

## Follow-up Action on Occurrence Report

**ACCIDENT TO BOEING B747-286B, EP-IAH, AT LONDON HEATHROW AIRPORT ON 20 JUNE 2002**

**(AIRCRAFT PRESSURE HULL PUNCTURED BY AIRBRIDGE)**

**CAA FACTOR NUMBER** : F13/2003  
**FACTOR PUBLICATION DATE** : 12 June 2003  
**OPERATOR** : Iran Air  
**CAA OCCURRENCE NUMBER** : 2002/04130  
**AAIB REPORT** : Bulletin 5/2003

### SYNOPSIS

(From AAIB Report)

Boarding had been completed and the aircraft was ready to depart from the stand. The handling agent's airbridge controller was qualified according to the Airport operator's requirements but she was not very familiar with the type of airbridge installed at Stand M30. When she attempted to back it away from aircraft Door 2 Left, she was conscious of how near the airbridge head was to the aircraft's wing root. Consequently, before starting to back away from the door, she turned the drive axle to ensure that the airbridge head did not hit the wing. However, when reverse drive was applied to the drive axle, the airbridge head started to move to the left, parallel to the fuselage side.

A member of the ramp crew, observing that the drive axle was aligned with the side marked 'BACK' facing towards the front of the aircraft, told the controller not to operate the airbridge and to ask for assistance from the Airport operator's engineering department. At this point, an inspection showed there to be some scratches on the aircraft paintwork below Door 2 Left.

The airbridge controller, however, believing that the operator wished to get their aircraft clear of the ramp as soon as possible, made a further attempt to realign the drive axle and retract the airbridge. This was also unsuccessful and resulted in the fuselage skin being dented. The airbridge controller then asked for, and obtained, assistance from the handling agent's airbridge training officer but during the subsequent attempt to retract the airbridge, the aircraft's pressure hull was punctured by the front of the airbridge. At this point the Airport operator's engineers arrived but declined to assist in separating the airbridge from the aircraft as they might then be responsible for causing further damage.

The damage to the hull resulted in the aircraft having to be withdrawn from service and a substitute aircraft flown into Heathrow. At the time of the incident, the sun was very bright and shining directly through the sideways facing window in the airbridge head into the face of the operator when she faced the airbridge control panel.

### FOLLOW UP ACTION

The six Safety Recommendations, made by the AAIB following their investigation, are reproduced overleaf, together with the CAA's responses.



### **Recommendation 2003-19**

Within CAP 642 the Civil Aviation Authority should advise Licence Holders of Airports at which there is a variety of specific types of airbridge installed, to adopt a system which ensures that Airbridge Operators' Licences (or Permits) restrict the holder to operating only those specific airbridge types upon which they have been tested for competency.

#### **CAA Response**

The CAA accepts this Recommendation.

Appropriate advice was incorporated in CAP 642 with the amendment issued on 16 May 2003.

**CAA Status - Closed**

### **Recommendation 2003-20**

Within CAP 642 the Civil Aviation Authority should advise Licence Holders of Airports at which there is a variety of specific types of airbridge installed, to adopt a system which ensures that airbridge operators maintain an adequate familiarity with all the types that they are approved to operate.

#### **CAA Response**

The CAA accepts this Recommendation.

Appropriate advice was incorporated in CAP 642 with the amendment issued on 16 May 2003.

**CAA Status - Closed**

### **Recommendation 2003-21**

The Civil Aviation Authority should require Airport Licence Holders to have a training and audit system to ensure that the Airbridge Training Officers for all companies that operate airbridges are regularly tested for familiarity with and competency on all types of airbridge installed at their airport. This system should ensure that Airbridge Training Officers are fully acquainted with any new type of airbridge as soon as it is commissioned.

#### **CAA Response**

The CAA accepts and agrees with this Recommendation in principle and appropriate guidance was incorporated in CAP 642, with the amendment issued on 16 May 2003. However, it should be noted that CAP 642 is intended only as a guidance and 'best practice' document and, accordingly, the term 'requirement' has not been used.

**CAA Status - Closed**

### **Recommendation 2003-22**

The Civil Aviation Authority should inform all UK Airport Authorities of the revised advice and guidance regarding airbridge operator training and authorisation when such guidance is formally issued in CAP 642.

#### **CAA Response**

The CAA accepts this Recommendation.

Appropriate advice was incorporated in CAP 642 with the amendment issued on 16 May 2003.

**Recommendation 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 M30 of Heathrow Terminal 3.

**CAA Response**

This Recommendation is not addressed to the CAA.

**CAA Status - Closed**

**Recommendation 2003-24**

Heathrow Airport Limited should consider determining and setting the steering limits of 'Apron-drive' type airbridges such that whilst the airbridge is being driven in reverse, it is not possible for the bridgehead to approach the fuselage side of a correctly positioned aircraft.

**CAA Response**

This Recommendation is not addressed to the CAA.

**CAA Status - Closed**