



**DEPARTMENT OF TRANSPORTATION**

**Federal Aviation Administration**

**14 CFR Part 39**

**[Docket No. FAA-2021-0608; Project Identifier 2019-SW-119-AD;  
Amendment 39-21750; AD 2021-20-12]**

**RIN 2120-AA64**

**Airworthiness Directives; Leonardo S.p.a. Helicopters**

**AGENCY:** Federal Aviation Administration (FAA), DOT.

**ACTION:** Final rule.

**SUMMARY:** The FAA is adopting a new airworthiness directive (AD) for certain Leonardo S.p.a. Model AB139, AW139, AB412, and AB412 EP helicopters. This AD was prompted by failure of an Emergency Flotation System (EFS) float compartment to inflate during maintenance of the EFS. This AD requires inspecting certain EFSs and depending on the results, marking certain parts or removing certain parts from service, as specified in a European Union Aviation Safety Agency (EASA) AD, which is incorporated by reference. The FAA is issuing this AD to address the unsafe condition on these products.

**DATES:** This AD is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The Director of the Federal Register approved the incorporation by reference of a certain publication listed in this AD as of [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

**ADDRESSES:** For EASA material incorporated by reference (IBR) in this AD, contact the EASA, Konrad-Adenauer-Ufer 3, 50668 Cologne, Germany; telephone +49 221 8999 000; email [ADs@easa.europa.eu](mailto:ADs@easa.europa.eu); Internet [www.easa.europa.eu](http://www.easa.europa.eu). You may find this material on the EASA website at <https://ad.easa.europa.eu>. For Leonardo Helicopters and Safran material identified in this final rule, contact Leonardo S.p.A. Helicopters, Emanuele Bufano, Head of Airworthiness, Viale G.Agusta 520, 21017 C.Costa di Samarate (Va) Italy; telephone +39-0331-225074; fax +39-0331-229046; or at

<https://customerportal.leonardocompany.com/en-US/>. You may view this material at the FAA, Office of the Regional Counsel, Southwest Region, 10101 Hillwood Pkwy., Room 6N-321, Fort Worth, TX 76177. For information on the availability of this material at the FAA, call 817-222-5110. The EASA material is also available in the AD docket at <https://www.regulations.gov> by searching for and locating Docket No. FAA-2021-0608.

### **Examining the AD Docket**

You may examine the AD docket at <https://www.regulations.gov> by searching for and locating Docket No. FAA-2021-0608; or in person at Docket Operations between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this final rule, any comments received, and other information. The address for Docket Operations is U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE, Washington, DC 20590.

**FOR FURTHER INFORMATION CONTACT:** Andrea Jimenez, Aerospace Engineer, COS Program Management Section, Operational Safety Branch, Compliance & Airworthiness Division, FAA, 1600 Stewart Ave., Suite 410, Westbury, NY 11590; telephone (516) 228-7330; email [andrea.jimenez@faa.gov](mailto:andrea.jimenez@faa.gov).

### **SUPPLEMENTARY INFORMATION:**

#### **Background**

The EASA, which is the Technical Agent for the Member States of the European Union, has issued EASA AD 2019-0311, dated December 19, 2019 (EASA AD 2019-0311), to correct an unsafe condition for Leonardo S.p.A., formerly Finmeccanica Helicopter Division, AgustaWestland, Agusta S.p.A., Model AB139, AW139, AB412, and AB412EP helicopters.

The FAA issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 by adding an AD that would apply to certain Leonardo S.p.a. Model AB139, AW139, AB412, and AB412EP helicopters. The NPRM published in the *Federal Register* on July 30, 2021 (86 FR 40962). The NPRM was prompted by failure of an EFS float compartment to inflate during maintenance of the EFS. The NPRM proposed to require

inspecting each EFS supply hose and depending on the results, re-identifying or removing the EFS supply hose from service, as specified in an EASA AD.

The FAA is issuing this AD to address a blocked float supply hose. See EASA AD 2019-0311 for additional background information.

### **Discussion of Final Airworthiness Directive**

#### **Comments**

The FAA gave the public the opportunity to participate in developing this final rule. The FAA received no comments on the NPRM or on the determination of the cost to the public.

#### **Conclusion**

The FAA reviewed the relevant data and determined that air safety and the public interest require adopting this final rule as proposed.

### **Related Service Information Under 1 CFR Part 51**

EASA AD 2019-0311 specifies inspecting certain EFSs and depending on the results, re-identifying the float supply hose with a green heat shrinkable sleeve if the float supply hose passes an inspection, or replacing the float supply hose with a serviceable float supply hose. EASA AD 2019-0311 also prohibits installing a float supply hose unless it passes the inspection and is re-identified.

This material is reasonably available because the interested parties have access to it through their normal course of business or by the means identified in the ADDRESSES section.

### **Other Related Service Information**

The FAA reviewed Safran Service Bulletin 025-69-19, Revision 00, dated November 22, 2019 (SB 025-69-19), which is attached as Annex A to Leonardo Helicopters Alert Service Bulletin (ASB) No. 139-610 and Emergency ASB No. 412-157, each dated December 17, 2019. SB 025-69-19 specifies procedures for inspecting for blockage through the float supply hoses of the EFS inflation system.

## **Differences Between this AD and the EASA AD**

EASA AD 2019-0311 requires inspecting each affected part in Group A within 400 flight hours (FH) or 12 months, whichever occurs first, whereas this AD requires inspecting each affected part in that group within 100 hours time-in-service instead.

EASA AD 2019-0311 requires inspecting each affected part in Group C within 300 FH or during the next scheduled “18 months” inspection, whichever occurs first, whereas this AD requires inspecting each affected part in that group within 15 hours time-in-service instead to address the unsafe condition as soon as practical as there are no Group C aircraft registered in the U.S.; the proposed compliance time matches those same model aircraft found in Group D. Where the service information referenced in EASA AD 2019-0311 specifies “operator able to perform the EFS maintenance in accordance with Aircraft Maintenance Manual (AMM) or Aircraft Maintenance Publication (AMP) can perform the procedure defined in this Service Bulletin,” this AD requires that the work be accomplished by a mechanic that meets the requirements of 14 CFR part 65 subpart D. Where EASA AD 2019-0311 specifies replacing an affected float supply hose that fails the inspection, this AD requires removing the float supply hose from service instead.

## **Costs of Compliance**

The FAA estimates that this AD affects 129 helicopters of U.S. Registry. Labor rates are estimated at \$85 per work-hour. Based on these numbers, the FAA estimates that operators may incur the following costs in order to comply with this AD.

Inspecting each EFS supply hose takes about 0.25 work-hour for an estimated cost of \$21 per hose. Re-identifying each EFS supply hose would take a minimal amount of time at a nominal cost.

Replacing an EFS supply hose takes up to 8 work-hours and parts cost between \$2,500 and \$9,500 for a set of float supply hoses, for an estimated cost of up to \$10,180 per helicopter.

According to Safran’s service information, some of the costs of this AD may be covered under warranty, thereby reducing the cost impact on affected individuals. The

FAA does not control warranty coverage by Safran; accordingly, all costs are included in this cost estimate.

### **Authority for this Rulemaking**

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. Subtitle VII: Aviation Programs, describes in more detail the scope of the Agency's authority.

The FAA is issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701: General requirements. Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

### **Regulatory Findings**

This AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify that this AD:

- (1) Is not a "significant regulatory action" under Executive Order 12866,
- (2) Will not affect intrastate aviation in Alaska, and
- (3) Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

### **List of Subjects in 14 CFR Part 39**

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

### **The Amendment**

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 14 CFR part 39 as follows:

## **PART 39 - AIRWORTHINESS DIRECTIVES**

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

### **§ 39.13 [Amended]**

2. The FAA amends § 39.13 by adding the following new airworthiness directive:

**2021-20-12 Leonardo S.p.a:** Amendment 39-21750; Docket No. FAA-2021-0608;  
Project Identifier 2019-SW-119-AD.

#### **(a) Effective Date**

This airworthiness directive (AD) is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

#### **(b) Affected ADs**

None.

#### **(c) Applicability**

This AD applies to Leonardo S.p.a. Model AB139, AW139, AB412, and AB412 EP helicopters, certificated in any category, with an affected part as identified in European Union Aviation Safety Agency (EASA) AD 2019-0311, dated December 19, 2019 (EASA AD 2019-0311), installed.

#### **(d) Subject**

Joint Aircraft System Component (JASC) Code: 3212, Emergency Flotation Section.

#### **(e) Unsafe Condition**

This AD was prompted by failure of an Emergency Flotation System (EFS) float compartment to inflate during maintenance of the EFS. The FAA is issuing this AD to address a blocked float supply hose. The unsafe condition, if not addressed, could result in partial inflation of an EFS float during an emergency landing on water and subsequently preventing a timely egress from the helicopter, which could result in injury to helicopter occupants.

#### **(f) Compliance**

Comply with this AD within the compliance times specified, unless already done.

### **(g) Requirements**

Except as specified in paragraph (h) of this AD: Comply with all required actions and compliance times specified in, and in accordance with, EASA AD 2019-0311.

### **(h) Exceptions to EASA AD 2019-0311**

(1) Where EASA AD 2019-0311 refers to its effective date, this AD requires using the effective date of this AD.

(2) Where EASA AD 2019-0311 requires compliance in terms of flight hours, this AD requires using hours time-in-service (TIS).

(3) Where paragraph (1) of EASA AD 2019-0311 requires inspecting each affected part within the compliance time specified in Table 2 of its AD, this AD requires:

(i) Inspecting each affected part in Group A within 100 hours TIS after the effective date of this AD.

(ii) Inspecting each affected part in Group C within 15 hours TIS after the effective date of this AD.

(4) Where the service information referenced in paragraph (1) of EASA AD 2019-0311 specifies “operator able to perform the EFS maintenance in accordance with Aircraft Maintenance Manual (AMM) or Aircraft Maintenance Publication (AMP) can perform the procedure defined in this Service Bulletin,” this AD requires that the work be accomplished by a mechanic that meets the requirements of 14 CFR part 65 subpart D.

(5) Where paragraph (2) of EASA AD 2019-0311 specifies replacing an EFS supply hose that fails the inspection, this AD requires removing the hose from service.

(6) This AD does not require the “Remarks” section of EASA AD 2019-0311.

### **(i) No Reporting Requirement**

Although the service information referenced in EASA AD 2019-0311 specifies to submit certain information to the manufacturer, this AD does not include that requirement.

### **(j) Alternative Methods of Compliance (AMOCs)**

(1) The Manager, International Validation Branch, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local

Flight Standards District Office, as appropriate. If sending information directly to the manager of the International Validation Branch, send it to the attention of the person identified in paragraph (k) of this AD. Information may be emailed to: 9-AVS-AIR-730-AMOC@faa.gov.

(2) Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office.

**(k) Related Information**

For more information about this AD, contact Andrea Jimenez, Aerospace Engineer, COS Program Management Section, Operational Safety Branch, Compliance & Airworthiness Division, FAA, 1600 Stewart Ave., Suite 410, Westbury, NY 11590; telephone (516) 228-7330; email andrea.jimenez@faa.gov.

**(l) Material Incorporated by Reference**

(1) The Director of the Federal Register approved the incorporation by reference (IBR) of the service information listed in this paragraph under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) You must use this service information as applicable to do the actions required by this AD, unless this AD specifies otherwise.

(i) European Union Aviation Safety Agency (EASA) AD 2019-0311, dated December 19, 2019.

(ii) [Reserved]

(3) For EASA AD 2019-0311, contact the EASA, Konrad-Adenauer-Ufer 3, 50668 Cologne, Germany; telephone +49 221 8999 000; email ADs@easa.europa.eu; Internet [www.easa.europa.eu](http://www.easa.europa.eu). You may find this EASA AD on the EASA website at <https://ad.easa.europa.eu>.

(4) You may view this service information at the FAA, Office of the Regional Counsel, Southwest Region, 10101 Hillwood Pkwy., Room 6N-321, Fort Worth, TX 76177. For information on the availability of this material at the FAA, call 817-222-5110. This material may be found in the AD docket at <https://www.regulations.gov> by searching for and locating Docket No. FAA-2021-0608.



(5) You may view this material that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, email [fr.inspection@nara.gov](mailto:fr.inspection@nara.gov), or go to <https://www.archives.gov/federal-register/cfr/ibr-locations.html>.

Issued on September 20, 2021.

Lance T. Gant, Director,  
Compliance & Airworthiness Division,  
Aircraft Certification Service.

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