



Airworthiness Directive

AD No.: 2017-0020R1

Issued: 22 May 2019

Note: This Airworthiness Directive (AD) is issued by EASA, acting in accordance with Regulation (EU) 2018/1139 on behalf of the European Union, its Member States and of the European third countries that participate in the activities of EASA under Article 129 of that Regulation.

This AD is issued in accordance with Regulation (EU) 748/2012, Part 21.A.3B. In accordance with Regulation (EU) 1321/2014 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 [Regulation (EU) 1321/2014 Annex I, Part M.A.303] or agreed with the Authority of the State of Registry [Regulation (EU) 2018/1139, Article 71 exemption].

Design Approval Holder's Name:

AIRBUS HELICOPTERS

Type/Model designation(s):

AS 350 and AS 355 helicopters

Effective Date: Revision 1: 22 May 2019

Original issue: 09 February 2017

TCDS Number(s): EASA.R.008, EASA.R.146

Foreign AD: Not applicable

Revision: This AD revises EASA Emergency AD 2017-0020-E dated 07 February 2017.

ATA 05 – Tail Rotor – Pitch Rod – Inspection

Manufacturer(s):

Airbus Helicopters (AH), formerly Eurocopter, Eurocopter France, Aerospatiale

Applicability:

AS 350 B, AS 350 BA, AS 350 BB, AS 350 B1, AS 350 B2, AS 350 B3, AS 355 E, AS 355 F, AS 355 F1, AS 355 F2, AS 355 N and AS 355 NP helicopters, all serial numbers, which embody modification (mod) 075601 or mod 076602.

Definitions:

For the purpose of this AD, the following definitions apply:

The applicable ASB: AH Alert Service Bulletin (ASB) AS350-05.00.86 and ASB AS355-05.00.75, as applicable, both Revision 01, or later.

Reason:

Several cases were reported of finding significant damage of the elastomeric ball-joint of the tail rotor (TR) pitch rod (horn side) on AS 350 and AS 355 helicopters. Investigation is on-going to determine the cause for this damage.

This condition, if not detected and corrected, could lead to loss of control of the helicopter.



To address this unsafe condition, AH issued the applicable ASB to reduce the interval of the visual inspection, as required by chapter 04-20-00 of the applicable Airworthiness Limitation Section (ALS), from 50 flight hours (FH) to 10 FH. Consequently, EASA issued Emergency AD 2017-0020-E to require repetitive inspections of the TR pitch rod, as specified in ALS chapter 04-20-00, but at reduced intervals.

Following the conclusion of the investigation, it was determined that maintenance had not been correctly performed, causing the detected advanced degradation of the elastomeric part, beyond the removal criteria given in the ALS. AH have revised the applicable ASB (Revision 3) accordingly, providing improved inspection instructions.

For the reasons described above, this AD is revised to identify conditions for reverting to the original ALS interval concerning the pitch rod inspection. This AD also contains some editorial changes, related to the latest AD writing standards, without affecting the technical content.

Required Action(s) and Compliance Time(s):

Required as indicated, unless accomplished previously:

Inspection(s):

- (1) Before exceeding 50 FH since the last inspection per ALS chapter 04-20-00, or within 10 FH or 7 days, whichever occurs first after 09 February 2017 [the effective date of the original issue of this AD], and, thereafter, at intervals not to exceed 10 FH, visually inspect the TR pitch rod in accordance with the instructions of paragraph 3.B.1 of the applicable ASB.

Corrective Action(s):

- (2) If, during any inspection as required by paragraph (1) of this AD, any damage, as detailed in the instructions of the applicable ASB, is found on one or more layers, with a circumference of more than 90 degrees, before next flight, replace the TR pitch change rod (a) with a serviceable pitch rod. This can be accomplished in accordance with the instructions of the applicable AH maintenance manual, Task 65-21-00, 4-12b, or MET Work Card 64.10.00.402.

Terminating Action:

- (3) Replacement of a TR pitch rod on a helicopter, as required by paragraph (2) of this AD, does not constitute terminating action for the repetitive inspections as required by paragraph (1) of this AD for that helicopter.

Optional use of ASB at Revision 3:

- (4) From the effective date of this revised AD, when a helicopter meets the conditions as specified in Table 1 of this AD, the repetitive inspections as required by paragraph (1) of this AD for that helicopter can be accomplished at intervals not exceeding 50 FH, consistent with ALS chapter 04-20-00.



Table 1 – Conditions to revert to ALS Interval

| Chapter 04 / 05 Task(s) | Task Name | Condition |
|--|---|--|
| 65/20/00/000/000/530, 65/20/00/000/000/540, 64/10/00/000/000/290 and 64/10/00/000/000/140 (04-20-00) | Pitch Rod / Check of elastomeric bearing | Tasks accomplished in accordance with the instructions of paragraph 3.B.1 of the applicable ASB at Revision 3 |
| 05/21/00/000/000/000, 05/21/00/603/000/000, (05-20-02 and 05-20-00) | Daily visual check of TR hub pitch change rod | Tasks accomplished in accordance with the instructions of paragraph 3.D of the applicable ASB at Revision 3 |
| 05-22-00 | TR gearbox pitch rod check | Task accomplished during each T-inspection (24 months) in accordance with the instructions of paragraph 3.D of the applicable ASB at Revision 3 |

Ref. Publications:

Airbus Helicopters Emergency ASB AS350-05.00.86 Revision 01 dated 06 February 2017, or Revision 2 dated 27 March 2019, or Revision 3 dated 08 May 2019.

Airbus Helicopters Emergency ASB AS355-05.00.75 Revision 01 dated 06 February 2017, or Revision 2 dated 27 March 2019, or Revision 3 dated 08 May 2019.

The use of later approved revisions of the above-mentioned documents is acceptable for compliance with the requirements of this AD.

Remarks:

1. If requested and appropriately substantiated, EASA can approve Alternative Methods of Compliance for this AD.
2. Based on the required actions and the compliance time, EASA have decided to issue a Final AD with Request for Comments, postponing the public consultation process until after publication.
3. Enquiries regarding this AD should be referred to the EASA Programming and Continued Airworthiness Information Section, Certification Directorate. E-mail: ADs@easa.europa.eu.
4. Information about any failures, malfunctions, defects or other occurrences, which may be similar to the unsafe condition addressed by this AD, and which may occur, or have occurred on a product, part or appliance not affected by this AD, can be reported to the [EU aviation safety reporting system](#).
5. For any question concerning the technical content of the requirements in this AD, please contact: Airbus Helicopters – Aéroport de Marseille Provence, 13725 Marignane Cedex, France
Internet: <https://keycopter.airbushelicopters.com> Technical Requests Management



Email: technicalsupport.helicopters@airbus.com

