

Follow-up Action on Occurrence Report

INCIDENT INVOLVING EMBRAER EMB 145EP, G-EMBD, AT VENICE AIRPORT ON 15 NOVEMBER 2003
(MAIN LANDING GEAR TYRE SHRED ITS TREAD ON TAKEOFF)

CAA FACTOR NUMBER : F43/2004
FACTOR PUBLICATION DATE : 13 October 2003
OPERATOR : BA CitiExpress
CAA OCCURRENCE NUMBER : 2003/07965
AAIB REPORT : Bulletin 9/2004

SYNOPSIS

(From AAIB Report)

During takeoff at Venice, the left inboard main wheel tyre (number 2) shed its tyre tread. The tread had failed as a result of overstress in the sidewall of the tyre leading to a break up of the tyre casing plies. Air penetrated through the failure in the inner wall of the tyre and then permeated through the casing leading to the tread package lifting from the carcass. The overstress was attributed to the tyre running under inflated due to an air leak from the overpressure valve. The leak was due to corrosion on the over pressure valve seat from a poor anodised layer during manufacture and a degraded O-ring seal. Four safety recommendations are made which address approved maintenance procedures for Embraer 145 mainwheels.

FOLLOW UP ACTION

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

Recommendation 2004-23

Goodrich Aircraft Wheels and Brakes Division should amend the Embraer 145 Wheel Component Maintenance Manual to require visual inspection of the inflation and over-inflation valve seat areas at every tyre change.

CAA Response

This Recommendation is not addressed to the CAA.

CAA Status - Closed

Recommendation 2004-24

Goodrich Aircraft Wheels and Brakes Division should review the Embraer 145 Wheel Component Maintenance Manual to clarify the requirement to replace the preformed packings (O-ring seals) at each tyre change.

CAA Response

This Recommendation is not addressed to the CAA.

CAA Status - Closed

Recommendation 2004-25

Goodrich Aircraft Wheels and Brakes Division should review the use of Dow Corning 33, 55, 4 and Molycote 111 on the silicone rubber preformed packages, determine whether degradation occurs and if so, specify only compatible lubricants.

CAA Response

This Recommendation is not addressed to the CAA.

CAA Status - Closed

Recommendation 2004-26

Goodrich Aircraft Wheels and Brakes Division should notify all wheel repair stations of amendments to its Embraer 145 Wheel Component Maintenance Manual arising from these recommendations.

CAA Response

This Recommendation is not addressed to the CAA.

CAA Status - Closed