



Airworthiness Directive

AD No.: 2021-0282

Issued: 17 December 2021

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: 31 December 2021

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

Foreign AD: Not applicable

Supersedure: None

ATA 64 – Tail Rotor – Tail Rotor Head Pitch Change Unit Bearing Spacer – Marking / Check

Manufacturer(s):

Airbus Helicopters (AH), formerly Eurocopter, Aerospatiale

Applicability:

AS 350 B, AS 350 BA, AS 350 BB, AS 350 B1, AS 350 B2, AS 350 B3, AS 350 D helicopters, and AS 355 E, AS 355 F, AS 355 F1, AS 355 F2, AS 355 N, AS 355 NP helicopters, all serial numbers.

Definitions:

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

Affected part: Tail rotor head (TRH) spider pitch change unit, having Part Number (P/N) 350A33-2030-00, P/N 350A33-2167-00, or P/N 350A33-2167-01.

The ASB: AH Alert Service Bulletin (ASB) AS350-05.01.03 and AH ASB AS355-05.00.86, as applicable.

Groups: Group 1 helicopters are those that have an affected part installed.

Group 2 helicopters are those that do not have an affected part installed.



Reason:

An occurrence was reported where, during a TRH pitch change spider inspection, excessive play in the assembly and excessive wear on its parts due to unwanted rotating motion were found.

This condition, if not detected and corrected, could lead to loss of the TRH pitch change control, possibly resulting in loss of control of the helicopter.

To address this potential unsafe condition, AH issued the ASB providing instructions for checks / marking.

For the reasons described above, this AD requires a one-time check of the spider pitch change nut, installation of a black paint index marking, repetitive checks of the marking alignment and, depending on findings, accomplishment of the applicable corrective action(s). This AD also provides conditions for affected part installation on a helicopter.

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

Required as indicated, unless accomplished previously:

Check / Marking / Inspection:

- (1) For Group 1 helicopters: Within 50 flight hours (FH) after the effective date of this AD, check the presence of the spider pitch change nut and its condition in accordance with the instructions of the ASB.
- (2) If, during the check as required by paragraph (1) of this AD, the nut is found present and in proper condition, before next flight, accomplish a black paint index marking on the rotating spider of the affected part and on the bearing spacer of the affected part in accordance with the instructions of the ASB.
- (3) If, during the check as required by paragraph (1) of this AD, the nut is found missing or loose, before next flight, inspect the affected part in accordance with the instructions of paragraph 3.B.2 of the ASB.

Repetitive Check:

- (4) Within 10 FH after installing the black paint index marking, as required by paragraph (2) of this AD, and, thereafter, at intervals not to exceed 10 FH, visually check that marking in accordance with the instructions of the ASB.
- (5) If, during any visual check as required by paragraph (4) of this AD, the black paint index marking is found misaligned, before next flight, inspect the affected part in accordance with the instructions of paragraph 3.B.2 of the ASB.

Corrective Action(s):

- (6) If, during any inspection as required by paragraph (3) or (5) of this AD, as applicable, discrepancies are detected, as defined in the ASB, before next flight, replace the TRH rotating plate in accordance with the instructions of the ASB.



Terminating Action(s):

(7) None.

Part(s) Installation:

(8) For Group 1 and Group 2 helicopters: From the effective date of this AD, it is allowed to install an affected part on any helicopter, provided that, before next flight after installation, the part has been checked / marked in accordance with the instructions of the ASB, and that, following installation, the part is checked as required by paragraph (4) of this AD.

Ref. Publications:

AH ASB AS350-05.01.03 original issue dated 16 December 2021.

AH ASB AS355-05.00.86 original issue dated 16 December 2021.

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 Safety 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](#). This may include reporting on the same or similar components, other than those covered by the design to which this AD applies, if the same unsafe condition can exist or may develop on an aircraft with those components installed. Such components may be installed under an FAA Parts Manufacturer Approval (PMA), Supplemental Type Certificate (STC) or other modification.
5. For any question concerning the technical content of the requirements in this AD, please contact: Airbus Helicopters Customer Support, Telephone +33 (0)4.42.85.97.89, Fax + 33 (0)4.42.85.99.66, E-mail: Airframe.Technical-Support@airbus.com, Keycopter Technical Request Management: TechnicalSupport.Helicopters@airbus.com.

