European Union Aviation Safety Agency

Airworthiness Directive

AD No.: 2022-0154

Issued: 01 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:
LEONARDO S.p.A.

Type/Model designation(s):
AB139 and AW139 helicopters

Effective Date: 15 August 2022
TCDS Number(s): EASA.R.006
Foreign AD: Not applicable
Supersedure: None

ATA 64 – Tail Rotor – Damper Bracket – Inspection

Manufacturer(s):
Leonardo S.p.A. Helicopters, formerly Finmeccanica S.p.A, AgustaWestland S.p.A., Agusta S.p.A.; and AgustaWestland Philadelphia Corporation, formerly Agusta Aerospace Corporation

Applicability:
AB139 and AW139 helicopters, all serial numbers (s/n).

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

Affected part: Tail rotor (TR) damper bracket assembly, having Part Number (P/N) 3G6420A06131 and having an s/n as specified in Table 1 of the ASB, or any other s/n starting with the prefix "V".

Serviceable part: Any TR damper bracket assembly, having P/N 3G6420A06131, that is not an affected part, as defined in this AD.

The ASB: Leonardo Alert Service Bulletin (ASB) 139-724.

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.

Reason:

During scheduled inspections some TR damper bracket assemblies were found cracked. Subsequent investigation revealed that the cracks originated from the outer edges of the TR damper bracket lug bores and were due to stress corrosion.

This condition, if not detected and corrected, could lead to fracture of the affected part, possibly resulting in failure of the tail rotor damper, and consequent loss of control of the helicopter.

To address this potential unsafe condition, Leonardo issued the ASB to provide inspection and replacement instructions.

For the reason described above, this AD requires repetitive detailed visual inspections (DVI) of the affected part for cracks and corrosion, and, depending on findings, replacement of the affected part with a serviceable part, as defined in this AD.

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 within 2 months, whichever occurs first after the effective date of this AD, and, thereafter, at intervals not to exceed 50 FH or 6 months, whichever occurs first, accomplish a DVI of the affected part in accordance with the instructions of section 3 of the ASB.

Corrective action:

(2) If, during any inspection as required by paragraph (1) of this AD, any corrosion is found, before next flight, remove the corrosion in accordance with the instructions of section 3 of the ASB.

(3) If, during any inspection as required by paragraph (1) of this AD, any cracks are found, or if the corrosion is still present after accomplishing the corrective action(s) as required by paragraph (2) of this AD, before next flight, replace the affected part with a serviceable part in accordance with the instructions of section 3 of the ASB.

Terminating Action:

(4) Replacement on a helicopter of an affected part with a serviceable part constitutes terminating action for the repetitive DVI as required by paragraph (1) of this AD for that helicopter.

Reporting:

(5) If, during any inspection as required by paragraph (1) of this AD, discrepancies are detected, as identified in the ASB, within 30 days after that inspection, report the results to Leonardo. Using the Compliance Form of the ASB is an acceptable method to comply with this reporting requirement.

Part(s) Installation:

(6) 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.

Ref. Publications:

Leonardo ASB 139-724 original issue dated 27 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. 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: Leonardo S.p.A. Helicopters. E-mail: engineering.support.lhd@leonardo.com.