



Airworthiness Directive

AD No.: 2020-0224R1

Issued: 11 November 2020

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 01: 18 November 2020
Original issue: 20 October 2020

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

Foreign AD: Not applicable

Revision: This AD revises EASA Emergency AD 2020-0224-E dated 16 October 2020.

ATA 64 – Tail Rotor – Tail Rotor Blades – Inspection / Replacement / Modification

Manufacturer(s):

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

Applicability:

AS 350 B, AS 350 BA, AS 350 BB, AS 350 B1, AS350 B2 and AS 350 D helicopters, all serial numbers (s/n); and

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:

Affected part: Pre-mod 075580 tail rotor blades (TRB), having a Part Number (P/N) as listed in Appendix 1, Table 1, of this AD.

Serviceable part: Post-mod 075580 TRB, having a P/N as listed in the applicable ASB at Revision 1.

The applicable ASB: AH AS 350 Emergency Alert Service Bulletin (ASB) 05.00.99 and AS 355 ASB 05.00.84, as applicable (single document).



Groups: Group 1 helicopters are those that have at least one affected part installed. Group 2 helicopters are those that do not have an affected part installed.

Reason:

Two occurrences were reported of finding large debonding of TRB leading edge (LE) protection shields. The design and assembly procedure of the affected part is such that rapid debonding can occur, if humidity/liquid water reaches the bonding surface between LE and blade spar.

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

To address this potential unsafe condition, AH published the applicable ASB to provide inspection instructions. Consequently, EASA issued Emergency AD 2020-0224-E, to require repetitive inspections of the affected parts and, depending on findings, replacement. That AD also required modification of the helicopter by installation of serviceable parts, and prohibited (re)installation of affected parts.

Since that AD was issued, it was determined that some post-mod 075580 TRB P/Ns should be added to the list of serviceable parts. Consequently, AH published the applicable ASB Revision 1 and this AD is revised accordingly.

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

Required as indicated, unless accomplished previously:

Repetitive Inspection(s):

- (1) For Group 1 helicopters: Before next flight after 20 October 2020 [the effective date of the original issue of this AD], and, thereafter, before each flight, visually inspect each TRB LE protection shield in accordance with the instructions of paragraph 3.B.1 of the applicable ASB.
- (2) For Group 1 helicopters: Within 30 flight hours (FH) after 20 October 2020 [the effective date of the original issue of this AD] or within 100 FH since last tapping inspection of the TRB LE, whichever occurs first, and, thereafter, at intervals not to exceed 30 FH, accomplish a tapping inspection of the TRB LE in accordance with the instructions of paragraph 3.B.1 of the applicable ASB.

Corrective Action(s):

- (3) If, during any inspection as required by paragraph (1) or (2) of this AD, discrepancies, as defined in the applicable ASB, are detected on an affected part, before next flight, replace that affected part with a serviceable part.

Parts Installation:

- (4) For Group 1 and Group 2 helicopters: From the effective date of this AD, do not install on any helicopter an affected part, as defined in this AD.



Modification:

- (5) For Group 1 helicopters: Within 14 months after 20 October 2020 [the effective date of the original issue of this AD], replace each affected part with a serviceable part in accordance with the instructions of the applicable ASB.

Terminating Action:

- (6) Replacement of all affected parts on a helicopter in accordance with the instructions of the applicable ASB constitutes terminating action for the repetitive inspections as required by paragraph (1) and (2) of this AD for that helicopter.
- (7) Modification of a helicopter as required by paragraph (5) of this AD constitutes terminating action for the repetitive inspections as required by paragraphs (1) and (2) of this AD for that helicopter.

Ref. Publications:

AH AS350 Emergency ASB 05.00.99 original issue dated 14 October 2020, or Revision 1 dated 05 November 2020.

AH AS355 Emergency ASB 05.00.84 original issue dated 14 October 2020, or Revision 1 dated 05 November 2020.

The use of later approved revisions of the above-mentioned document 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](#). 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), Aéroport de Marseille Provence 13725 Marignane Cedex, France, Telephone +33 (0)4 42 85 97 97, Fax +33 (0)4 42 85 99 66, Web portal: <https://keycopter.airbushelicopters.com> > Technical Requests Management,



E-mail: support.technical-dyncomp.ah@airbus.com, and
TechnicalSupport.Helicopters@airbus.com.



Appendix 1

Table 1 – Affected Parts (P/N)

350A120030.01, 350A120030.02, 350A120030.03, 350A120030.04, 350A120030.05, 350A120030.06, 350A120030.07, 350A120030.08, 350A120030.09 or 350A120030.10
355A120031.01, 355A120031.02, 355A120031.03, 355A120031.04, 355A120031.05, 355A120031.06, 355A120031.07, 355A120031.08, 355A120031.09 or 355A120031.10
355A120040.00, 355A120040.01, 355A120040.02, 355A120040.03, 355A120040.04, 355A120040.05, 355A120040.06, 355A120040.09 or 355A120040.12
355A120041.00, 355A120041.01, 355A120041.02, 355A120041.03, 355A120041.04, 355A120041.05, 355A120041.06, 355A120041.09 or 355A120041.12
355A120050.00, 355A120050.01, 355A120050.02, 355A120050.03, 355A120050.06 or 355A120050.07
355A120051.00, 355A120051.01, 355A120051.02, 355A120051.03, 355A120051.06 or 355A120051.07

