



Notification of a Proposal to issue an Airworthiness Directive

PAD No.: 19-016

Issued: 04 February 2019

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 71 – Powerplant – Engine Drain D1 Assembly – Modification

Manufacturer(s):

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

Applicability:

AW189 helicopters, serial number (s/n) 49007 to 49053 inclusive, s/n 49055 and 49057, s/n 89001 to 89010 inclusive, and s/n 92001 to 92010 inclusive.

Definitions:

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

Affected D1 drain: Engine combustion chamber D1 drain assemblies, having Part Number (P/N) 8G7170A00111.

The SB: Leonardo Service Bulletin (SB) 189-200.

Reason:

During a planned maintenance inspection on an AW189 helicopter, it was found that a number of fairleads that support the engine combustion chamber D1 drain hose showed evidence of heat damage. The cause of this heat damage was identified as excessive temperature reached by the



drain tube that can be in excess of 200°C. The heat damage does not impair the structural strength of the fairleads, or that of the D1 drain pipe. However, the analysis confirmed that for the right-hand (RH) installation, in case the RH engine is operated in the One Engine Inoperative (OEI) rating, the D1 drain pipe could transfer so much heat to the nearby fuel system vent pipe, that its internal surface temperature would exceed the auto-ignition temperature for fuel.

This condition, if not corrected, could lead to undetected fire ignition in the fuel tank bay with consequent loss of the helicopter.

To address this unsafe condition, Leonardo developed a modification, introducing a new design of the D1 drain assembly P/N 8G7170P00111, which includes a new drain route confined to the engine bay only. Leonardo published the SB to provide instructions for embodiment of this modification on in-service helicopters.

For the reason described above, this AD requires a modification to replace the affected D1 drain assembly.

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

Required as indicated, unless accomplished previously:

Modification:

Within 200 flight hours after the effective date of this AD, modify the helicopter by installing the engine combustion chamber D1 drain assembly P/N 8G7170P00111 in accordance with the instructions of the SB.

Ref. Publications:

Leonardo S.p.A. SB 189-200 original issue dated 24 January 2019.

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 18 February 2019.
2. Enquiries regarding this PAD should be referred to the EASA Safety Information Section, Certification Directorate. E-mail: 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](#).
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.AW@leonardocompany.com.

