

**FEDERAL AVIATION ADMINISTRATION
AIRWORTHINESS DIRECTIVES**

**SMALL AIRPLANES, ROTORCRAFT, GLIDERS,
BALLOONS, & AIRSHIPS**

BIWEEKLY 2019-25

11/25/2019 - 12/8/2019



Federal Aviation Administration
Continued Operational Safety Policy Section, AIR-141
P.O. Box 25082
Oklahoma City, OK 73125-0460

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SMALL AIRCRAFT, ROTORCRAFT, GLIDERS, BALLOONS, & AIRSHIPS

AD No.	Information	Manufacturer	Applicability
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Information Key: E - Emergency; COR - Correction; S – Supersedes; R - Replaces

Biweekly 2019-01

2018-26-02	R 2016-25-19	Airbus Helicopters	AS350B3; EC130B4; EC130T2 helicopters
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Biweekly 2019-02

We published no ADs for the Small AD Biweekly during this period.

Biweekly 2019-03

2019-01-02		Aspen Avionics, Inc.	Evolution Flight Display (EFD) EFD1000 Primary Flight Display, EFD1000 Multi-Function Display (MFD), EFD1000 Emergency Backup Display, or EFD500 MFD units
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Biweekly 2019-04

2019-02-02		Pacific Aerospace Ltd.	FBA-2C1, FBA-2C2, FBA-2C3, and FBA-2C4 airplanes
2019-02-05	R 2013-11-03	Viking Air Limited	CL-215-1A10, CL-215-6B11 airplanes

Biweekly 2019-05

2014-05-06 R2	R 2014-05-06 R1	Airbus Helicopters Deutschland GmbH	EC135 P1, P2, P2+, T1, T2, and T2+; MBB-BK 117 C-2 helicopters
2018-21-14		Zodiac Aerotechnics	MC10 series crew oxygen mask regulators
2018-22-11		Safran Helicopter Engines	ASTAZOU XIV B and H model engines
2019-03-02		Pacific Aerospace Limited	750XL airplanes
2019-03-05		Bell Helicopter Textron Canada Limited	429 helicopters

Biweekly 2019-06

2019-03-12		Airbus Helicopters	EC225 LP helicopters
2019-05-03		Leonardo S.p.A.	AB139 and AW139; AW169 and AW189 helicopters
2019-05-04		MD Helicopters, Inc.	369A, 369D, 369E, 369FF, 369H, 369HE, 369HM, 369HS, 500N, and 600N helicopters
2019-05-05	R 97-26-03	Airbus Helicopters Deutschland GmbH	MBB-BK 117 A-1, MBB-BK 117 A-3, MBB-BK 117 A-4, MBB-BK 117 B-1, MBB-BK 117 B-2, and MBB-BK 117 C-1 helicopters
2019-05-06		Airbus Helicopters Deutschland GmbH	EC135P1, EC135P2, EC135P2+, EC135P3, EC135T1, EC135T2, EC135T2+, and EC135T3 helicopters

Biweekly 2019-07

We published no ADs for the Small AD Biweekly during this period.

Biweekly 2019-08

2019-04-01		HPH s. r.o.	Glasfögel 304C, Glasfögel 304CZ, and Glasfögel 304CZ-17 gliders
2019-05-15		Pilatus Aircraft Ltd	PC-7 airplanes
2019-06-04		Bell Helicopter Textron Canada Limited	429 helicopters
2019-06-05		Airbus Helicopters Deutschland GmbH	MBB-BK 117 A-1, MBB-BK 117 A-3, MBB-BK 117 A-4, MBB-BK 117 B-1, MBB-BK 117 B-2, MBB-BK 117 C-1, and MBB-BK 117 C-2 helicopters
2019-06-10		Vulcanair S.p.A.	AP68TP-300 “SPARTACUS”; AP68TP-600 “VIATOR” airplanes
2019-06-11		Pacific Aerospace Limited	750XL airplanes
2019-07-02		Robinson Helicopter Company	R66 helicopters

Biweekly 2019-09

2019-07-07		Airbus Helicopters Deutschland GmbH	BO-105A, BO-105C, BO-105S, BO105LS A-3, MBB-BK 117A-1, MBB-BK 117A-3, MBB-BK 117A-4, MBB-BK 117B-1, MBB-BK 117B-2, MBB-BK 117C-1, MBB-BK 117C-2, and MBB-BK 117D-2 helicopters
2019-07-08		GA 8 Airvan (Pty) Ltd	GA8 and Model GA8-TC320 airplanes
2019-07-10	A 2010-26-09	Northrop Grumman LITEF GmbH	LCR-100 Attitude and Heading Reference System

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2019-08-51	E	Cirrus Design Corporation (Cirrus)	SF50 airplanes
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Biweekly 2019-10

We published no ADs for the Small AD Biweekly during this period.

Biweekly 2019-11

2019-08-10		Bell Helicopter Textron Canada Limited (Bell)	Model 206A, 206B, 206L, 206L-1, 206L-3, 206L-4, and 407 helicopters
2019-08-13		Textron Aviation, Inc.	Models 525, 525A, and 525B airplanes
2019-09-02	R 2018-17-01	Bell Helicopter Textron, Inc. (Bell)	Bell Model 212, 412, 412CF, and 412EP helicopters
2019-09-03		Airbus Helicopters	Model AS332C, AS332C1, AS332L, and AS332L1 helicopters
2019-10-51	E	Airbus Helicopters Deutschland GmbH (Airbus)	Model MBB-BK 117 C-2 helicopters

Biweekly 2019-12

2019-09-04		Leonardo S.p.A.	Model AW109SP helicopters
2019-10-04		BRP-Rotax GmbH & Co KG	BRP-Rotax GmbH & Co KG (Rotax) 912 F2, 912 F3, and 912 F4, 912 S2, 912 S3, and 912 S4, Rotax 914 F2, 914 F3, and 914 F4, and Rotax 912 F2, 912 F3, 912 F4, 912 S2, 912 S3, 912 S4, 914 F2, 914 F3, and 914 F4 engines
2019-10-07		Pilatus Aircraft Ltd	Models PC-6, PC-6/350, PC-6/350-H1, PC-6/350-H2, PC-6/A, PC-6/A-H1, PC-6/A-H2, PC-6/B-H2, PC-6/B1-H2, PC-6/B2-H2, PC-6/B2-H4, PC-6/C-H2, PC-6/C1-H2, PC-6-H1, PC-6-H2 airplanes
2019-11-04		Airbus Helicopters Deutschland GmbH	Model MBB-BK 117 D-2 helicopters
2019-11-05		Bell Helicopter Textron Canada Limited	429 helicopters

Biweekly 2019-13

2019-08-51		Cirrus Design Corporation	Model SF50 airplanes
2019-10-06		Aviat Aircraft Inc	Models A-1C-180 and A-1C-200 airplanes
2019-11-07		Rolls-Royce plc	(RR) RB211-524G2-19, RB211-524G2-T-19, RB211-524G3-19, RB211-524G3-T-19, RB211-524H2-19, RB211-524H2-T-19, RB211-524H-36 and RB211-524H-T-36 engines
2019-11-08		International Aero Engines	PW1133G-JM, PW1133GA-JM, PW1130G-JM, PW1129G-JM, PW1127G-JM, PW1127GA-JM, PW1127G1-JM, PW1124G-JM, PW1124G1-JM, and PW1122G-JM model turbofan engines
2019-12-01		CFM International S.A	LEAP-1B21, -1B23, -1B25, -1B27, -1B28, -1B28B1, -1B28B2, -1B28B3, -1B28B2C, -1B28BBJ1, and -1B28BBJ2 model turbofan
2019-12-05		CFM International S.A	CFM56-5B1, -5B2, -5B4, -5B5, -5B6, -5B7, -5B1/P, -5B2/P, -5B3/P, -5B4/P, -5B5/P, -5B6/P, -5B7/P, -5B8/P, -5B9/P, -5B3/P1, -5B4/P1, -5B1/2P, -5B2/2P, -5B3/2P, -5B4/2P, -5B6/2P, -5B9/2P, -5B3/2P1, -5B4/2P1, -7B20, -7B22, -7B24, -7B26, -7B27, -7B22/B1, -7B24/B1, -7B26/B1, -7B26/B2, -7B27/B1, -7B27/B3, -7B20/2, -7B22/2, -7B24/2, -7B26/2, -7B27/2, -7B27A model turbofan engines

Biweekly 2019-14

2019-12-06		Leonardo S.p.A.	Model AW139 helicopters
2019-12-12		Piper Aircraft, Inc.	Model PA-46-600TP (M600) airplanes
2019-12-14		Airbus Helicopters Deutschland GmbH	Model MBB-BK 117 C-2 helicopters
2019-12-15		Leonardo S.p.A	Model AB139 and AW139 helicopters
2019-12-18		Robinson Helicopter Company	Model R44 II helicopters

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Biweekly 2019-15

2019-12-09 Rockwell Collins, Inc. Flight Display System

Biweekly 2019-16

2019-13-03 Trig Avionics Limited TT31 Mode S transponders, AXP340 Mode S transponders and KT74 Mode S transponders

2019-13-05 Sikorsky Aircraft Corporation Model S-92A helicopters

2019-14-01 Rolls-Royce Deutschland Ltd & Co KG TAY 650-15 and TAY 651-54 turbofan engines

2019-14-05 B/E Aerospace Fischer GmbH Common Seats 170/260 H160

2019-15-05 Rolls-Royce Deutschland Ltd & Co KG Trent 1000-AE3, Trent 1000-CE3, Trent 1000-D3, Trent 1000-G3, Trent 1000-H3, Trent 1000-J3, Trent 1000-K3, Trent 1000-L3, Trent 1000-M3, Trent 1000-N3, Trent 1000-P3, Trent 1000-Q3 and Trent 1000-R3 engines

Biweekly 2019-17

2019-14-11 Diamond Aircraft Industries GmbH Model DA 42 NG and Model DA 42 M-NG airplanes

2019-15-06 R 2018-22-07 Engine Alliance GP7270, GP7272, and GP7277 model turbofan engines

2019-16-01 International Aero Engines AG AG (IAE) V2525-D5 and V2528-D5 model turbofan engines

2019-16-02 GE Honda Aero Engines HF120 model turbofan engines

2019-16-04 R 2019-03-04 Engine Alliance GP7270 and GP7277 model turbofan engines

Biweekly 2019-18

2019-16-14 R 2018-25-01 Rolls-Royce Deutschland Ltd & Co KG Trent 1000-A, Trent 1000-AE, Trent 1000-C, Trent 1000-CE, Trent 1000-D, Trent 1000-E, Trent 1000-G, and Trent 1000-H turbofan

2019-16-15 Pratt & Whitney PW1519G, PW1521G, PW1521GA, PW1524G, PW1525G, PW1521G-3, PW1524G-3, PW1525G-3, PW1919G, PW1921G, PW1922G, PW1923G, and PW1923G-A model turbofan

Biweekly 2019-19

2019-10-51 Airbus Helicopters Deutschland GmbH MBB-BK 117 C-2 helicopters

2019-16-16 R 2018-18-02 Airbus Helicopters AS350B, AS350B1, AS350B2, AS350B3, and AS350BA helicopters

2019-17-02 Airbus Helicopters Deutschland GmbH EC135P1, EC135P2, EC135P2+, EC135P3, EC135T1, EC135T2, EC135T2+, and EC135T3 helicopters

2019-18-01 International Aero Engines AG AG V2522-A5, V2524-A5, V2527-A5, V2527E-A5, V2527M-A5, V2530-A5, and V2533-A5 model turbofan

2019-18-02 Leonardo S.p.A AW169 helicopters

Biweekly 2019-20

2019-18-08 R 2019-16-04 Engine Alliance GP7270 and GP7277 model turbofan

2019-19-11 Pratt & Whitney PW1519G, PW1521G, PW1521GA, PW1524G, PW1525G, PW1521G-3, PW1524G-3, PW1525G-3, PW1919G, PW1921G, PW1922G, PW1923G, and PW1923G-A turbofan engines

Biweekly 2019-21

2019-19-12 R 2018-10-07 Sikorsky Aircraft Corporation Model S-76C helicopters

Biweekly 2019-22

2019-19-13 Airbus Helicopters EC225LP helicopters

2019-20-05 R 2018-15-01 Rolls-Royce Deutschland Ltd & Co KG Trent 1000-A, Trent 1000-A2, Trent 1000-AE, Trent 1000-AE2, Trent 1000-AE3, Trent 1000-C, Trent 1000-C2, Trent 1000-CE, Trent 1000-CE2, Trent 1000-CE3, Trent 1000-D, Trent 1000-D2, Trent 1000-D3, Trent 1000-E, Trent 1000-E2, Trent 1000-G,

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2019-21-51	E	General Electric Company	Trent 1000-G2, Trent 1000-G3, Trent 1000-H, Trent 1000-H2, Trent 1000-H3, Trent 1000-J2, Trent 1000-J3, Trent 1000-K2, Trent 1000-K3, Trent 1000-L2, Trent 1000-L3, Trent 1000-M3, Trent 1000-N3, Trent 1000-P3, Trent 1000-Q3 and Trent 1000-R3 model turbofan GE90-115B model turbofan
Biweekly 2019-23			
2019-20-08		Gulfstream Aerospace Corporation	G-IV and GIV-X
2019-21-08		Textron Aviation Inc.	E33, E33A, E33C, F33, G33, 35-C33, 35-C33A, K35, M35, N35, P35, S35, V35, V35A, and 36, (2) Model F33A, S/Ns CE-290 through CE-680, F33C, S/Ns CJ-26 through CJ-128, V35B, Model A36,
2019-21-12		BRP-Rotax GmbH & Co KG	Model 914 F2, 914 F3, and 914 F4 engines
Biweekly 2019-24			
2019-22-03	R 2015-20-04	Pratt & Whitney Canada Corp	PT6B-37A turboshaft
Biweekly 2019-25			
2019-23-09		Bell Helicopter Textron Canada Limited	427 helicopters
2019-23-10	R 2019-21-08	Textron Aviation Inc.	E33, E33A, E33C, F33, G33, 35-C33, 35-C33A, S35, V35, V35A, and 36, Model F33A, Model F33C, Model V35B, Model A36



2019-23-09 Bell Helicopter Textron Canada Limited: Amendment 39-19803; Docket No. FAA-2017-1105; Product Identifier 2017-SW-023-AD.

(a) Applicability

This AD applies to Bell Helicopter Textron Canada Limited Model 427 helicopters with a vertical fin part number (P/N) 427-035-840-105 or P/N 427-035-840-109 installed, certificated in any category.

(b) Unsafe Condition

This AD defines the unsafe condition as a crack on the vertical fin skin. This condition could lead to structural failure of the fin, separation of the skin from the helicopter, damage to the main or tail rotor blades and loss of helicopter control.

(c) Effective Date

This AD becomes effective January 10, 2020.

(d) 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.

(e) Required Actions

Within 25 hours time-in-service (TIS) or before the helicopter has accumulated 1,500 hours TIS, whichever occurs later, and thereafter at intervals not to exceed 100 hours TIS:

(1) Remove the vertical fin and clean the vertical fin attachment area with a soap solution to remove all traces of dirt, stains, exhaust residue, and oil. Rinse the area with water and let dry.

(i) Using a 10X power magnifying glass, visually inspect the inboard skin of the vertical fin for a crack around the four tailboom attachment points as depicted in Figure 1 of Bell Helicopter Alert Service Bulletin 427-15-38, Revision A, dated November 14, 2016. Pay particular attention to the upper aft attachment point.

(ii) If there is a crack, replace the vertical fin before further flight.

(2) If the vertical fin does not have a serial number, assign a serial number using the helicopter serial number, and permanently mark the new serial number on the vertical fin data plate. Create a component history card or equivalent record and annotate the serial number.

(f) Alternative Methods of Compliance (AMOCs)

(1) The Manager, Safety Management Section, Rotorcraft Standards Branch, FAA, may approve AMOCs for this AD. Send your proposal to: Matt Fuller, Senior Aviation Safety Engineer, Safety

Management Section, Rotorcraft Standards Branch, FAA, 10101 Hillwood Pkwy., Fort Worth, TX 76177; telephone 817-222-5110; email 9-ASW-FTW-AMOC-Requests@faa.gov.

(2) For operations conducted under a 14 CFR part 119 operating certificate or under 14 CFR part 91, subpart K, the FAA suggests 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.

(g) Additional Information

The subject of this AD is addressed in Transport Canada AD No. CF-2017-03, dated January 31, 2017. You may view the Transport Canada AD on the internet at <https://www.regulations.gov> in Docket No. FAA-2017-1105.

(h) Subject

Joint Aircraft Service Component (JASC) Code: 55, Empennage Structure.

(i) 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) Bell Helicopter Alert Service Bulletin 427-15-38, Revision A, dated November 14, 2016.

(ii) [Reserved]

(3) For Bell Helicopter Textron Canada Limited service information identified in this AD, contact Bell Helicopter Textron Canada Limited, 12,800 Rue de l'Avenir, Mirabel, Quebec J7J1R4; telephone 450-437-2862 or 800-363-8023; fax 450-433-0272; or at <https://www.bellcustomer.com>.

(4) You may view this service information at FAA, Office of the Regional Counsel, Southwest Region, 10101 Hillwood Pkwy., Room 6N-321, Fort Worth, TX 76177. For information on the availability of this material at the FAA, call 817-222-5110.

(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, or go to: <https://www.archives.gov/federal-register/cfr/ibr-locations.html>.

Issued in Fort Worth, Texas, on November 19, 2019.

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



2019-23-10 Textron Aviation Inc. (Type Certificate Previously Held by Beechcraft Corporation) Airplanes: Amendment 39-19804; Docket No. FAA-2019-0959; Product Identifier 2019-CE-051-AD.

(a) Effective Date

This AD is effective November 22, 2019.

(b) Affected ADs

This AD replaces AD 2019-21-08, Amendment 39-19774 (84 FR 59926, November 7, 2019) (“AD 2019-21-08”).

(c) Applicability

This AD applies to the following Textron Aviation Inc. (Type Certificate previously held by Beechcraft Corporation) airplanes, certificated in any category:

- (1) Models E33, E33A, E33C, F33, G33, 35-C33, 35-C33A, S35, V35, V35A, and 36, all serial numbers (S/Ns);
- (2) Model F33A, S/Ns CE-290 through CE-680;
- (3) Model F33C, S/Ns CJ-26 through CJ-128;
- (4) Model V35B, S/Ns D-9069 through D-9961; and
- (5) Model A36, S/Ns E-185 through E-925.

(d) Subject

Joint Aircraft System Component (JASC)/Air Transport Association (ATA) of America Code 2710, Aileron Control System.

(e) Unsafe Condition

This AD was prompted by reports of cracked and fractured right aileron flight control cable end fittings (terminal attachment fittings). The FAA is issuing this AD to detect and address damaged right aileron flight control cable end fittings. The unsafe condition, if not addressed, could result in failure of the right aileron flight control cable assembly, un-commanded right roll of the airplane, and loss of roll control in the left direction, which may lead to loss of control of the airplane.

(f) Compliance

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

(g) Inspection

Within 30 days after November 22, 2019 (the effective date retained from AD 2019-21-08) inspect the forward and aft right aileron flight control cable end fittings that thread into the turnbuckle. To gain access to the end fittings, you must remove the front seats and floorboards and, if installed, the rear seats and under-seat closeout. The end fittings are located underneath the heating duct, just forward of the aft carry through spar.

Note to paragraph (g) of this AD: Adjusting the turnbuckle relative to the end fittings will affect cable tension.

(1) Remove any safety wire from the end fittings and turnbuckle, if installed. Remove any sleeving and tape on the shank of the cable end fittings without gouging or scratching the fitting surface.

(2) Using a 10X magnification, a mirror, and a light source, inspect all exposed surfaces of both control cable end fittings for cracks, pitting, and corrosion.

(h) Follow-On Actions

Before further flight after the inspection required by paragraph (g) of this AD, do one of the following actions, as applicable:

(1) If there are no cracks, no pitting, and no corrosion, check cable tension and make any necessary adjustments, and replace safety wire; or

(2) If there is a crack or any pitting or corrosion, replace any damaged cable assembly.

(i) Credit for Previous Actions

(1) If you performed the actions required by paragraphs (g) and (h) of this AD before November 22, 2019 (the effective date retained from 2019-21-08) using one of the following documents, you met the requirements of this AD:

(i) American Bonanza Society (ABS) Air Safety Foundation Beechcraft Control Cable Turn Buckle Inspection Recommendation, dated February 8, 2019;

(ii) ABS Air Safety Foundation Recommended Beechcraft Control Cable Turnbuckle Inspection, Update 1, dated February 20, 2019; or

(iii) ABS Air Safety Foundation Recommended Beechcraft Control Cable Turnbuckle Inspection, Update 2, dated August 8, 2019.

(2) The ABS Air Safety Foundations recommended inspection documents are available on the internet at <https://www.regulations.gov> by searching for and locating Docket No. FAA-2019-0853. You may also obtain copies of these documents by contacting the ABS at American Bonanza Society, 3595 N. Webb Road, Suite 200, Wichita, KS 67226; email: info@bonanza.org; telephone: (316) 945-1700; fax: (316) 945-1710; or internet: <https://www.bonanza.org/>.

(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 paragraph (k) 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

For more information about this AD, contact Alan Levanduski, Aerospace Engineer, Wichita ACO Branch, FAA, 1801 Airport Road, Room 100, Wichita, Kansas 67209; phone: (316) 946-4161; fax: (316) 946-4107; email: alan.levanduski@faa.gov.

Issued on November 20, 2019.

William Schinstock,

Aircraft Certification Service. Acting Manager, Small Airplane Standards Branch, AIR-690.

[FR Doc. 2019-25568 Filed 11-20-19; 4:15 pm]

BILLING CODE 4910-13-P