



Airworthiness Directive

AD No.: 2016-0261R1

Issued: 13 February 2020

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:

LEONARDO S.p.A.

Type/Model designation(s):

A109 and AW109 helicopters

Effective Date: Revision 01: 20 February 2020
Original issue: 04 January 2017

TCDS Number(s): EASA.R.005

Foreign AD: Not applicable

Revision: This AD revises EASA AD 2016-0261 dated 21 December 2016.

ATA 26 – Fire Protection – Fire Extinguisher Bottles – Inspection / Replacement

Manufacturer(s):

Leonardo S.p.A. Helicopters, formerly Finmeccanica S.p.A. Helicopter Division, AgustaWestland S.p.A, Agusta S.p.A.

Applicability:

A109LUH, A109E, A109S and AW109SP helicopters, all manufacturer serial numbers.

Definitions:

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

The applicable BT: Leonardo Bollettino Tecnico (BT) 109L-088, BT 109EP-152, BT 109S-073 (revised as Service Bulletin (SB) 109S-073 revision A) and BT 109SP-108, as applicable.

Affected part: Fire extinguisher bottles Part Number (P/N) 27300-1.

Serviceable part: An affected part that is new, or an affected part that, prior to installation, has passed an inspection in accordance with the instructions of the applicable BT.

Reason:

A fractured bypass outlet assembly (red), part of the fire extinguishing bottle P/N 27300-1, has been found on an AW109SP helicopter during maintenance operations.



This condition, if not detected and corrected, could jeopardise the capability to extinguish fires in the engine area, possibly resulting in damage to the helicopter and injury to the occupants.

Due to similarity of design, other helicopter models can be affected by the same unsafe condition.

Prompted by this finding, Leonardo issued the applicable BT providing inspection instructions, and consequently, EASA issued AD 2016-0261 to require repetitive inspections of the bypass outlet assembly (red) of each affected part and, depending on findings, replacement of fire extinguisher bottle.

Since that AD was issued, a new A109S configuration ("Trekker") has been certified, on which the fire extinguisher bottle is installed with the engine fire extinguisher kit previously approved only for AW109SP helicopters, and Leonardo revised BT 109S-073 (published as SB 109S-073 revision A).

For the reason described above, this AD is revised to update the Table included in Note 1. This revised AD also introduces some editorial changes related to the latest AD writing standards, without affecting the requirements.

This AD is still considered an interim action and further AD action may follow.

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

Required as indicated, unless accomplished previously:

Inspection(s):

- (1) Within 25 flight hours (FH) or 3 months, whichever occurs first after 04 January 2017 [the effective date of the original issue of this AD], and, thereafter, at intervals not to exceed 200 FH or 12 months, whichever occurs first, visually inspect the bypass outlet assembly (red) of each affected part in accordance with the instructions of the applicable BT.

Note 1: Affected parts are installed with the following engine fire extinguisher kit P/N:

Helicopter model	Engine fire extinguisher kit P/N
A109LUH	109-0811-39-105
A109E	109-0811-39-103
A109S	109-0811-39-107 or 109-0811-39-109
AW109SP	109-0811-39-109

Corrective Action(s):

- (2) If, during any inspection as required by paragraph (1) of this AD, any crack is found on a bypass outlet assembly (red) of an affected part, before next flight, replace the affected part with a serviceable part in accordance with the instructions of the applicable BT.

Terminating Action:

- (3) None.



Part installation:

- (4) From 04 January 2017 [the effective date of the original issue of this AD], it is allowed to install an affected part on any helicopter, provided it is a serviceable part, as defined in this AD.

Ref. Publications:

Leonardo S.p.A. Helicopters BT 109L-088 original issue dated 15 December 2016.

Leonardo S.p.A. Helicopters BT 109EP-152 original issue dated 15 December 2016.

Leonardo S.p.A. Helicopters BT 109S-073 original issue dated 15 December 2016, or SB 109S-073 revision A dated 23 November 2018.

Leonardo S.p.A. Helicopters BT 109SP-108 original issue dated 15 December 2016.

The use of later approved revisions of the above-mentioned documents 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. 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 Programming and Continued Airworthiness 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 [EU aviation safety reporting system](#).
5. For any question concerning the technical content of the requirements in this AD, please contact: Leonardo S.p.A. Helicopters, Customer Support & Services, Product Support Engineering DPT, via Giovanni Agusta 520, 21017 Cascina Costa di Samarate (VA) – Italy
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