

**FEDERAL AVIATION ADMINISTRATION  
AIRWORTHINESS DIRECTIVES**

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

**BIWEEKLY 2019-15**

*7/8/2019 - 7/21/2019*



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

## CHANGE OF ADDRESS NOTICE

Any change of address regarding the biweekly service must include the mailing label from a recent issue or your name and address printed exactly as they appear on the mailing label (including the computer number above the address).

Please allow one month for an address change.

MAIL YOUR ADDRESS CHANGE TO:

Superintendent of Documents  
Government Printing Office  
Mail List Branch SSOM  
Washington, DC 20402

Telephone: (202) 512-1806  
Facsimile: (202) 512-2250

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

AD No.	Information	Manufacturer	Applicability
--------	-------------	--------------	---------------

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
------------	--------------	--------------------	---------------------------------------

**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
------------	--	----------------------	--

**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

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

AD No.	Information	Manufacturer	Applicability
--------	-------------	--------------	---------------

Information Key: E - Emergency; COR - Correction; S – Supersedes; R - Replaces

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

**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

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

AD No.	Information	Manufacturer	Applicability
--------	-------------	--------------	---------------

Information Key: E - Emergency; COR - Correction; S – Supersedes; R - Replaces

**Biweekly 2019-15**  
2019-12-09

Rockwell Collins, Inc.

Flight Display System



**2019-12-09 Rockwell Collins, Inc.:** Amendment 39-19664 ; Docket No. FAA-2019-0469 Product Identifier 2019-CE-028-AD.

**(a) Effective Date**

This AD is effective July 23, 2019.

**(b) Affected ADs**

None.

**(c) Applicability**

This AD applies to Rockwell Collins, Inc. (Rockwell Collins) Flight Display System Application FDSA-6500 part numbers 810-0234-1H0001, 810-0234-1H0002, 810-0234-1H0003, 810-0234-2H0001, 810-0234-2C0001, 810-0234-2C0002, and 810-0234-4B0001. These appliances are installed on, but not limited to, Bombardier Inc. Model CL-600-2B16 (604 variant) airplanes and Textron Aviation Inc. Models 525B, B200, B200C, B200CGT, B200GT, B300, B300C, and C90GTi airplanes, certificated in any category.

Note 1 to paragraph (c) of this AD: Rockwell Collins Operator Bulletin OPSB 0193-19R1, Revision 1, dated April 3, 2019, contains additional information related to the Applicability of this AD.

**(d) Subject**

Joint Aircraft System Component (JASC)/Air Transport Association (ATA) of America Code 34; Navigation.

**(e) Unsafe Condition**

This AD was prompted by a conflict between the traffic collision avoidance system (TCAS) primary display indications and aural alerts during a resolution advisory (RA) scenario. The FAA is issuing this AD to prevent conflicting TCAS information. The unsafe condition, if not addressed, could result in the pilot under-correcting or over-correcting and may lead to inadequate aircraft separation and a mid-air collision.

**(f) Compliance**

Comply with this AD within 30 days after July 23, 2019 (the effective date of this AD), unless already done.

**(g) Operating Limitations**

(1) Revise the airplane flight manual (AFM) or AFM supplement (AFMS) by adding the following text to the Limitations section: For TCAS II installations, during flight, do not operate TCAS in the “TA/RA” mode; TCAS may only be operated in “TA Only” mode.

Note 2 to paragraphs (g) and (h) of this AD: In “TA/RA” mode, the TA stands for traffic advisory and RA stands for resolution advisory.

(2) Fabricate a placard for each aircraft primary flight display, using at least 1/8 inch letters, with the following text: TCAS Flight Ops–TA Only mode (TA/RA mode prohibited).

(3) Install the placard on the bottom of each aircraft primary flight display bezel in the area depicted in figure 1 to paragraph (g)(3) of this AD.

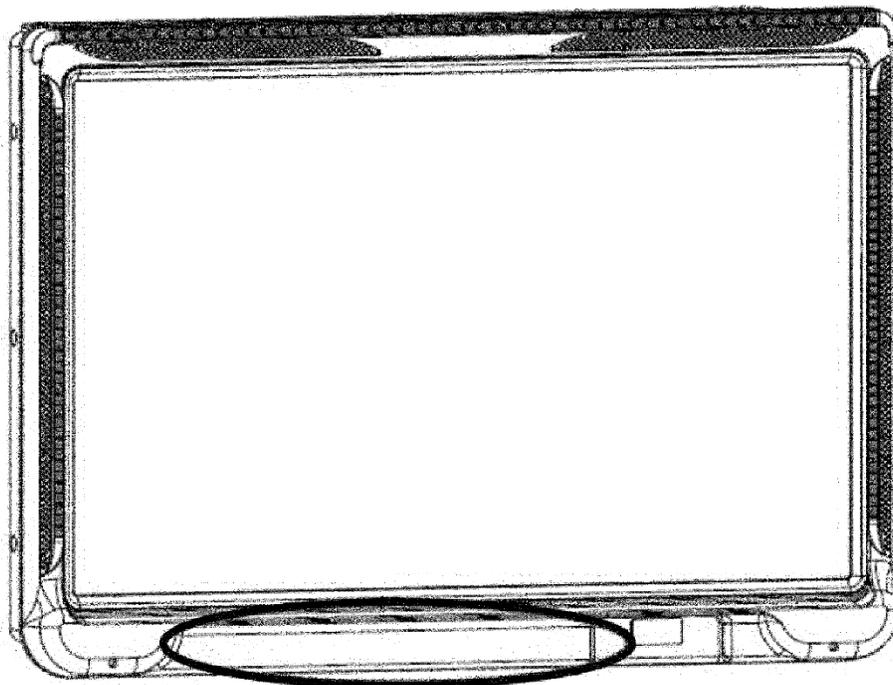


Figure 1 to paragraph (g)(3) of this AD; placard location on bezel

(4) In addition to the provisions of 14 CFR 43.3 and 43.7, the actions required by paragraph (g)(1) through (3) 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) through (4) and 14 CFR 91.417(a)(2)(v). The record must be maintained as required by 14 CFR 91.417. This authority is not applicable to aircraft being operated under 14 CFR part 119.

**(h) Special Flight Permit**

A special flight permit may be issued with the following limitation: Flight operation with the TCAS II in “TA/RA” mode is prohibited. Flight operation with the TCAS is only permitted in “TA Only” mode.

**(i) 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 (j).

(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.

**(j) Related Information**

(1) For more information about this AD, contact Nhien Hoang, Aerospace Engineer, Wichita ACO Branch, FAA, 1801 Airport Road, Room 100, Wichita, Kansas 67209; telephone: (316) 946-4157; fax: (316) 946-4107; email: nhien.hoang@faa.gov or Wichita-COS@faa.gov.

(2) Rockwell Collins Operator Bulletin OPSB 0193-19R1, Revision 1, dated April 3, 2019, contains additional information related to this AD. You may obtain copies of this service information by contacting Rockwell Collins, Inc. at Collins Aviation Services, 400 Collins Road NE, M/S 164-100, Cedar Rapids, IA 52498-0001; telephone: 888-265-5467 (U.S.) or 319-265-5467; fax: 319-295-4941 (outside U.S.); email: techmanuals@rockwellcollins.com; internet: [http://www.rockwellcollins.com/Services\\_and\\_Support/Publications.aspx](http://www.rockwellcollins.com/Services_and_Support/Publications.aspx).

Issued in Fort Worth, Texas, on June 28, 2019.

James A. Grigg,

Acting Deputy Director for Regulatory Operations, Compliance & Airworthiness Division, Aircraft Certification Service.

[FR Doc. 2019-14307 Filed 7-5-19; 8:45 am]