EASA AD No.: 2021-0078



# **Airworthiness Directive**

AD No.: 2021-0078

**Issued:** 17 March 2021

Note: This Airworthiness Directive (AD) 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.

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 (EU) 2018/1139, Article 71 exemption].

# **Design Approval Holder's Name:**

Type/Model designation(s):

LEONARDO S.p.A.

AW189 helicopters

Effective Date: 31 March 2021

TCDS Number(s): EASA.R.510

Foreign AD: Not applicable

Supersedure: None

# ATA 33 - Lights - Main Rotor Tip Light Fairings - Replacement

## 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:**

AW189 helicopters, all serial numbers (s/n), if Main Rotor (MR) tip lights kit Part Number (P/N) 8G3340F00411 is installed in combination with Full Ice Protection System (FIPS) kit P/N 8G3000F00111, or Limited Ice Protection System (LIPS) kit P/N 8G3000F00211 or kit P/N 8G3000F00212.

#### **Definitions:**

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

**Affected part**: MR tip light fairings, having P/N 8G3340A12531 (left-hand (LH) side) and P/N 8G3340A12631 (right-hand (RH) side), which are part of MR tip lights kit P/N 8G3340F00411.

**Serviceable part**: MR tip light fairings, having P/N 8G3340A12532 (LH side) and P/N 8G3340A12632 (RH side), which are part of MR tip lights kit P/N 8G3340P02411.

**Rescue hoist kit "removable" parts**: "Removable" parts P/N 8G2591A08311 of the rescue hoist kit P/N 8G2591F00311 on the helicopter.



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The ASB: AW189 Alert Service Bulletin (ASB) 189-265.

#### Reason:

Following a design review, it was identified that the fairings P/N 8G3340A12532 (LH) and P/N 8G3340A12632 (RH) used during icing trials activity conducted for the certification of FIPS and LIPS kits had never been introduced in the MR tip lights kit P/N 8G3340F00411 design definition. This kit is currently composed of two other fairings, P/N 8G3340A12531 (LH) and P/N 8G3340A12631 (RH) installed at the vicinity of each engine air intake. With these affected parts installed on the helicopter, significant ice accretion could occur during operations in icing conditions.

This condition, if not corrected, could lead to ice shedding ingestion by the engines, possibly resulting in a double engine in-flight shut-down and consequent loss of control of the helicopter.

To address this potential unsafe condition, Leonardo helicopters published the ASB, providing instructions to install the Rescue Hoist Kit "removable" parts as temporary mitigating action, preventing significant ice accretion, until the modification of the helicopter.

For the reasons described above, this AD requires, as an intermediate solution, installation of the recue hoist kit "removable" parts. This AD also requires replacing the affected parts with serviceable parts, as defined in this AD, and following modification, prohibits (re)installation of affected parts.

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

Required as indicated, unless accomplished previously:

### **Hoist Removable Parts:**

(1) Before each flight after the effective date of this AD into known or expected icing conditions, install the rescue hoist kit "removable" parts on the helicopter.

# Replacement:

(2) Within 400 flight hours or 12 months, whichever occurs first after the effective date of this AD, replace the affected parts with serviceable parts in accordance with the instructions of the ASB.

#### Part Installation:

(3) After modification of a helicopter as required by paragraph (2) of this AD, do not install any affected part on that helicopter.

### **Terminating Action:**

(4) After modification of a helicopter as required by paragraph (2) of this AD, the temporary actions as required by paragraph (1) of this AD are no longer required for that helicopter.

### **Ref. Publications:**

Leonardo S.p.A. Helicopters ASB 189-265 original issue dated 04 March 2021.

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



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### **Remarks:**

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

- 2. Based on the required actions and the compliance time, EASA have decided to issue a Final AD with Request for Comments, postponing the public consultation process until after publication.
- 3. Enquiries regarding this AD should be referred to the EASA Safety Information Section, Certification Directorate. E-mail: ADs@easa.europa.eu.
- 4. Information about any failures, malfunctions, defects or other occurrences, which may be similar to the unsafe condition addressed by this AD, and which may occur, or have occurred on a product, part or appliance not affected by this AD, 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 AD 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.
- 5. For any question concerning the technical content of the requirements in this AD, please contact: Leonardo S.p.A. Helicopters, E-mail: cse.aw139.AW@leonardocompany.com.

