

Airworthiness Directive

AD No.: 2023-0168**Issued:** 31 August 2023

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):

SA 341 G and SA 342 J helicopters

Effective Date: 14 September 2023**TCDS Number(s):** EASA.R.125**Foreign AD:** Not applicable**Supersedure:** None

ATA 65 – Tail Rotor Drive – Transmission Inclined and Horizontal Drive Shaft – Inspection

Manufacturer(s):

Eurocopter, Eurocopter France, Aérospatiale and 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:

The ASB: Airbus Helicopters (AH) Alert Service Bulletin (ASB) SA341-05.42 and SA342-05.42 (published as a single document, also ref. No. GAZ-05.42).

Affected part: Inclined drive shafts, having Part Number (P/N) 341A34-3100-00 or P/N 341A34-3100-01, and horizontal drive shafts, having P/N 341A34-1106-00, P/N 341A34-1106-01, P/N 341A34-1106-02, P/N 341A34-1106-03, P/N 341A34-1106-04, P/N 341A34-1106-05 or P/N 341A34-1106-06.

Serviceable part: An affected part that has accumulated less than 1 100 flight hours (FH) and less than 37 months since the date of first installation; or after having passed (no defects found) an inspection or having been repaired, as applicable, in accordance with the instructions of the ASB; or

any inclined drive shaft or horizontal drive shaft, eligible for installation, which is not an affected part.

Reason:

Several occurrences were reported of finding corrosion on contact surfaces of tail rotor, inclined and horizontal drive shaft flanges. Although more detailed non-destructive testing did not indicate any cracks or corrosion of the flange jo-bolt holes, indications were found for pitting corrosion on the mating faces of several flanges. Further investigation of exposed flange surfaces revealed various regions of intergranular failure beneath the surface of found corrosion pits.

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

To address this potential unsafe condition, AH issued the ASB, as defined in this AD, providing inspection instructions.

For the reasons described above, this AD requires repetitive inspections of the affected parts (as defined in this AD) and, depending on findings, accomplishment of applicable corrective action(s). This AD also regulates (re)installation of affected parts.

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

Required as indicated, unless accomplished previously:

Inspections:

- (1) Within the compliance time as defined in Table 1 of this AD and, thereafter, at intervals not to exceed 1 100 FH or 37 months, whichever occurs first, accomplish a visual inspection of each affected part in accordance with the instructions of the ASB.

Table 1 – Initial Visual Inspection

Compliance Time (whichever occurs later, A or B)	
A	Before exceeding 1 100 FH or 37 months, whichever occurs first since the date of first installation
B	Within 100 FH or 6 months, whichever occurs first after the effective date of this AD

Corrective Action:

- (2) If, during any visual inspection as required by paragraph (1) of this AD, an affected part is found to be corroded, before next flight, replace that affected part with a serviceable part, as defined in this AD, in accordance with the instructions of the ASB.

Terminating Action:

- (3) None.

Part(s) Installation:

- (4) From the effective date of this AD, it is allowed to install on any helicopter an affected part, provided it is a serviceable part, as defined in this AD.



Ref. Publications:

AH ASB SA341-05.42 and SA342-05.42 (published as a single document, also ref. No. GAZ-05.42) original issue dated 31 May 2023, or Revision 1 dated 28 July 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. This AD was posted on 31 July 2023 as PAD 23-090 for consultation until 28 August 2023. 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: 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):
E-mail: TechnicalSupport.Helicopters@airbus.com or
Airbus World: Technical Request Management: <https://airbusworld.helicopters.airbus.com>.

