



**DEPARTMENT OF TRANSPORTATION**

**Federal Aviation Administration**

**14 CFR Part 39**

**[Docket No. FAA-2020-0718; Project Identifier 2019-CE-045-AD; Amendment 39-21343; AD 2020-25-01]**

**RIN 2120-AA64**

**Airworthiness Directives; Textron Aviation, Inc. Airplanes (Type Certificate Previously Held by Beechcraft Corporation)**

**AGENCY:** Federal Aviation Administration (FAA), DOT.

**ACTION:** Final rule.

**SUMMARY:** The FAA is adopting a new airworthiness directive (AD) for certain Textron Aviation Inc. (Textron) (type certificate previously held by Beechcraft Corporation) Models F90, 65-90, 65-A90, B90, C90, H90 (T-44A), E90, 65-A90-1 (JU-21A, U-21A, RU-21A, RU-21D, U-21G, RU-21H), 65-A90-2 (RU-21B), 65-A90-3 (RU-21C), 65-A90-4 (RU-21E, RU-21H), 99, 99A, 99A (FACH), A99, A99A, B99, C99, 100, A100 (U-21F), and B100 airplanes. This AD was prompted by reports of fatigue cracks in the lower forward wing fitting. This AD requires a one-time inspection for the presence of washer part number (P/N) 90-380058-1 on the left-hand (LH) and right-hand (RH) lower forward wing bolt and, if applicable, removing washer P/N 90-380058-1, inspecting the wing fitting, bolt, and nut, replacing the wing fitting if it is cracked, and replacing the washer with washer P/N 90-380019-1. The FAA is issuing this AD to address the unsafe condition on these products.

**DATES:** This AD is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The Director of the Federal Register approved the incorporation by reference of a certain publication listed in this AD as of [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

**ADDRESSES:** For service information identified in this final rule, contact Textron Aviation Inc., PO Box 7706, Wichita, KS 67277; phone: 316-517-5800; internet:

<https://txtav.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. It is also available on the internet at <https://www.regulations.gov> by searching for and locating Docket No. FAA-2020-0718.

### **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-2020-0718; 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, any comments received, and other information. The address for Docket Operations is Docket Operations, U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE, Washington, DC 20590.

**FOR FURTHER INFORMATION CONTACT:** Brian C. Adamson, Aviation Safety Engineer, Wichita ACO Branch, AIR-7K3, FAA, 1801 Airport Rd, Wichita, KS 67209; phone: 316-946-4193; fax: 316-946-4107; email: [brian.adamson@faa.gov](mailto:brian.adamson@faa.gov) or [Wichita-COS@faa.gov](mailto:Wichita-COS@faa.gov).

### **SUPPLEMENTARY INFORMATION:**

#### **Discussion**

The FAA issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 by adding an AD that would apply to certain Textron (type certificate previously held by Beechcraft Corporation) Models F90, 65-90, 65-A90, B90, C90, H90 (T-44A), E90, 65-A90-1 (JU-21A, U-21A, RU-21A, RU-21D, U-21G, RU-21H), 65-A90-2 (RU-21B), 65-A90-3 (RU-21C), 65-A90-4 (RU-21E, RU-21H), 99, 99A, 99A (FACH), A99, A99A, B99, C99, 100, A100 (U-21F), and B100 airplanes. The NPRM published in the *Federal Register* on July 29, 2020 (85 FR 45545).

The NPRM was prompted by Textron receiving reports of fatigue cracks in the lower forward wing fitting on two airplanes. Investigation revealed that installing washer P/N 90-380058-1 on the wing bolt will cause a premature torque indication. This washer may have been installed as part of kit 101-4024-3 on Models F90, 65-90, 65-A90, B90,

C90, H90 (T-44A), E90, 65-A90-1 (JU-21A, U-21A, RU-21A, RU-21D, U-21G, RU-21H), 65-A90-2 (RU-21B), 65-A90-3 (RU-21C), 65-A90-4 (RU-21E, RU-21H), 99, 99A, 99A (FACH), A99, A99A, B99, C99, 100, A100 (U-21F), and B100 airplanes, or as part of kit 90-4077-1 on Models 65-90, 65-A90, 65-A90-1 (JU-21A, U-21A, RU-21A, RU-21D, U-21G, RU-21H), 65-A90-2 (RU-21B), 65-A90-3 (RU-21C), 65-A90-4 (RU-21E, RU-21H), B90, C90, and E90 airplanes. Under-torque of the wing bolt causes a reduced clamping force that changes the load path reacted by the RH and LH lower forward wing fitting.

In the NPRM, the FAA proposed to require a one-time inspection for the presence of washer P/N 90-380058-1 on the LH and RH lower forward wing bolt and, if applicable, removing washer P/N 90-380058-1, inspecting the wing fitting, bolt, and nut, replacing the wing fitting if it is cracked, and replacing the washer with washer P/N 90-380019-1. This condition, if not addressed, could result in fatigue cracks that lead to failure of the forward lower wing fitting, wing separation, and loss of airplane control.

## **Comments**

The FAA received one comment from an individual commenter. The following presents the comment received on the NPRM and the FAA's response to the comment.

### **Request Change to Applicability**

An individual commenter requested that the AD identify the applicable airplanes by serial number. The commenter stated that on the Beech Model C90A serial number LJ-1450 airplane, the lower front wing connections are designed as shear fittings with shear bolts, and therefore the washers are not affected.

The FAA disagrees. The AD, as proposed, clearly lists the applicable airplane models and serial numbers. The FAA responded to the commenter by email and advised that the AD, as proposed, would not apply to the Model C90A. A copy of the comment and the FAA's response is in the AD docket.

## **Conclusion**

The FAA reviewed the relevant data, considered the comment received, and determined that air safety requires adopting this AD as proposed. Accordingly, the FAA is issuing this AD to address the unsafe condition on these products.

### **Related Service Information under 1 CFR part 51**

The FAA reviewed Beechcraft Mandatory Service Letter MTL-57-01, Revision 1, dated September 19, 2018. The service information contains procedures for a one-time inspection for the presence of washer P/N 90-380058-1 on the LH and RH lower forward wing bolt and, if applicable, removing washer P/N 90-380058-1; inspecting the wing fitting, bolt, and nut; replacing the wing fitting if it is cracked; and replacing the washer with washer P/N 90-380019-1. 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.

### **Differences Between this AD and the Service Information**

The service information specifies inspecting within 200 flight hours or 12 months, whichever occurs earlier. This AD would require inspecting within the next 200 flight hours or 12 months, whichever occurs later.

The service information applies to Models A100A and A100C airplanes, and to Model F90 with S/N LA-1. This AD would not apply to these airplanes because they do not have an FAA type certificate.

This AD would apply to military Models T-44A, JU-21A, RU-21A, RU-21B, RU-21C, RU-21D, RU-21E, RU-21H, U-21A, U-21F, U-21G, and FACH airplanes, because these models have a civil counterpart that is subject to the unsafe condition. The service information does not apply to all of these military models.

### Costs of Compliance

The FAA estimates that this AD will affect 1,319 airplanes of U.S. registry.

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

#### Estimated costs

Action	Labor cost	Parts cost	Cost per product	Cost on U.S. operators
Inspection for washer P/N 90-380058-1 (LH Wing Fitting)	0.3 work-hour X \$85 per hour = \$25.50	Not applicable	\$25.50	\$33,634.50
Inspection for washer P/N 90-380058-1 (RH Wing Fitting)	0.3 work-hour X \$85 per hour = \$25.50	Not applicable	\$25.50	\$33,634.50

The FAA estimates the following costs to do any necessary replacements that would be required based on the results of the 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
RH Wing bolt, washer, and nut removal.	8 work-hours X \$85 per hour = \$680	\$335	\$1,015
LH Wing bolt, washer, and nut removal.	8 work-hours X \$85 per hour = \$680	\$335	\$1,015
Inspection of RH Lower Forward Wing Fitting.	2 work-hours X \$85 per hour = \$170	Not applicable	\$170
Inspection of LH Lower Forward Wing Fitting.	2 work-hours X \$85 per hour = \$170	Not applicable	\$170

<b>Action</b>	<b>Labor cost</b>	<b>Parts cost</b>	<b>Cost per product</b>
Removal and Replacement of P/N 50-120073-8 RH Lower Forward Wing Fitting.	150 work-hours X \$85 per hour = \$12,750	\$7,297.85	\$20,047.85
Removal and Replacement of P/N 50-120073-7 LH Lower Forward Wing Fitting.	150 work-hours X \$85 per hour = \$12,750	\$11,812.56	\$24,562.56

The FAA has included all known costs in this cost estimate. According to the manufacturer, however, some of the costs of this AD may be covered under warranty, thereby reducing the cost impact on affected operators.

### **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**

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) 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.

**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:

**2020-25-01 Textron Aviation, Inc., (Type Certificate Previously Held by Beechcraft Corporation):** Amendment 39-21343; Docket No. FAA-2020-0718; Project Identifier 2019-CE-045-AD.

**(a) Effective Date**

This airworthiness directive (AD) is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

**(b) Affected ADs**

None.

**(c) Applicability**

This AD applies to the Textron Aviation Inc., (Textron) (type certificate previously held by Beechcraft Corporation) airplanes, certificated in any category, identified in table 1 to paragraph (c) of this AD:

<b>Models</b>	<b>Serial Numbers (S/Ns)</b>
F90	LA-2 through LA-225
65-90, 65-A90, B90, C90	All S/Ns
H90 (T-44A)	LL-1 through LL-61
E90	LW-1 through LW-347
65-A90-1 (JU-21A, U-21A, RU-21A, RU-21D, U-21G, RU-21H)	LM-1 through LM-144

65-A90-2 (RU-21B)	LS-1, LS-2, LS-3
65-A90-3 (RU-21C)	LT-1 and LT-2
65-A90-4 (RU-21E, RU-21H)	LU-1 through LU-16
99, 99A, 99A (FACH), A99, A99A, B99, C99	U-1 through U-239
100, A100 (U-21F)	B-1 through B-247
B100	BE-1 through BE-137

Table 1 to paragraph (c)

**(d) Subject**

Joint Aircraft System Component (JASC): 5700, Wings.

**(e) Unsafe Condition**

This AD was prompted by information provided by Textron that a washer assembly may provide premature torque indication that could lead to cracking of the wing fitting. The FAA is issuing this AD to prevent such fatigue cracks. The unsafe condition, if not addressed, could result in failure of the forward lower wing fitting, which could lead to wing separation and loss of airplane control.

**(f) Compliance**

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

**(g) Action**

(1) Within the next 200 flight hours after the effective date of this AD or within 12 months after the effective date of this AD, whichever occurs later, inspect each washer assembly attached to the left and right lower forward wing bolts and remove all part number 90-380058-1 washers in accordance with the Accomplishment Instructions, paragraphs 3 through 5, of Beechcraft Mandatory Service Letter MTL-57-01, Revision 1, dated September 19, 2018 (MTL-57-01, Revision 1). In all locations where a washer part number 90-380058-1 was removed, do the following:

(i) Inspect the bolt, nut, and fitting in accordance with the Accomplishment Instructions, paragraph 6, of MTL-57-01, Revision 1. If there is a crack in the fitting, replace the fitting before further flight.

(ii) Install a part number 90-380019-1 washer in accordance with the Accomplishment Instructions, paragraph 7, of MTL-57-01, Revision 1.

(2) As of the effective date of this AD, do not install washer part number 90-380058-1 on any airplane listed in table 1 to paragraph (c) of this AD.

**(h) 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. Send information to ATTN: Brian C. Adamson, Aviation Safety Engineer, Wichita ACO Branch, AIR-7K3, FAA, 1801 Airport Rd, Wichita, KS 67209; phone: 316-946-4193; fax: 316-946-4107; email: brian.adamson@faa.gov or Wichita-COS@faa.gov.

(2) Before using any approved AMOC on any airplane to which the AMOC applies, notify your appropriate principal inspector (PI) in the FAA Flight Standards District Office (FSDO), or lacking a PI, your local FSDO.

**(i) Related Information**

For more information about this AD, contact Brian C. Adamson, Aviation Safety Engineer, Wichita ACO Branch, AIR-7K3, FAA, 1801 Airport Rd, Wichita, KS 67209; phone: 316-946-4193; fax: 316-946-4107; email: brian.adamson@faa.gov or Wichita-COS@faa.gov.

**(j) Material Incorporated by Reference**

(1) The Director of the Federal Register approved the incorporation by reference 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 the AD specifies otherwise.

(i) Beechcraft Mandatory Service Letter MTL-57-01, Revision 1, dated September 19, 2018.

(ii) [Reserved]

(3) For Beechcraft service information identified in this AD, contact Textron Aviation Inc., PO Box 7706, Wichita, KS 67277; phone: 316-517-5800; internet: <https://txtav.com/>.

(4) You may view this 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.

(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, email: [fedreg.legal@nara.gov](mailto:fedreg.legal@nara.gov) or go to: <https://www.archives.gov/federal-register/cfr/ibr-locations.html>.

Issued on November 23, 2020.

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

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