

Airworthiness Directive

AD No.: 2021-0096

Issued: 31 March 2021

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, 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: Type/Model designation(s):

LEONARDO S.p.A. A119 and AW119MKII helicopters

Effective Date: 14 April 2021

TCDS Number(s): EASA.R.005

Foreign AD: Not applicable

Supersedure: This AD supersedes EASA AD 2019-0057 dated 20 March 2019.

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, all serial numbers.

Definitions:

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

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

Affected part: Collective stick torque tube assemblies, having part number (P/N) 109-0011-03-105, and identified by batch number 823207 or earlier, or by batch number from 900144 to 991581 inclusive. The ASB provides instructions to determine the batch number.

Serviceable part: Collective stick torque tube assemblies which are not an affected part.

Groups: Group 1 helicopters are those that have an affected part installed, identified by batch number 823207 or earlier.



Group 2 helicopters are those that have an affected part installed, identified by batch number from 900144 to 991581 inclusive.

Group 3 helicopters are those that do not have an affected part installed.

Reason:

Occurrences have been reported of abnormal play on the collective torque tube on two AW119MKII helicopters. Following investigations, it was identified that these events were due to an erroneous manufacturing process, affecting certain collective torque tube assemblies. The affected batch numbers have been identified.

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 issue AD 2019-0057, to require identification of the batch number of all P/N 109-0011-03-105 torque tube assemblies, and, for Group 1 helicopters, repetitive inspections of the affected parts and replacement. That AD also prohibited (re)installation of affected parts.

Since that AD was issued, additional batches of affected parts have been identified. Furthermore, due to logistical issues, only a limited number of Group 1 helicopters have had the affected part replaced within the compliance time as required by that AD. Consequently, Leonardo issued the ASB, as defined in this AD, expanding the batches of affected parts, and substantiated an extension of the compliance time for the replacement of affected parts on Group 1 helicopters.

For the reason described above, this AD retains the requirements of EASA AD 2019-0057, which is superseded, expanding the definition of affected parts and, for Group 1 helicopters, extending the compliance time for replacement, and reducing the interval of the repetitive inspections.

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

Required as indicated, unless accomplished previously:

Inspections:

- (1) For Group 1 helicopters: Within 50 flight hours (FH) after 03 April 2019 [the effective date of EASA AD 2019-0057], and, thereafter, at intervals not exceeding 200 FH, inspect the affected part in accordance with the instructions of the ASB.
- (2) For Group 1 helicopters: Within 100 FH after the effective date of this AD, but not exceeding 200 FH since last inspection accomplished as required by paragraph (1) of this AD, and, thereafter, at intervals not exceeding 100 FH, inspect the affected part in accordance with the instructions of the ASB.
- (3) For Group 2 helicopters: Within 50 FH after the effective date of this AD, and, thereafter, at intervals not exceeding 200 FH, inspect the affected part in accordance with the instructions of the ASB.



Corrective Actions:

(4) For Group 1 and Group 2 helicopters: If, during any inspection as required by paragraph (1), (2) or (3) 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.

Replacement:

(5) For Group 1 and Group 2 helicopters: Unless already done as required by paragraph (4) of this AD, within the compliance time as specified in Table 1 of this AD, as applicable, replace the affected part with a serviceable part in accordance with the instructions of the ASB.

Table 1 – Compliance Time

Group	Compliance Time
1	Within 36 months after 03 April 2019 [the effective date of EASA AD 2019-0057]
2	Within 24 months after the effective date of this AD

Credit:

(6) Inspections and corrective actions on a helicopter, accomplished before the effective date of this AD in accordance with the instructions of Leonardo ASB 119-098 at original issue, are acceptable to comply with the initial requirements of paragraphs (1), (2) and (4) of this AD, as applicable, for that helicopter.

Terminating Action:

- (7) For Group 1 helicopters: accomplishment of the repetitive inspections on a helicopter as required by paragraph (2) of this AD constitutes terminating action for the repetitive inspections as required by paragraph (1) of this AD for that helicopter.
- (8) Replacement on a helicopter of an affected part with a serviceable part, as required by paragraph (4) or (5) of this AD, as applicable, constitutes terminating action for the repetitive inspections as required by paragraphs (1) and (2), or paragraph (3) of this AD, as applicable, for that helicopter.

Part Installation:

- (9) Do not install an affected part on any helicopter, as required by paragraph (9.1) or (9.2) of this AD, as applicable.
 - (9.1) For Group 1 and Group 2 helicopters: After replacement of the affected part as required by paragraph (4) or (5) of this AD, as applicable.
 - (9.2) For Group 3 helicopters: From the effective date of this AD.

Ref. Publications:

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



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 <u>EU aviation safety reporting system</u>. 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, Customer Support & Services, Product Support Engineering, E-mail: aw109.mbx.aw@leonardocompany.com.

