

# **Airworthiness Directive**

AD No.: 2016-0255R1

Issued: 17 January 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:**

# Type/Model designation(s):

LEONARDO S.p.A.

AB139 and AW139 helicopters

Effective Date: Revision 1: 24 January 2017

Original issue: 29 December 2016

TCDS Number(s): EASA.R.006

Foreign AD: Not applicable

Revision: This AD revises EASA AD 2016-0255 dated 15 December 2016.

## ATA 63 – Main Rotor Drive – Main Gearbox Input Module – Replacement

#### Manufacturer(s):

Leonardo S.p.A. Helicopters (formerly Finmeccanica S.p.A), AgustaWestland Philadelphia Corporation (formerly Agusta Aerospace Corporation)

#### Applicability:

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

#### Reason:

A batch of duplex bearings, installed on Main Gearbox (MGB) input modules, has been identified as defective by the supplier of these bearings.

This condition, if not detected and corrected, could lead to damage of the input module duplex ball bearing inner race, possibly resulting in loss of engine power and consequent reduced control of the helicopter.

To address this potential unsafe condition, Leonardo published Mandatory Bollettino Tecnico (BT) 139-303 providing instructions for identification and replacement of the affected MGB input modules with serviceable units.



For the reasons described above, this AD requires removal from service of affected MGB input modules.

This AD is revised as it was identified that the content of Note 2 of this AD was misleading and needed to be deleted.

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

Required as indicated, unless accomplished previously:

Note 1: For the purpose of this AD, an affected MGB input module is a part having Part Number (P/N) 3K6320A00135 or P/N 3K6320A00136 with a s/n listed in Appendix 1 of this AD.

### Replacement / Modification:

(1) Within the compliance time as specified in Table 1, replace each affected MGB input module with a serviceable unit, having P/N 3K6320A00136 in accordance with the instructions of Leonardo BT 139-303.

For a helicopter equipped with an affected MGB input module P/N 3K6320A00135, modify that helicopter by replacing both MGB input modules P/N 3K6320A00135 with serviceable P/N 3K6320A00136 units in accordance with the instructions of Leonardo BT 139-303.

Number of affected MGB Input Modules installed on the MGB assembly of the helicopter	Compliance Time
2	Within 300 flight hours (FH) after 29 December 2016 [the effective date of this AD at original issue]
1	Within 1 200 FH after 29 December 2016 [the effective date of this AD at original issue]

Table 1 – MGB Input Module Replacement

Note 2: DELETED.

#### **Parts Installation:**

(2) From 29 December 2016 [the effective date of this AD at original issue], installation on any helicopter of an MGB input module having a P/N and s/n listed in Appendix 1 of this AD is allowed, provided the duplex bearing has been replaced on that part, as specified in Leonardo BT 139-303.

### **Ref. Publications:**

Leonardo S.p.A. Helicopters BT 139-303 original issue, dated 20 September 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. Enquiries regarding this AD should be referred to the EASA Safety Information Section, Certification Directorate. E-mail: <a href="mailto:ADs@easa.europa.eu">ADs@easa.europa.eu</a>.
- 4. For any question concerning the technical content of the requirements in this AD, please contact Leonardo S.p.A. Helicopters, E-mail: <a href="mailto:CSE.AW139.AW@leonardocompany.com">CSE.AW139.AW@leonardocompany.com</a>.



Appendix 1 – Affected P/N and s/n MGB Input Modules

P/N 3K6320A00136 MGB Input Modules (s/n)						
KHI-395	KHI-E82	KHI-E87	KHI-E88	KHI-E89	KHI-E90	
KHI-E91	KHI-E92	KHI-E94	KHI-E98	KHI-F01	KHI-F04	
KHI-F07	KHI-F11	KHI-F13	KHI-F15	KHI-F16	KHI-F22	
KHI-F23	KHI-F26	KHI-F27	KHI-F29	KHI-F31	KHI-F34	
KHI-F35	KHI-F39	KHI-F40	KHI-F45	KHI-F46	KHI-F51	
KHI-F53	KHI-F55	KHI-F58	KHI-F59	KHI-F60	KHI-F63	
KHI-F74	KHI-F75	KHI-F87	KHI-F92	KHI-F93	KHI-F96	
KHI-G09	KHI-G10	KHI-G15	KHI-G18	KHI-G19	KHI-G21	
KHI-G25	KHI-G26	KHI-G31	KHI-G32	KHI-G35	KHI-G38	
KHI-G39	KHI-G41	KHI-G44	KHI-G56	KHI-G58	KHI-G60	
KHI-G62	KHI-G63	KHI-G65	KHI-G68	KHI-G70	KHI-G71	
KHI-G72	KHI-G76	KHI-G77	KHI-G79	KHI-G81		
P/N 3K6320A00135 MGB Input Module (s/n)						
KHI-200						