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COMISIÓN DE
INVESTIGACIÓN
DE ACCIDENTES
E INCIDENTES DE
AVIACIÓN CIVIL

Interim statement A-010/2013

Accident involving a Boeing 767-200 aircraft, registration XA-TOJ, operated by Aeromexico, during take-off at the Madrid-Barajas airport (LEMD) on 16 April 2013



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DE ESPAÑA

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SUBSECRETARÍA

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Important notice

This document constitutes the interim statement envisioned in Article 16.7 of Regulation (EU) no. 996/2010 of the European Parliament and of the Council, as well as in paragraph 6.6 of Annex 13 to the Convention on International Civil Aviation. The statement includes the details of the progress of the investigation and the most important operational safety issues revealed to date. The information provided herein is subject to change as the investigation proceeds.

Pursuant to the contents of Regulation (EU) no. 96/2010 of the European Parliament and of the Council, and those of Annex 13 to the Convention on International Civil Aviation, the investigation is purely technical in nature and is not intended to determine or apportion blame or liability. The investigation is being conducted without necessarily resorting to evidentiary procedures and for the sole purpose of preventing future accidents.

Consequently, the use of this information for any purpose other than to prevent future accidents may result in faulty conclusions or interpretations.

Abbreviations

.°	Degree
APU	Auxiliary Power Unit
ATC	Air Traffic Control
ATP (A)	Airline Transport Pilot (Airplane)
FA	Flight attendant
Ft	Foot
hr	Hours
Kt	Knots
LEMD	Madrid-Barajas Airport
m	Meter
OPT	Onboard Performance Tool
UTC	Coordinated Universal Time

DATA SUMMARY**LOCATION**

Date and time	Tuesday, 16 April 2013 at 12:58¹
Site	Madrid-Barajas Airport (LEMD)

AIRCRAFT

Registration	XA-TOJ
Type and model	Boeing 767-200
Operator	Aeroméxico

Engines

Type and model	PRATT & WHITNEY PW-4060
Number	2

Crew

	Captain	Copilot - 1st officer	Copilot - 2nd officer
Age	54	41	49
License	Airline Transport Pilot (Airplane) -ATP (A)	Airline Transport Pilot (Airplane) -ATP (A)	Airline Transport Pilot (Airplane) -ATP (A)
Total flight hours	—	—	—
Flight hours on the type	288	191	261

INJURIES

	Fatal	Serious	Minor / None
Crew			3+6
Passengers			154
Third persons			

DAMAGE

Aircraft	Significant
Third parties	Damage to runway 36L at the Madrid airport (LEMD)

FLIGHT DATA

Operation	Scheduled commercial air transport - International - Passenger
Phase of flight	Take off - Initial climb

INTERIM STATEMENT

Date of approval	27 March 2014
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¹ All times in this report are in UTC unless otherwise specified. To obtain local time, add two hours to UTC.

1. ACCIDENT INFORMATION

The Boeing B-767-200 aircraft, registration XA-TOJ and operated by Aeromexico, with call sign AMX002, was cleared to take off from runway 36L at the Madrid-Barajas Airport (LEMD) at 12:57:44. The wind was from 270.° at 3 kts. There were three flight crew, six flight attendants (FA) and 154 passengers onboard. According to the statement from the three FAs who were seated at the back of the aircraft, there was a strange noise during the take-off run. By the time they could notify the flight crew, they were already preparing to return to the airport due to the pressurization problems they had detected upon reaching 14000 ft. The oxygen masks then dropped in the passenger cabin. At 13:20 the flight crew informed ATC that they were returning to the airport due to pressurization problems.

An A330-200 aircraft operated by Air Europa, with call sign AEA071, which had taken off at 13:29, seventh after AMX002, informed the tower after taking off that they thought something on the runway had struck the aircraft's nose wheel and damaged the left tire, which had no pressure. The airline decided to have the aircraft return to the Madrid-Barajas airport, which it did after burning fuel in a holding pattern over Lisbon. The control tower requested an inspection of runway 36L, where metal debris was found. The crew of the sixth aircraft in line to take off had also reported seeing debris on the runway.

Aircraft AMX002 landed without incident on runway 18R at Madrid-Barajas at 14:08. The occupants were uninjured except for the two FAs located at the back of the airplane, who complained of neck pain. There was damage to the lower section of the tail and almost all the doors in the APU compartment were lost. The runway was inspected again in case any additional parts had detached on landing. Two metal parts were found.

Aircraft AEA071 finally landed at 17:39 after declaring an urgency (PAN PAN). The airport had declared a local alert. The aircraft's occupants were uninjured.

2. STATUS OF THE INVESTIGATION

Aircraft XA-TOJ had a valid and in force certificate of airworthiness. It had 99,771 flight hours. Its last maintenance inspection (100-hr check) had been conducted on 13 April 2013, and its next inspection (300-hr check) was scheduled for 24 April 2013.

The crew consisted of three pilots and six flight attendants. All had valid and in force licenses and medical certificates.

The operations official charged with dispatching the aircraft had a valid and in force dispatcher's license and medical certificate.

In late February 2013, the operator had started using a program called OPT (Onboard Performance Tool) that, among other things, calculated the take-off speeds for the aircraft for the conditions of that flight. Not all of the airports where they operated had stations licensed to use the software. This was the case at Madrid-Barajas, as a result of which the program's information could not be sent directly to the crew. The information was downloaded and sent via e-mail.

An error was detected during the investigation involving the calculation and transmission of data to the crew, which resulted in take-off speeds that were lower than required. As a result, when the crew tried to take off, the aircraft could not achieve lift and its tail struck the runway. The actions taken to mitigate the error detected involving both the entry of the data and its transmission to crews were overseen together with the operator.

Also analyzed were those aspects related to whether the crew could have detected the faulty data, as well as to the coordination and communication within the flight crew and with operations personnel during abnormal situations.

3. NEXT STEPS

The investigation has just concluded and the process of writing the draft of the final report has already commenced.