

Airworthiness Directive AD No.: 2022-0214 Issued: 21 October 2022

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, or Annex Vb Part ML.A.301, as applicable, 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 Annex Vb Part MLA.303, as applicable] 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): AW189 helicopters

Effective Date: 04 November 2022

TCDS Number(s): EASA.R.510

Foreign AD: Not applicable

Supersedure: None

ATA 25 – Equipment / Furnishings – Emergency Life-Raft System – Inspection

Manufacturer(s):

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

Applicability:

AW189 helicopters, having serial number (s/n) 49007 through 49079 inclusive, s/n 89001 through 89012 inclusive and s/n 92001 through 92010 inclusive, except helicopters having s/n 49024, 49036, 49040, 49041, 89005 or s/n 89006.

Definitions:

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

The SB: Leonardo Service Bulletin (SB) 189-315.

Affected control cable: Emergency life-raft system (ELS) control cable having Part Number (P/N) 8G2560V00432, P/N 8G2560V00531 and P/N 8G2560V00532.

Affected emergency life-raft assembly: Left-hand (LH) and right-hand (RH) emergency life-raft assembly having P/N 8G2560V00131 and P/N 8G2560V00231.

Serviceable emergency life-raft assembly: An emergency life-raft assembly which is new (never previously installed) or has accumulated zero hours since overhaul; or an assembly which, before



next flight after installation, passes an inspection in accordance with the instructions of Part I of the SB.

Groups: Group 1 helicopters are those equipped with an affected emergency life-raft assembly. Group 2 are all other helicopters.

Reason:

An uncommanded deployment of the ELS was reported. Subsequent investigation determined incorrect installation of the affected control cable connecting ELS activation handle on pilot/co-pilot doors to be a potential cause of the occurrence.

This condition, if not detected and corrected, may lead to further cases of unintended activation and deployment of the ELS in flight with possible impact on the rotors, resulting in reduced control of the helicopter.

To address this potential unsafe condition, Leonardo issued the SB, as defined in this AD, providing inspection and replacement instructions.

For the reason described above, this AD requires a one-time inspection of the life-raft installations and, depending on findings, replacement of the affected control cables, the associated cable pulley covers and the life-rafts, as applicable.

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

Required as indicated, unless accomplished previously:

Inspection:

(1) For Group 1 helicopters: Within 50 flight hours (FH) or 3 months, whichever occurs first after the effective date of this AD, inspect each life-raft installation, on both LH and RH sides, in accordance with the instructions of Part I of the SB.

Corrective Action(s):

- (2) If, during the inspection as required by paragraph (1) of this AD, an affected control cable is found damaged, before next flight, replace the damaged control cable with a new part and accomplish a check of the affected emergency life-raft assembly in accordance with the instructions of Part I of the SB.
- (3) If, during the inspection as required by paragraph (1) of this AD, a damaged cable pulley cover or an incorrectly installed affected control cable is detected, before next flight, accomplish all the applicable corrective actions in accordance with the instructions of Part I of the SB.
- (4) If, during the check of the emergency life-raft assembly as required by paragraph (2) of this AD, a damaged break-away pin is detected or it is determined that the trigger ball end on the inflation valve moves, before next flight, replace the affected LH and/or RH side emergency life-raft assembly, as applicable, with a serviceable emergency life-raft assembly in accordance with the instructions of Part II of the SB.



(5) Replacement of the affected emergency life-raft assembly, LH and/or RH side, as applicable, as required by paragraph (4) of this AD, can be deferred within a rectification interval as defined in Table 1 of this AD, as applicable, provided that, before next flight after the check as required by paragraph (2) of this AD, locally manufactured placard(s) is installed in clear view of both pilots in accordance with the instructions of Part I of the SB, all flight crew are informed and, thereafter, the helicopter is operated accordingly. After the accomplishment of the replacement as required by paragraph (4) of this AD, as applicable, the placard(s) can be removed from the helicopter.

| Condition | Rectification Interval |
|---|--|
| Damage detected on one side (LH <u>or</u> RH) only | Within 120 days after accomplishment of the inspection as required by paragraph (1) of this AD |
| Damage detected on both sides (LH <u>and</u> RH) | Before next flight over water |

Parts Installation:

(6) For Group 1 and Group 2 helicopters: From the effective date of this AD, it is allowed to install an affected emergency life-raft assembly on a helicopter, provided it is a serviceable emergency life-raft assembly, as defined in this AD.

Ref. Publications:

Leonardo SB 189-315 original issue dated 20 October 2022.

The use of later approved revisions of the above-mentioned 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. 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: <u>ADs@easa.europa.eu</u>.
- 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</u> reporting system. 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: <u>engineering.support.lhd@leonardocompany.com</u>.

