

SERIOUS INCIDENT

Aircraft Type and Registration:	Antonov 26B, UR-CQD	
No & Type of Engines:	2 AI-24VT Turboprop engines	
Year of Manufacture:	1980 (Serial no: 10101)	
Date & Time (UTC):	16 July 2020 at 0219 hrs	
Location:	Birmingham Airport	
Type of Flight:	Commercial Air Transport (Cargo)	
Persons on Board:	Crew - 6	Passengers - 3
Injuries:	Crew - None	Passengers - None
Nature of Damage:	None	
Commander's Licence:	Airline Transport Pilot's Licence	
Commander's Age:	44 years	
Commander's Flying Experience:	2,512 hours (of which 624 were on type) Last 90 days - 71 hours Last 28 days - 44 hours	
Information Source:	Aircraft Accident Report Form submitted by the pilot and additional information from the operator and ATC	

Synopsis

The aircraft made two non-precision approaches to Runway 33 at Birmingham Airport, remaining too high on the first and too low on the second. In both cases ATC instructed the aircraft to go around. The aircraft then made a successful third approach to Runway 15 using the ILS. The absence of a precision approach for Runway 33, the pressure of undergoing a line check with a senior manager, a new flight instrument layout and missed opportunities to provide correcting action to the operating pilot are likely contributory factors to the aircraft being too low on the second approach.

History of the flight

After an uneventful flight, the aircraft was cleared to carry out a LOC/DME approach to Runway 33 at Birmingham Airport. The commander had only recently been promoted and was undergoing a line check by a senior manager within the company. The visibility at the time was good with a broken cloud base at 1,900 ft.

The aircraft was cleared to descend to 2,000 ft and when 12 nm from touchdown was established on the localiser with clearance to descend further with the procedure (Figure 1).

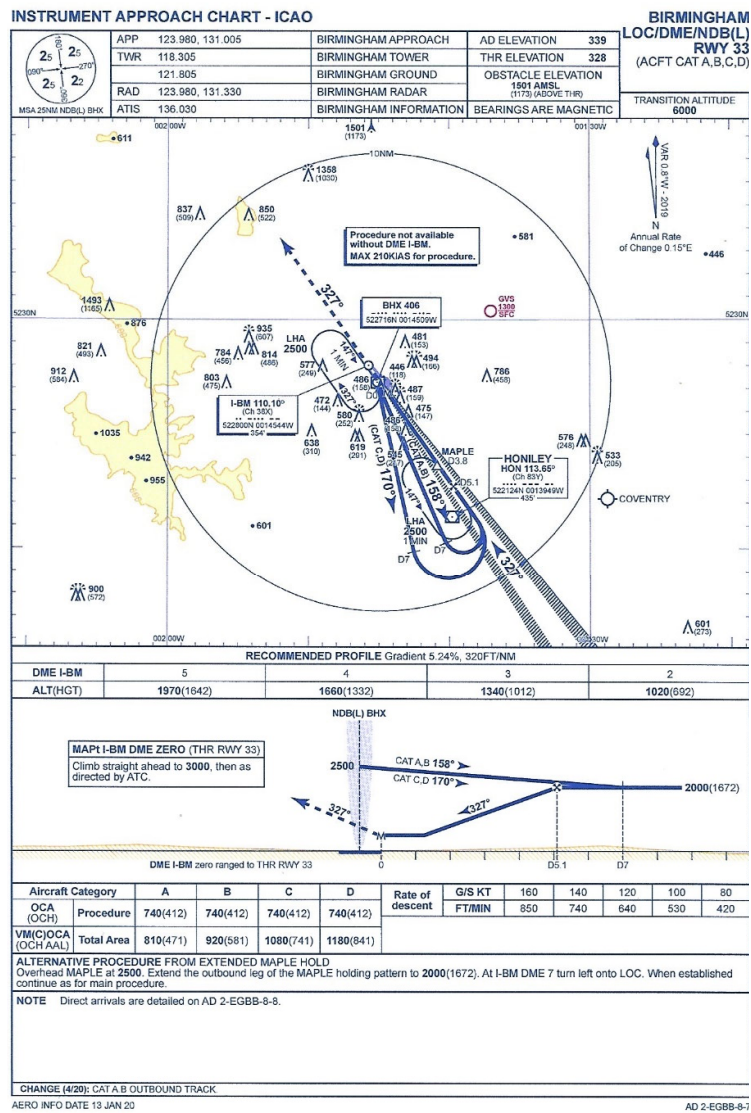


Figure 1
LOC/DME Approach Chart for Runway 33

At 5.5 nm from touchdown the aircraft was at 2,500 ft, 500 ft above the platform altitude for the approach. The aircraft continued to descend but then maintained an altitude of about 2,000 ft, remaining at this altitude beyond the start of the approach descent point, situated 5.1 nm from touchdown. At 3 nm from touchdown the aircraft was still maintaining 2,000 ft, 660 ft above the correct profile altitude. ATC instructed the pilots they were above the correct descent profile and the aircraft began a descent, but a few seconds later ATC instructed the pilots to go around and to climb straight ahead to 3,000 ft, in accordance with the published missed approach procedure. The aircraft then made a left turn before once again maintaining the runway heading. It was re-cleared to climb to 4,000 ft and given radar vectors for a further LOC/DME approach to Runway 33.

ATC provided further radar vectors to establish the aircraft on the localiser for a 10 nm final approach to Runway 33, reminding the pilots that there was no glideslope available.

The aircraft was cleared to descend with the procedure but started its descent below the 2,000 ft platform altitude when 8 nm from touchdown, 2.9 nm before the correct procedural descent point. At 7 nm the aircraft was descending through 1,600 ft, 400 ft below the correct altitude. ATC passed altitude and range information to the pilots but did not warn the pilots that they were below the correct altitude. The aircraft continued its descent and at 6 nm was at 1,500 ft, 500 ft below the correct altitude. ATC then gave the pilots a terrain warning and instructed them to go around. There was no immediate reply so ATC repeated the instruction with the aircraft now passing 1,400 ft, 600 ft below the correct altitude. The pilots responded that they had the runway in sight and were “*approaching the glideslope*”. ATC informed them there was no glideslope and again instructed the aircraft to go around, which the pilots then acknowledged.

ATC offered the crew an ILS approach to Runway 15 which, under the prevailing wind conditions, the pilots were able to accept and the aircraft landed without further event.

Airfield information

Early in 2014 work was completed to extend the threshold of Runway 33, including the installation of a new ILS system. Problems were then identified with ground water affecting the glide slope aerial, causing the glide slope to be removed from service in 2016. Drainage works were then undertaken and the glide slope re-established, but further problems due to ground water resulted in the glide slope once again having to be taken out of service.

Additional drainage works were undertaken in July 2020 with the glide slope being finally re-commissioned in September 2020.

Other information

The operator reported that the commander had previously flown non-precision approaches without difficulty. It also commented that earlier in the year the aircraft’s instrument panels had been modified, with some instruments changing position.

In his report the commander commented that he had reduced the descent rate excessively during the first approach, resulting in the aircraft remaining above the correct profile. He further commented that during the second approach the runway had been in sight and that he had intended to reduce the descent rate when ATC instructed the aircraft to go around.

Previous Incidents

The AAIB has previously investigated incidents involving non-precision approaches to Runway 33 at Birmingham Airport.¹

Footnote

¹ AAIB reference AAIB-26144. Aircraft Registration EC-KLT. https://assets.publishing.service.gov.uk/media/5f3b7e6fd3bf7f1b164fe178/Airbus_A320-216_EC-KLT_10-20.pdf (Accessed March 2021)

Analysis

Based on the profile of the first approach it appears that the pilots had either misinterpreted the approach or had been mistakenly expecting to intercept a glide slope. This was followed by advice from ATC that there was no glide slope available. On the second approach the crew appear to have mis-interpreted the approach profile, commencing their descent too early, or had commenced an early visual approach without notifying ATC. The apparently routine nature of ATC height and distance checks may have given the pilots the impression the aircraft was descending in accordance with the correct profile for landing. The manager carrying out the line check was in a position to intervene had he believed the pilot's deviation from the correct profile was inappropriate or unsafe, but did not do so.

Non-precision approaches are becoming less common and pilots may be less current in flying them. The commander also cited the new instrument layout and the pressure of undergoing a line check with a senior manager as additional factors affecting his performance.

Early and unequivocal intervention from those able to see the aircraft was not on the correct profile would have been appropriate. The return of the ILS to this runway after a protracted absence may enhance the safety of future approaches.