

Follow-up Action on Occurrence Report

ACCIDENT TO BRITTEN NORMAN BN2A TRISLANDER, G-BEVT, AT GUERNSEY AIRPORT ON 23 JULY 2004
(DE-ICER BOOT SEPARATED FROM LEFT HAND PROPELLER SHORTLY AFTER TAKE OFF)

CAA FACTOR NUMBER : F1/2006
FACTOR PUBLICATION DATE : 11 January 2006
OPERATOR : Aurigny
CAA OCCURRENCE NUMBER : 2004/04942
AAIB REPORT : AAR 1/2006

SYNOPSIS

(From AAIB Report)

Shortly after take-off from Guernsey Airport, a loud crack or bang was heard in the aircraft's cabin. The aircraft commander was told by a colleague in the cabin that one or more passengers had been injured and that a cabin window was broken. He decided to return to Guernsey Airport having been airborne for approximately four minutes. After the passengers disembarked the pilot noticed that a de-icer boot had separated from the left hand propeller and was now on the seat inside the cabin, adjacent to the broken window.

The investigation identified the following causal factors:

- (i) The accident was caused by the separation of a de-icer boot from the left propeller during takeoff.
- (ii) The de-icer boot separated due to peel stresses generated by forces on the propeller. The peel stresses arose because of physical or contamination damage to the adhesive bond which occurred because the required filler material was not used at the root of the de-icer boot.

Two Safety Recommendations were made during the course of the investigation.

FOLLOW UP ACTION

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

Recommendation 2005-78

The UK Civil Aviation Authority and the European Aviation Safety Agency should work closely together to develop further the valuable progress already made in human factors in aircraft maintenance, focusing on the underlying reasons for both errors and violations, with a view to reducing the potential for system-induced errors and violations, and therefore the risk of maintenance related accidents.

CAA Response

The CAA accepts the Recommendation insofar as it relates to human factors in aircraft maintenance. However, the CAA continues to work towards ensuring that an adequate understanding of the application of human factors and human performance in aircraft maintenance is established for all staff involved in aircraft maintenance within Part 145 organisations. UK based organisations are required by Part 145.A.30 (e) to establish competence in the field of human factors and human performance of all personnel involved in maintenance, management and/or quality audits. Competence in this area for affected staff must be established by 28 September 2006 (this being the end date of the derogation provided to EU Member States within article 7.3(c) of (EC) Regulation 2042/2003). To help organisations achieve this and other human factors related elements of Part 145, the CAA published CAP 716 issue 2 "Aviation Maintenance Human Factors" in December 2003. Development of any further regulations and guidance material in this field is the responsibility of the EASA. The CAA will, when invited, participate in this process.

CAA Status - Closed

Recommendation 2005-79

Hartzell Propeller Incorporated should investigate the feasibility and potential benefits of using thermal imaging techniques to inspect de-icer boots for disbonded areas.

CAA Response

This recommendation is not addressed to the CAA.

CAA Status - Closed