AIRWORTHINESS DIRECTIVE

On the effective date specified below, and for the reasons set out in the background section, the CASA delegate whose signature appears below revokes Airworthiness Directive (AD) AD/ECUREUIL/71 Amdt 3 and issues the following AD under subregulation 39.001(1) of CASR 1998. The AD requires that the action set out in the requirement section (being action that the delegate considers necessary to correct the unsafe condition) be taken in relation to the aircraft or aeronautical product mentioned in the applicability section: (a) in the circumstances mentioned in the requirement section; and (b) in accordance with the instructions set out in the requirement section; and (c) at the time mentioned in the compliance section.

Eurocopter AS 350 (Ecureuil) Series Helicopters

AD/ECUREUIL/71 Amdt 4 — Tail Rotor Blade Trailing Edge — 4/2009

Applicability: Model AS 350 helicopters, versions B, BA, BB, B1, B2, B3, and D, equipped with a tail rotor blade part number listed below:

355A12-0031-01, -02, -03, -04, -05, -06, -07, -08, -09, -11, -12, -13, -14.
355A12-0040-00, -01, -02, -03, -04, -05, -07, -08.
355A12-0050-00, -01, -02, -03, -04, -05.

Requirement:

1. Visually inspect the tail rotor blades in accordance with paragraph 2.B.1. of Eurocopter AS 350 Alert Service Bulletin (ASB) No. 05.00.40 Revision 2, or later EASA approved revision.

   If a crack is detected during any inspection, before further flight, accomplish the instructions specified in paragraph 2.B.2. of ASB No. 05.00.40 Revision 2, or later EASA approved revision.

2. Accomplish the instructions of Repair Sheet FR CN 376 or FR CN 453 on tail rotor blades part number 355A12-0050-00, -01, -02, -03, -04, -05 with serial numbers listed in paragraph 2.B.2.a. of ASB No. 05.00.40 Revision 3, or later EASA approved revision, and on blades with serial numbers below 8419; for which the annotation “repaired as per Work Card 64.10.00.872” or “repaired as per Work Card 64.10.20.712” is recorded on the log card.

3. No person shall install tail rotor blades with a part number that is listed in the applicability section of this Directive on any Model AS 350 helicopter, unless they have been inspected and repaired, as necessary, in accordance with paragraph 2.B.1 of ASB No. 05.00.40 Revision 3, or later EASA approved revision.

Previous accomplishment of FR CN 376 on tail rotor blades in accordance with ASB No. 05.00.40 Revision 2 is considered compliant with Requirements 2 and 3 of this Directive.

Note: EASA AD 2007-0138R2 refers.

Eurocopter AS 350 (Ecureuil) Series Helicopters

AD/ECUREUIL/71 Amdt 4 (continued)

Compliance:

1. At each check after the last flight of the day (ALF check), and not exceeding 10 flight hours between two successive checks.

2. Remains unchanged as: No later than 31 March 2009, unless already accomplished.

3. As of the effective date of this Directive.

The compliance times remain unchanged by this issue of the Directive.

This Directive shall be entered on the Maintenance Release as maintenance required. The required visual inspection may be performed and certified by a Pilot in Command who has been trained to do the inspection by an appropriately qualified person. In this case, a copy of the Requirement document and this Directive is to be carried in the aircraft.

This Amendment becomes effective on 9 April 2009.

Background: The DGAC received a report of separation of a tail rotor blade trailing edge section due to crack growth in the blade skin. The unbalance caused by the loss of a blade section can cause tail rotor gearbox separation.

Amendment 1 introduced certain actions to rotors installed on version B3 helicopters that are fitted with a 30mm trailing edge tab.

Amendment 2 introduced requirements to alleviate maintenance for tail rotor blades repaired as per Repair Sheet (FR) CN 376; as specified in the latest revision of the Requirement document.

Amendment 3 added a new Repair Sheet FR CN 453, and extended the repair accomplishment timescale accordingly; as specified in the latest revision of the Requirement document.

Amendment 4 is issued in response to a revision of the related EASA AD, which introduces a correction to the Requirement 1 compliance; with no change to the technical requirements.

David Punshon
Delegate of the Civil Aviation Safety Authority

6 February 2009