

Ministry of Communications and Public Works
-Ministerio de Fomento-

DIRECTORATE GENERAL OF CIVIL AVIATION
-DIRECCION GENERAL DE AVIACION CIVIL-

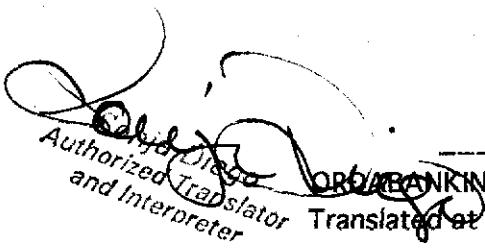
SUBDIRECTORATE GENERAL OF AIR NAVIGATION AND AIRPORT SYSTEMS

COMMISSION ON THE STUDY AND ANALYSIS
OF NOTIFICATIONS OF AIR TRAFFIC INCIDENTS

Case file 082/06/AT

Date of Incident 29.04.2006
Start (of investigation) 04.05.2005
Termination 07.09.2006

SONJA DIEGO
Translated at the request of the Icelandic Aircraft Accident Investigation Board


Authorized Translator
and Interpreter

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1. LOCATION OF INCIDENT

Date: 29/04/2006 Hour (UTC): 15:16
Notified by: ACC Barcelona; Aircraft 1; Aircraft 2
Meteorological conditions: X - VMC
Air Space: UIR Madrid/UIR Barcelona Class: C
Position: In the vicinity of point ASTRO

2. DESCRIPTION OF THE TRAFFIC ELEMENTS INVOLVED (LOS TRÁFICOS)

TRAFFIC ELEMENT 1 X - Aircraft
Identification: Aircraft 1 Point of departure: LSGG Destination: LEMG
Type of aircraft: CRJ 1 Flight Rules: IFR
Type of Operation: GAT Type of Flight: CA
Flight Phase: En route
Altitude: - ft. Flight Level: FL 270
ACAS: X - TA X - RA TYPE: Climb

TRAFFIC ELEMENT 2 X - Aircraft
Identification: Aircraft 2 Point of departure: LEAL Destination: BIKF
Type of aircraft: B 757 Flight Rules: IFR
Type of Operation: GAT Type of Flight: CA
Flight Phase: En route
Altitude: - ft. Flight Level: FL 266
ACAS: X - TA X - RA TYPE: Descend - Monitor V/S

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3. CAUSES

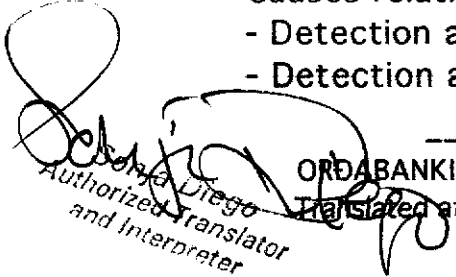
3.1 Level 1 Causes

- Causes relating to ATM; ATC Procedures
 - Authorization / Instruction / Information or Warning (Aviso) from ATC: Erroneous.

3.2 Level 2 Causes

- Causes relating to ATM; ATC Procedures
 - Detection and Solution of conflicts: Detection of Conflicts: None.
 - Detection and Solution of conflicts: Solution of Conflicts: None

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4. RATING OF THE INCIDENT

- INCIDENT: AIRPROX No Risk of Collision; Procedures
- Contribution of ATM: Direct Seriousness: C
- OTHER CHARACTERISTICS:
 - Non-observance/Violation (vulneración) of Minimum Separation.

5. DESCRIPTION

There occurred a situation following which ACC Barcelona and the aircrafts Aircraft 1 and Aircraft 2 notified an approach with activation of TCAS RA warnings to both, in the vicinity of point ASTRO.

Aircraft 1 maintained FL 270 and had been instructed by ACC Barcelona [Sector LEV2] to proceed directly to point ASTRO prior to transfer to ACC Sevilla [Sector North]. This aircraft was flying from LSGG (Geneva) to LEMG. As for Aircraft 2, which had taken off from LEAL, it was flying along the AWY UL-150 towards NW, and was in contact with ACC Madrid [Sector Castejón Inferior], at FL 240 and requesting permission to continue its ascent.

According to the transcription of the oral communications, ACC Madrid authorises Aircraft 2 to ascend to FL 300, directly to VOR CJN. At this moment, ACC Barcelona transfers Aircraft 1 to ACC Sevilla. ACC Sevilla, after making radar contact, instructs Aircraft 1 to proceed to VOR MGA. One minute and ten seconds afterwards, Aircraft 1 notifies to ACC Sevilla a TCAS decision for ascent. Simultaneously, on the frequency of ACC Madrid, Aircraft 2 also notifies a TCAS RA for descent.

Seconds before the TCAS RA warnings (avisos), ACC Barcelona tried to warn TACC Valencia of the situation, in order to have it stop the ascent of Aircraft 2, but this control station (dependencia) stated that the aircraft was already on the frequency of ACC Madrid.

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When ACC Barcelona called ACC Madrid, the TCAS warnings were coming through/being given.

In his notification report, the pilot of Aircraft 1 notes that all the time he had visual contact with the other aircraft, which maintained a fore-

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seeable trajectory. The pilot of Aircraft 2, for his part, stated that he established visual contact with the aircraft affecting him after the TCAS decision.

In his report, the controller of ACC Madrid stated that he authorised the ascent of Aircraft 2 and that following this the aircraft notified a TCAS RA warning with a "not correlated" traffic element flying on the stretch VLC-ASTRO-YES in contact with ACC Barcelona [in fact, Aircraft 1 was already under the control of ACC Sevilla].

The controller of ACC Barcelona states that there was no coordination concerning Aircraft 2, and that the only information at his disposal regarding this flight was a printed card indicating FL 240.

As for the Chief Controller/Control Room supervisor (jefe de Sala) of ACC Madrid, he states that coordination should be improved between the various control stations (dependencias) regarding point ASTRO.

According to the registered radar information, the minimum horizontal and vertical distance between the aircraft was 4,9 NM and 400 ft. respectively, just instants before the TCAS RA warnings were given. The quick response of the pilots to the warnings received by each prevented a further reduction of these minimums.

6. CONCLUSIONS

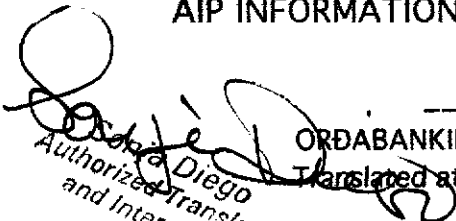
In view of all that has been set out above it is concluded that the facts described constitute an air traffic incident caused by ACC Madrid, acting outside the airspace under its jurisdiction, having authorised Aircraft 2 to ascend to FL 300 without taking into account the position of Aircraft 1 at FL 270.

7. APPLICABLE SPANISH STANDARDS (NORMATIVA)

RCA STANDARD: 3.3.3.1
3.3.3.3
4.3.3.1
4.8.4.2
4.8.4.2.1

AIP INFORMATION: ENR 6.1-3

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OTHER INFORMATION: Letter of Agreement between ACC Madrid and TACC Valencia dated 15 May 2003.

8. INTERESTED INSTITUTIONS:

Communicated to: La Dirección de Operaciones ATM de la D.N.A. de Aena.
The Swiss Aircraft Accident Investigation Bureau.
The Icelandic Aircraft Accident Investigation Board.

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9. RECOMMENDATIONS

There are no recommendations.

The rating/classification (calificación) and conclusions of the present Case file (Expediente) were analysed, treated and approved in a Plenary Session of the Commission, being declared firm at Meeting no. 42/06.

At the Airport of the Principality of Asturias
20, 21 and 22 November 2006

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the Directorate General of Civil Aviation*
SECRETARIAT OF CEANITA
Incident Commission

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Type of aircraft: B 757 Flight Rules: IFR
Type of Operation: GAT Type of Flight: CA
Flight Phase: En route
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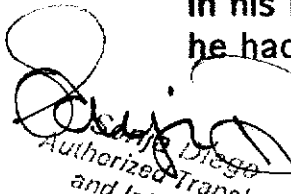
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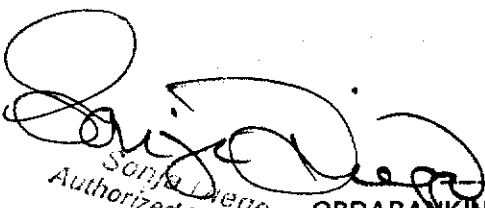
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