Airworthiness Directive

AD No.: 2017-0156

Issued: 24 August 2017

Note: This Airworthiness Directive (AD) is issued by EASA, acting in accordance with Regulation (EC) 216/2008 on behalf of the European Union, its Member States and of the European third countries that participate in the activities of EASA under Article 66 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 (EC) 216/2008, Article 14(4) exemption].

Design Approval Holder's Name:
LEONARDO S.p.A.

Type/Model designation(s):
AW169 helicopters

Effective Date: 07 September 2017

TCDS Number(s): EASA.R.509

Foreign AD: Not applicable

Supersedure: This AD supersedes EASA AD 2017-0112 dated 26 June 2017.

ATA 22 – Auto Flight – Automatic Flight Control System – Software Update

Rotorcraft Flight Manual / Limitations Section – Amendment

Manufacturer(s):
Leonardo S.p.A. (formerly Finmeccanica Helicopter Division, AgustaWestland)

Applicability:
AW169 helicopters, all serial numbers, except those equipped with Automatic Flight Control System (AFCS) software Part Number (P/N) 6F2210AS0103 or later.

Reason:
Several occurrences were reported of spurious but simultaneous in-flight disconnection of AFCS channels 1 and 2. Investigation revealed that this concurrent deactivation of both AFCS channels results from the activation of specific AFCS modes combined with the unavailability of Hybrid Ground Speed data at take-off.

This condition, if not corrected, could lead to temporary loss of control of the helicopter, possibly resulting in damage to the helicopter and/or injury to occupants.

Pending an AFCS software upgrade which will prevent the spurious simultaneous disconnection of AFCS channels 1 and 2, it was decided to address this unsafe condition by prohibiting the coupling of APP/NAV AFCS modes with VOR/ILS/LOC navigation source when Hybrid Ground Speed data is not available.

Consequently, EASA issued AD 2017-0112 to require amendment of the AW169 Rotorcraft Flight Manual (RFM) to incorporate limitations on APP/NAV AFCS modes.

Since that AD was issued, AFCS software P/N 6F2210AS0103 was introduced and Leonardo issued Alert Service Bulletin (ASB) 169-064 to provide instructions for installation.

For the reason described above, this AD retains the requirements of EASA AD 2017-0112, which is superseded, and requires installation of the new AFCS software version.

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

Required as indicated, unless accomplished previously:

Re-statement of the requirements of EASA AD 2017-0112:

RFM Amendment:

(1) Within 15 flight hours (FH) after 03 July 2017 [the effective date of EASA AD 2017-0112], amend the Limitations Section of the RFM by inserting a copy of Appendix 1 of this AD (or its text), inform all flight crews and, thereafter, operate the helicopter accordingly.

(2) Amending the limitations section of the RFM of a helicopter to incorporate a later RFM revision which includes the procedures detailed in Appendix 1 of this AD is acceptable to comply with the RFM amendment requirement of paragraph (1) of this AD for that helicopter.

New requirements of this AD:

Software Upgrade:

(3) Within 100 FH or 3 months, whichever occurs first after the effective date of this AD, install AFCS software P/N 6F2210AS0103 in accordance with the instructions of Leonardo ASB 169-064.

RFM Amendment:

(4) Concurrent with modification of a helicopter as required by paragraph (3) of this AD, remove the temporary revision, as required by paragraph (1) of this AD, from the RFM of that helicopter.

Ref. Publications:

Leonardo ASB 169-064 original issue, dated 09 August 2017.

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. 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_AW169.MBX.AW@leonardocompany.com.

Appendix 1: RFM Amendment

AFCS MODE LIMITATIONS

If "F" symbol is displayed next to groundspeed readout (GS) at the bottom of the IAS tape on PFD, APP/NAV AFCS modes must not be used when the navigation source is VOR/ILS/LOC. Therefore VOR navigation and VOR/ILS/LOC approaches must not be coupled to AFCS but are allowed if manually flown by the pilot.

NOTE

The “F” symbol displayed next to groundspeed readout (GS) is due to:

- ADAHRS/GPS degradation

or

- “DG” mode selection

In both cases the groundspeed (GS) data source is FMS instead of GPS.

CAUTION

THIS PAGE MUST NOT BE REMOVED FROM THE FLIGHT MANUAL (RFM) UNTIL AN ALTERNATIVE RFM REVISION IS APPROVED AND INCORPORATED IN THE FLIGHT MANUAL