

# Notification of a Proposal to issue an Airworthiness Directive

PAD No.: 25-084

Issued: 16 June 2025

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: Type/Model designation(s):

LEONARDO S.p.A. AB139, AW139 and AW189 helicopters

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

TCDS Number(s): EASA.R.006 and EASA.R.510

Foreign AD: Not applicable

Supersedure: None

## ATA 67 – Rotors Flight Control – Brake Pedal Assembly – 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:**

AB139, AW139 and 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) 139-817 (for AB139 and AW139 helicopters) and ASB 189-410 (for AW189 helicopters), as applicable.

#### Affected part:

For AB139 and AW139 helicopters:

Left-hand (LH) tube assembly having Part Number (P/N) M015-01M172-045 as part of brake pedal assembly P/N 3E6721A01433 and P/N 3E6721A01434; and

Right-hand (RH) tube assembly having P/N M015-01M172-046 as part of right brake pedal assembly P/N 3E6721A01533 or P/N 3E6721A01534,



which are parts of pedal assembly set P/N 3E6721A00136, or P/N 3G6721P00731, or P/N 3E6721A00137, or P/N 3G6721P00631, or P/N 3E6721A00138, or P/N 3G6721P00131.

#### For AW189 helicopters:

LH pedal shaft assembly having P/N 8G6721A02231 as part of left brake pedal assembly P/N 8G6721A02031; and

RH pedal shaft assembly having P/N 8G6721A02331 as part of right brake pedal assembly P/N 8G6721A02131,

which are parts of pedal assembly set P/N 8G6721A01831 or P/N 8G6721P00431.

**Serviceable part:** LH or RH tube assembly (for AB139 and AW139 helicopters) and LH or RH pedal shaft assembly (for AW189 helicopters); or an affected LH or RH brake pedal assembly; which are new (never previously installed) or passed the inspection in accordance with the instructions of the ASB.

**Temporary serviceable tube assembly:** LH or RH tube assembly having a single crack with a length of 5 mm or less.

**Groups:** Group 1 helicopters are those that have an affected part installed. Group 2 helicopters are those that do not have an affected part installed.

#### Reason:

Occurrences of cracking on the LH and RH pilot pedal tubes were reported on AW139 helicopter. Subsequent investigation determined that the cracks originated from the locking slot where the upper clamping bolt engages with the tube. The root cause of the tube cracking is still under investigation. Due to design similarity of braking pedal assembly architecture, AB139 and AW189 helicopters could be also affected by the same structural damage.

This condition, if not detected or corrected, could lead to structural failure of the pedal assembly resulting in reduced control of the helicopter around the yaw axis.

To address this potential unsafe condition, Leonardo issued the ASB to provide repetitive inspection instructions.

For the reasons described above, this AD requires repetitive inspections of the pedal and tube assembly and, depending on findings, replacement. This AD also provides conditions for installation of replacement parts.

#### 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 the compliance time defined in Table 1 of this AD and, thereafter at intervals not to exceed 600 flight hours (FH), inspect each affected part in accordance with the instructions of the Part I of the ASB.



#### Table 1 – Compliance Time

A or B, whichever occurs later	
Α	100 FH or 1 month, whichever occurs first after the effective date of this AD
В	1 200 FH accumulated by the pedal assembly since new (see Note 1 of this AD)

Note 1: If the service life of the pedal assembly cannot be determined (parameter **B**), accomplish the inspection within 100 FH or 1 month, whichever occurs first after the effective date of this AD (parameter **A**).

#### Corrective Action(s):

- (2) If, during any inspection as required by paragraph (1) of this AD, multiple cracks or a single crack exceeding 5 mm is detected, before next flight, replace the affected part with a serviceable part in accordance with the instructions of the Part I of the ASB.
- (3) For copilot side only: In lieu of installation of the serviceable part as required by paragraph (2) of this AD, it is allowed to install one single temporary serviceable tube assembly for each pedal assembly set in accordance with the instructions of the Part II of the ASB, provided that within 50 FH after installation and, thereafter, at interval not to exceed 50 FH the part is inspected in accordance with the instructions of the Part III of the ASB and, depending on findings, replaced before next flight after finding detected in accordance with the instructions of the Part IV of the ASB.
- (4) Concurrently with installation of a temporary serviceable tube assembly, as specified in paragraph (3) of this AD, install a placard in clear view of both pilots in accordance with the instructions of the Part II of the ASB.
- (5) Concurrently with the installation of the temporary serviceable tube assembly, as specified by paragraph (3) of this AD and installation of the placard, as required by paragraph (4) of this AD, temporarily amend the Limitation Section of the RFM by inserting a copy of Appendix 1 of this AD and, thereafter, operate the helicopter accordingly.
- (6) Unless the temporary serviceable tube assembly is replaced as required by paragraph (3) of this AD, within 200 FH or 3 months after installation of the temporary serviceable tube assembly as specified in paragraph (3) of this AD, replace the temporary serviceable tube assembly with a serviceable part in accordance with the instructions of the Part IV of the ASB.
- (7) After replacement of each temporary serviceable tube on a helicopter with a serviceable part the RFM limitation temporarily amended as required by paragraph (5) of this AD and the placard installed as required by paragraph (4) of this AD can be removed from that helicopter.

#### Terminating Action:

(8) None.



#### Part(s) Installation:

(9) For Group 1 and Group 2 helicopters: From the effective date of this AD, it is allowed to install an affected part on a helicopter, provided that the part is a serviceable or temporary serviceable part or accumulated less than 1 200 FH since new, as applicable, and that after installation the part is inspected or replaced, as required by this AD.

#### **Ref. Publications:**

Leonardo ASB 139-817 original issue dated 29 May 2025.

Leonardo ASB 189-410 original issue dated 29 May 2025.

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

#### **Remarks:**

- 1. This Proposed AD will be closed for consultation on 14 July 2025.
- 2. Enquiries regarding this PAD should be referred to the EASA Safety Information Section, Certification Directorate. E-mail: <a href="mailto:ADS@easa.europa.eu">ADS@easa.europa.eu</a>.
- 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 <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 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: <a href="mailto:engineering.support.lhd@leonardocompany.com">engineering.support.lhd@leonardocompany.com</a>.



# Appendix 1 - RFM Limitations

# BRAKE OPERATIONS ARE NOT TO BE PERFORMED FROM THE COPILOT POSITION EXCEPT AS REQUIRED BY THE RFM SECTION 3 EMERGENCY MALFUNCTION PROCEDURES

