

[Federal Register Volume 76, Number 208 (Thursday, October 27, 2011)]
[Rules and Regulations]
[Pages 66623-66625]
From the Federal Register Online via the Government Printing Office [www.gpo.gov]
[FR Doc No: 2011-27690]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2011-1034; Directorate Identifier 2011-SW-014-AD; Amendment 39-16816; AD 2011-20-06]

RIN 2120-AA64

Airworthiness Directives; Agusta S.p.A. Model AB139 and AW139 Helicopters

AGENCY: Federal Aviation Administration, DOT.

ACTION: Final rule; request for comments.

SUMMARY: This amendment supersedes an existing airworthiness directive (AD) for Agusta S.p.A. (Agusta) Model AB139 and AW139 helicopters. This action retains the requirements in the existing AD and adds a daily check of the tailboom panels to detect bulging or deformation of the tailboom outer skin panels. If there is bulging or deformation, this AD requires a mechanic to do a tap inspection for debonding. If the debonded area exceeds a certain limit, this AD requires modifying the tailboom. Also, when an area of debond does not exceed the limits, this AD requires, before further flight, repairing the debonded area of the tailboom or replacing the tailboom. This action also adds a tap inspection for additional tailboom panels and requires the inspection on both sides of the tailboom. This amendment is prompted by the determination that more inspections are required and to limit the applicability only to those helicopters with tailboom assemblies that have not been modified. Modifying the tailboom assembly is terminating action for the requirements of this AD. The actions specified in this AD are intended to detect damage in the tailboom to prevent failure of a tailboom and subsequent loss of control of a helicopter.

DATES: Effective November 14, 2011.

The incorporation by reference of certain publications listed in the regulations is approved by the Director of the Federal Register as of November 14, 2011.

Comments for inclusion in the Rules Docket must be received on or before December 27, 2011.

ADDRESSES: Use one of the following addresses to submit comments on this AD:

- Federal eRulemaking Portal: Go to <http://www.regulations.gov>. Follow the instructions for submitting comments.
- Fax: 202-493-2251.
- Mail: U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue, SE., Washington, DC 20590.

- Hand Delivery: U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue, SE., Washington, DC 20590, between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

You may get the service information identified in this AD from Agusta, Via Giovanni Agusta, 520 21017 Cascina Costa di Samarate (VA), Italy, telephone 39 0331-229111, fax 39 0331-229605/222595, or at http://customersupport.agusta.com/technical_advice.php.

Examining the Docket: You may examine the docket that contains the AD, any comments, and other information 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 Docket Operations office (telephone (800) 647-5527) is located in Room W12-140 on the ground floor of the West Building at the street address stated in the ADDRESSES section. Comments will be available in the AD docket shortly after receipt.

FOR FURTHER INFORMATION CONTACT: Sharon Miles, Aviation Safety Engineer, FAA, Rotorcraft Directorate, Regulations and Policy Group, 2601 Meacham Blvd., Fort Worth, Texas 76137, telephone (817) 222-5122, fax (817) 222-5961.

SUPPLEMENTARY INFORMATION: Based on the European Aviation Safety Agency (EASA) AD No. 2009-0198 E, dated September 16, 2009, we issued Emergency AD 2009-19-51, to all known U.S. owners and operators of Agusta Model AB139 and AW139 helicopters. We then issued a Final rule; request for comments for AD 2009-19-51, Amendment 39-16129, on January 11, 2010 (75 FR 3615, January 22, 2010). That AD requires inspecting the tailboom panels for debonding and if the debonding area exceeds a certain limit, repairing the tailboom. That action was prompted by a Model AW139 helicopter tailboom bending and collapsing during taxiing. That condition, if not corrected, could result in failure of a tailboom and subsequent loss of control of the helicopter.

Since issuing AD 2009-19-51, we have determined that additional inspections are needed on certain tailboom configurations. This determination was based on findings from the previous inspections required by AD 2009-19-51. Also, the manufacturer has introduced tailboom reinforcement structural retro modification (MOD), part number (P/N) 3G5309P01812, to reinforce the structure of the tailboom.

After reports of debonding of fuselage tailboom panels, EASA, which is the Technical Agent for the Member States of the European Union, issued the following ADs to correct an unsafe condition for the specified Agusta model helicopters:

- No. 2009-0234-E, dated October 28, 2009, introduced additional inspections of the tailboom panels.
- No. 2009-0234-E R1, dated October 29, 2009, added some serial numbers.
- No. 2011-0019, dated February 3, 2011, limits the applicability only to those helicopters with tailboom assemblies that have not been modified according to MOD, P/N 3G5309P01812, and requires modifying the tailboom assemblies with MOD, P/N 3G5309P01812, and to contact Agusta if there is an area of debond that exceeds the specified limits.

Related Service Information

Agusta has issued Alert Bollettino Tecnico (ABT) No. 139-195, Revision B, dated February 2, 2010, which supersedes ABT No. 139-193 and No. 139-194, both dated September 3, 2009. Based on findings from the inspections specified in ABT No. 139-193 and No. 139-194 on specific tailboom configurations, the revised ABT specifies a tighter inspection schedule and more frequent tapping inspections on two specific areas. The revised ABT retains the 50-flight hour tapping inspection specified by the superseded ABTs for inspecting the affected tailboom panels for signs of debonding and contacting the manufacturer for repair instructions. EASA classified the revised ABT as mandatory and issued AD No. 2009-0234-E, dated October 28, 2009, and subsequently 2009-0234-E

R1, dated October 29, 2009, and 2011-0019 dated February 3, 2011, to ensure the continued airworthiness of these helicopters.

FAA's Evaluation and Unsafe Condition 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 AD 2011-0019. 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.

Differences Between This AD and the EASA AD

We refer to flight hours as hours time-in-service (TIS). Also, we do not require you to contact the manufacturer. Finally, we require the inspection on both sides of the tailboom, and the EASA AD only requires the inspection on the right side of the tailboom. We do not require a specific part-numbered platform to do the inspections, and the EASA AD requires using Platform (CG-07-00), P/N 2004-5007-B or approved equivalent.

Comments

The comment period for AD 2009-19-51 closed on March 23, 2010. We have considered the two comments received from one commenter.

The commenter states that Agusta ABT No. 139-195, Revision A, dated October 27, 2009, supersedes ABT No. 139-193 and 139-194, and recommends referencing ABT 139-195 in the AD. The commenter also recommends relocating Note 1 because the current location in the AD can cause confusion.

We agree with the commenter, but ABT No. 139-195 has been revised to Revision B. Therefore, we reference ABT 139-195, Revision B, dated February 2, 2010, in this superseding AD. The comment about relocating Note 1 is not adopted because the ABT is referenced in the accomplishment instructions of this AD rather than in a Note.

FAA's Determination and Requirements of This AD

This unsafe condition is likely to exist or develop on other helicopters of the same type design. Therefore, this AD is being issued to detect damage in the tailboom to prevent failure of a tailboom and subsequent loss of control of a helicopter. This AD requires a daily check of each tailboom panel to detect outer skin bulging or deformation of the tailboom. This AD allows a pilot holding at least a private pilot certificate to perform this check because it involves only a visual check for outer skin bulging or deformation of the tailboom and does not require the use of tools and can be performed equally well by a pilot or a mechanic. If there is bulging or deformation on a skin panel, this AD requires a mechanic to use an aluminum hammer, P/N 109-3101-58-2, to tap inspect the area around the bulge or deformation for debonding. This AD also requires tap inspecting the tailboom panels for debonding at 25-hour TIS intervals in certain areas on three part-numbered tail assemblies with certain serial numbers and at 50-hour TIS intervals for all affected tail assemblies except those that are required to be inspected within this 25-hour TIS interval. If there is any debonding that is not within the acceptable limits, before further flight, installing tailboom structural reinforcement MOD, P/N 3G5309P01812, is required. If there is any debonding that is within the acceptable limits, before further flight, repairing the tailboom is required. Modifying the tailboom per MOD, P/N 3G5309P01812, is terminating action for the requirements of this AD.

The short compliance time involved is required because the previously described critical unsafe condition can adversely affect the controllability and structural integrity of the helicopter. Therefore,

because a daily check of the tailboom panels for outer skin bulgings or deformation and the tailboom panel inspections for debonding at 25-hour and 50-hour TIS is a very short time interval, this AD must be issued immediately.

Since a situation exists that requires the immediate adoption of this regulation, it is found that notice and opportunity for prior public comment hereon are impracticable, and that good cause exists for making this amendment effective in less than 30 days.

Costs of Compliance

We estimate that this AD will affect about 76 helicopters. We also estimate that it will take a minimal amount of time to do the daily check and about 2 work-hours per recurring inspection per helicopter to inspect the tailboom panels for debonding. The average labor rate is \$85 per work-hour. Installing MOD, P/N 3G5309P01812, would require 192 work-hours at a parts cost of \$52,300. Based on these figures, assuming there are 12 recurring inspections and 8 tailboom modifications, we estimate the cost of this AD on U.S. operators is \$704,000.

Comments Invited

This AD is a final rule that involves requirements that affect flight safety and was not preceded by notice and an opportunity for public comment; however, we invite you to submit any written data, views, or arguments regarding this AD. Send your comments to an address listed under ADDRESSES. Include "Docket No. FAA-2011-1034; Directorate Identifier 2011-SW-014-AD" at the beginning of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of the AD. We will consider all comments received by the closing date and may amend the AD in light of those comments.

We will post all comments we receive, without change, to <http://www.regulations.gov>, including any personal information you provide. We will also post a report summarizing each substantive verbal contact with FAA personnel concerning this AD. Using the search function of the docket web site, you can find and read the comments to any of our dockets, including the name of the individual who sent the comment. You may review the DOT's complete Privacy Act Statement in the Federal Register published on April 11, 2000 (65 FR 19477-78).

Regulatory Findings

We have 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 above, I certify that the regulation:

1. Is not a "significant regulatory action" under Executive Order 12866;
2. Is not a "significant rule" under the 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. See the AD docket to examine the economic evaluation.

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.

List of Subjects in 14 CFR Part 39

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

Adoption of the Amendment

Accordingly, pursuant to the authority delegated to me by the Administrator, the Federal Aviation Administration amends part 39 of the Federal Aviation Regulations (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. Section 39.13 is amended by removing Amendment 39-16129; (75 FR 3615, January 22, 2010), and by adding a new airworthiness directive (AD), Amendment 39-16816, to read as follows:



2011-20-06 Agusta S.p.A.: Amendment 39-16816. Docket No. FAA-2011-1034; Directorate Identifier 2011-SW-014-AD. Supersedes AD 2009-19-51, Amendment 39-16129; Docket No. FAA-2009-1125, Directorate Identifier 2009-SW-50-AD.

Applicability: Model AB139 and AW139 helicopters, with a tail assembly, part number (P/N) 3G5350A00132, 3G5350A00133, 3G5350A00134, or 3G5350A00135, except those with tailboom reinforcement structural retro-modification (MOD), P/N 3G5309P01812, installed, certificated in any category.

Compliance: Required as indicated.

To detect damage to the tailboom to prevent failure of a tailboom and subsequent loss of control of a helicopter, do the following:

(a) For all affected helicopters, before further flight, visually check all tailboom panels on both sides of the tailboom for skin bulging or deformation. Pay particular attention to the previously repaired areas. This visual check may be performed by an owner/operator (pilot) holding at least a private pilot certificate and must be entered into the helicopter records showing compliance with paragraph (a) of this AD in accordance with 14 CFR 43.9(a)(1)-(4) and 91.417(a)(2)(v).

(b) If there is bulging or deformation of a tailboom panel skin, before further flight, using an aluminum hammer (GF-06-00), P/N 109-3101-58-2 (aluminum hammer), tap inspect the area around the bulge or deformity for debonding. Mark the boundaries of the debond area and measure the size of the marked area.

(c) For helicopters with a tailboom assembly, P/N 3G5350A00132, 3G5350A00133, or 3G5350A00134, and a serial number (S/N) with a prefix of "A" up to and including S/N 7/109 for the short nose configuration and a S/N with a prefix of "A" up to and including S/N 7/063 for the long-nose configuration, within 25 hours time-in-service (TIS) from the last inspection or within 7 days, whichever occurs first, unless done previously, and thereafter at intervals not to exceed 25 hours TIS, tap inspect each tailboom panel on both sides of the tailboom in AREAs 3 and 5 for debonding, using an aluminum hammer as depicted in Figure 2 of Agusta Alert Bollettino Tecnico No. 139-195, Revision B, dated February 2, 2010 (ABT). First, inspect AREA 5 then AREA 3. You do not need to tap inspect the longeron area contained in AREA 3. Pay particular attention to previously repaired areas.

(d) For all affected helicopters, except those with tailboom assembly part numbers and serial numbers described in paragraph (c) of this AD, within 50 hours TIS, unless done previously, and thereafter at intervals not to exceed 50 hours TIS, tap inspect each tailboom panel on both sides of the tailboom for debonding using an aluminum hammer. Pay particular attention to the previously repaired areas.

(e) If there is any debonding, mark the debond area and measure the size of the marked area.

(f) Before further flight, install tailboom structural reinforcement per MOD, P/N 3G5309P01812; if:

(1) The mathematical area of a single debond is equal to or greater than 320 mm² and is wholly within AREA 3 as depicted in Figure 2 of the ABT;

(2) The mathematical area of a single debond is equal to or exceeds 150 mm² if the debond occurs in area 1, 2, 4, or 5 as depicted in Figure 2 of the ABT; or

(3) The distance between the edges of any two debonded areas is less than 3 times the largest debond dimension of the two debonded areas measured on a line between the centers of the two debonded areas; or

(4) A debond is within 3 mm from any bond joint edge.

(g) If none of the criteria of paragraphs (f)(1) through (f)(4) of this AD are met, before further flight, repair the debonded area of the tailboom using FAA engineering approved data and procedures or replace the tailboom with an airworthy tailboom.

(h) Modifying the tailboom per MOD, P/N 3G5309P01812, is terminating action for the requirements of this AD.

(i) To request a different method of compliance or a different compliance time for this AD, follow the procedures in 14 CFR 39.19. Contact the Manager, Safety Management Group, FAA Attn: Sharon Miles, ASW-111, Aviation Safety Engineer, Rotorcraft Directorate, Regulations and Guidance Group, 2601 Meacham Blvd, Fort Worth, Texas 76137, telephone (817) 222-5122, fax (817) 222-5961, for information about previously approved alternative methods of compliance.

(j) The Joint Aircraft System/Component (JASC) Code is 5302: Rotorcraft Tailboom.

(k) The inspections shall be done on both sides of the tailboom by following the specified portions of Agusta Alert Bollettino Tecnico No. 139-195, Revision B, dated February 2, 2010. The Director of the Federal Register approved this incorporation by reference in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies may be obtained from Agusta, Via Giovanni Agusta, 520 21017 Cascina Costa di Samarate (VA), Italy, telephone 39 0331-229111, fax 39 0331-229605/222595, or at http://customersupport.agusta.com/technical_advice.php. Copies may be inspected 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.

(l) This amendment becomes effective on November 14, 2011.

Note: The subject of this AD is addressed in European Aviation Safety Agency AD No. 2011-0019, dated February 3, 2011

.Issued in Fort Worth, Texas, on September 13, 2011.

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