



Airworthiness Directive

AD No.: 2018-0292

Issued: 28 December 2018

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 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:

LEONARDO S.p.A.

Type/Model designation(s):

AB139 and AW139 helicopters

Effective Date: 11 January 2019

TCDS Number(s): EASA.R.006

Foreign AD: Not applicable

Supersedure: None

ATA 64 – Tail Rotor – Tail Rotor Slider Assembly – Inspection

Manufacturer(s):

Leonardo S.p.A. Helicopters, formerly Finmeccanica S.p.A, AgustaWestland S.p.A., Agusta S.p.A.; 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 slider assembly having Part Number (P/N) 3G6430A00131.

Serviceable part: An affected part that is new (never installed on a helicopter); or an affected part that, before installation, has passed (no defects detected) a detailed visual inspection (DVI) in accordance with the instructions of Part I of the ASB.

The ASB: Leonardo Alert Service Bulletin (ASB) 139-569.



Reason:

One case has been reported of a tail rotor slider assembly found fractured in service during a post flight inspection; the bushing and the actuator rod included in the tail rotor servo were also found partially damaged.

The subsequent investigation revealed that the failure was due to fatigue, initiated from corroded areas localised on the surface of the slider characterised by circumferential refinishing signs. The presence of circumferential finish signs is consistent with sanding operation accomplished on the fractured area of the slider. AW139 AMPI Maintenance Manual instructions do not contain instructions to apply sanding on the slider surface as this operation may remove the passivation corrosion protection of the part.

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

To address this potential unsafe condition, Leonardo issued the ASB providing inspection instructions of the affected part.

For the reason described above, this AD requires to accomplish a one-time DVI of the affected part for corrosion and conditions and, depending on findings, replacement or repetitive inspections.

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

Required as indicated, unless accomplished previously:

Inspection:

- (1) Within the compliance times specified in Table 1 of this AD, accomplish a DVI of the affected part in accordance with the instructions of Part I of the ASB.

Table 1 - Inspection

Flight Hours (FH) accumulated by an affected part on the effective date of this AD	Compliance Time
Less than 2 400 FH	Before exceeding 2 450 FH
2 400 FH or more	Within 50 FH after the effective date of this AD

- (2) If, during the inspection as required by paragraph (1) of this AD, only evidence of refinishing signs is found on the surface of affected part, within 12 months after the inspection and, thereafter, at intervals not to exceed 12 months, accomplish a DVI of the affected part in accordance with the instructions of Part I of the ASB.

Corrective action(s):

- (3) If, during any inspection as required by paragraph (1) or (2) of this AD, as applicable, any evidence of corrosion is found, before next flight, replace the affected part with a serviceable part in accordance with the instructions of Part II the ASB.



Terminating Action:

- (4) Replacement of an affected part with a serviceable part as required by paragraph (3) of this AD constitutes terminating action for the repetitive DVI as required by paragraph (2) of this AD.

Parts Installation:

- (5) 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:

Leonardo S.p.A. Helicopters SB 139-569 original issue dated 28 December 2018.

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](#).
5. For any question concerning the technical content of the requirements in this AD, please contact: Leonardo S.p.A. Helicopters. E-mail: cse.aw139.AW@leonardocompany.com.

