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**DATE: October 29, 2014**  
**AD #: 2014-22-51**

This emergency airworthiness directive (EAD) 2014-22-51 is being sent to owners and operators of Airbus Helicopters (formerly Eurocopter France) Model EC130T2 helicopters.

### **Background**

This EAD is prompted by several cases of a cracked main gearbox (MGB) oil cooler hopper. The cracks were found on the hopper at the fan attachment points. This EAD requires, before further flight and thereafter at intervals not to exceed 10 hours time-in-service (TIS), visually inspecting the attachment points where the fan attaches to the hopper. If there is a crack, this EAD requires replacing the hopper with an airworthy hopper. These EAD actions are intended to detect a crack in the hopper at a fan attachment point to prevent failure of the fan attachment, interference of the fan with the control rod of the front servo-control or with the flight control bellcrank, and subsequent loss of control of the helicopter.

### **Discussion**

The European Aviation Safety Agency (EASA), which is the Technical Agent for the Member States of the European Union, has issued EASA EAD No. 2014-0229-E, dated October 20, 2014, to correct an unsafe condition for the Airbus Helicopters Model EC130T2 helicopters. EASA advises of several cases of cracked MGB oil cooler fan attachments to the hopper. The EASA EAD requires repetitive visual inspections of the MGB oil cooler fan attachment to the hopper and, depending on findings, replacement of cracked parts.

### **FAA's Determination**

This helicopter has been approved by the aviation authority of France and is approved for operation in the United States. Pursuant to our bilateral agreement with France, EASA, its technical representative, has notified us of the unsafe condition described in the EASA EAD. We are issuing this EAD because we evaluated all information provided by EASA and determined the unsafe condition exists and is likely to exist or develop on other helicopters of the same type design.

### **Related Service Information**

Airbus Helicopters has issued Emergency Alert Service Bulletin No. 05A020 Revision 0, dated October 20, 2014 (EASB), specifying periodic visual checks for cracks in the engine MGB oil fan hopper. The EASB states that a crack could lead to the total failure of the fan attachment and that this condition, if not detected and corrected, could lead to interference of the fan with the control rod of the front servo-control or with the flight control bellcrank, possibly resulting in reduced control of the helicopter. Also, the EASB states that pending modification, the periodic visual check of the hopper is necessary.

## **EAD Requirements**

This EAD requires, before further flight and thereafter at intervals not to exceed 10 hours TIS, visually inspecting the hopper for a crack at the four attachment points. If there is a crack, this EAD requires replacing the hopper with an airworthy hopper. Replacing the hopper is not terminating action for the repetitive visual inspections required by this EAD.

## **Differences Between This EAD and the EASA EAD**

We do not use the compliance time option of every 7 days.

## **Interim Action**

We consider this EAD to be an interim action. The design approval holder is currently developing a modification that will address the unsafe condition identified in this EAD. Once this modification is developed, approved, and available, we might consider additional rulemaking

## **Authority for this Rulemaking**

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, Section 106, describes the authority of the FAA Administrator. "Subtitle VII, Aviation Programs," describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in "Subtitle VII, Part A, Subpart III, Section 44701, General requirements." Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

## **Adoption of the Emergency Airworthiness Directive (EAD)**

We are issuing this EAD under 49 U.S.C. Sections 106(g), 40113, and 44701 according to the authority delegated to me by the Administrator.

2014-22-51 **Airbus Helicopters (formerly Eurocopter France):** Directorate Identifier 2014-SW-066-AD.

### **(a) Applicability**

This EAD applies to Model EC130T2 helicopters, certificated in any category.

### **(b) Unsafe Condition**

This EAD defines the unsafe condition as a crack in the main gearbox oil cooler fan hopper. This condition could result in failure of the fan attachment, interference of the fan with the control rod of the front servo-control or with the flight control bellcrank, and subsequent loss of control of the helicopter.

**(c) Effective Date**

This EAD is effective upon receipt.

**(d) Compliance**

You are responsible for performing each action required by this EAD within the specified compliance time unless it has already been accomplished prior to that time.

**(e) Required Actions**

Before further flight and thereafter at intervals not to exceed 10 hours time-in-service, using a light and a mirror, visually inspect the hopper for a crack at the four fan attachment points. The hopper is depicted as item “a” and the fan as item “b” in Figure 1 of Airbus Helicopters Emergency Alert Service Bulletin No. 05A020, Revision 0, dated October 20, 2014 (EASB). If there is a crack in the hopper, replace the hopper with an airworthy hopper. Examples of a crack are shown in Figure 2 of the EASB. Replacing the hopper does not constitute terminating action for the repetitive visual inspections required by this EAD.

**(f) Special Flight Permits**

Special flight permits may be issued provided that the fan is removed.

**(g) Alternative Methods of Compliance (AMOCs)**

(1) The Manager, Safety Management Group, FAA, may approve AMOCs for this EAD. Send your proposal to: Eric Haight, Aviation Safety Engineer, Regulations and Policy Group, Rotorcraft Directorate, FAA, 2601 Meacham Blvd., Fort Worth, Texas 76137; telephone (817) 222-5110; email [eric.haight@faa.gov](mailto:eric.haight@faa.gov).

(2) For operations conducted under a 14 CFR part 119 operating certificate or under 14 CFR part 91, subpart K, we suggest that you notify your principal inspector, or lacking a principal inspector, the manager of the local flight standards district office or certificate holding district office, before operating any aircraft complying with this EAD through an AMOC.

**(h) Additional Information.**

(1) For additional information, contact Eric Haight, Aviation Safety Engineer, Regulations and Policy Group, Rotorcraft Directorate, FAA, 2601 Meacham Blvd., Fort Worth, Texas 76137; telephone (817) 222-5110; email [eric.haight@faa.gov](mailto:eric.haight@faa.gov).

(2) For a copy of the service information referenced in this EAD, contact: Airbus Helicopters, Inc., 2701 N. Forum Drive, Grand Prairie, TX 75052; telephone (972) 641-0000 or (800) 232-0323; fax (972) 641-3775; or at <http://www.airbushelicopters.com/techpub>.

(3) The subject of this EAD is addressed in European Aviation Safety Agency EAD No. 2014-0229-E, dated October 20, 2014.

**(i) Subject**

Joint Aircraft Service Component (JASC) Tracking Code: 6322 Main Rotor Drive Rotorcraft Cooling Fan System.

Issued in Fort Worth, Texas, on October 29, 2014.

Kim Smith,  
Manager, Rotorcraft Directorate,  
Aircraft Certification Service.