Safety Regulation GroupSafety Investigation and Data Department



Follow-up Action on Occurrence Report

SERIOUS INCIDENT INVOLVING BOEING B737-436, G-DOCE, NEAR LYON, FRANCE ON 30 MAY 2003 (ELECTRICAL WIRING PROBLEMS DURING CRUISE)

CAA FACTOR NUMBER : F36/2004

FACTOR PUBLICATION DATE : 13 July 2004

OPERATOR : BA

CAA OCCURRENCE NUMBER : 2003/03379

AAIB REPORT : Bulletin 6/2004

SYNOPSIS

(From AAIB Report)

Whilst in the cruise the crew began to feel some discomfort in their ears. This was shortly followed by the cabin altitude warning horn which indicated that the cabin altitude had exceeded 10,000 feet and this was seen to continue to climb on the cockpit gauge. At the same time, the primary AUTO mode of the pressure control failed, shortly followed by the secondary STBY mode. The crew selected the first manual pressure control mode, but were unable to control the cabin altitude. An emergency descent and subsequent diversion to Lyon was carried out. The failure of the pressurisation control system was traced to burnt electrical wiring in the area aft of the aft cargo hold. The wiring loom had been damaged by abrasion with either a p-clip or 'zip' strap that, over time, resulted in the conductors becoming exposed, leading to short circuits and subsequent burning of the wires. There was no other damage. The wiring for all the modes of operation of the rear outflow valve, in addition to other services, run through this loom.

FOLLOW UP ACTION

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

Recommendation 2004-33

It is recommended that in order to prevent failure of the cabin pressure control system in the event of damage to wiring loom W298, the Boeing Commercial Airplanes should consider, on the Boeing 737-436 and similarly configured models, separating or protecting the wiring associated with the different modes of operation of this system, which connects the cabin pressure controller to the rear outflow valve, such that any single point failure of the loom would not result in effective failure of the pressurisation control system.

CAA Response

This Recommendation is not addressed to the CAA.

CAA Status - Closed