

# Airworthiness Directive

# Issued: 12 December 2019

Note: This Airworthiness Directive (AD) is issued by EASA, acting in accordance with Regulation (EU) 2018/1139 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:** AIRBUS HELICOPTERS

Type/Model designation(s): EC 225 LP helicopters

Effective Date:	Revision 1: 19 December 2019 Original issue: 06 December 2016
TCDS Number(s):	EASA.R.002
Foreign AD:	Not applicable
Revision:	This AD revises EASA AD 2016-0232 dated 22 November 2016.

# ATA 63 – Rotor Drive(s) – Main Gear Box / Emergency Spraying System – Modification / Functional Test

## Manufacturer(s):

Airbus Helicopters (AH), formerly Eurocopter, Eurocopter France

## **Applicability:**

EC 225 LP helicopters, all manufacturer serial numbers.

#### **Definitions:**

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

The ASB: AH Alert Service Bulletin (ASB) EC225-63A031.

#### Reason:

Occurrences of oil leaks during engine starting, originated from the main gearbox (MGB), were reported. Subsequent investigation determined that the leaks were a result of inadvertently opening of the "P 2.4" valve of the emergency lubrication (EMLUB) system and MGB pressurisation by compressed air produced by the engine during start-up. The signal to open the affected "P 2.4" valve was triggered by an electrical power interruption when changing from ground to helicopter electrical power.



This condition, if not corrected, could lead to loss of MGB lubrication, possibly resulting in reduced ability of the crew to cope with adverse operating conditions.

To address inadvertent pressurization of the MGB and potential loss of MGB main lubrication system, AH developed a modification of the electrical control circuit of the MGB EMLUB system, and issued the ASB to provide in-service modification instructions. Consequently, EASA issued AD 2016-0232 to require modification of the MGB EMLUB control circuit, post-mod repetitive functional tests of the MGB EMLUB system and, depending on findings, accomplishment of applicable corrective action(s).

Since that AD was issued, it was determined that the interval of the post-mod repetitive functional tests of the MGB EMLUB system, as required by paragraph (2) of this AD, can be extended to synchronise this task with the inspection of the MGB EMLUB system as included in the EC 225 LP Airworthiness Limitations Section, item 63-26.

For the reasons described above, this AD is revised to introduce an interval margin (that can be added to the interval limit value) for the tests required by paragraph (2) of this AD.

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

Required as indicated, unless accomplished previously:

- (1) Within 500 flight hours (FH) after the 06 December 2016 [the effective date of the original issue of this AD], modify the electrical control circuit of the MGB EMLUB system in accordance with the instructions of the ASB.
- (2) Within 600 FH (plus an interval margin of 225 FH that can be added to the interval limit value of 600 FH) after modification of the EMLUB electrical control circuit, as required by paragraph (1) of this AD and, thereafter, at intervals not to exceed 600 FH (plus an interval margin of 225 FH that can be added to the interval limit value of 600 FH), accomplish a functional test of the MGB EMLUB system in accordance with the instructions of the ASB.
- (3) If, during any functional test as required by paragraph (2) of this AD, any discrepancy is detected, as detailed in the ASB, before next flight, accomplish the applicable corrective action(s) in accordance with the instructions of the ASB.
- (4) Accomplishment of corrective action(s) on a helicopter, as required by paragraph (3) of this AD, does not constitute terminating action for the repetitive functional tests as required by paragraph (2) of this AD for that helicopter.

#### **Ref. Publications:**

AH ASB EC225-63A031 original issue dated 31 August 2016, or Revision 01 dated 07 October 2016.

The use of later approved revisions of the above-mentioned 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. The original issue of this AD was posted on 19 October 2016 as PAD 16-149 for consultation until 16 November 2016. No comments were received during the consultation period.
- 3. Enquiries regarding this AD should be referred to the EASA Programming and Continued Airworthiness Information Section, Certification Directorate. E-mail: <u>ADs@easa.europa.eu</u>.
- 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 <u>EU aviation safety</u> reporting system.
- For any question concerning the technical content of the requirements in this AD, please contact: Airbus Helicopters (Technical Support), web portal: <u>https://keycopter.airbushelicopters.com</u>, Technical Requests Management, or e-mail: <u>support.technical-airframe.ah@airbus.com</u>, or <u>TechnicalSupport.Helicopters@airbus.com</u>.

