DAL154 was passing flight level FL 353 climbing, with a lateral separation of 2 NM.
- At 07:54:35, the crew of flight DAL154 informed the controller that he was leaving flight level FL 355 to descend to flight level FL 350.
- In the internal company incident report, the copilot of flight IBERIA 3513 states that he had received clearance to climb to flight level FL 340 from Geneva control but indicates that he set flight level FL350 on the FCU altitude window in error. He mentions that the aircraft passed flight level FL 340 at the selected rate of climb of 1000 FT/min and that, when the aircraft passed flight level 344.60, the controller warned him. He then disengaged the automatic pilot and immediately initiated a descent to flight level FL 340, at the moment the TCAS alert was triggered.
- In his report, the commander of flight IBE3513 stated that he did not notice that the FCU altitude window was showing FL 350 instead of FL 340. He mentions that at the time of these facts, he was discussing with a flight attendant who had just made a tour of the cabin to check if a passenger was using an electronic device which might interfere with the aircraft systems. Moreover, they were busy checking the system circuit-breakers.
- Weather: Geneva, 07:50
 - Wind at altitude: FL340 230 degrees / 70 KT
 - TROPO: 34900FT, TEMP MS60
 - QNH 997 hPa

ANALYSIS

The crew of aircraft IBE3513

The report of the co-pilot of flight IBE3513 clearly establishes that the flight crew mistakenly entered flight level 350 in the FCU altitude window. The sequence of level change clearances received is described, as well as the evolution of the level bust. No reason is given to explain this error.

The first version of the commander's report notes flight level 340 was exceeded, it being given to understand that this might have been the consequence of an unexplained malfunction of the automatic flight controls.

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At this stage, this declaration implies that flight level FL340 was “perceived”, but nothing indicates that it was entered in the FCU altitude window, nor that the counter-verification procedure was carried out by the pilots. The fact that the flight level violation was not noticed would therefore constitute a contradiction in relation to the eventuality that the assigned and entered flight level was FL340. Indeed, a level acquisition is indicated by the PFD by a sequence of flight mode annunciator (FMA) modes which must be monitored by pilots.

If, for some unexplained reason, the level acquisition had not taken place, the flight warning computer (FWC) would have issued an acoustic and visual warning: the altitude window on the PFD would have gone to amber and would have flashed as soon as the aircraft had exceeded the FCU altitude by more than 250 feet.

This discrepancy is clarified in the second declaration by the commander: in it, he specifies that the level entered in the FCU altitude window was FL350 and that there was source of distraction which led to the level bust. The commander’s statements relate in the main to the reasons for the level bust, whereas that of the co-pilot consists of a description of the facts.

This distraction was probably aggravated by the intervention of the senior flight attendant, whom the pilots had asked to go and check in the cabin if any passengers were using electronic devices which might interfere with the aircraft systems. Moreover, it may have been aggravated even more by the fact that following a consultative message displayed on the screen for displaying alarm messages and the associated electronic centralized aircraft monitoring (ECAM) checklist, the pilots checked circuit-breakers located at the rear or on the ceiling of the cockpit, i.e. outside the normal field of vision for flying.

It should be noted that in this statement, the commander is aware that the level bust is due to incorrect setting of the assigned level in the FCU altitude window, following a series of distractions resulting from an ECAM consultative message.

The radar controller

According to his statement, before being alerted by the STCA, the radar controller had a feeling that the aircraft was going to pass the cleared altitude. It seems that this feeling was induced by constant monitoring of the situation on his radar screen, given the aircraft’s regular rate of climb, and by the danger inherent in a perpendicular and imminent intersection of the headings of the two aircraft.

He warned the pilot of aircraft IBE3513, insisting on the fact that he had cleared him to flight level 340 and that he should maintain this level.

Noting a few moments later that aircraft IBE3513 was passing the cleared flight level in a climb, the radar controller warned the pilot for a second time that he had cleared him to climb to flight level FL 340.

He then immediately and successively gave traffic information to the pilot of aircraft IBE3513 and the pilot of aircraft DAL154.

According to the statements by the co-pilot of aircraft IBE3513, it was on the insistence of the radar controller that he reacted immediately and initiated the descent whereas the crew of the aircraft initiated a climb, in accordance with the TCAS resolution advisory.

The monitoring by the radar controller who was undergoing “on the job training” was appropriate and forward-looking. The flight clearance reminders to the pilot of flight IBE3513 finally alerted him and led to correction of the error which had been made.

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CAUSE

The incident is due to the fact that a crew member of flight IBE3513 erroneously set FL 350 instead of the cleared flight level, FL 340, without the second crew member being aware of it.

Factors affecting the development of the incident:

The distraction of the pilots' attention occasioned by the disorganised handling of a consultative ECAM message.

SAFETY RECOMMENDATION NO. 348

The Federal Office of Civil Aviation should prescribe that in the event of an STCA alert, the air traffic controller should use appropriate phraseology. In the present case "Descend immediately to FL340."

It should be noted that the safety recommendations of the incident report on the mid-air collision between two commercial aircraft on 1 July 2002 over Ueberlingen, recommendation No. SE03/2003, point 3, "The use of appropriate phraseology, with an emphasis on achieving maximum effects within minimum possible time/radio transmission."

Berne, 3 December 2004

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 **27.11.2003**

- Subject of transcript: **DAL154 / IBE3513**

- Centre concerned: Swiss Radar Area West

- Designation of unit: Swiss UAC, MOLUS/MILPA4 & MOLUS/MILPA5

- Frequency / Channel: 124.030 MHz, 134.315 MHz, 128.155 MHz, 133.630 MHz

- Date and period (UTC) covered by attached extract: 27.11.2003
07:37 - 08:06 UTC

- Date of transcript: 05 December 2003

- Name of official in charge of transcription: Ivan ROCHAT

- 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, 05 December 2003



Ivan ROCHAT

Abbreviations

Sector Designation of sector

UAC - Swiss Radar Area West, UAC, sectors MOLUS/MILPA 4 & MOLUS/MILPA 5

<u>Aircraft</u>	-	<u>Callsign</u>	<u>Type of acft</u>	<u>Flight rules</u>	<u>ADEP</u>	-	<u>ADES</u>
3513	-	Iberia 3513	A320	IFR	EDDF	-	LEMD
302	-	GJT 302	F100	IFR	LEMD	-	LOWS
2AMB	-	Lion King 2 Ambulance	LJ35	IFR	ELLX	-	LEAL
316	-	Alitalia 316	MD82	IFR	LIRF	-	LFPG
227	-	Alitalia 227	A321	IFR	EGLL	-	LIMC
1102	-	Air France 1102	B733	IFR	LFPG	-	LIMF
1XM	-	Lufthansa 1XM	CRJ7	IFR	EDDL	-	LEBL
405	-	Belair 405	B752	IFR	LSZH	-	GCLA
571	-	Speedbird 571	A320	IFR	LIMC	-	EGLL
637	-	Aliven 637	C56X	IFR	LIPO	-	ELLX
154	-	Delta 154	B763	IFR	KJFK	-	LIPZ
520	-	Avcon 520	LJ45	IFR	LFML	-	LSZH
204K	-	Air France 204K	A320	IFR	LFPG	-	LIRF
3916	-	Ryanair 3916	B738	IFR	EGSS	-	LICJ
116	-	Spanair 116	A320	IFR	EDDF	-	LEMD
1233	-	Ryanair 1233	B738	IFR	LIRP	-	EDFH
695	-	Hapag Lloyd 695	B738	IFR	EDDM	-	GCLA
305	-	Alitalia 305	MD82	IFR	LFPG	-	LIML

OG EY / 05 December 2003

TRANSCRIPT SHEET

Occurrence: DAL154 / IBE3513 of 27.11.2003



To Col.1	From Col.2	Time Col.3	Communications Col.4	Observations Col.5
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**Coupled Channels: 124.030 MHz / 134.315 MHz / 128.155 MHz / 133.630 MHz,
MOLUS/MILPA 4 & MOLUS/MILPA 5**

UAC	3513	07:37:11	Radars, good morning, Iberia three five one three, maintaining three three zero.	
3513	UAC	16	Iberia three five one three, good morning, identified, three three zero, BENOT - MEBAK.	
3513	UAC	22	BENOT - MEBAK, Iberia three five one three.	
302	UAC	07:38:36	Golf Juliett Tango three zero two, contact Swiss Radar, one three four decimal six zero five, good day.	
UAC	302	41	One three four six zero five, Golf Juliett Tango three zero two.	
UAC	2AMB	07:39:50	Geneva Radar, bonjour, Lion King two Ambulance, flight level three seven zero.	
2AMB	UAC	55	DUK two Ambulance, good day, identified, three seven zero, cleared to TUROM then BALSU.	
UAC	2AMB	07:40:03	TUROM - BALSU, Lion King two Ambulance, merci.	
316	UAC	16	Alitalia three one six, contact Paris, one three two decimal six seven, ciao XXXXX.	Could be "grazie"
UAC	316	21	One three two six seven, Alitalia three one six, ciao.	
227	UAC	37	Alitalia two two seven ?	
UAC	227	40	Two seven, go ahead.	
227	UAC	42	Alitalia two two seven, descend to flight level two seven zero to be maintaining three zero miles before Torino.	
UAC	227	49	Heu... down flight level two seven zero to be leveled three zero miles before Torino, Alitalia... two two seven, leaving now three ... nine zero.	
227	UAC	57	Affirm.	
UAC	1102	07:41:50	Swiss Radar, Air France one one zero two, good morning, climbing flight level three three zero.	

Signature of person
in charge of transcription :

TRANSCRIPT SHEET

Occurrence: DAL154 / IBE3513 of 27.11.2003



To Col.1	From Col.2	Time Col.3	Communications Col.4	Observations Col.5
1102	UAC	07:41:56	Air France one one zero two, good morning, identified, when reaching, maintain three three zero, cleared to MOBLO then Torino.	
UAC	1102	07:42:05	Maintain flight level three three zero, MOBLO - Torino, Air France one one zero two.	
UAC	1XM	23	Swiss, Grüzi, Lufthansa one X-ray Mike, maintaining flight level three seven zero, approaching OLBEN.	
1XM	UAC	29	Lufthansa one X-ray Mike, good morning, identified, three seven zero, cleared to MILPA then BALSÌ for now.	
UAC	1XM	42	MILPA – BALSÌ, Lufthansa... one X-ray Mike, confirm?	
UAC	1XM	50	Radar, Lufthansa one X-ray Mike?	
1XM	UAC	52	Yes, Sir.	
UAC	1XM	53	XXXXX you confirm MILPA thereafter BALSÌ?	Could be "Can"
1XM	UAC	55	Affirm.	
UAC	1XM	56	Merci.	
405	UAC	07:43:33	Belair four zero five, contact Marseilles, one three three decimal two three five, good day.	
UAC	405	39	One three three decimal two three five, au revoir, Belair four zero five.	
571	UAC	55	Speedbird five seven one, contact Paris, one three two decimal six seven, good day.	
UAC	571	07:44:04	One three two six seven, five seven one, bye.	
2AMB	UAC	16	DUK... two Ambulance, direct to BALSÌ.	
UAC	2AMB	20	To BALSÌ, Lion King two Ambulance, thank you.	
227	UAC	39	Alitalia two two seven?	
UAC	227	42	Two two seven.	
227	UAC	43	Will you be able to maintain two seven zero, three zero miles before Torino?	
UAC	227	48	That's affirm, okay, Alitalia two two seven.	

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Occurrence: DAL154 / IBE3513 of 27.11.2003



To Col.1	From Col.2	Time Col.3	Communications Col.4	Observations Col.5
227	UAC	07:44:50	Roger, Sir.	
227	UAC	07:46:20	Alitalia two two seven, contact Milano, one three five decimal zero seven, ciao XXXXX.	Could be "grazie" or "ragazzi"
UAC	227	26	Three five zero seven, goodbye, two two seven.	
UAC	3513	07:48:01	Control, Iberia three five... one three?	
3513	UAC	04	Yes, Sir.	
UAC	3513	06	Is three five zero available?	
3513	UAC	12	Call you back in about one minute, ... XXXXX.	Could be "standby"
637	UAC	18	Lima Victor November six three seven..., ... descend now flight level three four zero.	
UAC	637	25	Down three four zero, six three seven.	
UAC	154	56	Good morning Swiss Radar, Delta one five four, flight level three five zero.	
154	UAC	07:49:01	Delta one five four..., good day, identified..., three five zero, cleared to MILPA then ORSUD - Saronno.	
UAC	154	13	Delta one five four, MILPA - ORSUD and Saronno.	
154	UAC	17	Affirm.	
UAC	520	20	Heu... Swiss Radar, Güte Morgen, Avcon five two zero, flight level three two zero, overhead OMASl.	
520	UAC	25	Avcon five two zero, good day, identified, three two zero, MOLUS - KORED.	
UAC	520	30	Three two zero, MOLUS - KORED, Avcon five two zero.	
637	UAC	34	Lima Victor November six three seven, continue descent to flight level three zero zero.	
UAC	637	38	Down three zero zero, six three seven.	
637	UAC	40	Yes, Lima Victor November six three seven, rate two thousand or more, please.	
UAC	637	44	Two thousand or more, six three seven.	

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Occurrence: DAL154 / IBE3513 of 27.11.2003



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>
UAC	204K	07:50:03	Swiss Radar, good morning, Air France two zero four Kilo, flight level three three zero.	
204K	UAC	09	Air France two zero four Kilo, good morning, identified, maintain flight level three three zero, cleared to MILPA then Torino.	
UAC	204K	19	Maintaining flight level three three zero on course to MILPA then Torino, Air France two zero four Kilo.	
UAC	154	30	<i>And Swiss..., Delta one five four, confirm after ORSUD, Sierra Romeo November?</i>	
154	UAC	35	<i>Affirm, Sir.</i>	
UAC	154	37	<i>Thank you.</i>	
3916	UAC	07:51:17	Ryanair three niner one six, contact Rome, one three two decimal niner zero five, good day.	
UAC	3916	23	One three two decimal nine zero five, Ryanair three nine one six, bye-bye.	
116	UAC	27	Spanair one one six, contact Marseilles, one one eight decimal eight eight zero, good day.	
UAC	116	32	One one eight decimal eight eight zero, Spanair one one six.	
3513	UAC	45	<i>Iberia three five one three, climb flight level three four zero.</i>	
UAC	3513	50	<i>Climb three four zero, Iberia three four... three five one three.</i>	
637	UAC	07:52:04	Lima Victor November six three seven, contact Reims, one three four decimal four zero, good day.	
UAC	637	10	One three four four zero, bye-bye.	
1102	UAC	38	Air France one one zero two?	
UAC	1102	41	Air France one one zero two, go ahead.	
1102	UAC	43	Air France one one zero two, descend to flight level two eight zero.	

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Occurrence: DAL154 / IBE3513 of 27.11.2003



To Col.1	From Col.2	Time Col.3	Communications Col.4	Observations Col.5
UAC	1102	07:52:47	Descending flight level two eight zero, Air France one one zero two	
1102	UAC	51	And Air France one one zero two, contact Swiss Radar, one two six decimal zero five, good day.	
UAC	1102	56	One two six decimal zero five, Air France one one zero two, bye-bye.	
3513	UAC	07:53:02	Iberia three five one three, when reaching, maintain three four zero, expect further climb in about one minute, call you back.	
UAC	3513	08	Roger, three four one... three.	
3513	UAC	24	Iberia three five one three, I said three four zero, Sir.	
UAC	5313	30	Sorry, I... .	
3513	UAC	32	Traffic at you one o'clock, one zero miles, ... east bound.	
UAC	3513	40	We are sorry..., descending three four zero.	
3513	UAC	44	Roger, Sir.	
UAC	3513	45	Thank you.	
154	UAC	46	<i>Delta one five four, traffic at your eleven o'clock..., six miles, crossing from left to right, now descending back to three four zero, out of three four five.</i>	
UAC	154	59	<i>Delta... one five four, leaving three five zero, conflict.</i>	
154	UAC	07:54:04	Roger.	
UAC	3513	13	We have in sight and maintaining three four zero, Iberia three four ... one, three five one three.	
3513	UAC	20	Roger.	
UAC	3513	22	Thank you.	
2AMB	UAC	25	DUK two Ambulance, contact Marseilles, one two eight decimal seven eight zero, good day.	
UAC	2AMB	30	One two eight seven eight zero, Lion King two Ambulance, bye-bye.	

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in charge of transcription :

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Occurrence: DAL154 / IBE3513 of 27.11.2003



To Col.1	From Col.2	Time Col.3	Communications Col.4	Observations Col.5
UAC	154	07:54:35	And Delta one five four, heu... leaving three five five for three five zero.	
154	UAC	41	Roger.	
3513	UAC	48	Iberia three five one three, climb flight level three five zero now.	
UAC	3513	52	Leaving three four zero, climbing three five zero, Iberia three five one three.	
3513	UAC	07:55:16	Iberia three five one three, heu... reach three five zero to be stable abeam NINTU, please.	
UAC	3513	26	Heu... say again, please for Iberia three five one three.	
3513	UAC	28	Iberia three five one three, climb three five zero to be maintaining in one zero miles, ??????	Unreadable
UAC	3513	34	One zero miles, roger, wilco.	
3513	UAC	35	?????.	Unreadable
UAC	1233	07:56:02	Swiss Radar, good day, Ryanair one two three three, flight level three six zero, inbound Aosta.	
1233	UAC	07	Ryanair one two three three, good day, squawk five seven five three.	
UAC	1233	11	Five seven five three coming up, Ryanair one two three three.	
3513	UAC	15	Iberia three five one three, contact Marseilles, one three three decimal two three five, for your information, Sir, I have to file a report.	
UAC	3513	23	Yes..., thank you for the information..., one two three, confirm... three one five.	
3513	UAC	29	One three three two three five, Sir, good day.	No reply
UAC	520	33	Swiss, Avcon five two zero, standing by for descent.	
520	UAC	36	Avcon five two zero, descend to flight level two seven zero.	
UAC	520	40	Descend flight level two seven zero, Avcon five two zero.	

Signature of person in charge of transcription :

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Occurrence: DAL154 / IBE3513 of 27.11.2003



To Col.1	From Col.2	Time Col.3	Communications Col.4	Observations Col.5
520	UAC	07:56:42	Yes, Sir, rate two thousand or more, please.	
UAC	520	45	Two thousand or more, Avcon five two zero.	
520	UAC	47	And Avcon five two zero, contact Swiss Radar, one two eight decimal niner zero, good day.	
UAC	520	52	One two eight niner zero, good day, Avcon five two zero.	
UAC	3513	07:57:10	Radar, please, from Iberia three five one three, may you confirm the next frequency please.	
3513	UAC	15	Iberia three five one three, one three three decimal two three five, Marseilles Radar.	
UAC	3513	20	Three three two three five, thank you.	
1233	UAC	40	Ryanair one two three three, identified, three six zero, AOSTA - MOLUS - PENDU.	
UAC	1233	46	Level three six zero, AOSTA - MOLUS - PENDU, Ryanair one two three three.	
154	UAC	07:58:57	Delta one five four, Swiss?	Coach takes over
UAC	154	07:59:01	Delta one five four, go ahead.	
154	UAC	04	Yeah, for information, about four minutes ago, we had a level bust of an aircraft cleared three four zero, that's why you had a TCAS RA. Will you file a report?	
UAC	154	15	Heu... Delta one five four, ... standby.	
UAC	154	30	Yeah, Delta one five four..., heu... our... rules require us to do one ... for our company.	
154	UAC	36	Ah, that's no problem, for information, we file as well a report, so... it will be at least double report.	
UAC	154	42	One five four, roger.	
1XM	UAC	46	Lufthansa one X-ray Mike, contact Marseilles, one two eight decimal seven eight zero, good day.	Trainee again
UAC	1XM	52	XXXXX, one two eight seven eight zero, Lufthansa one X-ray Mike, same to you, bye-bye.	Cold be "Okay"
1XM	UAC	56	Bye.	

Signature of person in charge of transcription :

TRANSCRIPT SHEET

Occurrence: DAL154 / IBE3513 of 27.11.2003



To Col.1	From Col.2	Time Col.3	Communications Col.4	Observations Col.5
154	UAC	08:00:36	<i>Delta one five four?</i>	Coach again
UAC	154	39	<i>Go ahead.</i>	
154	UAC	40	<i>Were you IMC or VMC?</i>	
UAC	154	43	<i>Heu... we, we were clear, but I think he might have been IMC.</i>	
154	UAC	46	<i>Okay, but you were VMC, above.</i>	
UAC	154	49	<i>Clear VMC above and then we did see him at the last minute, as we were starting, XXXXX to thirty five five, we saw him.</i>	Could be "heu... when we got"
154	UAC	55	<i>Thanks a lot, Sir.</i>	
UAC	154	56	<i>No problem.</i>	
UAC	154	58	<i>The, the report that we must file is only a company report, it's just for information only.</i>	
154	UAC	08:01:04	<i>Yeah, but is, as it was a loss of separation, or at least an RA, we have to file an official report.</i>	
UAC	154	09	<i>Okay, no problem in the ?????, thank you.</i>	Unreadable
154	UAC	12	<i>No problem.</i>	
UAC	154	17	<i>So instead of going to a nice dinner in Venice, now we have to stay in the hotel and do papers.</i>	
154	UAC	23	<i>Well if you landed in Geneva, I would, we would have paid you a drink, but... it's too far away, Venice.</i>	
UAC	154	28	<i>It's no problem, we do it when we get to New York, no problem, just kidding.</i>	
154	UAC	32	<i>I'm sorry about it.</i>	
154	UAC	08:02:43	<i>Delta one five four, descend to flight level two seven zero, to be maintaining three zero miles before Saronno.</i>	Trainee again
UAC	154	50	<i>Two seven zero, three zero miles this side of Saronno, Delta one five four, we are on our way.</i>	

Signature of person in charge of transcription :

TRANSCRIPT SHEET

Occurrence: DAL154 / IBE3513 of 27.11.2003

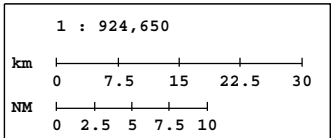
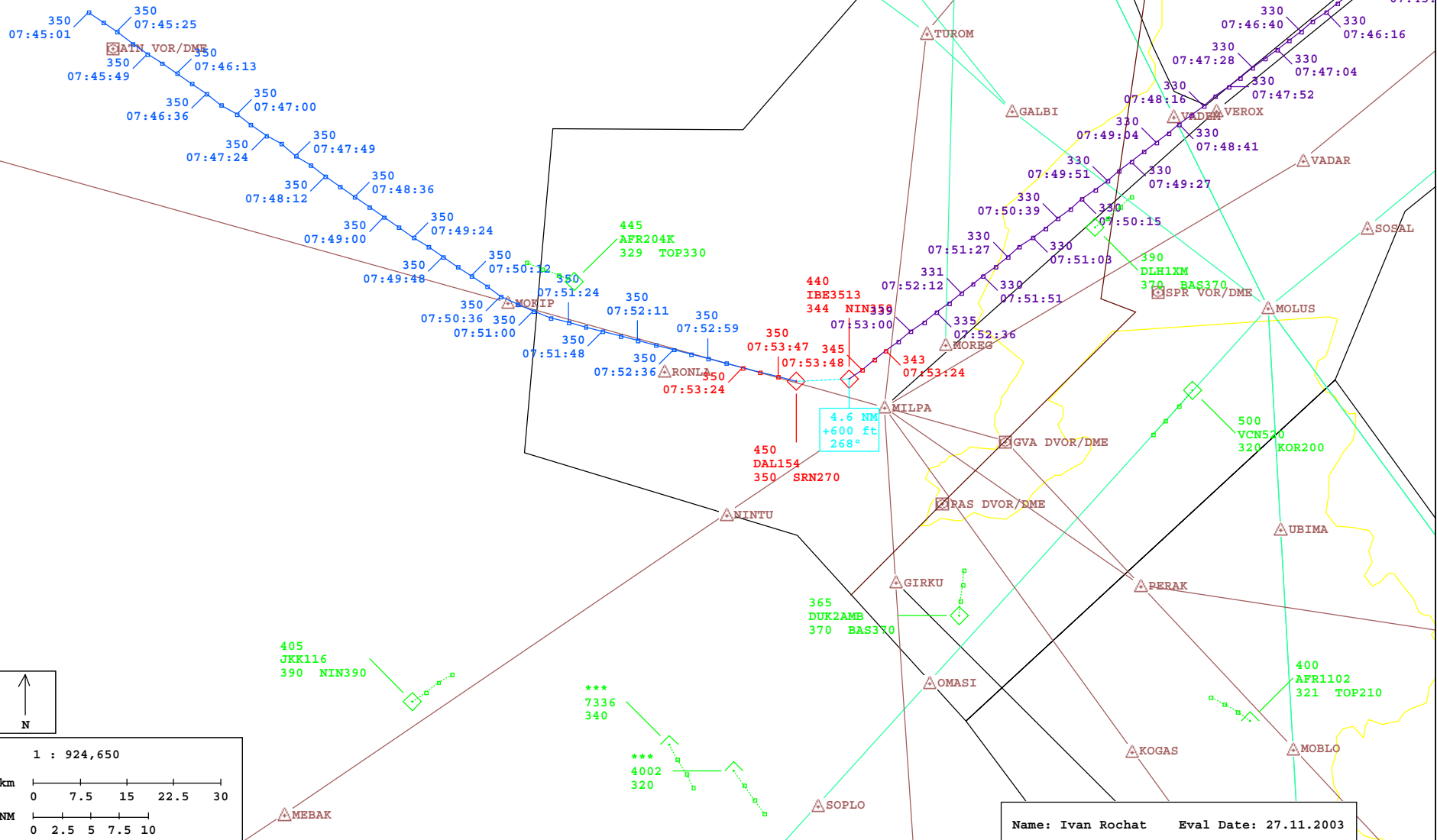


To <u>Col.1</u>	From <u>Col.2</u>	Time <u>Col.3</u>	Communications <u>Col.4</u>	Observations <u>Col.5</u>
UAC	695	08:04:05	Radar, good morning, Hapag Lloyd six niner five, level three five zero.	
695	UAC	10	Hapag Lloyd six niner five, good morning, identified, three five zero, cleared direct to MEBAK.	
UAC	695	15	Maintaining three five zero, direct to MEBAK, Hapag Lloyd six niner five.	
UAC	305	08:05:57	XXXXX, Alitalia three zero five, climbing level three three zero, MOBLO.	Could be "Radar, hello"
305	UAC	08:06:01	Alitalia three zero five, good day, identified, when reaching, maintain three three zero.	
UAC	305	07	We shall maintain three three zero, Alitalia three zero five.	
154	UAC	21	<i>Delta one five four, contact Milano, one two seven decimal four five, good day.</i>	
UAC	154	26	<i>Two seven decimal four five for Milano, heu... bye-bye.</i>	

Signature of person
in charge of transcription :

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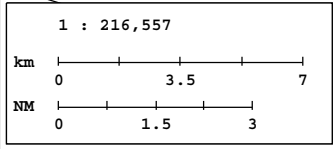
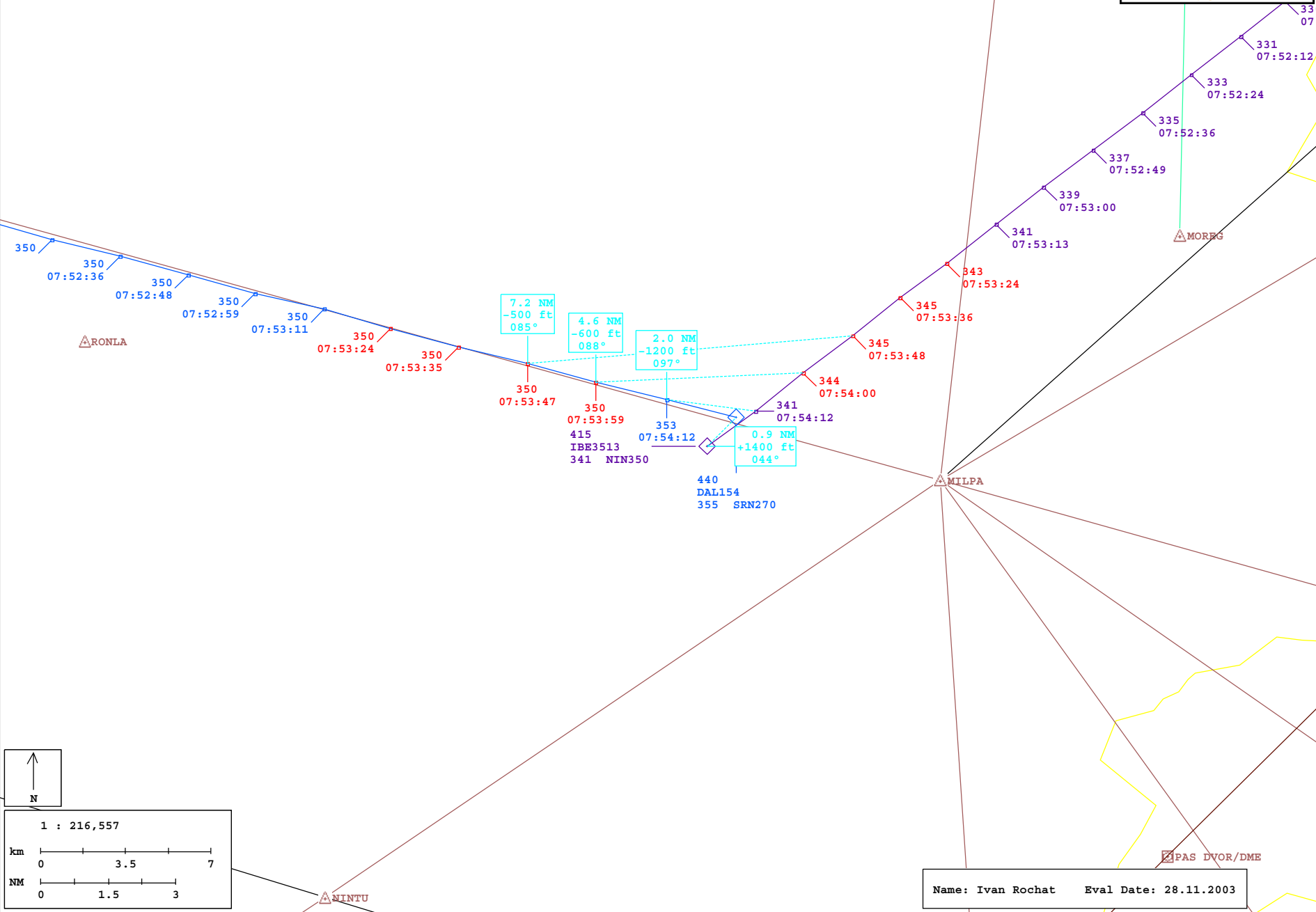
Analysis: Airprox DAL154 / IBE3513 Time [UTC]: 27.11.2003 07:54:02



Name: Ivan Rochat Eval Date: 27.11.2003

Src
ACC
ACN

Analysis: Airprox DAL154 / IBE3513 Time [UTC]: 27.11.2003 07:54:27



Name: Ivan Rochat Eval Date: 28.11.2003