



# Notification of a Proposal to issue an Airworthiness Directive

**PAD No.:** 17-096

**Issued:** 17 July 2017

Note: This Proposed Airworthiness Directive (PAD) 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.

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

**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. This Proposed AD will be closed for consultation on 31 July 2017.
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. 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).

