



## Notification of a Proposal to issue an Airworthiness Directive

**PAD No.:** 21-179

**Issued:** 09 December 2021

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):**

AW189 helicopters

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

**TCDS Number(s):** EASA.R.510

**Foreign AD:** Not applicable

**Supersedure:** None

### ATA 34 – Navigation - Glide Slope Antenna – Inspection / Cleaning / Replacement

**Manufacturer(s):**

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

**Applicability:**

AW189 helicopters, all serial numbers (s/n).

**Definitions:**

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

**The ASB:** Leonardo Alert Service Bulletin (ASB) 189-295.

**Affected parts:** Glide slope (G/S) antenna part number (P/N) 6208-88-62; and G/S antenna coaxial connectors P/N PE4958, part of G/S antenna kit P/N 8G3430F00111; except those which are serviceable parts.

**Serviceable parts:**

- G/S antenna and G/S antenna coaxial connectors, eligible for installation, which are not affected parts;
- G/S antenna P/N 6208-88-62 and G/S antenna coaxial connectors P/N PE4958, part of G/S antenna kit P/N 8G3430F00111, which are new (not previously installed on any helicopter);



- G/S antenna P/N 6208-88-62 which are in any of the following condition:
  - Passed an inspection (no sealant found) in accordance with the instructions of Part I of the ASB.
  - After an inspection in accordance with the instructions of Part I of the ASB, have been cleaned (no residuals of sealant) and, thereafter, before next flight after installation, passed (no discrepancy found) an acceptance test procedure (ATP) in accordance with the instructions of Annex A of the ASB.

**Groups:** Group 1 are helicopters having s/n from 92001 to 92010 inclusive; Group 2 are helicopters which are not Group 1.

**Reason:**

An in-flight abnormal oscillatory behaviour of an AW189 helicopter was reported during automated glide slope approaches. Subsequent investigations identified sealant on the G/S antenna coaxial connectors, which isolated it from its grounding plane.

This condition, if not detected and corrected, could lead to erratic signals from the G/S antenna, possibly resulting in reduced capability of the helicopter to perform safe automated approaches.

To address this potential unsafe condition, Leonardo issued the ASB, as defined in this AD, providing instructions to inspect the affected parts.

For the reason described above, this AD requires a one-time inspection of the affected parts and, depending on findings, corrective actions. This AD also provides requirements for installation of G/S antenna and coaxial connectors.

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

Required as indicated, unless accomplished previously:

**Inspection(s):**

- (1) For Group 1 helicopters: Within 200 flight hours or 6 months, whichever occurs first after the effective date of this AD, inspect the affected parts in accordance with the instructions of Part I of the ASB.

**Corrective Action(s):**

- (2) If, during the inspection as required by paragraph (1) of this AD, sealant is found on an affected part, before next flight, clean that part in accordance with the instructions of Part I of the ASB (including an additional inspection for residuals of sealant) and, thereafter, accomplish an ATP in accordance with the instructions of Annex A of the ASB.
- (3) If, during the inspection as required by paragraph (1) of this AD, no sealant is found on the affected parts, before next flight, accomplish an ATP in accordance with the instructions of Annex A of the ASB.
- (4) If, during the ATP as required by paragraph (2) or (3) of this AD, as applicable, any discrepancy is identified, before next flight, replace the affected parts with serviceable parts in accordance with the instructions of Part I of the ASB.



- (5) For affected parts on which residuals of sealant are found during the additional inspection as required by paragraph (2) of this AD, within 12 months after passing (no discrepancy found) the ATP as required by paragraph (2) of this AD, replace those affected parts with serviceable parts in accordance with the instructions of Part II of the ASB.

**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 a G/S antenna, and/or G/S antenna coaxial connectors, provided they are serviceable, as defined in this AD.

**Ref. Publications:**

Leonardo SB 189-295 original issue dated 29 November 2021.

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 06 January 2022.
2. Enquiries regarding this PAD should be referred to the EASA Safety Information Section, Certification Directorate. E-mail: [ADs@easa.europa.eu](mailto: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, E-mail: [PSE\\_AW189.MBX@leonardocompany.com](mailto:PSE_AW189.MBX@leonardocompany.com)

