

Airworthiness Directive AD No.: 2020-0128 Issued: 04 June 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: LEONARDO S.p.A.

Type/Model designation(s): A119 and AW119MKII helicopters

Effective Date: 18 June 2020

TCDS Number(s): EASA.R.005

Foreign AD: Not applicable

Supersedure: This AD supersedes EASA Emergency AD 2019-0194-E dated 09 August 2019.

ATA 64 – Tail Rotor – Tail Rotor Duplex Bearing and Plug – 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, manufacturer serial numbers (s/n) up to 14972 inclusive, except s/n 14950, s/n 14957, s/n 14961, s/n 14962, s/n 14964, s/n 14965, s/n 14967 and s/n 14970.

Definitions:

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

The ASB: Leonardo Emergency Alert Service Bulletin (ASB) 119-105 Revision (Rev.) A.

Affected duplex bearing: Tail rotor (TR) duplex bearing Part Number (P/N) 129-0160-11-103.

Affected plug: Plug P/N 129-0160-45-103 installed on a TR duplex bearing.

Reason:

Preliminary investigation of an AW119 MKII accident identified disassembled connection between the yaw control input lever and the rotating input shaft, partial presence of spalling on inner races of the affected duplex bearings and missing plug and related lock wire.



This condition, if not detected and corrected, could lead to functional failure of the TR pitch change mechanism, resulting in loss of control of the helicopter.

As a precautionary measure and pending further information from the technical investigation in progress, Leonardo issued ASB 119-100, providing inspection instructions and improved installation procedures applicable to TR duplex bearing, and EASA issued Emergency AD 2019-0194-E, to require inspection of the TR pitch change mechanism, installation of additional locking wire, repetitive inspections of the affected duplex bearing and, depending on findings, corrective actions. That AD was considered an interim action.

Since that AD was issued, Leonardo completed the investigations and determined that additional helicopters are affected, and that the repetitive inspections can be included in the Chapter 05 of the applicable maintenance manual (MM); consequently, Leonardo issued revision A (cancellation) of ASB 119-100, the ASB, as defined in this AD, and the applicable MM Temporary Revisions.

For the reasons stated above, this AD partially retains the requirements of EASA AD 2019-0194-E, which is superseded, and expands the Applicability.

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

Required as indicated, unless accomplished previously:

Inspection / Additional Locking Wire Installation:

- (1) Within 10 flight hours (FH) or 30 days, whichever occurs first after the applicable effective date, as identified in Table 1 of this AD, inspect the tightening torque of the affected plug and install an additional locking wire in accordance with the instructions of Part I of the ASB.
- (2) Within 50 FH or 6 months, whichever occurs first after the applicable effective date, as identified in Table 1 of this AD, inspect the affected duplex bearing, its corresponding locking nut and affected plug in accordance with the instructions of Part II of the ASB.

Helicopters s/n	Applicable Effective Date
All s/n up to 14966 inclusive, except s/n 14950, s/n 14957, s/n 14961, s/n 14962 and s/n 14963	13 August 2019 [the effective date of EASA AD 2019-0194-E]
s/n 14963, 14968, 14969, 14971 and 14972	18 June 2020 [the effective date of this AD]

Table 1 – Applicable Effective Date

Corrective Action(s):

(3) If, during any inspection as required by paragraph (1) or (2) of this AD, any discrepancies are detected, as defined in the ASB, before next flight, accomplish the applicable corrective action(s) in accordance with the instructions of the ASB.

Credit:

(4) Inspection(s) and corrective action(s) on a helicopter, accomplished before the effective date of this AD in accordance with the instructions of Leonardo ASB 119-100 or ASB 119-105 original issue, are acceptable to comply with the requirements of paragraphs (1), (2) and (3) of this AD for that helicopter.



Ref. Publications:

Leonardo ASB 119-105 original issue dated 18 May 2020, or Revision A dated 03 June 2020.

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

Leonardo ASB 119-100 original issue dated 07 August 2019.

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: <u>ADs@easa.europa.eu</u>.
- 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</u> <u>reporting system</u>.
- 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 DPT, E-mail: www.aw@leonardocompany.com.

