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/109 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/109 Amdt 4 — Sliding Door Rear Fitting Pin — 11/2007 DM

Applicability: Model AS 350 helicopters, versions B, BA, BB, B1, B2, B3, and D, equipped with sliding door(s) pre-MOD 073298 and/or pre-MOD 073308.

Requirement:

1. Check the support shaft of the rear roller and the rear fitting of the sliding door(s) for cracks, in accordance with paragraph 2.B. of Eurocopter AS 350 Alert Service Bulletin (ASB) No. 05.00.47 original issue, or later EASA approved revision.

2. Replace the roller support shaft and fitting(s) of the left hand and/or right hand sliding doors in accordance with paragraph 2.B. of ASB No. 52.00.30 original issue, or later EASA approved revision.

No person shall install, on any AS 350 helicopter, sliding doors listed in paragraph 1.A.2. of ASB No. 52.00.30 Revision 1, or later EASA approved revision, unless these sliding doors have been modified per MOD 073298 for LH doors, and per MOD 073308 for RH doors, in accordance with ASB No. 52.00.30 Revision 1.

No person shall install, on any AS 350 helicopter, rail roller pins part number 350A25-1275-20 and cast roller support fittings part numbers 350A25-1270-20 and 350A25-1270-22.

Note: EASA AD 2007-0236 refers.

Compliance:

1. a. For aircraft equipped with sliding doors that have logged less than 90 flight hours:

   Upon accumulating 110 flight hours. Inspect thereafter at intervals not to exceed 110 flight hours.

   b. For aircraft equipped with sliding doors that have logged 90 or more flight hours:

   Unless the initial inspection is already accomplished, within 20 flight hours after 26 October 2006. Inspect thereafter at intervals not to exceed 110 flight hours.

Eurocopter AS 350 (Ecureuil) Series Helicopters

AD/ECUREUIL/109 Amdt 4 (continued)

2. Unless already accomplished, before 30 September 2007.

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

This Amendment becomes effective on 14 September 2007.

Background: The manufacturer received a report of failure and a report of cracking of the sliding door rear roller support pin. Investigation revealed that the cracks started from a spring pin bore and grew due to fatigue. Metallurgical analysis revealed heat treatment non-conformity of the pin material.

Amendment 1 was prompted by reports of cracking and failure of the roller support shaft rear attaching fitting.

Amendment 2 converted the Requirement document to an Alert Service Bulletin with the same reference number, and mandated modification action that cancels the inspection requirements of this Directive.

Amendment 3 extended the compliance time for Requirements 2, 3, and 4.

Amendment 4 is issued in response to a new EASA AD, which requires repetitive inspections until replacement of current parts with improved parts and also prohibits installation of another roller support fitting part number 350A25-1270-22 on any AS 350 helicopter.

Charles Lenarcic
Delegate of the Civil Aviation Safety Authority

12 September 2007