EASA AD No.: 2019-0185



# **Airworthiness Directive**

AD No.: 2019-0185

**Issued: 30 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: Type/Model designation(s):

HELICOPTERES GUIMBAL

CABRI G2 helicopters

Effective Date: 13 August 2019

TCDS Number(s): EASA.R.145

Foreign AD: Not applicable

Supersedure: None

# ATA 67 – Rotors Flight Control – Main Rotor / Swashplate Guide Bellcrank Bushing – Replacement

#### Manufacturer(s):

Hélicoptères Guimbal (HG)

## **Applicability:**

Cabri G2 helicopters, all manufacturer serial numbers (s/n).

# **Definitions:**

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

**Affected part:** Metal bushings, having any Part Number (P/N) other than P/N HG22-1001, installed on the main rotor (MR) swashplate guide bellcrank.

**Serviceable part:** Plastic bushings, having P/N HG22-1001.

The SB: HG Service Bulletin (SB) 17-003 issue C.

**Groups:** Group 1 helicopters are those that have an affected part installed. Group 2 helicopters are those that do not have an affected part installed. Helicopters having s/n 1129, s/n 1134, or s/n 1136



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and higher are Group 2, as the respective HG modification 16-009 was embodied in production, provided the helicopter remains in that configuration.

#### **Reason:**

During scheduled maintenance on several helicopters, cracks were found on the MR scissor link. The suspected root cause for the cracking was corrosion due to stress induced by the mounting of the metal bushing inside the lug hole. Metal bushings are also installed on the MR swashplate guide bellcrank, where similar cracking may occur.

This condition, if not corrected, could lead to failure of the MR swashplate guide bellcrank, possibly resulting in reduced control of the helicopter.

To address this potential unsafe condition, HG modified the design of the MR swashplate guide bellcrank to replace the metal bushings with plastic bushings, and published SB 17-003 issue A (later revised) to provide instructions for replacement of the bushings.

For the reason described above, this AD requires replacement of metal bushings installed on the MR swashplate guide bellcrank.

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

Required as indicated, unless accomplished previously:

#### Replacement:

(1) Within 50 flight hours or 2 months, whichever occurs first after the effective date of this AD, modify the helicopter by replacing each affected part with a serviceable part, as defined in this AD, in accordance with the instructions of the SB.

#### Credit:

(2) Replacement of each affected part on a helicopter, accomplished before the effective date of this AD in accordance with the instructions of HG SB 17-003 at issue A or issue B, is acceptable to comply with the requirements of paragraph (1) of this AD for that helicopter.

## Parts Installation:

- (3) Do not install an affected part on any helicopter, as required by paragraph (3.1) or (3.2) of this AD, as applicable.
  - (3.1) For Group 1 helicopters: After modification of the helicopter as required by paragraph (1) of this AD.
  - (3.2) For Group 2 helicopters: From the effective date of this AD.

# **Ref. Publications:**

Hélicoptères Guimbal SB 17-003 issue C dated 12 July 2019.

The use of later approved revisions of the above-mentioned document is acceptable for compliance with the requirements of this AD.



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#### **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 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 <u>EU aviation safety</u> reporting system.
- 5. For any question concerning the technical content of the requirements in this AD, please contact: Hélicoptères Guimbal Customer support, Aérodrome d'Aix-en-Provence, 1070 rue Lieutenant Parayre, 13290 Les Milles, France, Telephone: +33 (0) 4 42 39 10 88, Fax: +33 (0) 4 42 39 10 82, E-mail: <a href="mailto:support@guimbal.com">support@guimbal.com</a>.

