Airworthiness Directive

AD No.: 2019-0157

Issued: 03 July 2019

Note: This Airworthiness Directive (AD) is issued by EASA, acting in accordance with Regulation (EU) 2018/1139 on 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):
SA 330 helicopters

Effective Date: 17 July 2019
TCDS Number(s): EASA.R.002
Foreign AD: Not applicable
Supersedure: None

ATA 62 – Rotor(s) – Main Rotor Hub Drag and Flapping Hinges – Inspection

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Manufacturer(s):
Eurocopter, Eurocopter France, Aérospatiale, Sud Aviation

Applicability:
SA 330 J helicopters, all serial numbers.

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

The ASB: Airbus Helicopters (AH) Alert Service Bulletin (ASB) SA330-05.106.

Groups: Group 1 helicopters are those that have a main rotor hub (MRH) installed, equipped with chip detectors. Group 2 helicopters are those that have an MRH installed, not equipped with chip detectors.

Reason:
Failures were reported on SA 330 J helicopters of the lower bearing cage of the MRH flapping hinges and presence of metallic particles at the bottom of a drag hinge. The investigation to detect the root cause of these events is on-going.

This condition, if not detected and corrected, could lead to loss of flapping hinge function, resulting in MRH unbalance and loss of helicopter control.

To address this potential unsafe condition, AH issued the ASB to provide inspection instructions as preliminary protective measures until the investigation results become available.

For the reasons described above, this AD requires repetitive inspections of the MRH chip detectors and/or oil for contamination by metallic particles and, depending on findings, accomplishment of applicable corrective action(s).

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

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

Required as indicated, unless accomplished previously:

Inspection(s):

(1) Group 1 helicopters: Within the compliance time defined in Table 1 of this AD and, thereafter, at intervals not to exceed 110 flight hours (FH), inspect each MRH chip detector to detect presence of any metallic particle in accordance with the instructions of paragraph 3.B.2 of the ASB.

(2) Group 2 helicopters: Within the compliance time defined in Table 1 of this AD and, thereafter, at intervals not to exceed 110 FH, drain the oil from the MRH through each sleeve, flapping and drag hinge, and inspect the drained oil for presence of any metallic particle in accordance with the instructions of paragraph 3.B.3 of the ASB.

Table 1 – MRH Chip Detectors and Oil Inspection for Presence of Metallic Particles
(see Note 1 of this AD)

Service life	Compliance Time
Less than 60 FH	Before exceeding 110 FH
60 FH or more	Within 50 FH after the effective date of this AD

Note 1: Unless specified otherwise, the FH in Table 1 of this AD are those accumulated by the MRH since new (first installation on a helicopter) or since last overhaul, as applicable.

Corrective Action(s):

(3) If, during any inspection as required by paragraph (1) or (2) of this AD, as applicable, any metallic particle is detected, before next flight, accomplish all applicable corrective actions in accordance with the instructions of paragraph 3.B.4 of the ASB.

Terminating Action:

(4) None.

Parts Installation:

(5) Group 1 and Group 2 helicopters: From the effective date of this AD, it is allowed to install an MRH on any helicopter, provided that following installation, the MRH is inspected and, depending on finding(s), corrected, as required by this AD.

Ref. Publications:

AH ASB SA330-05.106 original issue dated 27 May 2019.

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. This AD was posted on 03 June 2019 as PAD 19-099 for consultation until 01 July 2019. 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: ADs@easa.europa.eu.

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 EU aviation safety reporting system.

5. 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;
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