

# Airworthiness DirectiveAD No.:2022-0180Issued:29 August 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 ML.A.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 355 helicopters

Effective Date: 12 September 2022

TCDS Number(s): EASA.R.146

Foreign AD: Not applicable

Supersedure: This AD supersedes EASA AD 2022-0069 dated 19 April 2022.

# ATA 65 – Tail Rotor Drive – Fan Assembly – Inspection / Modification

# Manufacturer(s):

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

#### **Applicability:**

AS 355 E, AS 355 F, AS 355 F1, AS 355 F2 and AS 355 N helicopters, all serial numbers.

#### **Definitions:**

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

Affected part: Right-hand (RH) side fan supports, having Part Number (P/N) 355A34-1041-05 or P/N 355A34-1041-03; and left-hand (LH) side fan supports, having P/N 355A34-1040-05 or P/N 355A34-1040-03.

**Serviceable part**: A fan support, eligible for installation, which is not an affected part. This includes fan supports having P/N 355A34-1041-06 (RH) or P/N 355A34-1040-06 (LH).

The ASB: AH Alert Service Bulletin (ASB) AS355-05.00.88.

**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. A helicopter on which Airbus modification (mod) 07-9062 has been embodied in production is a Group 2 helicopter, provided no affected part is installed on that helicopter.



### Reason:

An occurrence was reported of a RH fan support found partially broken (1 leg among 2) and a LH fan support found completely broken (2 legs among 2) during a scheduled maintenance on the same AS 355 helicopter. The helicopter was in pre-mod 07-9062 configuration. AH mod 07-9062 consists in modifying the fan support by making the holes from a round to an oblong shape, allowing adjustment of the assembly and removing the stress during assembly. In the past, additional cases were reported of finding ruptured fan support legs on pre-mod 07-9062 helicopters, affecting legs on both RH and LH supports.

This condition, if not detected and corrected, could lead to loss of main gearbox and engine oil cooling function and loss of tail rotor drive, possibly resulting in loss of control of the helicopter.

To address this unsafe condition, AH issued the ASB, providing inspection and modification instructions. Consequently, EASA published AD 2022-0069 to require repetitive inspections of the legs of each affected part and, depending on findings, accomplishment of applicable corrective action(s).

Since that AD was published, it was determined that all affected helicopters must be modified and AH issued Revision 1 of the ASB accordingly.

For the reasons described above, this AD retains the requirements of EASA AD 2022-0069, which is superseded, and additionally requires modification of helicopters by replacing affected parts with serviceable parts.

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

Required as indicated, unless accomplished previously:

#### Inspections:

(1) For Group 1 helicopters: Within 50 flight hours (FH) or 6 months, whichever occurs first after 03 May 2022 [the effective date of EASA AD 2022-0069], and, thereafter, at intervals not to exceed 50 FH or 6 months, whichever occurs first, inspect the legs of each affected part in accordance with the instructions of the ASB.

#### **Corrective Action(s):**

(2) If, during any inspection as required by paragraph (1) of this AD, any cracked or broken leg is found, before next flight, modify the helicopter by replacing each affected part with a serviceable part in accordance with the instructions of the ASB.

#### Modification:

(3) For Group 1 helicopters: Unless already accomplished as required by paragraph (2) of this AD, within 600 FH or 24 months, whichever occurs first after the effective date of this AD, modify the helicopter by replacing each affected part with a serviceable part in accordance with the instructions of the ASB.



# **Terminating Action:**

(4) Modification of a helicopter as required by paragraph (2) or (3) of this AD constitutes terminating action for the repetitive inspections as required by paragraph (1) of this AD for that helicopter.

## Part(s) Installation:

- (5) Do not install an affected part on any helicopter, as required by paragraph (5.1) or (5.2) of this AD, as applicable.
  - (5.1) For Group 1 helicopters: After modification of the helicopter as required by paragraph (2) or (3) of this AD.
  - (5.2) For Group 2 helicopters: From 03 May 2022 [the effective date of EASA AD 2022-0069].

### **Ref. Publications:**

AH ASB AS355-05.00.88 original issue dated 03 April 2022 and Revision 1 dated 20 July 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. This AD was posted on 21 July 2022 as PAD 22-097 for consultation until 18 August 2022. No comments were received during the consultation period.
- 3. Enquiries regarding this AD should be referred to the EASA Safety Information Section, 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 <u>EU aviation safety</u> 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.
- For any question concerning the technical content of the requirements in this AD, please contact: Airbus Helicopters (Technical Support)
  E-mail: <u>TechnicalSupport.Helicopters@airbus.com</u> Airbus World: Technical Request Management: <u>https://airbusworld.helicopters.airbus.com</u>

