



[4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2020-0811; Product Identifier 2019-CE-055-AD]

RIN 2120-AA64

Airworthiness Directives; Textron Aviation Inc. (Textron) Airplanes

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: The FAA proposes to adopt a new airworthiness directive (AD) for certain Textron (type certificate previously held by Cessna Aircraft Company) Models 208 and 208B airplanes. This proposed AD was prompted by reports of loose elevator torque tube attach fasteners. This proposed AD would require repetitively inspecting the inboard and outboard elevator torque tube attachments for loose or incorrectly installed fasteners, replacing all fasteners if loose or incorrectly installed fasteners are found, and reporting the inspection results to the FAA. This AD also includes optional actions to terminate the repetitive inspections. The FAA is proposing this AD to address the unsafe condition on these products.

DATES: The FAA must receive comments on this proposed AD by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: You may send comments, using the procedures found in 14 CFR 11.43 and 11.45, by any of the following methods:

- Federal eRulemaking Portal: Go to <https://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: Deliver to Mail address above between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

- For service information identified in this NPRM, contact Textron Aviation Inc., One Cessna Boulevard, Wichita, KS 67215: Telephone: 316-517-5800: email: teamturbopropsupport@txtav.com; internet: <https://support.cessna.com>. You may view this service information at the FAA, Airworthiness Products Section, Operational Safety Branch, 901 Locust St, Kansas City, MO 64106. For information on the availability of this material at the FAA, call 816-329-4148.

Examining the AD Docket

You may examine the AD docket on the internet at <https://www.regulations.gov> by searching for and locating Docket No. FAA-2020-0811; or in person at Docket Operations between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this NPRM, the regulatory evaluation, any comments received, and other information. The street address for Docket Operations is listed above. Comments will be available in the AD docket shortly after receipt.

FOR FURTHER INFORMATION CONTACT: Bobbie Kroetch, Aerospace Engineer, Wichita ACO Branch, FAA, 1801 Airport Road, Wichita, Kansas 67209; phone: 316-946-4155; fax: 316-946-4107; email: bobbie.kroetch@faa.gov or Wichita-COS@faa.gov.

SUPPLEMENTARY INFORMATION:

Comments Invited

The FAA invites you to send any written relevant data, views, or arguments about this proposal. Send your comments to an address listed under the ADDRESSES section. Include “Docket No. FAA-2020-0811; Product Identifier 2019-CE-055-AD” at the

beginning of your comments. The FAA will consider all comments received by the closing date and may amend this NPRM because of those comments.

Except for Confidential Business Information (CBI) as described in the following paragraph, and other information as described in 14 CFR 11.35, the FAA will post all comments received, without change, to <https://www.regulations.gov>, including any personal information you provide. The FAA will also post a report summarizing each substantive verbal contact it receives about this proposed AD.

Confidential Business Information

Confidential Business Information (CBI) is commercial or financial information that is both customarily and actually treated as private by its owner. Under the Freedom of Information Act (FOIA) (5 U.S.C. 552), CBI is exempt from public disclosure. If your comments responsive to this NPRM contain commercial or financial information that is customarily treated as private, that you actually treat as private, and that is relevant or responsive to this NPRM, it is important that you clearly designate the submitted comments as CBI. Please mark each page of your submission containing CBI as "PROPIN." The FAA will treat such marked submissions as confidential under the FOIA, and they will not be placed in the public docket of this NPRM. Submissions containing CBI should be sent to Bobbie Kroetch, Aerospace Engineer, Wichita ACO Branch, FAA, 1801 Airport Road, Wichita, Kansas 67209. Any commentary that the FAA receives which is not specifically designated as CBI will be placed in the public docket for this rulemaking.

Discussion

The FAA received reports of loose elevator torque tube attach fasteners on low flight time Textron Model 208B airplanes. Textron identified a quality escape affecting certain serial-numbered Model 208 and 208B airplanes. Fastener holes in the inboard and outboard elevator torque tube connections may have been oversized and fasteners at the inboard and outboard torque tube connections may have been installed incorrectly.

This condition, if not addressed, could result in failure of the elevator torque tube fasteners, leading to loss of elevator control and loss of controlled flight.

Related Service Information under 1 CFR part 51

The FAA reviewed Task 27-30-00-290, Left and Right Elevator Torque Tube Attach Points (Borescope) Special Detailed Inspection, dated October 1, 2018, of the Cessna Model 208 Maintenance Manual (Task 27-30-00-290). This service information contains procedures for performing a detailed borescope inspection of the left and right elevator torque tube attach points. This service information is reasonably available because the interested parties have access to it through their normal course of business or by the means identified in the ADDRESSES section.

Other Related Service Information

The FAA also reviewed Textron Aviation Mandatory Caravan Service Bulletin CAB-27-06, dated October 14, 2019 (CAB-27-06). This service information contains instructions for visually inspecting the left and right elevator torque tube attach points for the presence of loose rivets and replacing loose or incorrectly installed rivets.

FAA's Determination

The FAA is proposing this AD because it evaluated all the relevant information and determined the unsafe condition described previously is likely to exist or develop in other products of this same type design.

Proposed AD Requirements

This proposed AD would require accomplishing the actions specified in the service information described previously, except as discussed under “Differences Between this Proposed AD and the Service Information.” This proposed AD also requires reporting the inspection results to the FAA.

Differences Between this Proposed AD and the Service Information

Task 27-30-00-290 only specifies replacing loose fasteners. The proposed AD would require replacement of all 48 fasteners if any single inboard or outboard elevator torque tube attach fastener is found loose or incorrectly installed. The FAA determined based on field evidence that identification of one loose fastener often indicates other fasteners may be affected.

CAB-27-06, which would not be incorporated by reference in this proposed AD, specifies performing an initial inspection within 800 flight hours or 12 months from date of receipt, whichever occurs first. This proposed AD would require an initial inspection before the airplane accumulates 800 hours time-in-service (TIS) or within 200 hours TIS after the AD effectivity date, whichever occurs later.

CAB-27-06 also specifies, without sufficient data, that an inspection is not required for airplanes that have reached 4,000 hours. The FAA determined an inspection of high-time airplanes is necessary to verify whether these airplanes are affected. This proposed AD would require a one-time visual inspection for airplanes that have already accumulated 4,000 hours TIS.

Costs of Compliance

The FAA estimates that this proposed AD affects 232 airplanes of U.S. registry.

The FAA estimates the following costs to comply with this proposed AD:

Estimated Costs				
Action	Labor cost	Parts cost	Cost per product	Cost on U.S. operators
Inspection	1 work-hour X \$85 per hour = \$85	Not applicable	\$85 per inspection cycle	\$19,720 per inspection cycle
Reporting Requirement	1 work-hour X \$85 per hour = \$85	Not applicable	\$85 per report	\$19,720 per report

The FAA estimates the following costs to do any necessary replacements that would be required based on the results of the proposed inspection. The FAA has no way of determining the number of airplanes that might need these replacements:

On-condition Costs			
Action	Labor cost	Parts cost	Cost per product
Fastener Replacement: All 48 Fasteners	16 work-hours X \$85 per hour = \$1,360	\$10	\$1,370

According to the manufacturer, some of the costs of this proposed AD may be covered under warranty, thereby reducing the cost impact on affected individuals. The FAA does not control warranty coverage for affected individuals. As a result, the FAA has included all costs in this cost estimate.

Paperwork Reduction Act

A federal agency may not conduct or sponsor, and a person is not required to respond to, nor shall a person be subject to a penalty for failure to comply with a collection of information subject to the requirements of the Paperwork Reduction Act unless that collection of information displays a currently valid OMB Control Number. The OMB Control Number for this information collection is 2120-0056. Public reporting for this collection of information is estimated to be approximately 1 hour per response,

including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, completing and reviewing the collection of information. All responses to this collection of information are mandatory. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden to: Information Collection Clearance Officer, Federal Aviation Administration, 10101 Hillwood Parkway, Fort Worth, TX 76177-1524.

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.

The FAA is 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

The FAA 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 above, I certify this proposed regulation:

(1) Is not a “significant regulatory action” under Executive Order 12866,

(2) Will not affect intrastate aviation in Alaska, and

(3) 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.

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):

Textron Aviation Inc. (Type Certificate Previously Held by Cessna Aircraft Company): Docket No. FAA-2020-0811; Product Identifier 2019-CE-055-AD.

(a) Comments Due Date

The FAA must receive comments by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE Federal Register].

(b) Affected ADs

None.

(c) Applicability

This AD applies to Textron Aviation Inc. (Textron) (type certificate previously held by Cessna Aircraft Company) Model 208 airplanes, serial numbers 20800564 through 20800594 and 20800603 through 20800605; and Model 208B airplanes, serial numbers 208B5141 through 208B5285, 208B5287 through 208B5305, 208B5307 through 208B5312, 208B5314, 208B5316 through 208B5344, 208B5346 through 208B5350, 208B5353, 208B5354, 208B5356 through 208B5359, 208B5362 through 208B5366, 208B5401, 208B5403, 208B5404, and 208B5408; certificated in any category.

(d) Subject

Joint Aircraft System Component (JASC)/Air Transport Association (ATA) of America Code: 5520, Elevator Structure.

(e) Unsafe Condition

This AD was prompted by reports loose elevator torque tube attach fasteners. The FAA is issuing this AD to detect and correct loosening and eventual failure of the elevator torque tube attach fasteners. The unsafe condition, if not addressed, could result in loss of elevator control, resulting in loss of control of the airplane.

(f) Compliance

Comply with this AD within the compliance times specified, unless already done.

(g) Inspection and Fastener Replacement

(1) At the following compliance times, inspect each inboard and outboard elevator torque tube attach fastener for looseness and fretting by following sections 2.C. and 2.D. of Task 27-30-00-290, Left and Right Elevator Torque Tube Attach Points (Borescope) Special Detailed Inspection, dated October 1, 2018, of the Cessna Model 208 Maintenance Manual. You must also inspect for incorrectly installed fasteners.

(i) For airplanes that have accumulated less than 800 hours time-in-service (TIS) as of the effective date of this AD, complete the initial inspection before the airplane

accumulates 800 hours TIS or within 200 hours TIS after the effective date of the AD, whichever occurs later. Thereafter, repeat the visual inspection at intervals not to exceed 200 hours TIS until the airplane has accumulated 4,000 hours TIS or until all 48 elevator torque tube attach fasteners are replaced, whichever occurs first.

(ii) For airplanes that have accumulated 800 or more hours TIS but less than 4,000 hours TIS as of the effective date of this AD, complete the initial inspection within 200 hours TIS after the effective date of the AD. Thereafter, repeat the visual inspection at intervals not to exceed 200 hours TIS until the airplane has accumulated 4,000 hours TIS or until all 48 elevator torque tube attach fasteners are replaced, whichever occurs first.

(iii) For airplanes that have accumulated 4,000 or more hours TIS as of the effective date of this AD, complete a one-time visual inspection within 200 hours TIS after the effective date of the AD. No repetitive inspections are required after completion of the one-time visual inspection.

(2) If there are any loose, fretting, or incorrectly installed fasteners, remove the elevator and replace all 48 elevator torque tube attach fasteners (24 per side, with 12 each on the inboard and outboard elevator torque tube attach point) before further flight. Maintain proper alignment by marking each part prior to removal and by replacing one fastener at a time. Replacing all 48 fasteners is terminating action for the repetitive inspections required by paragraphs (g)(1)(i) and (ii) of this AD.

(3) If all 48 fasteners were replaced before the effective date of this AD by following the instructions in paragraph (g)(2) of this AD, then the initial and recurring inspections detailed in paragraph (g)(1) of this AD are not required provided you report the information required by paragraph (h) of this AD.

(h) Reporting Requirement

Within 30 days after doing the initial inspection (regardless if loose, fretting, or incorrectly installed fasteners were found) or within 30 days after the effective date of

this AD, whichever occurs later, and then within 30 days after each inspection where loose, fretting, or incorrectly installed fasteners were found, report the following information to the FAA at Wichita-COS@faa.gov:

- (1) Name and address of owner.
- (2) Date of the inspection.
- (3) Name, address, telephone number, and email address of person submitting the report.
- (4) Airplane serial number, registration number, and total hours TIS on the airplane at the time of the inspection.
- (5) If an earlier inspection identified loose, fretting, or incorrectly installed fasteners, identify the hours TIS on the airplane and which fasteners were replaced, if known, or if all fasteners were replaced.
- (6) If loose, fretting, or incorrectly installed fasteners were found, detailed information including a sketch or picture showing the location of the loose, fretting, or incorrectly installed fasteners and identification of any installed supplemental type certificates (STCs), alterations, repairs, or field approvals affecting the area of concern.

(i) Paperwork Reduction Act Burden Statement

A federal agency may not conduct or sponsor, and a person is not required to respond to, nor shall a person be subject to a penalty for failure to comply with a collection of information subject to the requirements of the Paperwork Reduction Act unless that collection of information displays a currently valid OMB Control Number. The OMB Control Number for this information collection is 2120-0056. Public reporting for this collection of information is estimated to be approximately 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, completing and reviewing the collection of information. All responses to this collection of information are mandatory. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden to: Information Collection Clearance Officer, Federal Aviation Administration, 10101 Hillwood Parkway, Fort Worth, TX 76177-1524.

(j) Alternative Methods of Compliance (AMOCs)

(1) The Manager, Wichita ACO Branch, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the manager of the certification office, send it to the attention of the person identified in the Related Information section of this AD.

(2) Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office.

(k) Related Information

(1) For more information about this AD, contact Bobbie Kroetch, Aerospace Engineer, Wichita ACO Branch, FAA, 1801 Airport Rd, Wichita, KS 67209; phone: 316-946-4155; fax: 316-946-4107; email: bobbie.kroetch@faa.gov or Wichita-COS@faa.gov.

(2) For service information identified in this AD, contact Textron Aviation Inc., One Cessna Boulevard, Wichita, KS 67215, telephone: 316-517-5800, email: teamturbopropsupport@txtav.com, internet: <https://support.cessna.com>. You may review this referenced service information at the FAA, Airworthiness Products Section, Operational Safety Branch, 901 Locust, Kansas City, Missouri 64106. For information on the availability of this material at the FAA, call (816) 329-4148.

Issued on September 15, 2020.

Lance T. Gant, Director,
Compliance & Airworthiness Division,
Aircraft Certification Service.