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[4910-13]

**DEPARTMENT OF TRANSPORTATION**

**Federal Aviation Administration**

**14 CFR Part 39**

**[Docket No. FAA-2011-1454; Directorate Identifier 2011-SW-054-AD;  
Amendment 39-16910; AD 2011-27-08]**

**RIN 2120-AA64**

**Airworthiness Directives; Agusta S.p.A. Helicopters**

**AGENCY:** Federal Aviation Administration (FAA), Department of Transportation (DOT).

**ACTION:** Final rule; request for comments.

**SUMMARY:** We are adopting a new airworthiness directive (AD) for all Agusta S.p.A. (Agusta) model A109S and AW109SP helicopters. This AD is prompted by a fatigue crack found in the left elevator assembly along the riveting of the upper skin to the fourth rib on an Agusta A109S helicopter. These actions are intended to detect a crack, which could lead to a failure of the elevator, reduced maneuverability of the helicopter, and subsequent loss of control of the helicopter.

**DATES:** This AD becomes effective [INSERT DATE 15 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The Director of the Federal Register approved the incorporation by reference of certain documents listed in this AD as of [INSERT DATE 15 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

We must receive comments on this AD by [INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

**ADDRESSES:** You may send comments by any of the following methods:

- Federal eRulemaking Docket: Go to <http://www.regulations.gov>. Follow the online instructions for sending your comments electronically.
- Fax: 202-493-2251.
- Mail: Send comments to the U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE, Washington, DC 20590-0001.
- Hand Delivery: Deliver to the “Mail” address between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

**EXAMINING THE AD DOCKET:** You may examine the AD docket on the Internet at <http://www.regulations.gov> or in person at the Docket Operations Office between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this AD, the economic evaluation, any comments received, and other information. The street address for the Docket Operations Office (telephone 800- 647-5527) is in the ADDRESSES section. Comments will be available in the AD docket shortly after receipt.

For service information identified in this AD, contact Agusta Westland, Customer Support & Services, Via Per Tornaento 15, 21019 Somma Lombardo (VA) Italy, ATTN: Giovanni Cecchelli; telephone 39- 0331-711133; fax 39 0331 711180; or at <http://www.agustawestland.com/technical-bullettins>. You may review copies of the referenced service information at the FAA, Office of the Regional Counsel, Southwest Region, 2601 Meacham Blvd., Room 663, Fort Worth, Texas 76137.

**FOR FURTHER INFORMATION CONTACT:** Jim Grigg, Manager, FAA, Rotorcraft Directorate, Safety Management Group, 2601 Meacham Blvd, Fort Worth, TX 76137, telephone (817) 222-5126, fax (817) 222-5961, e-mail [jim.grigg@faa.gov](mailto:jim.grigg@faa.gov).

**SUPPLEMENTARY INFORMATION:**

**Comments Invited**

This AD is a final rule that involves requirements affecting flight safety, and we did not provide you with notice and an opportunity to provide your comments prior to it becoming effective. However, we invite you to participate in this rulemaking by submitting written comments, data, or views. We also invite comments relating to the economic, environmental, energy, or federalism impacts that resulted from adopting this AD. The most helpful comments reference a specific portion of the AD, explain the reason for any recommended change, and include supporting data. To ensure the docket does not contain duplicate comments, commenters should send only one copy of written comments, or if comments are filed electronically, commenters should submit them only one time.

We will file in the docket all comments that we receive, as well as a report summarizing each substantive public contact with FAA personnel concerning this rulemaking during the comment period. We will consider all the comments we receive and may conduct additional rulemaking based on those comments.

**Discussion**

The European Aviation Safety Agency (EASA), which is the Technical Agent for the Member States of the European Union, has issued EASA AD 2011-0150, dated August 9, 2011 (AD 2011-0150), to correct an unsafe condition for the Agusta A109S

and AW109SP helicopters. EASA advises that a fracture of the left elevator assembly part number (P/N) 109-0200-02-601, along the riveting of the upper skin to the fourth rib has recently occurred on an A109S helicopter. The elevator assembly, left and right, P/N 109-0200-02-601 or -801, and 109-0200-02-602 or -802, installed on an A109S helicopter are very similar to the elevator assembly, left and right, P/N 109-0200-02-803 and -804, installed on the AW109SP helicopter. The technical investigation conducted by Agusta revealed that the crack in the left elevator assembly was due to fatigue. The EASA AD requires, as an interim measure pending the development of a terminating action, repetitive inspections of the elevator upper skin in the area of the fourth rib, and if a crack is found, replacing the cracked elevator assembly with a serviceable unit or contacting Agusta for an approved repair.

#### **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, their technical representative, has notified us of the unsafe condition described in the EASA AD. We are issuing this AD 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**

We reviewed Agusta Mandatory Bollettino Tecnico (ABT) No. 109S-44 and No 109SP-032, both dated August 5, 2011. The ABTs describe procedures for visually inspecting with a 5-10X magnifying glass to verify the presence of cracks on the upper skin of the left elevator assembly, P/N 109-0200-02-601 or -801, and right elevator

assembly, P/N 109-0200-02-602 or -802, on the A109S and P/N 109-0200-02-803 and -804 on the AW109SP. The ABTs also provide instructions to carry out a dye penetrant inspection if there is any doubt as to the presence of a crack during the visual inspection. EASA classified this service information as mandatory and issued AD No. 2011-0150 to ensure the continued airworthiness of these helicopters.

### **AD Requirements**

This AD requires an inspection of the area depicted in figure 1 of the manufacturer's service bulletin.

- For elevator assemblies with less than 400 hours time-in-service (TIS), upon or before reaching 400 hours TIS, and thereafter at intervals not to exceed 50 hours TIS, inspect with a 10X power magnifying glass an area of the left and right elevator upper skin for a crack along the 4th rib station rivet line.

- For elevator assemblies with 400 or more hours TIS, within 30 hours TIS, and thereafter at intervals not to exceed 50 hours TIS, inspect with a 10X power magnifying glass an area of the left and right elevator upper skin for a crack along the 4th rib station rivet line.

- Replace any cracked elevator assembly with an airworthy elevator assembly before further flight.

### **Differences between this AD and the EASA AD**

The EASA AD specifies a 5-10X power magnifying glass; this AD specifies a 10X power or higher magnifying glass.

### **Costs of Compliance**

We estimate that this AD will affect 14 helicopters of U.S. Registry.

We estimate that operators may incur the following costs in order to comply with this AD. Inspecting the elevator assemblies will require 3 work-hours at an average labor rate of \$85 per hour, for a cost of \$255 per inspection cycle. To replace a cracked elevator assembly with an airworthy elevator assembly will require 10 work-hours at an average labor rate of \$85 per hour, and parts will cost \$19,921, for a cost per helicopter of \$20,771.

According to the PAHs service information some of the costs of this AD may be covered under warranty, thereby reducing the cost impact on affected individuals. We do not control warranty coverage by the PAH. Accordingly, we have included all costs in our cost estimate.

#### **FAA's Justification and Determination of the Effective Date**

Providing an opportunity for public comments prior to adopting these AD requirements would delay implementing the safety actions needed to correct this known unsafe condition. Therefore, we find that the risk to the flying public justifies waiving notice and comment prior to the adoption of this rule because some of the required corrective actions must be accomplished within 30 hours time-in-service, a very short time period based on the average flight-hour utilization rate of these helicopters.

Since an unsafe condition exists that requires the immediate adoption of this AD, we determined that notice an opportunity for public comment before issuing this AD are impracticable and contrary to the public interest and that good cause exists for making this amendment effective in less than 30 days.

#### **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.

### **Regulatory Findings**

We determined that this AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the national Government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed, I certify that this AD:

1. Is not a “significant regulatory action” under Executive Order 12866;
2. Is not a “significant rule” under DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979);
3. Will not affect intrastate aviation in Alaska to the extent that it justifies making a regulatory distinction; and
4. Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

We prepared an economic evaluation of the estimated costs to comply with this AD and placed it in the AD docket.

**List of Subjects in 14 CFR Part 39**

Air transportation, Aircraft, Aviation safety, Incorporation by Reference, Safety.

**Adoption of the Amendment**

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 14 CFR part 39 as follows:

**PART 39 - AIRWORTHINESS DIRECTIVES**

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

**§ 39.13 [Amended]**

2. The FAA amends § 39.13 by adding the following new AD:

2011-27-08 **Agusta S.p.A.:** Amendment 39-16910; Docket No. FAA-2011-1454; Directorate Identifier 2011-SW-054-AD.

(a) **Applicability.** This AD applies to model A109S and AW109SP helicopters with elevator assemblies, part number (P/N) 109-0200-02-601, 109-0200-02-801, 109-0200-02-602, 109-0200-02-802, 109-0200-02-803, or 109-0200-02-804 installed, certificated in any category.

(b) **Unsafe Condition.** This AD defines the unsafe condition as a fatigue crack on the elevator assembly. This condition could result in failure of the elevator, reduced maneuverability of the helicopter, and subsequent loss of control of the helicopter.

(c) **Effective Date.** This airworthiness directive (AD) becomes effective [INSERT DATE 15 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(d) **Compliance.** You are responsible for performing each action required by this AD within the specified compliance time unless it has already been accomplished prior to that time.

(e) **Corrective Action.**

(1) For elevator assemblies with less than 400 hours time-in-service (TIS), upon or before reaching 400 hours TIS, and thereafter at intervals not to exceed 50 hours TIS, inspect the left and right elevator upper skin along the 4th rib station rivet line from the leading edge to 200mm inboard with a 10X or higher magnifying glass for a crack in the area depicted in Figure 1 of Agusta Mandatory Bollettino Tecnico (ABT) No. 109S-44 or 109SP-032, both dated August 5, 2011, for your model helicopter.

(2) For elevator assemblies with 400 or more hours TIS, within the next 30 hours TIS, and thereafter at intervals not to exceed 50 hours TIS, inspect the left and right elevator upper skin along the 4th rib station rivet line from the leading edge to 200mm inboard with a 10X or higher magnifying glass for a crack in the area depicted in Figure 1 of the ABT for your model helicopter.

(3) If there is a crack, replace the cracked elevator assembly with an airworthy elevator assembly before further flight.

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

(1) The Manager, Safety Management Group, FAA, may approve AMOCs for this AD. Send your proposal to: Jim Grigg, Manager, FAA, Rotorcraft Directorate, Safety Management Group, 2601 Meacham Blvd, Fort Worth, TX 76137, telephone (817) 222-5126, fax (817) 222-5961, e-mail [jim.grigg@faa.gov](mailto:jim.grigg@faa.gov).

(2) For operations conducted under a Part 119 operating certificate or under

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 AD through an AMOC.

(g) **Additional Information.** The subject of this AD is addressed in European Aviation Safety Agency (EASA) AD No. 2011-0150, dated August 11, 2011.

(h) **Subject.** Joint Aircraft System Component (JASC) Code 5520: Elevator Structure.

(i) **Material Incorporated by Reference.** You must use the specified portions of the service information specified in this AD to do the actions required. The Director of the Federal Register approved the incorporation by reference of this service information under 5 U.S.C. 552(a) and 1 CFR part 51.

(1) Agusta Mandatory Bollettino Tecnico No. 109S-44, dated August 5, 2011, for model A109S helicopters; or

(2) Agusta Mandatory Bollettino Tecnico No. 109SP-032, dated August 5, 2011, for model AW109SP helicopters.

(3) For service information identified in this AD, contact Agusta Westland, Customer Support & Services, Via Per Tornavento 15, 21019 Somma Lombardo (VA) Italy, ATTN: Giovanni Cecchelli; telephone 39- 0331-711133; fax 39 0331 711180; or at <http://www.agustawestland.com/technical-bulletins>.

(4) You may review copies of the referenced service information at the FAA, Office of the Regional Counsel, Southwest Region, 2601 Meacham Blvd., Room 663, Fort Worth Texas 76137 or at the National Archives and Records Administration

(NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to:

[http://www.archives.gov/federal\\_register/code\\_of\\_federal\\_regulations/ibr\\_locations.html](http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html)

Issued in Fort Worth, Texas, on December 27, 2011.

M. Monica Merritt,  
Acting Manager, Rotorcraft Directorate,  
Aircraft Certification Service.

[FR Doc. 2012-366 Filed 01/23/2012 at 8:45 am; Publication Date: 01/24/2012]