

# FEDERAL AVIATION ADMINISTRATION AIRWORTHINESS DIRECTIVES

**LARGE AIRCRAFT**

**BIWEEKLY 2017-21**

*10/2/2017 - 10/15/2017*



Federal Aviation Administration  
Continued Operational Safety Policy Section, AIR-141  
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## LARGE AIRCRAFT

AD No.	Information	Manufacturer	Applicability
Information Key: E - Emergency; COR - Correction; S – Supersedes, R - Replaces			
<b>Biweekly 2017-01</b>			
2016-25-01		The Boeing Company	747-400, 747-400D, and 747-400F series; 757-200, -200PF, -200CB, and -300 series; 767-200, -300, -300F, and -400ER series; 767-300 and -300F series; and 767-300 and -300F series
2016-25-07	R 2012-11-15	The Boeing Company	767-200 and -300 series
2016-25-25		BAE (Operations) Limited	4101
2016-25-26		The Boeing Company	MD-90-30
2016-25-27		Airbus	A300 B4-603, B4-620, B4-622, B4-605R, B4-622R, F4-605R, F4-622R, and C4-605R variant F
2016-25-29		The Boeing Company	767-200 and -300 series
2016-25-30		Airbus	A330-223F and -243F; A330-201, -202, -203, -223, and -243; A330-301, -302, -303, -321, -322, -323, -341, -342, and -343; A340-211, -212, and -213; A340-311, -312, and -313; A340-541; A340-642
2016-25-31		Airbus	A330-201, -202, -203, -223, -223F, -243, -243F, -301, -302, -303, -321, -322, -323, -341, -342, and -343; A340-211, -212, -213, -311, -312, and -313; A340-541; and A340-642
2016-26-02		Bombardier, Inc.	CL-600-2C10 (Regional Jet Series 700, 701, & 702); CL-600-2D15 (Regional Jet Series 705); and CL-600-2D24 (Regional Jet Series 900); CL-600-2E25 (Regional Jet Series 1000)
2016-26-03	R 2013-23-02	Airbus Defense and Space S.A.	CN-235, CN-235-100, CN-235-200, CN-235-300, and C-295
2016-26-05	R 2014-26-08	Airbus	A330-201, -202, -203, -223, -223F -243, -243F, -301, -302, -303, -321, -322, -323, -341, -342, and -343
2017-01-07		Dassault Aviation	FAN JET FALCON; FAN JET FALCON SERIES C, D, E, F, and G; MYSTERE-FALCON 200; MYSTERE-FALCON 20-C5, 20-D5, 20-E5, and 20-F5; MYSTERE-FALCON 50
2017-01-08		Airbus	A330-201, -202, -203, -223, -223F, -243, -243F, -301, -302, -303, -321, -322, -323, -341, -342 and -343 airplanes; and Model A340-211, -212, -213, -311, -312, -313, -541, and -642
2016-25-02		The Boeing Company	787-8 series
<b>Biweekly 2017-02</b>			
2016-26-06		The Boeing Company	787-8 airplanes
2016-26-07		The Boeing Company	747-100, 747-100B, 747-100B SUD, 747-200B, 747-200C, 747-200F, 747-300, 747-400, 747-400D, 747-400F, 747SR, and 747SP series airplanes
2017-01-01	R 2014-05-25	Rolls-Royce plc	RB211-Trent 970-84, RB211-Trent 970B-84, RB211-Trent 972-84, RB211-Trent 972B-84, RB211-Trent 977-84, RB211-Trent 977B-84, and RB211-Trent 980-84 turbofan engines
2017-01-02		The Boeing Company	787-8 and 787-9 airplanes
2017-01-04		Fokker Services B.V.	F28 Mark 0100 airplanes
2017-01-05		Airbus Defense and Space S.A.	CN-235, CN-235-100, CN-235-200, and CN-235-300 airplanes
2017-01-06		Airbus	A319-115, A319-132, A320-214, A320-232, A321-211, A321-213, and A321-231 airplanes
2017-01-09		The Boeing Company	767-300 and 767-300F series airplanes
2017-01-10		Airbus Defense and Space S.A.	C-212-CB, C-212-CC, C-212-CD, C-212-CE, C-212-CF, C-212-DF, and C-212-DE airplanes
2017-01-11		Airbus	A318, A319, A320, A321 airplanes
<b>Biweekly 2017-03</b>			
No ADs			
<b>Biweekly 2017-04</b>			
2017-01-03	R 2007-11-13	The Boeing Company	717-200 airplanes
2017-01-09	COR	The Boeing Company	767-300 and 767-300F series airplanes
2017-01-11		Airbus	A318, A319, A320, A321 airplanes
2017-02-02	2005-13-30	The Boeing Company	737-100, -200, and -200C series airplanes
2017-02-03		The Boeing Company	767-200, -300, and -400ER series airplanes

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2017-02-04		The Boeing Company	747-200B, 747-300, 747-400, 747-400D, and 747-400F series airplanes
2017-02-05		The Boeing Company	737-100, -200, -200C, -300, -400, and -500 series airplanes
2017-02-08		Airbus	A300 B2-1A, B2-1C, B2K-3C, B2-203, B4-2C, B4-103, and B4-203 airplanes; A300 B4-601, B4-603, B4-620, B4-622, B4-605R, B4-622R, F4-605R, F4-622R, and C4-605R Variant F airplanes
2017-02-09		The Boeing Company	747-400, -400D, and -400F series airplanes
2017-02-10	R 2013-19-04	The Boeing Company	737-600, -700, -700C, -800, and -900 series airplanes
2017-03-02	S 2014-16-10	Rolls-Royce plc	RB211 Trent 768-60, 772-60, and 772B-60 turbofan engines
<b>Biweekly 2017-05</b>			
2017-02-01		Rolls-Royce plc	Trent 1000-A, Trent 1000-C, Trent 1000-D, Trent 1000-E, Trent 1000-G, and Trent 1000-H turbofan engines
2017-02-12		The Boeing Company	737-300, -400, and -500 series airplanes
2017-03-03	S 2013-05-18	Rolls-Royce plc	RB211 Trent 553-61, RB211 Trent 553A2-61, RB211 Trent 556-61, RB211 Trent 556A2-61, RB211 Trent 556B-61, RB211 Trent 556B2-61, RB211 Trent 560-61, and RB211 Trent 560A2-61 turbofan engines
2017-03-04	R 2012-16-07	The Boeing Company	737-500 series airplanes
2017-04-01		Gulfstream Aerospace Corporation	GVI airplanes
2017-04-02	R 2014-23-06	Bombardier, Inc.	CL-600-2B19 (Regional Jet Series 100 & 440) airplanes
2017-04-04	R 2012-16-08	BAE Systems (Operations) Limited	BAe 146-100A, -200A, and -300A; Avro 146-RJ70A, 146-RJ85A, and 146-RJ100A airplanes
2017-04-05	R 2011-10-17	Airbus	A300 B2-1A, B2-1C, B4-2C, B2K-3C, B4-103, B2-203, and B4-203 airplanes
2017-04-06		United Instruments, Inc.	5934 series altimeters
2017-04-07		The Boeing Company	757-200, -200PF, -200CB, and -300 series airplanes
2017-04-08	R 2008-13-12 R1	The Boeing Company	737-100, -200, -200C, -300, -400, and -500 series airplanes
2017-04-09	R 2012-22-12	Airbus	A330-243, -243F, -341, -342, and -343 airplanes
2017-04-10		Airbus	A318, A319, A320, A321 airplanes
2017-04-11		The Boeing Company	737-600, -700, -700C, -800, and -900 series airplanes
2017-04-12		Embraer	EMB-135, EMB-145 airplanes
2017-04-13		The Boeing Company	747-8 and 747-8F series airplanes
2017-04-15		Learjet Inc.	36A airplanes
2017-05-01		Airbus	A300 B2-1A, B2-1C, B2K-3C, B2-203, B4-2C, B4-103, and B4-203 airplanes
2017-05-02		Airbus	A318, A319, A320, A321 airplanes
2017-05-06		The Boeing Company	767-200 and -300 series airplanes
2017-05-07		The Boeing Company	777-200 and -300 series airplanes
<b>Biweekly 2017-06</b>			
2017-05-09		CFM International S.A.	CFM56-5B, CFM56-5B/P, CFM56-5B/3, CFM56-5B/2P, CFM56-5B/P1, CFM56-5B/2P1, and CFM56-5B/3B1 engines
2017-05-11	R 2012-08-11	Bombardier, Inc.	DHC-8-400, -401, and -402 airplanes
2017-05-10	R 2015-16-02	Airbus	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
2017-05-05		Pratt & Whitney Division	PW4074, PW4074D, PW4077, PW4077D, PW4084D, PW4090, and PW4090-3 turbofan engines
2017-05-12		Airbus	A318-112; A319-111, -112, -115, -132, and -133; A320-214, -232, and -233; A321-211, -212, -213, -231, and -232 airplanes
<b>Biweekly 2017-07</b>			
2017-06-05		The Boeing Company	DC-6, DC-6A, DC-6B, C-118A, R6D-1, and R6D-1Z airplanes
2017-07-03		Airbus	A330-243, -243F, -341, -342, and -343 airplanes
2017-06-04		Airbus	A300 B4-603, B4-620, and B4-622; A300 B4-605R and A300 B4-622R; and A300 C4-605R Variant F airplanes
2017-06-02		Fokker Services B.V.	F28 Mark 0100 airplanes

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2017-06-10		Bombardier, Inc.	DHC-8-400, -401, and -402 airplanes
2017-06-09		The Boeing Company	787-8 airplanes
2017-06-01	R 2017-03-04	The Boeing Company	737-500 series airplanes
2017-06-14		The Boeing Company	737-300, -400, and -500 series airplanes
2017-06-13		Textron Aviation Inc.	680 airplanes
2016-25-25	COR	BAE Systems (Operations) Limited	4101 airplanes
2017-06-12		Airbus	A319-111, -112, -113, -114, -115, -131, -132, and -133; A320-211, -212, -214, -231, -232, and -233 airplanes
<b>Biweekly 2017-08</b>			
2017-08-04	R 2015-03-01	Bombardier, Inc.	CL-600-2B19 (Regional Jet Series 100 & 440) airplanes
2017-07-06		Gulfstream Aerospace Corporation	G-1159B airplanes
2017-08-05	R 2016-13-05	General Electric Company	GE90-76B, GE90-77B, GE90-85B, GE90-90B, and GE90-94B turbofan engines
2017-06-07		Airbus	A330-223F and -243F; A330-201, -202, -203, -223, and -243; A330-301, -302, -303, -321, -322, -323, -341, -342, and -343; A340-211, -212, and -213; A340-311, -312, and -313; A340-541; and A340-642 airplanes
2017-07-03	COR	Airbus	A330-243, -243F, -341, -342, and -343 airplanes
2017-08-01	R 2013-22-19	Gulfstream Aerospace Corporation	GV and GV-SP airplanes
2017-06-08	R 2006-06-09 R 2012-05-08 R 2012-07-08	Embraer S.A.	ERJ 170-100 LR, -100 STD, -100 SE, and -100 SU; ERJ 170-200 LR, -200 SU, and -200 STD airplanes
2017-07-04	R 2013-24-17	General Electric Company	GE90-110B1 and GE90-115B engines
2017-08-02		Bombardier, Inc.	DHC-8-102, -103, and -106; DHC-8-201 and -202; DHC-8-301, -311, and -315 airplanes
2017-07-05		Airbus	A300 airplanes
<b>Biweekly 2017-09</b>			
2017-07-07		Airbus	A330-201, -202, -203, -223, -243, -301, -302, -303, -321, -322, -323, -341, -342, and -343; A340-211, -212, -213, -311, -312, and -313
2017-08-03		Airbus	A318-111, -112, -121, and -122; A319-111, -112, -113, -114, -115, -131, -132, and -133; A320-211, -212, -214, -231, -232, and -233; A321-111, -112, -131, -211, -212, -213, -231, and -232
2017-08-06		General Electric Company	GE90-76B, GE90-85B, GE90-90B, GE90-94B, GE90-110B1, and GE90-115B
2017-08-07		Learjet, Inc.	60
2017-08-08		CFE Company	CFE738-1-1B
2017-08-10	R 2017-01-01	Rolls-Royce plc	RB211-Trent 970-84, RB211-Trent 970B-84, RB211-Trent 972-84, RB211-Trent 972B-84, RB211-Trent 977-84, RB211-Trent 977B-84, and RB211-Trent 980-84
2017-08-11	R 2012-04-01	Rolls-Royce plc	RB211-Trent 875-17, 877-17, 884-17, 884B-17, 892-17, 892B-17, and 895-17
2017-08-13		Airbus	A300 B2-1A, B2-1C, B2K-3C, B2-203, B4-2C, B4-103, and B4-203; A300 B4-601, B4-603, B4-620, B4-622, B4-605R, B4-622R, F4-605R, and F4-622R, and A300 C4-605R Variant F; and A310-203, -204, -221, -222, -304, -322, -324, and -325; A300 F4-605R and F4-622R
2017-09-01		Bombardier, Inc.	CL-600-2E25 (Regional Jet Series 1000)
2016-05-02	R 2011-13-11 R 2011-13-11	Airbus	A318-111, -112, -121, and -122; A319-111, -112, -113, -114, -115, -131, -132, and -133; A320-211, -212, -214, -231, -232, and -233; A321-111, -112, -131, -211, -212, -213, -231, and -232
<b>Biweekly 2017-10</b>			
2017-09-03	R 2013-03-12	Dassault Aviation	MYSTERE-FALCON 50 airplanes
2017-09-04		The Boeing Company	707-100 Long Body, -200, -100B Long Body, and -100B Short Body series; 707-300, -300B, -300C, and -400 series; 720 and 720B series airplanes

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2017-09-06 2017-10-01	R 2015-15-03	General Electric Company Dassault Aviation	GENx-1B and GENx-2B turbofan engines FAN JET FALCON and FAN JET FALCON SERIES C, D, E, F, and G; MYSTERE-FALCON 20-C5, 20-D5, 20-E5, and 20-F5 airplanes
<b>Biweekly 2017-11</b>			
2017-09-08		The Boeing Company	787-8 airplanes
2017-09-09		Zodiac Seats California LLC	4157, 4170, and 4184 seating systems
2017-09-10		The Boeing Company	747-400, 747-400D, and 747-400F airplanes
2017-09-11		Bombardier, Inc.	DHC-8-400, -401, and -402 airplanes
2017-09-12		ATR-GIE Avions de Transport Régional	ATR42-500; ATR72-102, -202, -212, and -212A airplanes
2017-10-04		Embraer S.A.	EMB-120, EMB-120ER, EMB-120FC, EMB-120QC, and EMB-120RT airplanes
2017-10-05		Airbus	A300 airlines
2017-10-06		Rolls-Royce plc	RB211 Trent 768-60, RB211 Trent 772-60, and RB211 Trent 772B-60 turbofan engines
2017-10-07		The Boeing Company	737-400 series airplanes
2017-10-08	R 2009-21-01	The Boeing Company	737-300 series airplanes
2017-10-14	S 2014-07-07	British Aerospace Regional Aircraft	HP.137 Jetstream Mk.1, Jetstream Series 200, and Jetstream Series 3101 airplanes
2017-10-15		Airbus Defense and Space S.A.	CN-235, CN-235-100, CN-235-200, CN-235-300, and C-295 airplanes
2017-10-16		The Boeing Company	787-8 and 787-9 airplanes
2017-10-17	R 2014-16-19	Airbus	A330 airplanes
2017-10-18		Airbus	A330-223F, -223, -321, -322, and -323 airplanes
2017-10-21		The Boeing Company	737-300, -400, and -500 series airplanes
2017-10-22		The Boeing Company	737-600, -700, -700C, -800, and -900 series airplanes
2017-10-23		Airbus	A321-111, -112, -131, -211, -212, -213, -231, and -232 airplanes
2017-10-24	R 2011-17-09 R 2012-25-12	Airbus	A330 airplanes
2017-10-25		Rolls-Royce Deutschland Ltd & Co KG	Spey 506-14A, Spey 555-15, Spey 555-15H, Spey 555-15N, and Spey 555-15P turbofan engines
2017-11-01		The Boeing Company	737-100, -200, and -200C series airplanes
2017-11-02		The Boeing Company	MD-90-30 airplanes
2017-11-09	R 2017-08-07	Learjet, Inc.	Model 60 airplanes
<b>Biweekly 2017-12</b>			
2017-10-07		The Boeing Company	737-400 series airplanes
2017-10-08	R 2009-21-01	The Boeing Company	737-300 series airplanes
2017-10-13	S 2015-17-19	Rolls-Royce plc	RB211 Trent 768-60, 772-60, and 772B-60 turbofan engines
2017-10-14	S 2014-07-07	British Aerospace Regional Aircraft	HP.137 Jetstream Mk.1, Jetstream Series 200, and Jetstream Series 3101 airplanes
2017-11-04		The Boeing Company	767-200, -300, and -400ER series airplanes
2017-11-07		Airbus	A318, A319, A320, A321 airplanes
2017-11-09	R 2017-08-07	Learjet, Inc.	60 airplanes
2017-11-11		NavWorx, Inc.	ADS600-B and ADS600-EXP ADS-B Universal Access Transceiver units
2017-11-12		Bombardier, Inc.	BD-100-1A10 airplanes
2017-11-13	R 98-13-14	Airbus	A320-211, -212, and -231 airplanes
2017-11-14	R 2011-26-03	The Boeing Company	777-200, -200LR, -300, -300ER, and 777F airplanes
2017-11-15		General Electric Company	CF6-80C2L1F turbofan engines
2017-12-01		The Boeing Company	767-200 series airplanes
2017-12-02		General Electric Company	GENx-1B64, -1B64/P1, -1B64/P2, -1B67, -1B67/P1, -1B67/P2, -1B70, 1B70/P1, -1B70/P2, -1B70/75/P1, -1B70/75/P2, -1B70C/P1, -1B70C/P2, -1B74/75/P1, -1B74/75/P2, -1B76A/P2 engines
<b>Biweekly 2017-13</b>			
2017-11-05		Roll-Royce Corporation	AE 3007C and 3007C1 turbofan engines
2017-11-06	R 2014-05-32	Pratt & Whitney	PW2037, PW2037D, PW2037M, PW2040, PW2040D, PW2043, PW2143, PW2643, and F117-PW-100 turbofan engines

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2017-12-03		Pratt & Whitney Division	PW2037, PW2037M, and PW2040 turbofan engines
2017-12-05	R 2007-26-04	The Boeing Company	737-100, -200, -200C, -300, -400, and -500 series airplanes
2017-12-06		Airbus	A300, A310 airplanes
2017-12-07		The Boeing Company	737-800, -900, and -900ER series airplanes
2017-12-08	R 2011-24-06	BAE Systems (Operations) Limited	BAe 146-100A, -200A, and -300A; and Avro 146-RJ70A, 146-RJ85A, and 146-RJ100A airplanes
2017-12-09		Embraer	EMB-135ER, -135BJ, -135KE, -135KL, and -135LR; and EMB-145, -145ER, -145MR, -145LR, -145MP, -145EP, and -145XR airplanes
2017-12-10		Airbus	A321-111, -112, -131, -211, -212, -213, -231, and -232 airplanes
2017-12-11		Bombardier, Inc.	BD-100-1A10 airplanes
2017-12-12		The Boeing Company	757-200, -200PF, and -200CB series airplanes
2017-12-13		Airbus	A320-212, A320-214, A320-232 airplanes
2017-12-14		The Boeing Company	757-200 and -200PF series airplanes
2017-12-15		Bombardier, Inc.	CL-600-2E25 (Regional Jet Series 1000) airplanes
2017-13-01		The Boeing Company	737-300, -400, and -500 series airplanes
2017-13-02		Dassault Aviation	FALCON 7X airplanes
<b>Biweekly 2017-14</b>			
2017-10-19		Rolls-Royce plc	Trent 1000-A2, Trent 1000-C2, Trent 1000-D2, Trent 1000-E2, Trent 1000-G2, Trent 1000-H2, Trent 1000-J2, Trent 1000-K2, and Trent 1000-L2
2017-13-07		Airbus	A319-111, -112, -113, -114, -115, -131, -132, and -133; A320-211, -212, -214, -231, -232, and -233; A321-111, -112, -131, -211, -212, -213, -231, and -232
2017-13-08	R 2015-23-13	Airbus	A318-111, -112, -121, and -122; A319-111, -112, -113, -114, -115, -131, -132, and -133; A320-211, -212, -214, -231, -232, and -233; A321-111, -112, -131, -211, -212, -213, -231, and -232
2017-13-09	R 2014-16-02	Bombardier, Inc.	CL-600-1A11 (CL-600)
2017-13-10	R 2003-18-06	Airbus	A319-131 and -132; A320-231, -232, and -233; A321-131 and -231
2017-13-11		Gulfstream Aerospace Corporation	G-IV
2017-13-12		Airbus	A318-111, -112, -121, and -122; A319-111, -112, -113, -114, -115, -131, -132, and -133; A320-211, -212, -214, -231, -232, and -233; A321-111, -112, -131, -211, -212, -213, -231, and -232
2017-13-13		The Boeing Company	737-100, -200, -200C, -300, -400, and -500 series
2017-13-14		The Boeing Company	777-300ER series
2017-14-01	R 2013-10-03	Airbus	A330-201, -202, -203, -223, -223F, -243, -243F, -301, -302, -303, -321, -322, -323, -341, -342, and -343; A340-211, -212, -213, -311, -312, and -313
2017-14-02		Bombardier, Inc.	DHC-8-401 and DHC-8-402
<b>Biweekly 2017-15</b>			
2017-14-07		International Aero Engines AG	V2522-A5, V2524-A5, V2527-A5, V2527E-A5, V2527M-A5, V2530-A5, V2533-A5, V2525-D5, V2528-D5, and V2531-E5 turbofan engines
2017-14-08		CFM International S.A.	CFM56-3, -3B, and -3C turbofan engines
2017-14-09		Fokker Services B.V.	F28 Mark 0100 airplanes
2017-14-10		The Boeing Company	MD-11 and MD-11F airplanes
2017-14-11	R 2007-13-08	Airbus	A318, A319, A320, A321 airplanes
2017-14-13		The Boeing Company	737-600, -700, -700C, -800, -900, and -900ER series airplanes
2017-14-14		Airbus	A321-111, -112, -131, -211, -212, -213, -231, and -232 airplanes
2017-14-16		Bombardier, Inc.	BD-100-1A10 airplanes
2017-15-01		The Boeing Company	777-200, -200LR, -300, -300ER, and 777F series airplanes
2017-15-03	R 2014-08-02	Airbus	A300-B4-601, B4-603, B4-620, and B4-622 airplanes, and A300-B4-605R and B4-622R airplanes
2017-15-04		The Boeing Company	787-8 and 787-9 airplanes

## LARGE AIRCRAFT

AD No.	Information	Manufacturer	Applicability
Information Key: E - Emergency; COR - Correction; S – Supersedes, R - Replaces			
<b>Biweekly 2017-16</b>			
2017-13-05	R 2013-13-16	Airbus	A330-201, -202, -203, -223, -243, -301, -302, -303, -321, -322, -323, -341, -342, and -343; A340-211, -212, -213, -311, -312, -313, -541, and -642 airplanes
2017-14-15		Bombardier, Inc.	BD-700-1A10 and BD-700-1A11 airplanes
2017-15-06	R 97-10-05	British Aerospace Regional Aircraft	HP.137 Jetstream Mk.1, Jetstream Series 200 and 3101, and Jetstream Model 3201 airplanes
2017-15-10		The Boeing Company	787-9 airplanes
2017-15-11		Bombardier, Inc.	DHC-8-102, -103, -106, -201, -202, -301, -311, and -315 airplanes
2017-15-12		The Boeing Company	737-300, -400, and -500 series airplanes
2017-15-14		Bombardier, Inc.	CL-215-6B11 (CL-415 Variant) airplanes
2017-15-16		Embraer	EMB-135ER, -135KE, -135KL, -135LR, -145, -145ER, -145MR, -145LR, -145XR, -145MP, and -145EP airplanes
2017-15-17		Airbus	A300 B4-605R and B4-622R; A300 C4-605R Variant F; A300 F4-605R and F4-622R airplanes
<b>Biweekly 2017-17</b>			
2017-14-12	R 2015-22-06	Airbus	318-111, -112, -121, and -122; A319-111, -112, -113, -114, -115, -131, -132, and -133; A320-211, -212, -214, -231, -232, and -233; A321-111, -112, -131, -211, -212, -213, -231, and -232
2017-15-08		Bombardier, Inc.	CL-600-2E25 (Regional Jet Series 1000)
2017-16-05		The Boeing Company	737-600, -700, -700C, -800, -900, and -900ER series
2017-16-06		Airbus	A300 B2-1A, B2-1C, B2K-3C, B2-203, B4-2C, B4-103, and B4-203; A300 B4-601, B4-603, B4-620, and B4-622; A300 B4-605R and B4-622R; A300 F4-605R and F4-622R; A300 C4-605R Variant F; A310-203, -204, -221, -222, -304, -322, -324, and -325
<b>Biweekly 2017-18</b>			
2017-16-09		Dassault Aviation	MYSTERE-FALCON 50 and FALCON 2000
2017-16-10		The Boeing Company	777-200, -200LR, -300, -300ER, and 777F series
2017-16-12	R 2013-19-09 R 2014-25-51	Airbus	A318-111, -112, -121, and -122; A319-111, -112, -113, -114, -115, -131, -132, and -133; A320-211, -212, -214, -231, -232, and -233; A321-111, -112, -131, -211, -212, -213, -231, and -232
2017-16-13		Bombardier, Inc.	CL-600-2B16 (CL-601-3A, CL-601-3R, and CL-604 Variants)
2017-17-02	R 2014-20-09	Bombardier, Inc.	DHC-8-400, -401, and -402
2017-17-04		The Boeing Company	737-100, -200, -200C, -300, -400, and -500 series
2017-17-05		Airbus	A300 B2-1A, B2-1C, B2K-3C, B2-203, B4-2C, B4-103, and B4-203; A300 B4-601, B4-603, B4-620, and B4-622; A300 B4-605R and B4-622R; A300 F4-605R and F4-622R; A300 C4-605R Variant F
2017-17-06		The Boeing Company	737-300, -400, and -500 series
2017-17-07		Rolls-Royce plc	Trent XWB-75, Trent XWB-79, Trent XWB-79B, and Trent XWB-84 turbofan engines
2017-17-08		Airbus	A330-201, -202, -203, -223, -223F, -243, -243F, -301, -302, -303, -321, -322, -323, -341, -342, and -343; A340-541 and -642
2017-17-09		The Boeing Company	737-300, -400, and -500 series
2017-17-10	R 2015-23-12	ATR-GIE Avions de Transport Régional	ATR42-200, -300, -320, and -500; and ATR72-101, -201, -102, -202, -211, -212, and -212A
2017-17-11		Dassault Aviation	FALCON 7X
2017-17-12		Airbus	A310-203, -221, -222, -304, -322, -324, and -325
2017-17-13		Bombardier, Inc.	BD-100-1A10
2017-17-14		Saab AB, Saab Aeronautics	340A (SAAB/SF340A)
2017-17-15		Bombardier, Inc.	CL-600-2E25 (Regional Jet Series 1000)
2017-17-16		The Boeing Company	767-200, -300, -300F, and -400ER series
2017-17-18		General Electric Company	CF34-8C1, CF34-8C5, CF34-8C5A1, CF34-8C5B1, CF34-8C5A2, CF34-8C5A3, CF34-8E2, CF34-8E2A1, CF34-8E5, CF34-8E5A1, CF34-8E5A2, CF34-8E6 and CF34-8E6A1; CF34-8C5B1/B, CF34-8C5/B, CF34-8C5A1/B, CF34-

## LARGE AIRCRAFT

AD No.	Information	Manufacturer	Applicability
Information Key: E - Emergency; COR - Correction; S – Supersedes, R - Replaces			
2017-17-19		The Boeing Company	8C5A2/B, CF34-8C5/M, CF34-8C5A1/M, CF34-C8C5A2/M, CF34-8C5A3/B, or CF34-8C5B1/M
2017-18-05		The Boeing Company	DC-9-81 (MD-81), DC-9-82 (MD-82), DC-9-83 (MD-83), and DC-9-87 (MD-87) and MD-88
2017-18-06	R 2012-05-03	The Boeing Company	747-100, 747-100B, 747-100B SUD, 747-200B, 747-200C, 747-200F, 747-300, 747-400, 747-400D, 747-400F, 747SR, and 747SP
2017-18-07		Dassault Aviation	747-100, 747-100B, 747-100B SUD, 747-200B, 747-200C, 747-200F, 747-300, 747-400, 747-400D, 747-400F, 747SR, and 747SP series
2017-18-08		Dassault Aviation	FALCON 7X FALCON 2000 and FALCON 2000EX
<b>Biweekly 2017-19</b>			
2017-16-07		Airbus	A330 and A340 airplanes
2017-16-08	R 2012-23-09	Embraer S.A.	ERJ 190-100 STD, -100 LR, -100 ECJ, and -100 IGW; and ERJ 190-200 STD, -200 LR, and -200 IGW airplanes
2017-17-17	R 2011-03-08	Viking Air Limited	CL-215-1A10 (CL-215), CL-215-6B11 (CL-215T Variant), CL-215-6B11 (CL-415 Variant) airplanes
2017-18-09		Airbus Defense and Space S.A.	CN-235, CN-235-100, CN-235-200, CN-235-300, and C-295 airplanes
2017-18-12	R 2016-11-20	B/E Aerospace	Protective Breathing Equipment (PBE), part numbers (P/N) 119003-11 and 119003-21
2017-18-14	R 2015-02-22	Rolls-Royce Corporation	250-C20, -C20B, -C20F, -C20J, -C20R, -C20R/1, -C20R/2, -C20R/4, -C20W, -C300/A1, and -C300/B1 turboshaft engines
2017-18-15		Airbus	A300 and A310 airplanes
2017-18-16		The Boeing Company	737-700 and -700C series airplanes
2017-18-17	R 2004-23-20	Airbus	A300 B4-603, A300 B4-620, A300 B4-622, A300 B4-605R, A300 B4-622R, A300 F4-605R, A300 F4-622R, and A300 C4-605R Variant F airplanes
2017-18-18		Airbus	A350-941 airplanes
2017-18-19		Airbus	A310-203, -204, -221, -222, -304, -322, -324, and -325 airplanes
2017-18-21	R 2017-13-12	Airbus	A318, A319, A320, and A321 airplanes
2017-19-02		The Boeing Company	727, 727C, 727-100, 727-100C, 727-200, and 727-200F series
2017-19-03		Dassault Aviation	MYSTERE-FALCON 900 airplanes
2017-19-04		Dassault Aviation	FALCON 900EX airplanes
<b>Biweekly 2017-20</b>			
2017-16-01		Ameri-King Corporation	AK-450-( ) and AK-451-( ) series emergency locator transmitters
2017-18-21	R 2017-13-12 Republication	Airbus	A318, A319, A320, A321 airplanes
2017-19-05		Siemens S.A.S.	Smoke detectors
2017-19-06		Bombardier, Inc.	CL-600-1A11, -2A12, -2B16 airplanes
2017-19-07	R 2013-02-12	Airbus Defense and Space S.A.	CN-235, CN-235-100, CN-235-200, and CN-235-300 airplanes
2017-19-08		Airbus Defense and Space S.A.	C-212-CB, C-212-CC, C-212-CD, C-212-CE, and C-212-DF airplanes
2017-19-09	R 2014-25-01	Bombardier, Inc.	DHC-8-400, -401, and -402 airplanes
2017-19-10		The Boeing Company	757-200, -200PF, and -200CB series airplanes
2017-19-11		Bombardier, Inc.	BD-700-1A10 and BD-700-1A11 airplanes
2017-19-12	R 2014-13-17	Airbus	A300, A310 airplanes
2017-19-13	R 2001-16-01 R 2014-17-06	Airbus	A330 airplanes
2017-19-14	R 2014-16-27	Dassault Aviation	FALCON 900EX airplanes
2017-19-16		Rolls-Royce plc	RB211 Trent 553-61, Trent 553A2-61, Trent 556-61, Trent 556A2-61, Trent 556B-61, Trent 556B2-61, Trent 560-61, and Trent 560A2-61 turbofan engines
2017-19-17	R 2016-17-02	Dassault Aviation	FALCON 900EX, FALCON 2000EX airplanes
2017-19-18		Rolls-Royce Deutschland Ltd & Co KG	Tay 620-15 turbofan engines

## LARGE AIRCRAFT

AD No.	Information	Manufacturer	Applicability
Information Key: E - Emergency; COR - Correction; S – Supersedes, R - Replaces			
2017-19-19		Rolls-Royce plc	Trent XWB-75, Trent XWB-79, Trent XWB-79B, and Trent XWB-84 turbofan engines
2017-19-22	R 2014-07-09	British Aerospace Regional Aircraft	Jetstream Series 3101 and Jetstream Model 3201 airplanes
2017-19-23	R 2015-15-10	Airbus	A318, A319, A320, A321 airplanes
2017-19-24	R 2014-26-10	Airbus	A318, A319, A320, A321 airplanes
2017-19-25		Airbus Defense and Space S.A.	CN-235, CN-235-100, CN-235-200, and CN-235-300, and Model C-295 airplanes
2017-19-26	R 2008-12-04	The Boeing Company	737-600, -700, -700C, -800, and -900 series airplanes
2017-19-27		Bombardier, Inc.	DHC-8-401 and -402 airplanes
2017-20-01		Honeywell International Inc.	TFE731-20 and TFE731-40 turbofan engines
2017-20-02	R 2017-13-05	Airbus	A330, A340 airplanes
<b>Biweekly 2017-21</b>			
2017-18-20		The Boeing Company	707-100 Long Body, -200, -100B Long Body, and -100B Short Body series; and 707-300, -300B, -300C, and -400 series airplanes
2017-19-05		Siemens S.A.S.	Smoke detectors
2017-20-03		Dassault Aviation	FALCON 7X airplanes
2017-20-04		Airbus	A300, A310 airplanes
2017-20-05	R 2011-01-15	The Boeing Company	757-200 and -300 series airplanes
2017-20-06		Honeywell International Inc.	AS907-1-1A turbofan engines
2017-20-07		Bombardier, Inc.	DHC-8-400, -401, and -402 airplanes
2017-20-08	R 2009-17-01	Gulfstream Aerospace Corporation	G-IV, GIV-X, GV, GV-SP, and GVI airplanes
2017-20-09		General Electric Company	CF34-8E2; CF34-8E2A1; CF34-8E5; CF34-8E5A1; CF34-8E5A2; CF34-8E6; and CF34-8E6A1 model turbofan engines
2017-20-10		Airbus	A319, A320, A321 airplanes
2017-20-11		Bombardier, Inc.	CL-600-1A11, -2A12, -2B16 airplanes
2017-20-12		The Boeing Company	737-100, -200, and -200C series airplanes
2017-20-14		The Boeing Company	737-300, -400, and -500 series airplanes
2017-21-51		Engine Alliance	GP7270, GP7272, and GP7277 engines



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**2017-18-20 The Boeing Company:** Amendment 39-19029; Docket No. FAA-2016-9183; Product Identifier 2016-NM-059-AD.

**(a) Effective Date**

This AD is effective November 9, 2017.

**(b) Affected ADs**

This AD affects AD 80-08-10 R1, Amendment 39-3830 (45 FR 46343, July 10, 1980).

**(c) Applicability**

This AD applies to The Boeing Company Model 707-100 Long Body, -200, -100B Long Body, and -100B Short Body series airplanes; and Model 707-300, -300B, -300C, and -400 series airplanes; certificated in any category; equipped with a main cargo door (MCD).

**(d) Subject**

Air Transport Association (ATA) of America Code 52, Doors.

**(e) Unsafe Condition**

This AD was prompted by analysis of the cam support assemblies of the MCD that indicated the repetitive high frequency eddy current (HFEC) inspections required by the existing maintenance program are not adequate to detect cracks before two adjacent cam support assemblies of the MCD could fail. We are issuing this AD to detect and correct cracking of the cam support assemblies of the MCD. Such cracking could result in reduced structural integrity of the MCD and consequent rapid decompression of the airplane.

**(f) Compliance**

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

**(g) Inspection to Determine Part Numbers**

At the later of the times specified in paragraphs (g)(1) and (g)(2) of this AD: Inspect the cam support assemblies of the MCD to determine whether part number (P/N) 69-23588-1, 69-23588-2, 69-23588-5, 69-23588-6, 69-23588-9, or 69-23588-10 is installed. A review of airplane maintenance records is acceptable in lieu of this inspection if the part number(s) of the cam support assemblies of the MCD can be conclusively determined from that review.

(1) Before the accumulation of 18,000 total flight cycles since installation of the door, or before the accumulation of 10 years on the MCD cam support assemblies, whichever occurs first. If the number of flight cycles since installation of the door are not known, use total airplane flight cycles.

(2) Within 1,790 flight cycles or 24 months after the effective date of this AD, whichever occurs later.

**(h) Repetitive Inspections of the Cam Support Assemblies of the MCD and Corrective Actions**

If, during any inspection required by paragraph (g) of this AD, any cam support assembly of the MCD having P/N 69-23588-1, 69-23588-2, 69-23588-5, 69-23588-6, 69-23588-9, or 69-23588-10 is determined to be installed: At the later of the times specified in paragraphs (g)(1) and (g)(2) of this AD, do an ultrasonic inspection to detect cracking of the affected cam support assemblies of the MCD, and do all applicable replacements, in accordance with the Accomplishment Instructions of Boeing 707 Alert Service Bulletin A3542, dated February 12, 2016. Do all applicable replacements before further flight. Repeat the inspections thereafter at the applicable time specified in paragraph 1.E., "Compliance," of Boeing 707 Alert Service Bulletin A3542, dated February 12, 2016.

**(i) Terminating Action for AD 80-08-10 R1, Amendment 39-3830 (45 FR 46343, July 10, 1980)**

Accomplishment of the initial inspection and all applicable replacements on an airplane, as required by paragraph (h) of this AD, terminates all the requirements of AD 80-08-10 R1, Amendment 39-3830 (45 FR 46343, July 10, 1980), for that airplane only.

**(j) Alternative Methods of Compliance (AMOCs)**

(1) The Manager, Los Angeles 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-LAACO-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 Commercial Airplanes Organization Designation Authorization (ODA) that has been authorized by the Manager, Los Angeles ACO Branch, 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.

(4) For service information that contains steps that are labeled as Required for Compliance (RC), the provisions of paragraphs (j)(4)(i) and (j)(4)(ii) of this AD apply.

(i) The steps labeled as RC, including substeps under an RC step and any figures identified in an RC step, must be done to comply with the AD. If a step or substep is labeled "RC Exempt," then the RC requirement is removed from that step or substep. An AMOC is required for any deviations to RC steps, including substeps and identified figures.

(ii) Steps not labeled 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 RC steps, including substeps and identified figures, can still be done as specified, and the airplane can be put back in an airworthy condition.

**(k) Related Information**

For more information about this AD, contact Chandra Ramdoss, Aerospace Engineer, Airframe Section, FAA, Los Angeles ACO Branch, 3960 Paramount Boulevard, Lakewood, CA 90712-4137; phone: 562-627-5239; fax: 562-627-5210; email: chandraduth.ramdoss@faa.gov.

**(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 707 Alert Service Bulletin A3542, dated February 12, 2016.

(ii) Reserved.

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

(4) You may view this service information at the FAA, Transport Standards Branch, 1601 Lind Avenue SW., Renton, WA. For information on the availability of this material at the FAA, call 425-227-1221.

(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 Renton, Washington, on August 31, 2017.

Dionne Palermo,  
Acting Director, System Oversight Division,  
Aircraft Certification Service.



**2017-19-05 Siemens S.A.S.:** Amendment 39-19035; Docket No. FAA-2017-0099; Product Identifier 2017-NE-02-AD.

**(a) Effective Date**

This AD becomes effective October 31, 2017.

**(b) Affected ADs**

None.

**(c) Applicability**

(1) This AD applies to Siemens S.A.S. smoke detectors, part numbers (P/Ns) PMC1102-02, PMC3100-00, and GMC1102-02, with serial numbers (S/Ns) listed in paragraph 1/D/ of Siemens Service Information Letter (SIL) No. PMC-26-002, Revision No. 1, dated January 2016; or paragraph 1/D/ of Siemens SIL No. PMC-26-003, Revision No. 2, dated February 2016.

(2) This AD also applies to those smoke detectors with P/Ns and S/Ns listed in Figure 1 to paragraph (c) of this AD; installed on, but not limited to, any airplane, certificated in any category, listed in paragraphs (c)(2)(i) or (ii) of this AD.

**Figure 1 to Paragraph (c) of This AD—P/N and S/Ns of Repaired Smoke Detectors**

P/N	S/N
PMC1102-02	2129, 2281, 2335, 2343, 2356, 2399, 2411, 2428, 2588, 2731, 2851, 2888, 3658, 3696, 3710, 3729, 3731, 5032, 5039, 5040, 5107, 5216, 5233, 50069, 50075, 50087, 50122, 50204, 50250, 50264, 50268, 50270, 50272, 50366 and 50386.
PMC3100-00	201, 208, 213, 227, 260, 268, 312, 528, 588, 592, 606, 652, 655, 660, 667, 50037, 50046, 50058, 50060, 50062, 50067, 50070, 50072 and 50090.

(i) in production on Airbus A330, A330 freighter, and A380 airplanes;

(ii) in service by supplemental type certificate modification on:

(A) Airbus A319 and A320, and Bombardier CL-600-2B19 (Challenger 850), Boeing (formerly McDonnell Douglas) DC-9 series 80 airplanes; and

(B) Boeing 737-400 (BDSF), 767, and 747-8 airplanes.

**(d) Subject**

Joint Aircraft System Component (JASC) Code 2611, Smoke Detection.

**(e) Reason**

This AD was prompted by a report that the affected smoke detectors failed an acceptance test. We are issuing this AD to prevent failure of the smoke detector, on-board uncontrolled fire, and damage to the airplane.

**(f) Compliance**

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

(1) Within 30 days after the effective date of this AD, inspect each Siemens smoke detector, or review your maintenance records, to determine if an affected detector is installed.

(2) For smoke detectors identified in paragraph (c)(1) of this AD, replace the detectors within the compliance times specified in Figures 2, 3, and 4 to paragraph (f) of this AD.

**Figure 2 to Paragraph (f) of This AD–P/N PMC1102-02 [Cargo compartments]**

<b>Manufacturing date (month/year)</b>	<b>Compliance time (after the effective date of this AD)</b>
122010 to 112011 inclusive	Within 5 months.
122011 to 012013 inclusive	Within 11 months.

**Figure 3 to Paragraph (f) of This AD–P/N PMC3100-00 Detectors [Cargo compartments]**

<b>Manufacturing date (month/year)</b>	<b>Compliance time (after the effective date of this AD)</b>
032011 to 012012 inclusive	Within 5 months.
022012 to 012013 inclusive	Within 11 months.

**Figure 4 to Paragraph (f) of This AD–P/N GMC1102-02 [Passenger cabin or any other location]**

<b>Manufacturing date (month/year)</b>	<b>Compliance time (after the effective date of this AD)</b>
112010 to 022012 inclusive	Within 24 months.
032012 to 122012 inclusive	Within 36 months.

(3) For smoke detectors identified in paragraph (c)(2) of this AD, replace the detectors within 5 months after the effective date of this AD.

**(g) Installation Prohibition**

After the effective date of this AD, do not install on any airplane a smoke detector:

- (1) With a manufacturing date and P/N listed in Figure 2 or 3 to paragraph (f) of this AD;
- (2) listed in Figure 4 to paragraph (f) of this AD unless the detector is marked 'SIL PMC-26-002'.

**(h) Alternative Methods of Compliance (AMOCs)**

(1) The Manager, FAA, Boston ACO Branch, Compliance and Airworthiness Division, 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 Boston ACO Branch, send it to the attention of the person identified in paragraph (i)(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.

**(i) Related Information**

(1) For more information about this AD, contact Erin Hulverson, Aerospace Engineer, FAA, Boston ACO Branch, Compliance and Airworthiness Division, 1200 District Avenue, Burlington, MA 01803; phone: 781-238-7655; fax: 781-238-7199; email: erin.hulverson@faa.gov.

(2) Refer to MCAI European Aviation Safety Agency AD 2016-0024, dated January 26, 2016, for more information. You may examine the MCAI in the AD docket on the Internet at <http://www.regulations.gov> by searching for and locating it in Docket No. FAA-2017-0099.

**(j) 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) Siemens Service Information Letter (SIL) No. PMC-26-002, Revision No. 1, dated January 2016.

(ii) Siemens SIL No. PMC-26-003, Revision No. 2, dated February 2016.

(3) For Siemens service information identified in this AD, contact Siemens, Aviation Customer Support, 697 Rue Fourny, 78530 Buc, France; phone: (33) 1 3084 6650; fax: (33) 1 3956 1364.

(4) You may view this service information at FAA, Engine and Propeller Standards Branch, Policy and Innovation Division, 1200 District Avenue, Burlington, MA. For information on the availability of this material at the FAA, call 781-238-7125.

(5) You may view this service information 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 September 20, 2017.

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



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**2017-20-03 Dassault Aviation:** Amendment 39-19060; Docket No. FAA-2017-0532; Product Identifier 2016-NM-203-AD.

**(a) Effective Date**

This AD is effective November 6, 2017.

**(b) Affected ADs**

None.

**(c) Applicability**

This AD applies to Dassault Aviation Model FALCON 7X airplanes, certificated in any category, serial numbers (S/Ns) 2 through 215 inclusive.

**(d) Subject**

Air Transport Association (ATA) of America Code 20, Standard Practices Airframe–Electrical Wiring.

**(e) Reason**

This AD was prompted by a review showing that inadequate clearance may exist between certain electrical wiring and nearby structures. We are issuing this AD to detect and correct inadequate clearances between electrical wiring and nearby structures, which could lead to interference or contact with a structure and cause an electrical short circuit or fluid leakage. This could result in the loss of several functions essential for safe flight.

**(f) Compliance**

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

**(g) Inspection, Modification, and Corrective Actions**

Within 99 months or 4,100 flight cycles, whichever occurs first, since the date of issuance of the original airworthiness certificate or date of issuance of the original export certificate of airworthiness; or within 60 days after the effective date of this AD; whichever occurs later: Do a general visual inspection of the affected electrical wiring of the airplane for worn or damaged wiring or connectors due to inadequate clearance between wiring and nearby structures, accomplish all applicable corrective actions, and modify the airplane, in accordance with the Accomplishment Instructions of Dassault Service Bulletin 7X-056, Revision 1, dated July 20, 2016, as specified in table 1 to paragraph (g) of this AD. Do all applicable corrective actions before further flight. The “Dassault service bulletin 7X-056 section” identified in table 1 to paragraph (g) of this AD is not required for

airplanes on which a corresponding Dassault modification has been embodied in production, as identified in the “Excluded” column in table 1 to paragraph (g) of this AD.

**Table 1 to Paragraph (g) of This AD—Applicable Sections of Dassault Service Bulletin 7X-056, Revision 1, Dated July 20, 2016**

<b>Dassault Service Bulletin 7X-056 section</b>	<b>Excluded</b>
7X-056-1	Post-mod M876.
7X-056-2	Post-mod M897.
7X-056-3	Post-mod M900.
7X-056-4	S/Ns 132 through 215 inclusive.
7X-056-5	Post-mod M954.
7X-056-6	Post-mod M980.
7X-056-7	Post-mod M1021.
7X-056-8	None.

#### **(h) Credit for Previous Actions**

This paragraph provides credit for actions required by paragraph (g) of this AD, if those actions were performed before the effective date of this AD using Dassault Service Bulletin 7X-056, issued October 30, 2014.

#### **(i) 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 (j)(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 Dassault Aviation's EASA Design Organization Approval (DOA). If approved by the DOA, the approval must include the DOA-authorized signature.

#### **(j) Related Information**

(1) Refer to Mandatory Continuing Airworthiness Information (MCAI) EASA Airworthiness Directive 2016-0230, dated November 21, 2016, 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-2017-0532.

(2) For more information about this AD, contact Tom Rodriguez, Aerospace Engineer, International Section, Transport Standards Branch, FAA, 1601 Lind Avenue SW., Renton, WA 98057-3356; telephone 425-227-1137; fax 425-227-1149.

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

**(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 this AD specifies otherwise.

(i) Dassault Service Bulletin 7X-056, Revision 1, dated July 20, 2016.

(ii) Reserved.

(3) For service information identified in this AD, contact Dassault Falcon Jet Corporation, Teterboro Airport, P.O. Box 2000, South Hackensack, NJ 07606; telephone 201-440-6700; Internet <http://www.dassaultfalcon.com>.

(4) You may view this service information at the FAA, Transport Standards Branch, 1601 Lind Avenue SW., Renton, WA. For information on the availability of this material at the FAA, call 425-227-1221.

(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 Renton, Washington, on September 18, 2017.

Dionne Palermo,  
Acting Director, System Oversight Division,  
Aircraft Certification Service.



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**2017-20-04 Airbus:** Amendment 39-19061; Docket No. FAA-2017-0515; Product Identifier 2016-NM-171-AD.

**(a) Effective Date**

This AD is effective November 15, 2017.

**(b) Affected ADs**

None.

**(c) Applicability**

This AD applies to the Airbus airplanes identified in paragraphs (c)(1), (c)(2), (c)(3), (c)(4), and (c)(5) of this AD, certificated in any category, all manufacturer serial numbers, except those on which Airbus modification 12691 or 13665 has been embodied in production.

- (1) Airbus Model A300 B4-601, B4-603, B4-620, and B4-622 airplanes.
- (2) Airbus Model A300 B4-605R and B4-622R airplanes.
- (3) Airbus Model A300 F4-605R and F4-622R airplanes.
- (4) Airbus Model A300 C4-605R Variant F airplanes.
- (5) Airbus Model A310-203, -204, -221, -222, -304, -322, -324, and -325 airplanes.

**(d) Subject**

Air Transport Association (ATA) of America Code 31, Instruments.

**(e) Reason**

This AD was prompted by reports of unreliable airspeed indications that were caused by pitot heater resistance shorted to ground. We are issuing this AD to ensure proper flight crew awareness of unreliable airspeed indications. This condition, if not recognized by the flight crew, could possibly result in reduced control of the airplane.

**(f) Compliance**

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

**(g) Replacement of the Electronic Centralized Aircraft Monitoring (ECAM) Symbol Generator Unit (SGU)**

Within 36 months after the effective date of this AD, replace the ECAM SGU with a new ECAM SGU (software standard W32 or W33), in accordance with the Accomplishment Instructions of the service information identified in paragraph (g)(1), (g)(2), or (g)(3) of this AD, as applicable.

(1) For Airbus Model A300 B4-601, B4-603, B4-620, and B4-622 airplanes; Model A300 B4-605R and B4-622R airplanes; and Model A300 C4-605R Variant F airplanes: Airbus Service Bulletin

A300-31-6113, Revision 03, including Appendix 01, dated July 5, 2016; or Airbus Service Bulletin A300-31-6142, Revision 01, dated November 21, 2013.

(2) For Airbus Model A300 F4-605R and F4-622R airplanes: Airbus Service Bulletin A300-31-6124, Revision 01, dated July 4, 2016.

(3) For Airbus Model A310-203, -204, -221, -222, -304, -322, -324, and -325 airplanes: Airbus Service Bulletin A310-31-2123, Revision 01, including Appendix 01, dated July 1, 2016; or Airbus Service Bulletin A310-31-2145, Revision 01, dated November 13, 2013.

#### **(h) Parts Installation Prohibition**

(1) As of the effective date of this AD, for any airplane that has ECAM SGU software standard W32, part number 9612670332, or ECAM SGU software standard W33, part number 9612670333, installed, no person may install an ECAM SGU software standard prior to W32.

(2) For any airplane that has an ECAM SGU software standard prior to W32, after modification of that airplane, no person may install an ECAM SGU software standard prior to W32.

#### **(i) Credit for Previous Actions**

This paragraph provides credit for actions required by paragraph (g) of this AD, if those actions were performed before the effective date of this AD using the service information specified in paragraph (i)(1), (i)(2), (i)(3), (i)(4), or (i)(5) of this AD, as applicable.

(1) Airbus Service Bulletin A300-31-6113, Revision 02, including Appendix 01, dated September 4, 2014.

(2) Airbus Service Bulletin A300-31-6124, Revision 00, dated October 13, 2005.

(3) Airbus Service Bulletin A300-31-6142, Revision 00, dated August 13, 2013.

(4) Airbus Service Bulletin A310-31-2123, Revision 00, dated January 4, 2006.

(5) Airbus Service Bulletin A310-31-2145, Revision 00, dated August 13, 2013.

#### **(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. 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 Airbus'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 2016-0195, dated September 30, 2016, 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-2017-0515.

(2) For more information about this AD, contact Dan Rodina, Aerospace Engineer, International Section, Transport Standards Branch, FAA, 1601 Lind Avenue SW., Renton, WA 98057-3356; telephone: 425-227-2125; fax: 425-227-1149.

(3) Service information identified in this AD that is not incorporated by reference is available at the addresses specified in paragraphs (l)(3) and (l)(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 this AD specifies otherwise.

(i) Airbus Service Bulletin A300-31-6113, Revision 03, including Appendix 01, dated July 5, 2016.

(ii) Airbus Service Bulletin A300-31-6124, Revision 01, dated July 4, 2016.

(iii) Airbus Service Bulletin A300-31-6142, Revision 01, dated November 21, 2013.

(iv) Airbus Service Bulletin A310-31-2123, Revision 01, including Appendix 01, dated July 1, 2016.

(v) Airbus Service Bulletin A310-31-2145, Revision 01, dated November 13, 2013.

(3) For service information identified in this AD, contact Airbus SAS, Airworthiness Office—EAW, 1 Rond Point Maurice Bellonte, 31707 Blagnac Cedex, France; telephone: +33 5 61 93 36 96; fax: +33 5 61 93 44 51; email: [account.airworth-eas@airbus.com](mailto:account.airworth-eas@airbus.com); Internet: <http://www.airbus.com>.

(4) You may view this service information at the FAA, Transport Standards Branch, 1601 Lind Avenue SW., Renton, WA. For information on the availability of this material at the FAA, call 425-227-1221.

(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 Renton, Washington, on September 18, 2017.

Dionne Palermo,  
Acting Director, System Oversight Division,  
Aircraft Certification Service.



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**2017-20-05 The Boeing Company:** Amendment 39-19062; Docket No. FAA-2016-3697; Product Identifier 2015-NM-143-AD.

**(a) Effective Date**

This AD is effective November 6, 2017.

**(b) Affected ADs**

This AD replaces AD 2011-01-15, Amendment 39-16572 (76 FR 1351, January 10, 2011) (“AD 2011-01-15”).

**(c) Applicability**

(1) This AD applies to The Boeing Company Model 757-200 and -300 series airplanes, certificated in any category, as identified in Boeing Special Attention Service Bulletin 757-53-0097, Revision 3, dated December 2, 2016.

(2) Installation of Supplemental Type Certificate (STC) ST01518SE ([http://rgl.faa.gov/Regulatory\\_and\\_Guidance\\_Library/rgSTC.nsf/0/38B606833BBD98B386257FAA00602538?OpenDocument&Highlight=st01518se](http://rgl.faa.gov/Regulatory_and_Guidance_Library/rgSTC.nsf/0/38B606833BBD98B386257FAA00602538?OpenDocument&Highlight=st01518se)) does not affect the ability to accomplish the actions required by this AD. Therefore, for airplanes on which STC ST01518SE is installed, a “change in product” alternative method of compliance (AMOC) approval request is not necessary to comply with the requirements of 14 CFR 39.17.

**(d) Subject**

Air Transport Association (ATA) of America Code 53, Fuselage.

**(e) Unsafe Condition**

This AD was prompted by reports of the initiation of fatigue cracking in the fuselage skin of the crown skin panel along locally thinned channels adjacent to the chem-milled steps. We are issuing this AD to detect and correct fatigue cracking of the fuselage skin of the crown skin panel, which could result in pressure venting and consequent rapid decompression of the airplane.

**(f) Compliance**

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

**(g) Repetitive Inspections**

Do the applicable inspections required by paragraphs (g)(1), (g)(2), and (g)(3) of this AD.

(1) For all airplanes: Within the compliance time specified in paragraph (h) of this AD, do the Zone 1 inspection specified in paragraph (g)(1)(i) or (g)(1)(ii) of this AD. Repeat the applicable Part 1 or Part 2 inspection thereafter at the applicable times specified in table 1 of paragraph 1.E.,

“Compliance,” of Boeing Special Attention Service Bulletin 757-53-0097, Revision 3, dated December 2, 2016. Accomplishing the preventive modification specified in paragraph (k)(1) of this AD or the replacement specified in paragraph (k)(2) of this AD terminates the inspections required by this paragraph.

(i) Do an external sliding probe eddy current (EC) inspection for cracking of the crown skin panel in the applicable Zone 1 areas specified in, and in accordance with, Part 1 of the Accomplishment Instructions of Boeing Special Attention Service Bulletin 757-53-0097, Revision 3, dated December 2, 2016.

(ii) Do an external spot-probe-medium-frequency EC inspection for cracking of the crown skin panel in the applicable Zone 1 areas specified in, and in accordance with, Part 2 of the Accomplishment Instructions of Boeing Special Attention Service Bulletin 757-53-0097, Revision 3, dated December 2, 2016.

(2) For airplanes on which any crack is found during any inspection required by paragraph (g)(1) of this AD; or any repair is installed that covers any portion of the Zone 1 inspection area specified in Boeing Special Attention Service Bulletin 757-53-0097, Revision 3, dated December 2, 2016; or the optional Zone 1 preventive modification specified in paragraph (k)(1) of this AD is installed: At the applicable time specified in table 2 of paragraph 1.E., “Compliance,” of Boeing Special Attention Service Bulletin 757-53-0097, Revision 3, dated December 2, 2016, except as required by paragraph (l)(1) of this AD: Do the Zone 2 inspection specified in paragraph (g)(2)(i) or (g)(2)(ii) of this AD. Repeat the applicable Part 4 or Part 5 inspection thereafter at the applicable times specified in table 2 of paragraph 1.E., “Compliance,” of Boeing Special Attention Service Bulletin 757-53-0097, Revision 3, dated December 2, 2016. Accomplishing the replacement specified in paragraph (k)(2) of this AD terminates the inspections required by this paragraph.

(i) Do an external sliding probe EC inspection for cracking of the crown skin panel in the applicable Zone 2 areas specified in, and in accordance with, Part 4 of the Accomplishment Instructions of Boeing Special Attention Service Bulletin 757-53-0097, Revision 3, dated December 2, 2016.

(ii) Do an external spot-probe-medium-frequency EC inspection for cracking of the crown skin panel in the applicable Zone 2 areas specified in, and in accordance with, Part 5 of the Accomplishment Instructions of Boeing Special Attention Service Bulletin 757-53-0097, Revision 3, dated December 2, 2016.

(3) For airplanes on which any crack is found during any inspection required by paragraph (g)(1) of this AD; or any repair is installed that covers any portion of the Zone 1 inspection area specified in Boeing Special Attention Service Bulletin 757-53-0097, Revision 3, dated December 2, 2016; or the optional Zone 1 preventive modification specified in paragraph (k)(1) of this AD is installed: At the applicable time specified in table 3 of paragraph 1.E., “Compliance,” of Boeing Special Attention Service Bulletin 757-53-0097, Revision 3, dated December 2, 2016, except as required by paragraph (l)(1) of this AD, do the Zone 3 inspection specified in paragraph (g)(3)(i) or (g)(3)(ii) of this AD. Repeat the applicable Part 6 or Part 7 inspection thereafter at the applicable times specified in table 3 of paragraph 1.E., “Compliance,” of Boeing Special Attention Service Bulletin 757-53-0097, Revision 3, dated December 2, 2016. Accomplishing the replacement specified in paragraph (k)(2) of this AD terminates the inspections required by this paragraph.

(i) Do an external sliding probe EC inspection for cracking of the crown skin panel in the applicable Zone 3 areas specified in, and in accordance with, Part 6 of the Accomplishment Instructions of Boeing Special Attention Service Bulletin 757-53-0097, Revision 3, dated December 2, 2016.

(ii) Do an external spot-probe-medium-frequency EC inspection for cracking of the crown skin panel in the applicable Zone 3 areas specified in, and in accordance with, Part 7 of the Accomplishment Instructions of Boeing Special Attention Service Bulletin 757-53-0097, Revision 3, dated December 2, 2016.

**(h) Initial Compliance Time for Inspection Required by Paragraph (g)(1) of This AD**

Within the applicable compliance times specified in paragraphs (h)(1), (h)(2), (h)(3), and (h)(4) of this AD, whichever occurs latest: Do the initial inspection required by paragraph (g)(1) of this AD.

(1) For all airplanes: Before the accumulation of 15,000 total flight cycles.

(2) For airplanes on which an external sliding probe EC inspection for Zone 1, as specified in Boeing Special Attention Service Bulletin 757-53-0097, has been done as of the effective date of this AD: Within 620 flight cycles after accomplishing the most recent external sliding probe EC inspection for Zone 1.

(3) For airplanes on which an external spot-probe-medium-frequency EC inspection for Zone 1, as specified in Boeing Special Attention Service Bulletin 757-53-0097, has been done as of the effective date of this AD: Within 200 flight cycles after accomplishing the most recent external spot-probe-medium-frequency EC inspection for Zone 1.

(4) For all airplanes: Within 200 flight cycles or 90 days after the effective date of this AD, whichever occurs first.

**(i) Post-Preventive Modification Supplemental Inspections**

For airplanes on which a preventive modification has been installed as specified in Part 3 of the Accomplishment Instructions of Boeing Special Attention Service Bulletin 757-53-0097, Revision 3, dated December 2, 2016: At the applicable time specified in table 4 of paragraph 1.E., "Compliance," of Boeing Special Attention Service Bulletin 757-53-0097, Revision 3, dated December 2, 2016; do eddy current and detailed inspections for cracking of the applicable areas of the fuselage skin of the doublers, triplers, and fillers of the preventive modification, in accordance with the Accomplishment Instructions of Boeing Special Attention Service Bulletin 757-53-0097, Revision 3, dated December 2, 2016. Repeat the inspection thereafter at the applicable times specified in table 4 of paragraph 1.E., "Compliance," of Boeing Special Attention Service Bulletin 757-53-0097, Revision 3, dated December 2, 2016.

**(j) Repair**

If any cracking is found during any inspection required by paragraph (g)(1), (g)(2), (g)(3), or (i) of this AD, repair before further flight using a method approved in accordance with the procedures specified in paragraph (n) of this AD. Doing the repair ends the repetitive inspections for the repaired area only.

**(k) Optional Terminating Actions**

(1) Accomplishing the preventive modification, including doing high frequency EC open-hole inspections for cracking in the existing fastener holes, in accordance with Part 3 of the Accomplishment Instructions of Boeing Special Attention Service Bulletin 757-53-0097, Revision 3, dated December 2, 2016, except as required by paragraph (l)(2) of this AD, terminates the inspections required by paragraph (g)(1) of this AD, provided the preventive modification is done before further flight after accomplishing an inspection required by paragraph (g)(1) of this AD. If any cracking is found during any high frequency EC open-hole inspection, before further flight, repair using a method approved in accordance with the procedures specified in paragraph (n) of this AD.

(2) Replacing the crown skin panel between station (STA) 297 and STA 439, and stringers S-4L and S-4R, in accordance with the Accomplishment Instructions of Boeing Special Attention Service Bulletin 757-53-0097, Revision 3, dated December 2, 2016, or using a method approved in accordance with the procedures specified in paragraph (n) of this AD, terminates the inspections required by paragraphs (g)(1), (g)(2), and (g)(3) of this AD.

**(l) Exceptions to Service Information Specifications and Preventive Modification**

(1) Where Boeing Special Attention Service Bulletin 757-53-0097, Revision 3, dated December 2, 2016, specifies a compliance time “after the Revision 2 date of this service bulletin,” or “after the Revision 3 date of this service bulletin,” this AD requires compliance within the specified compliance time after the effective date of this AD.

(2) Where Boeing Special Attention Service Bulletin 757-53-0097, Revision 3, dated December 2, 2016, specifies to contact Boeing for repair instructions: Before further flight, repair using a method approved in accordance with the procedures specified in paragraph (n) of this AD.

**(m) Credit for Previous Actions**

This paragraph provides credit for Zone 1 inspections required by paragraph (g)(1) of this AD, if those actions were performed before the effective date of this AD using Boeing Special Attention Service Bulletin 757-53-0097, dated November 22, 2010 (which was incorporated by reference in AD 2011-01-15); Boeing Special Attention Service Bulletin 757-53-0097, Revision 1, dated January 6, 2011; or Boeing Special Attention Service Bulletin 757-53-0097, Revision 2, dated July 28, 2015.

**(n) Alternative Methods of Compliance (AMOCs)**

(1) The Manager, Los Angeles 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 (o)(1) of this AD. Information may be emailed to: 9-ANM-LAACO-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 Commercial Airplanes Organization Designation Authorization (ODA) that has been authorized by the Manager, Los Angeles ACO Branch, 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.

(4) AMOCs approved for AD 2011-01-15 are approved as AMOCs for the corresponding provisions of paragraph (g) of this AD; except, as of the effective date of this AD, AMOCs that extend the initial compliance times specified in AD 2011-01-15 are no longer approved for the compliance time extension, and the compliance times required by this AD must be complied with.

(5) For service information that contains steps that are labeled as Required for Compliance (RC), the provisions of paragraphs (n)(5)(i) and (n)(5)(ii) apply.

(i) The steps labeled as RC, including substeps under an RC step and any figures identified in an RC step, must be done to comply with the AD. An AMOC is required for any deviations to RC steps, including substeps and identified figures.

(ii) Steps not labeled 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 RC steps, including substeps and identified figures, can still be done as specified, and the airplane can be put back in an airworthy condition.

**(o) Related Information**

(1) For more information about this AD, contact Eric Schrieber, Aerospace Engineer, Airframe Section, FAA, Los Angeles ACO Branch, 3960 Paramount Boulevard, Lakewood, CA 90712-4137; phone: 562-627-5348; fax: 562-627-5210; email: Eric.Schrieber@faa.gov.

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

**(p) 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 Service Bulletin 757-53-0097, Revision 3, dated December 2, 2016.

(ii) Reserved.

(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; telephone 562-797-1717; Internet <https://www.myboeingfleet.com>.

(4) You may view this service information at the FAA, Transport Standards Branch, 1601 Lind Avenue SW., Renton, WA. For information on the availability of this material at the FAA, call 425-227-1221.

(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 Renton, Washington, on September 14, 2017.

Jeffrey E. Duven,  
Director, System Oversight Division,  
Aircraft Certification Service.



**2017-20-06 Honeywell International Inc.:** Amendment 39-19063; Docket No. FAA-2017-0034; Product Identifier 2016-NE-32-AD.

**(a) Effective Date**

This AD is effective November 9, 2017.

**(b) Affected ADs**

None.

**(c) Applicability**

This AD applies to Honeywell International Inc. (Honeywell) AS907-1-1A turbofan engines with second stage low-pressure turbine (LPT2) rotor blades, part number (P/N) 3035602-1, installed.

**(d) Subject**

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

**(e) Unsafe Condition**

This AD was prompted by reports of loss of power due to failure of the LPT2 blade. We are issuing this AD to prevent failure of the LPT2 blades, failure of one or more engines, and loss of the airplane.

**(f) Compliance**

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

(1) For LPT2 rotor blades, P/N 3035602-1 that have more than 8,000 hours since new on the effective date of this AD, perform a one-time borescope inspection for wear of the Z gap contact area at the blade tip shroud for each of the 62 LPT2 rotor blades within 200 hours time in service after the effective date of this AD.

(2) Use the Accomplishment Instructions, Paragraph 3.B.(1), of Honeywell Service Bulletin (SB) AS907-72-9067, Revision 1, dated March 20, 2017, to do the inspection.

(3) If the measured wear and/or fretting of any Z gap contact area is greater than 0.005 inch, replace the LPT2 rotor assembly with a part eligible for installation before further flight.

(4) Do the following actions within 200 hours time in service after the effective date of this AD:

(i) Using a borescope make a clear digital image of the Z gap contact area at the blade tip shroud of the 62 LPT2 rotor blades.

(ii) Identify the three Z gap contact areas with the greatest amount of wear and/or fretting.

(iii) Record the blade position on the LPT2 rotor assembly and the measured wear of the three Z gap contact areas with the greatest amount of wear and/or fretting.

(iv) Send the results to Honeywell at [engine.reliability@honeywell.com](mailto:engine.reliability@honeywell.com) within 30 days after completing these actions.

**(g) Credit for Previous Actions**

You may take credit for the actions required by paragraphs (f)(1) and (4) of this AD, if you performed these actions before the effective date of this AD using Honeywell SB AS907-72-9067, Revision 0, dated December 12, 2016.

**(h) Paperwork Reduction Act Burden Statement**

A federal agency may not conduct or sponsor, and a person is not required to respond to, nor shall a person be subject to a penalty for failure to comply with a collection of information subject to the requirements of the Paperwork Reduction Act unless that collection of information displays a current valid OMB Control Number. The OMB Control Number for this information collection is 2120-0056. Public reporting for this collection of information is estimated to be approximately 5 minutes per response, including the time for reviewing instructions, completing and reviewing the collection of information. All responses to this collection of information are mandatory. Comments concerning the accuracy of this burden and suggestions for reducing the burden should be directed to the FAA at: 800 Independence Ave. SW., Washington, DC 20591, Attn: Information Collection Clearance Officer, AES-200.

**(i) Alternative Methods of Compliance (AMOCs)**

(1) The Manager, Los Angeles ACO Branch, FAA, may 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 Los Angeles ACO Branch, 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**

For more information about this AD, contact Joseph Costa, Aerospace Engineer, Los Angeles ACO Branch, FAA, 3960 Paramount Blvd., Lakewood, CA 90712-4137; phone: 562-627-5246; fax: 562-627-5210; email: joseph.costa@faa.gov.

**(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) Honeywell Service Bulletin AS907-72-9067, Revision 1, dated March 20, 2017.

(ii) Reserved.

(3) For Honeywell service information identified in this AD, contact Honeywell International Inc., 111 S 34th Street, Phoenix, AZ 85034-2802; phone: 800-601-3099; Internet: <https://myaerospace.honeywell.com/wps/portal>.

(4) You may view this service information at FAA, Engine and Propeller Standards Branch, 1200 District Avenue, Burlington, MA. For information on the availability of this material at the FAA, call 781-238-7125.

(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 September 22, 2017.  
Robert J. Ganley,  
Manager, Engine and Propeller Standards Branch,  
Aircraft Certification Service.



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**2017-20-07 Bombardier, Inc.:** Amendment 39-19064; Docket No. FAA-2017-0518; Product Identifier 2016-NM-167-AD.

**(a) Effective Date**

This AD is effective November 6, 2017.

**(b) Affected ADs**

None.

**(c) Applicability**

This AD applies to Bombardier, Inc., Model DHC-8-400, -401, and -402 airplanes, certificated in any category, serial numbers 4001, and 4003 through 4504 inclusive.

**(d) Subject**

Air Transport Association (ATA) of America Code 26, Fire protection.

**(e) Reason**

This AD was prompted by the failure of the fire control amplifier (FCA), which was likely caused by an electrical short in a discharged squib for a fire extinguishing bottle. We are issuing this AD to prevent failure of the FCA and subsequent discharge of fire extinguishing bottles and false fire indications, leaving the flight crew with reduced firefighting capability in the event of a fire.

**(f) Compliance**

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

**(g) Replacement of Affected Circuit Breakers**

Within 6,000 flight hours or 3 years, whichever occurs first, after the effective date of this AD: Replace the 7.5-amp circuit breakers specified in Bombardier Service Bulletin 84-26-16, Revision A, dated February 12, 2016, with 1-amp circuit breakers having part number MS3320-1, in accordance with the Accomplishment Instructions of Bombardier Service Bulletin 84-26-16, Revision A, dated February 12, 2016.

**(h) Credit for Previous Actions**

This paragraph provides credit for actions required by paragraph (g) of this AD, if those actions were performed before the effective date of this AD using Bombardier Service Bulletin 84-26-16, dated August 14, 2015.

**(i) Other FAA AD Provisions**

The following provisions also apply to this AD:

(1) Alternative Methods of Compliance (AMOCs): The Manager, New York 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 ATTN: Program Manager, Continuing Operational Safety, FAA, New York ACO Branch, 1600 Stewart Avenue, Suite 410, Westbury, NY 11590; telephone 516-228-7300; fax 516-794-5531. 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, New York ACO Branch, FAA; or Transport Canada Civil Aviation (TCCA); or Bombardier, Inc.'s TCCA Design Approval Organization (DAO). If approved by the DAO, the approval must include the DAO-authorized signature.

**(j) Related Information**

(1) Refer to Mandatory Continuing Airworthiness Information (MCAI) Canadian Airworthiness Directive CF-2016-25, dated August 22, 2016, 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-2017-0518.

(2) For more information about this AD, contact Assata Dessaline, Aerospace Engineer, Avionics and Administrative Services Section, FAA, New York ACO Branch, 1600 Stewart Avenue, Suite 410, Westbury, NY 11590; telephone 516-228-7301; fax 516-794-5531.

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

**(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 this AD specifies otherwise.

(i) Bombardier Service Bulletin 84-26-16, Revision A, dated February 12, 2016.

(ii) Reserved.

(3) For service information identified in this AD, contact Bombardier, Inc., Q-Series Technical Help Desk, 123 Garratt Boulevard, Toronto, Ontario M3K 1Y5, Canada; telephone 416-375-4000; fax 416-375-4539; email [thd.qseries@aero.bombardier.com](mailto:thd.qseries@aero.bombardier.com); Internet <http://www.bombardier.com>.

(4) You may view this service information at the FAA, Transport Standards Branch, 1601 Lind Avenue SW., Renton, WA. For information on the availability of this material at the FAA, call 425-227-1221.

(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 Renton, Washington, on September 20, 2017.

Dionne Palermo,  
Acting Director, System Oversight Division,  
Aircraft Certification Service.



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**2017-20-08 Gulfstream Aerospace Corporation:** Amendment 39-19065; Docket No. FAA-2016-9522; Product Identifier 2016-NM-144-AD.

**(a) Effective Date**

This AD is effective November 6, 2017.

**(b) Affected ADs**

This AD replaces AD 2009-17-01, Amendment 39-15991 (74 FR 40061, August 11, 2009) (“AD 2009-17-01”).

**(c) Applicability**

This AD applies to the Gulfstream Aerospace Corporation airplanes, certificated in any category, identified in paragraphs (c)(1) through (c)(5) of this AD.

- (1) Model G-IV airplanes, having serial numbers (S/Ns) 1000 and subsequent.
- (2) Model GIV-X airplanes, having S/Ns 4001 and subsequent.
- (3) Model GV airplanes, having S/Ns 501 and subsequent.
- (4) Model GV-SP airplanes, having S/Ns 5001 and subsequent.
- (5) Model GVI airplanes, having S/Ns 6001 and subsequent.

**(d) Subject**

Air Transport Association (ATA) of America Code 49, Airborne Auxiliary Power; and 53, Fuselage.

**(e) Unsafe Condition**

This AD was prompted by a report indicating that the type design sealant (Aerospace Material Specification (AMS) 3374), as applied to the auxiliary power unit (APU) enclosure (firewall), does not meet the requirement in 14 CFR 25.1191(b)(1) for a firewall to be fireproof, and failed a certification test and a company test. We are issuing this AD to provide the flight crew with operating procedures for airplanes that have AMS 3374 or Gulfstream Material Specification (GMS) 4107 sealant applied to the APU enclosure. Under certain anomalous conditions such as an APU failure/APU compartment fire, AMS 3374 or GMS 4107 sealant could ignite the exterior surfaces of the APU enclosure and result in propagation of an uncontained fire to other critical areas of the airplane.

**(f) Compliance**

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

**(g) Airplane Flight Manual (AFM) Revision**

Within 30 days after the effective date of this AD, revise the Limitations Section of the applicable Gulfstream AFM specified in paragraphs (h)(1) through (h)(6) of this AD to include the information in the applicable Gulfstream AFM supplement (AFMS) specified in paragraphs (h)(1) through (h)(6) of this AD. These AFMSs introduce operating limitations on the use of the APU during certain ground and flight operations. This AFM revision may be done by inserting a copy of the applicable AFMS into the applicable AFM specified in paragraphs (h)(1) through (h)(6) of this AD. When the AFMS has been included in the general revision of the AFM, the general revision may be inserted into the AFM, provided the relevant information in the general revision is identical to that in the applicable AFMS specified in paragraphs (h)(1) through (h)(6) of this AD.

**(h) AFMSs**

For the AFM revision required by paragraph (g) of this AD, insert the applicable AFMS into the applicable Gulfstream AFM identified in paragraphs (h)(1) through (h)(6) of this AD.

(1) Gulfstream GIV/G300/G400 AFM Supplement GIV-2016-01, dated July 27, 2016, to the Gulfstream GIV AFM, dated April 22, 1987; the Gulfstream G300 AFM, dated January 15, 2003; and the Gulfstream G400 AFM, dated November 18, 2002.

(2) Gulfstream G450/G350 AFM Supplement G450-2016-01, dated July 27, 2016, to the Gulfstream G450 AFM, dated August 12, 2004; and the Gulfstream G350 AFM, dated October 28, 2004.

(3) Gulfstream GV AFM Supplement GV-2016-01, dated July 27, 2016, to the Gulfstream GV AFM, dated April 11, 1997.

(4) Gulfstream G550/G500 AFM Supplement G550-2016-01, dated July 27, 2016, to the Gulfstream G550 AFM, dated August 14, 2003; and the Gulfstream G500 AFM, dated December 5, 2003.

(5) Gulfstream GVI (G650) AFM Supplement G650-2016-01, dated July 27, 2016, to the Gulfstream GVI (G650) AFM, dated September 7, 2012.

(6) Gulfstream GVI (G650ER) AFM Supplement G650ER-2016-03, dated July 27, 2016, to the Gulfstream GVI (G650ER) AFM, dated October 2, 2014.

**(i) Credit for Previous Actions**

This paragraph provides credit for the action required by paragraph (g) of this AD, if that action was performed before the effective date of this AD using the applicable service information specified in paragraphs (i)(1) through (i)(4) of this AD. This service information was incorporated by reference in AD 2009-17-01.

(1) Gulfstream G-IV/G300/G400 AFM Supplement G-IV-2009-02, Revision 1, dated June 25, 2009, to the Gulfstream GIV AFM, the Gulfstream G300 AFM, and the Gulfstream G400 AFM.

(2) Gulfstream G450/G350 AFM Supplement G450-2009-03, Revision 1, dated June 25, 2009, to the Gulfstream G450 AFM and the Gulfstream G350 AFM.

(3) Gulfstream GV AFM Supplement GV-2009-03, Revision 1, dated June 25, 2009, to the Gulfstream GV AFM.

(4) Gulfstream G550/G500 AFM Supplement G550-2009-03, Revision 1, dated June 25, 2009, Gulfstream G550 AFM and the Gulfstream G500 AFM.

**(j) Alternative Methods of Compliance (AMOCs)**

(1) The Manager, Atlanta 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)(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.

(3) AMOCs approved previously for paragraph (h) of AD 2009-17-01 are approved as AMOCs for the corresponding provisions of paragraph (g) of this AD.

#### **(k) Related Information**

(1) For more information about this AD, contact Ky Phan, Aerospace Engineer, Propulsion and Services Section, FAA, Atlanta ACO Branch, 1701 Columbia Avenue, College Park, GA 30337; phone: 404-474-5536; fax: 404-474-5606; email: ky.phan@faa.gov.

(2) Service information identified in this AD that is not incorporated by reference is available at the addresses specified in paragraphs (l)(3) and (l)(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) Gulfstream GIV/G300/G400 Airplane Flight Manual (AFM) Supplement GIV-2016-01, dated July 27, 2016, to the Gulfstream GIV AFM, dated April 22, 1987; the Gulfstream G300 AFM, dated January 15, 2003; and the Gulfstream G400 AFM, dated November 18, 2002.

(ii) Gulfstream G450/G350 Airplane Flight Manual (AFM) Supplement G450-2016-01, dated July 27, 2016, to the Gulfstream G450 AFM, dated August 12, 2004; and the Gulfstream G350 AFM, dated October 28, 2004.

(iii) Gulfstream GV Airplane Flight Manual (AFM) Supplement GV-2016-01, dated July 27, 2016, to the Gulfstream GV AFM, dated April 11, 1997.

(iv) Gulfstream G550/G500 Airplane Flight Manual (AFM) Supplement G550-2016-01, dated July 27, 2016, to the Gulfstream G550 AFM, dated August 14, 2003; and the Gulfstream G500 AFM, dated December 5, 2003.

(v) Gulfstream GVI (G650) Airplane Flight Manual (AFM) Supplement G650-2016-01, dated July 27, 2016, to the Gulfstream GVI (G650) AFM, dated September 7, 2012.

(vi) Gulfstream GVI (G650ER) Airplane Flight Manual (AFM) Supplement G650ER-2016-03, dated July 27, 2016, to the Gulfstream GVI (G650ER) AFM, dated October 2, 2014.

(3) For service information identified in this AD, contact Gulfstream Aerospace Corporation, Technical Publications Dept., P.O. Box 2206, Savannah, GA 31402-2206; telephone 800-810-4853; fax 912-965-3520; email pubs@gulfstream.com; Internet [http://www.gulfstream.com/product\\_support/technical\\_pubs/pubs/index.htm](http://www.gulfstream.com/product_support/technical_pubs/pubs/index.htm).

(4) You may view this service information at the FAA, Transport Standards Branch, 1601 Lind Avenue SW., Renton, WA. For information on the availability of this material at the FAA, call 425-227-1221.

(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 Renton, Washington, on September 18, 2017.

Dionne Palermo,  
Acting Director, System Oversight Division,  
Aircraft Certification Service.



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**2017-20-09 General Electric Company:** Amendment 39-19066; Docket No. FAA-2017-0254; Product Identifier 2017-NE-10-AD.

**(a) Effective Date**

This AD is effective November 13, 2017.

**(b) Affected ADs**

None.

**(c) Applicability**

This AD applies to all General Electric Company (GE) CF34-8E2; CF34-8E2A1; CF34-8E5; CF34-8E5A1; CF34-8E5A2; CF34-8E6; and CF34-8E6A1 model turbofan engines.

**(d) Subject**

Joint Aircraft System Component (JASC), 7270, Turbine Engine Bypass Section.

**(e) Unsafe Condition**

This AD was prompted by a report that using a certain repair procedure for the fan outlet guide vane (OGV) frame could alter the strength capability of the fan OGV frame. We are issuing this AD to prevent failure of the fan OGV frame, engine separation, and loss of the airplane.

**(f) Compliance**

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

**(g) Required Actions**

(1) For engines with a fan OGV frame installed that was repaired using GE CF34-8E Engine Manual, GEK 112031, 72-00-23, REPAIR 006:

(i) If the fan OGV frame has 24,900 cycles since new (CSN) or more on the effective date of this AD, remove the OGV frame from service within 100 cycles after the effective date of this AD.

(ii) If the OGV frame has less than 24,900 CSN on the effective date of this AD, remove the fan OGV frame from service at the next shop visit after the effective date of this AD, or before exceeding 25,000 CSN, whichever occurs earlier.

(2) After the effective date of this AD, do not install a fan OGV frame that was repaired using GE CF34-8E Engine Manual, GEK 112031, 72-00-23, REPAIR 006.

**(h) Definition**

For the purpose of this AD, an “engine shop visit” is the induction of an engine into the shop for maintenance involving the separation of pairs of major mating engine flanges.

**(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)(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.

**(j) Related Information**

(1) For more information about this AD, contact David Bethka, Aerospace Engineer, ECO Branch, FAA, 1200 District Avenue, Burlington, MA 01803; phone: 781-238-7129; fax: 781-238-7199; email: david.bethka@faa.gov.

(2) For General Electric service information identified in this AD, contact General Electric Company, GE-Aviation, Room 285, 1 Neumann Way, Cincinnati, OH 45215, phone: 513-552-3272; fax: 513-552-3329; email: geae.aoc@ge.com. You may view this service information at the FAA, Engine and Propeller Standards Branch, 1200 District Avenue, Burlington, MA. For information on the availability of this material at the FAA, call 781-238-7125.

**(k) Material Incorporated by Reference**

None.

Issued in Burlington, Massachusetts, on September 28, 2017.  
Robert J. Ganley,  
Manager, Engine and Propeller Standards Branch,  
Aircraft Certification Service.



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**2017-20-10 Airbus:** Amendment 39-19067; Docket No. FAA-2017-0624; Product Identifier 2016-NM-135-AD.

**(a) Effective Date**

This AD is effective November 15, 2017.

**(b) Affected ADs**

This AD affects AD 2000-12-13, Amendment 39-11791 (65 FR 37845, June 19, 2000) (“AD 2000-12-13”).

**(c) Applicability**

This AD applies to the Airbus airplanes, certificated in any category, identified in paragraphs (c)(1) through (c)(3) of this AD, all manufacturer serial numbers.

(1) Airbus Model A319-111, -112, -113, -114, -115, -131, -132, and -133 airplanes.

(2) Airbus Model A320-211, -212, -214, -231, -232, and -233 airplanes.

(3) Airbus Model A321-111, -112, -131, -211, -212, -213, -231, and -232 airplanes.

**(d) Subject**

Air Transport Association (ATA) of America Code 22, Auto Flight.

**(e) Reason**

This AD was prompted by a report of a runway excursion due to an unexpected thrust increase leading to an unstable approach performed using the current flight management and guidance computer (FMGC) standard. We are issuing this AD to prevent unstable approaches due to an unexpected thrust increase, which could result in reduced controllability of the airplane and runway excursions.

**(f) Compliance**

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

**(g) Inspection and Replacement of Affected FMGC**

(1) Within 36 months after the effective date of this AD: Inspect the FMGC to determine if any FMGC with an affected part number identified in Figure 1 to paragraphs (g)(1), (g)(2), (h)(1), (h)(2), and (j) of this AD is installed. A review of airplane maintenance records is acceptable in lieu of inspecting the FMGC, provided those records can be relied upon for that purpose and the part number of the FMGC can be conclusively identified from that review.

(2) If any affected FMGC with an affected part number identified in Figure 1 to paragraphs (g)(1), (g)(2), (h)(1), (h)(2), and (j) of this AD is found during any inspection or review required by

paragraph (g)(1) of this AD: Within 36 months after the effective date of this AD, replace the FMGC with a serviceable FMGC having a part number that is not identified in Figure 1 to paragraphs (g)(1), (g)(2), (h)(1), (h)(2), and (j) of this AD, in accordance with the Accomplishment Instructions and paragraph 1.B. (concurrent actions) of the applicable service information specified in paragraphs (g)(2)(i) through (g)(2)(vi) of this AD, or using a method approved by the Manager, International Section, Transport Standards Branch, FAA; or the European Aviation Safety Agency (EASA); or Airbus's EASA Design Organization Approval (DOA). Refer to Figure 2 to paragraph (g)(2) of this AD and Figure 3 to paragraph (g)(2) of this AD for the lists of approved eligible FMGCs certified as of the effective date of this AD.

(i) Airbus Service Bulletin A320-22-1090, Revision 11, dated July 20, 2004 (installation of FMGC part number (P/N) C13042BA01).

(ii) Airbus Service Bulletin A320-22-1103, Revision 04, dated March 12, 2004 (installation of FMGC P/N C13043AA01).

(iii) Airbus Service Bulletin A320-22-1116, Revision 04, dated March 29, 2004 (installation of FMGC P/N C13043BA01).

(iv) Airbus Service Bulletin A320-22-1152, Revision 03, dated February 18, 2005 (installation of FMGC P/N C13043AA02).

(v) Airbus Service Bulletin A320-22-1243, Revision 05, dated May 31, 2010 (installation of FMGC P/N C13043BA04).

(vi) Airbus Service Bulletin A320-22-1519, Revision 02, dated December 21, 2015 (installation of FMGC P/N C13207CA00).

**Figure 1 to paragraphs (g)(1), (g)(2), (h)(1), (h)(2), and (j) of this AD – Affected FMGCs**

<b>Airplanes</b>	<b>FMGC part number</b>			
A319-111, A319-112, A319-113, A319-114, A319-115, A320-211, A320-212, A320-214, A321-111, A321-112, A321-211, A321-212, and A321-213 (all CFM56)	B398AAM0303	B398AAM0304	B398AAM0405	B398AAM0406
	B398AAM0407	B398AAM0408	B398AAM0409	B398AAM0410
	B398AAM0411	B398AAM0412	B398BAM0101	B398BAM0202
	B398BAM0203	B398BAM0204	B398BAM0205	B398BAM0206
	B398BAM0207	B398BAM0208	B398BAM0209	B546BAM0101
	B546BAM0202	B546BAM0203	B546BAM0204	B546BAM0205
	B546BAM0206	B546CAM0101	B546CAM0102	B546CAM0103
	B546CAM0104			
A319-131 A319-132 A319-133 A320-231 A320-232 A320-233 A321-131 A321-231 and A321-232 (all V2500)	B398BCM0101	B398BCM0102	B398BCM0103	B398BCM0104
	B398BCM0105	B398BCM0106	B398BCM0107	B398BCM0108
	B398BCM0109	B546BCM0101	B546BCM0102	B546BCM0203
	B546BCM0204	B546BCM0205	B546CCM0101	B546CCM0102
	B546CCM0103	B546CCM0104	B546CCM0105	B546CCM0106

**Figure 2 to paragraph (g)(2) of this AD –**  
*List of approved eligible FMGCs certified as of the effective date of this AD*

Airplanes	FMGC part number		
A319-111, A319-112, A319-113, A319-114, A319-115, A320-211, A320-212, A320-214, A321-111, A321-112, A321-211, A321-212, and A321-213 (all CFM56)	C13042AA01		
	C13042AA02		
	C13042AA03		
	C13042AA04		
	C13042AA05		
	C13042AA06		
	C13042AA07		
	C13043AA01		
	C13043AA02		
	C13043AA03		
	C13043AA04		
	C13043AA05		
	C13043AA06		
	<b>FMGC hardware</b>		<b>Flight Guidance (FG) software</b>
	C13207AA00	G2858AAA01	
	C13207CA00	G2858AAA02	
C13207CA00	G2858AAA03		
C13208AA00	G2858AAA01		
C13208AA00	G2858AAA02		
C13208AA00	G2858AAA03		

**Figure 3 to paragraph (g)(2) of this AD –**  
*List of approved eligible FMGCs certified as of the effective date of this AD*

Airplanes	FMGC part number	
A319-131, A319-132, A319-133, A320-231, A320-232, A320-233, A321-131, A321-231, and A321-232 (all V2500)	C13042BA01	
	C13042BA02	
	C13042BA03	
	C13042BA04	
	C13042BA05	
	C13042BA06	
	C13042BA07	
	C13042BA08	
	C13043BA01	
	C13043BA02	
	C13043BA03	
	C13043BA04	
	C13043BA05	
	C13043BA06	
	C13043BA07	
	C13043BA08	
<b>FMGC hardware</b>		<b>FG software</b>
C13207BA00	G2859AAA01	
C13207DA00	G2859AAA02	
C13207DA00	G2859AAA03	
C13207DA00	G2859AAA04	
C13208BA00	G2859AAA01	
C13208BA00	G2859AAA02	
C13208BA00	G2859AAA03	
C13208BA00	G2859AAA04	

**(h) Unaffected Airplanes**

(1) An airplane on which Airbus Modification 31896 or Airbus Modification 31897 has been embodied in production is not affected by the requirements of paragraph (g) of this AD, provided it is conclusively determined that no FMGC with an affected part number identified in Figure 1 to paragraphs (g)(1), (g)(2), (h)(1), (h)(2), and (j) of this AD has been installed on that airplane since the date of issuance of the original certificate of airworthiness or the original export certificate of airworthiness. A review of airplane maintenance records is acceptable to make this determination provided those records can be relied upon for that purpose and the part number of the FMGC can be conclusively identified from that review.

(2) An airplane on which the actions specified in paragraph (g)(2) have been done before the effective date of this AD is not affected by the requirements in paragraph (g) of this AD, provided it is conclusively determined that no FMGC with an affected part number identified in Figure 1 to paragraphs (g)(1), (g)(2), (h)(1), (h)(2), and (j) of this AD has been installed on that airplane since accomplishing the actions specified in paragraph (g)(2) of this AD. A review of airplane maintenance records is acceptable to make this determination provided those records can be relied upon for that purpose and the part number of the FMGC can be conclusively identified from that review.

**(i) Parts Installation Limitation**

Installation of an FMGC standard approved after the effective date of this AD on any airplane, is acceptable for compliance with the actions required by paragraph (g)(2) of this AD, provided the conditions specified in paragraphs (i)(1) and (i)(2) of this AD are accomplished.

(1) The software and hardware standard, as applicable, must be approved by the Manager, International Section, Transport Standards Branch, FAA; or EASA; or Airbus's EASA DOA.

(2) The installation must be accomplished using airplane modification instructions approved by the Manager, International Section, Transport Standards Branch, FAA; or EASA; or Airbus's EASA DOA.

**(j) Parts Installation Prohibition**

As of the effective date of this AD, no person may install on any airplane an FMGC with an affected part number identified in Figure 1 to paragraphs (g)(1), (g)(2), (h)(1), (h)(2), and (j) of this AD.

**(k) Credit for Previous Actions**

This paragraph provides credit for actions required by paragraph (g)(2) of this AD, if those actions were performed before the effective date of this AD using the applicable service information identified in Figure 4 to paragraph (k) of this AD.

**Figure 4 to paragraph (k) of this AD –**  
*Service information acceptable for credit for actions in paragraph (g)(2) of this AD*

FMGC/FG install	Airbus Service Bulletin	Revision	Date
C13042BA01	A320-22-1090	00	March 5, 2002
		01	April 15, 2002
		02	June 14, 2002
		03	October 1, 2002
		04	November 26, 2002
		05	January 13, 2003
		06	March 3, 2003
		07	June 26, 2003
		08	October 15, 2003
		09	November 7, 2003
		10	January 22, 2004
C13043AA01	A320-22-1103	00	October 8, 2002
		01	April 1, 2003
		02	August 28, 2003
		03	October 15, 2003
C13043BA01	A320-22-1116	00	January 31, 2003
		01	August 4, 2003
		02	October 17, 2003
		03	February 25, 2004
C13043AA02	A320-22-1152	00	May 5, 2004
		01	July 6, 2004
		02	October 15, 2004
C13043BA04	A320-22-1243	00	October 16, 2007
		01	April 1, 2008
		02	September 10, 2008
		03	February 17, 2009
		04	March 3, 2010
C13207CA00	A320-22-1519	00	June 26, 2015
		01	August 26, 2015

### (l) Terminating Action for Other ADs

Accomplishing the actions required by paragraph (g)(1) of this AD, and, as applicable, paragraph (g)(2) of this AD, terminates all requirements of AD 2000-12-13.

### (m) 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 manager of the International Section, send it to the attention of the person identified in paragraph (n)(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 EASA; or Airbus's EASA DOA. If approved by the DOA, the approval must include the DOA-authorized signature.

### (n) Related Information

(1) Refer to Mandatory Continuing Airworthiness Information (MCAI) EASA Airworthiness Directive 2016-0122, dated June 21, 2016, 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-2017-0624.

(2) For more information about this AD, contact Sanjay Ralhan, Aerospace Engineer, International Section, Transport Standards Branch, FAA, 1601 Lind Avenue SW., Renton, WA 98057-3356; telephone 425-227-1405; fax 425-227-1149.

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

**(o) 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 Service Bulletin A320-22-1090, Revision 11, dated July 20, 2004.

(ii) Airbus Service Bulletin A320-22-1103, Revision 04, dated March 12, 2004.

(iii) Airbus Service Bulletin A320-22-1116, Revision 04, dated March 29, 2004.

(iv) Airbus Service Bulletin A320-22-1152, Revision 03, dated February 18, 2005.

(v) Airbus Service Bulletin A320-22-1243, Revision 05, dated May 31, 2010.

(vi) Airbus Service Bulletin A320-22-1519, Revision 02, dated December 21, 2015.

(3) For service information identified in this AD, contact Airbus, Airworthiness Office–EIAS, 1 Rond Point Maurice Bellonte, 31707 Blagnac Cedex, France; telephone +33 5 61 93 36 96; fax +33 5 61 93 44 51; email [account.airworth-eas@airbus.com](mailto:account.airworth-eas@airbus.com); Internet <http://www.airbus.com>.

(4) You may view this service information at the FAA, Transport Standards Branch, 1601 Lind Avenue SW., Renton, WA. For information on the availability of this material at the FAA, call 425-227-1221.

(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 Renton, Washington, on September 20, 2017.

Dionne Palermo,  
Acting Director, System Oversight Division,  
Aircraft Certification Service.



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**2017-20-11 Bombardier, Inc.:** Amendment 39-19068; Docket No. FAA-2017-0691; Product Identifier 2017-NM-029-AD.

**(a) Effective Date**

This AD is effective November 15, 2017.

**(b) Affected ADs**

None.

**(c) Applicability**

This AD applies to Bombardier, Inc., Model CL-600-1A11 (CL-600) airplanes, serial numbers 1004 through 1085 inclusive; Model CL-600-2A12 airplanes (CL-601 Variant), serial numbers 3001 through 3066 inclusive; and Model CL-600-2B16 (CL-601-3A and CL-601-3R Variants) airplanes, serial numbers 5001 through 5194 inclusive; certificated in any category.

**(d) Subject**

Air Transport Association (ATA) of America Code 53, Fuselage.

**(e) Reason**

This AD was prompted by a report of laminated shims that may have been improperly installed at a certain wing tie beam. We are issuing this AD to detect and correct degradation of the structural integrity of the affected tie beam, which could result in cracking of the pressure floor.

**(f) Compliance**

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

**(g) Maintenance or Inspection Program Revision**

Within 30 days after the effective date of this AD, revise the maintenance or inspection program, as applicable, to incorporate the certification maintenance requirement (CMR) task specified in the applicable service information identified in paragraphs (g)(1) through (g)(3) of this AD. The initial compliance time for the task is within the applicable time specified in the service information, or within 30 days after the effective date of this AD, whichever occurs later.

(1) For Model CL-600-1A11 (CL-600) airplanes: Task 53-10-00-131, "Pressure Floor–Wing Tie Beam–FS460.00," of Section 5-10-30, "Airworthiness Limitation Checks by ATA Chapter Number," of Bombardier Challenger 600 Time Limits/Maintenance Checks, Publication No. PSP 605, Revision 37, dated April 29, 2016.

(2) For Model CL-600-2A12 airplanes (CL-601 Variant) airplanes: Task 53-10-00-133, "Pressure Floor–Wing Tie Beam–FS460.00," of Section 5-10-30, "Airworthiness Limitation Checks

by ATA Chapter Number,” of Bombardier Challenger 601 Time Limits/Maintenance Checks, Publication No. PSP 601-5, Revision 44, dated April 29, 2016.

(3) For Model CL-600-2B16 (CL-601-3A and CL-601-3R Variants) airplanes: Task 53-10-00-134, “Pressure Floor–Wing Tie Beam–FS460.00,” of Section 5-10-30, “Airworthiness Limitation Checks by ATA Chapter Number,” of Bombardier Challenger 601 Time Limits/Maintenance Checks, Publication No. PSP 601A-5, Revision 40, dated April 29, 2016.

#### **(h) No Alternative Actions or Intervals**

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

#### **(i) Other FAA AD Provisions**

The following provisions also apply to this AD:

(1) Alternative Methods of Compliance (AMOCs): The Manager, New York 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 ATTN: Program Manager, Continuing Operational Safety, FAA, New York ACO Branch, 1600 Stewart Avenue, Suite 410, Westbury, NY 11590; telephone 516-228-7300; fax 516-794-5531. 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, New York ACO Branch, FAA; or Transport Canada Civil Aviation (TCCA); or Bombardier, Inc.'s TCCA Design Approval Organization (DAO). If approved by the DAO, the approval must include the DAO-authorized signature.

#### **(j) Related Information**

(1) Refer to Mandatory Continuing Airworthiness Information (MCAI) Canadian Airworthiness Directive CF-2016-34, dated October 14, 2016, 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-2017-0691.

(2) For more information about this AD, contact Aziz Ahmed, Aerospace Engineer, Airframe and Mechanical Systems Section, FAA, New York ACO Branch, 1600 Stewart Avenue, Suite 410, Westbury, NY 11590; telephone 516-228-7329; fax 516-794-5531.

#### **(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 this AD specifies otherwise.

(i) Task 53-10-00-131, “Pressure Floor–Wing Tie Beam–FS460.00,” of Section 5-10-30, “Airworthiness Limitation Checks by ATA Chapter Number,” of Bombardier Challenger 600 Time Limits/Maintenance Checks, Publication No. PSP 605, Revision

37, dated April 29, 2016. The revision level of this document is identified on only the Transmittal Letter.

(ii) Task 53-10-00-133, “Pressure Floor–Wing Tie Beam–FS460.00,” of Section 5-10-30, “Airworthiness Limitation Checks by ATA Chapter Number,” of Bombardier Challenger 601 Time Limits/Maintenance Checks, Publication No. PSP 601-5, Revision 44, dated April 29, 2016. The revision level of this document is identified on only the Transmittal Letter.

(iii) Task 53-10-00-134, “Pressure Floor–Wing Tie Beam–FS460.00,” of Section 5-10-30, “Airworthiness Limitation Checks by ATA Chapter Number,” of Bombardier Challenger 601 Time Limits/Maintenance Checks, Publication No. PSP 601A-5, Revision 40, dated April 29, 2016. The revision level of this document is identified on only the Transmittal Letter.

(3) For service information identified in this AD, contact Bombardier, Inc., 400 Côte-Vertu Road West, Dorval, Québec H4S 1Y9, Canada; Widebody Customer Response Center North America toll-free telephone 1-866-538-1247 or direct-dial telephone 1-514-855-2999; fax 514-855-7401; email [ac.yul@aero.bombardier.com](mailto:ac.yul@aero.bombardier.com); Internet <http://www.bombardier.com>.

(4) You may view this service information at the FAA, Transport Standards Branch, 1601 Lind Avenue SW., Renton, WA. For information on the availability of this material at the FAA, call 425-227-1221.

(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 Renton, Washington, on September 27, 2017.

Dionne Palermo,  
Acting Director, System Oversight Division,  
Aircraft Certification Service.



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**2017-20-12 The Boeing Company:** Amendment 39-19069; Docket No. FAA-2017-0243; Product Identifier 2016-NM-045-AD.

**(a) Effective Date**

This AD is effective November 16, 2017.

**(b) Affected ADs**

This AD affects AD 98-11-04 R1, Amendment 39-10984 (64 FR 987, January 7, 1999) (“AD 98-11-04 R1”); and AD 2008-08-23, Amendment 39-15477 (73 FR 21237, April 21, 2008) (“AD 2008-08-23”).

**(c) Applicability**

This AD applies to all The Boeing Company Model 737-100, -200, and -200C series airplanes, certificated in any category.

**(d) Subject**

Air Transport Association (ATA) of America Code 53, Fuselage; 54, Nacelles/Pylons; 55, Stabilizers; 57, Wings.

**(e) Unsafe Condition**

This AD was prompted by a report of incidents involving fatigue cracking in transport category airplanes that are approaching or have exceeded their design service objective and a structural reevaluation that was conducted by the manufacturer that identified additional structural elements that qualify as structural significant items (SSIs). We are issuing this AD to ensure the continued structural integrity of all The Boeing Company Model 737-100, -200, and -200C series airplanes.

**(f) Compliance**

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

**(g) Revision of the Maintenance or Inspection Program for All Airplanes**

Prior to reaching the compliance time specified in paragraph (h)(1), (h)(2), or (h)(3) of this AD, as applicable: Incorporate a revision into the maintenance or inspection program, as applicable, that provides no less than the required damage tolerance rating (DTR) for each SSI listed in Boeing Document D6-37089, “Supplemental Structural Inspection Document for Model 737-100/200/200C Airplanes,” Revision F, dated November 2015 (“Document D6-37089, Revision F”). The required DTR value for each SSI is listed in Document D6-37089, Revision F. The revision to the maintenance or inspection program must include, and must be implemented in accordance with, the procedures in Section 5.0, “Damage Tolerance Rating (DTR) System Application,” and Section 6.0,

“SSI Discrepancy Reporting” of Document D6-37089, Revision F. Accomplishing the revision required by this paragraph terminates the actions required by paragraphs (a) and (b) of AD 98-11-04 R1, and paragraph (g) of AD 2008-08-23.

#### **(h) Initial and Repetitive Inspections**

Perform an inspection in accordance with Document D6-37089, Revision F, to detect cracks of all structure identified in Document D6-37089, Revision F, at the time specified in paragraph (h)(1), (h)(2), or (h)(3) of this AD, as applicable. Repeat the inspection thereafter at the intervals specified in Document D6-37089, Revision F. Accomplishing an initial inspection required by this paragraph terminates the corresponding inspection required by paragraph (c) of AD 98-11-04 R1 and paragraph (h) of AD 2008-08-23.

(1) For SSIs on Model 737-100 and -200 series airplanes: Before the accumulation of 66,000 total flight cycles, at the next inspection required by Note 5 of AD 98-11-04 R1 (Note 5 of AD 98-11-04 R1 follows paragraph (c)(2) of AD 98-11-04 R1), or within 12 months after the effective date of this AD, whichever occurs later.

(2) For SSIs on Model 737-200C series airplanes not affected by cargo configuration: Before the accumulation of 66,000 total flight cycles, at the next inspection required by paragraph (h) of AD 2008-08-23, or within 12 months after the effective date of this AD, whichever occurs later.

(3) For SSIs on Model 737-200C series airplanes affected by cargo configuration: Before the accumulation of 46,000 total flight cycles, at the next inspection required by paragraph (h) of AD 2008-08-23, or within 12 months after the effective date of this AD, whichever occurs later.

#### **(i) Repairs and Alterations**

(1) If any cracked SSI structure is found during any inspection required by paragraph (h) of this AD, repair before further flight using an FAA-approved method or using a method approved in accordance with the procedures specified in paragraph (l) of this AD. Within 18 months after repair, incorporate a revision into the maintenance or inspection program, as applicable, to include a damage-tolerance-based alternative inspection program for the repaired structure. Thereafter, inspect the affected structure in accordance with the alternative program. The inspection method and compliance times (i.e., threshold and repetitive intervals) of the alternative program must be approved in accordance with the procedures specified in paragraph (l) of this AD.

(2) If any repair or alteration to an SSI is found during any inspection required by paragraph (h) of this AD such that the repair or alteration affects your ability to accomplish the inspections required by paragraph (h) of this AD, within 18 months after the inspection compliance time, incorporate a revision into the maintenance or inspection program, as applicable, to include a damage tolerance based alternative inspection program for each affected SSI. Thereafter, inspect the affected structure in accordance with the alternative inspection program. The inspection method and compliance times (i.e., threshold and repetitive intervals) of the alternative inspection program must be approved in accordance with the procedures specified in paragraph (l) of this AD. Accomplishing an initial inspection required by this paragraph terminates the corresponding inspection required by paragraph (i) of AD 2008-08-23.

#### **(j) Terminating Action for Other ADs**

Accomplishing the revision required by paragraph (g) of this AD and all initial inspections required by paragraph (h) of this AD terminates all requirements of AD 98-11-04 R1 and AD 2008-08-23.

### **(k) Paperwork Reduction Act Burden Statement**

A federal agency may not conduct or sponsor, and a person is not required to respond to, nor shall a person be subject to a penalty for failure to comply with a collection of information subject to the requirements of the Paperwork Reduction Act unless that collection of information displays a current valid OMB Control Number. The OMB Control Number for this information collection is 2120-0056. Public reporting for this collection of information is estimated to be approximately 5 minutes per response, including the time for reviewing instructions, completing and reviewing the collection of information. All responses to this collection of information are mandatory. Comments concerning the accuracy of this burden and suggestions for reducing the burden should be directed to the FAA at: 800 Independence Ave. SW., Washington, DC 20591, Attn: Information Collection Clearance Officer, AES-200.

### **(l) Alternative Methods of Compliance (AMOCs)**

(1) The Manager, Los Angeles 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 (m) of this AD. Information may be emailed to: 9-ANM-LAACO-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 Commercial Airplanes Organization Designation Authorization (ODA) that has been authorized by the Manager, Los Angeles ACO Branch, 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.

(4) AMOCs approved for AD 98-11-04 R1 and AD 2008-08-23 are approved as AMOCs for the corresponding provisions of paragraphs (g) and (h) of this AD for the SSIs identified in the AMOC.

### **(m) Related Information**

For more information about this AD, contact Jennifer Tsakoumakis, Aerospace Engineer, Airframe Section, FAA, Los Angeles ACO Branch, 3960 Paramount Boulevard, Lakewood, CA 90712-4137; phone: 562-627-5264; fax: 562-627-5210; email: jennifer.tsakoumakis@faa.gov.

### **(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 the AD specifies otherwise.

(i) Boeing Document D6-37089, "Supplemental Structural Inspection Document for Model 737-100/200/200C Airplanes," Revision F, dated November 2015.

(ii) Reserved.

(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; telephone 562-797-1717; Internet <https://www.myboeingfleet.com>.

(4) You may view this service information at the FAA, Transport Standards Branch, 1601 Lind Avenue SW., Renton, WA. For information on the availability of this material at the FAA, call 425-227-1221.

(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 Renton, Washington, on September 27, 2017.

Dionne Palermo,  
Acting Director, System Oversight Division,  
Aircraft Certification Service.



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**2017-20-14 The Boeing Company:** Amendment 39-19071; Docket No. FAA-2017-0244; Product Identifier 2016-NM-044-AD.

**(a) Effective Date**

This AD is effective November 16, 2017.

**(b) Affected ADs**

This AD affects AD 2008-09-13, Amendment 39-15494 (73 FR 24164, May 2, 2008) (“AD 2008-09-13”).

**(c) Applicability**

This AD applies to all The Boeing Company Model 737-300, -400, and -500 series airplanes, certificated in any category.

**(d) Subject**

Air Transport Association (ATA) of America Code 52, Doors; 53, Fuselage; 54, Nacelles/Pylons; 55, Stabilizers; 57, Wings.

**(e) Unsafe Condition**

This AD was prompted by a structural reevaluation conducted by the manufacturer. We have determined that supplemental inspections are required for timely detection of fatigue cracking for certain structural significant items (SSIs). We are issuing this AD to ensure the continued structural integrity of all The Boeing Company Model 737-300, -400, and -500 series airplanes.

**(f) Compliance**

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

**(g) Revision of the Maintenance or Inspection Program for All Airplanes**

Before the accumulation of 66,000 total flight cycles, or within 12 months after the effective date of this AD, whichever occurs later: Incorporate a revision into the maintenance or inspection program, as applicable, that provides no less than the required damage tolerance rating (DTR) for each SSI listed in Boeing Document D6-82669, “Supplemental Structural Inspection Document, Models 737-300/400/500 Airplanes,” Revision October 2015. The required DTR value for each SSI is listed in Boeing Document D6-82669, “Supplemental Structural Inspection Document, Models 737-300/400/500 Airplanes,” Revision October 2015. The revision to the maintenance or inspection program must include, and must be implemented in accordance with, the procedures in Section 5.0, “Damage Tolerance Rating (DTR) System Application;” and Section 6.0, “SSI Discrepancy Reporting;” of Boeing Document D6-82669, “Supplemental Structural Inspection Document, Models

737-300/400/500 Airplanes,” Revision October 2015. Accomplishment of the revision required by this paragraph terminates the requirements of paragraph (g) of AD 2008-09-13.

#### **(h) Initial and Repetitive Inspections**

At the applicable time specified in paragraphs (h)(1) and (h)(2) of this AD, perform an inspection in accordance with Boeing Document D6-82669, “Supplemental Structural Inspection Document, Models 737-300/400/500 Airplanes,” Revision October 2015, to detect cracks of the applicable structure identified in paragraphs (h)(1) and (h)(2) of this AD. Repeat the inspections thereafter at the intervals specified in Boeing Document D6-82669, “Supplemental Structural Inspection Document, Models 737-300/400/500 Airplanes,” Revision October 2015. Accomplishing an initial inspection required by this paragraph terminates the corresponding inspection required by paragraph (h) of AD 2008-09-13.

(1) For all structure identified in Boeing Document D6-82669, “Supplemental Structural Inspection Document, Models 737-300/400/500 Airplanes,” Revision October 2015, except for empennage SSIs E-19, E-21, E-29, E-30, and E-31: Before the accumulation of 66,000 total flight cycles, at the next repetitive inspection required by paragraph (h) of AD 2008-09-13, or within 12 months after the effective date of this AD, whichever occurs latest.

(2) For empennage SSIs E-19, E-21, E-29, E-30, and E-31: Before the accumulation of 66,000 total flight cycles, or within 12 months after the effective date of this AD, whichever occurs later.

#### **(i) Repairs and Alterations**

(1) If any cracked SSI structure is found during any inspection required by paragraph (h) of this AD, repair before further flight using an FAA-approved method or using a method approved in accordance with the procedures specified in paragraph (l) of this AD. Within 18 months after repair, incorporate a revision into the maintenance or inspection program, as applicable, to include a damage-tolerance-based alternative inspection program for the repaired structure. Thereafter, inspect the affected structure in accordance with the alternative program. The inspection method and compliance times (i.e., threshold and repetitive intervals) of the alternative program must be approved in accordance with the procedures specified in paragraph (l) of this AD.

(2) If any repair or alteration to an SSI is found during any inspection required by paragraph (h) of this AD such that the repair or alteration affects your ability to accomplish the inspections required by paragraph (h) of this AD, within 18 months after the inspection compliance time, incorporate a revision into the maintenance or inspection program, as applicable, to include a damage tolerance based alternative inspection program for each affected SSI. Thereafter, inspect the affected structure in accordance with the alternative inspection program. The inspection method and compliance times (i.e., threshold and repetitive intervals) of the alternative inspection program must be approved in accordance with the procedures specified in paragraph (l) of this AD. Accomplishing an initial inspection required by this paragraph terminates the corresponding inspection required by paragraph (i) of AD 2008-09-13.

#### **(j) Terminating Action for AD 2008-09-13**

Accomplishing the revision required by paragraph (g) of this AD and all initial inspections required by paragraph (h) of this AD terminates all requirements of AD 2008-09-13.

#### **(k) Paperwork Reduction Act Burden Statement**

A federal agency may not conduct or sponsor, and a person is not required to respond to, nor shall a person be subject to a penalty for failure to comply with a collection of information subject to the requirements of the Paperwork Reduction Act unless that collection of information displays a

current valid OMB Control Number. The OMB Control Number for this information collection is 2120-0056. Public reporting for this collection of information is estimated to be approximately 5 minutes per response, including the time for reviewing instructions, completing and reviewing the collection of information. All responses to this collection of information are mandatory. Comments concerning the accuracy of this burden and suggestions for reducing the burden should be directed to the FAA at: 800 Independence Ave. SW., Washington, DC 20591, Attn: Information Collection Clearance Officer, AES-200.

### **(l) Alternative Methods of Compliance (AMOCs)**

(1) The Manager, Los Angeles Aircraft 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 (m) of this AD. Information may be emailed to: 9-ANM-LAACO-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 Commercial Airplanes Organization Designation Authorization (ODA) that has been authorized by the Manager, Los Angeles ACO Branch, 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.

(4) AMOCs approved for AD 2008-09-13 are approved as AMOCs for the corresponding provisions of paragraphs (g) and (h) of this AD for the SSIs identified in the AMOC, except for AMOCs written for empennage SSIs E-19, E-21, E-29, E-30, and E-31.

### **(m) Related Information**

For more information about this AD, contact Jennifer Tsakoumakis, Aerospace Engineer, Airframe Section FAA, Los Angeles ACO Branch, 3960 Paramount Boulevard, Lakewood, CA 90712-4137; phone: 562-627-5264; fax: 562-627-5210; email: jennifer.tsakoumakis@faa.gov.

### **(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 the AD specifies otherwise.

(i) Boeing Document D6-82669, "Supplemental Structural Inspection Document, Models 737-300/400/500 Airplanes," Revision October 2015.

(ii) Reserved.

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

(4) You may view this service information at the FAA, Transport Standards Branch, 1601 Lind Avenue SW., Renton, WA. For information on the availability of this material at the FAA, call 425-227-1221.

(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 Renton, Washington, on September 27, 2017.  
Dionne Palermo,  
Acting Director, System Oversight Division,  
Aircraft Certification Service.



**DATE:** October 12, 2017

**AD #:** 2017-21-51

Emergency Airworthiness Directive (AD) 2017-21-51 is sent to owners and operators of Engine Alliance (EA) Model GP7200 series turbofan engines.

### **Background**

This emergency AD was prompted by an uncontained engine failure that occurred on an Engine Alliance (EA) GP7270 turbofan engine. The failed engine had 3,527 cycles since new, which is a relatively high cycle engine. The actions specified in this AD are intended to prevent failure of the fan hub, which could lead to an uncontained release of the fan hub, damage to the engine, and damage to the airplane.

### **Relevant Service Information**

We reviewed EA Alert Service Bulletin (ASB) EAGP7-A72-383, Revision 1, dated October 12, 2017. The ASB describes procedures for visual inspections of the GP7200 series engine fan hubs for damage.

### **FAA's Determination**

We are issuing this AD because we evaluated all the relevant information and determined the unsafe condition described previously is likely to exist or develop in other products of the same type design.

### **AD Requirements**

This AD requires a one-time visual inspection of the GP7200 series engine fan hub, with the compliance time based on the number of accumulated flight cycles, and removal of the fan hub if damage or defects are found that are outside of serviceable limits.

### **Interim Action**

We consider this AD interim action. An investigation to determine the cause of the failure is on-going and we may consider additional rulemaking if final action is identified.

### **Authority for this Rulemaking**

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, Section 106, describes the authority of the FAA Administrator. Subtitle VII, Aviation Programs, describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701, "General requirements." Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This

regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

This AD is issued in accordance with authority delegated by the Executive Director, Aircraft Certification Service, as authorized by FAA Order 8000.51C. In accordance with that order, issuance of ADs is normally a function of the Compliance and Airworthiness Division, but during this transition period, the Executive Director has delegated the authority to issue ADs applicable to engines, propellers, and associated appliances to the Manager, Engine and Propeller Standards Branch, Policy and Innovation Division.

### **Presentation of the Actual AD**

We are issuing this AD under 49 U.S.C. Section 44701 according to the authority delegated to me by the Administrator.

**2017-21-51 Engine Alliance:** Product Identifier 2017-NE-37-AD.

#### **(a) Effective Date**

This Emergency AD is effective upon receipt.

#### **(b) Affected ADs**

None.

#### **(c) Applicability**

This AD applies to all Engine Alliance (EA) GP7270, GP7272, and GP7277 engines.

#### **(d) Subject**

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

#### **(e) Unsafe Condition**

This AD was prompted by failure of a fan hub. We are issuing this AD to prevent failure of the fan hub, which could lead to uncontained release of the fan hub, 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**

(1) Perform a visual inspection of the fan hub, in accordance with the Accomplishment Instructions, paragraph 1.B., 1.C., and 1.D., of EA Alert Service Bulletin (ASB) EAGP-A72-383, Revision 1, dated October 12, 2017, at the times specified in paragraphs (g)(1)(i) through (iii) of this AD.

(i) For fan hubs with 3,500 cycles since new (CSN) or more, inspect within 2 weeks of the effective date of this AD.

(ii) For fan hubs with 2,000 CSN or greater and less than 3,500 CSN, inspect within 5 weeks of the effective date of this AD.

(iii) For fan hubs with less than 2,000 CSN, inspect within 8 weeks of the effective date of this AD.

(2) If defects or damage to the fan hub are found that are outside of serviceable limits, remove the hub from service and replace with a part that has been inspected and found airworthy in accordance with paragraph (g)(1) of this AD, prior to further flight. Serviceable limits are defined in the Accomplishment Instructions, Table 1 of EA ASB EAGP7-A72-383, Revision 1, dated October 12, 2017.

#### **(h) Credit for Previous Actions**

This paragraph provides credit for the actions required by paragraph (g) of this AD, if those actions were performed before the effective date of this AD, using EA ASB EAGP7-A72-383, dated October 7, 2017.

#### **(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. 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.

#### **(j) Related Information**

(1) For further information about this AD, contact: David Bethka, Aerospace Engineer, ECO Branch, FAA, 1200 District Avenue, Burlington, MA 01803; phone: 781-238-7129; fax: (781) 238-7199; email: david.bethka@faa.gov.

(2) EA ASB EAGP7-A72-383, Revision 1, dated October 12, 2017, pertains to the subject of this AD.

(3) For copies of the service information referenced in this AD, contact: Engine Alliance, 400 Main St., East Hartford, CT 06108, M/S 169-10, phone: 800-565-0140; email: help24@pw.utc.com; website: www.engineallianceportal.com. You may view this referenced service information at the FAA, Engine and Propeller Standards Branch, 1200 District Avenue, Burlington, MA.

Issued in Burlington, Massachusetts, on October 12, 2017.

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