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**DATE: March 25, 2013**

**AD #: 2013-06-51**

This emergency airworthiness directive (EAD) 2013-06-51 is being sent to owners and operators of the following helicopters:

AgustaWestland S.p.A Models A109, A109S, A109K2, A109A, A109A II, A109C, A109E, AW109SP, AB139, AW139, AB412, and AB412 EP;

Bell Helicopter Textron, Inc., Models 212, 214B, 214B-1, 214ST, 412, 412CF, and 412EP;

Bell Helicopter Textron Canada, Ltd., Models 429 and 430;

Eurocopter France Models AS 365 N3, AS332L2, and EC225LP;

Eurocopter Deutschland GmbH (ECD) Models MBB-BK 117 C-2, EC135P1, EC135T1, EC135P2, EC135T2, EC135P2+, and EC135T2+; and

Sikorsky Aircraft Corporation Models S-61L, S-61N, S-61R, S-61NM, S-70, S-70A, S-70C, S-70C(M), S-70C(M1), S-76A, S-76B, S-76C, S-76D, and S-92A.

## **Background**

This EAD was prompted by an incident that occurred during a maintenance check of a rescue hoist that lost the ability to hold the load at maximum rated capacity, causing the test load to strike the ground. An ECD Model MBB-BK 117 C-2 helicopter picked up a dummy load of 552 lbs. to conduct a "maximum load cycle" on the rescue hoist. Initially, the cable reeled out and stopped as commanded by the winch operator; however, the cable continued to reel-out without further command by the winch operator, causing the dummy load to strike the ground. Examination of the affected hoist determined that the overload clutch had failed. This EAD requires performing a cable conditioning lift, performing a load inspection test, and recording the results on the hoist component history card or equivalent record. These EAD actions are intended to detect conditions that may result in failure of the hoist and injury to persons being lifted.

The European Aviation Safety Agency (EASA), which is the Technical Agent for the Member States of the European Union, issued EASA AD No. 2013-0065-E, dated March 14, 2013, to correct an unsafe condition for helicopters with certain part-numbered and serial-numbered Goodrich hoists installed. EASA advised of a report that an ECD Model MBB-BK 117 C-2 helicopter experienced an incident of its rescue hoist containing a dummy load of 552 lbs. that reeled-out without command of the operator and impacted the ground during a maintenance check flight. Examination of the affected hoist determined that the overload clutch had failed. The overload clutch design is common to many Goodrich externally-mounted rescue hoists installed on the applicable model helicopters. EASA further stated its AD action is considered an interim action and further AD action may follow.

## **FAA's Determination**

These helicopters have been approved by the aviation authorities of Italy, Canada, France, and Germany and are approved for operation in the United States. Pursuant to our bilateral agreement with those countries, EASA, their technical representative, has notified us of the unsafe condition described in the EASA AD. 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 these same type designs.

## **Related Service Information**

Goodrich issued Alert Service Bulletin No. 44301-10-15, dated March 8, 2013 (ASB), for certain externally-mounted rescue hoists manufactured by Goodrich Sensors & Integrated Systems. The ASB specifies inspecting and performing an operational check of the hoist. The ASB also specifies recording the performance in the hoist log and reporting the results of the test to UTC Aerospace Systems.

## **EAD Requirements**

This EAD requires complying with specified portions of the ASB to do the following before the next flight involving a hoist operation:

- Performing a cable conditioning lift;
- Performing a load inspection test;
- Deactivating or replacing any hoist that fails the load inspection test; and
- Recording the results of the load inspection test on the hoist component history card or equivalent record.

## **Differences Between this EAD and the EASA AD**

The EASA AD applies to specific model helicopters. This EAD applies to all helicopters with certain Goodrich hoists installed that are type certificated in the U.S. This EAD does not contain a requirement to report results to the manufacturer. The EASA AD requires complying with specific helicopter manufacturer ASBs, and this EAD requires complying with the Goodrich ASB for conducting the load inspection test.

## **Interim Action**

We consider this EAD to be an interim action. Investigation of the root cause of the clutch failure is ongoing. If final action is later identified, we might consider further 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.

2013-06-51 **VARIOUS HELICOPTER MODELS WITH THE GOODRICH HOIST INSTALLED:** Directorate Identifier 2013-SW-010-AD.

#### **(a) Applicability.**

This EAD applies to helicopters, certificated in any category, with an externally-mounted hoist with a part number and serial number listed in Table 1 of Goodrich Alert Service Bulletin No. 44301-10-15, dated March 8, 2013 (ASB), installed, including but not limited to the following:

AgustaWestland S.p.A Model A109, A109S, A109K2, A109A, A109A II, A109C, A109E, AW109SP, AB139, AW139, AB412, and AB412 EP; Bell Helicopter Textron, Inc., Model 212, 214B, 214B-1, 214ST, 412, 412CF, and 412EP; Bell Helicopter Textron Canada, Ltd., Model 429 and 430; Eurocopter France Model AS 365 N3, AS332L2, and EC225LP; Eurocopter Deutschland GmbH Model MBB-BK 117 C-2, EC135P1, EC135T1, EC135P2, EC135T2, EC135P2+, and EC135T2+; Sikorsky Aircraft Corporation Model S-61L, S-61N, S-61R, S-61NM, S-70, S-70A, S-70C, S-70C(M), S-70C(M1), S-76A, S-76B, S-76C, S-76D, and S-92A helicopters.

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

This EAD defines the unsafe condition as failure of the overload clutch resulting in in-flight failure of the hoist, which could result in injury to persons being lifted.

#### **(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 next flight involving a hoist operation, perform the following one-time actions:

(1) Perform a cable conditioning lift by following the Accomplishment Instructions, paragraphs 2.A. through 2.A.(2), of the ASB.

(2) Perform a load inspection test by following the Accomplishment Instructions, paragraphs 2.B. through 2.I., of the ASB. Refer to the aircraft weight and balance limitations prior to performing this test and use a balancing load if necessary to prevent helicopter rollover. Any alternate method of complying with the load inspection test must first be approved in accordance with paragraph (f) of this EAD.

(3) If the hoist fails the load inspection test, deactivate or replace the hoist with an airworthy hoist.

(4) Record the result of the load inspection test on the hoist component history card or equivalent record.

**(f) Alternative Methods of Compliance (AMOCs).**

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

**(g) Additional Information.**

(1) For further information contact: Matt Wilbanks, Aviation Safety Engineer, Regulations and Policy Group, Rotorcraft Directorate, FAA, 2601 Meacham Blvd., Fort Worth, Texas 76137; telephone (817) 222-5110; email [matt.wilbanks@faa.gov](mailto:matt.wilbanks@faa.gov).

(2) For a copy of the service information referenced in this EAD, contact: Goodrich Corporation, Sensors & Integrated Systems (SIS-CA), Brea, CA 92821, telephone (714) 984-1461; <http://www.goodrich.com/Goodrich>.

(3) You may view this service information at FAA, Office of the Regional Counsel, Southwest Region, 2601 Meacham Blvd., Room 663, Fort Worth, Texas 76137. For information on the availability of this material at the FAA, call (817) 222-5110.

(4) The subject of this EAD is addressed in European Aviation Safety Agency AD No. 2013-0065-E, dated March 14, 2013.

**(h) Subject.**

Joint Aircraft Service Component (JASC) Code: 2500 Equipment/Furnishings.

Issued in Fort Worth, Texas, on March 25, 2013.

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