AIRWORTHINESS DIRECTIVE

For the reasons set out in the background section, the CASA delegate whose signature appears below issues the following Airworthiness Directive (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/117 Main Servo-Controls 4/2006 TX

Applicability: Models AS 350 B, BA, BB, B1, B2, B3, and D helicopters, equipped with main servo-controls, all part numbers, not modified per MOD 073343, and on which the tightening torque of the nut that secures the upper ball-end has been increased following:

- embodiment of MOD 073191; or,
- compliance with MET Work Card 67.30.00.402 since MET Revision 04-06.

Requirement: For main servo-controls installed on helicopters:

1. Check the tapered housings of the main servo-controls for cracks, in accordance with paragraph 2.B.2.of Eurocopter AS 350 Alert Service Bulletin (ASB) No. 05.00.51.

   a. If no crack is evident, comply once with paragraph 2.B.3. of ASB No. 05.00.51, then resume flights.

   b. If there is a vertical crack (along the servo-control axis) that is less than 20 mm long:

      (i) Comply once with paragraph 2.B.3. of ASB No. 05.00.51, and identify the end of the crack using an indelible ink marker and resume flights.

      (ii) Comply with paragraph 2.B.4. of ASB No. 05.00.51.

2. Replace the servo-control in accordance with paragraph 2.A. of ASB No. 05.00.51, in the following cases if:

   - a vertical crack is found (along the servo-control axis) that is 20 mm long or longer,
   - the crack has grown by more than 5mm,
   - there is an oblique or a horizontal crack,
   - there are several cracks.

Eurocopter AS 350 (Ecureuil) Series Helicopters

AD/ECUREUIL/117 (continued)

For main servo-controls held as spares:

3. Accomplish paragraph 2.B.2.b. of ASB No. 05.00.51.

   If no crack is evident, comply once with paragraph 2.B.3. of ASB No. 05.00.51.

   If a crack is evident, return the servo-control for repair.

Note: EASA AD 2006-0055-E refers.

Compliance:

1. Within 10 flight hours or 10 days after 6 March 2006, whichever occurs first.

1.b.(ii) During the check after the last flight of the day, without exceeding 10 flight hours between two inspections, pending replacement of the servo-control (in accordance with paragraph 2.A. of ASB No. 05.00.51) no later than within 150 flight hours without exceeding 3 months.

2. Before further flight.

3. Within 10 days after 6 March 2006, or before installing a main servo-control held as spares.

This Airworthiness Directive becomes effective on 6 March 2006.

Background: The European Aviation Safety Agency received reports of cracks discovered in the tapered housings of main servo-controls during scheduled inspections. Undetected cracking in the tapered housing of a main servo-control could lead to the loss of attachment of the affected servo-control to the non-rotating swashplate, and consequent loss of control of the helicopter.

David Punshon
Delegate of the Civil Aviation Safety Authority

3 March 2006