



## Airworthiness Directive

**AD No.:** 2018-0272

**Issued:** 13 December 2018

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:** 27 December 2018

**TCDS Number(s):** EASA.R.002

**Foreign AD:** Not applicable

**Supersedure:** This AD supersedes EASA AD 2018-0065 dated 23 March 2018.

### ATA 05 – Time Limits / Maintenance Checks – Main Gearbox / Particle Detectors – Inspection

**Manufacturer(s):**

Airbus Helicopters (AH), formerly Eurocopter, Eurocopter France, Aérospatiale

**Applicability:**

SA 330 J helicopters, all serial numbers.

**Definitions:**

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

**The ASB:** AH Alert Service Bulletin (ASB) SA330-05.103 Revision 1.

**ALF:** After last flight of the day (ALF) inspection.

**Reason:**

Investigation prompted by an EC 225 helicopter accident revealed involvement of a failure of a second stage planet gear of the Main Gearbox (MGB). Following review of design similarities, it was determined that such event might conceivably also occur on SA 330 J helicopters.

This condition, if not detected and corrected, could lead to loss of control of the helicopter.



As a precautionary measure, AH issued the original issue of ASB SA330-05.103, applicable to SA 330 J helicopters, providing updated inspection intervals and particle assessment criteria, aligning the SA 330 J particle inspection to the standards set for EC 225 LP/AS 332 L2 helicopters, and EASA issued AD 2018-0065 accordingly, to require those actions.

After that AD was issued, investigation results determined that inspections of the MGB particle detector only, do not ensure an adequate safety level. Pending the development of a more effective detection method, it was decided to introduce repetitive inspections of the MGB bottom housing (oil sump). Consequently, AH issued the ASB providing the necessary instructions.

For the reason described above, this AD retains the requirements of EASA AD 2018-0065, which is superseded, and adds repetitive inspections of the MGB bottom housing (oil sump), and, depending on findings, accomplishment of applicable corrective action(s).

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:

#### **Inspections / Analyses:**

- (1) From 30 March 2018 [the effective date of EASA AD 2018-0065], during each ALF inspection, or at intervals not to exceed 10 flight hours (FH), whichever occurs first, inspect the MGB particle detector in accordance with the instructions of Section 3 of the ASB.
- (2) Within 45 FH after the effective date of this AD and, thereafter, at intervals not to exceed 45 FH, accomplish an MGB bottom housing (oil sump) inspection in accordance with the instructions of Section 3 of the ASB.
- (3) If, during any inspection as required by paragraph (1) or (2) of this AD, as applicable, particles are detected, before next flight, analyse the particles in accordance with the instructions of Appendix 4.A. of the ASB.

#### **Corrective Action(s):**

- (4) If, during any analysis as required by paragraph (3) of this AD, particles are detected which exceed the limits specified in Appendix 4.A. of the ASB, before next flight, accomplish the applicable corrective action(s) in accordance with the instructions of Appendix 4.A. of the ASB.

#### **Terminating Action:**

- (5) None.

#### **Credit:**

- (6) Inspections, analyses and corrective actions on a helicopter, accomplished before the effective date of this AD in accordance with the instructions of AH ASB SA330-05.103 original issue, are acceptable to comply with the initial requirements of this AD for that helicopter.



**Parts Installation:**

- (7) From 30 March 2018 [the effective date of EASA AD 2018-0065], it is allowed to install an MGB assembly on any helicopter, provided that, following installation, it is inspected as required by this AD.

**Ref. Publications:**

AH ASB SA330-05.103 original issue dated 20 March 2018, or Revision 1 dated 10 December 2018.

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. 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: [ADs@easa.europa.eu](mailto: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 (EBSES) – Aéroport de Marseille Provence, 13725 Marignane Cedex, France; Telephone +33 (4) 42 85 97 97; Fax +33 (4) 42 85 99 66; Web portal: <https://keycopter.airbushelicopters.com> > Technical Requests Management. E-mail: [support.technical-dyncomp.ah@airbus.com](mailto:support.technical-dyncomp.ah@airbus.com), and [TechnicalSupport.Helicopters@airbus.com](mailto:TechnicalSupport.Helicopters@airbus.com).

