

Airworthiness Directive

AD No.: 2020-0206

Issued: 30 September 2020

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 October 2020

TCDS Number(s): EASA.R.005

Foreign AD: Not applicable

Supersedure: This AD supersedes EASA AD 2018-0156 dated 24 July 2018.

ATA 65 – Tail Rotor Drive – Gearbox Output Shaft – 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:

A119 and AW119MKII helicopters, all serial numbers (s/n).

Definitions:

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

The SB: Leonardo Service Bulletin (SB) 119-090 revision A.

Affected part: 90° tail rotor gearbox (TGB) shafts, having Part Number (P/N) 109-0443-03-107 (installed on TGB having P/N 109-0440-06-01-101, or P/N 109-0440-06-105), and an s/n as listed in Appendix 1 of this AD.

Reason:

Two occurrences were reported of corrosion on the internal surface of the 90° TGB shaft of A119 helicopters. Further analysis identified a specific batch of parts that may be susceptible to similar occurrences.



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

Prompted by this occurrence, and pending further information from the technical investigation, Leonardo issued SB 119-090 (original issue), providing inspection instructions, and EASA issued AD 2018-0156 to require repetitive inspections of affected parts and, depending on findings, replacement of the 90° TGB.

Since that AD was issued, it has been determined that additional parts may be susceptible to similar occurrences; furthermore, it was observed that it cannot be excluded that some TGB shafts could have been reinstalled on a TGB other than the one on which they were initially installed. Consequently, Leonardo issued the SB, expanding the list of affected parts and updating the instructions.

For the reasons stated above, this AD retains the requirements of EASA AD 2018-0156, which is superseded, and expands the population of affected parts.

This AD is still considered an interim action and further AD action may follow.

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

Required as indicated, unless accomplished previously:

Identification:

(1) Within 25 flight hours or 3 months, whichever occurs first after the effective date of this AD, but not exceeding 6 months after last inspection accomplished as required by EASA AD 2018-0156, as applicable, inspect the 90° TGB shaft in accordance with the instructions of Section 3 – Part I of the SB.

Repetitive Inspections:

(2) If, during the inspection as required by paragraph (1) of this AD, an affected part is found installed, before next flight, and, thereafter, at intervals not exceeding 6 months, inspect that affected part in accordance with the instructions of Section 3 – Part II of the SB.

Corrective Action(s):

(3) If, during any inspection as required by paragraph (2) of this AD, corrosion is found, before next flight, replace the 90° TGB in accordance with the instructions of the SB.

Terminating Action:

(4) None.

Part Installation:

(5) From the effective date of this AD, it is allowed to install a 90° TGB on a helicopter, provided that, before installation, an identification of the 90° TGB shaft in accordance with the instruction of Section 3 – Part I of the SB is accomplished and, if that 90° TGB shaft is identified as an affected part, following installation, it is inspected as required by this AD.



Ref. Publications:

Leonardo S.p.A. Helicopters SB 119-090 original issue dated 23 July 2018, and Revision A dated 14 September 2020.

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 Programming and Continued Airworthiness 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.



Appendix 1 90° TGB shafts P/N 109-0443-03-107

s/n

G14993	V47	V48	V49	V51	V54	V55
V56	V57	V59	V74	105	106	107
109	110	111	112	113	115	116
118	119	121	123	124	128	151
156	158	160	161	162	163	164
165	166	167	168	169	170	171
172	180	181	182	183	188	189
190	191	192	193	194	195	198
199	200	201	202	203	204	205
206	207	AW210 to AW280 inclusive				