## **EASA** AIRWORTHINESS DIRECTIVE AD No.: 2009-0019 Date: 03 February 2009 Note: This Airworthiness Directive (AD) is issued by EASA, acting in accordance with Regulation (EC) No 216/2008 on behalf of the European Community, its Member States and of the European third countries that participate in the activities of EASA under Article 66 of that Regulation. This AD is issued in accordance with EC 1702/2003, Part 21A.3B. In accordance with EC 2042/2003 Annex I, Part M.A.301, the continuing airworthiness of an aircraft shall be ensured by accomplishing any applicable ADs. Consequently, no person may operate an aircraft to which an AD applies, except in accordance with the requirements of that AD unless otherwise specified by the Agency [EC 2042/2003 Annex I, Part M.A.303] or agreed with the Authority of the State of Registry [EC 216/2008, Article 14(4) exemption]. Type/Model designation(s) : **Type Approval Holder's Name :** EUROCOPTER AS350 helicopters TCDS Number : EASA.R.008 Foreign AD : Not applicable Supersedure : This AD supersedes and cancels EASA AD 2008-0205-E dated 02 December 2008 Rotors Flight Control - Collective Pitch Lever Locking Stud -**ATA 67** Inspection / Repair Manufacturer(s): EUROCOPTER (formerly EUROCOPTER FRANCE, AEROSPATIALE). Applicability: All 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 Refer to the Aircraft Individual Inspection Record (RIC), the Log Cards (FM) or the aircraft logbook to identify the actual configuration of the helicopter. Reason: EUROCOPTER has developed the 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. 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.  |
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|  | In fact, on a helicopter during an autorotation test in flight, it was found that<br>the collective pitch lever rubbed against the locking strip in the "low pitch"<br>position (low position). This rubbing is due to insufficient clearance and could<br>result in untimely locking of the collective pitch lever and consequent loss of<br>control of the helicopter.                                       |
|  | To preclude the risk of untimely locking, EASA AD 2008-0205-E required an inspection to verify the presence of the required minimum clearance between the end of the locking stud and the locking strip and provided 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. |
|  | This AD, superseding EASA AD 2008-0205-E taking over its requirements, mandates also to repeat the clearance measurements under the conditions and at the intervals defined in paragraph 3. of the Required Action and Compliance Time section of this AD.   |
| Effective Date:                                  | 17 February 2009   |
| Required Action(s)<br>and Compliance<br>Time(s): | Required as indicated, in accordance with the instructions of EUROCOPTER Emergency Alert Service Bulletin No. 05.00.58:  |
|  | 1. Helicopters having embodied modification 073237:  |
|  | 1.1. After the last flight of the day following the effective date of this AD measure the clearance between the end of the locking stud and the locking strip in accordance with paragraph 2.B.2.a.  |
|  | 1.2. If the clearance is equal to or more than 3 mm return the helicopter to flight configuration.   |
|  | 1.3. If the clearance is less than 3 mm and the helicopter has not<br>embodied modification 073175, accomplish the instructions of<br>paragraph 2.B.2.b.   |
|  | 1.4. 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.   |
|  | 2. Helicopters not having embodied modification 073237:  |
|  | 2.1 After the last flight of the day following the effective date of this AD measure the clearance between the end of the locking stud and the locking strip in accordance with paragraph 2.B.3.a.   |
|  | 2.2 If the clearance is equal to or more than 3 mm return the helicopter to flight configuration.  |
|  | 2.3 If the clearance is less than 3 mm and the helicopter has not<br>embodied modification 073175, accomplish the instructions of<br>paragraph 2.B.3.b.  |
|  | 2.4 If the clearance is less than 3 mm and the helicopter has already<br>embodied modification 073175, suspend flights, contact<br>EUROCOPTER for instructions and follow their corrective actions.  |
|  | 3. The clearance measurement defined in paragraph 1. or 2. of this AD, depending on the helicopter configuration, has to be repeated:  |
|  | <ul> <li>each time the collective pitch lever, the locking stud or the locking<br/>pitch are replaced;</li> </ul>  |
|  | <ul> <li>each time the locking strip setting is readjusted;</li> </ul>   |
|  | <ul> <li>at intervals not exceeding 660 flight hours or 2 years, whichever occurs first.</li> </ul>  |

|                    | 4. If a flight is necessary to ferry the helicopter to a repair station or a place<br>where the maintenance can be performed in order to comply with<br>paragraphs 1.or 2. of this AD, the flight is permitted with no passenger on<br>board.   |
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| Ref. Publications: | EUROCOPTER Emergency Alert Service Bulletin No. 05.00.58 Rev. 0 dated 01 December 2008.<br>The use of later approved revisions of this document is acceptable for compliance with the requirements of this AD.  |
| Remarks:           | <ol> <li>If requested and appropriately substantiated, EASA can approve<br/>Alternative Methods of Compliance for this AD.</li> <li>The required actions and the risk allowance have granted the issuance of<br/>a Final AD with Request for Comments, postponing the public<br/>consultation process after publication.</li> <li>Enquiries regarding this AD should be referred to the Airworthiness<br/>Directives, Safety Management &amp; Research Section, Certification<br/>Directorate, EASA. E-mail <u>ADs@easa.europa.eu</u>.</li> <li>For any question concerning the technical content of the requirements in<br/>this AD, please contact: EUROCOPTER (STDI) – Aéroport de Marseille<br/>Provence 13725 Marignane Cedex – France.<br/>Tel: +33(0)4 42 85 97 97 – Fax: +33(0)4 42 85 99 66,<br/>E-mail: <u>Directive.technical-support@eurocopter.com</u>.</li> </ol> |