

Notification of a Proposal to issue an Airworthiness Directive

PAD No.: 23-010

Issued: 25 January 2023

Note: This Proposed Airworthiness Directive (PAD) 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.

In accordance with the EASA Continuing Airworthiness Procedures, the Executive Director is proposing the issuance of an EASA Airworthiness Directive (AD), applicable to the aeronautical product(s) identified below.

All interested persons may send their comments, referencing the PAD Number above, to the e-mail address specified in the 'Remarks' section, prior to the consultation date indicated.

Design Approval Holder's Name:

LEONARDO S.p.A.

Type/Model designation(s):

A119 and AW119MKII helicopters

Effective Date: [TBD - standard: 14 days after AD issue date]

TCDS Number(s): EASA.R.005

Foreign AD: Not applicable

Supersedure: This AD supersedes EASA AD 2021-0096 dated 31 March 2021.

ATA 67 – Rotors Flight Control – Collective Stick Torque Tube Assembly – Inspection / Replacement

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:

A119 and AW119MKII helicopters up to serial number 14999 inclusive.

Definitions:

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

The ASB: Leonardo Alert Service Bulletin (ASB) 119-098 Revision B.

Affected part: Collective stick torque tube assemblies having part number (P/N) 109-0011-03-105.

Groups: Group 1 helicopters are those that have an affected part installed, identified by batch number 823207 or earlier, or from 900144 to 991581 inclusive. Group 2 helicopters are those which have an affected part installed, and are not Group 1.

Serviceable part: An affected part that was never removed as instructed by ASB 119-098 at any revision.

Reason:

Occurrences have been reported of abnormal rotations on the collective torque tube of the A119 and AW119MKII helicopters. Following investigations, it was identified that these events were due to an erroneous manufacturing process, affecting certain collective torque tube assemblies.

This condition, if not detected and corrected, could lead to reduced control of the helicopter, possibly resulting in a forced landing, with consequent damage to the helicopter and injury to occupants.

To address this potential unsafe condition, Leonardo issued ASB 119-098, providing applicable instructions, and EASA issued AD 2019-0057, to require identification of the batch number of all P/N 109-0011-03-105 torque tube assemblies, repetitive inspections of certain torque tube assemblies and replacement. That AD also prohibited (re)installation of affected parts.

Since that AD was issued, additional batches of affected parts were identified. Furthermore, due to logistical issues, only a limited number helicopters had the affected part replaced within the compliance time as required by that AD. Consequently, Leonardo issued the ASB 119-098 Revision A, and EASA issued AD 2021-0096, expanding the batches of affected parts and substantiating an extension of the compliance time for the replacement of affected parts.

After that AD was issued, additional occurrences were reported on parts not previously included in the affected batches. Consequently, Leonardo issued the ASB 119-098 Revision B expanding the applicability to all torque tube assemblies P/N 109-0011-03-105, reducing the interval of the repetitive inspections and simplifying the inspection methodology.

For the reason described above, this AD partially retains the inspection requirements of EASA AD 2021-0096, which is superseded, by expanding the applicability to all torque tube assemblies P/N 109-0011-03-105 and reducing the interval of the repetitive inspections.

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

Required as indicated, unless accomplished previously:

Inspection(s):

- (1) For Group 1 helicopters: Within 50 flight hours (FH) after 31 March 2021 [the effective date of EASA AD 2021-0096], and, thereafter, at intervals not exceeding 100 FH, inspect the affected part in accordance with the instructions of the ASB.
- (2) For Group 2 helicopters: Within 50 FH after the effective date of this AD, and, thereafter, at intervals not exceeding 100 FH, inspect the affected part in accordance with the instructions of the ASB.



Corrective Action(s):

- (3) If, during any inspection as required by paragraph (1) or (2) of this AD, as applicable, any deficiency, as identified in the ASB, is detected on the affected part, before next flight, replace that affected part with a serviceable part in accordance with the instructions of the ASB.

Credit:

- (4) Inspections and corrective actions on a helicopter, accomplished before the effective date of this AD in accordance with the ASB, are acceptable to comply with the initial requirements of paragraphs (1) and (3) of this AD, as applicable, for that helicopter.

Terminating Action(s):

- (5) None.

Parts Installation:

- (6) For Group 1 and Group 2 helicopters: 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; and that, before next flight after installation, it passes an inspection (no deficiency detected) in accordance with the instructions of the ASB; and, thereafter, it is inspected as required by paragraph (1) or (2) of this AD, as applicable.

Ref. Publications:

Leonardo S.p.A. Helicopters ASB 119-098 original issue dated 13 March 2019, Revision A dated 31 March 2021, and Revision B dated 25 January 2023.

The use of later approved revisions of the above-mentioned document is acceptable for compliance with the requirements of this AD.

Remarks:

1. This Proposed AD will be closed for consultation on 08 February 2023.
2. Enquiries regarding this PAD should be referred to the EASA Safety Information Section, Certification Directorate. E-mail: ADs@easa.europa.eu.
3. Information about any failures, malfunctions, defects or other occurrences, which may be similar to the unsafe condition addressed by this PAD, and which may occur, or have occurred on a product, part or appliance not affected by this PAD, 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 PAD 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.
4. For any question concerning the technical content of the requirements in this PAD, please contact: Leonardo S.p.A. Helicopters, Customer Support & Services, Product Support Engineering, E-mail: engineering.support.lhd@leonardo.com.

