Safety Regulation GroupSafety Investigation and Data Department



Follow-up Action on Occurrence Report

ACCIDENT TO RAYTHEON 390 PREMIER 1, N-200PR, AT BLACKBUSHE AIRFIELD ON 7 APRIL 2004
(AIRCRAFT CRASHED AFTER LANDING)

CAA FACTOR NUMBER : F4/2005

FACTOR PUBLICATION DATE : 14 February 2005

OPERATOR : Private

CAA OCCURRENCE NUMBER : 2004/02145

AAIB REPORT : Bulletin 1/2005

SYNOPSIS

(From AAIB Report)

After takeoff the pilot was unable to raise the landing gear and was presented with failure indications affecting both the lift dump and anti skid systems. Following a successful landing at Farnborough, and discussions with the aircraft's maintenance organisation, the aircraft was flown to Blackbushe for further technical investigation. After landing on Runway 26 the aircraft left the runway, struck a series of obstructions and was destroyed: there was no fire and the pilot was uninjured.

The support bracket for the right main landing gear weight-on-wheels switch was found to have sustained a preimpact failure which accounted for the indications reported by the pilot. Five recommendations have been made as a result of this investigation.

FOLLOW UP ACTION

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

Recommendation 2004-95

It is recommended that Raytheon Aircraft Company review the design and installation of the weight-on- wheels switches and support hardware fitted to the Premier 1 aircraft, with a view to reducing the possibility of stress corrosion cracking.

CAA Response

This Recommendation is not addressed to the CAA.

CAA Status - Closed

Recommendation 2004-96

It is recommended that Raytheon Aircraft Company review the logic of displaying a LIFT DUMP FAIL and inhibiting the system due to a weight-on-wheels switch disagree on the Premier 1 aircraft, and modify the system so that lift dump remains available.

CAA Response

This Recommendation is not addressed to the CAA.

CAA Status - Closed

Recommendation 2004-97

It is recommended that Raytheon Aircraft Company review the logic of displaying ANTI SKID FAIL for a weight-on-wheels switch disagree on the Premier 1 aircraft, when the system is otherwise still operational.

CAA Response

This Recommendation is not addressed to the CAA.

CAA Status - Closed

Recommendation 2004-98

It is recommended that Raytheon Aircraft Company should carry out the following amendments to the Airplane Flight Manual for the Premier 1 aircraft:

- Revise the Lift Dump Failure (Lift Dump Annunciator Illuminated) abnormal checklist to include recommendations on required braking technique and to include the Warning of braking efficiency published as part of the Lift Dump Fails to Extend (Lift Dump Warning Tone Sounds) emergency checklist.
- 2. Review all Airplane Flight Manual and abbreviated checklists to ensure that flight critical items included in Warnings and Cautions in the Airplane Flight Manual are included in the appropriate abbreviated checklists.
- 3. Expand the Performance section of the Airplane Flight Manual to include advice and, where appropriate, data for multiple system failures.
- 4. Amend, where appropriate, performance charts to include all associated conditions on which the published performance is based.

CAA Response

This Recommendation is not addressed to the CAA.

CAA Status - Closed

Recommendation 2004-99

It is recommended that Raytheon Aircraft Company review the presentation of performance data in the Airplane Flight Manual for the Premier 1 aircraft to render it less susceptible to errors in interpretation.

CAA Response

This Recommendation is not addressed to the CAA.

CAA Status - Closed