[4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2013-0574; Directorate Identifier 2008-SW-22-AD]

RIN 2120-AA64

Airworthiness Directives; Bell Helicopter Textron Canada (Bell) Helicopters

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: We propose to supersede an existing airworthiness directive (AD) for the Bell Model 407 helicopters. The existing AD currently requires preflight checking and repetitively inspecting for a crack in certain tailbooms that have been redesigned, replacing the tailboom if there is a crack, modifying and re-identifying certain tailbooms, installing an improved horizontal stabilizer assembly, and assigning a 5,000 hour time-in-service (TIS) limit. Since we issued that AD, we have received several additional reports of cracked tailboom skins. This proposed AD would retain the existing requirements and apply additional inspection requirements. The proposed actions are intended to prevent separation of the tailboom 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 Bell Helicopter Textron Canada, 12,800 Rue de l'Avenir, Mirabel, Quebec J7J1R4, telephone (450) 437-2862 or (800) 363-8023, fax (450) 433-0272 or at http://www.bellcustomer.com/files/. You may review 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: Sharon Miles, Aviation Safety Engineer, Regulations and Policy Group, Rotorcraft Directorate, FAA, 2601 Meacham Blvd., Fort Worth, Texas 76137, telephone (817) 222-5110, fax (817) 222-5961, email sharon.y.miles@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

On March 21, 2000, we issued AD 2000-06-10, Amendment 39-11651 (65 FR 16804, March 30, 2000), to require preflight checking and repetitively inspecting the tailboom for a crack and replacing the tailboom if a crack was found. On March 3, 2003, we issued AD 2003-05-03, Amendment 39-13079 (68 FR 11967, March 13, 2003), which superseded AD 2000-06-10. AD 2003-05-03 requires prelight checks and repetitive inspections, modifying and reidentifying certain tailbooms, installing an improved

horizontal stabilizer assembly, and assigning a 5,000-hour TIS life limit to certain tailbooms. AD 2003-05-03 was intended to prevent separation of the tailboom and subsequent loss of control of the helicopter.

Actions Since Existing AD Was Issued

Since we issued AD 2003-05-03, Transport Canada, which is the aviation authority for Canada, has issued Canadian AD No. CF-2008-04, dated January 11, 2008 (AD CF-2008-04), based on several reports of cracks to the tailboom skin on the left side in the area of horizontal stabilizer found by visual inspection. AD CF-2008-04 mandates new inspection requirements based on the manufacturer's service information discussed in the "Related Service Information" section of this NPRM.

FAA's Determination

This helicopter model has been approved by the aviation authority of Canada and is approved for operation in the United States. Pursuant to our bilateral agreement, Transport Canada has kept the FAA informed of the situation described above. We are proposing this AD because we evaluated all known relevant information and determined that an unsafe condition is likely to exist or develop on other helicopters of these same type designs.

Related Service Information

We reviewed Bell Alert Service Bulletin (ASB) No. 407-07-80 and ASB No. 407-01-48, Revision C, both dated August 27, 2007. In ASB No. 407-07-80, Bell states they have received additional reports of cracked tailboom skins, part number (P/N) 407-030-801-157, affecting tailboom assemblies, P/N 407-530-014-101 and -103 (modified per AD 2003-05-03, reference ASB 407-01-48, Revision B, dated April 25,

2002), and original production tailboom assembly, P/N 407-030-801-107. Each report indicated a crack above the left side upper stabilizer attachment support at Station 98.89. Further investigation conducted by Bell revealed other areas of the tailbooms require additional attention. Thus, ASB 407-07-080 contains procedures for preparing the tailboom for repetitive inspection, preflight checking the tailboom, and repetitively inspecting the tailboom. Bell specifies that replacing the affected tailboom assembly, P/N 407-530-014-101, -103 or 407-030-801-107, with tailboom assembly, P/N 407-030-801-201, -203, -205, or later dash numbers is terminating action for Bell ASB No. 407-07-80.

In ASB 407-01-48, Bell states that since issuing ASB 407-99-26, Revision C, dated February 28, 2002, they have received additional reports of cracks in the upper skins, which originated from holes where the fasteners are installed at the forward and aft section of the left upper stabilizer support, P/N 407-023-800-117. ASB 407-01-48 contains procedures for inspecting the tailboom on the left side where the fasteners are installed, installing an improved horizontal stabilizer assembly and re-identifying the tailboom, and assigning a 5,000-hour TIS life limit to the tailboom.

Proposed AD Requirements

This proposed AD addresses certain part-numbered tailbooms that were modified and reidentified as one new P/N. These same P/Ns are addressed by new inspection requirements. This proposed AD retains the requirements of the superseded AD for certain part-numbered tailbooms and establishes new requirements for certain other P/Ns, by requiring compliance with portions of the Bell ASBs as follows:

- For tailboom, P/Ns 407-030-801-101 and -105, which have not been modified, conduct daily preflight checks of the tailboom for a crack and repetitively inspect the

tailboom for a crack. Within 600 hours TIS or 30 days, modify and re-identify these part-numbered tailbooms as P/N 407-530-014-101 or 407-530-014-103, and install an improved horizontal stabilizer assembly.

- For P/Ns 407-530-014-101 and -103 and P/N 407-030-801-107, revise the Airworthiness Limitations section of the maintenance manual by establishing a retirement life of 5,000 hours TIS, prepare the tailboom for daily visual checks and inspections, and inspect the tailboom for a crack. Thereafter, visually check the tailboom for a crack before the first flight of each day and repetitively inspect the tailboom for a crack every 100 hours TIS.

- For all P/Ns, if there is a crack, before further flight, replace the tailboom. If there is no crack, ensure both surfaces are dry and protect each reworked area with a thin coat of clear coating.

- An owner/operator (pilot) may perform the daily visual checks required by this proposed AD because these checks require no special tools and can be performed equally well by a pilot or a mechanic. This authorization is an exception to our standard maintenance regulations.

Differences Between This Proposed AD and the Transport Canada AD

This AD would not require you to contact the manufacturer. This AD does not state that replacing the affected tailboom with tailboom, P/N 407-030-801-201, -203, -205, or later numbers constitutes terminating action because installing other part-numbered tailbooms than those listed in the applicability of this AD may also result in terminating action for the requirements of this AD.

Costs of Compliance

We estimate that this proposed AD would affect about 464 helicopters of U.S. registry. We estimate that operators would incur the following costs in order to comply with this AD. We estimate the time for conducting pilot checks is minimal and thus we are assuming there is no cost. It would take about .5 work-hour to perform the annotations in the helicopter records, 1.5 work hours to prepare the inspection area and do the magnification inspection, and 2.5 work hours to do the repetitive 100-hour TIS inspections at an average labor rate of $85 per work-hour. Based on these figures, we estimate the cost of the proposed AD on U.S. operators would be $1,445 per helicopter and $670,480 for the U.S. operator fleet to do the checks and inspections, based on 6 repetitive inspections the first year. The previous AD affected 284 helicopters, and we estimated 3.5 work hours to do the initial inspection, 1.5 work hours to do the recurring inspections, and 18 work hours to do the modification at an average labor rate of $60 per work hour. Required parts were estimated at $1,244 per helicopter. Based on these figures, the total cost of the AD on U.S. operators was estimated to be $3,254 per helicopter or $924,136, based on 8 repetitive inspections per year.

According to Bell, the cost of a new tailboom is $82,850. Per Bell ASB 407-07-80, the costs to replace the tailboom may be covered under warranty, thereby reducing the cost impact on affected individuals. We do not control warranty coverage by Bell. We have included all costs in our cost estimate.

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 removing Airworthiness Directive (AD) 2003-05-03 (68 FR 11967, March 13, 2003) and by adding the following new AD:

BELL HELICOPTER TEXTRON CANADA: Docket No. FAA-2013-0574; Directorate Identifier 2008-SW-22-AD.

(a) Applicability.

This AD applies to Model 407 helicopters, serial numbers 53000 through 53475, with tailboom, part number (P/N) 407-030-801-101, -105, or -107, or 407-530-014-101 or -103, installed, certificated in any category.

(b) Unsafe Condition.

This AD defines the unsafe condition as cracks in the tailboom skin on the left side in the area of horizontal stabilizer, which could result in separation of the tailboom and subsequent loss of control of the helicopter.

(c) Affected ADs.

This AD supersedes AD 2003-05-03, Amendment 39-13079 (68 FR 11967, March 13, 2003), which superseded AD 2000-06-10, Amendment 39-11651 (65 FR 16804, March 30, 2000).

(d) Comments Due Date.

We must receive comments by [INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE Federal Register].

(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) For tailboom, P/Ns 407-030-801-101 and -105:

(i) Unmodified per Bell Alert Service Bulletin (ASB) 407-01-48, Revision C, dated August 27, 2007 (ASB 407-01-48):

(A) Before the first flight of each day, visually check the tailboom for a crack, as depicted in Figure 1 to paragraph (f)(1)(i)(A) of this AD.

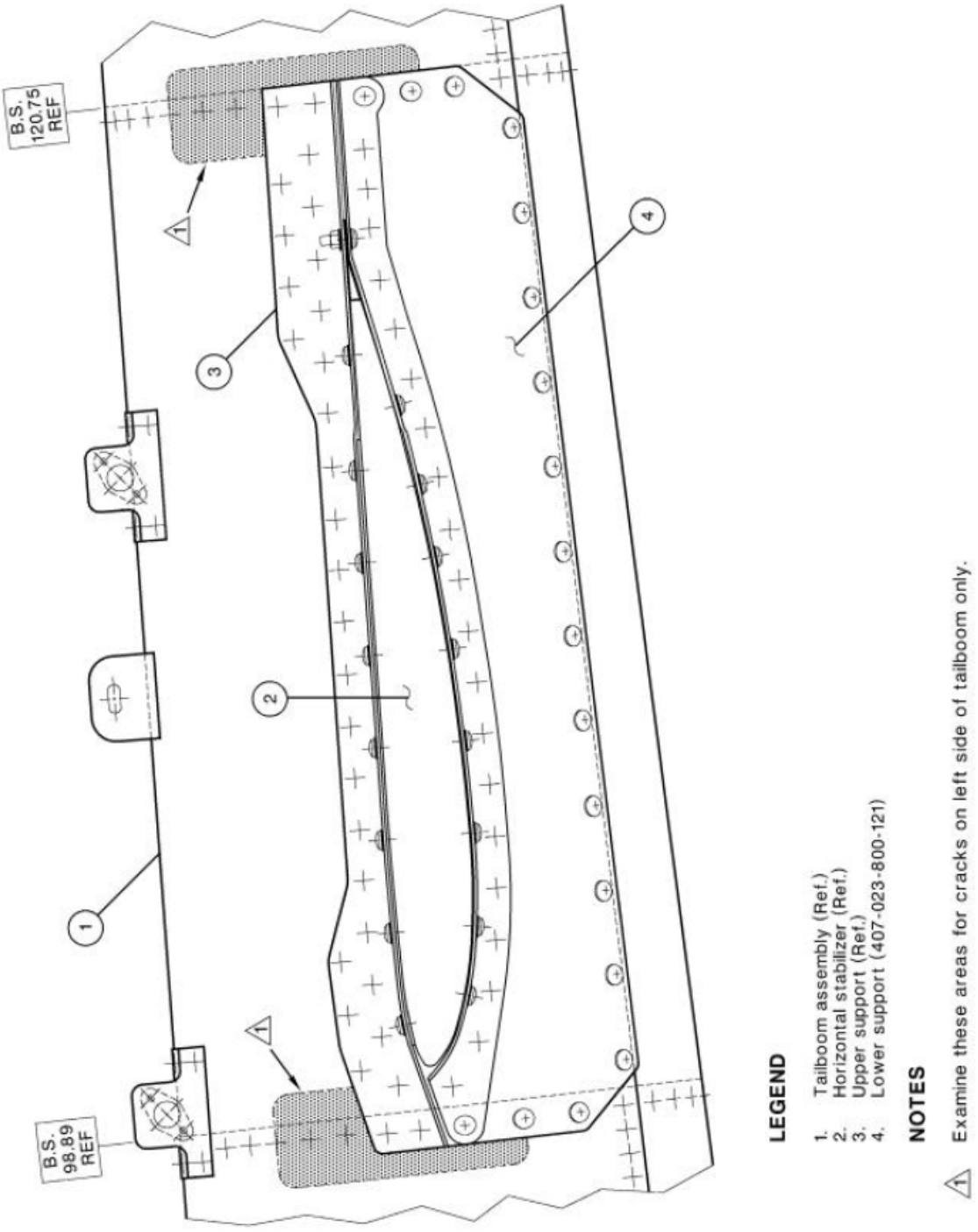

Figure 1 to Paragraph (f)(1)(i)(A)

(B) For a tailboom with 600 or more hours time-in-service (TIS), within 25 hours TIS and thereafter at intervals not to exceed 50 hours TIS, visually inspect the tailboom for a crack using a 10X or higher magnifying glass by following the Accomplishment Instructions, Part II, of Bell ASB 407-99-26, Revision C, dated February 28, 2002, except this AD does not require you to contact Bell.

(ii) Within 600 hours TIS, but not later than 30 days:

(A) Modify and re-identify each tailboom, P/N 407-030-801-101 as 407-530-014-101, and P/N 407-030-801-105 as 407-530-014-103, by following the Accomplishment Instructions, Parts I and III, of ASB 407-01-48.

(B) Install improved horizontal stabilizer assembly, P/N 407-023-800-ALL, by following Bell Technical Bulletin No. 407-01-33, dated August 29, 2001, except this AD does not require you to contact Bell.

(2) For tailboom, P/Ns 407-530-014-101 and -103, and P/N 407-030-801-107:

(i) Before further flight after the tailboom is modified and re-identified, revise the Airworthiness Limitations section of the maintenance manual by establishing a retirement life of 5,000 hours TIS. Create a component history card or equivalent record and assign a life limit of 5,000 hours TIS by following the Accomplishment Instructions, Part IV, of ASB 407-01-48.

(ii) Within 25 hours TIS or 30 days, whichever occurs first, prepare the tailboom for daily visual checks and recurring inspections and inspect the tailboom for a crack by following the Accomplishment Instructions, Part II, Steps 1.a) through 1.f), of Bell ASB 407-07-80, dated August 27, 2007 (ASB 407-07-80).

(iii) Thereafter, before the first flight of each day, clean the area on the tailboom where paint has been removed and visually check the tailboom for a crack as depicted in Figure 2 to Paragraph (f)(2)(iii) of this AD.

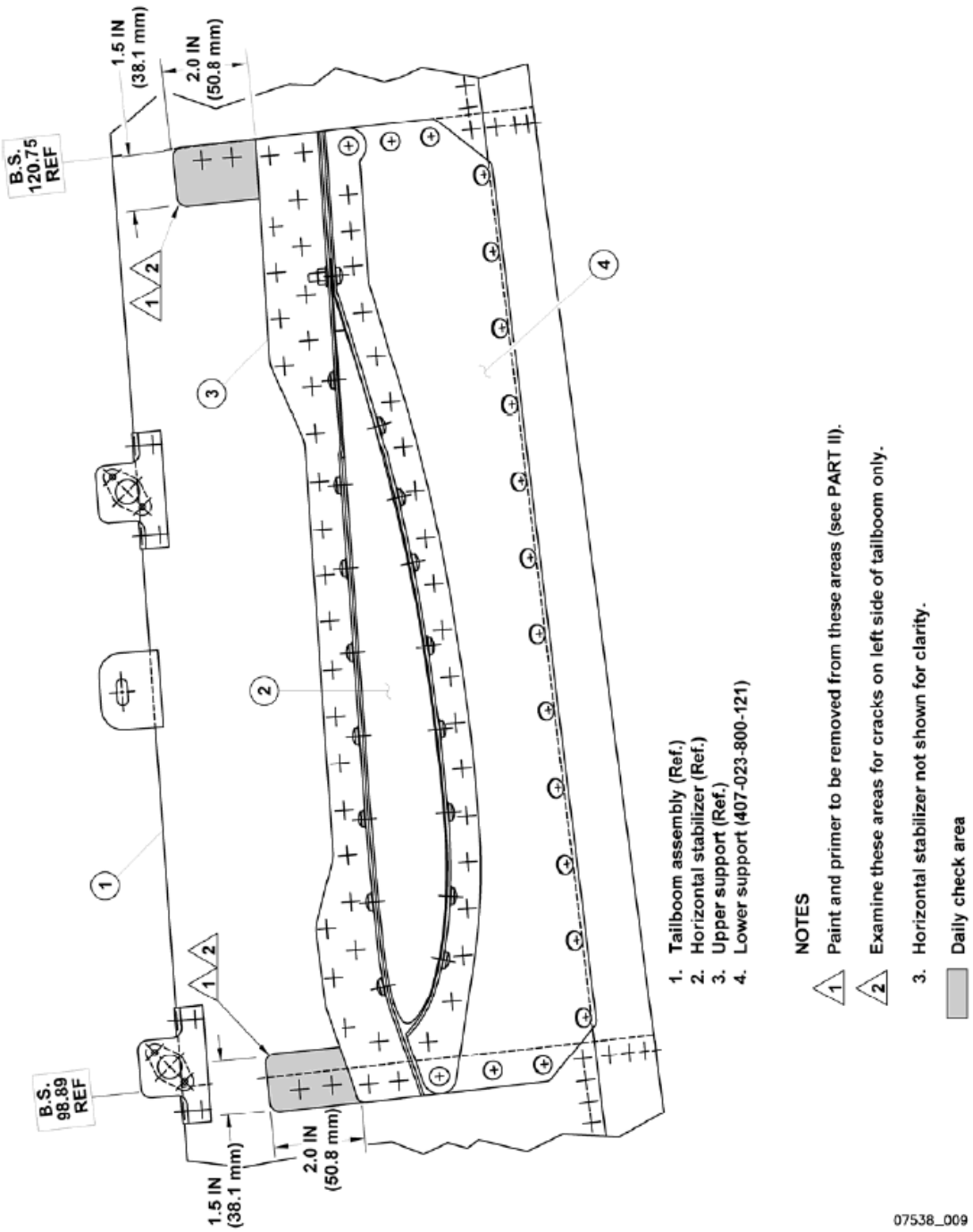

Figure 2 to Paragraph (f)(2)(iii)

(iv) Within 100 hours TIS and thereafter at intervals not to exceed 100 hours TIS, using a 10X or higher power magnifying glass, inspect each tailboom for a loose rivet, a crack, skin corrosion, or any other damage, by following the Accomplishment Instructions, Part IV, Steps 1 through 6, of ASB 407-07-80, except this AD does not require you to contact Bell. If there is corrosion within an allowable tolerance, repair each area of corrosion.

(3) If there is a crack, before further flight, replace the tailboom.

(4) If there is no crack, make sure both of the inspection area surfaces are dry and protect each reworked area with a thin coat of clear coating.

(5) The actions required by paragraphs (f)(1)(i)(A) and (f)(2)(iii) of this AD may be performed by the owner/operator (pilot) holding at least a private pilot certificate and must be entered into the aircraft records showing compliance with this AD in accordance with 14 CFR 43.9 (a)(1)-(4) and 91.417(a)(2)(v). This record must be maintained as required by 14 CFR 91.417, 121.380, or 135.439.

(g) Alternative Methods of Compliance (AMOCs).

(1) The Manager, Safety Management Group, FAA, may approve AMOCs for this AD. Send your proposal to: Sharon Miles, Aviation Safety Engineer, Regulations and Policy Group, Rotorcraft Directorate, FAA, 2601 Meacham Blvd., Fort Worth, Texas 76137; telephone (817) 222-5110; email sharon.y.miles@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.

The subject of this AD is addressed in Transport Canada Civil Aviation (TCCA) AD No. CF-2008-04, dated January 11, 2008. You may view the TCCA AD on the

Internet at http://www.regulations.gov in Docket No. FAA-2013-0574.

(i) Subject.

Joint Aircraft Service Component (JASC) Code is 5300: Rotorcraft Tail Boom, and 5302: Middle Section.

Issued in Fort Worth, Texas, on June 12, 2013.

Kim Smith,

Directorate Manager, Rotorcraft Directorate,
Aircraft Certification Service.

[FR Doc. 2013-16727 Filed 07/11/2013 at 8:45 am; Publication Date: 07/12/2013]