Airworthiness Directive

AD No.: 2017-0139

Issued: 04 August 2017

Note: This Airworthiness Directive (AD) is issued by EASA, acting in accordance with Regulation (EC) 216/2008 on behalf of the European Union, its Member States and of the European third countries that participate in the activities of EASA under Article 66 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 (EC) 216/2008, Article 14(4) exemption].

Design Approval Holder's Name:
LEONARDO S.p.A.

Type/Model designation(s):
AW189 helicopters

Effective Date: 18 August 2017

TCDS Number(s): EASA.R.510

Foreign AD: Not applicable

Supersedure: None

ATA 53 – Fuselage – Underbelly Tank Fuel Sump Electrical Bonding – Modification

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Manufacturer(s):
Leonardo S.p.A. Helicopters (formerly Finmeccanica S.p.A, AgustaWestland S.p.A.)

Applicability:
AW189 helicopters, serial numbers 89001, 89003, 89004, and 92001 to 92006 inclusive.

Reason:
During a review of the underbelly fuel tank system, installed on extended range helicopters, a safety issue was identified related to the electrical bonding installed on the fuel sump plate. The underbelly tank fuel sumps and the fuel sump covers are bonded to the external helicopter skin in the same location. In case of a lightning strike, a fraction of the electrical current may be diverted inside the sump plate and therefore flowing into the electrical wiring, connected to the components installed inside the fuel tanks.

This condition, if not corrected, could, under certain conditions, create an ignition source in the fuel tank vapour space, possibly resulting in a fuel tank fire or explosion.

To address this potential unsafe condition, Leonardo S.p.A. Helicopters issued Alert Service Bulletin (SB) 189-100 to provide instructions for modification of the electrical bonding of the underbelly fuel tank sumps by replacing and re-routing the existing copper straps with bonding cables.

For the reason described above, this AD requires modification of the underbelly fuel tank bonding.

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

Required as indicated, unless accomplished previously:

Modification:

Within 300 flight hours after the effective date of this AD, modify the underbelly fuel tanks sumps in accordance with the instructions of Leonardo S.p.A. Helicopters Alert SB 189-100.

Ref. Publications:

Leonardo S.p.A. Helicopters Alert SB 189-100 original issue, dated 13 July 2017.

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

Remarks:

1. If requested and appropriately substantiated, EASA can approve Alternative Methods of Compliance for this AD.

2. This AD was posted on 17 July 2017 as PAD 17-096 for consultation until 31 July 2017. No comments were received during the consultation period.

3. Enquiries regarding this AD should be referred to the EASA Safety Information Section, Certification Directorate. E-mail: ADs@easa.europa.eu.

4. For any question concerning the technical content of the requirements in this AD, please contact: Leonardo S.p.A. Helicopters, E-mail: PSE_AW189.MBX@leonardocompany.com.