

INCIDENT

Aircraft Type and Registration:	Boeing 777-236, G-YMMI	
No & Type of Engines:	2 Rolls-Royce RB211 Trent 895-17 turbofan engines	
Year of Manufacture:	2000	
Date & Time (UTC):	2 August 2010 at 2110 hrs	
Location:	Stand 330, London Heathrow Airport	
Type of Flight:	Commercial Air Transport (Passenger)	
Persons on Board:	Crew - 16	Passengers - 236
Injuries:	Crew - None	Passengers - None
Nature of Damage:	Upper surface of left engine cowling	
Commander's Licence:	Airline Transport Pilot's Licence	
Commander's Age:	46 years	
Commander's Flying Experience:	16,000 hours (of which 7,500 were on type) Last 90 days - 120 hours Last 28 days - 67 hours	
Information Source:	Information from the airport operator and airline.	

Synopsis

As the airbridge was being removed from the aircraft, it struck the left engine nose cowling. The aircraft was taken out of service as a result of the damage.

airbridge auto-leveller contacted the aircraft's left engine nose cowling puncturing the outer skin over a length of approximately 20 cm. The aircraft was taken out of service as a result of the damage.

Description of the incident

G-YMMI was on Stand 330 at London Heathrow Airport and ready to depart for a commercial air transport flight to Singapore. The airbridge operator moved the airbridge slowly back from the aircraft and adjusted its alignment relative to the aircraft fuselage. She believed from looking at the CCTV monitor installed at the driving position that the airbridge wheels were aligned with the lines drawn on the manoeuvring area, designed to help operators guide the wheels to the yellow parking circle. As she moved the airbridge back further, however, the

Previous incident

In June 2002, the AAIB carried out a field investigation into an incident at the same stand during which the airbridge punctured the pressure hull of a parked aircraft (see AAIB Bulletin 5/2003). The airbridge had an apron surveillance CCTV camera located under the airbridge which was approximately 25 m from the wheels when the bridge head was extended to the side of an aircraft. The report commented that:

'when the airbridge is considerably extended, the image of the drive axle is small and indistinct.'

The report noted that one of the reasons for the incident was:

'the airbridge controller's inability to properly assess the orientation of the driving axle.'

The airbridge controller was unfamiliar with the type of airbridge at the stand.

The investigation made a number of recommendations, which included:

Safety Recommendation No 2003-23

Heathrow Airport Limited, in consultation with Thyssen, the airbridge manufacturer, should improve the ease of use and accuracy of the means by which airbridge controllers can assess the orientation of the drive axles of the type of airbridge installed at Stand M 30 of Heathrow Terminal 3.

The recommendation was accepted and the airbridge was fitted with an axle position indicator in the driving position.

Information from the airport operator

The airport operator reported that the axle position indicator in the airbridge driving position had been vandalised and was unusable.

The airline's report into the incident

Managers who attended the scene stated that the image on the CCTV screen of the orientation of the wheel axle was poor. One commented that lighting conditions under the airbridge were also poor. The report noted that training for airbridge operators stressed the requirement to check axle orientation visually and to maintain a lookout while manoeuvring the airbridge. The CCTV and the axle position indicator were to be used in support of these activities. The report concluded that it was most likely that the axle was not parallel to the aircraft when the operator, who was not familiar with Stand 330, began to withdraw the airbridge.

As a result of the incident, and following expressions of concern from other operators using Stands 330 to 336, the airport operator agreed to carry out a trial of the airbridges to limit their turning ability and to reduce their speed. It would also conduct a comprehensive review of all airbridges at the airport.