



Airworthiness Directive

AD No.: 2022-0006R1

Issued: 24 January 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, 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):

EC 155 helicopters

Effective Date: 26 January 2022 (same as original issue)

TCDS Number(s): EASA.R.105

Foreign AD: Not applicable

Revision: This AD revises EASA AD 2022-006 dated 12 January 2022.

ATA 63 – Main Rotor Drive – Oil Cooling Fan Hub – Inspection / Replacement

Manufacturer(s):

Airbus Helicopters (AH), formerly Eurocopter

Applicability:

EC 155 B1 helicopters, all manufacturer serial numbers.

Definitions:

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

The ASB: AH Alert Service Bulletin (ASB) EC155-05A039.

Affected part: Main gearbox (MGB) oil cooling fan hub, having Part Number 365A32-9204-01.

Serviceable part: An affected part that is new (not previously installed); or an affected part that, before installation, has passed an inspection (no cracks found) in accordance with the instructions of the ASB.

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. Helicopters which have AH modification 0763C41 embodied in production or in service are Group 1.



Reason:

Occurrences have been reported of failure of the MGB oil cooling fan hub. Detachment of the fan could damage surrounding harnesses and cause a loss of certain monitoring and warning functions.

This condition, if not detected and corrected, could lead to an undetected total loss of lubrication of the MGB and/or engines, possibly resulting in reduced control of the helicopter.

To address this potential unsafe condition, AH published the ASB, as defined in this AD, providing instructions for inspection and replacement of affected parts.

For the reasons described above, this AD requires repetitive inspections of affected parts and the area around the fan hub attachment screws, close monitoring and replacement of affected parts if cracks are found around attachment screws, and replacement of cracked affected parts.

This AD is considered an interim action and further AD action may follow.

This AD is revised to add a tolerance for accomplishment of the inspections.

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

Required as indicated, unless accomplished previously:

Inspections:

- (1) For Group 1 helicopters: Within 50 flight hours (FH) after the effective date of this AD, or since first installation of the affected part on a helicopter, whichever occurs later, and, thereafter, at intervals not to exceed 50 FH (see Note 1 of this AD), inspect the affected part and the area around the fan hub attachment screws in accordance with the instructions of the ASB.

Note 1: A non-cumulative tolerance of 5 FH may be applied to the compliance time and inspection interval defined in paragraph (1) of this AD.

Corrective Action(s):

- (2) If, during any inspection as required by paragraph (1) of this AD, any crack is detected around the fan hub attachment screws, accomplish the actions as specified in paragraphs (2.1) and (2.2) of this AD:
 - (2.1) Within 10 FH after crack detection around the attachment screw(s) and, thereafter, at intervals not to exceed 10 FH, inspect the affected part for cracks in accordance with the instructions of the ASB.
 - (2.2) Within 50 FH after crack detection around the attachment screw(s), replace the affected part with a serviceable part in accordance with the instructions of the ASB.
- (3) If, during any inspection as required by paragraph (1) or (2) of this AD, as applicable, any crack is detected on the affected part in any area other than around the attachment screw(s), before next flight, replace the affected part with a serviceable part in accordance with the instructions of the ASB.



Terminating Action:

(4) None.

Part(s) Installation:

(5) For Group 1 and Group 2 helicopters: From the effective date of this AD, it is allowed to install on any helicopter an affected part, provided it is a serviceable part.

Ref. Publications:

AH ASB EC155-05A039 original issue dated 06 January 2022.

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 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 – Aéroport de Marseille Provence, 13725 Marignane Cedex, France
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