

Follow-up Action on Occurrence Report

ACCIDENT TO BOEING B737-59D, G-BVKC, AT CARDIFF AIRPORT ON 21 FEBRUARY 2004

(VIOLENT SHIMMY ON LEFT MAIN LANDING GEAR AFTER LANDING)

CAA FACTOR NUMBER : F18/2005

FACTOR PUBLICATION DATE : 07 June 2005

OPERATOR : BMI British Midland

CAA OCCURRENCE NUMBER : 2004/01025

AAIB REPORT : Bulletin 4/2005

SYNOPSIS

(From AAIB Report)

The left main landing gear (MLG) began a violent shimmy (yaw oscillation) when the wheelbrakes were applied after a normal landing touchdown, probably damaging the MLG lower torsion link. The shimmying stopped when braking was reduced but restarted when braking was increased, causing the torsion link to fracture. Further higher amplitude shimmying of the left MLG ensued, resulting in severe MLG tyre, wheel and brake damage and substantial oscillatory loads on the aircraft structure. Steering difficulties were experienced during both shimmying episodes.

It was likely that the shimmying resulted from excessive wear of the torsion link apex joint that reduced the effectiveness of the shimmy damper. Maintenance records indicated that the MLG had been maintained in accordance with the manufacturer's recommendations, but it was considered that relevant Aircraft Maintenance Manual (AMM) procedures could be difficult to follow. Similar failures had occurred over a number of years, which had been attributed by the aircraft manufacturer to excessive apex joint wear that had not been detected or adequately rectified during maintenance. One safety recommendation has been made.

FOLLOW UP ACTION

The one Safety Recommendation, made by the AAIB following their investigation, is reproduced below, together with the CAA's response.

Recommendation 2004-103

The Federal Aviation Authority and the Boeing Commercial Airplane Group should take effective measures aimed at preventing further cases of Boeing 737 main landing gear shimmy and resultant torsion link fracturing brought about by excessive play in the anti-torque links apex joint.

CAA Response

This Recommendation is not addressed to the CAA.

CAA Status - Closed