

Follow-up Action on Occurrence Report

ACCIDENT TO B747-367, AP-BFV, AT LONDON HEATHROW AIRPORT ON 7 DECEMBER 2002 (FRACTURE ON NOSE LANDING GEAR ON TAXY OUT)

CAA FACTOR NUMBER	:	F49/2004
FACTOR PUBLICATION DATE	:	14 December 2004
OPERATOR	:	PIA
CAA OCCURRENCE NUMBER	:	2002/08799
AAIB REPORT	:	Bulletin 11/2004

SYNOPSIS

(From AAIB Report)

The aircraft was taxiing for departure when the crew heard a bang, the aircraft nose pitched down significantly and moments later the 'STAB TRIM' caption on the master warning panel illuminated. The commander cancelled the departure and taxied the aircraft back to a stand without further incident. A subsequent engineering examination revealed that the nose landing gear outer cylinder had suffered a circumferential fracture and a large section of the cylinder material had been ejected onto the taxiway. A metallurgical examination concluded that the fracture had occurred as the result of fatigue initiating at the base of a groove at the upper edge of the internal diameter (ID) seal band. The fracture had propagated through approximately half of the cylinder wall thickness prior to the final failure. The groove, square shaped in cross section and of an appearance that it had been made by a rotating cutting wheel, was machined into 70% of the internal circumference. The outer cylinder had been overhauled once since original manufacture during which rework in the area of the ID Seal had been carried out.

FOLLOW UP ACTION

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

Recommendation 2004-69

It is recommended that the Federal Aviation Administration (FAA) should consider deleting or amending Federal Aviation Regulation (FAR) 145.219 paragraph 'c' to ensure that maintenance/overhaul records are retained for the life of the aircraft/component.

CAA Response

This Recommendation is not addressed to the CAA.

CAA Status - Closed

This publication provides the initial CAA response to each Safety Recommendation made by the Air Accidents Investigation Branch, Department of Transport. Status 'CLOSED' or 'OPEN' indicates completion or not of all actions judged appropriate by the CAA in response to the Recommendation.

The current status and the final responses to all Safety Recommendations are contained in an annual CAA report entitled PROGRESS REPORT - CAA RESPONSES TO AIR ACCIDENTS INVESTIGATION BRANCH (AAIB) SAFETY RECOMMENDATIONS. The absence of errors and omissions cannot be guaranteed. This document is published by the Safety Investigation and Data Department, Safety Regulation Group, Civil Aviation Authority, Aviation House, Gatwick Airport South, West Sussex, RH6 0YR. Tel: 01293 573220 Fax: 01293 573972 Telex: 878753

Recommendation 2004-70

It is recommended that the Federal Aviation Administration (FAA) adopt a programme for performing targeted surveillance and increased oversight of overhaul practices at '14 Code of Federal Regulations Part 145' Repair Stations that are conducting repair, overhaul and rework of aircraft landing gears, to ensure that the manufacturer's overhaul manuals and instructions are followed and that appropriate quality assurance procedures are in place for the continued airworthiness of these components.

CAA Response

This Recommendation is not addressed to the CAA.

CAA Status - Closed