



[4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2018-0068; Product Identifier 2017-CE-049-AD; Amendment 39-19176; AD 2018-03-03]

RIN 2120-AA64

Airworthiness Directives; Textron Aviation Inc. Airplanes

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule; request for comments.

SUMMARY: We are adopting a new airworthiness directive (AD) for certain Textron Aviation Inc. Models 401, 401A, 401B, 402, 402A, 402B, 402C, 411, 411A, 414, 414A, 421, 421A, 421B, 421C, and 425 airplanes. This AD requires repetitively inspecting the left and the right forward lower carry through spar cap for cracks and replacing the carry through spar if cracks are found. This AD was prompted by a report of a fully cracked lower forward carry through spar cap found on an affected airplane. We are issuing this AD to address the unsafe condition on these products.

DATES: This AD is effective [INSERT DATE 15 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The Director of the Federal Register approved the incorporation by reference of certain publications listed in this AD as of [INSERT DATE 15 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

We must receive comments on this 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 <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.

For service information identified in this final rule, contact Textron Aviation Inc., Textron Aviation Customer Service, One Cessna Blvd., Wichita, Kansas 67215; telephone: (316) 517-5800; email: customercare@txtav.com; Internet: www.txtav.com. You may view this service information at the FAA, Policy and Innovation Division, 901 Locust, Kansas City, Missouri 64106. For information on the availability of this material at the FAA, call (816) 329-4148. It is also available on the internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2018-0068.

Examining the AD Docket

You may examine the AD docket on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2018-0068; 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 final rule, the regulatory evaluation, any comments

received, and other information. The street address for Docket Operations (phone: 800-647-5527) is in the ADDRESSES section. Comments will be available in the AD docket shortly after receipt.

FOR FURTHER INFORMATION CONTACT: Bobbie Kroetch, Aerospace Engineer, Wichita ACO Branch, 1801 Airport Road, Room 100, Wichita, Kansas 67209; telephone: (316) 946-4155; fax: (316) 946-4107; email: bobbie.kroetch@faa.gov or Wichita-COS@faa.gov.

SUPPLEMENTARY INFORMATION:

Discussion

We received a report of a fully cracked lower forward carry through spar cap found on a Textron Aviation Inc. (type certificate previously held by Cessna Aircraft Company) Model 402C airplane. Investigation revealed that the crack is a result of metal fatigue. At this time, the cracking has only been found on the Model 402C airplanes. However, the carry through spar cap and surrounding structure on the other model airplanes included in this AD are similar and the loads on the other model airplanes are similar to (or higher than) the Model 402C airplanes.

This condition, if not addressed, could cause failure of the carry through spar cap during flight and result in loss of control. We are issuing this AD to address the unsafe condition on these products.

Related Service Information under 1 CFR part 51

We reviewed Textron Aviation Multi-engine Mandatory Service Letter MEL-57-01 and Textron Aviation Conquest Mandatory Service Letter CQL-57-01, both dated December 18, 2017. As applicable, these service letters describe procedures for repetitively inspecting the forward lower carry through spar cap for cracks. 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

We reviewed Textron Aviation Conquest Service Bulletin CQB-57-01, Textron Aviation Multi-engine Service Bulletin MEB-57-01, and Textron Multi-engine Service Bulletin MEB-57-02, all dated December 20, 2017. As applicable, these service bulletins provide the manufacturer's optional procedures for installing access panels for easier access to the forward lower carry through spars. This AD does not require installing the access panels.

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.

AD Requirements

This AD requires repetitively inspecting the left and the right forward lower carry through spar cap for cracks and replacing the carry through spar if cracks are found. This AD also requires sending the inspection results to the FAA.

Interim Action

We consider this AD interim action. Textron Aviation Inc. is evaluating the initial and repetitive inspection intervals, as well as designing a replacement lower carry through spar cap from an improved material. After the evaluations are complete and the design modification is developed, approved, and available, we may consider additional rulemaking.

FAA's Justification and Determination of the Effective Date

An unsafe condition exists that requires the immediate adoption of this AD without providing an opportunity for public comments prior to adoption. The FAA has found that the risk to the flying public justifies waiving notice and comment prior to adoption of this rule because cracks in the left and/or the right forward lower carry through spar cap could cause the carry through spar cap to fail during flight and result in loss of control. Therefore, we find good cause that notice and opportunity for prior public comment are impracticable. In addition, for the reason stated above, we find that good cause exists for making this amendment effective in less than 30 days.

Comments Invited

This AD is a final rule that involves requirements affecting flight safety and was not preceded by notice and an opportunity for public comment. However, we invite you to send any written data, views, or arguments about this final rule. Send your comments to an address listed under the ADDRESSES section. Include the docket number FAA-2018-0068 and Product Identifier 2017-CE-049-AD at the beginning of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of this final rule. We will consider all comments received by the closing date and may amend this final rule because 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 we receive about this final rule.

Costs of Compliance

We estimate that this AD affects 2,147 airplanes of U.S. registry.

We estimate the following costs to comply with this AD:

Estimated costs

Action	Labor cost	Parts cost	Cost per product	Cost on U.S. operators
Inspect the left and the right forward lower carry through spar cap for cracks (without inspection access panels)	12 work-hours X \$85 per hour = \$1,020 per inspection cycle	Not applicable	\$1,020 per inspection cycle	\$2,189,940 per inspection cycle

We estimate the following costs to do any necessary replacement that would be required based on the results of the inspection. We have no way of determining the number of aircraft that might need this replacements:

On-condition costs

Action	Labor cost	Parts cost	Cost per product
Replace carry through spar	800 work-hours X \$85 per hour = \$68,000	\$5,000	\$73,000

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 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 current valid OMB control number. The control number for the collection of information required by this AD is 2120-0056. The paperwork cost associated with this AD has been detailed in the Costs of Compliance section of this document and includes time for reviewing instructions, as well as completing and reviewing the collection of information. Therefore, all reporting associated with this AD is mandatory. Comments concerning the accuracy of this burden

and suggestions for reducing the burden should be directed to the FAA at 800 Independence Ave., SW, Washington, DC 20591. ATTN: Information Collection Clearance Officer, AES-200.

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.

This AD is issued in accordance with authority delegated by the Executive Director, Aircraft Certification Service, as authorized by FAA Order 8000.51C. In accordance with that order, issuance of ADs is normally a function of the Compliance and Airworthiness Division, but during this transition period, the Executive Director has delegated the authority to issue ADs applicable to small airplanes, gliders, balloons, airships, domestic business jet transport airplanes, and associated appliances to the Director of the Policy and Innovation Division.

Regulatory Findings

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 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, 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.

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 adding the following new airworthiness directive (AD):

2018-03-03 **Textron Aviation Inc.:** Amendment 39-19176; Docket No.

FAA-2018-0068; Product Identifier 2017-CE-049-AD.

(a) Effective Date

This AD is effective [INSERT DATE 15 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(b) Affected ADs

None.

(c) Applicability

This AD applies to the following Textron Aviation Inc. (type certificate previously held by Cessna Aircraft Company) model airplanes, that are certificated in any category:

Table 1 to paragraph (c) of this AD – Affected Models and Serial Numbers

Model	Serial Numbers
401	401-0001 through 401-0322
401A	401A0001 through 401A0132
401B	401B0001 through 401B0221
402	402-0001 through 402-0322
402A	402A0001 through 402A0129
402B	402B0001 through 402B1384
402C	689, 402C0001 through 402C1020
411	411-0001 through 411-0250
411A	411-0251 through 411-0300
414	414-0001 through 414-0965
414A	414A0001 through 414A1212
421	421-0001 through 421-0200
421A	421A0001 through 421A0158
421B	421B0001 through 421B0970
421C	421C0001 through 421C1807
425	425-0001 through 425-0236

(d) Subject

Joint Aircraft System Component (JASC)/Air Transport Association (ATA) of America Code 53, Fuselage.

(e) Unsafe Condition

This AD was prompted by a report that a fully cracked lower forward carry through spar cap was found on a Textron Model 402C airplane. We are issuing this AD to prevent failure of the carry through spar cap during flight. The unsafe condition, if not addressed, could result in loss of control.

(f) Compliance

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

(g) Initial Inspection for All Affected Airplanes with 24,975 Hours Time-In-Service (TIS) or More on the Carry Through Spars

Within the next 25 hours TIS after [INSERT DATE 15 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER] (the effective date of this AD), do a detailed visual inspection of the left and right forward lower carry through spar cap for cracks. Using a 10X magnifier visually inspect the bottom surface of the carry through spar cap in the areas around the fasteners located just inboard of the left-hand and right-hand forward lower wing fittings. If a crack is not positively identified during the detailed visual inspection but is suspected or the area is questionable, before further flight, do a surface eddy current inspection of the suspected area. Do these inspections using the Accomplishment Instructions in Textron Aviation Multi-engine Mandatory Service Letter MEL-57-01 and Textron Aviation Conquest Mandatory Service Letter CQL-57-01, both dated December 18, 2017, as applicable.

(h) Initial Inspection for All Affected Airplanes with Less Than 24,975 Hours TIS on the Carry Through Spars

Using the compliance times listed in paragraphs (h)(1) through (3) of this AD, do a detailed visual inspection of the left and right forward lower carry through spar cap for cracks. Using a 10X magnifier visually inspect the bottom surface of the carry through spar cap in the areas around the fasteners located just inboard of the left-hand and right-hand forward lower wing fittings. If a crack is not positively identified during the detailed visual inspection but is suspected or the area is questionable, before further flight, do a surface eddy current inspection of the suspected area. Do these inspections using the Accomplishment Instructions in Textron Aviation Multi-engine Mandatory Service Letter MEL-57-01 and Textron Aviation Conquest Mandatory Service Letter CQL-57-01, both dated December 18, 2017, as applicable.

(1) For Models 401, 401A, 401B, 402, 402A, 402B, 402C, 411, 411A, 414, 414A, 421, and 421A airplanes: Before the accumulation of 15,000 TIS on the carry through spars or within the next 50 hours TIS after [INSERT DATE 15 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER] (the effective date of this AD), whichever occurs later.

(2) For Models 421B and 421C airplanes: Before the accumulation of 12,000 hours TIS on the carry through spars or within the next 50 hours TIS after [INSERT DATE 15 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER] (the effective date of this AD), whichever occurs later.

(3) For Model 425 airplanes: Before the accumulation of 11,000 TIS on the carry through spars or within the next 50 hours TIS after [INSERT DATE 15 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER] (the effective date of this AD), whichever occurs later.

(i) Repetitive Inspections for All Affected Airplanes

If no cracks are found during the detailed visual inspections or the surface eddy current inspections required in paragraphs (g) and (h) of this AD, repetitively thereafter inspect at intervals not to exceed 50 hours TIS. Inspect as specified in paragraphs (g) and (h) of this AD using the service information specified in each paragraph as applicable.

(j) Replacement of Carry Through Spars for All Affected Airplanes

If cracks are found during any inspection required in paragraphs (g) through (i) and paragraph (k) of this AD, before further flight, replace the carry through spar.

(k) Initial and Repetitive Inspections of Newly Replaced Carry Through Spars for All Affected Airplanes

At the compliance times in paragraphs (k)(1) through (3) of this AD, do a detailed visual inspection of the left and right forward lower carry through spar cap for cracks. Using a 10X magnifier visually inspect the bottom surface of the carry through spar cap in the areas around the fasteners located just inboard of the left-hand and right-hand forward lower wing fittings. If a crack is not positively identified during the detailed visual inspection but is suspected or the area is questionable, before further flight, do a surface eddy current inspection of the suspected area. Do these inspections using the Accomplishment Instructions in Textron Aviation Multi-engine Mandatory Service Letter MEL-57-01 and Textron Aviation Conquest Mandatory Service Letter CQL-57-01, both dated December 18, 2017, as applicable.

(1) For Models 401, 401A, 401B, 402, 402A, 402B, 402C, 411, 411A, 414, 414A, 421, and 421A airplanes: Before the accumulation of 15,000 hours TIS on the newly installed carry through spar. If no cracks are found, repetitively thereafter inspect at intervals not to exceed 50 hours TIS.

(2) For Models 421B and 421C airplanes: Before the accumulation of 12,000 hours TIS on the newly installed carry through spar. If no cracks are found, repetitively thereafter inspect at intervals not to exceed 50 hours TIS.

(3) For Model 425 airplanes: Before the accumulation of 11,000 hours TIS on the newly installed carry through spar. If no cracks are found, repetitively thereafter inspect at intervals not to exceed 50 hours TIS.

(l) Reporting Requirement for All Affected Airplanes

Within 30 days after each inspection required by paragraphs (g) through (i) and paragraph (k) of this AD, report the results of the inspection to the FAA representative identified in paragraph (q) of this AD using the undated Attachment (titled Spar Cap Inspection Results Form and Spar Cap Inspection Results Form Continued) to Textron Aviation Multi-engine Mandatory Service Letter MEL-57-01 and Textron Aviation Conquest Mandatory Service Letter CQL-57-01, both dated December 18, 2017, as applicable. Please identify AD 2018-03-03 in the subject line if submitted through email.

(m) Installation of Optional Access Panels All Affected Airplanes

Textron Aviation Conquest Service Bulletin CQB-57-01, Textron Aviation Multi-engine Service Bulletin MEB-57-01, and Textron Multi-engine Service Bulletin MEB-57-02, all dated December 20, 2017, provide the manufacturer's optional procedures for installing access panels for easier access to the forward carry through spars. This AD does not require installing the access panels, but does not restrict the owner/operator from doing so.

(n) Credit for Actions Done Following Previous Service Information For Affected Airplanes

This AD allows credit for the initial inspection of the forward lower carry through spar cap required in paragraphs (g) and (h) of this AD if done before [INSERT DATE 15 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER] (the effective date of this AD) using the following documents:

(1) Models 401, 401A, 401B, 402, 402A, 402B airplanes: Cessna Aircraft Company Model 401/402 Supplemental Inspection Document, Supplemental Inspection Number 57-10-10, dated June 3, 2002.

(2) Model 402C airplanes: Cessna Aircraft Company Model 402C Maintenance Manual, Supplemental Inspection Number 57-10-14, dated June 3, 2002.

(3) Models 411 and 411A airplanes: Cessna Aircraft Company Model 411, Supplemental Inspection Document, Supplemental Inspection Number 57-10-10, dated January 6, 2003.

(4) Model 414 airplanes: Cessna Aircraft Company Model 414 Supplemental Inspection Document, Supplemental Inspection Number 57-10-10, dated August 1, 2002.

(5) Model 414A airplanes: Cessna Aircraft Company Model 414A Supplemental Inspection Document, Supplemental Inspection Number 57-10-14, dated August 1, 2002.

(6) Models 421, 421A, and 421B airplanes: Cessna Aircraft Company Model 421 Supplemental Inspection Document, Supplemental Inspection Number 57-10-10, dated March 3, 2003.

(7) Model 421C airplanes: Cessna Aircraft Company Model 421C Supplemental Inspection Document, Supplemental Inspection Number 57-10-14, dated January 6, 2003.

(o) 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 current 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 15 minutes per response, including the time for reviewing instructions, completing and reviewing the collection of information. All responses to this collection of information are mandatory. Comments concerning the accuracy of this burden and suggestions for reducing the burden should be directed to the FAA at: 800 Independence Ave. SW, Washington, DC 20591, Attn: Information Collection Clearance Officer, AES-200.

(p) 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 paragraph (q) 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.

(q) Related Information

For more information about this AD, contact Bobbie Kroetch, Aerospace Engineer, Wichita ACO Branch, 1801 Airport Road, Room 100, Wichita, Kansas 67209; telephone: (316) 946-4155; fax: (316) 946-4107; email: bobbie.kroetch@faa.gov or Wichita-COS@faa.gov.

(r) Material Incorporated by Reference

(1) The Director of the Federal Register approved the incorporation by reference (IBR) of the service information listed in this paragraph under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) You must use this service information as applicable to do the actions required by this AD, unless this AD specifies otherwise.

(i) Textron Aviation Multi-engine Mandatory Service Letter MEL-57-01, dated December 18, 2017 (includes the undated Attachment titled Spar Cap Inspection Results Form and Spar Cap Inspection Results Form Continued).

(ii) Textron Aviation Conquest Mandatory Service Letter CQL-57-01, dated December 18, 2017 (includes the undated Attachment titled Spar Cap Inspection Results Form and Spar Cap Inspection Results Form Continued).

(3) For Textron Aviation service information identified in this AD, contact Textron Aviation Inc., Textron Aviation Customer Service, One Cessna Blvd., Wichita, Kansas 67215; telephone: (316) 517-5800; email: customercare@txtav.com; Internet: www.txtav.com.

(4) You may view this service information at FAA, Policy and Innovation Division, 901 Locust, Kansas City, Missouri 64106. For information on the availability of this material at the FAA, call (816) 329-4148.

(5) You may view this service information that is incorporated by reference 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/cfr/ibr-locations.html>.
Issued in Kansas City, Missouri, on February 2, 2018.

Melvin J. Johnson,
Deputy Director, Policy & Innovation Division,
Aircraft Certification Service.

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