



Airworthiness Directive

AD No.: 2019-0311

Issued: 19 December 2019

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):

AB139, AW139, AB412 and AB412EP helicopters

Effective Date: 01 January 2020

TCDS Number(s): EASA.R.006

Foreign AD: Not applicable

Supersedure: None

ATA 25, 95 – Equipment / Furnishings, Emergency Flotation System – Inflation Hoses – Inspection

Manufacturer(s):

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

Applicability:

AB139 and AW139 helicopters, all serial numbers (s/n); and
AB412 and AB412EP helicopters, all s/n.

Definitions:

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

Affected part: Emergency Flotation System (EFS) semi-rigid cover assemblies, having a Part Number (P/N) as specified in Table 1 of this AD and a s/n as specified in Appendix 1 of this AD, except those that are marked with SAFRAN Service Bulletin (SB) 025-69-19 on the external identification label, or for which the Log Card records the application of the SB.

Serviceable part: An EFS semi-rigid cover assembly which is not an affected part.

The applicable SB: Leonardo Alert SB 139-610 and Emergency Alert SB 412-157, as applicable, which refer to SAFRAN SB 025-69-19.



Helicopter Groups: Group 1 helicopters are those that have an affected part installed. Group 2 helicopters are those that do not have an affected part installed.

Affected Part Groups: Groups A, B, C and D are defined in Appendix 1 of this AD.

Reason:

During maintenance on an EFS, the third compartment of the left forward float did not inflate, because the supply hose ensuring the gas flow from the pressurized cylinder to the float compartment was blocked. Investigation results showed that this was due to a manufacturing defect. Similar supply hoses are installed on different EFS P/N on different helicopter type designs.

This condition, if not detected and corrected, could result in a partial inflation of the flotation bags during a ditching event, possibly preventing a timely egress from the helicopter and consequent injury to helicopter occupants.

To address this potential unsafe condition, Leonardo issued the SB providing inspection instructions to detect incorrectly manufactured supply hoses.

For the reasons described above, this AD requires a one-time inspection of each affected EFS assembly and, depending on findings, replacement.

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

Required as indicated, unless accomplished previously

Table 1 – Affected parts

Helicopter Type	P/N	Description
AB139/AW139	3G9560V02131	Left Hand (L/H) FWD float assembly
	3G9560V02231	Right Hand (R/H) FWD float assembly
	3G9560V02331	L/H AFT float assembly
	3G9560V02431	R/H AFT float assembly
AB412/AB412EP	412-4600-03-101	L/H float assembly
	412-4600-03-102	R/H float assembly

Inspection(s):

- (1) For Group 1 helicopters: within the compliance times specified in Table 2 of this AD, inspect each affected part in accordance with the instructions of the applicable SB.



Table 2 – Inspection

Affected Part Group	Compliance Time
A	Within 400 flight hours (FH) or 12 months, whichever occurs first after the effective date of this AD
B	Within 30 FH after the effective date of the AD
C	Within 300 FH or during the next scheduled '18 months' inspection, whichever occurs first after the effective date of this AD
D	Within 15 FH after the effective date of the AD

Corrective Action(s):

- (2) If, during the inspection as required by paragraph (1) of this AD, the supply hoses of the EFS fail the inspection, before next flight, replace the affected part with a serviceable part.

Parts Installation:

- (3) For Group 1 and Group 2 helicopters: From the effective date of this AD, do not install an affected part on any helicopter.
- (4) For Group 1 and Group 2 helicopters: From the effective date of this AD, installation of a float supply hose manufactured before May 2015, P/N 220415-0 (AB/AW139 helicopters), or P/N 215342-0 (AB412/AB412EP helicopters), as applicable, is allowed, provided that, prior to installation on an affected part, the hose passes an inspection and is re-identified, in accordance with the instructions of the applicable SB.

Ref. Publications:

Leonardo S.p.A. Alert SB 139-610 original issue dated 17 December 2019.

Leonardo S.p.A. Alert SB 412-157 original issue dated 17 December 2019.

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 & Licenses DPT, Via Giovanni Agusta 520, 21017 Cascina Costa di Samarate (VA) – Italy, Tel.: +39 0331 255036, Fax: +39 0331 225988,
E-mail: PSE_AW189.MBX.AW@leonardocompany.com.



Appendix 1 – Groups of Affected Parts

Group A Affected parts for AB139/AW139, except Group B

P/N	s/n
3G9560V02131	All serial numbers up to S/N 202
3G9560V02231	All serial numbers up to S/N 195
3G9560V02331	All serial numbers up to S/N 185
3G9560V02431	All serial numbers up to S/N 189

Group B Affected parts for AB139/AW139

P/N	s/n
3G9560V02131	30, 32, 33, 35, 39 and 50
3G9560V02231	30, 33, 35, 36, 39 and 42
3G9560V02331	28 and 29
3G9560V02431	25 and 36

Group C Affected parts for AB412/AB412EP, except Group D Affected Parts

P/N	s/n
412-4600-03-101 (Float P/N 412-4600-03-107, Manufacturer P/N 215271-0)	All serial numbers up to S/N 117
412-4600-03-102 (Float P/N 412-4600-03-108, Manufacturer P/N 215349-0)	All serial numbers up to S/N 121

Group D Affected parts for AB412/AB412EP

P/N	s/n
412-4600-03-101	99, 100 and 110
412-4600-03-102	105, 106, 107, 110 and 119

