

## Notification of a Proposal to issue an Airworthiness Directive

**PAD No.:** 21-077

**Issued:** 21 May 2021

Note: This Proposed Airworthiness Directive (PAD) 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.

In accordance with the EASA Continuing Airworthiness Procedures, the Executive Director is proposing the issuance of an EASA Airworthiness Directive (AD), applicable to the aeronautical product(s) identified below.

All interested persons may send their comments, referencing the PAD Number above, to the e-mail address specified in the 'Remarks' section, prior to the consultation date indicated.

**Design Approval Holder's Name:**

HELICOPTERES GUIMBAL

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

CABRI G2 helicopters

**Effective Date:** [TBD - standard: 14 days after AD issue date]

**TCDS Number(s):** EASA.R.145

**Foreign AD:** Not applicable

**Supersedure:** This AD supersedes EASA AD 2020-0199 issued on 21 September 2020, including its Correction issued on 24 September 2020.

### ATA 67 – Rotors Flight Control – Main Rotor Scissors Fittings – Inspection / Replacement

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**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:** Rotating and non-rotating scissors fittings, having Part Number (P/N) G12-00-200, for installation on main rotor hub (MRH) and on Swashplate Guide, respectively.

**Serviceable part:** An MRH (P/N G12-00-100, or -101, or -102) or Swashplate Guide (P/N G21-01-101 or -102) that is new (not previously installed); or on which, prior to installation, the affected parts have passed an inspection (no defects found) in accordance with the instructions of the initial SB; or an MRH P/N G12-00-103 or Swashplate Guide P/N G21-01-103 with improved scissors fittings P/N G12-00-202 installed.

**The initial SB:** HG Service Bulletin (SB) 20-012.

**The repeat SB:** HG SB 20-011, Revision B.

**The modification SB:** HG SB 21-007.

**Groups:** Group 1 helicopters are those that have affected parts installed.

Group 2 helicopters are those that do not have affected parts installed. Helicopters with HG modification (mod) 20-040 installed in production are Group 2, provided the helicopter remains in that configuration.

**Reason:**

An occurrence was reported where, during maintenance, a crack was found on a rotating scissors fitting. The suspected root cause for the cracking is corrosion under residual stress.

This condition, if not detected and corrected, could lead to affected part failure, possibly resulting in loss of control of the helicopter.

To address this potential unsafe condition, HG issued the initial SB to provide instructions for an initial detailed inspection (DET); and the repeat SB to provide instructions for repetitive visual inspections of the affected parts. Consequently, EASA issued AD 2020-0199 to require an initial DET and repetitive inspections of the affected parts and, depending on findings, accomplishment of applicable corrective action(s).

Since that AD was issued, HG developed a design change for the MRH and Swashplate Guide, mod 20-040, installing new scissors fittings, P/N G12-00-202, which are not affected by stress corrosion cracking. HG issued the modification SB to provide in-service installation instructions.

For the reason described above, this AD retains the requirements of EASA AD 2020-0199, which is superseded, and requires replacement of the MRH and the Swashplate Guide by assemblies equipped with the new fittings. This AD also corrects the interval for the DET from 50 flight hours (FH) to 60 FH, and prohibits (re)installation of affected parts on post-mod helicopters.

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

Required as indicated, unless accomplished previously:

**Inspection(s):**

- (1) For Group 1 helicopters: Within 30 (FH) or 30 days, whichever occurs first after 05 October 2020 [the effective date of EASA AD 2020-0199], accomplish a DET of the affected parts in accordance with the instructions of the initial SB.
- (2) Within 60 FH or 6 months, whichever occurs first after the DET as required by paragraph (1) of this AD, and, thereafter, at intervals not to exceed 60 FH or 6 months, whichever occurs first, visually inspect the affected parts in accordance with the instructions of the repeat SB.



**Corrective Action(s):**

- (3) If, during any inspection as required by paragraph (1) or (2) of this AD, as applicable, a crack is detected in an affected part, before next flight, replace both the MRH and the Swashplate Guide with a serviceable part, as defined in this AD, which can be accomplished by using standard HG maintenance instructions, or modify the helicopter in accordance with the instructions of the modification SB.

**Reporting:**

- (4) Within 30 days after each inspection as required by paragraph (1) or (2) of this AD, as applicable, if discrepancies were detected, report the inspection results to HG.

**Modification:**

- (5) For Group 1 helicopters: During the next overhaul of the main gearbox, or within 60 months, whichever occurs first after the effective date of this AD, replace both the MRH and the Swashplate Guide in accordance with the instructions of the modification SB.

**Terminating Action:**

- (6) Replacement on a helicopter of MRH and Swashplate Guide as required by paragraph (3) does not constitute terminating action for the repetitive inspections as required by paragraph (2) of this AD for that helicopter, except as specified in paragraph (7) of this AD.
- (7) Modification of a helicopter as required by paragraph (5) of this AD, or as specified in paragraph (3) of this AD, as applicable, constitutes terminating action for the inspections as required by paragraphs (1) and (2) of this AD for that helicopter.

**Parts Installation:**

- (8) From 05 October 2020 [the effective date of EASA AD 2020-0199], it is allowed to install on any helicopter an MRH or Swashplate Guide, provided it is a serviceable part, as defined in this AD.
- (9) Do not (re)install an affected part on any helicopter, as required by paragraph (9.1) or (9.2) of this AD, as applicable:
- (9.1) For Group 1 helicopters: After modification of the helicopter as required by paragraph (5) of this AD, or as specified in paragraph (3) of this AD, as applicable.
- (9.2) For Group 2 helicopters: From the effective date of this AD.

**Ref. Publications:**

HG SB 20-011 Revision B dated 01 September 2020.

HG SB 20-012 Revision A (original issue) dated 01 September 2020.

HG SB 21-007 Revision B dated 04 April 2021.

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



**Remarks:**

1. This Proposed AD will be closed for consultation on 18 June 2021.
2. Enquiries regarding this PAD should be referred to the EASA Safety Information Section, Certification Directorate. E-mail: [ADs@easa.europa.eu](mailto:ADs@easa.europa.eu).
3. Information about any failures, malfunctions, defects or other occurrences, which may be similar to the unsafe condition addressed by this PAD, and which may occur, or have occurred on a product, part or appliance not affected by this PAD, can be reported to the [EU aviation safety reporting system](#). This may include reporting on the same or similar components, other than those covered by the design to which this PAD applies, if the same unsafe condition can exist or may develop on an aircraft with those components installed. Such components may be installed under an FAA Parts Manufacturer Approval (PMA), Supplemental Type Certificate (STC) or other modification.
4. For any question concerning the technical content of the requirements in this PAD, please contact: Hélicoptères Guimbal –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: [support@guimbal.com](mailto:support@guimbal.com).

