

SERIOUS INCIDENT

Aircraft Type and Registration:	Airbus A319-111, G-EZFP	
No & Type of Engines:	2 CFM56-5B5/3 turbofan engines	
Year of Manufacture:	2009 (Serial no: 4087)	
Date & Time (UTC):	9 May 2016 at 1530 hrs	
Location:	Lille Airport, France	
Type of Flight:	Commercial Air Transport (Passenger)	
Persons on Board:	Crew - 6	Passengers - 154
Injuries:	Crew - None	Passengers - None
Nature of Damage:	None	
Commander's Licence:	Airline Transport Pilot Licence	
Commander's Age:	33 years	
Commander's Flying Experience:	9,293 hours (of which 6,445 were on type) Last 90 days - 162 hours Last 28 days - 55 hours	
Information Source:	Aircraft Accident Report Form submitted by the pilot and further enquiries by the AAIB	

Synopsis

During pre-flight preparation performance figures were calculated for a departure from Lille Airport using the full length of Runway 08. The subsequent takeoff was from Intersection Tango 5, from which less than the full length was available. The error was not revealed by the crew's standard cross-check because they misread the runway length, possibly as a result of fatigue.

History of the flight

The aircraft was on a scheduled flight from Lille Airport to Toulouse Airport, France. The co-pilot was to be the Pilot Flying (PF) and the commander Pilot Monitoring (PM). Runway 08 was in use.

During the pre-flight preparation an Electronic Flight Bag (EFB) was used to calculate takeoff performance. Initially, upon opening the runway drop-down menu on the EFB the commander selected '08 T5' (indicating a departure from Intersection Tango 5 on Runway 08). He then saw that there was an option entitled '08 TMP' (Runway 08 Temporary¹). He compared the

Footnote

¹ A 'Temporary' designator is added to the runway in the EFB when there are changes published by NOTAM that affect the takeoff performance. These might be changes related to runway length for maintenance work or other factors such as obstacles.

TORA² and the engine-out procedure for both options, focusing on obstacles and stopway because he recalled there was a NOTAM that mentioned cranes. Having not noticed any difference between the two TORA he computed the performance figures using the 08 TMP option; after the co-pilot had cross-checked them they were entered into the flight management guidance computer.

While taxiing to the runway the PF briefed the departure in accordance with the operator's standard operating procedures, which include a review of takeoff speeds; these did not give either pilot cause for concern. The aircraft then took off using Runway 08 from Intersection Tango 5.

After takeoff the crew remarked to each other that the end of the runway seemed to be closer than normal as the aircraft became airborne, causing the commander to think a mistake may have been made. During the cruise he checked the EFB and noticed that there was a difference in runway length between 08 T5 and 08 TMP.

Airport information

The relevant distances are as follows:

Runway designator	TORA	ASDA ¹
08 TMP	2,825 m	2,162 m
08 - Takeoff from Intersection Tango 5	2,265 m	1,688 m

¹ ASDA – Accelerate Stop Distance Available.

Recorded data

The aircraft's flight data monitoring system captured the incident, showing that the aircraft departed using Runway 08 from Intersection Tango 5, at a takeoff weight of 59.735 tonnes.

Using this information the manufacture calculated that as the aircraft accelerated through V_1 of 139 KIAS there was about 920 m of runway remaining. When the aircraft became airborne there was approximately 800 m of runway remaining and the aircraft passed over the runway end at a height of 280 ft. Had an engine failed at V_1 there would have been 730 m of runway remaining as the aircraft got airborne, with the aircraft passing over the end of the runway at about 55 ft.

Commander's comments

The commander commented that while he and the co-pilot had cross-checked the distances between Runway 08 T5 and Runway 08 TMP they failed to spot the difference in length. Later he noted that three out of four digits were the same, but with the middle two swapped. As the V speeds seemed plausible it did not give him any cause for concern. He added that this was an "unintentional slip-up" that may have been caused by fatigue.

Footnote

² TORA – Take Off Run Available.

Other recent events involving takeoff from an intersection*G-EZAA*

On 25 June 2015 an Airbus A319, registration G-EZAA, took off from Intersection Bravo on Runway 25 at Belfast International Airport with takeoff performance calculated using the full length of Runway 07. This report was published in AAIB Bulletin 05/2016 on 12 May 2016.

G-EZUH

On 16 July 2015 an Airbus A320, registration G-EZUH, took off from Intersection Bravo on Runway 08 at London Luton Airport with takeoff performance calculated using the full length. This report was published in AAIB Bulletin 01/2016 on 14 January 2016.

G-EZIV

On 16 October 2015 an Airbus A319, registration G-EZIV, took off from Intersection Uniform Five on Runway 21 at Lisbon Airport, Portugal with takeoff performance calculated using Intersection November Two of Runway 03. This report was published in AAIB Bulletin 05/2016 on 12 May 2016.

G-EZFJ

On 14 April 2016 an Airbus A319-111, registration G-EZFJ, took off from Runway 31 at Malaga Airport. Due to a software anomaly, information for Runway 31 was displayed alongside takeoff performance data for Runway 13. The flight crew did not notice this during cross-checking and subsequently took off from Runway 31 using takeoff performance figures for Runway 13. This report is published in this AAIB Bulletin (1/2017).