

**FEDERAL AVIATION ADMINISTRATION
AIRWORTHINESS DIRECTIVES**

**LARGE AIRCRAFT
BIWEEKLY 2016-24**

11/14/2016 - 11/27/2016



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			
Biweekly 2016-01			
2015-25-03	COR	The Boeing Company	747-100, 747-100B, 747-100B SUD, 747-200B, 747-200C, 747-200F, 747-300, 747-400, 747-400D, 747-400F, and 747SR series airplanes
2015-25-06	R 2010-06-04	Airbus	A300 B2-1C, B2-203, B2K-3C, B4-103, B4-203, and B4-2C; A310-203, -204, -221, -222, -304, -322, -324, and -325; A300 B4-601, B4-603, B4-605R, B4-620, B-622, and B4-622R airplanes
2015-26-02		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, -313, -541, and -642 airplanes
2015-26-03	R 2011-07-10	Bombardier, Inc.	BD-100-1A10 (Challenger 300) airplanes
2015-26-07		The Boeing Company	767-200, -300, -300F series airplanes
Biweekly 2016-02			
2015-25-10	R 2011-24-05	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
2015-26-05		Fokker Services B.V.	F.28 Mark 1000, 2000, 3000, and 4000
2015-26-06	R 2004-14-09	Airbus	A320-211, -212, and -231
2015-26-09		ATR-GIE Avions de Transport Régional (ATR)	ATR42-200, -300, -320, and -500
2015-27-01		General Electric Company (GE)	GE90-76B, -77B, -85B, -90B, and -94B
2016-01-02		Bombardier, Inc.	CL-600-2B19 (Regional Jet Series 100 & 440)
2016-01-03		Airbus	A330-201, A330-202, A330-203, A330-223, A330-223F, A330-243, A330-243F, A330-301, A330-302, A330-303, A330-321, A330-322, A330-323, A330-341, A330-342, and A330-343; A340-211, A340-212, A340-213, A340-311, A340-312, and A340-313
2016-01-04	R 2005-01-09	The Boeing Company	747-100, -100B, 747-100B SUD, 747-200B, 747-200C, 747-200F, 747-300, 747-400, 747-400D, 747-400F, and 747SR series
2016-01-05		The Boeing Company	737-400 series
2016-01-07		Airbus	A319-113 and A319-114; A320-211 and A320-212
2016-01-08	R 2013-13-04	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; and A321-111, -112, -131, -211, -212, -213, -231, and -232
2016-01-09		Bombardier, Inc.	DHC-8-400, -401, and -402
2016-01-11	R 98-18-26	Airbus	A320-211, -212, and -231
2016-01-12		Bombardier, Inc.	BD-700-1A10 and BD-700-1A11
2016-01-13		Airbus	A310-203, -204, -221, -222, -304, -322, -324, and -325; A300 B4-601, B4-603, B4-620, and B4-622; A300 B4-605R and B4-622R; and A300 F4-605R, F4-622R, and A300 C4-605R Variant F
2016-01-16	R 2002-23-20	Dassault Aviation	Mystere-Falcon 900
2016-01-17		Bombardier, Inc.	CL-600-2C10 (Regional Jet Series 700, 701, & 702)
Biweekly 2016-03			
2015-25-08	COR	The Boeing Company	777-200, -200LR, -300, -300ER, and 777F series airplanes
2015-28-01		Engine Alliance	GP7270 turbofan engines
2016-01-10	R 2004-20-14	Airbus	A300 airplanes
2016-01-18	R 98-20-27	Airbus	A300 airplanes
2016-02-01	R 96-18-06	Airbus	A320-211, -212, and -231 airplanes
2016-02-02		Airbus	A318-111 and -112; A319-111, -112, and -115; A320-214; A321-111, -112, -211, -212, and -213 airplanes
2016-02-03		Airbus	A319-113 and -114; A320-211 and -212 airplanes
2016-02-04		CFM International S.A.	CFM56-5B engines
2016-02-05		Bombardier, Inc.	BD-100-1A10 (Challenger 300) airplanes
2016-03-01		The Boeing Company	737-100, -200, -200C, -300, -400, and -500 series airplanes

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AD No.	Information	Manufacturer	Applicability
Information Key: E - Emergency; COR - Correction; S – Supersedes, R - Replaces			
Biweekly 2016-04			
2016-03-04		Rolls-Royce plc	(RR) RB211-535E4-37, RB211-535E4-B-37, and RB211-535E4-C-37 turbofan engines
2016-03-06	R 2012-18-05	The Boeing Company	DC-9-11, DC-9-12, DC-9-13, DC-9-14, DC-9-15, DC-9-15F, DC-9-21, DC-9-31, DC-9-32, DC-9-32 (VC-9C), DC-9-32F, DC-9-33F, DC-9-34, DC 9 34F, DC 9 32F (C-9A, C 9B), DC-9-41, DC-9-51, DC-9-81 (MD-81), DC-9-82 (MD-82), DC-9-83 (MD-83), DC-9-87 (MD-87), MD-88, MD-90-30 airplanes.
2016-04-01	R 2015-26-02	Airbus	A330-201, -202, -203, -223, -223F, -243, -243F, -301, -302, -303, -321, -322, -323, -341, -342, -343, A340-211, -212, -213, -311, -312, -313, -541, and -642 airplanes
2016-04-02	R 2010-26-10	The Boeing Company	747-200C, -200F, -400, -400D, and -400F series airplanes
2016-04-03		The Boeing Company	747-400F series airplanes
Biweekly 2016-05			
2016-04-06		The Boeing Company	737-600, -700, -700C, -800, -900, and -900ER series
2016-04-07		The Boeing Company	767-200, -300, -300F, and -400ER series
2016-04-08		The Boeing Company	787-8
2016-04-09		Dassault Aviation	FALCON 900EX and FALCON 2000EX
2016-04-10		ATR-GIE Avions de Transport Régional	ATR42-500 and ATR72-102, -202, -212, and -212A
2016-04-11		General Electric Company	GEEx-1B54, -1B58, -1B64, -1B67, and -1B70
2016-04-17		The Boeing Company	777-200 series
2016-04-18		The Boeing Company	747-100, -200B, -200C, -200F, -300, -400, -400D, and -400F series
2016-04-19		Airbus Defense and Space S.A.	CN-235, CN-235-100, CN-235-200, CN-235-300, and C-295
2016-04-20		The Boeing Company	737-600, -700, -700C, -800, -900, and -900ER series; 757-200, -200PF, -200CB, and -300 series; 767-200, -300, -300F, and -400ER series; 777-200, -200LR, -300, -300ER, and -777F series
2016-04-21	R 2008-26-07	The Boeing Company	DC-8-11, DC-8-12, DC-8-21, DC-8-31, DC-8-32, DC-8-33, DC-8-41, DC-8-42, DC-8-43, DC-8-51, DC-8-52, DC-8-53, DC-8-55, DC-8F-54, DC-8F-55, DC-8-61, DC-8-62, DC-8-63, DC-8-61F, DC-8-62F, DC-8-63F, DC-8-71, DC-8-72, DC-8-73, DC-8-71F, DC-8-72F, and DC-8-73F
2016-04-22		Fokker Services B.V.	F.27 Mark 200, 300, 400, 500, 600, and 700
2016-04-23		The Boeing Company	787-8
2016-04-24		The Boeing Company	757-200 series
Biweekly 2016-06			
2016-03-03	S 2013-11-13	Rolls-Royce plc	Viper Mk. 521, Viper Mk. 522, and Viper Mk. 601-22 turbojet engines
2016-03-07		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, -313, -541, and -642
2016-04-13	S 2015-04-03	Rolls-Royce plc	RB211 Trent 768-60, 772-60, and 772B-60 turbofan engines
2016-04-16	R 2013-08-23	The Boeing Company	DC-10-10, DC-10-10F, DC-10-15, DC-10-30, DC-10-30F (KC-10A and KDC-10), DC-10-40, DC-10-40F, MD-10-10F, MD-10-30F, MD-11, and MD-11F
2016-05-02	R 2011-13-11 & R 2013-16-09	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
2016-05-04		Dowty Propellers	R352/6-123-F/1, R352/6-123-F/2, and R410/6-123-F/35
2016-05-05		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, A310-203, -204, -221, -222, -304, -322, -324, and -325
2016-05-07		Engine Alliance	GP7270 turbofan engine
2016-05-12	R 2012-15-13	The Boeing Company	747-100B SUD, 747-300, 747-400, and 747-400D series, 747-200B series

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2016-06-02		The Boeing Company	737-300, -400, and -500 series
2016-06-03		Airbus	A319-131, -132, and -133, A320-232 and -233, A321-131, -231, and -232
2016-06-04		The Boeing Company	737-300, -400, and -500 series
2016-06-05		The Boeing Company	777-200, -200LR, -300, -300ER, and -777F series
2016-06-06		Quest Aircraft Design, LLC	KODIAK 100
2016-06-07	R 2006-22-15	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
2016-06-08		The Boeing Company	787-8 and 787-9
Biweekly 2016-07			
2016-06-10		The Boeing Company	787-8
2016-06-11		Airbus Defense and Space S.A.	CN-235, CN-235-100, CN-235-200, and CN-235-300
2016-06-12		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
2016-06-13		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
2016-07-03		The Boeing Company	747-100, 747-100B, 747-100B SUD, 747-200B, 747-300, 747SR, and 747SP series
2016-07-05		The Boeing Company	747-8 series
2016-07-06		BAE Systems (Operations) Limited	BAe 146-100A, -200A, and -300A; Avro 146-RJ70A, 146-RJ85A, and 146-RJ100A
2016-07-10		The Boeing Company	787-8 and 787-9
Biweekly 2016-08			
2016-06-14		General Electric Company	CF6-80E1
2016-07-02		Honeywell International Inc.	TFE731-4, -4R, -5AR, -5BR, and -5R
2016-07-04		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
2016-07-07		The Boeing Company	757-200, -200PF, -200CB, and -300 series
2016-07-08		The Boeing Company	DC-9-83 (MD-83)
2016-07-09	R 2011-21-06	BAE SYSTEMS (Operations) Limited	4101
2016-07-12		Airbus	A318-111 and -112, A319-111, -112, -113, -114, and -115; A320-211, -212, and -214; A321-111, -112, -211, -212, and -213
2016-07-14		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
2016-07-15		Dassault Aviation	FALCON 7X
2016-07-16	R 2013-26-08	The Boeing Company	737-600, -700, -700C, -800, -900, and -900ER series
2016-07-17	R 97-20-07	Airbus	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
2016-07-18		Airbus Defense and Space S.A.	CN-235-200 and CN-235-300
2016-07-20	R 95-18-08	Airbus	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
2016-07-22		Airbus	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
2016-07-25		The Boeing Company	787-8
2016-07-28		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
2016-07-30		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, -313, -541, and -642
2016-07-31	R 2013-22-11	The Boeing Company	747-400 and -400D series

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2016-08-03		The Boeing Company	777-200, -200LR, -300, and -300ER series
2016-08-04		Airbus	A330-223F and -243F
2016-08-05		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)
2016-08-06		Airbus	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
2016-08-07		Rolls-Royce plc	RB211-22B-02, RB211-22B (MOD 72-8700), RB211-524B-02, RB211-524B-B-02, RB211-524B2-19, RB211-524B2-B-19, RB211-524B3-02, RB211-524B4-02, RB211-524B4-D-02, RB211-524C2-19, RB211-524C2-B-19, RB211-524D4-19, RB211-524D4-B-19, RB211-524D4X-19, RB211-524D4X-B-19, RB211-524D4-39, RB211-524D4-B-39, RB211-524G2-19, RB211-524G3-19, RB211-524G2-T-19, RB211-524G3-T-19, RB211-524H-36, RB211-524H2-19, RB211-524H-T-36, and RB211-524H2-T-19
Biweekly 2016-09			
2016-08-01		Dassault Aviation	FALCON 7X airplanes
2016-08-09		Pratt & Whitney Division	PW4050, PW4052, PW4056, PW4060, PW4060A, PW4060C, PW4062, PW4062A, PW4152, PW4156, PW4156A, PW4158, PW4160, PW4460, PW4462, and PW4650 turbofan engines
2016-08-10		General Electric Company	CF6-80C2A1, CF6-80C2A2, CF6-80C2A3, CF6-80C2A5, CF6-80C2A5F, CF6-80C2A8, CF6-80C2B1, CF6-80C2B1F, CF6-80C2B1F1, CF6-80C2B1F2, CF6-80C2B2, CF6-80C2B2F, CF6-80C2B3F, CF6-80C2B4, CF6-80C2B4F, CF6-80C2B5F, CF6-80C2B6, CF6-80C2B6F, CF6-80C2B6FA, CF6-80C2B7F, CF6-80C2B8F, CF6-80C2D1F, CF6-80C2L1F, CF6-80C2K1F, CF6-80E1A1, CF6-80E1A2, CF6-80E1A3, CF6-80E1A4, and CF6-80E1A4/B turbofan engines
2016-08-11	R 2012-17-13	The Boeing Company	707 airplanes; 720 and 720B series airplanes
2016-08-12		The Boeing Company	787-8 and 787-9 airplanes
2016-08-14	R 2014-03-14	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
Biweekly 2016-10			
2016-07-23		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 airplanes
2016-08-02		Airbus	A320-214, -232, and -233, A321-211 and -231 airplanes
2016-08-13	R 2004-19-11	Airbus	A320-211, -212, -214, -231, -232, and -233
2016-08-15	R 2014-17-51	Bombardier, Inc	CL-600-2B16
2016-09-01		The Boeing Company	777-200 and -300 series
2016-09-03		Dassault Aviation	FALCON 2000, FALCON 2000EX, MYSTERE-FALCON 900 and FALCON 900EX
2016-09-04		Bombardier, Inc	CL-600-2B19 (Regional Jet Series 100 & 440)
2016-09-05		The Boeing Company	717-200 airplanes
2016-09-06		Airbus	A318-111 and -112, A319-111, -112, -113, -114, and -115, A320-211, -212, and -214, A321-111, -112, -211, -212, and -213
2016-09-07		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
2016-09-08		The Boeing Company	747-8 series airplanes
2016-09-10	R 2007-10-10 R1	Airbus	A300 B4-600, B4-600R, and F4-600R series, A300 C4-605R Variant F airplanes (collectively called A300-600 series airplanes)

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2016-09-11		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
2016-09-12		The Boeing Company	787-8 and 787-9 airplanes
2016-09-13		The Boeing Company	737-300, -400, and -500 series
2016-10-02		The Boeing Company	777-200 and -300 series
Biweekly 2016-11			
2016-10-04		The Boeing Company	737-100, -200, -200C, -300, -400, and -500 series
2016-10-05		The Boeing Company	757-200, -200CB, -200PF, and -300
2016-10-06		Bombardier, Inc.	BD-700-1A10, BD-700-1A11
2016-10-07		Bombardier, Inc.	DHC-8-102, -103, -106, -201, -202, -301, -311, and -315
2016-10-08		Airbus	A330-201, -202, -203, -223, and -243, A330-223F and -243F, 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
2016-10-09		The Boeing Company	787-8 and 787-9
2016-10-10	R 2014-20-01	Bombardier, Inc.	CL-600-2B16 (CL-601-3A, CL-601-3R, and CL-604 Variants)
2016-10-11	R 2015-03-06	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, -313, -541, and -642
2016-10-12		Fokker Services B.V.	F.28 Mark 0070 and 0100
2016-10-13		Airbus	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
2016-10-14		Bombardier, Inc.	CL-600-2C10 (Regional Jet Series 700, 701, & 702), CL-600-2D15 (Regional Jet Series 705), CL-600-2D24 (Regional Jet Series 900)
2016-10-16		Dassault Aviation	MYSTERE-FALCON 900, FALCON 900EX, FALCON 2000EX
2016-11-02		Bombardier, Inc.	CL-600-2C10 (Regional Jet Series 700, 701, & 702), CL-600-2D15 (Regional Jet Series 705), CL-600-2D24 (Regional Jet Series 900), CL-600-2E25 (Regional Jet Series 1000)
Biweekly 2016-12			
2016-10-15		Fokker Services B.V.	F.28 Mark 0070 and 0100
2016-11-01		Airbus	A330-201, -202, -203, -223, and -243; A330-223F and -243F; A330-301, -302, -303, -321, -322, -323, -341, -342, and -343; A340-541; and A340-642
2016-11-03		The Boeing Company	777-200, -200LR, -300, -300ER, and -777F series
2016-11-04	R 2011-23-05	The Boeing Company	737-300, -400, and -500 series
2016-11-05	R 99-16-01	Airbus	A300 B4-601, B4-603, B4-620, and B4-622; A300 B4-605R and B4-622R; A300 F4-605R; and A300 C4-605R Variant F
2016-11-06	R 2005-18-18	The Boeing Company	757-200, -200PF, -200CB, and -300 series
2016-11-07		The Boeing Company	777-200 and -300 series
2016-11-08	R 2001-12-18	Airbus Defense and Space S.A.	CN-235; CN-235-100 and -200
2016-11-15		Fokker Services B.V.	F28 Mark 0070 and 0100
2016-11-17		The Boeing Company	787-8
2016-11-18		The Boeing Company	787
2016-11-20		B/E Aerospace	Protective Breathing Equipment (PBE)
2016-11-22		Fokker Services B.V.	F.28 Mark 0070 and 0100
2016-12-03	R 2011-17-10	Fokker Services B.V.	F.28 Mark 1000
Biweekly 2016-13			
2016-11-14		Fokker Services B.V.	F.28 Mark 1000, 2000, 3000, and 4000 airplanes
2016-11-16		The Boeing Company	777-200 and -300 series airplanes
2016-11-19		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, -313, -541, and -642 airplanes

LARGE AIRCRAFT

AD No.	Information	Manufacturer	Applicability
Information Key: E - Emergency; COR - Correction; S – Supersedes, R - Replaces			
2016-12-04		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 airplanes
2016-12-05	R 2014-15-04	Saab AB, Saab Aeronautics	SAAB 2000 airplanes
2016-12-09	R 2016-09-11	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 airplanes
2016-12-10	R 2016-09-07	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 airplanes
2016-12-11	R 2008-05-18 R1	The Boeing Company	787-8 airplanes
2016-12-12		Fokker Services B.V.	F.27 Mark 050, 200, 300, 400, 500, 600, and 700 airplanes
2016-12-14		Embraer S.A.	ERJ 170-100 LR, -100 STD, -100 SE., and -100 SU; ERJ 170-200 LR, -200 SU, and -200 STD; ERJ 190-100 STD, -100 LR, -100 IGW, -200 STD, -200 LR, and -200 IGW airplanes
2016-12-15	R 2016-07-30	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, -313, -541, and -642 airplanes
2016-13-01	R 2016-08-05	Bombardier, Inc.	CL-600-2C10 (Regional Jet Series 700, 701, & 702); CL-600-2D15 (Regional Jet Series 705); CL-600-2D24 (Regional Jet Series 900); CL-600-2E25 (Regional Jet Series 1000) airplanes
2016-13-02	R 2016-09-04	Bombardier, Inc.	CL-600-2B19 (Regional Jet Series 100 & 440) airplanes
2016-13-05		General Electric Company	GE90-76B, GE90-77B, GE90-85B, GE90-90B, and GE90-94B turbofan engines
Biweekly 2016-14			
2016-13-03	COR	The Boeing Company	767-200, -300, -300F, and -400ER series airplanes
2016-13-05		General Electric Company	GE90-76B, GE90-77B, GE90-85B, GE90-90B, and GE90-94B turbofan engines
2016-13-06		Saab AB, Saab Aeronautics	340A (SAAB/SF340A), SAAB 340B airplanes
2016-13-08		Airbus	A300 B2-1A, B2-1C, B2K-3C, B2-203, B4-2C, B4-103, and B4-203, B4-601, B4-603, B4-620, B4-622, B4-605R, B4-622R, F4-605R, F4-622R, and C4-605R Variant F airplanes
2016-13-10	R 2012-12-04	The Boeing Company	737-300, -400, and -500 series
2016-13-11	R 2008-05-06	The Boeing Company	737-100, -200, -300, -400, and -500 series
2016-13-12		Rolls-Royce Deutschland GmbH	BR700-710A1-10, BR700-710A2-20, BR700-710C4-11 engines
2016-13-13		Beechcraft Corporation	BAe.125 series 1000A and 1000B, and Hawker 1000 airplanes
2016-13-14		Bombardier, Inc.	DHC-8-400, -401 and -402 airplanes
2016-13-16		The Boeing Company	737-600, -700, -700C, -800, -900, and 900ER series airplanes
2016-14-02	R 2012-18-12	Airbus	A318-111, -112, -121, and -122, A319-111, -112, -113, -114, -115, -131, -132, and -133, 320-211, -212, -214, -231, -232, and -233 airplanes
2016-14-03		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 airplanes
2016-14-04		The Boeing Company	787-8 series
Biweekly 2016-15			
2016-13-09		Bombardier, Inc	CL-600-2B16 (CL-604 Variant)
2016-13-15		Dassault Aviation	FALCON 7X
2016-14-01		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
2016-14-07		Bombardier, Inc	CL-600-2B19 (Regional Jet Series 100 & 440); CL-600-2C10 (Regional Jet Series 700, 701, & 702); CL-600-2D15

LARGE AIRCRAFT

AD No.	Information	Manufacturer	Applicability
Information Key: E - Emergency; COR - Correction; S – Supersedes, R - Replaces			
2016-14-08	R 2015-10-03	Airbus	(Regional Jet Series 705); CL-600-2D24 (Regional Jet Series 900); CL-600-2E25 (Regional Jet Series 1000) 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 -642
2016-14-09	R 2014-14-06	Airbus	A318-111 and -112; A319-111, -112, -113, -114, and -115; A320-211, -212, and -214; A321-111, -112, -211, -212, and -213
2016-15-01		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
Biweekly 2016-16			
2016-14-01	COR	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 airplanes
2016-14-10	S 2013-02-02	CFM International, S.A.	CFM56-3, CFM56-3B, and CFM56-3C turbofan engines
2016-15-03		Bombardier Inc.	BD-700-1A10 and BD-700-1A11
2016-15-04		The Boeing Company	757-200 and -200CB series
2016-15-05		Dassault Aviation	FALCON 900EX and FALCON 2000EX
2016-15-06		Bombardier, Inc.	BD-700-1A10 and BD-700-1A11
2016-15-07		Bombardier, Inc.	CL-600-2C10 (Regional Jet Series 700, 701, & 702), CL-600-2D15 (Regional Jet Series 705), CL-600-2D24 (Regional Jet Series 900), CL-600-2E25 (Regional Jet Series 1000)
2016-16-01		Airbus	A330-223F and -243F, A330-201, -202, -203, -223, and -243, A330-301, -302, -303, -321, -322, -323, -341, -342, and -343
2016-16-04		Fokker Services B.V.	F.28 Mark 1000, 2000, 3000, and 4000
2016-16-05		Fokker Services B.V.	F.28 Mark 1000, 2000, 3000, and 4000
2016-16-06		Airbus	A300 B4-603, A300 B4-605R, A300 B4-622R, A310-304, A310-324, and A310-325
Biweekly 2016-17			
2016-16-02		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
2016-16-07	R 2007-21-14 R1	Airbus	A310-203, -204, -221, -222, -304, -322, -324, and -325
2016-16-08		Airbus	A330-201, -202, -203, -223, -243, -223F, -243F, -301, -302, -303, -321, -322, -323, -341, -342, and -343; A340-211, -212, -213, -311, -312, and -313
2016-16-09	R 2011-10-01	Dassault Aviation	FALCON 7X
2016-16-10		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
2016-16-11	R 2010-10-13	BAE Systems (Operations) Limited	BAe 146-100A, -200A, and -300A series; Avro 146-RJ70A, 146-RJ85A, and 146-RJ100A
2016-16-13	R 2016-13-10	The Boeing Company	737-300, -400, and -500 series
2016-16-14	R 2013-20-11	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
2016-16-15		Bombardier, Inc.	DHC-8-400, -401, and -402
2016-17-02		Dassault Aviation	FALCON 900EX; FALCON 2000EX
2016-17-03`	R 2003-25-07 R 2005-13-39	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

LARGE AIRCRAFT

AD No.	Information	Manufacturer	Applicability
Information Key: E - Emergency; COR - Correction; S – Supersedes, R - Replaces			
Biweekly 2016-18			
2016-17-01	S 2006-18-14	Rolls-Royce Deutschland Ltd & Co	Tay 650-15 and Tay 651-54
2016-17-06		The Boeing Company	767-200 and -300 series
2016-17-09		Bombardier, Inc.	CL-600-2D15 (Regional Jet Series 705) and CL-600-2D24 (Regional Jet Series 900)
2016-17-10		The Boeing Company	777-200, 777-200LR, 777-300, 777-300ER, and 777F series
2016-17-11		The Boeing Company	787-8
2016-17-12		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
2016-17-13		Bombardier, Inc.	CL-600-2C10 (Regional Jet Series 700, 701, & 702)
2016-17-15		Bombardier, Inc	CL-600-2B19 (Regional Jet Series 100 & 440)
2016-17-16		Bombardier, Inc	BD-700-1A10 and BD-700-1A11
2016-17-17		Airbus Defense and Space S.A.	CN-235, CN 235-200, and CN 235-300
2016-18-01		The Boeing Company	737-600, -700, -700C, -800, -900, and -900ER series
2016-18-02		The Boeing Company	777-200 and -300ER series
2016-18-03		Bombardier, Inc	CL-600-2B19 (Regional Jet Series 100 & 440)
2016-18-04	R 2013-24-12	The Boeing Company	747-8 and 747-8F
2016-18-10		International Aero Engines AG (IAE)	V2522-A5, V2524-A5, V2525-D5, V2527-A5, V2527E-A5, V2527M-A5, V2528-D5, V2530-A5, and V2533-A5
2016-16-01	COR	Airbus	A330-223F and -243F; A330-201, -202, -203, -223, and -243; A330-301, -302, -303, -321, -322, -323, -341, -342, and -343
Biweekly 2016-19			
2016-17-14		Saab AB, Saab Aeronautics	SAAB 2000 airplanes
2016-18-06		The Boeing Company	767-200, -300, and -400ER series
2016-18-08	R 90-11-05	Airbus	A300 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
2016-18-09		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
2016-18-11		Gulfstream Aerospace Corporation	G-1159, G-1159A, G-1159B, G-IV, GV, GIV-X, GV-SP
2016-18-12		Airbus	A300 B4-203 and A300 B4-2C
2016-18-13		Fokker Services B.V.	F28 Mark 0070 and 0100
2016-18-14		ATR–GIE Avions de Transport Régional	ATR42-500, ATR72-212A
2016-18-15		The Boeing Company	737-600, -700, -700C, -800, and -900 series
2016-19-06		Airbus	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
2016-19-07	R 2008-19-08	Dassault Aviation	Falcon 10
Biweekly 2016-20			
2016-18-07	R 2009-15-17	Airbus	A330-223F, -243F, -201, -202, -203, -223, -243, -301, -302, -303, -321, -322, -323, -341, -342, and -343; A340-211, -212, -213, -311, -312, and -313
2016-18-16		The Boeing Company	737-100, -200, -200C, -300, -400, and -500 series
2016-19-01		Fokker Services B.V.	F28 Mark 0070 and F28 Mark 0100
2016-19-02	R 2005-15-07	Airbus	A320-211, -212, and -231
2016-19-03		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 series
2016-19-04		The Boeing Company	787-8
2016-19-05		International Aero Engines AG	V2500-A1

LARGE AIRCRAFT

AD No.	Information	Manufacturer	Applicability
Information Key: E - Emergency; COR - Correction; S – Supersedes, R - Replaces			
2016-19-09		General Electric Company	GE90-76B, GE90-77B, GE90-85B, GE90-90B, and GE90-94B
2016-19-10	R 2000-10-18	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; A300 C4-605R Variant F; A310-203, -204, -221, -222, -304, -322, -324, and -325
2016-19-11		Bombardier, Inc.	DHC-8-400, -401, and -402
2016-20-05		Saab AB, Saab Aeronautics	SAAB 2000
2016-20-06		Gulfstream Aerospace Corporation	G-1159, G-1159A, G-1159B, and G-IV
Biweekly 2016-21			
2016-19-12		The Boeing Company	747-400, 747-400D, and 747-400F series
2016-19-17	R 2010-23-19	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)
2016-20-14		The Boeing Company	737-600, -700, -700C, -800, -900 and -900ER series
2016-20-15		General Electric Company	GENx-1B64/P2, -1B67/P2, -1B70/P2, -1B70C/P2, -1B70/75/P2, and -1B74/75/P2 turbofan engines
Biweekly 2016-22			
2016-19-13		Dassault Aviation	MYSTERE-FALCON 50, MYSTERE-FALCON 900, FALCON 900EX, FALCON 2000EX
2016-19-14		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
2016-20-02		The Boeing Company	737-300, -400, and -500 series
2016-20-03		The Boeing Company	767-200, -300, and -400ER series
2016-20-08	R 95-21-09	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, and B4-622R; A300 F4-605R; A300 F4-622R; A300 C4-605R Variant F
2016-20-10		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
2016-20-12	R 2012-20-07	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
2016-20-13		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
2016-22-03		Bombardier, Inc.	DHC-8-400, -401, and -402
Biweekly 2016-23			
2016-22-05		Pratt & Whitney Division	PW4164, PW4168, PW4168A, PW4164-1D, PW4168-1D, PW4168A-1D, and PW4170
2016-22-09	R 2006-20-11	The Boeing Company	757-200, -200CB, and -200PF series
2016-22-10		Turbomeca S.A.	Arriel 1, 1A, 1A1, 1A2, 1B, 1B2, 1C, 1C1, 1C2, 1D, 1D1, 1E, 1E2, 1K1, 1S, and 1S1 turboshaft engines
2016-22-11	R 2013-02-06	Engine Alliance	GP7270 and GP7277 turbofan engines
2016-22-14		The Boeing Company	737-600, 737-700, 737-700C, 737-800, 737-900, and 737-900ER series
2016-22-15	R 2012-24-06	Saab AB, Saab Aeronautics	340A (SAAB/SF340A) and SAAB 340B
2016-22-18		The Boeing Company	MD-90-30 airplanes
2016-23-01	R 2010-04-03	Airbus	A310-203, -204, -221, -222, -304, -322, -324, and -325
Biweekly 2016-24			
2016-21-05		The Boeing Company	777-200, -200LR, -300, and -300ER series
2016-21-06	R 2015-02-23	Bombardier, Inc	CL-600-1A11 (CL-600), CL-600-2A12 (CL-601), CL-600-2B16 (CL-601-3A and CL-601-3R Variants)

LARGE AIRCRAFT

AD No.	Information	Manufacturer	Applicability
Information Key: E - Emergency; COR - Correction; S – Supersedes, R - Replaces			
2016-21-08	R 2013-25-08	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
2016-22-04		Gulfstream Aerospace Corporation	GV, GV-SP
2016-22-13		The Boeing Company	737-600, -700, -700C, -800, -900, and -900ER series
2016-22-16		Bombardier, Inc	CL-600-2C10 (Regional Jet Series 700, 701, and 702), CL-600-2D15 (Regional Jet Series 705) and CL-600-2D24 (Regional Jet Series 900), CL-600-2E25 (Regional Jet Series 1000)
2016-22-17		The Boeing Company	787-8
2016-23-02	R 2006-19-12	The Boeing Company	777-200, -200LR, -300, -300ER, and 777F series
2016-23-07	R 2013-02-08	Bombardier, Inc	CL-600-2B19 (Regional Jet Series 100 & 440)
2016-23-08		The Boeing Company	737-400 series
2016-24-01		Bombardier, Inc	DHC-8-102, -103, and -106, DHC-8-201 and -202, DHC-8-301, -311, and -315
2016-24-02		The Boeing Company	747-8 and 747-8F series



2016-21-05 The Boeing Company: Amendment 39-18686; Docket No. FAA-2015-7527; Directorate Identifier 2015-NM-094-AD.

(a) Effective Date

This AD is effective December 19, 2016.

(b) Affected ADs

None.

(c) Applicability

This AD applies to The Boeing Company Model 777-200, -200LR, -300, and -300ER series airplanes, certificated in any category, as identified in Boeing Special Attention Service Bulletin 777-28-0061, Revision 2, dated May 4, 2015.

(d) Subject

Air Transport Association (ATA) of America Code 2822, Fuel Boost Pump.

(e) Unsafe Condition

This AD was prompted by a report indicating that the manufacturer discovered locations where the control components and wiring of the left and right engine fuel spar valves do not have adequate physical separation to meet the redundant system separation requirements. We are issuing this AD to prevent loss of control of both the left and right engine fuel spar valves during a single event, such as local wire bundle damage or a wire bundle fire, which could cause both engines to shut down or result in the inability to control an engine fire.

(f) Compliance

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

(g) Modification

Within 60 months after the effective date of this AD, modify the wiring and install new relay brackets in new locations to allow installation of new relays for the left and right engine fuel spar valves, in accordance with the Accomplishment Instructions of Boeing Special Attention Service Bulletin 777-28-0061, Revision 2, dated May 4, 2015, except as required by paragraph (h) of this AD.

specified in paragraphs (i)(2)(i) and (i)(2)(ii) of this AD; and, as applicable, measure the electrical resistance of the bond from the adapter plate to the airplane structure and, before further flight, do all applicable corrective actions. All actions specified in this paragraph for the left and right engine fuel spar valves must be done in accordance with the Accomplishment Instructions of Boeing Service Bulletin 777-28A0034, Revision 3, dated September 25, 2015.

(i) The replacement MOV actuator must be a Boeing part that is approved after the issuance of Boeing Service Bulletin 777-28A0034, Revision 3, dated September 25, 2015, by the Manager, Seattle Aircraft Certification Office (ACO), FAA; or the Boeing Commercial Airplanes Organization Designation Authorization (ODA) that has been authorized by the Manager, Seattle ACO, to approve the part.

(ii) The replacement MOV actuator must be fully interchangeable with the part specified in Boeing Service Bulletin 777-28A0034, Revision 3, dated September 25, 2015.

(j) Credit for Previous Actions

(1) This paragraph provides credit for the requirements of paragraph (g) of this AD, if those actions were performed before the effective date of this AD using Boeing Special Attention Service Bulletin 777-28-0061, dated October 25, 2010; or Boeing Special Attention Service Bulletin 777-28-0061, Revision 1, dated January 26, 2012; as applicable. These documents are not incorporated by reference in this AD.

(2) This paragraph provides credit for the requirements of paragraph (i) of this AD, if those actions were performed before April 25, 2013 (the effective date of AD 2013-05-03, Amendment 39-17375 (78 FR 17290, March 21, 2013), "AD 2013-05-03"), using Boeing Alert Service Bulletin 777-28A0034, dated August 2, 2007; or Boeing Alert Service Bulletin 777-28A0034, Revision 1, dated May 20, 2010; except that the replacement of MOV actuators of the left and right engine fuel spar valves must also include cap sealing the bonding jumper, as described in Boeing Service Bulletin 777-28A0034, Revision 2, dated September 20, 2010; and provided that the replacement is an MOV actuator identified in paragraph (j)(2)(i) or (j)(2)(ii) of this AD. Boeing Alert Service Bulletin 777-28A0034, dated August 2, 2007, and Boeing Alert Service Bulletin 777-28A0034, Revision 1, dated May 20, 2010, are not incorporated by reference in this AD. Boeing Service Bulletin 777-28A0034, Revision 2, dated September 20, 2010, is incorporated by reference in AD 2013-05-03.

(i) An MOV actuator that has P/N MA30A1001, MA30A1017, or MA20A2027.

(ii) An MOV actuator that has a part number other than P/N MA20A1001-1 and meets the criteria specified in paragraphs (i)(2)(i) and (i)(2)(ii) of this AD.

(3) This paragraph provides credit for the requirements of paragraph (i) of this AD, if those actions were performed before the effective date of this AD using Boeing Service Bulletin 777-28A0034, Revision 2, dated September 20, 2010, which was incorporated by reference in AD 2013-05-03.

(k) Alternative Methods of Compliance (AMOCs)

(1) The Manager, Seattle ACO, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the manager of the ACO, send it to the attention of the person identified in paragraph (l)(1) of this AD. Information may be emailed to: 9-ANM-Seattle-ACO-AMOC-Requests@faa.gov.

(2) Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office.

(3) An AMOC that provides an acceptable level of safety may be used for any repair, modification, or alteration required by this AD if it is approved by the Boeing Commercial Airplanes

ODA that has been authorized by the Manager, Seattle ACO, 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.

(l) Related Information

(1) For more information about this AD, contact Brendan Shanley, Aerospace Engineer, Systems and Equipment Branch, ANM-130S, FAA, Seattle Aircraft Certification Office, 1601 Lind Avenue SW., Renton, WA 98057-3356; telephone: 425-917-6492; fax: 425-917-6590; email: brendan.shanley@faa.gov.

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

(m) Material Incorporated by Reference

(1) The Director of the Federal Register approved the incorporation by reference (IBR) of the service information listed in this paragraph under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) You must use this service information as applicable to do the actions required by this AD, unless the AD specifies otherwise.

(i) Boeing Special Attention Service Bulletin 777-28-0061, Revision 2, dated May 4, 2015.

(ii) Boeing Service Bulletin 777-28A0034, Revision 3, dated September 25, 2015.

(3) For Boeing service information identified in this AD, contact Boeing Commercial Airplanes, Attention: Data & Services Management, P.O. Box 3707, MC 2H-65, Seattle, WA 98124-2207; telephone 206-544-5000, extension 1; fax 206-766-5680; Internet <https://www.myboeingfleet.com>.

(4) You may view this service information at FAA, Transport Airplane Directorate, 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 October 7, 2016.

Michael Kaszycki,
Acting Manager, Transport Airplane Directorate,
Aircraft Certification Service.



2016-21-06 Bombardier, Inc.: Amendment 39-18687; Docket No. FAA-2016-5593; Directorate Identifier 2015-NM-184-AD.

(a) Effective Date

This AD is effective December 19, 2016.

(b) Affected ADs

This AD replaces AD 2015-02-23, Amendment 39-18092 (80 FR 5670, February 3, 2015) ("AD 2015-02-23"). This AD affects AD 2014-03-17, Amendment 39-17754 (79 FR 9389, February 19, 2014) ("AD 2014-03-17").

(c) Applicability

This AD applies to the Bombardier, Inc. airplanes identified in paragraphs (c)(1), (c)(2), and (c)(3) of this AD, certificated in any category.

(1) Bombardier, Inc. Model CL-600-1A11 (CL-600) airplanes, having serial numbers (S/Ns) 1004 through 1085 inclusive.

(2) Bombardier, Inc. Model CL-600-2A12 (CL-601) airplanes, having S/Ns 3001 through 3066 inclusive.

(3) Bombardier, Inc. Model CL-600-2B16 (CL-601-3A and CL-601-3R Variants) airplanes, having S/Ns 5001 through 5194 inclusive.

(d) Subject

Air Transport Association (ATA) of America Code 57, Wings.

(e) Reason

This AD was prompted by reports of incorrectly oriented fasteners. We are issuing this AD to prevent incorrectly oriented or fractured fasteners, which could result in detachment of the flap hinge-box and the flap surface, and consequent reduced controllability of the airplane.

(f) Compliance

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

(g) Retained Inspection on Airplanes Not Previously Inspected, With No Changes

This paragraph restates the requirements of paragraph (g) of AD 2015-02-23, with no changes. For airplanes that have not been inspected as required by paragraph (g) of AD 2014-03-17, as of February 18, 2015 (the effective date of AD 2015-02-23): Within 10 flight cycles after February 18, 2015, or 100 flight cycles after March 6, 2014 (the effective date of AD 2014-03-17), whichever occurs first, do a detailed visual inspection for incorrect orientation and any fractured or missing

fastener heads of each inboard flap fastener of the hinge-box forward fitting at wing station (WS) 76.50 and WS 127.25, on both wings, in accordance with the Accomplishment Instructions of the applicable service information specified in paragraphs (g)(1) and (g)(2) of this AD. Accomplishing the inspection required by this paragraph terminates the requirements of paragraph (g) of AD 2014-03-17 for the inspected airplane only.

(1) For Model CL-600-1A11 (CL-600) airplanes having S/Ns 1004 through 1085 inclusive: Bombardier Alert Service Bulletin A600-0763, Revision 02, dated December 9, 2014, including Appendixes 1 and 2, dated September 26, 2013.

(2) For Model CL-600-2A12 (CL-601) airplanes having S/Ns 3001 through 3066 inclusive, and Model CL-600-2B16 (CL-601-3A and CL-601-3R Variants) airplanes having S/Ns 5001 through 5194 inclusive: Bombardier Alert Service Bulletin A601-0627, Revision 02, dated December 9, 2014, including Appendixes 1 and 2, dated September 26, 2013.

(h) Retained Corrective Actions for Paragraph (g) of This AD, With Revised Paragraph (h)(2) of This AD

(1) This paragraph restates the requirements of paragraph (h)(1) of AD 2015-02-23, with no changes. If, during any inspection required by paragraph (g) of this AD, all fasteners are found correctly oriented and not fractured, and no fastener heads are missing (fasteners found intact): No further action is required by this AD.

(2) This paragraph restates the requirements of paragraph (h)(2) of AD 2015-02-23, with revised references to replacement paragraphs. If, during any inspection required by paragraph (g) of this AD, any fastener is found incorrectly oriented but no fasteners are fractured or are missing a fastener head (fasteners found intact), repeat the inspection required by paragraph (g) of this AD thereafter at intervals not to exceed 10 flight cycles until the replacements specified in paragraphs (h)(3), (k), or (n) of this AD are accomplished.

(3) This paragraph restates the requirements of paragraph (h)(3) of AD 2015-02-23, with no changes. If, during any inspection required by paragraph (g) of this AD, any fastener is found fractured or has a missing fastener head: Before further flight, remove and replace all forward and aft fasteners (regardless of orientation or condition) at WS 76.50 and WS 127.25, on both wings, in accordance with the Accomplishment Instructions of the applicable service information specified in paragraphs (h)(3)(i) and (h)(3)(ii) of this AD, except as required by paragraph (m) of this AD. After accomplishing the replacements required by this paragraph, no further action is required by this AD.

(i) For Model CL-600-1A11 (CL-600) airplanes having S/Ns 1004 through 1085 inclusive: Bombardier Alert Service Bulletin A600-0763, Revision 02, dated December 9, 2014, including Appendixes 1 and 2, dated September 26, 2013.

(ii) For Model CL-600-2A12 (CL-601) airplanes having S/Ns 3001 through 3066 inclusive, and Model CL-600-2B16 (CL-601-3A and CL-601-3R Variants) airplanes having S/Ns 5001 through 5194 inclusive: Bombardier Alert Service Bulletin A601-0627, Revision 02, dated December 9, 2014, including Appendixes 1 and 2, dated September 26, 2013.

(i) Retained Inspection for Airplanes Previously Inspected and Found To Have Incorrectly Oriented Fastener(s), With No Changes

This paragraph restates the requirements of paragraph (i) of AD 2015-02-23, with no changes. For airplanes on which an inspection required by paragraph (g) or (j) of AD 2014-03-17, has been done as of the effective date of this AD, and on which any incorrectly oriented fastener was found but no fasteners were fractured (fasteners found intact): Except as provided by paragraph (l) of this AD, within 10 flight cycles after February 18, 2015 (the effective date of AD 2015-02-23), or within 100 flight cycles after accomplishing the most recent inspection required by AD 2014-03-17, whichever occurs first, do a detailed visual inspection for any fractured or missing fastener heads of each inboard flap fastener of the hinge-box forward fitting at WS 76.50 and WS 127.25, on both wings. Do

the inspection in accordance with the Accomplishment Instructions of the applicable service information specified in paragraphs (i)(1) and (i)(2) of this AD. Accomplishing the inspection required by this paragraph terminates the requirements of paragraphs (g) and (j) of AD 2014-03-17 for the inspected airplane only.

(1) For Model CL-600-1A11 (CL-600) airplanes having S/Ns 1004 through 1085 inclusive: Bombardier Alert Service Bulletin A600-0763, Revision 02, dated December 9, 2014, including Appendixes 1 and 2, dated September 26, 2013.

(2) For Model CL-600-2A12 (CL-601) airplanes having S/Ns 3001 through 3066 inclusive, and Model CL-600-2B16 (CL-601-3A and CL-601-3R Variants) airplanes having S/Ns 5001 through 5194 inclusive: Bombardier Alert Service Bulletin A601-0627, Revision 02, dated December 9, 2014, including Appendixes 1 and 2, dated September 26, 2013.

(j) Retained Corrective Actions for Paragraph (i) of This AD, With Revised Reference to Additional, New Requirements

(1) This paragraph restates the requirements of paragraph (j)(1) of AD 2015-02-23, with revised reference to additional, new requirements. If, during any inspection required by paragraph (i) of this AD, no fasteners are found fractured or have missing fastener heads (fasteners are intact), repeat the inspection required by paragraph (i) of this AD thereafter at intervals not to exceed 10 flight cycles until the replacement specified in paragraph (j)(2), (k), or (n) of this AD is accomplished.

(2) This paragraph restates the requirements of paragraph (j)(2) of AD 2015-02-23, with no changes. If, during any inspection required by paragraph (i) of this AD, any fastener is found fractured or has a missing fastener head: Before further flight, remove and replace all forward and aft fasteners (regardless of orientation or condition) at WS 76.50 and WS 127.25, on both wings, in accordance with the Accomplishment Instructions of the applicable service information specified in paragraphs (j)(2)(i) and (j)(2)(ii) of this AD, except as required by paragraph (m) of this AD. After accomplishing the replacements required by this paragraph, no further action is required by this AD.

(i) For Model CL-600-1A11 (CL-600) airplanes having S/Ns 1004 through 1085 inclusive: Bombardier Alert Service Bulletin A600-0763, Revision 02, dated December 9, 2014, including Appendixes 1 and 2, dated September 26, 2013.

(ii) For Model CL-600-2A12 (CL-601) airplanes having S/Ns 3001 through 3066 inclusive, and Model CL-600-2B16 (CL-601-3A and CL-601-3R Variants) airplanes having S/Ns 5001 through 5194 inclusive: Bombardier Alert Service Bulletin A601-0627, Revision 02, dated December 9, 2014, including Appendixes 1 and 2, dated September 26, 2013.

(k) Retained Optional Terminating Action for Incorrectly Oriented Fasteners, With No Changes

This paragraph restates the provisions of paragraph (k) of AD 2015-02-23, with no changes. Replacement of all forward and aft fasteners (regardless of orientation or condition) at WS 76.50 and WS 127.25, on both wings, terminates the requirements of this AD. The replacement must be done in accordance with the Accomplishment Instructions of the applicable service information specified in paragraphs (k)(1) and (k)(2) of this AD, except as provided by paragraph (m) of this AD. Doing the replacements specified in this paragraph terminates the requirements of paragraphs (g) and (j) of AD 2014-03-17, only for the airplane on which the replacement was done.

(1) For Model CL-600-1A11 (CL-600) airplanes having S/Ns 1004 through 1085 inclusive: Bombardier Alert Service Bulletin A600-0763, Revision 02, dated December 9, 2014, including Appendixes 1 and 2, dated September 26, 2013.

(2) For Model CL-600-2A12 (CL-601) airplanes having S/Ns 3001 through 3066 inclusive, and Model CL-600-2B16 (CL-601-3A and CL-601-3R Variants) airplanes having S/Ns 5001 through 5194 inclusive: Bombardier Alert Service Bulletin A601-0627, Revision 02, dated December 9, 2014, including Appendixes 1 and 2, dated September 26, 2013.

(l) Retained Exception for Previously Replaced Fasteners, With No Changes

This paragraph restates the provisions of paragraph (l) of AD 2015-02-23, with no changes. Replacement of all fractured and incorrectly oriented forward and aft fasteners, as specified in paragraph (i) or (k) of AD 2014-03-17, if done before the effective date of this AD, is considered acceptable for compliance with the requirements of this AD.

(m) Retained Exception to the Service Information, With No Changes

This paragraph restates the requirements of paragraph (m) of AD 2015-02-23, with no changes. Where Bombardier Alert Service Bulletin A600-0763, Revision 02, dated December 9, 2014, including Appendixes 1 and 2, dated September 26, 2013; and Bombardier Alert Service Bulletin A601-0627, Revision 02, dated December 9, 2014, including Appendixes 1 and 2, dated September 26, 2013; specify to contact Bombardier for repair instructions, before further flight, repair using a method approved by the Manager, New York Aircraft Certification Office (ACO), FAA; or Transport Canada Civil Aviation (TCCA); or Bombardier's TCCA Design Approval Organization (DAO).

(n) New Requirement of This AD: Terminating Action

For airplanes on which any incorrectly oriented fastener, and no fractured or missing fastener, was detected during any inspection required by paragraph (g), (h)(2), (i), and (j)(1) of this AD: Within 24 months after the effective date of this AD, replace all forward and aft fasteners, regardless of condition or orientation, at WS 76.50 and WS 127.25, on affected wings, in accordance with the Accomplishment Instructions of the applicable service information specified in paragraphs (k)(1) and (k)(2) of this AD, except as provided by paragraph (m) of this AD. Doing the replacements specified in this paragraph terminates the requirements of this AD. Doing the replacements specified in this paragraph terminates the requirements of paragraphs (g) and (j) of AD 2014-03-17, only for the airplane on which the replacement was done.

(o) Credit for Previous Actions

This paragraph restates the provisions of paragraph (n) of AD 2015-02-23, with new credit for paragraph (n) of this AD. This paragraph provides credit for actions required by paragraphs (g), (h), (i), and (n) of this AD, if those actions were performed before the effective date of this AD using the applicable service information identified in paragraphs (o)(1) through (o)(4) of this AD.

(1) Bombardier Alert Service Bulletin A600-0763, including Appendixes 1 and 2, dated September 26, 2013, which was previously incorporated by reference on March 6, 2014 (79 FR 9389, February 19, 2014).

(2) Bombardier Alert Service Bulletin A600-0763, Revision 01, dated February 26, 2014, including Appendixes 1 and 2, dated September 26, 2013, which is not incorporated by reference in this AD.

(3) Bombardier Alert Service Bulletin A601-0627, including Appendixes 1 and 2, dated September 26, 2013, which was previously incorporated by reference on March 6, 2014 (79 FR 9389, February 19, 2014).

(4) Bombardier Alert Service Bulletin A601-0627, Revision 01, dated February 26, 2014, including Appendixes 1 and 2, dated September 26, 2013, which is not incorporated by reference in this AD.

(p) Other FAA AD Provisions

The following provisions also apply to this AD:

(1) Alternative Methods of Compliance (AMOCs): The Manager, New York ACO, ANE-170, 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 ACO, send it to ATTN: Program Manager, Continuing Operational Safety, FAA, New York ACO, 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, ANE-170, FAA; or TCCA; or Bombardier, Inc.'s TCCA DAO. If approved by the DAO, the approval must include the DAO-authorized signature.

(q) Related Information

(1) Refer to Mandatory Continuing Airworthiness Information (MCAI) Canadian Emergency AD CF-2013-39R2, dated December 12, 2014, 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-2016-5593.

(2) Service information identified in this AD that is not incorporated by reference is available at the addresses specified in paragraphs (r)(4) and (r)(5) of this AD.

(r) 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.

(3) The following service information was approved for IBR on February 18, 2015 (80 FR 5670, February 3, 2015).

(i) Bombardier Alert Service Bulletin A600-0763, Revision 02, dated December 9, 2014, including Appendixes 1 and 2, dated September 26, 2013.

(ii) Bombardier Alert Service Bulletin A601-0627, Revision 02, dated December 9, 2014, including Appendixes 1 and 2, dated September 26, 2013.

(4) 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; Internet: <http://www.bombardier.com>.

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

(6) 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 October 7, 2016.

Michael Kaszycki,
Acting Manager, Transport Airplane Directorate,
Aircraft Certification Service.



2016-21-08 Airbus: Amendment 39-18689; Docket No. FAA-2016-3701; Directorate Identifier 2015-NM-015-AD.

(a) Effective Date

This AD is effective December 27, 2016.

(b) Affected ADs

This AD replaces AD 2013-25-08, Amendment 39-17704 (78 FR 78694, December 27, 2013) ("AD 2013-25-08").

(c) Applicability

This AD applies to Airbus airplanes, certificated in any category, as identified in paragraphs (c)(1) and (c)(2) of this AD.

(1) Model A330-201, -202, -203, -223, -223F, -243, -243F, -301, -302, -303, -321, -322, -323, -341, -342, and -343 airplanes, all manufacturer serial numbers except those on which Airbus modification 203972 has been embodied in production.

(2) Model A340-211, -212, -213, -311, -312, and -313 airplanes, all manufacturer serial numbers.

(d) Subject

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

(e) Reason

This AD was prompted by multiple reports of hydraulic line check valves loosening. We are issuing this AD to detect and correct hydraulic check valve loosening; loosened valves could result in hydraulic leaks, possibly leading to the loss of all three hydraulic systems and consequent loss of control of the airplane.

(f) Compliance

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

(g) Retained Inspections, With No Changes

This paragraph restates the requirements of paragraph (g) of AD 2013-25-08, with no changes. Except for Model A330-223F and A330-243F airplanes: Do the actions required by paragraphs (g)(1) and (g)(2) of this AD.

(1) For airplanes that do not have Airbus Modification 54491 embodied in production, or Airbus Service Bulletin A330-29-3101 or Airbus Service Bulletin A340-29-4078 embodied in service: Within 100 flight cycles or 28 days after December 14, 2009 (the effective date of AD 2009-24-09, Amendment 39-16068 (74 FR 62208, November 27, 2009) ("AD 2009-24-09")), whichever occurs

first, inspect the check valves on the blue, green, and yellow hydraulic systems to identify their part numbers (P/Ns), in accordance with the instructions of Airbus All Operators Telex (AOT) A330-29A3111, Revision 1, dated October 8, 2009 (for Model A330-200 and -300 series airplanes); or Airbus AOT A340-29A4086, Revision 1, dated October 8, 2009 (for Model A340-200 and -300 series airplanes). Accomplishment of the inspection required by paragraph (h) of this AD terminates the requirements of this paragraph.

(i) If check valves having P/N CAR401 are installed on all three hydraulic systems, before further flight, do the actions specified in paragraph (g)(2)(i) of this AD. After accomplishing the actions required by paragraph (g)(2)(i) of this AD, do the actions specified in paragraphs (g)(2)(ii) and (g)(2)(iii) of this AD at the applicable compliance times specified in those paragraphs. Accomplishment of the inspection required by paragraph (i) of this AD terminates the requirements of this paragraph.

(ii) If check valves having P/N CAR401 are not installed on all three hydraulic systems, no further action is required by this paragraph until any check valve having P/N CAR400 is replaced with a check valve having P/N CAR401. If any check valve having P/N CAR400 is replaced by a check valve having P/N CAR401, before further flight, do the inspection specified in paragraph (g)(1) of this AD to determine if all three hydraulic systems are equipped with check valves having P/N CAR401. Accomplishment of the inspection required by paragraph (h) of this AD terminates the requirements of this paragraph.

(2) For airplanes on which Airbus Modification 54491 was embodied in production, or Airbus Service Bulletin A330-29-3101; or Airbus Service Bulletin A340-29-4078 was embodied in service, do the actions specified in paragraphs (g)(2)(i), (g)(2)(ii), and (g)(2)(iii) of this AD.

(i) Except as required by paragraph (g)(1)(i) of this AD, at the applicable times specified in paragraphs (g)(2)(i)(A) and (g)(2)(i)(B) of this AD, as applicable: Do the inspection program (detailed inspection of the lock wire for presence and integrity, a detailed inspection for traces of seepage or black deposits, and an inspection for proper torque) on yellow and blue high pressure manifolds, install new lock wires, and do all applicable corrective actions, in accordance with the instructions of paragraph 4.1.1 of Airbus AOT A330-29A3111, Revision 1, dated October 8, 2009 (for Model A330-200 and -300 series airplanes); or Airbus AOT A340-29A4086, Revision 1, dated October 8, 2009 (for Airbus Model A340-200 and -300 series airplanes). Do all applicable corrective actions before further flight. Accomplishment of the inspection required by paragraph (h)(1) of this AD terminates the requirements of this paragraph.

(A) For airplanes on which Airbus Modification 54491 has been embodied in production: At the later of the times specified in paragraphs (g)(2)(i)(A)(1) and (g)(2)(i)(A)(2) of this AD.

(1) Before the accumulation of 1,000 total flight cycles since first flight but no earlier than the accumulation of 700 total flight cycles since first flight.

(2) Within 100 flight cycles or 28 days after December 14, 2009 (the effective date of AD 2009-24-09), whichever occurs first.

(B) For airplanes on which Airbus Service Bulletin A330-29-3101 or Airbus Service Bulletin A340-29-4078 was embodied in service: At the later of the times specified in paragraphs (g)(2)(i)(B)(1) and (g)(2)(i)(B)(2) of this AD.

(1) Within 1,000 flight cycles since the embodiment of Airbus Service Bulletin A330-29-3101 or Airbus Service Bulletin A340-29-4078 but no earlier than 700 flight cycles after the embodiment of Airbus Service Bulletin A330-29-3101 or Airbus Service Bulletin A340-29-4078.

(2) Within 100 flight cycles or 28 days after December 14, 2009 (the effective date of AD 2009-24-09), whichever occurs first.

(ii) Within 900 flight hours after accomplishment of paragraph (g)(2)(i) of this AD, do the inspection program (detailed inspection of the lock wire for presence and integrity, a detailed inspection for traces of seepage or black deposits, and an inspection for proper torque) and install a new lock wire on the green high pressure manifold; and do an inspection (detailed inspection for traces of seepage or black deposits, and detailed inspection to determine alignment of the check valve and manifold) on the yellow and blue high pressure manifolds, and do all applicable corrective

actions; in accordance with the instructions of paragraph 4.1.2 of Airbus AOT A330-29A3111, Revision 1, dated October 8, 2009 (for Model A330-200 and -300 series airplanes); or Airbus AOT A340-29A4086, Revision 1, dated October 8, 2009 (for Model A340-200 and -300 series airplanes). Do all applicable corrective actions before further flight. Accomplishment of the inspection program required by paragraph (i) of this AD terminates the requirements of this paragraph.

(iii) Within 900 flight hours after accomplishment of paragraph (g)(2)(ii) of this AD, and thereafter at intervals not to exceed 900 flight hours, do the inspection program (detailed inspection for traces of seepage or black deposits, and detailed inspection to determine alignment of the check valve and manifold) on the green, yellow, and blue high pressure manifolds, and do all applicable corrective actions, in accordance with the instructions of paragraph 4.1.3 of Airbus AOT A330-29A3111, Revision 1, dated October 8, 2009 (for Model A330-200 and -300 series airplanes); or Airbus AOT A340-29A4086, Revision 1, dated October 8, 2009 (for Model A340-200 and -300 series airplanes). Do all applicable corrective actions before further flight. Accomplishment of the inspection program required by paragraph (i) of this AD terminates the requirements of this paragraph.

(h) Retained Inspection, With No Changes

This paragraph restates the requirements of paragraph (h) of AD 2013-25-08, with no changes. For airplanes equipped with check valves having P/N CAR400; and for airplanes equipped with check valves having P/N CAR401, except for airplanes on which Airbus Modification 201384 has been embodied during production, or on which Airbus Service Bulletin A330-29-3119 (for Model A330-200, -200F, and -300 series airplanes) or Airbus Service Bulletin A340-29-4091 (for Model A340-200 and -300 series airplanes) has been embodied in service: Within 900 flight hours after January 31, 2014 (the effective date of AD 2013-25-08), inspect the check valves on the blue, green, and yellow hydraulic systems to identify their part numbers, in accordance with the Accomplishment Instructions of Airbus Mandatory Service Bulletin A330-29-3111, Revision 02, dated June 23, 2011 (for Model A330-200, -200F, and -300 series airplanes); or Airbus Mandatory Service Bulletin A340-29-4086, Revision 02, dated June 23, 2011 (for Model A340-200 and -300 series airplanes). Accomplishment of the actions required by this paragraph terminates the requirements specified in paragraphs (g)(1) and (g)(1)(ii) of this AD.

(1) If check valves having P/N CAR401 are installed on all three hydraulic systems: Before further flight, do the inspection program (detailed inspection for red mark presence and alignment integrity of the check valve and manifold, a detailed inspection for traces of seepage or black deposits, and an inspection for proper torque) on yellow and blue high pressure manifolds, and do all applicable corrective actions, in accordance with the Accomplishment Instructions of Airbus Mandatory Service Bulletin A330-29-3111, Revision 02, dated June 23, 2011 (for Model A330-200, -200F, and -300 series airplanes); or Airbus Mandatory Service Bulletin A340-29-4086, Revision 02, dated June 23, 2011 (for Model A340-200 and -300 series airplanes). Accomplishment of the actions required by this paragraph terminates the requirements specified in paragraph (g)(2)(i) of this AD.

(2) If check valves having P/N CAR401 are not installed on all three hydraulic systems, no further action is required by this paragraph until any check valve having P/N CAR400 is replaced with a check valve having P/N CAR401. If any check valve having P/N CAR400 is replaced by a check valve having P/N CAR401: Before further flight after such replacement, do the actions specified in paragraph (h) of this AD, to determine if all three hydraulic systems are equipped with check valves having P/N CAR401. If check valves having P/N CAR401 are installed on all three hydraulic systems: Before further flight, do the actions specified in paragraphs (h)(1) and (i) of this AD.

(i) Retained Repetitive Inspection Program and Corrective Actions, With No Changes

This paragraph restates the requirements of paragraph (i) of AD 2013-25-08, with no changes. Within 900 flight hours after accomplishment of paragraph (h)(1) of this AD, do the inspection program (detailed inspection for red mark presence and alignment integrity of the check valve and manifold, a detailed inspection for traces of seepage or black deposits, and an inspection for proper torque) on the green, yellow, and blue system check valves, and do all applicable corrective actions, in accordance with the Accomplishment Instructions of Airbus Mandatory Service Bulletin A330-29-3111, Revision 02, dated June 23, 2011 (for Model A330-200, -200F, and -300 series airplanes); or Airbus Mandatory Service Bulletin A340-29-4086, Revision 02, dated June 23, 2011 (for Model A340-200 and -300 series airplanes). Do all applicable corrective actions before further flight. Repeat the inspection program thereafter at intervals not to exceed 900 flight hours. Accomplishment of the actions required by this paragraph terminates the requirements specified in paragraphs (g)(1)(i), (g)(2)(ii), and (g)(2)(iii) of this AD.

(j) Retained Repetitive Inspection for Certain Airplanes, With No Changes

This paragraph restates the requirements of paragraph (j) of AD 2013-25-08, with no changes. For airplanes equipped with check valves having P/N CAR401 and on which Airbus Modification 201384 has been embodied during production, or on which Airbus Service Bulletin A330-29-3119 (for Model A330-200, -200F, and -300 series airplanes); or Airbus Service Bulletin A340-29-4091 (for Model A340-200 and -300 series airplanes) has been embodied in service: Within 1,000 flight hours after January 31, 2014 (the effective date of AD 2013-25-08), do a general visual inspection of the green, yellow, and blue high pressure manifolds and check valves having P/N CAR401 for any sign of rotation of the check valve head, and for any signs of hydraulic fluid leakage or seepage (including black deposits), in accordance with the instructions of Airbus Alert Operators Transmission A29L001-12, dated October 11, 2012. Repeat the inspection thereafter at interval not to exceed 900 flight hours.

(k) Retained Corrective Action for Certain Airplanes, With No Changes

This paragraph restates the requirements of paragraph (k) of AD 2013-25-08, with no changes. If, during any inspection required by paragraph (j) of this AD, any sign of rotation of the check valve head is found, or any sign of hydraulic fluid leakage or seepage (including black deposits) is found: Before further flight, do all applicable corrective actions, in accordance with the instructions of Airbus Alert Operators Transmission A29L001-12, dated October 11, 2012.

(l) Retained Provisions Regarding Terminating Action, With No Changes

This paragraph restates the provisions of paragraph (l) of AD 2013-25-08, with no changes. Accomplishment of the corrective actions required by this AD does not constitute terminating action for the repetitive inspections required by this AD.

(m) Retained Replacement Check Valve Torque Value, With No Changes

This paragraph restates the requirements of paragraph (m) of AD 2013-25-08, with no changes. As of January 31, 2014 (the effective date of AD 2013-25-08), at each replacement of a check valve with a check valve having P/N CAR401, apply a torque of 141 to 143 newton meters (N.m) (103.98 to 105.45 pounds-foot (lbf.ft)) during installation.

(n) Retained Credit for Previous Actions, With No Changes

This paragraph restates the provisions of paragraph (n) of AD 2013-25-08, with no changes.

(1) This paragraph provides credit for actions required by paragraph (g)(2)(i) of this AD, if those actions were performed before December 14, 2009 (the effective date of AD 2009-24-09), using the applicable service information specified in paragraphs (n)(1)(i) and (n)(1)(ii) of this AD.

(i) Airbus AOT A330-29A3111, dated September 2, 2009 (for Model A330-200 and -300 series airplanes), which is not incorporated by reference in this AD.

(ii) Airbus AOT A340-29A4086, dated September 2, 2009 (for Model A340-200 and -300 series airplanes), which is not incorporated by reference in this AD.

(2) This paragraph provides credit for actions required by paragraph (h) of this AD, if those actions were performed before January 31, 2014 (the effective date of AD 2013-25-08), using the applicable service information specified in paragraphs (n)(2)(i) through (n)(2)(iv) of this AD.

(i) Airbus AOT A330-29A3111, dated September 2, 2009 (for Model A330-200 and -300 series airplanes), which is not incorporated by reference in this AD.

(ii) Airbus AOT A330-29A3111, Revision 1, dated October 8, 2009 (for Model A330-200 and -300 series airplanes), which is incorporated by reference in this AD.

(iii) Airbus AOT A340-29A4086, dated September 2, 2009 (for Model A340-200 and -300 series airplanes), which is not incorporated by reference in this AD.

(iv) Airbus AOT A340-29A4086, Revision 1, dated October 8, 2009 (for Model A340-200 and -300 series airplanes), which is incorporated by reference in this AD.

(o) Retained Provisions for Reporting, With No Changes

This paragraph restates the provisions of paragraph (o) of AD 2013-25-08, with no changes. Although the service information specified in paragraphs (o)(1) through (o)(5) of this AD specifies to submit certain information to the manufacturer, this AD does not include that requirement.

(1) Airbus Alert Operators Transmission A29L001-12, dated October 11, 2012.

(2) Airbus Mandatory Service Bulletin A330-29-3111, Revision 02, dated June 23, 2011.

(3) Airbus Mandatory Service Bulletin A340-29-4086, Revision 02, dated June 23, 2011.

(4) Airbus AOT A330-29A3111, Revision 1, dated October 8, 2009.

(5) Airbus AOT A340-29A4086, Revision 1, dated October 8, 2009.

(p) New Requirement of This AD: Modify Hydraulic Systems

Within 36 months after the effective date of this AD, modify the green, blue, and yellow high pressure hydraulic manifolds by replacing each check valve having P/N CAR401 with an improved check valve having P/N CAR402, in accordance with the Accomplishment Instructions of Airbus Service Bulletin A330-29-3125, Revision 03, including Appendixes 01 and 02, dated April 8, 2016; or Airbus Service Bulletin A340-29-4096, Revision 02, including Appendixes 01 and 02, dated April 8, 2016; as applicable.

(q) New Provision of This AD: Terminating Action for Repetitive Inspections

Modification of an airplane, as required by paragraph (p) of this AD, constitutes terminating action for the repetitive inspections required by this AD.

(r) New Requirement of This AD: Parts Installation Limitations

(1) For an airplane that, as of the effective date of this AD, has a check valve having P/N CAR401 installed, after modification as required by paragraph (p) of this AD, no person may install a check valve having P/N CAR401, on that airplane.

(2) For an airplane that does not have a check valve having P/N CAR401 installed, as of the effective date of this AD, no person may install a check valve having P/N CAR401, on that airplane.

(s) Credit for Previous Actions

This paragraph provides credit for actions required by paragraph (p) of this AD, if those actions were performed before the effective date of this AD using the applicable service information specified in paragraphs (s)(1) through (s)(5) of this AD, which are not incorporated by reference in this AD.

(1) Airbus Service Bulletin A330-29-3125, dated August 8, 2014.

(2) Airbus Service Bulletin A330-29-3125, Revision 01, including Appendixes 01 and 02, dated July 30, 2015.

(3) Airbus Service Bulletin A330-29-3125, Revision 02, including Appendixes 01 and 02, dated January 21, 2016.

(4) Airbus Service Bulletin A340-29-4096, dated August 8, 2014.

(5) Airbus Service Bulletin A340-29-4096, Revision 01, including Appendixes 01 and 02, dated July 30, 2015.

(t) Other FAA AD Provisions

The following provisions also apply to this AD:

(1) Alternative Methods of Compliance (AMOCs): The Manager, International Branch, ANM-116, Transport Airplane Directorate, 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 Branch, send it to ATTN: Vladimir Ulyanov, Aerospace Engineer, International Branch, ANM-116, Transport Airplane Directorate, FAA, 1601 Lind Avenue SW., Renton, WA 98057-3356; telephone 425-227-1138; fax 425-227-1149. Information may be emailed to: 9-ANM-116-AMOC-REQUESTS@faa.gov.

(i) Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office.

(ii) AMOC ANM-116-14-180 R1, dated February 21, 2014, is approved as an AMOC for the corresponding provisions of this AD.

(iii) AMOC ANM-116-14-429, dated September 25, 2014, is not approved as an AMOC for the corresponding provisions of this AD.

(2) Contacting the Manufacturer: As of the effective date of this AD, 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 Branch, ANM-116, Transport Airplane Directorate, 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.

(u) Related Information

(1) Refer to Mandatory Continuing Airworthiness Information (MCAI) EASA Airworthiness Directive 2015-0009, dated January 16, 2015, 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-2016-3701.

(2) Service information identified in this AD that is not incorporated by reference is available at the addresses specified in paragraphs (v)(6) and (v)(7) of this AD.

(v) 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.

(3) The following service information was approved for IBR on December 27, 2016.

(i) Airbus Service Bulletin A330-29-3125, Revision 03, including Appendixes 01 and 02, dated April 8, 2016.

(ii) Airbus Service Bulletin A340-29-4096, Revision 02, including Appendixes 01 and 02, dated April 8, 2016.

(4) The following service information was approved for IBR on January 31, 2014 (78 FR 78694, December 27, 2013).

(i) Airbus Alert Operators Transmission A29L001-12, dated October 11, 2012.

(ii) Airbus Mandatory Service Bulletin A330-29-3111, Revision 02, dated June 23, 2011.

(iii) Airbus Mandatory Service Bulletin A340-29-4086, Revision 02, dated June 23, 2011.

(5) The following service information was approved for IBR on December 14, 2009 (74 FR 62208, November 27, 2009).

(i) Airbus Alert Operators Telex A330-29A3111, Revision 1, dated October 8, 2009. Only the first page of this document contains the document number, revision level, and date; no other pages of this document contain this information.

(ii) Airbus Alert Operators Telex A340-29A4086, Revision 1, dated October 8, 2009. Only the first page of this document contains the document number, revision level, and date; no other pages of this document contain this information.

(6) For service information identified in this AD, contact Airbus SAS—Airworthiness Office—EAL, 1 Rond Point Maurice Bellonte, 31707 Blagnac Cedex, France; telephone +33 5 61 93 36 96; fax +33 5 61 93 45 80; email airworthiness.A330-A340@airbus.com; Internet <http://www.airbus.com>.

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

(8) 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 October 12, 2016.

Michael Kaszycki,
Acting Manager, Transport Airplane Directorate,
Aircraft Certification Service.



2016-22-04 Gulfstream Aerospace Corporation: Amendment 39-18693; Docket No. FAA-2016-4223; Directorate Identifier 2015-NM-108-AD.

(a) Effective Date

This AD is effective December 27, 2016.

(b) Affected ADs

None.

(c) Applicability

This AD applies to Gulfstream Aerospace Corporation Model GV airplanes, certificated in any category, serial numbers 501 through 693 inclusive and serial number 699; and Model GV-SP airplanes, certificated in any category, serial numbers 5001 through 5433 inclusive.

(d) Subject

Air Transport Association (ATA) of America Code 32, Landing Gear; 53, Fuselage; 54, Nacelles/Pylons; 55, Stabilizers; and 57, Wings.

(e) Unsafe Condition

This AD was prompted by a new revision to the Airworthiness Limitations Section (ALS) of the Aircraft Maintenance Manual (AMM), Chapter 05-10-10, based on fatigue and damage tolerance testing, and updated analysis. We are issuing this AD to ensure fatigue cracking of principal structural elements (PSEs) is detected and corrected; such fatigue cracking could result in reduced structural integrity of the PSEs and critical components.

(f) Compliance

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

(g) Revise Maintenance or Inspection Program

Within 12 months after the effective date of this AD, revise the maintenance or inspection program, as applicable, to incorporate the airworthiness limitations specified in Gulfstream Document GV-GER-9973, Summary of Changes to the GV Series Airworthiness Limitations, Revision C, dated January 8, 2015. The initial compliance times for the tasks identified in Gulfstream Document GV-GER-9973, Summary of Changes to the GV Series Airworthiness Limitations, Revision C, dated January 8, 2015, are at the applicable times specified in Gulfstream Document GV-GER-9973, Summary of Changes to the GV Series Airworthiness Limitations, Revision C, dated January 8, 2015, or within twelve months after the effective date of this AD, whichever occurs later.

Note 1 to paragraph (g) of this AD: Gulfstream Document GV-GER-9973, Summary of Changes to the GV Series Airworthiness Limitations, Revision C, dated January 8, 2015, specifies the following AMM revisions as additional sources of guidance for the actions required by paragraph (g) of this AD. For Model GV airplanes, AMM Revision 43, dated February 15, 2015; and for Model GV-SP airplanes, G500 or G550 AMM Revision 24, dated February 15, 2015, as applicable.

(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) of this AD.

(i) Alternative Methods of Compliance (AMOCs)

(1) The Manager, Atlanta Aircraft Certification Office (ACO), FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the manager of the ACO, 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 Ronald Wissing, Aerospace Engineer, Airframe Branch, ACE-117A, FAA, Atlanta ACO, 1701 Columbia Avenue, College Park, GA 30337; phone: 404-474-5552; fax: 404-474-5606; email: ronald.wissing@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) Gulfstream Document GV-GER-9973, Summary of Changes to the GV Series Airworthiness Limitations, Revision C, dated January 8, 2015. The revision level and date of this document are not specified on the title page of the document.

(ii) Reserved.

(3) For Gulfstream Aerospace Corporation 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.

(4) You may view this service information at FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, WA 98057-3356. 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 October 14, 2016.
Michael Kaszycki,
Acting Manager, Transport Airplane Directorate,
Aircraft Certification Service.



2016-22-13 The Boeing Company: Amendment 39-18702; Docket No. FAA-2016-5034; Directorate Identifier 2015-NM-172-AD.

(a) Effective Date

This AD is effective December 27, 2016.

(b) Affected ADs

None.

(c) Applicability

(1) This AD applies to all The Boeing Company Model 737-600, -700, -700C, -800, -900, and -900ER series airplanes, certificated in any category.

(2) Installation of Supplemental Type Certificate (STC) ST00830SE (http://rgl.faa.gov/Regulatory_and_Guidance_Library/rgSTC.nsf/0/38B606833BBD98B386257FAA00602538?OpenDocument&Highlight=st00830se) does not affect the ability to accomplish the actions required by this AD. Therefore, for airplanes on which STC ST00830SE 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 an evaluation by the design approval holder (DAH) indicating that the stringer (S)-14L and S-14R lap splices are subject to widespread fatigue damage (WFD). We are issuing this AD to detect and correct widespread cracking in the S-14L and S-14R lap splices that could rapidly link up and result in possible rapid decompression and reduced structural integrity of the airplane.

(f) Compliance

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

(g) Repetitive Inspections

At the applicable compliance time specified in paragraph 1.E., "Compliance," of Boeing Alert Service Bulletin 737-53A1352, Revision 1, dated March 10, 2016, do a low frequency eddy current inspection for cracking of the lower fastener row of S-14L and S-14R lap splices, in accordance with the Accomplishment Instructions of Boeing Alert Service Bulletin 737-53A1352, Revision 1, dated March 10, 2016. Repeat the inspection thereafter at the applicable times specified in paragraph 1.E.,

"Compliance," of Boeing Alert Service Bulletin 737-53A1352, Revision 1, dated March 10, 2016. If any cracking is found, before further flight, repair using a method approved in accordance with the procedures specified in paragraph (i) of this AD.

(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 Boeing Alert Service Bulletin 737-53A1352, dated October 2, 2015.

(i) Alternative Methods of Compliance (AMOCs)

(1) The Manager, Seattle Aircraft Certification Office (ACO), FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the manager of the ACO, send it to the attention of the person identified in paragraph (j) of this AD. Information may be emailed to: 9-ANM-Seattle-ACO-AMOC-Requests@faa.gov.

(2) Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office.

(3) An AMOC that provides an acceptable level of safety may be used for any repair, modification, or alteration required by this AD if it is approved by the Boeing Commercial Airplanes Organization Designation Authorization (ODA) that has been authorized by the Manager, Seattle ACO, 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 (i)(4)(i) and (i)(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.

(j) Related Information

For more information about this AD, contact Gaetano Settineri, Aerospace Engineer, Airframe Branch, ANM-120S, FAA, Seattle ACO, 1601 Lind Avenue SW., Renton, WA 98057-3356; phone: 425-917-6577; fax: 425-917-6590; email: gaetano.settineri@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) Boeing Alert Service Bulletin 737-53A1352, Revision 1, dated March 10, 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 Airplane Directorate, 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 October 21, 2016.

Michael Kaszycki,
Acting Manager, Transport Airplane Directorate,
Aircraft Certification Service.



2016-22-16 Bombardier, Inc.: Amendment 39-18705; Docket No. FAA-2016-7421; Directorate Identifier 2015-NM-145-AD.

(a) Effective Date

This AD is effective December 27, 2016.

(b) Affected ADs

None.

(c) Applicability

This AD applies to the Bombardier, Inc. airplanes identified in paragraph (c)(1), (c)(2), or (c)(3) of this AD, certificated in any category, equipped with No. 3 hydraulic system reservoir having part number 960450-1.

(1) Model CL-600-2C10 (Regional Jet Series 700, 701, and 702) airplanes, having serial numbers 10002 through 10999 inclusive.

(2) Model CL-600-2D15 (Regional Jet Series 705) and CL-600-2D24 (Regional Jet Series 900) airplanes, having serial numbers 15001 through 15990 inclusive.

(3) Model CL-600-2E25 (Regional Jet Series 1000) airplanes, having serial numbers 19001 through 19990 inclusive.

(d) Subject

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

(e) Reason

This AD was prompted by a determination that wear and possible leakage of the high-pressure seal in the cylinder of the No. 3 hydraulic system reservoir could occur and cause high hydraulic fluid temperature and/or prevent the system from reaching normal operating pressure. We are issuing this AD to detect and correct wear and leakage of the high-pressure seal in the cylinder of the reservoir of the No. 3 hydraulic system, which can result in high hydraulic fluid temperature. High hydraulic fluid temperature combined with a temperature transducer malfunction could result in un-announced overheating of the hydraulic system and consequent ignition sources inside the fuel tank, which, combined with flammable fuel vapors, could result in a fuel tank explosion and consequent loss of the airplane.

(f) Compliance

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

(g) Operational Check and Repair, if Necessary

Within 660 flight hours or 4 months after the effective date of this AD, whichever occurs first: Perform an operational check for wear and leakage of the high-pressure seal in the cylinder of the reservoir of the No. 3 hydraulic system, in accordance with the Accomplishment Instructions of Bombardier Service Bulletin 670BA-29-018, Revision A, dated October 13, 2015. If the operational check fails, before further flight, do applicable corrective actions and repeat the operational check and applicable corrective actions until the operational check passes. Repeat the operational check thereafter at intervals not to exceed 660 flight hours or 4 months, whichever occurs first.

(h) Credit for Previous Actions

This paragraph provides credit for the applicable actions required by paragraph (g) of this AD, if those actions were performed before the effective date of this AD using Bombardier Service Bulletin 670BA-29-018, dated June 25, 2015.

(i) Other FAA AD Provisions

The following provisions also apply to this AD:

(1) Alternative Methods of Compliance (AMOCs): The Manager, New York Aircraft Certification Office (ACO), ANE-170, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. Send information to ATTN: Program Manager, Continuing Operational Safety, FAA, New York ACO, 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, ANE-170, 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-2015-27, dated September 14, 2015, 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-2016-7421.

(2) 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 670BA-29-018, Revision A, dated October 13, 2015.

(ii) Reserved.

(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; Internet <http://www.bombardier.com>.

(4) You may view this service information at the FAA, Transport Airplane Directorate, 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 October 25, 2016.

Dionne Palermo,
Acting Manager, Transport Airplane Directorate,
Aircraft Certification Service.



2016-22-17 The Boeing Company: Amendment 39-18706; Docket No. FAA-2016-6672; Directorate Identifier 2016-NM-022-AD.

(a) Effective Date

This AD is effective December 27, 2016.

(b) Affected ADs

None.

(c) Applicability

This AD applies to The Boeing Company Model 787-8 airplanes, certificated in any category, as identified in Boeing Service Bulletin B787-81205-SB530025-00, Issue 002, dated June 2, 2016 ("B787-81205-SB530025-00 Issue 002").

(d) Subject

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

(e) Unsafe Condition

This AD was prompted by a report that the grounding jumpers between the environmental control system (ECS) bracket and the current return network (CRN) straps near passenger 1 left and 1 right entry doors were not bonded correctly during manufacturing. We are issuing this AD to prevent an incorrectly bonded jumper between the ECS bracket and the CRN strap, which does not provide proper grounding to the door frames at doors 1 left and 1 right. If a fault occurs, an electrical shock hazard can exist and could result in serious or fatal injury to passengers and flight crew.

(f) Compliance

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

(g) Grounding Jumper Revision

Within 12 months after the effective date of this AD: Change the configuration of the grounding jumpers connecting the ECS brackets and CRN straps, including measuring the bond resistance and doing all applicable related investigative and corrective actions, in accordance with the Accomplishment Instructions of B787-81205-SB530025-00 Issue 002. Do all applicable related investigative and corrective actions before further flight.

(h) Credit for Previous Actions

This paragraph provides credit for the actions specified in paragraph (g) of this AD, if those actions were performed before the effective date of this AD using Boeing Service Bulletin B787-81205-SB530025-00, Issue 001, dated July 17, 2014.

(i) Alternative Methods of Compliance (AMOCs)

(1) The Manager, Seattle Aircraft Certification Office (ACO), FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the manager of the ACO, send it to the attention of the person identified in paragraph (j) of this AD. Information may be emailed to: 9-ANM-Seattle-ACO-AMOC-Requests@faa.gov.

(2) Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office.

(3) An AMOC that provides an acceptable level of safety may be used for any repair, modification, or alteration required by this AD if it is approved by the Boeing Commercial Airplanes Organization Designation Authorization (ODA) that has been authorized by the Manager, Seattle ACO, 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 (i)(4)(i) and (i)(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.

(j) Related Information

For more information about this AD, contact Brendan Shanley, Aerospace Engineer, Systems and Equipment Branch, ANM-130S, FAA, Seattle Aircraft Certification Office (ACO), 1601 Lind Avenue SW., Renton, WA 98057-3356; phone: 425-917-6492; fax: 425-917-6590; email: brendan.shanley@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) Boeing Service Bulletin B787-81205-SB530025-00, Issue 002, dated June 2, 2016.

(ii) Reserved.

(3) For Boeing service information identified in this AD, contact Boeing Commercial Airplanes, Attention: Data & Services Management, P.O. Box 3707, MC 2H-65, Seattle, WA 98124-2207; telephone 206-544-5000, extension 1; fax 206-766-5680; Internet <https://www.myboeingfleet.com>.

(4) You may view this service information at FAA, Transport Airplane Directorate, 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 October 25, 2016.

Dionne Palermo,
Acting Manager, Transport Airplane Directorate,
Aircraft Certification Service.



2016-23-02 The Boeing Company: Amendment 39-18709; Docket No. FAA-2015-5809; Directorate Identifier 2015-NM-055-AD.

(a) Effective Date

This AD is effective December 30, 2016.

(b) Affected ADs

This AD replaces AD 2006-19-12, Amendment 39-14769 (71 FR 55727, September 25, 2006) ("AD 2006-19-12").

(c) Applicability

This AD applies to The Boeing Company Model 777-200, -200LR, -300, -300ER, and 777F series airplanes, certified in any category, as identified in Boeing Special Attention Service Bulletin 777-54-0038, dated March 6, 2015; except for line number 940.

(d) Subject

Air Transport Association (ATA) of America Code 54, Nacelles/pylons.

(e) Unsafe Condition

This AD was prompted by a report that an aft fairing lower spar web exceeded the allowable conductivity limits. An investigation concluded that wear to the pan casting and gap cover strips allowed increased heat into the aft fairing heat shield cavity. We are issuing this AD to detect and correct degradation of the aft fairing lower web, which could lead to cracking of the web and could allow flammable fluids to leak into the heat shield pan castings, and increase the risk of an uncontained fire and subsequent structural damage.

(f) Compliance

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

(g) Retained Inspection, Installation, and Replacement Actions, With No Changes

This paragraph restates the actions required by paragraph (f) of AD 2006-19-12, with no changes. For Model 777-200 and -300 series airplanes identified in Boeing Special Attention Service Bulletin 777-54-0021, Revision 1, dated March 16, 2006: Except as provided by paragraph (h) of this AD, within 12 months after October 30, 2006 (the effective date of AD 2006-19-12), do the actions specified in paragraphs (g)(1), (g)(2), (g)(3), and (g)(4) of this AD, in accordance with the Accomplishment Instructions of Boeing Special Attention Service Bulletin 777-54-0021, Revision 1, dated March 16, 2006.

- (1) Do a general visual inspection of the lower web of the aft fairing for any discoloration and do any related investigative action.
- (2) Do a general visual inspection of the heat shield castings for any damage (crack(s), dent(s), gouge(s), warpage, fretting, or missing/loose nutplates).
- (3) Install gap cover strips on the heat shield pans.
- (4) Replace insulation blankets on the heat shield pans with new insulation blankets.

(h) Retained Repair Instructions, With No Changes

This paragraph restates the actions required by paragraph (g) of AD 2006-19-12, with no changes. If any damage, discoloration, heat damage, or crack is found during any inspection required by paragraph (g) of this AD: Before further flight, do all applicable corrective actions, in accordance with a method approved by the Manager, Seattle Aircraft Certification Office (ACO), FAA, or in accordance with the Accomplishment Instructions of Boeing Special Attention Service Bulletin 777-54-0021, Revision 1, dated March 16, 2006.

(i) Retained Credit for Previous Actions, With Revised Format

This paragraph restates the credit provided by paragraph (h) of AD 2006-19-12, with a revised format. This paragraph provides credit for actions required by paragraph (g) of this AD, if those actions were performed before October 30, 2006 (the effective date of AD 2006-19-12), using Boeing Special Attention Service Bulletin 777-54-0021, dated June 23, 2005, except where Boeing Special Attention Service Bulletin 777-54-0021, dated June 23, 2005, does not provide an international annealed copper standard (IACS) value for determining the results of the inspection for heat damage, the maximum acceptable IACS value is 42 percent.

(j) New Requirements: Detailed and Conductivity Inspections and Related Investigative and Corrective Actions (Repetitive Inspections for Certain Airplanes)

(1) For Group 1, Configurations 1, 2, 3, and 4, airplanes; and Group 2, Configurations 1 and 2, airplanes; identified in Boeing Special Attention Service Bulletin 777-54-0038, dated March 6, 2015: Within 24 months after the effective date of this AD, do a detailed inspection of the aft fairing lower structure for any cracking and deformation, and do a conductivity inspection of the aft fairing lower structure for the IACS value (thermal degradation indication), as applicable, and do all applicable related investigative and corrective actions, in accordance with the Accomplishment Instructions of Boeing Special Attention Service Bulletin 777-54-0038, dated March 6, 2015. Do all applicable related investigative and corrective actions before further flight.

(2) For Group 1, Configurations 1 and 3, airplanes, and Group 2, Configuration 1, airplanes, identified in Boeing Special Attention Service Bulletin 777-54-0038, dated March 6, 2015: Repeat the inspections specified in paragraph (j)(1) of this AD thereafter at intervals not to exceed 24 months until the terminating action specified in paragraph (k) of this AD is done.

(k) Optional Terminating Action

Accomplishing a detailed inspection of the gap cover strips and heat shield pan castings for damage and applicable corrective actions, and installation of new gap cover strip fillers, new Velcro strips, and improved aft fairing insulation blankets with new batting material, in accordance with the Accomplishment Instructions of Boeing Service Bulletin 777-54-0026, Revision 2, dated January 5, 2012, prior to or concurrently with accomplishing detailed and conductivity inspections and all applicable related investigative and corrective actions required by paragraph (j)(1) of this AD, terminates the repetitive inspections specified in paragraph (j)(2) of this AD; except, where Boeing Service Bulletin 777-54-0026, Revision 2, dated January 5, 2012, specifies to contact the

manufacturer, repair using a method approved in accordance with the procedures specified in paragraph (m) of this AD.

(l) Credit for Previous Actions

This paragraph provides credit for the actions specified in paragraph (k) of this AD that are identified in Boeing Service Bulletin 777-54-0026, Revision 2, dated January 5, 2012, if those actions were performed before the effective date of this AD using Boeing Service Bulletin 777-54-0026, dated March 29, 2011; or Boeing Service Bulletin 777-54-0026, Revision 1, dated August 23, 2011.

(m) Alternative Methods of Compliance (AMOCs)

(1) The Manager, Seattle ACO, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the manager of the ACO, send it to the attention of the person identified in paragraph (n)(1) of this AD. Information may be emailed to: 9-ANM-Seattle-ACO-AMOC-Requests@faa.gov.

(2) Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office.

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

(4) AMOCs approved for AD 2006-19-12 are approved as AMOCs for the corresponding provisions of paragraphs (g), (h), and (i) of this AD.

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

(n) Related Information

(1) For more information about this AD, contact Sue Lucier, Aerospace Engineer, Propulsion Branch, ANM-140S, FAA, Seattle ACO, 1601 Lind Avenue SW., Renton, WA 98057-3356; telephone: 425-917-6438; fax: 425-917-6590; email: suzanne.lucier@faa.gov.

(2) Service information identified in this AD that is not incorporated by reference is available at the addresses specified in paragraphs (o)(5) and (o)(6) 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 the AD specifies otherwise.

(3) The following service information was approved for IBR on December 30, 2016.

(i) Boeing Service Bulletin 777-54-0026, Revision 2, dated January 5, 2012.

(ii) Boeing Special Attention Service Bulletin 777-54-0038, dated March 6, 2015.

(4) The following service information was approved for IBR on October 30, 2006, Amendment 39-14769 (71 FR 55727, September 25, 2006).

(i) Boeing Special Attention Service Bulletin 777-54-0021, Revision 1, dated March 16, 2006.

(ii) Reserved.

(5) For Boeing service information identified in this AD, contact Boeing Commercial Airplanes, Attention: Data & Services Management, P.O. Box 3707, MC 2H-65, Seattle, WA 98124-2207; telephone 206-544-5000, extension 1; fax 206-766-5680; Internet <https://www.myboeingfleet.com>.

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

(7) 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 October 28, 2016.

Dionne Palermo,
Acting Manager, Transport Airplane Directorate,
Aircraft Certification Service.



2016-23-07 Bombardier, Inc.: Amendment 39-18714; Docket No. FAA-2016-7427; Directorate Identifier 2016-NM-041-AD.

(a) Effective Date

This AD is effective December 30, 2016

(b) Affected ADs

This AD replaces AD 2013-02-08, Amendment 39-17329 (78 FR 7647, February 4, 2013) ("AD 2013-02-08").

(c) Applicability

This AD applies to Bombardier, Inc. Model CL-600-2B19 (Regional Jet Series 100 & 440) airplanes, certificated in any category, serial numbers 7003 through 8113 inclusive.

(d) Subject

Air Transport Association (ATA) of America Code 27: Flight controls.

(e) Reason

This AD was prompted by a determination that not all affected attachment pins and trunnions were included in the inspections required by AD 2013-02-08, and that incorrect attachment hardware may have been used in replacements on certain airplanes. We are issuing this AD to prevent failure of the attachment pins and trunnions of the horizontal stabilizer trim actuator (HSTA), which could result in separation of the horizontal stabilizer, and consequent loss of control of the airplane.

(f) Compliance

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

(g) Inspection

(1) For airplanes on which the detailed inspection specified in Bombardier Service Bulletin 601R-27-160, dated September 29, 2011; or Bombardier Service Bulletin 601R-27-160, Revision A, dated October 3, 2012; has not been done as of the effective date of this AD: At the earliest of the times specified in paragraphs (g)(1)(i), (g)(1)(ii), and (g)(1)(iii) of this AD, measure the diameter of the bolts that attach the trunnions and pins; measure the diameter of the attach holes in the airplane structure, and, as applicable, measure the diameter of the attach holes in the trunnions and pins; do detailed visual inspections for gouges, scratches, and corrosion of the trunnions and pins; do detailed visual inspections for damage of the spacers; do corrective actions; and re-identify trunnions and pins; in accordance with Part A of the Accomplishment Instructions of Bombardier Service Bulletin

601R-27-160, Revision D, dated October 22, 2015; except as required by paragraph (h) of this AD. Do all applicable corrective actions before further flight.

(i) Within 5,000 flight hours after March 11, 2013 (the effective date of AD 2013-02-08).

(ii) Within 60 months after March 11, 2013 (the effective date of AD 2013-02-08).

(iii) Before the accumulation of 40,000 total flight cycles, or within 60 days after March 11, 2013 (the effective date of AD 2013-02-08), whichever occurs later.

(2) For airplanes on which the detailed inspection specified in Bombardier Service Bulletin 601R-27-160, dated September 29, 2011; or Bombardier Service Bulletin 601R-27-160, Revision A, dated October 3, 2012; has been done as of the effective date of this AD: Within 9,600 flight hours or 60 months after the effective date of this AD, whichever occurs first, measure the diameter of the bolts that attach the trunnions and pins; measure the diameter of the attach holes in the airplane structure, and, as applicable, measure the diameter of the attach holes in the trunnions and pins; do detailed visual inspections for gouges, scratches, and corrosion of the trunnions and pins; do detailed visual inspections for damage of the spacers; do corrective actions; and re-identify trunnions and pins; in accordance with Part B of the Accomplishment Instructions of Bombardier Service Bulletin 601R-27-160, Revision D, dated October 22, 2015, except as required by paragraph (h) of this AD. Do all applicable corrective actions before further flight.

(h) Exception to Service Information

Where Bombardier Service Bulletin 601R-27-160, Revision D, dated October 22, 2015, specifies to contact Bombardier for disposition, before further flight, repair in accordance with the requirements of paragraph (1)(2) of this AD.

(i) Credit for Previous Actions

This paragraph provides credit for the actions specified in paragraph (g) of this AD, if those actions were performed before the effective date of this AD using the service information identified in paragraphs (i)(1) and (i)(2) of this AD.

(1) Bombardier Service Bulletin 601R-27-160, Revision B, dated February 20, 2015.

(2) Bombardier Service Bulletin 601R-27-160, Revision C, dated May 3, 2015.

(j) Revision of Maintenance or Inspection Program

(1) Within 30 days after March 11, 2013 (the effective date of AD 2013-02-08), revise the maintenance or inspection program, as applicable, to incorporate the information specified in Bombardier CL-600-2B19 Airworthiness Requirements Temporary Revision 2B-2186, dated August 8, 2011. The compliance time for doing the initial inspection of the upper and lower installation pins of the horizontal stabilizer pitch trim actuator is before the accumulation of 40,000 landings or within 60 days after March 11, 2013, whichever occurs later.

(2) Within 30 days after the effective date of this AD, revise the maintenance or inspection program, as applicable, to incorporate the information specified in Bombardier CL-600-2B19 Airworthiness Requirements Temporary Revision 2B-2245, dated September 16, 2014. The compliance time for doing the initial replacement for the HSTA trunnion support and attaching hardware is before the accumulation of 80,000 landings or within 60 days after the effective date of this AD, whichever occurs later.

(k) No Alternative Actions or Intervals

After accomplishing the revision required by paragraph (j) 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 (l)(1) of this AD.

(l) Other FAA AD Provisions

The following provisions also apply to this AD:

(1) Alternative Methods of Compliance (AMOCs): The Manager, New York Aircraft Certification Office (ACO), ANE-170, 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 ACO, send it to ATTN: Program Manager, Continuing Operational Safety, FAA, New York ACO, 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. The AMOC approval letter must specifically reference this AD.

(2) Contacting the Manufacturer: As of the effective date of this AD, 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, ANE-170, Engine and Propeller Directorate, 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.

(m) Related Information

(1) Refer to Mandatory Continuing Airworthiness Information (MCAI) Canadian Airworthiness Directive CF-2016-08, effective March 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-2016-7427.

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

(n) Material Incorporated by Reference

(1) The Director of the Federal Register approved the incorporation by reference (IBR) of the service information listed in this paragraph under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) You must use this service information as applicable to do the actions required by this AD, unless this AD specifies otherwise.

(i) Bombardier Service Bulletin 601R-27-160, Revision D, dated October 22, 2015.

(ii) Bombardier CL-600-2B19 Airworthiness Requirements Temporary Revision 2B-2245, dated September 16, 2014.

(iii) Bombardier CL-600-2B19 Airworthiness Requirements Temporary Revision 2B-2186, dated August 8, 2011.

(3) For service information identified in this AD, contact Bombardier, Inc., 400 Côte-Vertu Road West, Dorval, Québec H4S 1Y9, Canada; telephone 514-855-5000; fax 514-855-7401; email thd.crj@aero.bombardier.com; Internet <http://www.bombardier.com>.

(4) You may view this service information at the FAA, Transport Airplane Directorate, 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 November 8, 2016.
Michael Kaszycki,
Acting Manager, Transport Airplane Directorate,
Aircraft Certification Service.



2016-23-08 The Boeing Company: Amendment 39-18715; Docket No. FAA-2016-5597; Directorate Identifier 2016-NM-009-AD.

(a) Effective Date

This AD is effective December 30, 2016.

(b) Affected ADs

None.

(c) Applicability

This AD applies to all the Boeing Company Model 737-400 series airplanes, certificated in any category.

(d) Subject

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

(e) Unsafe Condition

This AD was prompted by reports of cracks in the upper chord of the overwing stub beams at body station (STA) 578 emanating from the rivet location common to the crease beam inner chord and the overwing stub beam upper chord. We are issuing this AD to detect and correct cracking in the upper chord of the overwing stub beam caused by high flight-cycle fatigue stresses from both pressurization and maneuver loads. Cracking of the overwing stub beam could adversely affect the fuselage structural integrity and result in possible decompression of the airplane.

(f) Compliance

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

(g) Inspections, Related Investigative Actions, and Corrective Actions

At the applicable time specified in table 1 in paragraph 1.E., "Compliance," of Boeing Alert Service Bulletin 737-53A1347, Original Issue, dated December 9, 2015 ("ASB 737-53A1347 Original Issue"), except as required by paragraphs (j)(1) and (j)(2) of this AD: Do a surface high frequency eddy current (HFEC) inspection for any cracking in the overwing stub beam upper chord at STA 559, STA 578, and STA 601; and do all applicable related investigative and corrective actions; in accordance with the Accomplishment Instructions of ASB 737-53A1347 Original Issue, except as specified in paragraph (j)(3) of this AD. Do all applicable related investigative and corrective actions before further flight. Repeat the HFEC inspection thereafter at the applicable intervals specified in ASB 737-53A1347 Original Issue.

Note 1 to paragraph (g) of this AD: Deviation from the actions specified in ASB 737-53A1347 Original Issue may affect compliance with the fuel tank ignition prevention requirements specified in Critical Design Configuration Control Limitation 28-AWL-11 of Document D6-38278-CMR.

(h) Terminating Action

Replacement of the overwing stub beam, in accordance with Part 4 of the Accomplishment Instructions of ASB 737-53A1347 Original Issue, terminates the repetitive inspections required by paragraph (g) of this AD at the STA 578 replacement location only. The post-replacement inspections required by paragraph (i) of this AD are still required at the STA 578 replacement location.

(i) Post-Replacement Inspections and Corrective Action

For airplanes on which an overwing stub beam has been replaced at STA 578, in accordance with Part 4 of the Accomplishment Instructions of ASB 737-53A1347 Original Issue: At the applicable time specified in table 2 in paragraph 1.E., "Compliance," of ASB 737-53A1347 Original Issue, do a surface HFEC inspection for any cracking in the overwing stub beam upper chord at STA 578, in accordance with the Accomplishment Instructions of ASB 737-53A1347 Original Issue. Repeat the HFEC inspection thereafter at the applicable intervals specified in ASB 737-53A1347 Original Issue. If any cracking is found during any inspection required by this paragraph, before further flight, repair the cracking using a method approved in accordance with the procedures specified in paragraph (j)(3) of this AD.

(j) Exceptions to Service Information

(1) Where ASB 737-53A1347 Original Issue, specifies a compliance time after the "original issue date of this service bulletin," this AD requires compliance within the specified compliance time after the effective date of this AD.

(2) The Condition column of paragraph 1.E., "Compliance," of ASB 737-53A1347 Original Issue, refers to airplanes with specified total flight-cycles "at the original issue date of this service bulletin." This AD, however, applies to the airplanes with the specified total flight-cycles as of the effective date of this AD.

(3) If any cracking is found during any inspection required by this AD, and ASB 737-53A1347 Original Issue specifies to contact Boeing for appropriate action: Before further flight, repair the cracking or replace the stub beam, using a method approved in accordance with the procedures specified in paragraph (l) of this AD.

(k) No Economic Inspection Required

This AD does not require the "Recommended Economic Inspection" specified in paragraph 3.B.3. of the Accomplishment Instructions of ASB 737-53A1347 Original Issue.

(l) Alternative Methods of Compliance (AMOCs)

(1) The Manager, Los Angeles Aircraft Certification Office (ACO), FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the manager of the ACO, send it to the attention of the person identified in paragraph (m) of this AD. Information may be emailed to: 9-ANM-LAACO-ACO-AMOC-Requests@faa.gov.

(2) Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office.

(3) An AMOC that provides an acceptable level of safety may be used for any repair, modification, or alteration required by this AD if it is approved by the Boeing Commercial Airplanes Organization Designation Authorization (ODA) that has been authorized by the Manager, Los Angeles ACO, 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) Except as required by paragraph (j)(3) of this AD: For service information that contains steps that are labeled as Required for Compliance (RC), the provisions of paragraphs (l)(4)(i) and (l)(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.

(m) Related Information

For more information about this AD, contact Galib Abumeri, Aerospace Engineer, Airframe Branch, ANM-120L, FAA, Los Angeles Aircraft Certification Office (ACO), 3960 Paramount Boulevard, Lakewood, CA 90712-4137; phone: 562-627-5324; fax: 562-627-5210; email: galib.abumeri@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 Alert Service Bulletin 737-53A1347, Original Issue, dated December 9, 2015.

(ii) Reserved.

(3) For Boeing 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 Airplane Directorate, 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 November 8, 2016.

Michael Kaszycki,
Acting Manager, Transport Airplane Directorate,
Aircraft Certification Service.



2016-24-01 Bombardier, Inc.: Amendment 39-18718; Docket No. FAA-2016-5044; Directorate Identifier 2014-NM-166-AD.

(a) Effective Date

This AD is effective December 30, 2016.

(b) Affected ADs

None.

(c) Applicability

This AD applies to Bombardier, Inc. airplanes identified in paragraphs (c)(1), (c)(2), and (c)(3) of this AD, certificated in any category, serial numbers 003 through 672 inclusive, on which terminal block part number 82450075-001 is installed.

- (1) Model DHC-8-102, -103, and -106 airplanes.
- (2) Model DHC-8-201 and -202 airplanes.
- (3) Model DHC-8-301, -311, and -315 airplanes.

(d) Subject

Air Transport Association (ATA) of America Code 24, Electrical Power.

(e) Reason

This AD was prompted by a report of heat damage found on a nacelle firewall after an unsuccessful engine ground start and several events of heat damage found on direct current starter/generator terminal block assemblies. We are issuing this AD to prevent arcing between the firewall and terminal blocks that are missing insulating sleeves on the conductive bushings, which could, in combination with a fuel or hydraulic fluid leak, be an ignition source for a fire.

(f) Compliance

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

(g) Inspection and Corrective Action

Within 2,500 flight cycles or 14 months after the effective date of this AD, whichever occurs first, perform a detailed visual inspection of the right-hand side and left-hand side nacelle firewalls and terminal block assemblies, as defined in Bombardier Service Bulletin 8-24-92, Revision A, dated April 11, 2014, in accordance with the Accomplishment Instructions of Bombardier Service Bulletin 8-24-92, Revision A, dated April 11, 2014.

(1) If the inspection finds no damage on the engine firewalls and the terminal blocks, and that undamaged insulating sleeves are installed on both terminal blocks, no further action is required by this AD.

(2) If the inspection finds that no insulating sleeves are installed, or the existing sleeves are damaged, and there is no damage to the nacelle firewall and terminal block, before further flight, install the replacement insulating sleeves, in accordance with the Accomplishment Instructions of Bombardier Service Bulletin 8-24-92, Revision A, dated April 11, 2014.

(3) If the inspection finds that no insulating sleeves are installed, or any existing sleeve is damaged, and there is no damage to the nacelle firewall, but there is damage to the terminal block, before further flight, replace the terminal block assembly (which includes insulating sleeves), in accordance with the Accomplishment Instructions of Bombardier Service Bulletin 8-24-92, Revision A, dated April 11, 2014.

(4) If the inspection finds that no insulating sleeves are installed and there is damage to the nacelle firewall and the terminal block, repair the damage using a method approved by the Manager, New York Aircraft Certification Office (ACO), ANE-170, Engine and Propeller Directorate, FAA; or Transport Canada Civil Aviation (TCCA); or Bombardier, Inc.'s TCCA Design Approval Organization (DAO).

(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 8-24-92, dated September 25, 2013.

(i) Other FAA AD Provisions

The following provisions also apply to this AD:

(1) Alternative Methods of Compliance (AMOCs): The Manager, New York ACO, ANE-170, 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 ACO, send it to ATTN: Program Manager, Continuing Operational Safety, FAA, New York ACO, 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, ANE-170, Engine and Propeller Directorate, FAA; or TCCA; or Bombardier, Inc.'s TCCA 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-2014-03R1, dated July 24, 2014, 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-2016-5044.

(2) 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 8-24-92, Revision A, dated April 11, 2014.

(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; Internet <http://www.bombardier.com>.

(4) You may view this service information at the FAA, Transport Airplane Directorate, 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 November 10, 2016.

Michael Kaszycki,
Acting Manager, Transport Airplane Directorate,
Aircraft Certification Service.



2016-24-02 The Boeing Company: Amendment 39-18719; Docket No. FAA-2016-5041; Directorate Identifier 2015-NM-102-AD.

(a) Effective Date

This AD is effective December 30, 2016.

(b) Affected ADs

None.

(c) Applicability

This AD applies to The Boeing Company Model 747-8 and 747-8F series airplanes, certificated in any category, as identified in Boeing Alert Service Bulletin 747-57A2348, Revision 1, dated February 26, 2016; except for line numbers 1435, 1506, and 1509, which were delivered with the terminating action already incorporated and are not affected by this AD.

(d) Subject

Air Transport Association (ATA) of America Code 57, Wings.

(e) Unsafe Condition

This AD was prompted by a report that static strength analysis has shown that the aluminum transmission aft bearing plate assemblies have inadequate structural strength for one or more of the required load cases, including cases for drive system jam, flap skew, and structural damage tolerance. Inadequate structural strength can result in damage to the transmission aft bearing plate assemblies. We are issuing this AD to prevent inadequate structural strength of transmission aft bearing plate assemblies. This condition could result in damaged transmission aft bearing plate assemblies, which could result in incorrect operation and departure of the flap from the airplane and consequent loss of controllability of the airplane.

(f) Compliance

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

(g) Replacement

Within 48 months after the effective date of this AD: Remove aluminum transmission aft bearing plate assemblies from the flap track and install new titanium transmission aft bearing plate assemblies to the flap track, in accordance with the Accomplishment Instructions of Boeing Alert Service Bulletin 747-57A2348, Revision 1, dated February 26, 2016.

(h) Credit for Previous Actions

This paragraph provides credit for the actions specified in paragraph (g) of this AD, if those actions were performed before the effective date of this AD using Boeing Alert Service Bulletin 747-57A2348, dated June 12, 2015.

(i) Alternative Methods of Compliance (AMOCs)

(1) The Manager, Seattle Aircraft Certification Office (ACO), FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the manager of the ACO, send it to the attention of the person identified in paragraph (j)(1) of this AD. Information may be emailed to: 9-ANM-Seattle-ACO-AMOC-Requests@faa.gov.

(2) Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office.

(3) An AMOC that provides an acceptable level of safety may be used for any repair, modification, or alteration required by this AD if it is approved by the Boeing Commercial Airplanes Organization Designation Authorization (ODA) that has been authorized by the Manager, Seattle ACO, 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 (i)(4)(i) and (i)(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.

(j) Related Information

(1) For more information about this AD, contact Bill Ashforth, Aerospace Engineer, Airframe Branch, ANM-120S, FAA, Seattle ACO, 1601 Lind Avenue SW., Renton, WA 98057-3356; phone: 425-917-6432; fax: 425-917-6590; email: bill.ashforth@faa.gov.

(2) 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 the AD specifies otherwise.

(i) Boeing Alert Service Bulletin 747-57A2348, Revision 1, dated February 26, 2016.

(ii) Reserved.

(3) For Boeing service information identified in this AD, contact Boeing Commercial Airplanes, Attention: Data & Services Management, P.O. Box 3707, MC 2H-65, Seattle, WA 98124-2207; telephone 206-544-5000, extension 1; fax 206-766-5680; Internet <https://www.myboeingfleet.com>.

(4) You may view this referenced service information at the FAA, Transport Airplane Directorate, 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 November 10, 2016.

Michael Kaszycki,
Acting Manager, Transport Airplane Directorate,
Aircraft Certification Service.