

Airworthiness Directive AD No.: 2025-0064 Issued: 25 March 2025

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, or Annex Vb Part ML.A.301, as applicable, 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 Annex Vb Part ML.A.303, as applicable] 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): AW189 helicopters

LEONARDO S.p.A.

Effective Date: 08 April 2025

TCDS Number(s): EASA.R.510

Foreign AD: Not applicable

Supersedure: This AD supersedes EASA AD 2023-0149 dated 19 July 2023.

ATA 78 – Engine Exhaust – Ejector Duct – Inspection

Manufacturer(s):

Leonardo S.p.A. Helicopters, formerly Finmeccanica S.p.A., AgustaWestland S.p.A.

Applicability:

AW189 helicopters, all manufacturer serial numbers (MSN).

Definitions:

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

Affected parts: Ejector duct Part Number (P/N) 8G7810P00131 (left-hand (LH) side) and P/N 8G7810P00231 (right-hand (RH) side).

Serviceable parts: Any affected part which is new (never installed) or a part that, before next flight after installation, passed an inspection (no defect found) in accordance with the instructions of the SB.

The SB: Leonardo Alert Service Bulletin (SB) 189-384 Revision A.



Groups:

Group 1 are all MSN, except Group 2 helicopters. Group 2 are helicopters having MSN 49018, 49019, 49025 or MSN 49028.

Reason:

Occurrences were reported of cracking damage on affected parts on the LH side of the rear sliding cowling where the engine exhaust ducts are installed. Investigation of the cracks, which developed in the area of the engine exhaust duct boundary reinforcement plate, is ongoing to identify the root cause of the occurrences.

This condition, if not detected and corrected, could lead to detachment of a part of the ejector duct, which could impact the helicopter tailplane or the tail rotor with consequent reduction or loss of control of the helicopter.

To address this potential unsafe condition, Leonardo issued the original issue of the SB 189-384 providing instructions for repetitive inspections and EASA issued AD 2023-0149 to require accomplishment of those instructions.

Since that AD was issued, it was determined that due to reasons still under investigation, the affected parts installed on Group 2 helicopters, as defined in this AD, are exposed to higher likelihood of cracking. Additionally, it was determined that the inspection area needs to be extended also to the area of the exhaust bracket reinforcements. Prompted by this development, Leonardo issued the SB, as defined in this AD, providing the applicable inspection instructions.

For the reasons described above, this AD partially retains the requirements of EASA AD 2023-0149, which is superseded, requires for Group 2 helicopters repetitive inspections of the affected parts within reduced compliance time and intervals and, depending on findings, replacement of the affected part. This AD also requires reporting of findings to Leonardo.

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

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

Required as indicated by this AD, unless the action(s) required by this AD have been already accomplished:

Inspection(s):

- (1) For Group 1 helicopters: Within 25 flight hours (FH) after 26 July 2023 [the effective date of EASA AD 2023-0149] and, thereafter, at intervals not to exceed 50 FH, inspect each affected part (LH and RH sides) in accordance with the instructions of the SB.
- (2) For Group 2 helicopters: Within 10 FH after the effective date of this AD and, thereafter, at intervals not to exceed 10 FH inspect each affected part (LH and RH sides) in accordance with the instructions of the SB.



Corrective Action(s):

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

Reporting:

(4) If, during any inspection as required by paragraph (1) or (2) of this AD, as applicable, any discrepancy, as defined in the SB, is detected, within 30 days after that inspection, or after the effective date of this AD, whichever occurs later, report the inspection result to Leonardo. Using the inspection report attached to the SB is an acceptable method to comply with this requirement.

Credit:

(5) Inspection(s) and corrective action(s) accomplished on a helicopter including the reporting, accomplished before the effective date of this AD in accordance with the instructions of the original issue of the Leonardo SB 189-384 are acceptable to comply with the requirements of paragraphs (1), (3) and (4) of this AD, as applicable, for that helicopter.

Terminating Action:

(6) None.

Ref. Publications:

Leonardo S.p.A. Alert SB 189-384 original issue dated 17 July 2023, or Revision A dated 10 March 2025.

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

Remarks:

- If requested and appropriately substantiated, EASA can approve Alternative Methods of 1. 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. All interested persons may send their comments, referencing the AD Number, to the E-mail address specified in below Remark 3, prior to 22 April 2025. Only if any comment is received during the consultation period, a Comment Response Document will be published in the EASA <u>Safety Publications Tool</u>, in a compressed ('zipped') file, attached to the record for this AD.
- Enquiries regarding this AD should be referred to the EASA Safety Information Section, 3. Certification Directorate. E-mail: <u>ADs@easa.europa.eu.</u>
- Information about any failures, malfunctions, defects or other occurrences, which may be 4. 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. 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, E-mail: <u>engineering.support.lhd@leonardocompany.com</u>.

