Final Report

of the Aircraft Accident

Investigation Bureau

concerning the incident (Airprox)

between DAH1170 and AFR1217

on 21st September 2000

Geneva Area Control Center

AIRCRAFT ACCIDENT INVESTIGATION BUREAU

FINAL REPORT

AIR TRAFFIC INCIDENT REPORT (ATIR)

AIRPROX (NEAR COLLISION)

**THIS REPORT HAS BEEN PREPARED FOR THE PURPOSE OF ACCIDENT/INCIDENT PREVENTION. THE LEGAL ASSESSMENT OF ACCIDENT/INCIDENT CAUSES AND CIRCUMSTANCES IS NO CONCERN OF THE INCIDENT INVESTIGATION
(ART. 24 OF THE AIR NAVIGATION LAW)**

PLACE	Geneva area control centre
DATE/TIME	21 September 2000 / 09:35 UTC
AIRCRAFT	1. DAH1170, Boeing 737-200, Air Algérie
	2. AFR1217, British Aerospace BA46, Air France

ATC UNIT	Area control centre (ACC)
CONTROLLER	Radar controller, INI EST sector
AIRSPACE	C

HISTORY

On Thursday 21 September at 09:35 UTC, an aircraft of Type Boeing 737-200, DAH1170, a commercial flight from Constantine to Basle, was at flight level 310 and authorised to descend to flight level 270.
At the same moment AFR1217, an aircraft of Type BEA 146, a commercial flight from Florence to Paris Charles de Gaulle, was at flight level 260 and was going to cross the course of Flight DAH1170 in the region of MOLUS. Flight DAH1170 continued its descent below flight level 270 without authorisation. When the controller asked him to confirm his flight level, the pilot noticed his error and climbed back to flight level 270. When climbing, he crossed the trajectory of Flight AFR1217 with a separation of 300 ft at 1.3 NM.
The pilot of Flight DAH1170 apologised and the pilot of Flight AFR1217 stated that he was going to file an ATIR report.

FINDINGS

- Geneva Meteorological Office 08:50 hours :
  Wind: 220° 1 KT
  Visibility: 10 km
  Cloud: few at 1000 ft, broken at 3000 ft
  QNH 1020
  Nosig

- Flight AF1217 from Florence to Paris Charles de Gaulle was effected by an aircraft of Type BEA 146 of the CITY JET company.

- The route of Flight AF1217 was: TONDA-MOLUS-ALOGA.

- The route of Flight DAH1170 was: IRMAR-MOLUS-KORED.

- The incident happened 5 NM SE of MOLUS in Category C airspace at flight level 260 in the control zone of the Geneva ACC (Area Control Centre).

- Instrument flight rules were applicable.

- At the time of the incident, both Flight DAH1170 and Flight AF1217 were in contact with and under radar control of the INI EST sector on the 128.9 MHz frequency.

- Flight DAH1170 was authorised to descend from flight level 310 to flight level 270 by the radar controller of the 133.155 MHz sector.

- The pilot of Flight DAH1170 gave a correct "read back" and was sent on the frequency of the sector INI EST 128.9 MHz for authorisation to continue his descent.

- At 15 NM south of MOLUS, the radar controller of sector INI EST authorised Flight DAH1170 directly to the SOSAL point.

- The radar controller of the sector INI EST observed on his radar screen that the flight level of the aircraft DAH1170 was below the authorised flight level.

- At 09:35:39 hours, the radar controller requested the pilot of Flight DAH1170 to confirm his flight level.

- At 09:36:09 hours, the STCA gave a proximity alert "short time conflict alert".

- At 09:36:33 hours, Flight DAH1170 crossed the trajectory of Flight AFR1270 with a minimum vertical separation of 300 ft and a distance of 1.3 NM.

- The pilot of Flight AFR1270 stated that he had traffic in view and that he was going to file an ATIR report.

- The ATIR report of the pilot of Flight AFR1270 has never been received by us despite several requests to the company.

- Flight DAH1170 was not equipped with a TCAS/ACAS (Anti-collision airborne system).

- With respect to this equipment, the Air Algérie airline company possesses a EUROCONTROL derogation, valid until 31 March 2001, for flights over Europe.

ANALYSIS

Before landing at Basle airport, Flight DAH1170 was authorised by the radar controller of the 133.155 MHz sector to descend to flight level 270. The flight was then directed to the 128.9 MHz frequency of the INI EST sector in order to receive authorisation to continue the descent. Thirty seconds later, the pilot of Flight DAH1170 announced his presence in the INI EST sector and stated that he was leaving flight level 290 for flight level 270. The radar controller authorised Flight DAH1170 directly to SOSAL and requested the pilot to report his flight level. The pilot of Flight DAH1170 noticed his error (he crossed level 258 in descent), apologised and left level 252 to climb back to the authorised level 270. Because of this, Flight DAH1170 crossed twice the flight level 260 of Flight AFR1217.

The pilot of Flight AFR1217 informed that he had Flight DAH1170 in view and that he was going to file a report. This report has never been received by us.

CAUSE

The incident was due to the pilot of Flight DAH1170 not respecting his ATC authorisation.

Berne, 2 November 2001   Aircraft Accident Investigation Bureau

TRANSCRIPT OF TELEPHONY

OR RADIOTELEPHONY COMMUNICATIONS TAPE-RECORDING

Investigation into the **incident** that occurred on **September 21st 2000**

- Subject of transcript:	**DAH1170 / AFR1217**
- Centre concerned:	Geneva
- Designation of unit:	ACC
- Channel / Frequency:	133.155 / 128.9 MHz
- Date and period covered by attached extract:	September 21st 2000 09:30 – 09:41 UTC
- Date of transcript:	September 26th 2000
- Name of official in charge of transcription service:	Monica Simonet

- Certificate by official in charge of Analysis Department:

   I hereby certify:

-    That the accompanying transcript of the telephony or radiotelephony communication tape-recording, retained at the present time in the premises of Analysis Department, has been made under my supervision.

-    That it was 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, September 26th 2000   M. Simonet

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SWISSCONTROL

TRANSCRIPT SHEET

To Col.1	From Col.2	Hour Col.3	Communications Col.4	Observations Col.5

Channel 133.155 MHz: Geneva Area Control Centre, concerning DAH1170 only

To	From	Hour	Communications	Observations
ACC	1170	09:30:34	France Contrôle, Air Algérie onze soixante-dix bonjour.	
1170	ACC	37	Onze soixante-dix, Genève bonjour, maintenez trois dix, on vous rappelle pour descendre.	
ACC	1170	41	On maintient trois dix, on vous rappellera pour… descendre.	
				ACC in contact with several other traffic
1170	ACC	09:33:16	Air Algérie one one seven zero descend level two seven zero.	
ACC	1170	20	Descend three one zero - two seven zero, Air Algérie one one seven zero.	
				ACC in contact with another traffic
1170	ACC	54	Air Algérie one one seven zero further descent Geneva, one two eight decimal nine, au revoir.	
ACC	1170	59	Confirm Sir ?	
1170	ACC	09:34:01	Geneva, one two eight decimal nine.	
ACC	1170	05	One two eight ?????, bye.	**Unreadable**
1170	ACC	06	One two eight decimal <u>nine</u>.	
ACC	1170	09	One two eight decimal nine, Air Algérie one one seven zero.	

Frequency 128.9 MHz: Geneva Area Control Centre

To	From	Hour	Communications	Observations
ACC	*1217*	*09:33:01*	*Geneva bonjour, Air France one two one XXXXX, flight level two six zero.*	*Probably: "seven"*
1217	*ACC*	*06*	*Air France one two one seven bonjour, you are identified.*	
662	ACC	12	Swissair six six two further climb with Geneva on one three four decimal eight five, bonne journée, ciao.	
ACC	662	17	Three four eight five, Swissair six six two, bonne journée.	

<u>Signature of person in charg</u>

TRANSCRIPT SHEET

To Col.1	From Col.2	Hour Col.3	Communications Col.4	Observations Col.5
7200	ACC	09:33:26	Crossair seven two zero zero contact now Arrival on one three one decimal three two, bonne journée, ciao.	
ACC	7200	32	One three one three two, bye-bye, Crossair seven two zero zero.	
3924	ACC	36	Swissair three nine two four, now Arrival on one three one decimal three two, bonne journée, ciao.	
ACC	3924	42	Three one three two, Swissair three nine two four, au revoir.	
ACC	**1170**	**09:34:24**	**Genève XXXXX, Air Algérie one one seven zero.**	**Probably: "Control"**
1170	**ACC**	**28**	**Air Algérie one one seven zero bonjour, you are identified, direct SOSAL and I call you back for descent.**	
ACC	**1170**	**35**	**We are leaving two nine zero down two seven zero, confirm direct to ?**	
1170	**ACC**	**40**	**SOSAL …………………. Sierra Oscar Sierra Alfa Lima.**	
ACC	**1170**	**46**	**Sierra Oscar Sierra Alfa Lima.**	
1170	**ACC**	**09:35:39**	**Air Algérie one one seven zero confirm maintaining two seven zero ?**	
ACC	**1170**	**43**	**Sorry Sir, sorry Sir, I, leaving two five.**	
1170	**ACC**	**48**	**And you're descending to which level ? You have a traffic on your right hand side at flight level two six zero.**	
ACC	**1170**	**54**	**Sorry Sir!**	
1170	**ACC**	**56**	**Now descend to flight level two hundred.**	
ACC	**1170**	**59**	**Descending flight level two hundred, Air Algérie two zero, one one sev.., seven zero.**	
ACC	**1170**	**09:36:21**	**Geneva, Air Algérie one one seven one ?**	**Probably it is the captain speaking**
1170	**ACC**	**24**	**Report your level, one one seven zero.**	
ACC	**1170**	**29**	**Leaving two six zero down two zero zero, Air Algérie one one seven zero.**	
1170	**ACC**	**09:36:35**	**Roger.**	

Signature of
person in charg

TRANSCRIPT SHEET

To Col.1	From Col.2	Hour Col.3	Communications Col.4	Observations Col.5
ACC	**1170**	**36**	**Heu, we do apologise about that.**	**Probably it is the captain speaking**
1170	**ACC**	**40**	**Roger.**	
ACC	*1217*	*41*	*Air France one two one seven, the level of the traffic on our right ?*	
1217	*ACC*	*44*	*It's now descending to flight level two zero zero.*	
ACC	*1217*	*52*	*And confirm he is now in loss of separation ?*	
1217	*ACC*	*55*	*Heu the.., heu this traffic was cleared to flight level two seven zero, descending two five, reclimbing two six five, descending two six zero and now descending two hundred.*	
ACC	*1217*	*09:37:06*	*And he is loss of separation, was he ?*	
1217	*ACC*	*12*	*He is loss of separation, but… do you have to....., do you have this traffic in sight ?*	
ACC	*1217*	*19*	*Affirm, we'll be filing a loss of separation.*	
1217	*ACC*	*24*	*Roger.*	
ACC	931G	30	Radar bonjour, Swissair niner three one Golf just reaching, maintaining flight level one four zero.	
931G	ACC	35	Swissair niner three one Golf bonjour, identified.	
1170	**ACC**	**48**	**Air Algérie one one seven zero continue descent to flight level one eight zero now.**	
ACC	**1170**	**54**	**One eight zero now, Air Algérie se…. one one seven zero.**	
1170	**ACC**	**09:39:19**	**Air Algérie one one zero zero for information, the other aircraft has to file a report and also we have to file a "rapport".**	
ACC	**1170**	**30**	**You say ?????, please.**	**Unreadable**
1170	**ACC**	**33**	**I call you back.**	
1217	*ACC*	*34*	*Air France one two one seven call now Geneva on one three four decimal zero two.*	
ACC	*1217*	*09:39:38*	*One three four zero two, Air France one two one seven.*	
1217	*ACC*	*41*	*And sorry about that.*	

Signature of
person in charg

SWISSCONTROL

TRANSCRIPT SHEET

To Col.1	From Col.2	Hour Col.3	Communications Col.4	Observations Col.5
ACC	*1217*	*42*	*XXXXX.*	*Probably: "Okay"*
1170	ACC	46	Air Algérie one one zero, seven zero for your information, we have to file a "rapport".	
ACC	1170	53	One one seven one, it's okay Sir.	Probably it is the captain speaking
ACC	1170	56	….. seven one, it's okay.	At the same time probably the co-pilot
1170	ACC	58	Roger.	
ACC	1170	09:40:12	Geneva, Air Algérie one one seven one, any means to avoid that ?	Probably it is the captain speaking
1170	ACC	20	I don't think, because the other, the other aircraft has to file a report. I think he has... a TCAS resolution advisory.	
ACC	1170	28	XXXXX XXXXX, is that Air France ?	Probably: "Heu which aircraft is"
1170	ACC	33	Heu, the other aircraft was the Air France one two one seven.	
ACC	1170	38	Okay, one two one seven, thank you.	
				ACC in contact with another traffic
1170	ACC	09:41:24	Air Algérie one one seven zero now Zurich on one three five decimal six seven, ciao.	
ACC	1170	30	One three five decimal six seven, confirm ?	
1170	ACC	33	Affirm.	

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Signature of
person in charg

TRANSCRIPT SHEET

To   From   Hour   Communications   Observations
Col.1   Col.2   Col.3   Col.4   Col.5

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Abbreviations

ACC   -   Geneva Area Control Centre

1170	**-**	**Air Algérie 1170**	**B732**	**IFR flight**	**DABC**	**-**	**LFSB**
1217	*-*	*Air France 1217*	*BA46*	*IFR flight*	*LIRQ*	*-*	*LFPG*
662	-	Swissair 662	A321	IFR flight	LSZH	-	LEBL
7200	-	Crossair 7200	E145	IFR flight	LFSB	-	LSGG
3924	-	Swissair 3924	BA46	IFR flight	LSZH	-	LSGG
931G	-	Swissair 931G	A320	IFE flight	LSGG	-	LSZH

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Signature of
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swisscontrol

Src
ACC

Analysis: ATIR AFR1217 / DAH1170   Time [UTC]: 21.09.2000 09:37:47

DAH1170
229
360 ZA

235
09:37:33

243
09:37:20

250
09:37:08

256
09:36:56

AFR1217
260
340 N

260
09:37:33

MOLUS
260
09:37:20

260
09:37:08

260
09:36:56

2.0 NM
0 ft
230°

260
09:36:45

GG512

1.3 NM
−300 ft
191°

260   263
09:36:45   09:36:33

1.6 NM
−400 ft
137°

260
09:36:33

260
09:36:21

2.7 NM
−200 ft
117°

262
09:36:09

260
09:36:21

3.9 NM
+800 ft
107°

260
09:36:09

253
09:35:57

260
09:35:57

5.1 NM
+700 ft
101°

253
09:35:45

260
09:35:45

258
09:35:33

260
09:35:33

N

1 : 143,228

km
0   1   2   3   4

NM
0   0.5   1   1.5   2

265
09:35:21

260
09:35:21

Annexe 2

Name: Monica Simonet   Eval Date: 22.09.2000