[4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2012-1093; Directorate Identifier 2011-SW-020-AD]

RIN 2120-AA64

Airworthiness Directives; Brantly International, Inc. Helicopters

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: We propose to adopt a new airworthiness directive (AD) for the Brantly International, Inc. (Brantly) Model B-2, Model B-2A, and Model B-2B helicopters with a certain main rotor blade. This proposed AD was prompted by multiple reports of main rotor (M/R) blade cracks and an accident in which a crack that originated near the M/R blade trailing edge resulted in the loss of a large section of the M/R blade. The proposed actions are intended to prevent loss of the M/R blade and subsequent loss of control of the helicopter.

DATES: We must receive comments on this proposed 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 proposed 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 proposed AD, contact Brantly International, Inc, 621 South Royal Lane, Suite 100, Coppell Texas, 75019, telephone (972) 829-4638, email tarcher@superiorairparts.com. 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: Marc Belhumeur, Senior Project Engineer, Rotorcraft Certification Office, Rotorcraft Directorate, FAA, 2601 Meacham Blvd., Fort Worth, Texas 76137; telephone (817) 222-5177; email marc.belhumeur@faa.gov.

SUPPLEMENTARY INFORMATION:

Comments Invited

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 might result from adopting the proposals in this document. The most helpful comments reference a specific portion of the proposal, 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 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 proposed rulemaking. Before acting on this proposal, we will consider all comments we receive on or before the closing date for comments. We will consider comments filed after the comment period has closed if it is possible to do so without incurring expense or delay. We may change this proposal in light of the comments we receive.

Discussion

We propose to adopt a new AD for all Brantly B-2, B-2A, and B-2B helicopters with an M/R blade, part number (P/N) 248-101, 248-202, or 248-404. This proposed AD is prompted by a 2007 accident in New Zealand in which a large inboard section of the M/R blade of a Brantly B-2B helicopter separated from the helicopter during flight. Laboratory analysis concluded that the M/R blade failure was caused by hydrocarbon contaminants inside the blade's skin-to-foam bond and that the fracture originated near

the blade's trailing edge. There were three other reports of portions of M/R blades separating during flight and another five reports of M/R blades having cracks or other defects that were found during inspections.

FAA's Determination

We are proposing this AD because we evaluated all known relevant information and determined that an unsafe condition exists and is likely to exist or develop on other products of these same type designs.

Related Service Information

We reviewed Brantly International Inc. Service Bulletin No. 111, dated February 10, 2011 (SB 111). The bulletin describes procedures for inspecting the M/R blades every 300 hours time-in-service (TIS) using Eddy Current Procedure ET002, performing a visual inspection using a 10X power magnifying glass and conducting a tap test every 25 hours TIS and a visual inspection of the M/R blades before the first flight of the day.

Proposed AD Requirements

This proposed AD would require, before the first flight of each day, for any helicopter with M/R blade, P/N 248-101, 248-202, or 248-404, visually inspecting the M/R blade for a crack, nick, wrinkle, or bend. Within 8 hours TIS, this proposed AD would require for any helicopter with an M/R blade P/N 248-404 with 10 or more years in service or 1,000 or more hours TIS, whichever occurs first, or for any helicopter with M/R blade, P/N 248-101 or P/N 248-202:

- Having an inspector qualified to the American Society for Nondestructive Testing (ASNT) Level II or equivalent, perform an eddy current inspection for a crack

or a nick and repeating this inspection at intervals not to exceed 300 hours TIS or five calendar years, whichever occurs first.

- Tap inspecting for delamination focusing more attention on the inboard first 12 inches of the top and bottom of the M/R blade and repeating this action at intervals not to exceed 25 hours TIS.

- Visually inspecting with a 10X or higher power magnifying glass for a crack, nick, crease, wrinkle, bend, added hole (such as a drilled hole to stop the spread of a crack), extra rivet, or inadequate rivet spacing and repeating this inspection at intervals not to exceed 25 hours TIS.

- Before further flight, removing from service any M/R blade that has a crack, nick, crease, wrinkle, bend, extra hole, extra rivet or inadequate rivet spacing or any delamination.

Differences between this Proposed AD and the Service Information

SB 111 requires accomplishment of sections 1 and 2 before further flight. The proposed AD requires it to be completed within 8 hours TIS. SB 111 allows up to 10 square inches of delamination outside of the inboard 12 inches of the M/R blade. The proposed AD does not.

Costs of Compliance

We estimate that this proposed AD would affect 76 helicopters of U.S. registry. We estimate the following costs to comply with this proposed AD, using an average of $85 per work-hour:

- For the visual inspection before the first flight of each day, we estimate that it would require about one work-hour for a labor cost of $85 per inspection cycle. No parts would be needed, so the total cost for the U.S. fleet would be $6,460.

- For the eddy current inspection, we estimate that it would require about four work-hours for a labor cost of $340 per inspection cycle. No parts would be needed, so the total cost for the 76-helicopter U.S. fleet would be $25,840 per inspection cycle.

- For the visual inspection with the magnifying glass and the tap inspection, we estimate that it would require about three work-hours for a labor cost of $255 per inspection cycle. No parts would be needed, so the total cost for the U.S. fleet would be $19,380 per inspection cycle.

- Replacing an M/R blade, if needed, would require about two work-hours for a labor cost of $170. An M/R blade would cost $7,500 for a total cost of $7,670 per helicopter, assuming one M/R blade is replaced.

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 proposed AD would not have federalism implications under Executive Order 13132. This proposed AD would 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 this proposed 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 proposed 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.

The Proposed Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA proposes to amend 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 airworthiness directive (AD):

BRANTLY INTERNATIONAL, INC. Docket No. FAA-2012-1093; Directorate Identifier 2011-SW-020-AD.

(a) Applicability.

This AD applies to the Model B-2, Model B-2A, and Model B-2B helicopters, with a main rotor (M/R) blade, part number (P/N) 248-101, 248-202, or 248-404, installed, certificated in any category.

(b) Unsafe Condition.

This AD defines the unsafe condition as a crack, nick, crease, wrinkle, bend, extra hole, extra rivet, inadequate rivet spacing, or any delamination in an M/R blade. Any of these conditions could result in loss of an M/R blade and subsequent loss of control of the helicopter.

(c) 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.

(d) Required Actions.

(1) Before the first flight of each day, visually inspect each M/R blade for a crack, nick, wrinkle, or bend. Pay particular attention to the M/R blade root area, the area around the lead/lag damper mounting fork, and the trailing edge.

(2) Within 8 hours time-in-service (TIS), for a helicopter with an M/R blade, P/N 248-101 or P/N 248-202, and for a helicopter with an M/R blade P/N 248-404 with 10 or more years or 1,000 or more hours TIS, whichever occurs first, remove each M/R blade and:

(i) Using an inspector qualified to the American Society for Nondestructive Testing (ASNT) Level II or equivalent, eddy current inspect each M/R blade for a crack or a nick in accordance with paragraph number 4 and paragraph number 7 through 17 of Technique Number ET002, dated November 2007, attached to Brantly International, Inc., Service Bulletin No. 111, dated February 10, 2011 (SB 111).

(ii) Thereafter, at intervals not to exceed 300 hours TIS or five calendar years, whichever occurs first, repeat the eddy current inspection in accordance with the requirements of paragraph (d)(2)(i) of this AD.

(iii) Using a metallic coin or tap hammer, tap inspect each M/R blade for delamination in the bonded areas as shown on SB 111, Section 4. Pay particular attention to the root area in the first 12 inches of the top and bottom of each M/R blade.

(iv) Using a 10X or higher power magnifying glass, visually inspect for a crack, nick, crease, wrinkle, bend, extra hole (such as a stop drill hole), extra rivet, and any inadequate rivet spacing caused by additional holes or rivets.

(v) Thereafter, at intervals not to exceed 25 hours TIS, repeat the tap inspection in accordance with the requirements of paragraph (d)(2)(iii) of this AD and the visual inspection using a 10X or higher power magnifying glass in accordance with the requirements of paragraph (d)(2)(iv) of this AD.

(3) Before further flight, remove from service any M/R blade with a crack, nick, crease, wrinkle, bend, extra hole, extra rivet, delamination, or inadequate rivet spacing caused by additional holes or rivets.

(e) Alternative Methods of Compliance (AMOC).

(1) The Manager, Safety Management Group, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. Send your proposal to: Marc Belhumeur, Senior Project Engineer, Rotorcraft Certification Office, Rotorcraft Directorate, FAA, 2601 Meacham Blvd., Fort Worth, Texas 76137; telephone (817) 222-5177; email marc.belhumeur@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.

(f) Additional Information.

For service information identified in this AD, contact Brantly International, Inc, 621 South Royal Lane, Suite 100, Coppell Texas, 75019, telephone (972) 829-4638, email tarcher@superiorairparts.com. You may review a copy of this information at the FAA, Office of the Regional Counsel, Southwest Region, 2601 Meacham Blvd., Room

663, Fort Worth, Texas 76137.

(g) Subject.

Joint Aircraft Service Component (JASC) Code: 6210, Main Rotor Blade.

Issued in Fort Worth, Texas, on October 5, 2012.

Kim Smith,

Manager, Rotorcraft Directorate,
Aircraft Certification Service.

[FR Doc. 2012-25444 Filed 10/15/2012 at 8:45 am; Publication Date: 10/16/2012]