

Emergency Airworthiness Directive AD No.: 2023-0128-E Issued: 26 June 2023

Note: This Emergency 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 | 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): SA 341 G and SA 342 J helicopters

Effective Date: 28 June 2023

TCDS Number(s): EASA.R.125

Foreign AD: Not applicable

Supersedure: This AD supersedes EASA Emergency AD 2022-0169-E dated 12 August 2022.

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

Manufacturer(s):

Eurocopter, Eurocopter France, Aerospatiale, Sud Aviation

Applicability:

SA 341 G and SA 342 J (commercial name 'Gazelle') helicopters, all serial numbers.

Definitions:

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

Affected part: Tail rotor blades (TRB) having Part Number (P/N) 341A33-5130-04 or P/N 341A33-5130-06, except those that are delivered as new (not previously installed) on or after 04 August 2022, and those that have passed (no defect found) the inspection(s) in accordance with the instructions of the ASB (at any revision).

Serviceable part: Any TRB that is not an affected part and that is eligible for installation.

The ASB: Airbus Helicopters (AH) Emergency Alert Service Bulletin (ASB) SA341 65.71 and SA342 65.71 (published as a single document, also ref. No. ASB GAZ-65.71).



Reason:

An occurrence was reported about manufacturing defects found on several TRBs. Visual inspection of an additional number (representative sampling) of TRBs, coming from different batches, and further analysis revealed visual linear indications on approximately 75% of the TRBs, positioned at the aerofoil connection radius and perpendicular to the grain flow direction. The results of follow-up dye penetrant inspections confirmed up to 20% of the TRB population to be discrepant and therefore having a high risk for crack propagation.

This condition, if not detected and corrected, could lead to an (in-flight) TRB loss, possibly resulting in unbalance and/or damage of the tail or other parts of the helicopter, with consequent potential loss of control of the helicopter.

To address this potential unsafe condition, AH published the original issue of the ASB, as defined in this AD, providing instructions to inspect and replace the affected parts. Consequently, EASA issued Emergency AD 2022-0169-E to require a one-time inspection of each affected part and, depending on findings, replacement. In addition, that AD also allowed one ferry flight, and prohibited the (re)installation of affected parts.

Since that AD was issued, it was determined that affected parts that accumulated more than 500 flight hours (FH) since new are also affected. In addition, the defined compliance time for the visual check of the root area of each affected part was determined to be too strict. Consequently, Airbus revised the ASB accordingly (Revision 2).

For the reasons described above, this Emergency AD retains most of the requirements of EASA Emergency AD 2022-0169-E, which is superseded, adds an inspection of affected parts that accumulated more than 500 FH since new, and amends the compliance time for the visual check of affected parts.

This AD is (still) considered an interim measure and further AD action may follow.

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

Required as indicated, unless accomplished previously:

Inspection(s):

(1) Within the compliance time as defined in Table 1 of this AD, as applicable, accomplish a visual inspection of the root area of each affected part, as defined in this AD, in accordance with the instructions of the ASB.

Accumulated FH	Compliance Time
unknown	Within 10 FH after 16 August 2022 [the effective date of EASA AD 2022-0169-E]
500 FH or less	
More than 500 FH	Within 10 FH after the effective date of this AD

Table 1 – Visual Inspection of Affected Part(s) (see Note 1 of this AD)



Note 1: Unless specified otherwise, the FH indicated in Table 1 of this AD are those accumulated by an affected part, on 16 August 2022 [the effective date of EASA Emergency AD 2022-0169-E], since new (first installation on a helicopter).

(2) If, during the inspection as required by paragraph (1) of this AD, a linear indication is found, before next flight, accomplish a dye penetrant inspection of the root area of that discrepant part in accordance with the instructions of the ASB.

Replacement:

(3) If, during the inspection as required by paragraph (2) of this AD, a linear indication is confirmed, before next flight, replace the affected part with a serviceable part, as defined in this AD, in accordance with the instructions of the ASB.

Parts Installation:

(4) From the effective date of this AD, do not install on any helicopter an affected part.

Ref. Publications:

AH Emergency ASB SA341 65.71 and SA342 65.71 (published as a single document, also ref. No. ASB GAZ-65.71) original issue dated 04 August 2022, or Revision 1 dated 21 September 2022, or Revision 2 dated 19 June 2023.

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. The results of the safety assessment have indicated the need for immediate publication and notification, without the full consultation process.
- 3. Enquiries regarding this AD should be referred to the EASA Safety Information Section, Certification Directorate. E-mail: <u>ADs@easa.europa.eu</u>.
- Information about any failures, malfunctions, defects or other occurrences, which may be 4. 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) at: Web portal: https://airbusworld.helicopters.airbus.com / Technical Requests Management, or E-mail: TechnicalSupport.Helicopters@airbus.com, or Telephone +33 (0)4.42.85.97.89.

