EASA	AIRWORTHINESS DIRECTIVE
	AD No.: 2014-0038 **Date: 14 February 2014** Note: This Airworthiness Directive (AD) is issued by EASA, acting in accordance with Regulation (EC) No 216/2008 on behalf of the European Community, 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 EU 748/2012, Part 21.A.3B. In accordance with EC 2042/2003 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 [EC 2042/2003 Annex I, Part M.A.303] or agreed with the Authority of the State of Registry [EC 216/2008, Article 14(4) exemption].

Design Approval Holder's Name:	**Type/Model designation(s):**
HELICOPTERES GUIMBAL	CABRI G2 helicopters

TCDS Number:	EASA.R.145
Foreign AD:	Not applicable
Supersedure:	None

ATA 71	**Powerplant – Engine Cooling Fan – Inspection / Modification**
Manufacturer(s):	Hélicoptères Guimbal
Applicability:	Cabri G2 G00-00-000 helicopters, all manufacturer serial numbers (S/N).
Reason:	An in-flight engine shutdown was reported on a Cabri G2 helicopter, leading the pilot to a forced landing. Subsequent investigation revealed that the engine cooling fan had failed, which led to power shutdown as the fan damaged the scroll and pulled the mixture control cable. The suspected cause of the cooling fan failure is a crack which had developed in the fan external ring. Although the origin of that crack has not yet been determined, contributing factors could be corrosion, a manufacturing defect or local damage caused by maintenance or foreign object impact. This condition, if not detected and corrected, could lead to other events of cooling fan failure and subsequent in-flight engine shutdown or damage to the engine installation, possibly resulting in reduced control of the helicopter. To address this potential unsafe condition, Hélicoptères Guimbal (HG) issued Service Bulletin (SB) 13-021, providing instructions for inspection of the fan external ring to detect damage or cracking. HG also designed a new external ring with improved mechanical characteristics and a fail-safe feature (glass fiber winding). HG SB 13-022 was issued to provide instructions for installation of this new external ring on in-service helicopters. Helicopters S/N 1053 and from S/N 1055 onwards will be equipped with the new external ring design in production (MOD 13-050). For the reasons described above, this AD requires repetitive inspections of the engine cooling fan external ring part number (P/N) G52-01-200 or P/N G52-01-201and replacement of the ring with a new design part P/N G52-00-101.

Effective Date:	28 February 2014
Required Action(s) and Compliance Time(s):	Required as indicated, unless accomplished previously: (1) Within 5 flight hours (FH) after the effective date of this AD, identify the engine cooling fan P/N, and, if P/N G52-00-000 is installed, before next flight, inspect the cooling fan external ring in accordance with the instructions of HG SB 13-021. (2) Within 50 FH after the initial inspection as required by paragraph (1) of this AD, and, thereafter, at intervals not to exceed 50 FH, inspect the external ring of engine cooling fan P/N G52-00-000 in accordance with the instructions of HG SB 13-021. Note: A non-cumulative tolerance of 5 FH may be applied to the inspection interval specified in paragraph (2) of this AD. (3) If, during any inspection as required by paragraph (1) or (2) of this AD, any crack or damage is found on the external ring, before next flight, modify engine cooling fan P/N G52-00-000 by replacing the ring with a new design external ring P/N G52-00-101and by marking the cooling fan with new P/N G52-00-001 in accordance with the instructions of HG SB 13-022 issue B. (4) Within 200 FH or 3 months, whichever occurs first after the effective date of this AD, unless already accomplished as required by paragraph (3) of this AD, modify engine cooling fan P/N G52-00-000 by installing a new design external ring P/N G52-00-101and by marking the cooling fan with new P/N G52-00-001 in accordance with the instructions of HG SB 13-022 issue B. (5) Installation of a new design external ring P/N G52-00-101 and marking of the cooling fan with new P/N G52-00-001 as required by paragraph (3) or (4) of this AD, as applicable, constitutes terminating action for the repetitive inspections required by paragraph (2) of this AD. (6) From the effective date of this AD, do not install a cooling fan P/N G52-00-000 and do not install on an engine cooling fan a plain external ring P/N G52-01-200 or P/N G52-01-201.
Ref. Publications:	HGSB 13-021 original issue, dated 18 July 2013. HGSB 13-022 issue B, dated 10 September 2013. The use of later approved revisions of these 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. 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 Safety Information Section, Executive Directorate, EASA. E-mail: ADs@easa.europa.eu 4. For any question concerning the technical content of the requirements in this AD, please contact: Helicoptères Guimbal – Support Aérodrome d'Aix-en-Provence, 1070 rue du Lieutenant Parayre, 13290 LES MILLES, FRANCE Tel : +33 (0)4 42 39 10 88 E-mail: support@guimbal.com.