

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2013-0098; Directorate Identifier 2011-SW-039-AD; Amendment 39-17339; AD 2013-03-16]

RIN 2120-AA64

Airworthiness Directives; Bell Helicopter Textron Helicopters

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

ACTION: Final rule; request for comments.

SUMMARY: We are superseding an existing airworthiness directive (AD) for the Bell Helicopter Textron (Bell) Model 212 helicopters and adopting requirements for Bell Model 204B, 205A, 205A-1, 205B and 210 helicopters with certain part-numbered main rotor hub inboard strap fittings (fittings). This AD requires magnetic particle inspecting (MPI) the fittings for a crack, and if a crack exists, replacing the fittings with airworthy fittings. This AD is prompted by reports of additional cracked fittings and the determination that additional part-numbered fittings may not have been manufactured in accordance with approved manufacturing processes and controls. These actions are intended to identify a crack in the fitting, which may lead to the fitting's failure, loss of a main rotor blade, and subsequent loss of helicopter control.

DATES: This AD becomes effective February 27, 2013.

We must receive comments on this AD by April 15, 2013.

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 800-647-5227) is in the ADDRESSES section. Comments will be available in the AD docket shortly after receipt.

For service information identified in this AD, contact Bell Helicopter Textron, Inc., P.O. Box 482, Fort Worth, TX 76101, telephone (817) 280-3391, fax (817) 280-6466, or at <http://www.bellcustomer.com/files/>. You may review a copy 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: Michael Kohner, Aerospace Engineer, FAA, Rotorcraft Directorate, Rotorcraft Certification Office, 2601 Meacham Blvd., Fort Worth, Texas, 76137, phone: (817) 222-5170; fax: (817) 222-5783; email: mike.kohner@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

On March 29, 2011, the FAA issued AD 2011-08-01, Amendment 39-16651 (76 FR 18865, April 6, 2011), which superseded previously existing emergency AD 2010-25-51, for Bell Model 212 helicopters with a fitting, part number (P/N) 212-010-103-007 and with a certain serial number (S/N). AD 2011-08-01 retained the requirements of AD 2010-25-51 to replace certain serial-numbered fittings and perform an MPI for a crack on other serial-numbered fittings, and expanded the applicability to require performing an MPI on additional serial-numbered fittings. The AD based the compliance time for performing an MPI on the number of hours time-in-service (TIS) of the fitting. That AD was prompted by reports of cracks in fittings. Subsequently, the cracking was determined to have been caused by the manufacturer's failure to follow approved manufacturing processes and controls during the quenching operation from the heat treating of the fittings.

Since AD 2011-08-01 was issued, two additional fittings were found with a crack. Based on these additional reported cracks, we have determined that a crack may occur in a fitting regardless of the hours TIS. In addition, fitting P/Ns 204-012-102-001, -005, -009, 212-010-103-005, and -101, which are used on other model helicopters, are susceptible to the same type of cracking because they are of similar design and manufacture to fitting P/N 212-010-103-007, which was the subject of AD 2011-08-01. Failure of a fitting in flight may result in the loss of a main rotor blade and subsequent

loss of helicopter control. Therefore, this AD reduces the compliance time for performing an MPI of some serial-numbered fittings by requiring an MPI for all applicable serial-numbered fittings within 25 hours TIS or 15 days, whichever occurs first. This AD does not require you to report a cracked fitting to the Rotorcraft Certification Office.

FAA's Determination

We are issuing this AD because we evaluated all the relevant information and determined the unsafe condition described previously is likely to exist or develop in other products of the same type design.

Related Service Information

We have reviewed Bell Alert Service Bulletin (ASB) No. 212-10-141, Revision A, dated November 18, 2010, for the Model 212 helicopter, which specifies the immediate removal from service of fittings with certain S/Ns.

We have also reviewed ASB No. 204-11-66 for the Model 204B helicopters; ASB No. 205-11-107 for the Model 205A and 205A-1 helicopters; ASB No. 205B-11-58 for the Model 205B helicopters; ASB No. 210-11-08 for the Model 210 helicopters; and ASB No. 212-10-142, Revision B for the Model 212 helicopters; all dated May 31, 2011. These ASBs specify:

- For certain serial-numbered fittings with less than 400 flight hours, performing an initial MPI within 100 flight hours but before the fitting reaches 425 flight hours or before November 26, 2011, whichever occurs first.
- For certain serial-numbered fittings with more than 400 hours, performing an initial MPI within 25 flight hours or before November 26, 2011, whichever occurs first.
- Certain serial-numbered fittings that have already had an MPI during main rotor hub assembly maintenance or during an overhaul do not need an additional MPI. Historical records must be annotated to show compliance during records inspection.
- If defects are found, returning the removed strap fittings to Bell.
- If no defects are found, re-identifying the fitting by adding an "FM" at the end of the part number and making a record entry.
- Performing a recurring MPI on all fittings, regardless of S/N and prefix, at 1,200 hours or 24 months for all models, except the Model 210, and at the tension-torsion (TT) strap replacement for the Model 210 helicopters.

AD Requirements

This AD supersedes AD 2011-08-01 (76 FR 18865, April 6, 2011) and requires for any Model 204B, 205A, 205A-1, 205B, 210 and 212 helicopter with certain fittings the following actions:

- Within 25 hours TIS or 15 days, whichever occurs first, performing an MPI of each fitting for a crack.
- If a fitting is cracked, before further flight, replacing it with an airworthy fitting.
- If a fitting is not cracked, re-identifying the fitting and its component history card or equivalent record by adding "FM" at the end of the P/N.

If an MPI has previously been performed on a fitting and the component history card or equivalent record of the fitting has been re-identified with "FM" at the end of the P/N, the requirements of this AD have been met.

Differences Between This AD and the Service Information

This AD differs from the ASBs because we require an MPI within 25 hours time-in-service or 15 days, whichever occurs first, of any fitting with an affected P/N and S/N. Bell requires different compliance times depending on the hours TIS of the fitting. We do not require the immediate removal of fittings, P/N 212-010-103-007, with certain S/Ns because the MPI provides the necessary level of safety. We do not require returning parts to Bell.

Costs of Compliance

We estimate that this AD affects 152 helicopters of U.S. registry and that labor costs average \$85 per work-hour. Based on these estimates, we expect the following costs to comply with this AD:

- We estimate that 304 fittings (2 per helicopter) will need to be MPI inspected for a crack and that this task will require 40 work-hours. No parts are needed for the inspection, bringing the total cost per helicopter to \$3,400; \$516,800 for all U.S. operators.
- If a fitting is cracked, replacement parts will cost \$2,367 per fitting. Labor costs will not be an additional expense as they can be absorbed as part of the inspection.

According to Bell's 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 Bell. 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 the required corrective actions must be accomplished within 15 days, 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 and opportunity for public comment before issuing this AD are impracticable 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 removing Amendment 39-16651 (76 FR 18865, April 6, 2011) and adding the following new airworthiness directive (AD):



2013-03-16 Bell Helicopter Textron (Bell): Amendment 39-17339; Docket No. FAA-2013-0098; Directorate Identifier 2011-SW-39-AD.

(a) Applicability

This AD applies to Model 204B, 205A, 205A-1, 205B, 210 and 212 helicopters, certificated in any category, with a main rotor hub inboard strap fitting (fitting) with a part number (P/N) and serial number (S/N) listed in Table 1 to paragraph (a) of this AD.

Table 1 to paragraph (a)

Helicopter models	Fitting P/Ns	Fitting S/Ns
204B	204-012-102-001	All.
204B, 205A and 205A-1	204-012-102-005	All.
204B, 205A and 205A-1	204-012-102-009	All, except S/Ns 7500 or larger with a prefix of "A".
212	212-010-103-005	All.
212	212-010-103-007	All, except S/Ns 140 or larger with a prefix of "SH" and except S/Ns 11021 or larger with a prefix of " A".
205A-1, 205B and 210	212-010-103-101	All, except S/Ns 486 or larger with a prefix of "SH," and except S/Ns 10997 or larger with a prefix of "A".

(b) Unsafe Condition

This AD defines the unsafe condition as a crack in the fitting and the determination that additional part-numbered fittings may not have been manufactured in accordance with approved manufacturing processes and controls. This condition could result in failure of a fitting, loss of a main rotor blade, and loss of helicopter control.

(c) Affected ADs

This AD supersedes AD 2011-08-01, Docket No. FAA-2011-0323, Amendment 39-16651 (76 FR 18865, April 6, 2011), Directorate Identifier 2011-SW-005-AD.

(d) Effective Date

This AD becomes effective February 27, 2013.

(e) 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.

(f) Required Actions

(1) Within 25 hours time-in-service or 15 days, whichever occurs first, perform a magnetic particle inspection (MPI) of each fitting for a crack. If an MPI was already performed on a fitting resulting in re-identifying the fitting with "FM" at the end of the P/N or at the end of the P/N on the fitting's component history card or equivalent record, then the requirements of this AD have been met.

(2) If a fitting is cracked, before further flight, replace it with an airworthy fitting.

(3) If a fitting is not cracked, before further flight, re-identify the fitting by adding "FM" at the end of the P/N using a vibrating stylus. The depth of the "FM" must not exceed 0.005 inches or extend within 0.10 inch of the part's edge. Also, add "FM" at the end of the P/N on the fitting's component history card or equivalent record.

(g) Alternative Methods of Compliance (AMOCs)

(1) The Manager, Rotorcraft Certification Office, FAA, may approve AMOCs for this AD. Send your proposal to: Michael Kohner, Aerospace Engineer, FAA, Rotorcraft Directorate, Rotorcraft Certification Office, 2601 Meacham Blvd., Fort Worth, Texas, 76137, phone: (817) 222-5170; fax: (817) 222-5783; email: mike.kohner@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 AD through an AMOC.

(h) Additional Information

Bell Alert Service Bulletin (ASB) No. 212-10-141, Revision A, dated November 18, 2010; and ASBs No. 204-11-66, No. 205-11-107, No. 205B-11-58, No. 210-11-08; and No. 212-10-142 Revision B, all dated May 31, 2011, which are not incorporated by reference, contain additional information about the subject of this AD. For this service information, contact Bell Helicopter Textron, Inc., P.O. Box 482, Fort Worth, TX 76101, telephone (817) 280-3391, fax (817) 280-6466, or at <http://www.bellcustomer.com/files/>. You may review this service information at the FAA, Office of the Regional Counsel, Southwest Region, 2601 Meacham Blvd., Room 663, Fort Worth, Texas 76137.

(i) Subject

Joint Aircraft Service Component (JASC) Code: 6220, Main Rotor Head.

Issued in Fort Worth, Texas, on January 28, 2013.

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