



FAA
Aviation Safety

EMERGENCY

AIRWORTHINESS DIRECTIVE

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DATE: March 27, 2014

AD #: 2014-07-51

This emergency airworthiness directive (EAD) 2014-07-51 is being sent to owners and operators of AgustaWestland S.p.A. Model AB139 and AW139 helicopters.

Background

This EAD was prompted by reports of certain Lower Half Scissor Spherical Bearings (bearings) dislodging from certain Main Rotor (M/R) Rotating Scissors. This EAD requires inspecting the M/R Rotating Scissors for play of the bearing. If the play is beyond allowable limits, this EAD requires removing the affected bearing and re-identifying the M/R Rotating Scissors. This EAD also requires removing all affected bearings. The actions of this EAD are intended to detect excessive play of the bearing and prevent failure of the M/R Rotating Scissors 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, issued EASA EAD No. 2014-0073-E, dated March 20, 2014, to correct an unsafe condition for AgustaWestland S.p.A. Model AB139 and AW139 helicopters. EASA advises of reports of the dislodging of bearings, part number (P/N) 3G6230V00654, that were installed on M/R Rotating Scissors, P/N 3G6230A00733. EASA also states that as a result of the investigations accomplished by the supplier of the bearings, it was determined that a quality issue might have affected the production of the bearings. EASA advises that the condition, if not detected and corrected, could lead to loss of control of the helicopter. The EASA EAD requires repetitive inspections of certain M/R Rotating Scissors, P/N 3G6230A00733, that have been manufactured or repaired with the installation of certain potentially defective bearings, P/N 3G6230V00654. The EASA EAD also requires replacement of the affected bearings, or as an alternative, replacement of the M/R Rotating Scissors with an affected bearing, which constitutes terminating action for the repetitive inspections required by the EAD.

FAA's Determination

These helicopters have been approved by the aviation authority of Italy and are approved for operation in the United States. Pursuant to our bilateral agreement with Italy, EASA, its technical representative, 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 these same type designs.

Related Service Information

AgustaWestland issued Bollettino Tecnico No. 139-368, dated March 19, 2014 (BT), for Model AB139 and AW139 helicopters with certain serial numbered (S/Ned) M/R Rotating Scissors, P/N 3G6230A00733; or M/R Rotating Scissors, P/N 3G6230A00733, which have been repaired with the installation of certain S/Ned bearings, P/N 3G6230V00654. The BT also applies to affected parts

kept in stock. The BT was issued to identify and replace potentially defective bearings caused by a supplier quality issue. The BT also establishes an interim inspection schedule to reduce impact on operations.

AgustaWestland also issued Data Module No. 39-C-62-31-00-00A-286C-A, issue 001, dated August 6, 2012, for Model AB139 and AW139 helicopters to specify the detailed inspection of the fixed swashplate and rotating scissiors.

EAD Requirements

This EAD requires, within 5 hours time-in-service (TIS) and thereafter at intervals not to exceed 5 hours TIS, inspecting the M/R Rotating Scissiors for play of the bearing. If there is play, this EAD requires, before further flight, a more detailed inspection of the M/R Rotating Scissiors. If the detailed inspection results determine the play is beyond allowable limits, this EAD requires, before further flight, removing the bearing and re-identifying the M/R Rotating Scissiors. This EAD also requires, within 50 hours TIS, removing any affected bearing.

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.

2014-07-51 **AgustaWestland S.p.A. (Agusta):** Directorate Identifier 2014-SW-017-AD.

(a) Applicability

This EAD applies to the following Agusta Model AB139 and AW139 helicopters, certificated in any category:

(1) For helicopters with Main Rotor (M/R) Rotating Scissiors, part number (P/N) 3G6230A00733, with serial numbers (S/Ns) listed in Table 1 of AgustaWestland Bollettino Tecnico No. 139-368, dated March 19, 2014 (BT 139-368), on which the Lower Half Scissiors Spherical Bearing (bearing), P/N 3G6230V00654, was not replaced; and

(2) For helicopters with M/R Rotating Scissiors, P/N 3G6230A00733, on which the bearing, P/N 3G6230V00654, was replaced with a bearing with a S/N listed in Table 2 of BT 139-368.

(b) Unsafe Condition

This EAD defines the unsafe condition as excessive play of the bearing in the M/R Rotating Scissors. This condition could result in failure of the M/R Rotating Scissors 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

(1) Within 5 hours time-in-service (TIS) and thereafter at intervals not to exceed 5 hours TIS, inspect the M/R Rotating Scissors for play of the bearing in accordance with paragraph 4. of Part I, Compliance Instructions, of BT 139-368.

(2) If there is play, before further flight, accomplish a detailed inspection of the M/R Rotating Scissors in accordance with steps 9.1 through 12.9 of Data Module No. 39-C-62-31-00-00A-286C-A, Rotating control installation – Fixed swashplate and rotating scissors – Detailed inspection, issue 001, dated August 6, 2012, of Chapter 62, Main Rotor, issue 003, dated July 15, 2006, Change 16, dated October 31, 2013, of AgustaWestland Aircraft Maintenance Publication, dated August 6, 2012, published October 31, 2013. If there is play beyond allowable limits, before further flight, remove the bearing.

(3) Within 50 hours TIS, remove any bearing listed in the Applicability section of this EAD.

(4) Prior to installing a M/R Rotating Scissors with a S/N listed in the Applicability section of this EAD, replace the bearing and re-identify the M/R Rotating Scissors in accordance with paragraphs 4.2. through 4.4. of Part II, Compliance Instructions, of BT 139-368.

(5) Do not install a bearing listed in the Applicability section of this EAD into any M/R Rotating Scissors.

(f) Alternative Methods of Compliance (AMOCs)

(1) The Manager, Safety Management Group, FAA, may approve AMOCs for this EAD. Send your proposal to: Robert Grant, Aviation Safety Engineer, Safety Management Group, FAA, 2601 Meacham Blvd., Fort Worth, Texas 76137; telephone (817) 222-5110; email robert.grant@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: Robert Grant, Aviation Safety Engineer, Safety Management Group, FAA, 2601 Meacham Blvd., Fort Worth, Texas 76137; telephone (817) 222-5110; email robert.grant@faa.gov.

(2) For a copy of the service information referenced in this AD, contact: AgustaWestland, Product Support Engineering, Via del Gregge, 100, 21015 Lonate Pozzolo (VA) Italy, ATTN: Maurizio D'Angelo; telephone 39-0331-664757; fax 39-0331-664680; or at <http://www.agustawestland.com/technical-bulletins>.

(h) Subject

Joint Aircraft Service Component (JASC) Code: 6200, M/R System.

Issued in Fort Worth, Texas, on March 27, 2014.

Lance T. Gant,
Acting Directorate Manager, Rotorcraft Directorate,
Aircraft Certification Service.