

Airworthiness Directive

2022-0246 AD No.:

Issued: 12 December 2022

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, or Annex Vb Part ML.A.301, as applicable, 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 Annex Vb Part MLA.303, as applicable] 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: 26 December 2022

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

Foreign AD: Not applicable

Supersedure: None

ATA 62 – Main Rotor – Main Rotor Blades – Inspection

Manufacturer(s):

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

Applicability:

AS 350 B, AS 350 B1, AS 350 B2, AS 350 BA, AS 350 BB and AS 350 D helicopters, all serial numbers (s/n).

AS 355 E, AS 355 F, AS 355 F1, AS 355 F2 and AS 355 N helicopters, all s/n.

Definitions:

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

The ASB: AH Alert Service Bulletin (ASB) AS350-05.01.07 or AH ASB AS355-05.00.91, as applicable.

Affected part: Main rotor blades (MRB), having Part Number (P/N) 350A11-0010-01, P/N 350A11-0010-02, P/N 350A11-0010-03, P/N 350A11-0010-04, P/N 350A11-0010-06, P/N 355A11-0020-00, P/N 355A11-0020-01, P/N 355A11-0020-02, P/N 355A11-0020-03, P/N 355A11-0020-04, P/N 355A11-0020-06 or P/N 355A11-0020-07.



Serviceable part: An affected part that has accumulated less than 165 flight hours (FH) after having passed (no defects found) the inspection or having been repaired, as applicable, in accordance with the instructions of the ASB; or an MRB which is not an affected part.

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:

Several occurrences have been reported of debonding on the stainless steel leading edge protection of the affected part, resulting in significant unbalance of the main rotor and, consequently, in a high level of vibration.

This condition, if not detected and corrected, could lead to the failure of the main rotor and/or the main gearbox, resulting in loss of control of the helicopter.

To address this potential unsafe condition, AH issued the ASB providing inspection and repair instructions.

For the reasons described above, this AD requires repetitive inspections of each affected part and, depending on findings, replacement. This AD also prohibits installation of an affected part on a helicopter.

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

Required as indicated, unless accomplished previously:

Inspections:

(1) For Group 1 helicopters: Within 55 FH or 6 months, whichever occurs first after the effective date of this AD, and, thereafter, at intervals not to exceed 165 FH, accomplish a tapping inspection of each affected part in accordance with the instructions of the ASB.

Corrective Action(s):

- (2) If, during any tapping inspection as required by paragraph (1) of this AD, an affected part is found with a disbonded area that is within the permitted limits as specified in the ASB, before next flight, repair that affected part or replace that affected part with a serviceable part in accordance with the instructions of the ASB.
- (3) If, during any tapping inspection as required by paragraph (1) of this AD, an affected part is found with a disbonded area that exceeds the permitted limits as specified in the ASB, before next flight, replace that affected part with a serviceable part in accordance with the instructions of the ASB.

Terminating Action(s):

(4) Accomplishment of the repair on an affected part, as required by paragraph (2) of this AD, does not constitute terminating action for the inspections as required by paragraph (1) of this AD for that affected part.



(5) Replacement of each affected part on a helicopter with an MRB which is not an affected part constitutes terminating action for the repetitive inspections as required by paragraph (1) of this AD for that helicopter. After accomplishment of that action, the helicopter becomes a Group 2 helicopter.

Part(s) Installation:

- (6) For Group 1 helicopters: From the effective date of this AD, it is allowed to install an affected part on a helicopter, provided that it is serviceable part, as defined in this AD, and, following installation, it is inspected as required by this AD.
- (7) For Group 2 helicopters: From the effective date of this AD, do not install an affected part on any helicopter.

Ref. Publications:

AH ASB AS350-05.01.07 original issue dated 06 December 2022.

AH ASB AS355-05.00.91 original issue dated 06 December 2022.

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.
- Enquiries regarding this AD should be referred to the EASA Safety Information Section, 3. Certification Directorate. E-mail: <u>ADs@easa.europa.eu</u>.
- 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 (Technical Support) E-mail: TechnicalSupport.Helicopters@airbus.com Airbus World: Technical Request Management: https://airbusworld.helicopters.airbus.com.

