

# Airworthiness Directive AD No.: 2018-0176 Issued: 21 August 2018

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: AIRBUS HELICOPTERS

Type/Model designation(s): SA 365, AS 365 and EC155 helicopters

Effective Date: 04 September 2018

TCDS Number(s): EASA.R.105

Foreign AD: Not applicable

Supersedure: None

# ATA 63 – Main Rotor Drive – Main Gearbox Magnetic Plug – Replacement

## Manufacturer(s):

Airbus Helicopters (formerly Eurocopter, Eurocopter France, Aerospatiale)

## **Applicability:**

SA 365 N, SA 365 N1, AS 365 N2, AS 365 N3, EC155 B and EC155 B1 helicopters, all manufacturer serial numbers, except helicopters that have embodied Airbus Helicopters (AH) modification (mod) 0763B19 or mod 0763C96 in production, as applicable to helicopter model.

#### **Definitions:**

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

**Affected part:** Magnetic plugs, Part Number (P/N) 1B7807 or P/N 704A34543017 (electrical), or P/N 365A32-1711-00 (non-electrical), as applicable, installed in the Main Gearbox (MGB) pump intake.

Improved part: Magnetic plugs, P/N 365A32-7701-00 (non-electrical).

**The ASB:** AH Alert Service Bulletin (ASB) AS365-63.00.23, AS365-63.00.22 or EC155-63A017, as applicable to helicopter model and configuration.



#### Reason:

Prompted by an EC225 helicopter accident, AH expanded the subsequent investigation also to MGB design of SA 365, AS 365 and EC155 helicopters and EASA issued AD 2017-0116R2 (applicable to SA 365 and AS 365 helicopters) and AD 2018-0052 (applicable to EC155 helicopters) to require precautionary actions resulting from that investigation.

Following additional investigation and in addition to the protective measures introduced by EASA AD 2017-0116R2 and AD 2018-0052, it was determined to further improve the detection capability of the MGB lubrication system by replacing the existing chip detector installed at the pump intake with a more efficient one.

Prompted by this development, AH introduced modifications 0763B19 and 763C96 available for in-service helicopters through the ASBs.

For the reasons described above, this AD requires replacement of the affected parts (either electrical or non-electrical magnetic plug) with improved (non-electrical) part.

This AD is considered as an interim action and further AD action may follow.

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

Required as indicated, unless accomplished previously:

#### Modification:

(1) Within 110 flight hours (FH) or 10 months, whichever occurs first after the effective date of this AD, replace each affected part with an improved part in accordance with the instructions of the applicable ASB.

#### Parts Installation:

(2) After modification of a helicopter as required by paragraph (1) of this AD, do not install an affected part on that helicopter.

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

AH ASB AS365-63.00.23 original issue dated 11 July 2018.

AH ASB AS365-63.00.22 original issue dated 11 July 2018.

AH ASB EC155-63A017 original issue dated 11 July 2018.

The use of later approved revisions of above-mentioned documents 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. This AD was posted on 20 July 2018 as PAD 18-102 for consultation until 17 August 2018. No comments were received during the consultation period.



- 3. Enquiries regarding this AD should be referred to the EASA Safety 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> <u>reporting system</u>.
- For any question concerning the technical content of the requirements in this AD, please contact: Airbus Helicopters (EBSESB) Aéroport de Marseille Provence 13725 Marignane Cedex, France, Telephone +33 (4) 42 85 97 97; Fax +33 (4) 42 85 99 66; E-mail: <u>support.technical-airframe.ah@airbus.com.</u>

