Safety Regulation Group Safety Investigation and Data Department



Follow-up Action on Occurrence Report

INCIDENT INVOLVING AIRBUS A321-231, G-MIDJ, IN CRUISE, 70NM SE OF VIENNA ON 26 MAY 2003
(AIRCRAFT BADLY DAMAGED BY HAIL WITHIN UNEXPECTED CUMULO NIMBUS CLOUD)

CAA FACTOR NUMBER : F30/2004

FACTOR PUBLICATION DATE : 13 July 2004

OPERATOR : British Midland Airways

CAA OCCURRENCE NUMBER : 2003/03143

AAIB REPORT : Bulletin 6/2004

SYNOPSIS

(From AAIB Report)

The aircraft was in the cruise at FL340 approximately 70 nm south-east of Vienna when it encountered an area of severe turbulence and hail. Some of the flight deck windows became crazed and other areas of the airframe suffered extensive damage although this was not apparent to the crew. The aircraft made a precautionary descent to FL230, in accordance with the required abnormal procedures, and continued the flight to its destination of Manchester. The crew had no indication or warning that the aircraft was about to enter an area of severe turbulence, associated with the upper levels of a Cumulo-nimbus cloud. When they had been using the weather radar to check the route ahead of the aircraft, sometime before the encounter, the radar returns appeared benign.

FOLLOW UP ACTION

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

Recommendation 2004-47

The Civil Aviation Authority should consider reviewing their guidance material concerning the use and interpretation of airborne weather radar, with a view to highlighting the potential for displayed data to be unreliable when used for calculating the safe vertical clearance for overflight of active storm cells.

CAA Response

The CAA accepts this Recommendation.

The CAA has reviewed the guidance material contained in Aeronautical Information Circular (AIC) 72/2001 entitled 'The Effect of Thunderstorms and Associated Turbulence on Aircraft Operations' and has amended and updated it as necessary. In particular it covers the subject of the use and interpretation of airborne weather radar with regard to calculating the safe vertical clearance for the overflight of active storm cells. This includes highlighting the potential for the displayed data of the weather radar to be unreliable when used for these calculations.

The revised AIC will be published on 19 August 2004.

CAA Status - Closed

This publication provides the initial CAA response to each Safety Recommendation made by the Air Accidents Investigation Branch, Department of Transport.