



Airworthiness Directive

AD No.: 2016-0213

Issued: 26 October 2016

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):

A109A and A109All helicopters

Effective Date: 31 October 2016

TCDS Number(s): EASA.R.005

Foreign AD: Not applicable

Supersedure: This AD supersedes EASA AD 2015-0190R1 dated 23 October 2015.

ATA 62 – Main Rotor – Blades – Inspection

Manufacturer(s):

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

Applicability:

A109A and A109All helicopters, all serial numbers.

Reason:

Abnormal vibrations were reported during flight on an A109All helicopter. During post flight inspection, a crack was found on a main rotor blade (MRB), Part Number (P/N) 109-0103-01-9.

This condition, if not detected and corrected, could affect the structural integrity of the blade, possibly resulting in blade failure and loss of control of the helicopter.

Prompted by this finding, AgustaWestland issued Bollettino Tecnico (BT) 109-150, providing inspection instructions. Due to similarity of design, the inspections also apply to MRB P/N 109-0103-01-7 and P/N 109-0103-01-115.

Consequently, EASA issued Emergency AD 2015-0190-E, requiring pre-flight inspections and repetitive inspections of the affected MRB. After that AD was issued, it was determined that the



repetitive inspections may be accomplished at extended intervals. AgustaWestland issued BT 190-150 revision A, and EASA revised EASA AD 2015-0190 accordingly.

Since EASA AD 2015-0190R1 was issued, during an inspection of an MRB, a crack was found that was not detected during any of the pre-flight inspections. Following this event, and a subsequent review of data, it has been determined that the pre-flight inspections cannot be effective to address the unsafe condition, while the repetitive inspections must be accomplished at reduced intervals. Consequently, Leonardo issued BT 109-150 Revision B to inform operators accordingly.

For the reason stated above, this AD partially retains the requirement of EASA AD 2015-0190R1, which is superseded, and requires the accomplishment of repetitive inspections at reduced intervals.

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:

Note: For the purpose of this AD, an affected MRB is identified by P/N 109-0103-01-7, or P/N 109-0103-01-9, or P/N 109-0103-01-115.

Inspection(s):

(1) Upon accumulating 500 Flight Hours (FH) by an affected MRB (see Note of this AD) since first installation on a helicopter, or within 5 FH after the last inspection as previously required by paragraph (2) of EASA AD 2015-0190R1, or before the first flight of the day after the effective date of this AD, whichever occurs later, and, thereafter, at intervals not exceeding 5 FH, inspect that MRB in accordance with the instructions of Leonardo BT 109-150 Revision B.

Corrective Action(s):

(2) If, during any inspection as required by paragraph (1) of this AD, any crack is found, before next flight, replace the affected MRB with a serviceable MRB. Replacement of an MRB can be accomplished in accordance with the instructions of the applicable maintenance manual.

Terminating Action: None

(3) Replacement of an MRB on a helicopter, as required by paragraph (2) of this AD, does not constitute terminating action for the repetitive inspections as required by paragraph (1) of this AD for that helicopter.

Ref. Publications:

Leonardo S.p.A. Helicopters BT 109-150 Revision B dated 21 October 2016.

The use of later approved revisions of this 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. Inquiries 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
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