

**FEDERAL AVIATION ADMINISTRATION
AIRWORTHINESS DIRECTIVES**

**LARGE AIRCRAFT
BIWEEKLY 2019-16**

7/22/2019 - 8/4/2019



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

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LARGE AIRCRAFT

AD No.	Information	Manufacturer	Applicability
Information Key: E – Emergency; COR – Correction; R – Replaces, A – Affects			
Biweekly 2019-01			
2018-22-07		Engine Alliance	GP7270, GP7272, and GP7277 model turbofan engines
2018-23-12	COR	Zodiac Aero Evacuation Systems	Fusible plugs installed on emergency evacuation equipment
2018-25-08	R 2017-22-07	Airbus SAS	A319, A320, A321 airplanes
2018-26-01	R 2018-18-01	CFM International S.A.	CFM56-7B turbofan engines
2018-26-03		The Boeing Company	757-200 series airplanes
2018-26-04		Airbus SAS	A350-941 and -1041 airplanes
2018-26-05	A 2015-19-01	The Boeing Company	777-200, 777-200LR, 777-300, 777-300ER, and 777F series airplanes
2018-26-06		The Boeing Company	737-600, -700, -700C, -800, -900, and -900ER series airplanes
Biweekly 2019-02			
2019-01-01		The Boeing Company	787-8 airplanes
Biweekly 2019-03			
2019-01-01	COR	The Boeing Company	787-8 airplanes
Biweekly 2019-04			
2018-23-04		Bombardier, Inc.	DHC-8-102, -103, -106, -201, -202, -301, -311, and -315 airplanes
2018-24-01		International Aero Engines	PW1133G-JM, PW1133GA-JM, PW1130G-JM, PW1127G-JM, PW1127GA-JM, PW1127G1-JM, PW1124G-JM, PW1124G1-JM, and PW1122G-JM turbofan engines
2019-01-03	R 2016-18-01	The Boeing Company	737-600, -700, -700C, -800, -900, and -900ER series airplanes
2019-01-04		The Boeing Company	787 series airplanes
2019-01-05	A 2017-05-10	Airbus SAS	A330-201, A330-202, A330-203, A330-223, A330-243, A330-223F, A330-243F, A330-301, A330-302, A330-303, A330-321, A330-322, A330-323, A330-341, A330-342, and A330-343 airplanes
2019-01-06		The Boeing Company	737-100, -200, -200C, -300, -400, and -500 series airplanes
2019-01-07		Airbus SAS	A321-111, -112, -131, -211, -212, -213, -231, and -232 airplanes
2019-01-08		The Boeing Company	777-200, -200LR, -300, and -300ER series airplanes
2019-02-01	R 2018-16-07	General Electric Company	GEnx-1B54, -1B58, -1B64, -1B67, -1B70, -1B54/P1, -1B58/P1, -1B64/P1, -1B67/P1, -1B70/P1, -1B54/P2, -1B58/P2, -1B64/P2, -1B67/P2, -1B70/P2, -1B70C/P1, -1B70/P2, -1B70/P2, -1B70/P2, -1B74/P1, -1B75/P1, -1B70C/P2, -1B70/P2, -1B70/P2, -1B74/P2, -1B75/P2, -1B75/P2, -1B76/P2, -1B76A/P2, -1B78/P2, -2B67, -2B67B, and -2B67/P turbofan engines
2019-02-03		The Boeing Company	787-8, 787-9, and 787-10 airplane
2019-02-04	R 2018-22-05	Engine Alliance	GP7270, GP7272, and GP7277 turbofan engines
2019-03-01		Pratt & Whitney Division	PW4074, PW4074D, PW4077, PW4077D, PW4084D, PW4090, and PW4090-3 turbofan engines
Biweekly 2019-05			
2018-21-14		Zodiac Aerotechnics	MC10 series crew oxygen mask regulators
2018-26-07		Airbus SAS	A350-941 and -1041 airplanes
2018-26-08		Airbus SAS	Note: Was missing from BW2019-01 A320-214, A320-232, A320-233, A321-211, and A321-231 airplanes
2019-03-03	A 2016-17-03	Airbus SAS	Note: Was missing from BW2019-01 A318, A319, A320, A321 airplanes
2019-03-04	R 2018-11-16	Engine Alliance	GP7270 and GP7277 model turbofan engines
2019-03-06		The Boeing Company	737-300, -400, and -500 series airplanes
2019-03-07	R 2017-16-05	The Boeing Company	737-600, -700, -700C, -800, -900, and -900ER series airplanes
2019-03-08		Airbus SAS	A350-941 airplanes

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2019-03-09		Airbus SAS	A310-304, -322, -324, and -325 airplanes
2019-03-10	R 2017-07-05	Airbus SAS	A300 airplanes
2019-03-11		Airbus SAS	A350-941 and -1041 airplanes
2019-03-15		Airbus SAS	A330-201, -202, and -203; A330-301, -302, and -303 airplanes
2019-03-17	A 2017-25-04	Airbus SAS	A318, A319, A320, A321 airplanes
2019-03-19		Saab AB, Saab Aeronautics	SAAB 2000 airplanes
2019-03-20	A 2014-16-23 A 2016-16-09	Dassault Aviation	FALCON 7X airplanes
2019-03-21		Embraer S.A.	ERJ 190-100 STD, -100 LR, and -100 IGW; ERJ 190-200 STD, -200 LR, and -200 IGW airplanes
2019-03-23		Airbus SAS	A330, A340 airplanes
Biweekly 2019-06			
2019-03-13		Gulfstream Aerospace LP	Gulfstream G150 airplanes
2019-03-14		Dassault Aviation	FAN JET FALCON and FAN JET FALCON SERIES C, D, E, F, and G airplanes
2019-03-16	A 2006-25-06 A 97-04-08	Fokker Services B.V.	F.27 Mark 100, 200, 300, 400, 500, 600, and 700 airplanes
2019-03-18		Airbus SAS	A318, A319, A320 airplanes
2019-03-22		Bombardier, Inc.	BD-700-1A10 and BD-700-1A11 airplanes
2019-03-24		The Boeing Company	737-400 series airplanes
2019-03-25	A 2008-02-15	Airbus SAS	A318, A319, A320, A321 airplanes
2019-03-26		The Boeing Company	737-600, -700, -700C, -800, -900, and -900ER series airplanes
2019-03-27		Dassault Aviation	Falcon 10 airplanes
2019-03-28	R 2016-07-23	Airbus SAS	A318, A319, A320, A321 airplanes
2019-03-30		Empresa Brasileira de Aeronautica S.A.	EMB-135, EMB-145 airplanes
2019-05-01	R 2017-11-06	Pratt & Whitney Division	PW2037, PW2037D, PW2037M, PW2040, PW2040D, PW2043, PW2143, PW2643, and F117-PW-100 turbofan engines
2019-05-02	R 2017-22-13	Rolls-Royce plc	RB211-Trent 970-84 and RB211-Trent 972-84 turbofan engines
2019-05-08	R 2015-12-08	Airbus SAS	A318, A319, A320, A321 airplanes
Biweekly 2019-07			
2019-05-07	R 2017-20-01	Honeywell International Inc.	TFE731-20R, -20AR, -20BR, and TFE731-40, -40AR, -40BR, and -40R turbofan engines
2019-05-09		Airbus SAS	A320-251N and -271N, and A321-253N airplanes
2019-05-10		Airbus SAS	A350-941 airplanes
2019-05-12		Bombardier, Inc.	CL-600-2C10, -2D15, -2D24, -2E25 airplanes
2019-05-13	R 2007-22-05	Airbus SAS	A300-600 and A310 series airplanes
2019-05-14	R 2012-02-18	Dassault Aviation	MYSTERE-FALCON 50 airplanes
2019-06-01	R 2018-24-01	International Aero Engines	PW1133G-JM, PW1133GA-JM, PW1130G-JM, PW1127G-JM, PW1127GA-JM, PW1127G1-JM, PW1124G-JM, PW1124G1-JM, and PW1122G-JM turbofan engines
2019-06-02		Pratt & Whitney Division	PW4158 turbofan engines
2019-06-06		International Aero Engines AG	V2500-A1, V2522-A5, V2524-A5, V2525-D5, V2527-A5, V2527E-A5, V2527M-A5, V2528-D5, V2530-A5, V2533-A5 turbofan engines
2019-06-07	R 2016-22-05	Pratt & Whitney Division	Certain PW4000 engines (see AD)
Biweekly 2019-08			
2019-06-01	R 2018-24-01	International Aero Engines	PW1133G-JM, PW1133GA-JM, PW1130G-JM, PW1127G-JM, PW1127GA-JM, PW1127G1-JM, PW1124G-JM, PW1124G1-JM, and PW1122G-JM turbofan engines
2019-06-02	COR	Pratt & Whitney Division	PW4158 turbofan engines
2019-06-03	A 2017-01-08	Airbus SAS	A330 and A340 airplanes
2019-06-08		Airbus SAS	A330-223, A330-223F, A330-321, A330-322, and A330-323 airplanes
2019-06-09		Airbus SAS	A350-941 airplanes

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2019-06-12		Airbus SAS	A330-201, -202, and -203; A330-301, -302, and -303 airplanes
2019-07-03		Zodiac Seats France	536-Series Cabin Attendant Seats
Biweekly 2019-09			
2019-07-01	A 2014-26-07	Dassault Aviation	FAN JET FALCON and FAN JET FALCON SERIES C, D, E, F, and G airplanes
2019-07-04	COR	The Boeing Company	757-200, -200PF, -200CB, and -300 series airplanes
2019-07-05	R 2016-19-04	Airbus SAS	A318, A319, A320 and A321 airplanes
2019-07-06		Bombardier, Inc	Model BD-100-1A10 airplanes
2019-07-09		Rolls-Royce plc	Trent 1000-A2, Trent 1000-AE2, Trent 1000-C2, Trent 1000-CE2, Trent 1000-D2, Trent 1000-E2, Trent 1000-G2, Trent 1000-H2, Trent 1000-J2, Trent 1000-K2, and Trent 1000-L2 model turbofan engines
Biweekly 2019-10			
2019-03-29		Bombardier, Inc	Model BD-100-1A10 airplanes
2019-06-13		The Boeing Company	Model 787 series airplanes
2019-07-05	COR, A 2016-19-04	Airbus SAS	A318, A319, A320 airplanes
2019-08-01		RECARO Aircraft Seating GmbH & Co. KG	Passenger Compartment Equipment
2019-08-02		The Boeing Company	Model 737-100, -200, -200C, -300, -400, and -500 series airplanes
2019-08-05		The Boeing Company	Model 787-8 and 787-9 airplanes
2019-08-06	R 2016-16-01	Airbus SAS	A330-223F and -243F, A330-201, -202, -203, -223, -243 A330-301, -302, -303, -321, -322, -323, -341, -342, and -343 airplanes
2019-08-09	A 2017-04-13	The Boeing Company	Model 747-8 and 747-8F series airplanes
2019-08-12		Viking Air Limited	Model CL-215-6B11 (CL-215T Variant) and CL-215-6B11 (CL-415 Variant)
Biweekly 2019-11			
2019-08-03		The Boeing Company	Model 737-100, -200, -200C, -300, -400, and -500 series airplanes
2019-08-07	R 2014-20-04	Airbus SAS	A318, A319, A320 and A321 airplanes
2019-08-08	R 2010-14-05	Bombardier, Inc.	Model CL-600-1A11 (600), Model CL-600-2A12 (601), Model CL-600-2B16 airplanes
2019-09-01		The Boeing Company	Model 737-100, -200, -200C, -300, -400, and -500 series airplanes
Biweekly 2019-12			
2019-08-04	R 2012-25-02	Bombardier, Inc.	Model CL-600-2B19 (Regional Jet Series 100 & 440) airplanes
2019-08-11	R 2008-24-14	Bombardier, Inc.	Model CL-600-2B19 (Regional Jet Series 100 & 440) airplanes
2019-10-03		The Boeing Company	Model 737-100, -200, -200C, -300, -400, and -500 series airplanes
2019-10-04		BRP-Rotax GmbH & Co KG	BRP-Rotax GmbH & Co KG (Rotax) 912 F2, 912 F3, and 912 F4 engines, Rotax 912 S2, 912 S3, and 912 S4 engines, Rotax 914 F2, 914 F3, and 914 F4 engines, and Rotax 912 F2, 912 F3, 912 F4, 912 S2, 912 S3, 912 S4, 914 F2, 914 F3, and 914 F4 engines
2019-10-05		Viking Air Limited	Models DHC-6-1, DHC-6-100, DHC-6-200, DHC-6-300, and DHC-6-400 airplanes
Biweekly 2019-13			
2019-10-01		Bombardier, Inc	Model CL-600-2A12 (601) airplanes
2019-11-01		Airbus SAS	Model A350-941 airplanes
2019-11-02	R 2017-16-10	The Boeing Company	Model 777-200, -200LR, -300, -300ER, and 777F series airplanes
2019-11-03		The Boeing Company	Model 737-700C, -800, and -900ER series airplanes

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2019-11-06	A 2013-19-23	The Boeing Company	Model 737-600, -700, -700C, -800, -900, and -900ER series airplanes
2019-11-07		Rolls-Royce plc	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
2019-11-09		Airbus SAS	Model A319-113 and -114 airplanes, and Model A320-211 and -212 airplanes
2019-12-01		CFM International S.A	LEAP-1B21, -1B23, -1B25, -1B27, -1B28, -1B28B1, -1B28B2, -1B28B3, -1B28B2C, -1B28BBJ1, and -1B28BBJ2 model turbofan engines
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			
2019-12-03		Bombardier, Inc.	Model CL-600-2C10 (Regional Jet Series 700, 701 & 702), CL-600-2D15 (Regional Jet Series 705), and CL-600-2D24 (Regional Jet Series 900) airplanes
2019-12-04	R 2018-19-18 A 2014-20-18	Airbus SAS	Model A300 B4-603, B4-620, B4-622, B4-605R, B4-622R, C4-605R Variant F, F4-605R, and F4-622R airplanes
2019-12-07	R 2007-11-11 R 2018-01-11	Airbus SAS	Model A318-111, -112, -121, and -122, A319-111, -112, -113, -114, -115, -131, -132, A320-211, -212, -214, -216, -231, -232, -233, A321-111, -112, -131, -211, -212, -213, -231, and -232 airplanes
2019-12-10	A 2017-06-06 A 2012-12-07	Fokker Services B.V	Model F28 Mark 0070 and 0100 airplanes
2019-12-13		The Boeing Company	Model 757-200, -200PF, -200CB, and -300 series airplanes
Biweekly 2019-15			
2019-10-02		Saab AB, Saab Aeronautics	Model SAAB 2000 airplanes
2019-12-02		Bombardier Inc.	Model BD-700-1A10 and BD-700-1A11 airplanes
2019-12-08		Bombardier, Inc.	Model CL-600-2D15 (Regional Jet Series 705), CL-600-2D24 (Regional Jet Series 900), and CL-600-2E25 (Regional Jet Series 1000)
2019-12-09		Rockwell Collins, Inc.	Flight Display System Application FDSA-6500
2019-12-11		Bombardier, Inc	Model CL-600-2B19 (Regional Jet Series 100 & 440)
2019-12-16		Airbus SAS	Model A350-941 airplanes
2019-12-17		Bombardier, Inc.	Model DHC-8-102, -103, -106, -201, -202, -301, -311, and -315 airplanes
2019-13-02		The Boeing Company	Model 737-200, -200C, -300, -400, and -500 airplanes
Biweekly 2019-16			
2019-07-10		Northrop Grumman LITEF GmbH LCR-100	Attitude and Heading Reference System (AHRS) Note: This AD was included in Small AD Biweekly 2019-09, but was inadvertently left off the Large AD Biweekly.
2019-13-03		Trig Avionics Limited	Mode S transponders
2019-13-04		ATR-GIE Avions de Transport Régional	Model ATR72-101, -102, -201, -202, -211, -212, and -212A
2019-14-01		Rolls-Royce Deutschland Ltd & Co KG	TAY 650-15 and TAY 651-54 turbofan
2019-14-02		The Boeing Company	Model 737 series
2019-14-04		Airbus SAS	Model A318-111, -112, -121, and -122, A319-111, -112, -113, -114, -115, -131, -132, and -133, A320-211, -212, -214, -216, -231, -232, -233, -251N, -252N, and -271N,

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2019-14-05			A321-111, -112, -131, -211, -212, -213, -231, -232, -251N, -251NX, -252N, -252NX, -253N, -253NX, -271N, -271NX, -272N, and -272NX airplanes
2019-15-05		B/E Aerospace Fischer GmbH Rolls-Royce Deutschland Ltd & Co KG	Common Seats 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



2019-07-10 Northrop Grumman LITEF GmbH LCR-100 Attitude and Heading Reference System: Amendment 39-19621; Docket No. FAA-2017-0522; Product Identifier 2015-SW-068-AD.

(a) Applicability

This AD applies to airplanes and helicopters, certificated in any category, with a Northrop Grumman LITEF GmbH LCR-100 Attitude and Heading Reference System (AHRS) unit part number (P/N) 145130-2000, 145130-2001, 145130-7000, 145130-7001, or 145130-7100 installed using analog outputs for primary flight information display or autopilot functions without automatic output comparison. Aircraft known to have the subject AHRS units installed include but are not limited to the following:

- (1) Dornier Luftfahrt GmbH Model 228-100, 228-101, 228-200, 228-201, 228-202, and 228-212 airplanes;
- (2) Learjet Inc. Model 31A airplanes;
- (3) Pilatus Aircraft Ltd. Model PC12, PC-12/45, and PC-12/47 airplanes;
- (4) Polskie Zaklady Lotnicze Sp. z o.o. Model PZL M28 05 airplanes;
- (5) Textron Aviation Inc. (type certificate previously held by Cessna Aircraft Company) Model 560XL airplanes;
- (6) Bell Helicopter Textron Canada Limited Model 407 helicopters;
- (7) Bell Helicopter Textron Inc. Model 412 and 412EP helicopters; and
- (8) Sikorsky Aircraft Corporation Model S-76A, S-76-B, and S-76C helicopters.

(b) Unsafe Condition

This AD defines the unsafe condition as the AHRS unit's analog outputs of attitude and heading data freezing without detection or warning. This condition could result in misleading attitude and heading information, anomalous autopilot behavior, and loss of control of the aircraft.

(c) Affected ADs

This AD affects AD 2010-26-09, Amendment 39-16548 (75 FR 81424, December 28, 2010) ("AD 2010-26-09"). Accomplishing a certain requirement of this AD terminates the requirements of AD 2010-26-09.

(d) Effective Date

This AD becomes effective May 29, 2019.

(e) 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.

(f) Required Actions

- (1) Within 25 hours time-in-service (TIS), remove the AHRS unit from service.
- (2) Removal from service of P/N 145130-7100 terminates the requirements of AD 2010-26-09 (75 FR 81424, December 28, 2010).
- (3) Do not install an AHRS unit P/N 145130-2000, 145130-2001, 145130-7000, 145130-7001, or 145130-7100 on any aircraft.

(g) Alternative Methods of Compliance (AMOCs)

- (1) The Manager, Boston ACO Branch, FAA, may approve AMOCs for this AD. Send your proposal to: Nick Rediess, Aviation Safety Engineer, Boston ACO Branch, Compliance and Airworthiness Division, 1200 District Avenue, Burlington, Massachusetts 01803; telephone (781) 238-7763; email nicholas.rediess@faa.gov.
- (2) For operations conducted under a 14 CFR part 119 operating certificate or under 14 CFR part 91, subpart K, we suggest that 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.

(h) Additional Information

- (1) Northrop Grumman LITEF GmbH Service Bulletin No. 145130-0017-845, Revision D, dated April 1, 2015, which is not incorporated by reference, contains additional information about the subject of this AD. For service information identified in this AD, contact Northrop Grumman LITEF GmbH, Customer Service—Commercial Avionics, Loerracher Str. 18, 79115 Freiburg, Germany; telephone +49 (761) 4901-142; fax +49 (761) 4901-773; email ahrs.support@ng-litef.de. You may review a copy of the service information at the FAA, Office of the Regional Counsel, Southwest Region, 10101 Hillwood Pkwy., Room 6N-321, Fort Worth, TX 76177.
- (2) The subject of this AD is addressed in European Aviation Safety Agency (EASA) AD No. 2015-0093, dated May 27, 2015. You may view the EASA AD on the internet at <http://www.regulations.gov> in Docket No. FAA-2017-0522.

(i) Subject

Joint Aircraft Service Component (JASC) Code: 3420, Attitude and Directional Data System.

Issued in Fort Worth, Texas, on April 16, 2019.
Lance T. Gant,
Director, Compliance & Airworthiness Division,
Aircraft Certification Service.



2019-13-03 Trig Avionics Limited: Amendment 39-19676; Docket No. FAA-2018-1081; Product Identifier 2018-NE-39-AD.

(a) Effective Date

This AD is effective August 27, 2019.

(b) Affected ADs

None.

(c) Applicability

This AD applies to:

(1) Trig Avionics Limited TT31 Mode S transponders, part number (P/N) 00220-00-01 and P/N 00225-00-01, with a serial number (S/N) from 05767 to S/N 09715 inclusive, and Modification (Mod) Level 6 or below, installed.

(2) Avidyne Corporation AXP340 Mode S transponders, P/N 200-00247-0000, also marked with Trig Avionics P/N 01155-00-01, with a S/N from 00801 to S/N 01377 inclusive, and Mod Level 0, installed.

(3) BendixKing/Honeywell International KT74 Mode S transponders, P/N 89000007-002001, also marked with Trig Avionics P/N 01157-00-01, with a S/N from 01143 to S/N 02955 inclusive, and Mod Level 0, installed.

(d) Subject

Joint Aircraft System Component (JASC) Code 3452, ATC transponder system.

(e) Unsafe Condition

This AD was prompted by the discovery that the retaining cam that engages in the mounting tray may not withstand g-forces experienced during an emergency landing. The FAA is issuing this AD to prevent the transponder from detaching from the avionics rack. The unsafe condition, if not addressed, could result in damage to the fuel system or emergency evacuation equipment, or injury to aircraft occupants.

(f) Compliance

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

(g) Required Actions

(1) Within 90 days after the effective date of this AD, inspect the transponder installation to determine if the transponder is installed in a conventional aft-facing avionics rack.

(2) If the transponder is installed in a conventional aft-facing avionics rack, no further action is required.

(3) If the transponder is not installed in a conventional aft-facing avionics rack, remove the transponder before further flight.

(4) Use the Accomplishment Instructions, paragraphs 4-8, to determine if the part is eligible for repair and re-installation, for the appropriate transponder, per Trig Avionics Limited Service Bulletin (SB) SUP/TT31/027, Issue 1.0, dated October 1, 2018; Trig Avionics Limited SB SUP/AXP340/002, Issue 1.0, dated October 1, 2018; or Trig Avionics Limited SB SUP/KT74/005, Issue 1.0, dated October 1, 2018.

(h) Installation Prohibition

After the effective date of this AD, do not install an affected transponder on any aircraft, unless the transponder is installed in a conventional aft-facing avionics rack as defined in this AD.

(i) No Reporting Requirement

No reporting requirement contained within the SBs referenced in paragraph (g)(4) of this AD is required by this AD.

(j) Definition

For the purpose of this AD, a conventional aft-facing avionics rack is defined as an installation with the control panel oriented in opposition to the direction of flight (aft facing).

(k) Alternative Methods of Compliance (AMOCs)

(1) The Manager, Boston 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 ACO Branch, send it to the attention of the person identified in paragraph (l)(1) 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.

(l) Related Information

(1) For more information about this AD, contact Min Zhang, Aerospace Engineer, Boston ACO Branch, FAA, 1200 District Avenue, Burlington, MA, 01803; phone: 781-238-7161; fax: 781-238-7199; email: min.zhang@faa.gov.

(2) Refer to European Union Aviation Safety Agency (EASA) AD 2018-0247, dated November 13, 2018, for more information. You may examine the EASA AD in the AD docket on the internet at <http://www.regulations.gov> by searching for and locating it in Docket No. FAA-2018-1081.

(m) 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 the AD specifies otherwise.

(i) Trig Avionics Limited Service Bulletin (SB) SUP/TT31/027, Issue 1.0, dated October 1, 2018.

(ii) Trig Avionics Limited SB SUP/AXP340/002, Issue 1.0, dated October 1, 2018.

(iii) Trig Avionics Limited SB SUP/KT74/005, Issue 1.0, dated October 1, 2018.

(3) For Trig Avionics Limited service information identified in this AD, contact Trig Avionics Limited, Heriot Watt Research Park, Riccarton, Edinburgh EH14 4AP, United Kingdom; phone: +44 131 449 8810; fax: +44 131 449 8811; email: support@trig-avionics.com; internet: <https://trig-avionics.com>.

(4) You may view this service information at FAA, Engine & Propeller Standards Branch, 1200 District Avenue, Burlington, MA, 01803. For information on the availability of this material at the FAA, call 781-238-7759.

(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 Burlington, Massachusetts, on July 16, 2019.

Robert J. Ganley,
Manager, Engine and Propeller Standards Branch,
Aircraft Certification Service.



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www.faa.gov/aircraft/safety/alerts/
www.gpoaccess.gov/fr/advanced.html

2019-13-04 ATR-GIE Avions de Transport Régional: Amendment 39-19677; Docket No. FAA-2018-1069; Product Identifier 2018-NM-128-AD.

(a) Effective Date

This AD is effective August 26, 2019.

(b) Affected ADs

This AD affects AD 2018-14-11, Amendment 39-19331 (83 FR 34031, July 19, 2018) (“AD 2018-14-11”); AD 2000-23-26, Amendment 39-11999 (65 FR 70775, November 28, 2000) (“AD 2000-23-26”); and AD 2008-04-19 R1, Amendment 39-16069 (74 FR 56713, November 3, 2009) (“AD 2008-04-19 R1”).

(c) Applicability

This AD applies to ATR-GIE Avions de Transport Régional Model ATR72-101, -102, -201, -202, -211, -212, and -212A airplanes, certificated in any category, with an original airworthiness certificate or original export certificate of airworthiness issued on or before January 30, 2018.

(d) Subject

Air Transport Association (ATA) of America Code 05, Time Limits/Maintenance Checks.

(e) Reason

This AD was prompted by a determination that new or more restrictive maintenance instructions and airworthiness limitations are necessary. The FAA is issuing this AD to prevent fatigue cracking and damage in principal structural elements, which could result in reduced structural integrity of the airplane.

(f) Compliance

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

(g) Maintenance or Inspection Program Revision

Within 90 days after the effective date of this AD, revise the existing maintenance or inspection program, as applicable, to incorporate the information specified in ATR ATR72 Time Limits Document, Revision 16, dated January 30, 2018. The initial compliance time for doing the tasks is at the time specified in ATR ATR72 Time Limits Document, Revision 16, dated January 30, 2018, or within 90 days after the effective date of this AD, whichever occurs later, except as provided by paragraphs (h) and (i) of this AD.

(h) Initial Compliance Times for Certain Tasks

For accomplishing airworthiness limitations (AWL) and certification maintenance requirement (CMR)/maintenance significant item (MSI) tasks identified in figure 1 to paragraph (h) of this AD, the initial compliance time is at the applicable time specified in the airworthiness limitations section (ALS) of the ATR ATR72 Time Limits Document, Revision 16, dated January 30, 2018, or at the applicable compliance time in figure 1 to paragraph (h) of this AD, whichever occurs later.

Figure 1 to paragraph (h) – Grace period for CMR/MSI tasks

CMR/MSI Tasks	Compliance Time
213100-1	Within 550 flight hours or 3 months after August 23, 2018 (the effective date of AD 2018-14-11), whichever occurs first
213100-2	
213100-3	

(i) Initial Compliance Time: One-Time Initial Threshold

For CMR task 220000-5, a one-time initial threshold, as specified in ATR ATR72 Time Limits Document, Revision 16, dated January 30, 2018, is allowed as specified in figure 2 to paragraph (i) of this AD.

Figure 2 to paragraph (i) – Initial threshold for CMR task

Configuration	Compliance Time
ATR modification 7585 embodied in production	Within 7,000 flight hours since first flight of the airplane
ATR Service Bulletin ATR72-34-1154 embodied in service	Within 7,000 flight hours after embodiment of ATR Service Bulletin ATR72-34-1154

(j) No Alternative Actions and Intervals

After the existing maintenance or inspection program has been revised as required by paragraph (g) of this AD, no alternative actions (e.g., inspections) and intervals may be used unless the actions and intervals are approved as an alternative method of compliance (AMOC) in accordance with the procedures specified in paragraph (l)(1) of this AD.

(k) Terminating Action for AD 2018-14-11, AD 2000-23-26, and AD 2008-04-19 R1

Accomplishing the actions required by this AD terminates all requirements of AD 2018-14-11, AD 2000-23-26, and AD 2008-04-19 R1.

(l) Other FAA AD Provisions

The following provisions also apply to this AD:

(1) Alternative Methods of Compliance (AMOCs): The Manager, International Section, Transport Standards 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 International Section, send it to the attention of the person identified in paragraph (m)(2) of this AD. Information may be emailed to: 9-ANM-116-AMOC-

REQUESTS@faa.gov. 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.

(2) Contacting the Manufacturer: For any requirement in this AD to obtain corrective actions from a manufacturer, the action must be accomplished using a method approved by the Manager, International Section, Transport Standards Branch, FAA; or the European Aviation Safety Agency (EASA); or ATR-GIE Avions de Transport Régional's EASA Design Organization Approval (DOA). If approved by the DOA, the approval must include the DOA-authorized signature.

(m) Related Information

(1) Refer to Mandatory Continuing Airworthiness Information (MCAI) EASA AD 2018-0184, dated August 28, 2018, for related information. This MCAI may be found in the AD docket on the internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2018-1069.

(2) For more information about this AD, contact Shahram Daneshmandi, Aerospace Engineer, International Section, Transport Standards Branch, FAA, 2200 South 216th St., Des Moines, WA 98198; telephone and fax 206-231-3220.

(n) 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) ATR ATR72 Time Limits Document, Revision 16, dated January 30, 2018.

(ii) [Reserved]

(3) For service information identified in this AD, contact ATR-GIE Avions de Transport Régional, 1 Allée Pierre Nadot, 31712 Blagnac Cedex, France; telephone +33 (0) 5 62 21 62 21; fax +33 (0) 5 62 21 67 18; email [.](mailto:aircraft.com)

(4) You may view this service information at the FAA, Transport Standards Branch, 2200 South 216th St., Des Moines, WA. For information on the availability of this material at the FAA, call 206-231-3195.

(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 Des Moines, Washington, on July 1, 2019.

Michael Kaszycki,
Acting Director, System Oversight Division,
Aircraft Certification Service.



2019-14-01 Rolls-Royce Deutschland Ltd & Co KG: Amendment 39-19679; Docket No. FAA-2018-0993; Product Identifier 2018-NE-18-AD.

(a) Effective Date

This AD is effective August 26, 2019.

(b) Affected ADs

None.

(c) Applicability

This AD applies to Rolls-Royce Deutschland Ltd & Co KG (RRD) TAY 650-15 and TAY 651-54 turbofan engines with low-pressure compressor (LPC) fan blade module M01300AA or M01300AB, installed.

(d) Subject

Joint Aircraft System Component (JASC) Code 7230, Turbine Engine Compressor Section.

(e) Unsafe Condition

This AD was prompted by reports of LPC fan blade retention lug fractures on engines with a high number of dry-film lubrication (DFL) treatments. The FAA is issuing this AD to prevent failure of the LPC fan blade retention lug. The unsafe condition, if not addressed, could result in loss of engine thrust control and reduced control of the airplane.

(f) Compliance

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

(g) Required Actions

(1) Within 30 days after the effective date of this AD, determine whether the engine is a Group 1 or Group 2 engine as follows:

(i) A Group 1 engine is an affected RRD TAY 650-15 or TAY 651-54 turbofan engine with a LPC fan blade, part number (P/N) JR31911, P/N JR33865, or P/N JR33866, and with a serial number (S/N) listed in Appendix 1 of RRD Alert Non-Modification Service Bulletin (NMSB) TAY-72-A1833, Revision 1, dated January 8, 2018.

(ii) A Group 2 engine is any other RRD TAY 650-15 or TAY 651-54 turbofan engine with LPC fan blade module M01300AA or M01300AB, installed.

(2) For Group 1 and 2 engines: Within 30 days after the effective date of this AD, determine the number of DFL treatments on each affected LPC fan blade by reviewing the maintenance records or

using the alternative method specified in the Accomplishment Instructions, paragraph 3.D. or 3.Q., of RRD Alert NMSB TAY-72-A1833, Revision 1, dated January 8, 2018.

(3) Depending on the results of the maintenance record review or the alternative method specified above, do the following, as applicable:

(i) For Group 1 and 2 engines: If the number of DFL treatments on an LPC fan blade is fewer than 13, mark the LPC fan blade dovetail root with a suffix code during the next scheduled LPC fan blade removal using the Accomplishment Instructions, paragraph 3.J. or 3.U., of RRD Alert NMSB TAY-72-A1833, Revision 1, dated January 8, 2018.

(ii) For Group 1 engines: If any LPC fan blades with 13 to 20 DFL treatments are installed on more than one engine on the same airplane, within 500 flight hours after the effective date of this AD, use one of the three options in the Accomplishment Instructions, paragraph 3.F., of RRD Alert NMSB TAY-72-A1833, Revision 1, dated January 8, 2018, to ensure that no LPC fan blade with 13 to 20 DFL treatments is installed on more than one engine on the same airplane.

(iii) For Group 1 and 2 engines: If it is determined that the number of DFL treatments on an LPC fan blade is equal to or more than the value defined in Table 1 of paragraph (g) of this AD, remove the LPC fan blade from service and replace with a part eligible for installation within the compliance times specified in Table 1 of paragraph (g) of this AD.

Table 1 to Paragraph (g) – LPC Fan Blade Replacement

Group	DFL Treatments	Compliance Time
1	20 or more	Within 500 flight hours after the effective date of this AD
2	13 or more	Within 500 flight hours after the effective date of this AD

(h) Installation Prohibition

After the effective date of this AD, do not install an affected LPC fan blade or LPC module M01300AA or M01300AB onto any engine or install any engine with an affected LPC fan blade or LPC module M01300AA or M01300AB onto any airplane unless it has been first determined that the LPC fan blades have had less than 13 DFL treatments and have been marked in accordance with the Accomplishment Instructions, paragraph 3.J. or 3.U., of RRD Alert NMSB TAY-72-A1833, Revision 1, dated January 8, 2018.

(i) Definitions

(1) A part eligible for installation is an LPC fan blade that has had 12 or fewer DFL treatments and is marked on the LPC fan blade dovetail root with a suffix code depicting the number of DFL treatments.

(2) An affected fan blade is an LPC fan blade, P/N JR31911, P/N JR33865, or P/N JR33866, and with an S/N listed in Appendix 1 of RRD Alert NMSB TAY-72-A1833, Revision 1, dated January 8, 2018.

(j) Alternative Methods of Compliance (AMOCs)

(1) The Manager, ECO 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 ECO Branch, send it to the attention of the person

identified in paragraph (k)(1) of this AD. You may email your request to: ANE-AD-AMOC@faa.gov.

(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 Wego Wang, Aerospace Engineer, ECO Branch, FAA, 1200 District Avenue, Burlington, MA, 01803; phone: 781-238-7134; fax: 781-238-7199; email: wego.wang@faa.gov.

(2) Refer to European Union Aviation Safety Agency (EASA) AD 2018-0079, dated April 11, 2018, for more information. You may examine the EASA AD in the AD docket on the internet at <http://www.regulations.gov> by searching for and locating it in Docket No. FAA-2018-0993.

(l) 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 the AD specifies otherwise.

(i) Rolls-Royce Deutschland Ltd & Co KG (RRD) Alert Non-Modification Service Bulletin TAY-72-A1833, Revision 1, dated January 8, 2018.

(ii) [Reserved]

(3) For RRD service information identified in this AD, contact Rolls-Royce Deutschland Ltd & Co KG, Eschenweg 11, Dahlewitz, 15827 Blankenfelde-Mahlow, Germany; phone; +49 (0) 33-7086-1200; fax: +49 (0) 33-086-3276.

(4) You may view this service information at FAA, Engine & Propeller Standards Branch, 1200 District Avenue, Burlington, MA 01803. For information on the availability of this material at the FAA, call 781-238-7759.

(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 Burlington, Massachusetts, on July 12, 2019.

Robert J. Ganley,
Manager, Engine and Propeller Standards Branch,
Aircraft Certification Service.



2019-14-02 The Boeing Company: Amendment 39-19680; Docket No. FAA-2019-0114; Product Identifier 2018-NM-146-AD.

(a) Effective Date

This AD is effective August 27, 2019.

(b) Affected ADs

None.

(c) Applicability

This AD applies to all The Boeing Company Model 737 series airplanes, certificated in any category.

(d) Subject

Air Transport Association (ATA) of America Code 29, Hydraulic power.

(e) Unsafe Condition

This AD was prompted by a report indicating that structural fatigue cracks can develop in certain aluminum pressure module check valves prior to the design limit. The FAA is issuing this AD to address structural fatigue cracks in certain aluminum pressure module check valves, which could cause separation of the check valve head from the check valve body when hydraulic pressure is applied, resulting in injuries to maintenance personnel.

(f) Compliance

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

(g) Required Actions

(1) For airplanes identified as Group 1 in Boeing Special Attention Requirements Bulletin 737-29-1127 RB, dated October 8, 2018: Within 120 days after the effective date of this AD, inspect the airplane and do all applicable on-condition actions using a method approved in accordance with the procedures specified in paragraph (j) of this AD.

(2) Except as specified by paragraph (h)(3) of this AD: For airplanes identified as Groups 2 and 3 in Boeing Special Attention Requirements Bulletin 737-29-1127 RB, dated October 8, 2018, at the applicable times specified in the "Compliance" paragraph of Boeing Special Attention Requirements Bulletin 737-29-1127 RB, dated October 8, 2018, do all applicable actions identified in, and in accordance with, the Accomplishment Instructions of Boeing Special Attention Requirements Bulletin 737-29-1127 RB, dated October 8, 2018.

Note 1 to paragraphs (g)(2) through (g)(4): Guidance for accomplishing the actions required by this AD can be found in Boeing Special Attention Service Bulletin 737-29-1123, dated October 2, 2018; Boeing Special Attention Service Bulletin 737-29-1126, dated October 2, 2018; and Boeing Special Attention Service Bulletin 737-29-1127, dated October 8, 2018; as applicable; which are referred to in Boeing Special Attention Requirements Bulletin 737-29-1123 RB, dated October 2, 2018; Boeing Special Attention Requirements Bulletin 737-29-1126 RB, dated October 2, 2018; and Boeing Special Attention Requirements Bulletin 737-29-1127 RB, dated October 8, 2018; respectively.

(3) Except as specified by paragraph (h)(1) of this AD: For Model 737-600, -700, -700C, -800, -900, and -900ER airplanes that have an original airworthiness certificate or export certificate of airworthiness issued on or before the effective date of this AD; at the applicable times specified in the “Compliance” paragraph of Boeing Special Attention Requirements Bulletin 737-29-1123 RB, dated October 2, 2018, do all applicable actions identified in, and in accordance with, the Accomplishment Instructions of Boeing Special Attention Requirements Bulletin 737-29-1123 RB, dated October 2, 2018.

(4) Except as specified by paragraph (h)(2) of this AD: For Model 737-8 and 737-9 airplanes that have an original airworthiness certificate or export certificate of airworthiness issued on or before the effective date of this AD; at the applicable times specified in the “Compliance” paragraph of Boeing Special Attention Requirements Bulletin 737-29-1126 RB, dated October 2, 2018, do all applicable actions identified in, and in accordance with, the Accomplishment Instructions of Boeing Special Attention Requirements Bulletin 737-29-1126 RB, dated October 2, 2018.

(h) Exceptions to Service Information Specifications

For purposes of determining compliance with the requirements of this AD:

(1) Where Boeing Special Attention Requirements Bulletin 737-29-1123 RB, dated October 2, 2018, uses the phrase “the original issue date of Requirements Bulletin 737-29-1123 RB,” this AD requires using “the effective date of this AD.”

(2) Where Boeing Special Attention Requirements Bulletin 737-29-1126 RB, dated October 2, 2018, uses the phrase “the original issue date of Requirements Bulletin 737-29-1126 RB,” this AD requires using “the effective date of this AD.”

(3) Where Boeing Special Attention Requirements Bulletin 737-29-1127 RB, dated October 8, 2018, uses the phrase “the original issue date of Requirements Bulletin 737-29-1127 RB,” this AD requires using “the effective date of this AD.”

(i) Parts Installation Prohibition

As of the effective date of this AD, no person may install a Parker pressure module check valve, part number (P/N) H61C0552M1, or hydraulic pressure module assembly, P/N 65-17821-() that contains a Parker pressure module check valve, P/N H61C0552M1, on any airplane.

(j) Alternative Methods of Compliance (AMOCs)

(1) The Manager, Seattle 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. Information may be emailed to: 9-ANM-Seattle-ACO-AMOC-Requests@faa.gov.

(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.

(3) An AMOC that provides an acceptable level of safety may be used for any repair, modification, or alteration required by this AD if it is approved by The Boeing Company Organization Designation Authorization (ODA) that has been authorized by the Manager, Seattle ACO Branch, FAA, to make those findings. To be approved, the repair method, modification deviation, or alteration deviation must meet the certification basis of the airplane, and the approval must specifically refer to this AD.

(k) Related Information

(1) For more information about this AD, contact Douglas Tsuji, Aerospace Engineer, Systems and Equipment Section, FAA, Seattle ACO Branch, 2200 South 216th St., Des Moines, WA 98198; phone and fax: 206-231-3548; email: douglas.tsuji@faa.gov.

(2) Service information identified in this AD that is not incorporated by reference is available at the addresses specified in paragraphs (1)(3) and (1)(4) of this AD.

(l) 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 the AD specifies otherwise.

(i) Boeing Special Attention Requirements Bulletin 737-29-1123 RB, dated October 2, 2018.

(ii) Boeing Special Attention Requirements Bulletin 737-29-1126 RB, dated October 2, 2018.

(iii) Boeing Special Attention Requirements Bulletin 737-29-1127 RB, dated October 8, 2018.

(3) For service information identified in this AD, contact Boeing Commercial Airplanes, Attention: Contractual & Data Services (C&DS), 2600 Westminister Blvd., MC 110-SK57, Seal Beach, CA 90740-5600; phone: 562-797-1717; internet: <https://www.myboeingfleet.com>.

(4) You may view this service information at the FAA, Transport Standards Branch, 2200 South 216th St., Des Moines, WA. For information on the availability of this material at the FAA, call 206-231-3195.

(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 Des Moines, Washington, on July 11, 2019.

Suzanne Masterson,
Acting Director, System Oversight Division,
Aircraft Certification Service.



2019-14-04 Airbus SAS: Amendment 39-19682; Docket No. FAA-2019-0116; Product Identifier 2018-NM-152-AD.

(a) Effective Date

This AD is effective August 29, 2019.

(b) Affected ADs

This AD affects AD 2018-17-21, Amendment 39-19375 (83 FR 44209, August 30, 2018) (“AD 2018-17-21”).

(c) Applicability

This AD applies to the Airbus SAS airplanes identified in paragraphs (c)(1) through (c)(4) of this AD, certificated in any category, with an original airworthiness certificate or original export certificate of airworthiness issued on or before June 13, 2018.

- (1) Model A318-111, -112, -121, and -122 airplanes.
- (2) Model A319-111, -112, -113, -114, -115, -131, -132, and -133 airplanes.
- (3) Model A320-211, -212, -214, -216, -231, -232, -233, -251N, -252N, and -271N airplanes.
- (4) Model A321-111, -112, -131, -211, -212, -213, -231, -232, -251N, -251NX, -252N, -252NX, -253N, -253NX, -271N, -271NX, -272N, and -272NX airplanes.

(d) Subject

Air Transport Association (ATA) of America Code 05, Time Limits/Maintenance Checks.

(e) Reason

This AD was prompted by a determination that new or more restrictive airworthiness limitations are necessary. The FAA is issuing this AD to address the potential of ignition sources inside fuel tanks, which, in combination with flammable fuel vapors, could result in a fuel tank explosion and consequent loss of the airplane.

(f) Compliance

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

(g) Maintenance or Inspection Program Revision

Within 90 days after the effective date of this AD, revise the existing maintenance or inspection program, as applicable, to incorporate the information specified in Airbus A318/A319/A320/A321 Airworthiness Limitations Section (ALS), Part 5, Fuel Airworthiness Limitations (FAL), Revision 05, dated June 13, 2018. The initial compliance time for doing the tasks is at the time specified in

Airbus A318/A319/A320/A321 Airworthiness Limitations Section (ALS), Part 5, Fuel Airworthiness Limitations (FAL), Revision 05, dated June 13, 2018, or within 90 days after the effective date of this AD, whichever occurs later.

(h) No Alternative Actions, Intervals, or Critical Design Configuration Control Limitations (CDCCLs)

After the maintenance or inspection program has been revised as required by paragraph (g) of this AD, no alternative actions (e.g., inspections), intervals, or CDCCLs may be used unless the actions, intervals, and CDCCLs are approved as an alternative method of compliance (AMOC) in accordance with the procedures specified in paragraph (j)(1) of this AD.

(i) Terminating Action for AD 2018-17-21

Accomplishing the actions required by this AD terminates all requirements of AD 2018-17-21.

(j) Other FAA AD Provisions

The following provisions also apply to this AD:

(1) Alternative Methods of Compliance (AMOCs): The Manager, International Section, Transport Standards 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 International Section, send it to the attention of the person identified in paragraph (k)(2) of this AD. Information may be emailed to: 9-ANM-116-AMOC-REQUESTS@faa.gov.

(i) 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.

(ii) AMOCs approved previously for AD 2018-17-21 are approved as AMOCs for the corresponding provisions of this AD.

(2) Contacting the Manufacturer: For any requirement in this AD to obtain corrective actions from a manufacturer, the action must be accomplished using a method approved by the Manager, International Section, Transport Standards Branch, FAA; or the European Aviation Safety Agency (EASA); or Airbus SAS's EASA Design Organization Approval (DOA). If approved by the DOA, the approval must include the DOA-authorized signature.

(3) Required for Compliance (RC): If any service information contains procedures or tests that are identified as RC, those procedures and tests must be done to comply with this AD; any procedures or tests that are not identified as RC are recommended. Those procedures and tests that are not identified as RC may be deviated from using accepted methods in accordance with the operator's maintenance or inspection program without obtaining approval of an AMOC, provided the procedures and tests identified as RC can be done and the airplane can be put back in an airworthy condition. Any substitutions or changes to procedures or tests identified as RC require approval of an AMOC.

(k) Related Information

(1) Refer to Mandatory Continuing Airworthiness Information (MCAI) EASA AD 2018-0231, dated October 25, 2018, for related information. This MCAI may be found in the AD docket on the internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2019-0116.

(2) For more information about this AD, contact Sanjay Ralhan, Aerospace Engineer, International Section, Transport Standards Branch, FAA, 2200 South 216th St., Des Moines, WA 98198; telephone and fax 206-231-3223.

(I) 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) Airbus A318/A319/A320/A321 Airworthiness Limitations Section (ALS), Part 5, Fuel Airworthiness Limitations (FAL), Revision 05, dated June 13, 2018.

(ii) Reserved

(3) For service information identified in this AD, contact Airbus SAS, Airworthiness Office–EIAS, Rond-Point Emile Dewoitine No: 2, 31700 Blagnac Cedex, France; telephone +33 5 61 93 36 96; fax +33 5 61 93 44 51; email account.airworth-eas@airbus.com; internet <http://www.airbus.com>.

(4) You may view this service information at the FAA, Transport Standards Branch, 2200 South 216th St., Des Moines, WA. For information on the availability of this material at the FAA, call 206-231-3195.

(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 Des Moines, Washington, on July 16, 2019.

Michael Kaszycki,
Acting Director, System Oversight Division,
Aircraft Certification Service.



2019-14-05 B/E Aerospace Fischer GmbH: Amendment 39-19683; Docket No. FAA-2019-0129; Product Identifier 2019-NE-01-AD.

(a) Effective Date

This AD is effective September 3, 2019.

(b) Affected ADs

None.

(c) Applicability

(1) This AD applies to B/E Aerospace Fischer GmbH (B/E Aerospace Fischer) Common Seats 170/260 H160 with a part number and serial number combination listed in Annex A to B/E Aerospace Fischer Alert Service Bulletin (ASB) No. SB0718-004, Issue A, dated June 26, 2018.

(2) These seats are known to be installed on, but not limited to: Airbus Helicopters (formerly Airbus Helicopters Deutschland GmbH, Eurocopter Deutschland GmbH, Eurocopter Espa[ntilde]a S.A.) EC135 and EC635 helicopters; and Airbus Helicopters (formerly Eurocopter, Eurocopter France, Aerospatiale) AS 332 L1 and EC 225 LP helicopters.

(d) Subject

Joint Aircraft System Component (JASC) Code 2510, Flight Compartment Equipment.

(e) Unsafe Condition

This AD was prompted by the discovery during testing that the energy absorber (EA) installed on certain B/E Aerospace Fischer Common Seats 170/260 H160 may not function as intended during emergency landing. The FAA is issuing this AD to prevent malfunction of the EA on the seat. The unsafe condition, if not addressed, could result in injuries to the occupants during an emergency landing.

(f) Compliance

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

(g) Required Actions

Within 12 months or 1,000 flight hours, whichever occurs first, after the effective date of this AD:

(1) Review each affected B/E Aerospace Fischer Common Seat as identified by part number and serial number in Annex A of the B/E Aerospace Fischer ASB No. SB0718-004, Issue A, dated June 26, 2018, to determine if rework has already been performed. If the rework has been performed, the

seat will be marked with a placard stating “SB0718-004A implemented” and no further action is required.

(2) Rework the affected seats in accordance with paragraphs 1 and 2 in B/E Aerospace Fischer ASB No. SB0718-004, Issue A, dated June 26, 2018. Once the rework is complete, mark the seat by installing a placard in accordance with paragraph 3 in B/E Aerospace Fischer ASB No. SB0718-004 except submittal of the reply form to B/E Aerospace Fischer is not required.

(h) Installation Prohibition

From the effective date of this AD, do not install any seat affected by this AD onto any aircraft unless the seat is marked with a placard stating completion of B/E Aerospace Fischer ASB No. SB0718-004, Issue A, dated June 26, 2018.

(i) Alternative Methods of Compliance (AMOCs)

(1) The Manager, Boston 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)(1) 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.

(j) Related Information

(1) For more information about this AD, contact Dorie Resnik, Aerospace Engineer, Boston ACO Branch, FAA, 1200 District Avenue, Burlington, MA 01803; phone: 781-238-7693; fax: 781-238-7199; email: dorie.resnik@faa.gov.

(2) Refer to European Union Aviation Safety Agency (EASA) AD 2018-0223, dated October 17, 2018, for more information. You may examine the EASA AD in the AD docket on the internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2019-0129.

(k) 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 the AD specifies otherwise.

(i) B/E Aerospace Fischer Alert Service Bulletin No. SB0718-004, Issue A, dated June 26, 2018.

(ii) [Reserved]

(3) For B/E Aerospace Fischer service information identified in this AD, contact B/E Aerospace Fischer GmbH, Müller-Armack-Str. 4, D-84034 Landshut, Germany; phone: +49 (0) 871 93248-0; fax: +49 (0) 871 93248-22; email: spares@fischer-seats.de.

(4) You may view this service information at FAA, Engine & Propeller Standards Branch, 1200 District Avenue, Burlington, MA 01803. For information on the availability of this material at the FAA, call 781-238-7759.

(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 Burlington, Massachusetts, on July 22, 2019.
Robert J. Ganley,
Manager, Engine and Propeller Standards Branch,
Aircraft Certification Service.



2019-15-05 Rolls-Royce Deutschland Ltd & Co KG: Amendment 39-19698; Docket No. FAA-2019-0567; Product Identifier 2019-NE-21-AD.

(a) Effective Date

This AD is effective August 16, 2019.

(b) Affected ADs

None.

(c) Applicability

This AD applies to all Rolls-Royce Deutschland Ltd & Co KG (RRD) 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.

(d) Subject

Joint Aircraft System Component (JASC) Code 7250, Turbine Section.

(e) Unsafe Condition

This AD was prompted by recent analysis of the material condition used in the manufacture of these parts that determined the high-pressure turbine (HPT) disk front cover plate may have a safe life below its declared safe cyclic life. The FAA is issuing this AD to prevent failure of the HPT disk front cover plate. The unsafe condition, if not addressed, could result in uncontained release of the HPT turbine disk front cover plate, damage to the engine, and damage to the airplane.

(f) Compliance

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

(g) Required Actions

Remove the HPT disk front cover plate, part number KH59279, from service prior to it reaching 1,250 engine cycles since first installation on an engine and replace with a part eligible for installation.

(h) Installation Prohibition

Do not install any HPT disk front cover plate, part number KH59279, into any engine, or any engine onto any airplane, if that part has exceeded 1,250 engine cycles since first installation on an engine.

(i) Alternative Methods of Compliance (AMOCs)

(1) The Manager, ECO 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) 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.

(j) Related Information

(1) For more information about this AD, contact Besian Luga, Aerospace Engineer, ECO Branch, FAA, 1200 District Avenue, Burlington, MA 01803; phone: 781-238-7750; fax: 781-238-7199; email: Besian.luga@faa.gov.

(2) Refer to European Union Aviation Safety Agency (EASA) AD 2018-0164R1, dated March 14, 2019 (corrected copy dated March 21, 2019), for more information. You may examine the EASA AD in the AD docket on the internet at <http://www.regulations.gov> by searching for and locating it in Docket No. FAA-2019-0567.

(k) Material Incorporated by Reference

None.

Issued in Burlington, Massachusetts, on July 26, 2019.
Karen M. Grant,
Acting Manager, Engine and Propeller Standards Branch,
Aircraft Certification Service.