

Follow-up Action on Occurrence Report

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ACCIDENT TO EUROCOPTER AS350B2 SQUIRREL, G-CBHL, AT LANARK SCOTLAND ON 15 SEPTEMBER 2007

CAA FACTOR NUMBER : F4/2009 (As Revised)
FACTOR PUBLICATION DATE : 11 October 2010
OPERATOR : Private
CAA OCCURRENCE NUMBER : 2007/09013
AAIB REPORT : Bulletin 2/2009

SYNOPSIS

From AAIB Report:

The helicopter crashed in a wooded valley while manoeuvring at high speed and low height. It was intact prior to impact, and the available evidence indicated that the engine was delivering power. The cause of the accident was not positively determined. Although no technical reason was found to explain the accident, a technical fault could not be ruled out entirely. However, it is more likely that the pilot attempted a turning manoeuvre at low height, during which the helicopter deviated from his intended flight path. This may have been due to the pilot encountering handling difficulties, misjudgement, spatial disorientation, distraction or a combination of factors. There were indications that the pilot had started a recovery but, with insufficient height in which to complete it, the helicopter struck trees in the valley and crashed, killing all four occupants. Four safety recommendations are made.

FOLLOW UP ACTION

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

The original version of this FACTOR F04/2009 was issued on 09 April 2009. The FACTOR has been revised to include updated CAA responses for Recommendations 2008-068 and 2008-070.

Recommendation 2008-067

It is recommended that Eurocopter review current operational information and advice about the servo transparency phenomenon. This should be with a view to including a warning in applicable Flight Manuals that the associated uncommanded right roll and possible pitch-up, if encountered by an aircraft manoeuvring in a right turn, have the potential to cause a significant deviation from the intended flight path which, if encountered in close proximity to terrain or obstacles, could be hazardous.

CAA Response

This Recommendation is not addressed to the CAA.

CAA Status - Closed

Recommendation 2008-068 (revised 11 October 2010)

It is recommended that the Civil Aviation Authority should circulate, by the most appropriate means, the content of Eurocopter's Service Letter SL-1648-29-03 to owners and operators of applicable helicopter models, with a view to reminding them of the causes, symptoms, hazards and recovery actions relating to 'servo transparency' or 'jack stall' encounters.

CAA Response

The CAA accepts this Recommendation. The Helicopter Inspectorate of the CAA will, during visits to AOC holders, alert them to the issue of "servo transparency", to AAIB Bulletin 1/2009 and to the Eurocopter Service letter. A FODCOM addressed to all helicopter AOC holders and helicopter pilots, containing the content of the Eurocontrol Service Letter, will be published. In addition, an article will be published in GASIL. All of these actions will be completed by the end of May 2009.

The Helicopter Inspectorate of the CAA, during routine visits to AOC holders in 2009, reminded them of the issue of "servo transparency", and drew their attention to the AAIB Bulletin 2/2009 and to the Eurocopter Service Letter. In addition, and in order to give the widest possible publicity, instead of using the means of FODCOM and GASIL, the issue, the accident and contents of the Eurocopter Service letter were published in an Aeronautical Information Circular (AIC). Pink AIC 043/2009 was published on 18 Jun 2009.

CAA Status - Closed

Recommendation 2008-069

It is recommended that the Civil Aviation Authority, in conjunction with the European Aviation Safety Agency, require an awareness of the causes, symptoms, hazards and recovery actions relating to 'servo transparency' or 'jack stall' encounters to be covered as a ground study item as part of the mandatory training for aircraft type rating for those helicopter types likely to be affected.

CAA Response

The CAA accepts this Recommendation. The Acceptable Means of Compliance to JAR-FCL 2.261(c)(2), Guidelines for the Approval of a Helicopter Type rating Course, paragraph 9, Theoretical Instruction, already states:

"The theoretical knowledge instruction training should meet the general objectives of:

- (c) Giving the student an understanding of system malfunctions, their effect on helicopter operations interaction with other systems.
- (d) Giving the student the understanding of normal, abnormal and emergency procedures."

In addition, the Acceptable Means of Compliance to JAR-FCL 2.261(c) paragraph 1.6 requires Aircraft Hydraulic Systems to be taught on a Type Rating Course.

The CAA will, by means of a TrainingCom and other appropriate communications, notify training schools that for any new course of training to be approved, the CAA will expect the organisation to show how the potential for 'servo transparency' or 'jack stall' will be covered for those types likely to be affected, as part of compliance with the above requirements. For courses already approved, the CAA will request that schools confirm in writing how the potential for 'servo transparency' or 'jack stall' is covered for those types likely to be affected, as part of compliance with the above requirements.

The CAA has now included 'servo transparency' as part of the briefing at helicopter Flight Instructor seminars and all helicopter Flight Instructor Examiners will be briefed to include this topic as necessary when conducting FI and TRI revalidations.

Finally, the CAA will write to EASA proposing that this Recommendation be taken into account in the comments to EASA-FCL (NPA-2008-017b), however the CAA believes that direct communication from AAIB to EASA would also be useful. CAA has included a comment to EASA AMC 3 to OR.ATO.125 (NPA-2008-22c), where the JAR-FCL requirements for TRTO courses have been included. The comment has proposed that 'servo transparency' be included in a course of training for those helicopter types likely to be affected.

CAA Status - Closed

Recommendation 2008-070 (revised 11 October 2010)

It is recommended that the Civil Aviation Authority standardise a requirement for all Authorised Examiners to check the licence and/or other applicable documentation of candidates presenting themselves for proficiency checks or skills tests. This requirement should be stated in the applicable Standards Documents, together with the action to take in the event that the validity of any required documentation has expired or is approaching expiry.

CAA Response

The CAA accepts this Recommendation. Standards Documents 21 and 28, and the Helicopter Flight Examiner Handbook are in the process of being updated to reflect the need to check a candidate's licence and other applicable documentation prior to test. Previously this was implicit, but it will be made explicit. The action to be taken in the event that the validity of any required documentation has expired or is approaching expiry will also be included.

These documents will be re-issued by the end of April 2009.

Flight Examiners Handbooks for both aeroplanes and helicopters and Standards Documents now contain a specific requirement for a check of validity of licences, ratings and medical certificates as part of the pre-flight briefings

CAA Status - Closed