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/133 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/133 Collective Pitch Lever Locking Stud 5/2009 Amdt 1

Applicability: EUROCOPTER (formerly EUROCOPTER FRANCE, AEROSPATIALE) AS350 B, BA, BB, B1, B2, B3, D helicopters:

- Delivered before embodiment of modification 073175; or
- Helicopters on which the locking studs or the collective pitch levers or the locking strips have been reworked or modified in service; or
- Helicopters having accomplished Revision 0 or Revision 1 of EUROCOPTER SB No. 67.00.37, corresponding to modification 073237; or
- Helicopters with a serial number equal to: 3972, 3973, 3982, 3987, 4003, 4023, 4046, 4050, 4086, 4120, 4122, 4132, 4143, 4152, 4172, 4194, 4259, 4314, 4324, 4378, 4392, 4447, 4452, 4477, 4489, 4490, 4501, 4523, 4546, 4560, 4589, 4594, 4599, 4632, 4659, 4666, 4671.

Note 1: Refer to the Aircraft Individual Inspection Record (RIC), the Log Cards (FM) or the aircraft logbook to identify the actual configuration of the helicopter.

Requirement: Required as indicated, in accordance with EUROCOPTER Emergency Alert Service Bulletin No. 05.00.58.

The use of later approved revisions of this document is acceptable for compliance with the requirements of this AD.

1. Helicopters having embodied modification 073237:

   a) Measure the clearance between the end of the locking stud and the locking strip in accordance with paragraph 2.B.2.a.

   b) If the clearance is equal to or more than 3 mm return the helicopter to flight configuration.

   c) If the clearance is less than 3 mm and the helicopter has not embodied modification 073175, accomplish the instructions of paragraph 2.B.2.b.

   d) If the clearance is less than 3 mm and the helicopter has already embodied modification 073175, accomplish the instructions of paragraph 2.B.2.c.

Eurocopter AS 350 (Ecureuil) Series Helicopters

AD/ECUREUIL/133 Amdt 1 (continued)

2. Helicopters not having embodied modification 073237:

   a) Measure the clearance between the end of the locking stud and the locking strip in accordance with paragraph 2.B.3.a.

   b) If the clearance is equal to or more than 3 mm return the helicopter to flight configuration.

   c) If the clearance is less than 3 mm and the helicopter has not embodied modification 073175, accomplish the instructions of paragraph 2.B.3.b.

   d) If the clearance is less than 3 mm and the helicopter has already embodied modification 073175, suspend flights, contact EUROCOPTER for instructions and follow their corrective actions.

3. Repeat the clearance measurement detailed in Requirement 1 or 2 of this AD, depending on the helicopter configuration.

Ferry Flights

If a flight is necessary to ferry the helicopter to a repair station or a place where the maintenance can be performed in order to comply with Requirements 1 or 2 of this AD, the flight is permitted with no passenger on board.

Note 2: EASA AD 2009-0019 dated 3 February 2009 refers. This AD supersedes EASA AD 2008-0205-E.

Compliance: For Requirements 1 and 2 - Remains unchanged as detailed in the original issue of this AD as: After the last flight of the day from 5 December 2008 (the effective date of the original issue of this AD).

For Requirement 3 - At each time the collective pitch lever, the locking stud or the locking pitch are replaced; and

each time the locking strip setting is readjusted; and

at intervals not exceeding 660 flight hours or 2 years, whichever occurs first.

This Amendment becomes effective on 7 May 2009.

Background: EUROCOPTER has developed modification 073237 which prevents wear of the locking stud and thus precludes the risk of untimely unlocking of the collective pitch lever during the engine starting phase.

This modification has introduced a new locking stud which is longer than the previous one.

Eurocopter AS 350 (Ecureuil) Series Helicopters

AD/ECUREUIL/133 Amdt 1 (continued)

As a result, the clearance between the locking stud and the locking strip is reduced and in some cases it proves to be insufficient when the collective pitch lever is positioned on the "low pitch" stop.

In fact, on a helicopter during an autorotation test in flight, it was found that the collective pitch lever rubbed against the locking strip in the "low pitch" position (low position). This rubbing is due to insufficient clearance and could result in untimely locking of the collective pitch lever and consequent loss of control of the helicopter.

To preclude the risk of untimely locking, this AD required an inspection to verify the presence of the required minimum clearance between the end of the locking stud and the locking strip and provides a repair solution in case the clearance is insufficient. This was extended as a precautionary measure also to helicopters with locking system configuration prior to modification 073237.

Amendment 1requires repeat inspections to be conducted at intervals as defined in this AD.

The original issue of this AD became effective 5 December 2008.

James Coyne
Delegate of the Civil Aviation Safety Authority

27 March 2009