

**FEDERAL AVIATION ADMINISTRATION  
AIRWORTHINESS DIRECTIVES**

**LARGE AIRCRAFT**

**BIWEEKLY 2016-13**

*6/13/2016 - 6/26/2016*



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			
<b>Biweekly 2016-01</b>			
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
<b>Biweekly 2016-02</b>			
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)
<b>Biweekly 2016-03</b>			
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			
<b>Biweekly 2016-04</b>			
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
<b>Biweekly 2016-05</b>			
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
<b>Biweekly 2016-06</b>			
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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AD No.	Information	Manufacturer	Applicability
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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
<b>Biweekly 2016-07</b>			
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
<b>Biweekly 2016-08</b>			
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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AD No.	Information	Manufacturer	Applicability
Information Key: E - Emergency; COR - Correction; S – Supersedes, R - Replaces			
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
<b>Biweekly 2016-09</b>			
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
<b>Biweekly 2016-10</b>			
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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AD No.	Information	Manufacturer	Applicability
Information Key: E - Emergency; COR - Correction; S – Supersedes, R - Replaces			
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
<b>Biweekly 2016-11</b>			
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)
<b>Biweekly 2016-12</b>			
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
<b>Biweekly 2016-13</b>			
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		The Boeing Company	787-8 airplanes
2016-12-12	R 2008-05-18 R1	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



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**2016-11-14 Fokker Services B.V.:** Amendment 39-18541. Docket No. FAA-2015-8467; Directorate Identifier 2014-NM-107-AD.

**(a) Effective Date**

This AD is effective July 22, 2016.

**(b) Affected ADs**

None.

**(c) Applicability**

This AD applies to Fokker Services B.V. Model F.28 Mark 1000, 2000, 3000, and 4000 airplanes, certificated in any category, all serial numbers.

**(d) Subject**

Air Transport Association (ATA) of America Code 28, Fuel.

**(e) Reason**

This AD was prompted by a design review that revealed no controlled bonding provisions are present on a number of critical locations inside the fuel tanks or connected to the walls of the fuel tanks. We are issuing this AD to prevent an ignition source in the fuel tank vapor space, which 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) Installation of Bonding Provisions**

At the next scheduled opening of the fuel tanks after the effective date of this AD, but no later than 84 months after the effective date of this AD, install additional and improved bonding provisions in the fuel tanks, and do the applicable related investigative and corrective actions, in accordance with the Accomplishment Instructions of Fokker Proforma Service Bulletin SBF28-28-058, dated January 9, 2014; and Fokker F28 Appendix Service Bulletin SBF28-28-058/APP01, dated July 15, 2014.

**(h) Revision of Maintenance or Inspection Program**

Before further flight after completing the installation specified in paragraph (g) of this AD, or within 30 days after the effective date of this AD, whichever occurs later: Revise the airplane maintenance or inspection program, as applicable, by incorporating the fuel airworthiness limitation

items and critical design configuration control limitations (CDCCLs) specified in paragraph 1.L.(1)(c) of Fokker Proforma Service Bulletin SBF28-28-058, dated January 9, 2014. The initial compliance times for the tasks are at the latest of the times specified in paragraphs (h)(1), (h)(2), and (h)(3) of this AD.

(1) At the applicable time specified in Fokker Service Bulletin SBF28-28-050, Revision 3, dated December 11, 2014.

(2) Before further flight after completing the installation specified in paragraph (g) of this AD.

(3) Within 30 days after the effective date of this AD.

#### **(i) No Alternative Actions, Intervals, and CDCCLs**

After accomplishment of the revision required by paragraph (h) of this AD, no alternative actions (e.g., inspections), intervals, or CDCCLs may be used unless the actions, intervals, or CDCCLs are approved as an alternative method of compliance (AMOC) in accordance with the procedures specified in paragraph (j)(1) of this AD.

#### **(j) 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: Tom Rodriguez, Aerospace Engineer, International Branch, ANM-116, Transport Airplane Directorate, FAA, 1601 Lind Avenue SW., Renton, WA 98057-3356; telephone 425-227-1137; fax 425-227-1149. Information may be emailed to: 9-ANM-116-AMOC-REQUESTS@faa.gov. Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office. The AMOC approval letter must specifically reference this AD.

(2) Contacting the Manufacturer: For any requirement in this AD to obtain corrective actions from a manufacturer, the action must be accomplished using a method approved by the Manager, International Branch, ANM-116, Transport Airplane Directorate, FAA; or the European Aviation Safety Agency (EASA); or Fokker B.V. Service's EASA Design Organization Approval (DOA). If approved by the DOA, the approval must include the DOA-authorized signature.

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

Refer to Mandatory Continuing Airworthiness Information (MCAI) EASA Airworthiness Directive 2014-0108, dated May 8, 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-2015-8467.

#### **(l) Material Incorporated by Reference**

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

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

(i) Fokker F28 Appendix Service Bulletin SBF28-28-058/APP01, dated July 15, 2014.

(ii) Fokker Proforma Service Bulletin SBF28-28-058, dated January 9, 2014.

(iii) Fokker Service Bulletin SBF28-28-050, Revision 3, dated December 11, 2014.

(3) For service information identified in this AD, contact Fokker Services B.V., Technical Services Dept., P.O. Box 1357, 2130 EL Hoofddorp, the Netherlands; telephone +31 (0)88-6280-350; fax +31 (0)88-6280-111; email [technicalservices@fokker.com](mailto:technicalservices@fokker.com); Internet <http://www.myfokkerfleet.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 May 20, 2016.

Victor Wicklund,  
Acting Manager, Transport Airplane Directorate,  
Aircraft Certification Service.



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**2016-11-16 The Boeing Company:** Amendment 39-18543; Docket No. FAA-2011-0027; Directorate Identifier 2010-NM-127-AD.

**(a) Effective Date**

This AD is effective July 22, 2016.

**(b) Affected ADs**

This AD affects AD 2005-07-24, Amendment 39-14049 (70 FR 18285, April 11, 2005).

**(c) Applicability**

This AD applies to The Boeing Company Model 777-200 and -300 series airplanes, certificated in any category, equipped with Rolls-Royce Model RB211-Trent 800 engines.

**(d) Subject**

Air Transport Association (ATA) of America Code 78, Engine exhaust.

**(e) Unsafe Condition**

This AD was prompted by reports of thrust reverser (T/R) events related to thermal damage of the T/R inner wall. We are issuing this AD to detect and correct a degraded T/R inner wall panel. A degraded T/R inner wall panel could lead to failure of the T/R and adjacent components and their consequent separation from the airplane, which could result in a rejected takeoff (RTO) and cause asymmetric thrust and consequent loss of control of the airplane during reverse thrust operation. If a T/R inner wall overheats, separated components could cause structural damage to the airplane, damage to other airplanes, or possible injury to people on the ground.

**(f) Compliance**

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

**(g) Records Review, Inspections, and Related Investigative and Corrective Actions for Airplanes With Pre-Thermal Protection System (TPS) Insulation Blankets (Part Numbers (P/Ns) 315W5113-(XX) and 315W5010-(XX)) Installed**

For airplanes with pre-TPS insulation blankets, P/Ns 315W5113-(XX) and 315W5010-(XX): Except as required by paragraphs (h)(1), (h)(2), (h)(3), and (h)(4) of this AD, at the applicable time in paragraph 1.E., "Compliance," of Boeing Alert Service Bulletin 777-78A0065, Revision 2, dated May 6, 2010, review the airplane maintenance records to determine whether sealant was added to insulation blankets around the compression pad fittings and the powered door opening system (PDOS) fitting; do the applicable actions specified in paragraphs (g)(1), (g)(2), (g)(3), (g)(4), (g)(5), and (g)(6) of this AD; and do all applicable related investigative and corrective actions; in accordance

with the applicable work packages of the Accomplishment Instructions of Boeing Alert Service Bulletin 777-78A0065, Revision 2, dated May 6, 2010, except as required by paragraph (h)(5) of this AD. Do all applicable related investigative and corrective actions before further flight. Repeat the applicable inspections, replacement, and installations required by paragraphs (g)(1), (g)(2), (g)(3), (g)(4), (g)(5), and (g)(6) of this AD thereafter at the applicable intervals specified in paragraph 1.E., "Compliance," of Boeing Alert Service Bulletin 777-78A0065, Revision 2, dated May 6, 2010.

(1) Do a detailed inspection of all T/R inner wall insulation blanket edges, grommet holes, penetrations, and seams for sealant that is cracked, has gaps, is loose, or is missing; do a general visual inspection of click bond studs, blanket studs, and temporary fasteners; and replace sealant as applicable.

(2) Do the actions specified by either paragraph (g)(2)(i) or (g)(2)(ii) of this AD.

(i) Do a full inner wall panel nondestructive test (NDT) inspection for delamination and disbonding of each T/R half, and do a general visual inspection for areas of thermal degradation.

(ii) Do a limited area NDT inspection of the inner wall panel of each T/R half for delamination and disbonding, and do a general visual inspection for areas of thermal degradation.

(3) Do a general visual inspection of the T/R perforated wall aft of the intermediate pressure compressor 8th stage (IP8) and the high pressure compressor 3rd stage (HP3) bleed port exits for a color that is different from that of the general area.

(4) Do a detailed inspection of the PDOS lug bushings on the upper number 1 compression pad fittings to detect hole elongation, deformation, and contact with the PDOS actuator; and install a PDOS actuator rod and sealant.

(5) Do an NDT inspection for unsatisfactory number 1 upper and numbers 1 and 2 lower compression pad fittings.

(6) Install and seal insulation blankets.

**(h) Exceptions to Specifications of Boeing Alert Service Bulletin 777-78A0065, Revision 2, Dated May 6, 2010**

(1) Where paragraph 1.E., "Compliance," of Boeing Alert Service Bulletin 777-78A0065, Revision 2, dated May 6, 2010, specifies a compliance time "after the date on the original issue of this service bulletin," this AD requires compliance within the specified compliance time after the effective date of this AD.

(2) Where table 2 of paragraph 1.E., "Compliance," in Boeing Alert Service Bulletin 777-78A0065, Revision 2, dated May 6, 2010, specifies a compliance time of "2,000 flight cycles after the date of the operator's own inspections," for doing Work Packages 2 and 5, or Work Packages 5 and 6, this AD requires compliance within 2,000 flight cycles after the date of the operator's own inspections, or within 12 months after the effective date of this AD, whichever occurs later.

(3) Where the Condition column in table 2 of paragraph 1.E., "Compliance," of Boeing Alert Service Bulletin 777-78A0065, Revision 2, dated May 6, 2010, refers to a T/R half that has or has not been inspected before "the date on this service bulletin," this AD requires compliance for each corresponding T/R half that has or has not been inspected before the effective date of this AD.

(4) Where the Condition column in tables 2 and 3 of paragraph 1.E., "Compliance," of Boeing Alert Service Bulletin 777-78A0065, Revision 2, dated May 6, 2010, refers to "total flight cycles," this AD applies to each T/R half with the specified total flight cycles as of the effective date of this AD.

(5) Where Boeing Alert Service Bulletin 777-78A0065, Revision 2, dated May 6, 2010, specifies to contact Boeing for appropriate action: Before further flight, repair using a method approved in accordance with the procedures specified in paragraph (r) of this AD.

**(i) Repetitive NDT and Additional Inspections for Airplanes With TPS Insulation Blankets (P/N 315W5115-(XX)) Installed**

For airplanes with TPS insulation blankets, P/N 315W5115-(XX): Within 2,000 flight cycles after doing any NDT inspection specified in Boeing Special Attention Service Bulletin 777-78-0071; or within 2,000 flight cycles after doing any NDT inspection specified in Boeing Service Bulletin 777-78-0082; or within 30 days after the effective date of this AD; whichever occurs latest; do the inspections specified in paragraphs (i)(1) and (i)(2) of this AD, and do all applicable related investigative and corrective actions, in accordance with the Accomplishment Instructions of Boeing Special Attention Service Bulletin 777-78-0071, Revision 2, dated July 23, 2013, or in accordance with the Accomplishment Instructions of Boeing Service Bulletin 777-78-0082, Revision 1, dated June 15, 2015, as applicable; except as required by paragraph (m) of this AD. Do all applicable related investigative and corrective actions before further flight. Repeat the inspections specified in paragraphs (i)(1) and (i)(2) of this AD thereafter at the applicable time specified in paragraph 1.E., "Compliance," of Boeing Special Attention Service Bulletin 777-78-0071, Revision 2, dated July 23, 2013; or Boeing Service Bulletin 777-78-0082, Revision 1, dated June 15, 2015; as applicable.

(1) Do an NDT inspection of the full T/R inner wall panel for delaminations and disbonds.

(2) Do a detailed inspection of the perforated side of the T/R inner wall aft of the IP8 and the HP3 bleed port exits for color that is different from the normal T/R perforated wall color.

**(j) Concurrent Requirements for Paragraph (i) of This AD**

For airplanes with TPS insulation blankets, P/N 315W5115-(XX), on which any action specified in Boeing Special Attention Service Bulletin 777-78-0071 have been done but the actions specified in paragraphs (j)(1) and (j)(2) of this AD have not been done: Prior to or concurrently with doing the inspection required by paragraph (i) of this AD, do the actions specified in paragraphs (j)(1) and (j)(2) of this AD, in accordance with the Accomplishment Instructions of Boeing Special Attention Service Bulletin 777-78-0071, Revision 2, dated July 23, 2013, except as required by paragraph (m) of this AD.

(1) Install click bond covers and bracket and replace the washers.

(2) Do a detailed inspection of the compression fitting for incorrect pin orientation, and do all applicable related investigative and corrective actions. Do all applicable related investigative and corrective actions before further flight.

**(k) Repetitive Electronic Engine Control (EEC) Wire Bundle Inspections for Airplanes With TPS Insulation Blankets (P/N 315W5115-(XX)) Installed**

For airplanes with TPS insulation blankets, P/N 315W5115-(XX): Do the inspections specified in paragraphs (k)(1) or (k)(2) of this AD, as applicable.

(1) For airplanes on which any inspection specified in Boeing Special Attention Service Bulletin 777-78-0071 has been done: Within 2,000 flight hours after doing a detailed inspection of the EEC wire bundles and clips as specified in Boeing Special Attention Service Bulletin 777-78-0071, or within 500 flight hours after the effective date of this AD, whichever occurs later; do a detailed inspection of the EEC wire bundles and clips for damage, and do all applicable corrective actions, in accordance with the Accomplishment Instructions of Boeing Special Attention Service Bulletin 777-78-0071, Revision 2, dated July 23, 2013, except as required by paragraph (m) of this AD. Do all applicable corrective actions before further flight. Repeat the inspection thereafter at the applicable time specified in table 5 of paragraph 1.E., "Compliance," of Boeing Special Attention Service Bulletin 777-78-0071, Revision 2, dated July 23, 2013.

(2) For airplanes on which any inspection specified in Boeing Service Bulletin 777-78-0082, has been done: Within 2,000 flight hours after doing a detailed inspection of the EEC wire bundles and clips as specified in Boeing Special Attention Service Bulletin 777-78-0082, or within 500 flight

hours after the effective date of this AD, whichever occurs later; do a detailed inspection for damage of the EEC wire bundles and clips, and do all applicable corrective actions, in accordance with the Accomplishment Instructions of Boeing Service Bulletin 777-78-0082, Revision 1, dated June 15, 2015, except as required by paragraph (m) of this AD. Do all applicable corrective actions before further flight. Repeat the inspection thereafter at the applicable time specified in table 5 of paragraph 1.E., "Compliance," of Boeing Service Bulletin 777-78-0082, Revision 1, dated June 15, 2015.

**(l) T/R Inner Wall Installation**

Within 48 months after the effective date of this AD: Install serviceable T/R halves, in accordance with the Accomplishment Instructions of Boeing Alert Service Bulletin 777-78A0094, dated July 29, 2014, except as required by paragraph (m) of this AD. The definition of a serviceable T/R half is specified in Boeing Alert Service Bulletin 777-78A0094, dated July 29, 2014. Accomplishing the installation specified in this paragraph and the revision to the maintenance or inspection program required by paragraph (n) of this AD terminates the actions required by paragraphs (g), (i), (j), and (k) of this AD.

**(m) Exceptions to Service Information Specified in Paragraphs (i), (j), (k), and (l) of This AD**

Where Boeing Alert Service Bulletin 777-78A0094, dated July 29, 2014; Boeing Service Bulletin 777-78-0082, Revision 1, dated June 15, 2015; and Boeing Special Attention Service Bulletin 777-78-0071, Revision 2, dated July 23, 2013; specify to contact Boeing for appropriate action: Before further flight, repair using a method approved in accordance with the procedures specified in paragraph (r) of this AD.

**(n) Revise the Maintenance or Inspection Program**

Within 30 days after the effective date of this AD, revise the maintenance or inspection program, as applicable, to incorporate Airworthiness Limitations 78-AWL-01, Thrust Reverser Thermal Protection System; and 78-AWL-02, Thrust Reverser Inner Wall; as specified in Boeing 777 Maintenance Planning Data (MPD) Document, Section 9, Airworthiness Limitations (AWLs) and Certification Maintenance Requirements (CMRs), D622W001-9, Revision dated November 2015. The initial compliance times for AWLs 78-AWL-01, Thrust Reverser Thermal Protection System, and 78-AWL-02, Thrust Reverser Inner Wall, as specified in Boeing 777 MPD Document, Section 9, AWLs and CMRs, D622W001-9, Revision dated November 2015, are at the applicable time specified in paragraph (n)(1) or (n)(2) of this AD.

(1) For airplanes on which any inspections required by paragraph (i) of this AD are done: Concurrent with the next inspection required by paragraph (i) of this AD, or within 30 days after the effective date of this AD, whichever occurs later.

(2) For airplanes on which the installation required by paragraph (l) of this AD is done: At the later of the times specified in paragraph (n)(2)(i) and (n)(2)(ii) of this AD.

(i) Within 1,125 days or 6,000 flight cycles, whichever occurs first after accomplishing the installation required by paragraph (l) of this AD.

(ii) Within 30 days after the effective date of this AD.

**(o) No Alternative Actions or Intervals**

After the maintenance or inspection program, as applicable, has been revised as required by paragraph (n) 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 (r) of this AD.

**(p) Credit for Previous Actions**

(1) 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 777-78A0065, dated June 23, 2008; or Boeing Alert Service Bulletin 777-78A0065, Revision 1, dated January 29, 2009. This service information is not incorporated by reference in this AD.

(2) This paragraph provides credit for the actions specified in paragraph (i) of this AD, if those actions were performed before the effective date of this AD using any service information specified in paragraphs (p)(2)(i), (p)(2)(ii), and (p)(2)(iii) of this AD. This service information is not incorporated by reference in this AD.

(i) Boeing Service Bulletin 777-78-0082, dated November 9, 2011.

(ii) Boeing Special Attention Service Bulletin 777-78-0071, dated November 25, 2009.

(iii) Boeing Special Attention Service Bulletin 777-78-0071, Revision 1, dated September 8, 2010.

(3) This paragraph provides credit for the actions specified in paragraph (j) of this AD, if those actions were performed before the effective date of this AD using Boeing Special Attention Service Bulletin 777-78-0071, Revision 1, dated September 8, 2010. This service information is not incorporated by reference in this AD.

(4) This paragraph provides credit for the actions specified in paragraph (k)(2) of this AD, if those actions were performed before the effective date of this AD using Boeing Service Bulletin 777-78-0082, dated November 9, 2011. This service information is not incorporated by reference in this AD.

(5) This paragraph provides credit for the actions specified in paragraph (n) of this AD, if those actions were performed before the effective date of this AD using Boeing 777 MPD Document, Section 9, AWLs and CMRs, D622W001-9, Revision dated October 2014. This service information is not incorporated by reference in this AD.

**(q) Terminating Action for AD 2005-07-24, Amendment 39-14049 (70 FR 18285, April 11, 2005)**

Accomplishing the actions specified in paragraph (q)(1), (q)(2), or (q)(3) of this AD terminates the actions required by paragraphs (f), (g), and (h) of AD 2005-07-24, Amendment 39-14049 (70 FR 18285, April 11, 2005).

(1) The actions required by paragraph (g) of this AD.

(2) The inspections required by paragraphs (i) and (k) of this AD, and, as applicable, the actions required by paragraph (j) of this AD.

(3) The installation specified in paragraph (l) of this AD.

**(r) 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 (s)(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.

**(s) Related Information**

(1) For more information about this AD, contact Kevin Nguyen, Aerospace Engineer, Propulsion Branch, ANM-140S, FAA, Seattle ACO, 1601 Lind Avenue SW., Renton, Washington 98057-3356; phone: 425-917-6501; fax: 425-917-6590; email: kevin.nguyen@faa.gov.

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

**(t) 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 777-78A0065, Revision 2, dated May 6, 2010.

(ii) Boeing Alert Service Bulletin 777-78A0094, dated July 29, 2014.

(iii) Boeing Service Bulletin 777-78-0082, Revision 1, dated June 15, 2015.

(iv) Boeing Special Attention Service Bulletin 777-78-0071, Revision 2, dated July 23, 2013.

(v) Boeing 777 Maintenance Planning Data (MPD) Document, Section 9, Airworthiness Limitations (AWLs) and Certification Maintenance Requirements (CMRs), D622W001-9, Revision dated November 2015.

(3) For 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 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 May 20, 2016.

Victor Wicklund,  
Acting Manager, Transport Airplane Directorate,  
Aircraft Certification Service.



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**2016-11-19 Airbus:** Amendment 39-18546; Docket No. FAA-2016-3988; Directorate Identifier 2015-NM-130-AD.

**(a) Effective Date**

This AD is effective July 22, 2016.

**(b) Affected ADs**

None.

**(c) Applicability**

This AD applies to the airplanes identified in paragraphs (c)(1) and (c)(2) of this AD, certificated in any category, all manufacturer serial numbers.

(1) Airbus Model A330-201, -202, -203, -223, -223F, -243, -243F, -301, -302, -303, -321, -322, -323, -341, -342, and -343 airplanes; except airplanes on which Airbus Modification 203672 has been embodied in production.

(2) Airbus Model A340-211, -212, -213, -311, -312, -313, -541, and -642 airplanes.

**(d) Subject**

Air Transport Association (ATA) of America Code 25, Equipment/Furnishings.

**(e) Reason**

This AD was prompted by reports of chafing of the feeder cable at the pylon-wing junction due to vibration; one report revealed that the cable loom plastic support bracket of the G-route was broken due to vibration; and another report revealed wire chafing due to clamp damage. We are issuing this AD to prevent chafing of the wiring in the pylon-wing area, which could result in an electrical short circuit near a flammable fluid vapor zone, and consequent fire or fuel tank explosion.

**(f) Compliance**

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

**(g) Modification of the Feeder Cable**

Within 18 months after the effective date of this AD: Modify the cable loom support bracket of the G-route 7701VB in the left-hand side of the inboard pylon, and the G-route 7702VB in the right-hand side of the inboard pylon, located at the pylon-wing junction, in accordance with the applicable service information specified in paragraphs (g)(1), (g)(2), and (g)(3) of this AD.

(1) Airbus Service Bulletin A330-92-3132, Revision 01, dated May 21, 2015.

(2) Airbus Service Bulletin A340-92-4100, Revision 01, dated May 21, 2015.

(3) Airbus Service Bulletin A340-92-5066, dated June 25, 2014.

**(h) Credit for Previous Actions**

This paragraph provides credit for the modification required by paragraph (g) of this AD, if the modification was performed before the effective date of this AD using Airbus Service Bulletin A330-92-3132, dated June 19, 2014; or Airbus Service Bulletin A340-92-4100, dated June 19, 2014; as applicable. This service information is not incorporated by reference in this AD.

**(i) 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. 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: 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.

**(j) Related Information**

(1) Refer to Mandatory Continuing Airworthiness Information (MCAI) EASA Airworthiness Directive 2015-0142, dated July 17, 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-2016-3988.

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

(3) The following service information was approved for IBR on July 22, 2016.

(i) Airbus Service Bulletin A330-92-3132, Revision 01, dated May 21, 2015.

(ii) Airbus Service Bulletin A340-92-4100, Revision 01, dated May 21, 2015.

(iii) Airbus Service Bulletin A340-92-5066, dated June 25, 2014.

(4) 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](mailto:airworthiness.A330-A340@airbus.com); Internet <http://www.airbus.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 May 26, 2016.

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



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**2016-12-04 Airbus:** Amendment 39-18553. Docket No. FAA-2015-3635; Directorate Identifier 2015-NM-037-AD.

**(a) Effective Date**

This AD becomes effective July 20, 2016.

**(b) Affected ADs**

None.

**(c) Applicability**

This AD applies to the Airbus airplanes specified in paragraphs (c)(1) through (c)(4) of this AD, certificated in any category, all manufacturer serial numbers.

- (1) Airbus Model A318-111, -112, -121, and -122 airplanes.
- (2) Airbus Model A319-111, -112, -113, -114, -115, -131, -132, and -133 airplanes.
- (3) Airbus Model A320-211, -212, -214, -231, -232, and -233 airplanes.
- (4) Airbus Model A321-111, -112, -131, -211, -212, -213, -231, and -232 airplanes.

**(d) Subject**

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

**(e) Reason**

This AD was prompted by an evaluation by the design approval holder (DAH) indicating that certain structural repair manual (SRM) inspection requirements for the fuselage skin repairs are insufficient to detect cracks. We are issuing this AD to detect and correct fatigue cracking of the fuselage skin, which could result in reduced structural integrity of the airplane.

**(f) Compliance**

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

**(g) Inspection To Determine Repair Areas**

At the applicable time specified in paragraph (g)(1) or (g)(2) of this AD: Do an inspection to determine whether any fuselage external skin (doubler) repairs have been accomplished on fuselage sections 11, 12, 13, 14, 16, and 17 with a skin thickness of 1.2 millimeters. A review of airplane maintenance records is acceptable in lieu of this inspection if the identification of applicable repairs can be conclusively determined from that review.

(1) For Model A319, A320, and A321 series airplanes: Except as specified in paragraphs (h)(1) and (h)(2) of this AD, at the applicable time specified in paragraphs 4.1.1.b. and 4.1.1.c. of the

"Accomplishment Timescale" of Airbus Alert Operators Transmission (AOT) A53N007-14, dated July 22, 2014, or within 350 flight cycles after the effective date of this AD, whichever occurs later.

(2) For Model A318 series airplanes: Except as specified in paragraphs (h)(1) and (h)(2) of this AD, at the Model A319 airplane time specified in paragraphs 4.1.1.b. and 4.1.1.c. of the "Accomplishment Timescale" of Airbus AOT A53N007-14, dated July 22, 2014, or within 350 flight cycles after the effective date of this AD, whichever occurs later.

#### **(h) Exceptions to Service Information**

(1) Where paragraphs 4.1.1.b. and 4.1.1.c. of the "Accomplishment Timescale" of Airbus AOT A53N007-14, dated July 22, 2014, specify "FC," this AD specifies "flight cycles."

(2) Where paragraphs 4.1.1.b. and 4.1.1.c. of the "Accomplishment Timescale" of Airbus AOT A53N007-14, dated July 22, 2014, specify "from AOT issuance," this AD specifies "as of the effective date of this AD."

#### **(i) Inspection for Cracking**

If, during the inspection required by paragraph (g) of this AD, it is determined that any fuselage external skin (doubler) repair has been accomplished on fuselage section 11, 12, 13, 14, 16, or 17: At the applicable time specified paragraph (g)(1) or (g)(2) of this AD, do an external ultrasonic inspection or an internal low frequency eddy current (LFEC) inspection for cracking of all of the repaired 1.2-millimeter (mm) fuselage skin areas, in accordance with the instructions specified in paragraph 4.2.2, "Inspection Requirements," of Airbus AOT A53N007-14, dated July 22, 2014, except as provided by paragraph (j) of this AD.

#### **(j) Optional Inspection for Cracking**

As an optional method of compliance to the ultrasonic inspection or LFEC inspection required by paragraph (i) of this AD: Do a high frequency eddy current (HFEC) inspection for cracking in the cut-out surrounding the fastener area, at and in front (approximately 10-15 millimeters) of the fastener row, after doubler removal and before any new extended doubler installation, 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).

#### **(k) Optional Repetitive Inspections**

In lieu of doing the inspection required by paragraph (i) of this AD: Within the applicable compliance time specified in paragraph 4.1.1, "Accomplishment Timescale," of Airbus AOT A53N007-14, dated July 22, 2014, after accomplishing the inspections required by paragraph (g) of this AD, do a detailed inspection or HFEC inspection and repeat the inspection thereafter within the applicable compliance times specified in paragraph 4.1.1, "Accomplishment Timescale," of Airbus AOT A53N007-14, dated July 22, 2014. The inspections must be done in accordance with the instructions of paragraph 4.2.2, "Inspection Requirements," of Airbus AOT A53N007-14, dated July 22, 2014. For Model A318 series airplanes, use the applicable compliance times and instructions specified in Airbus AOT A53N007-14, dated July 22, 2014, that are specified for Model A319 series airplanes.

#### **(l) Repair**

If any crack is found during any inspection required by paragraph (i), (j), or (k) of this AD: Before further flight, repair the cracking, in accordance with the instructions of paragraph 4.2.3,

"Findings," of Airbus AOT A53N007-14, dated July 22, 2014, except where Airbus AOT A53N007-14, dated July 22, 2014, specifies to contact Airbus for a repair design approval sheet or for further instructions, this AD requires repair using a method approved by the Manager, International Branch, ANM-116, Transport Airplane Directorate, FAA; or the EASA; or Airbus's EASA DOA.

**(m) FAA-Approved Maintenance or Inspection Program Revision**

Concurrently with the accomplishment of any repair required by paragraph (l) of this AD, revise the post-repair inspection threshold(s) in the applicable FAA-approved maintenance program or inspection program, as applicable, in accordance with the instructions specified in paragraph 4.1.1, "Accomplishment Timescale," of Airbus AOT A53N007-14, dated July 22, 2014; except for Model A318 series airplanes use the instructions specified for Model A319 series airplanes.

**(n) 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: Sanjay Ralhan, Aerospace Engineer, International Branch, ANM-116, Transport Airplane Directorate, FAA, 1601 Lind Avenue SW., Renton, WA 98057-3356; telephone 425-227-1405; fax 425-227-1149. Information may be emailed to: 9-ANM-116-AMOC-REQUESTS@faa.gov. Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office.

(2) Contacting the Manufacturer: For any requirement in this AD to obtain corrective actions from a manufacturer, the action must be accomplished using a method approved by the Manager, International Branch, ANM-116, Transport Airplane Directorate, FAA; or the EASA; or Airbus's EASA DOA. If approved by the DOA, the approval must include the DOA-authorized signature.

**(o) Related Information**

(1) Refer to Mandatory Continuing Airworthiness Information (MCAI) EASA Airworthiness Directive 2015-0036R1, dated March 31, 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-2015-3635.

**(p) Material Incorporated by Reference**

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

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

(i) Airbus Alert Operators Transmission A53N007-14, dated July 22, 2014.

(ii) Reserved.

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

(4) You may view this service information at the FAA, Transport 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 May 31, 2016.  
Michael Kaszycki,  
Acting Manager, Transport Airplane Directorate,  
Aircraft Certification Service.



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**2016-12-05 Saab AB, Saab Aeronautics (Formerly Known as Saab AB, Saab Aerosystems):**  
Amendment 39-18554. Docket No. FAA-2015-7524; Directorate Identifier 2014-NM-231-AD.

**(a) Effective Date**

This AD is effective July 20, 2016.

**(b) Affected ADs**

This AD replaces AD 2014-15-04, Amendment 39-17906 (79 FR 45337, August 5, 2014) ("AD 2014-15-04").

**(c) Applicability**

This AD applies to Saab AB, Saab Aeronautics (formerly known as Saab AB, Saab Aerosystems) Model SAAB 2000 airplanes, certificated in any category, serial numbers 004 through 016 inclusive, 018, 022, 023, 024, 026, 029, 031, 032, 033, 035 through 039 inclusive, 041 through 044 inclusive, 046, 047, 048, 051, and 053 through 063 inclusive.

**(d) Subject**

Air Transport Association (ATA) of America Code 38, Water/Waste.

**(e) Reason**

This AD was prompted by a report of rudder pedal restriction which was the result of water leakage at the inlet tubing of an in-line heater in the lower part of the forward fuselage. This AD was also prompted by the development of a modification that would address the unsafe condition. We are issuing this AD to prevent rudder pedal restriction due to the pitch control mechanism becoming frozen as the result of water spray, which could prevent disconnection of the pitch control mechanism and normal pitch control, and consequently result in reduced controllability of the airplane.

**(f) Compliance**

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

**(g) Retained Deactivation of Potable Water System With New Exception**

This paragraph restates the requirements of paragraph (g) of AD 2014-15-04, with a new exception. Except as provided by paragraph (l) of this AD, within 30 days after September 9, 2014 (the effective date of AD 2014-15-04), deactivate the potable water system, in accordance with the Accomplishment Instructions of Saab Service Bulletin 2000-38-010, dated July 12, 2013.

### **(h) Retained Alternative to Deactivation of Potable Water System With No Changes**

This paragraph restates the requirements of paragraph (h) of AD 2014-15-04, with no changes. As an alternative, or subsequent, to the action required by paragraph (g) of this AD, during each filling of the potable water system after September 9, 2014, accomplish the temporary filling procedure, in accordance with the instructions in Saab Service Newsletter SN 2000-1304, Revision 01, dated September 10, 2013, including Attachment 1 Engineering Statement to Operator 2000PBS034334, Issue A, dated September 9, 2013.

### **(i) New Inspection and Installation**

At the applicable compliance times specified in paragraphs (j)(1) and (j)(2) of this AD, concurrently accomplish the actions specified in paragraphs (i)(1) and (i)(2) of this AD, in accordance with the Accomplishment Instructions of Saab Service Bulletin 2000-38-011, dated October 22, 2014.

(1) Do a detailed inspection for correct brazing of the in-line heater, and if any discrepancy is found, before further flight, and before accomplishment of the modification required by paragraph (i)(2) of this AD, accomplish all applicable corrective actions.

(2) Install a shrink tube on the water line and a spray shield on the in-line heater.

### **(j) Compliance Times for Inspection and Installation**

Do the actions specified in paragraph (i) of this AD at the applicable times specified in paragraphs (j)(1) and (j)(2) of this AD.

(1) For airplanes having had the potable water system reactivated and operated using the alternative filling procedure specified in Saab Service Newsletter SN 2000-1304, Revision 01, dated September 10, 2013, including Attachment 1 Engineering Statement to Operator 2000PBS034334, Issue A, dated September 9, 2013: Within 6 months after the effective date of this AD.

(2) For airplanes having the potable water system deactivated using procedures specified in the Accomplishment Instructions of Saab Service Bulletin 2000-38-010, dated July 12, 2013: Before further flight after the reactivation of the potable water system.

### **(k) Terminating Actions for the Deactivation of the Potable Water System**

Accomplishing the actions required by paragraph (i) of this AD terminates the requirements of paragraphs (g) and (h) of this AD.

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

The following provisions also apply to this AD:

(1) Alternative Methods of Compliance (AMOCs): The Manager, ANM-116, International Branch, 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: Shahram Daneshmandi, Aerospace Engineer, International Branch, ANM-116, Transport Airplane Directorate, FAA, 1601 Lind Avenue SW., Renton, WA 98057-3356; telephone 425-227-1112; 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. The AMOC approval letter must specifically reference this AD.

(ii) AMOCs approved previously in accordance with AD 2014-15-04 are approved as AMOCs for the corresponding provisions of paragraphs (g) and (h) 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 Saab AB, Saab Aeronautics' EASA Design Organization Approval (DOA). If approved by the DOA, the approval must include the DOA-authorized signature.

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

Refer to Mandatory Continuing Airworthiness Information (MCAI) European Aviation Safety Agency Airworthiness Directive 2014-0255, dated November 25, 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-2015-7524.

### **(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.

(3) The following service information was approved for IBR on July 20, 2016.

(i) Saab Service Bulletin 2000-38-011, dated October 22, 2014.

(ii) Reserved.

(4) The following service information was approved for IBR on September 9, 2014 (79 FR 45337, August 5, 2014).

(i) Saab Service Bulletin 2000-38-010, dated July 12, 2013.

(ii) Saab Service Newsletter SN 2000-1304, Revision 01, dated September 10, 2013, including Attachment 1 Engineering Statement to Operator 2000PBS034334, Issue A, dated September 9, 2013.

(5) For service information identified in this AD, contact Saab AB, Saab Aeronautics, SE-581 88, Linköping, Sweden; telephone +46 13 18 5591; fax +46 13 18 4874; email [saab340techsupport@saabgroup.com](mailto:saab340techsupport@saabgroup.com); Internet <http://www.saabgroup.com>.

(6) 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.

(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 May 31, 2016.

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



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**2016-12-09 Airbus:** Amendment 39-18558. Docket No. FAA-2016-6899; Directorate Identifier 2016-NM-066-AD.

**(a) Effective Date**

This AD is effective June 29, 2016.

**(b) Affected ADs**

This AD replaces AD 2016-09-11, Amendment 39-18509 (81 FR 27986, May 9, 2016) ("AD 2016-09-11").

**(c) Applicability**

This AD applies to the airplanes identified in paragraphs (c)(1) and (c)(2) of this AD, certificated in any category, all manufacturer serial numbers, except those on which Airbus Modification (Mod) 55792 or Mod 55306 has been embodied in production, and except those on which Airbus Repair Instruction R57115092 has been embodied in service on both right-hand (RH) and left-hand (LH) sides.

(1) Airbus Model A330-201, -202, -203, -223, -223F, -243 -243F, -301, -302, -303, -321, -322, -323, -341, -342, and -343 airplanes.

(2) Airbus Model A340-211, -212, -213, -311, -312, and -313 airplanes.

**(d) Subject**

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

**(e) Reason**

This AD was prompted by reports that cracks were found on an adjacent hole of certain frames of the center wing box (CWB). We are issuing this AD to detect and correct cracking on certain holes of the CWB, which could affect the structural integrity of the airplane.

**(f) Compliance**

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

**(g) Inspection**

Do a rototest inspection of the fastener holes at the frame (FR) 40 vertical web, on both sides, as specified in paragraphs (g)(1) through (g)(6) of this AD, except as required by paragraph (k) of this AD.

(1) For Model A330-300 series airplanes in pre-mod 44360 configuration: At the later of the times specified in paragraphs (g)(1)(i) and (g)(1)(ii) of this AD, inspect below the CWB lower panel

reference, in accordance with the Accomplishment Instructions of Airbus Service Bulletin A330-57-3114, dated March 12, 2013.

(i) At the applicable time specified in paragraph 1.E., "Compliance" of Airbus Service Bulletin A330-57-3114, dated March 12, 2013.

(ii) Within 2,400 flight cycles or 24 months after the effective date of this AD, whichever occurs first.

(2) For Model A330-200 and -300 series airplanes in post-mod 44360 and pre-mod 49202 configuration: At the later of the times specified in paragraphs (g)(2)(i) and (g)(2)(ii) of this AD, inspect below the CWB lower panel reference, in accordance with the Accomplishment Instructions of Airbus Service Bulletin A330-57-3116, dated March 12, 2013.

(i) At the applicable time specified in paragraph 1.E., "Compliance," of Airbus Service Bulletin A330-57-3116, dated March 12, 2013.

(ii) Within 2,400 flight cycles or 24 months after the effective date of this AD, whichever occurs first.

(3) For Model A330-200 and -300 series airplanes in pre-mod 55306 and pre-mod 55792 configuration: At the later of the times specified in paragraphs (g)(3)(i) and (g)(3)(ii) of this AD, inspect above the CWB lower panel reference, in accordance with the Accomplishment Instructions of Airbus Service Bulletin A330-57-3115, dated April 4, 2013.

(i) At the applicable time specified in paragraph 1.E., "Compliance" of Airbus Service Bulletin A330-57-3115, dated April 4, 2013.

(ii) Within 2,400 flight cycles or 24 months after the effective date of this AD, whichever occurs first.

(4) For Model A340-200 and -300 series airplanes in pre-mod 44360 configuration: At the later of the times specified in paragraphs (g)(4)(i) and (g)(4)(ii) of this AD, inspect below the CWB lower panel reference, in accordance with the Accomplishment Instructions of Airbus Service Bulletin A340-57-4123, dated March 12, 2013.

(i) At the applicable time specified in paragraph 1.E., "Compliance" of Airbus Service Bulletin A330-57-4123, dated March 12, 2013.

(ii) Within 1,300 flight cycles or 24 months after the effective date of this AD, whichever occurs first.

(5) For Model A340-200 and -300 series airplanes in pre-mod 55306 and pre-mod 55792 configuration: At the later of the times specified in paragraphs (g)(5)(i) and (g)(5)(ii) of this AD, inspect above the CWB lower panel reference, in accordance with the Accomplishment Instructions of Airbus Service Bulletin A340-57-4124, Revision 01, dated August 22, 2013.

(i) At the applicable time specified in paragraph 1.E., "Compliance," of Airbus Service Bulletin A340-57-4124, Revision 01, dated August 22, 2013.

(ii) Within 1,300 flight cycles or 24 months after the effective date of this AD, whichever occurs first.

(6) For Model A340-200 and -300 series airplanes in post-mod 44360 and pre-mod 49202 configuration: At the later of the times specified in paragraphs (g)(6)(i) and (g)(6)(ii) of this AD, inspect below the CWB lower panel reference, in accordance with the Accomplishment Instructions of Airbus Service Bulletin A340-57-4125, dated March 12, 2013.

(i) At the applicable time specified in paragraph 1.E., "Compliance," of Airbus Service Bulletin A340-57-4125, dated March 12, 2013.

(ii) Within 1,300 flight cycles or 24 months after the effective date of this AD, whichever occurs first.

#### **(h) Follow-On Actions: No Cracking**

If no crack is found during any inspection required by paragraph (g) of this AD, do the actions specified in paragraphs (h)(1) and (h)(2) of this AD.

(1) Before further flight, install new fasteners in the transition fit, in accordance with the Accomplishment Instructions of the applicable service information identified in paragraph (g) of this AD.

(2) Repeat the inspection required by paragraph (g) of this AD thereafter at the applicable time identified in paragraph 1.E., "Compliance," of the applicable service information identified in paragraph (g) of this AD.

**(i) Follow-On Actions: Crack Findings**

If any crack is found during any inspection required by paragraph (g) of this AD: Before further flight, oversize the holes to the first oversize in comparison with the current hole diameter, and do a rototest inspection for cracks, in accordance with the Accomplishment Instructions of the applicable service information identified in paragraph (g) of this AD.

(1) If no cracking is found during the rototest inspection required by paragraph (i) of this AD, do the actions specified in paragraphs (i)(1)(i) and (i)(1)(ii) of this AD.

(i) Before further flight: Install new fasteners in the transition fit, in accordance with the Accomplishment Instructions of the applicable service information identified in paragraph (g) of this AD.

(ii) Repeat the inspection required by paragraph (g) of this AD thereafter at the applicable time identified in paragraph 1.E., "Compliance," of the applicable service information identified in paragraph (g) of this AD.

(2) If cracking is found during the rototest inspection required by paragraph (i) of this AD: Before further flight, repair 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).

**(j) Terminating Action Specifications**

Accomplishment of the initial and repetitive inspections required by this AD terminates accomplishment of Airworthiness Limitation Items Tasks 57-11-04 and 57-11-02 of the Airworthiness Limitation Section (ALS) Part 2, Damage Tolerant Airworthiness Limitation Items (DT ALI).

(1) Installation of new fasteners, as specified in paragraph (h)(1) of this AD, does not terminate the repetitive inspections required by paragraph (g) of this AD.

(2) Accomplishment of the corrective actions specified in the introductory text of paragraph (i) and paragraph (i)(1) of this AD does not terminate the repetitive inspections required by paragraph (g) of this AD.

(3) Accomplishment of the repair specified in paragraph (i)(2) of this AD does not terminate repetitive inspections required by paragraph (g) of this AD, unless the approved repair method specifies otherwise.

**(k) Exceptions to Service Information**

(1) If the applicable service information identified in paragraph (g) of this AD specifies contacting Airbus for appropriate action: Before further flight, repair using a method approved by the Manager, International Branch, ANM-116, Transport Airplane Directorate, FAA; or the EASA; or Airbus's EASA DOA.

(2) Where paragraph 1.E., "Compliance," of the applicable service information specified in paragraph (g) of this AD specifies a compliance time in terms of a "Threshold" and "Grace Period," this AD requires compliance at the later of the applicable threshold and grace period.

(3) Where paragraph 1.E., "Compliance," of the applicable service information specified in paragraph (g) of this AD specifies a threshold as "before next flight," this AD requires compliance before the next flight after the applicable finding.

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

This paragraph provides credit for actions required by paragraphs (g) and (i) of this AD, if those actions were performed before the effective date of this AD using the applicable service information specified in paragraph (l)(1), (l)(2), (l)(3), (l)(4), (l)(5), (l)(6), (l)(7), (l)(8), or (l)(9) of this AD. This service information is not incorporated by reference in this AD.

- (1) Airbus Technical Disposition LR57D11023270, Issue B, dated July 12, 2011.
- (2) Airbus Technical Disposition LR57D11029171, Issue B, dated September 6, 2011.
- (3) Airbus Technical Disposition LR57D11029173, Issue B, dated September 6, 2011.
- (4) Airbus Technical Disposition LR57D11030741, Issue B, dated September 22, 2011.
- (5) Airbus Technical Disposition LR57D11029170, Issue C, dated September 6, 2011.
- (6) Airbus Technical Disposition LR57D11023714, Issue B, dated July 12, 2011.
- (7) Airbus Technical Disposition LR57D11029172, Issue B, dated September 6, 2011.
- (8) Airbus Technical Disposition LR57D11030740, Issue C, dated September 22, 2011.
- (9) Airbus Service Bulletin A340-57-4124, dated April 4, 2013.

#### **(m) 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. 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: 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 EASA; or Airbus's EASA DOA. If approved by the DOA, the approval must include the DOA-authorized signature.

#### **(n) Related Information**

(1) Refer to Mandatory Continuing Airworthiness Information (MCAI) EASA Airworthiness Directive 2014-0149, dated June 13, 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-2016-6899.

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

#### **(o) Material Incorporated by Reference**

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

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

(3) The following service information was approved for IBR on June 13, 2016, (81 FR 27986, May 9, 2016).

(i) Airbus Service Bulletin A330-57-3114, dated March 12, 2013.

(ii) Airbus Service Bulletin A330-57-3115, dated April 4, 2013.

(iii) Airbus Service Bulletin A330-57-3116, dated March 12, 2013.

(iv) Airbus Service Bulletin A340-57-4123, dated March 12, 2013.

(v) Airbus Service Bulletin A340-57-4124, Revision 01, dated August 22, 2013.

(vi) Airbus Service Bulletin A340-57-4125, dated March 12, 2013.

(4) 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](mailto:airworthiness.A330-A340@airbus.com); Internet: <http://www.airbus.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 June 3, 2016.

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



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**2016-12-10 Airbus:** Amendment 39-18559. Docket No. FAA-2016-6900; Directorate Identifier 2016-NM-064-AD.

**(a) Effective Date**

This AD is effective June 29, 2016.

**(b) Affected ADs**

(1) This AD replaces AD 2016-09-07, Amendment 39-18505 (81 FR 27298, May 6, 2016) ("AD 2016-09-07").

(2) This AD affects AD 2004-03-33, Amendment 39-13477 (69 FR 9936, March 3, 2004) ("AD 2004-03-33").

**(c) Applicability**

This AD applies to the airplanes identified in paragraphs (c)(1), (c)(2), (c)(3), and (c)(4) of this AD, certificated in any category, all manufacturer serial numbers.

(1) Airbus Model A318-111, -112, -121, and -122 airplanes.

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

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

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

**(d) Subject**

Air Transport Association (ATA) of America Code 34, Navigation.

**(e) Reason**

This AD was prompted by reports of airspeed indication discrepancies during flight at high altitudes in inclement weather. We are issuing this AD to prevent airspeed indication discrepancies caused by accumulation of ice crystals during inclement weather, which, depending on the prevailing altitude, could lead to reduced controllability of the airplane.

**(f) Compliance**

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

**(g) Pitot Probe Replacement**

On or before November 12, 2016: Replace any Thales pitot probe having part number (P/N) C16195AA or P/N C16195BA with a Goodrich pitot probe having P/N 0851HL, in accordance with the Accomplishment Instructions of Airbus Service Bulletin A320-34-1170, Revision 30, dated June 18, 2015. The replacement in this paragraph terminates the requirements of paragraph (f) of AD 2004-03-33 for that airplane only.

**(h) Other Acceptable Compliance**

(1) Replacement of the pitot probes in accordance with the Accomplishment Instructions of both Airbus Service Bulletin A320-34-1456, Revision 01, dated May 15, 2012 (pitot probes on the captain and standby sides); and Airbus Service Bulletin A320-34-1463, Revision 01, dated May 15, 2012 (pitot probes on the first officer side); is an acceptable method of compliance for the requirements of paragraph (g) of this AD.

(2) Airplanes on which Airbus Modification 25578 was embodied in production, except for post-modification 25578 airplanes on which Airbus Modification 155737 (installation of Thales pitot probes) was also embodied in production, are compliant with the requirements of paragraph (g) of this AD, provided it can be conclusively determined that no Thales pitot probe having P/N C16195AA, P/N C16195BA, or P/N 50620-10 has been installed since the date of issuance of the original certificate of airworthiness or the date of issuance of the original export certificate of airworthiness. Post-modification-25578 airplanes on which Airbus Modification 155737 (installation of Thales pitot probes) was also embodied in production must be in compliance with the requirements of paragraph (g) of this AD.

**(i) Credit for Previous Actions**

(1) This paragraph provides credit for the actions required by paragraph (g) of this AD, if those actions were performed before June 10, 2016 (the effective date of AD 2016-09-07), using service information identified in paragraphs (i)(1)(i) through (i)(1)(xxvi) of this AD. This service information is not incorporated by reference in this AD.

- (i) Airbus Service Bulletin A320-34-1170, Revision 04, dated May 24, 2000.
- (ii) Airbus Service Bulletin A320-34-1170, Revision 05, dated September 11, 2000.
- (iii) Airbus Service Bulletin A320-34-1170, Revision 06, dated October 18, 2001.
- (iv) Airbus Service Bulletin A320-34-1170, Revision 07, dated December 4, 2001.
- (v) Airbus Service Bulletin A320-34-1170, Revision 08, dated January 15, 2003.
- (vi) Airbus Service Bulletin A320-34-1170, Revision 09, dated February 17, 2003.
- (vii) Airbus Service Bulletin A320-34-1170, Revision 10, dated November 21, 2003.
- (viii) Airbus Service Bulletin A320-34-1170, Revision 11, dated August 18, 2004.
- (ix) Airbus Service Bulletin A320-34-1170, Revision 12, dated December 2, 2004.
- (x) Airbus Service Bulletin A320-34-1170, Revision 13, dated January 18, 2005.
- (xi) Airbus Service Bulletin A320-34-1170, Revision 14, dated April 21, 2005.
- (xii) Airbus Service Bulletin A320-34-1170, Revision 15, dated July 19, 2005.
- (xiii) Airbus Service Bulletin A320-34-1170, Revision 16, dated November 23, 2006.
- (xiv) Airbus Service Bulletin A320-34-1170, Revision 17, dated February 14, 2007.
- (xv) Airbus Service Bulletin A320-34-1170, Revision 18, dated October 9, 2009.
- (xvi) Airbus Service Bulletin A320-34-1170, Revision 19, dated November 9, 2009.
- (xvii) Airbus Service Bulletin A320-34-1170, Revision 20, dated December 1, 2010.
- (xviii) Airbus Service Bulletin A320-34-1170, Revision 21, dated March 24, 2011.
- (xix) Airbus Service Bulletin A320-34-1170, Revision 22, dated July 19, 2011.
- (xx) Airbus Service Bulletin A320-34-1170, Revision 23, dated February 3, 2012.
- (xxi) Airbus Service Bulletin A320-34-1170, Revision 24, dated April 12, 2012.
- (xxii) Airbus Service Bulletin A320-34-1170, Revision 25, dated September 4, 2012.
- (xxiii) Airbus Service Bulletin A320-34-1170, Revision 26, dated September 16, 2013.
- (xxiv) Airbus Service Bulletin A320-34-1170, Revision 27, dated March 18, 2014.
- (xxv) Airbus Service Bulletin A320-34-1170, Revision 28, dated September 1, 2014.
- (xxvi) Airbus Service Bulletin A320-34-1170, Revision 29, dated February 16, 2015.

(2) This paragraph provides credit for the replacement of pitot probes on the captain and standby sides specified in paragraph (h)(1) of this AD, if the replacement was performed before June 10, 2016

(the effective date of AD 2016-09-07), using Airbus Service Bulletin A320-34-1456, dated December 2, 2009, which is not incorporated by reference in this AD.

(3) This paragraph provides credit for the replacement of pitot probes on the first officer side as specified in paragraph (h)(1) of this AD, if those actions were performed before June 10, 2016 (the effective date of AD 2016-09-07), using Airbus Service Bulletin A320-34-1463, dated March 9, 2010, which is not incorporated by reference in this AD.

#### **(j) Parts Installation Limitations**

(1) At the applicable time specified in paragraph (j)(1)(i) or (j)(1)(ii) of this AD: No person may install on any airplane a Thales pitot probe having P/N C16195AA or P/N C16195BA.

(i) For airplanes with a Thales pitot probe having P/N C16195AA or P/N C16195BA installed: After replacement with BF Goodrich pitot probe P/N 0851HL.

(ii) For airplanes without a Thales pitot probe having P/N C16195AA or P/N C16195BA installed: As of June 10, 2016 (the effective date of AD 2016-09-07).

(2) As of June 10, 2016 (the effective date of AD 2016-09-07), no person may install on any airplane a Thales pitot probe having P/N 50620-10.

#### **(k) 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: Sanjay Ralhan, Aerospace Engineer, International Branch, ANM-116, Transport Airplane Directorate, FAA, 1601 Lind Avenue SW., Renton, WA 98057-3356; telephone: 425-227-1405; fax: 425-227-1149. Information may be emailed to: 9-ANM-116-AMOC-REQUESTS@faa.gov. Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office. The AMOC approval letter must specifically reference this AD.

(2) Contacting the Manufacturer: For any requirement in this AD to obtain corrective actions from a manufacturer, the action must be accomplished using a method approved by the Manager, International 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.

#### **(l) Related Information**

(1) Refer to Mandatory Continuing Airworthiness Information (MCAI) EASA Airworthiness Directive 2015-0205, dated October 9, 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-2016-6900.

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

(3) The following service information was approved for IBR on June 10, 2016 (81 FR 27298).

(i) Airbus Service Bulletin A320-34-1170, Revision 30, dated June 18, 2015.

(ii) Airbus Service Bulletin A320-34-1456, Revision 01, dated May 15, 2012.

(iii) Airbus Service Bulletin A320-34-1463, Revision 01, dated May 15, 2012.

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

(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 June 2, 2016.

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



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**2016-12-11 The Boeing Company:** Amendment 39-18560; Docket No. FAA-2015-4812; Directorate Identifier 2015-NM-034-AD.

**(a) Effective Date**

This AD is effective July 27, 2016.

**(b) Affected ADs**

None.

**(c) Applicability**

This AD applies to certain The Boeing Company Model 787-8 airplanes, certificated in any category, identified in the service information specified in paragraphs (c)(1) through (c)(8) of this AD.

- (1) Boeing Alert Service Bulletin B787-81205-SB250036-00, Issue 001, dated September 10, 2013.
- (2) Boeing Alert Service Bulletin B787-81205-SB250039-00, Issue 001, dated October 8, 2013.
- (3) Boeing Alert Service Bulletin B787-81205-SB250040-00, Issue 001, dated October 14, 2013.
- (4) Boeing Alert Service Bulletin B787-81205-SB250041-00, Issue 001, dated October 18, 2013.
- (5) Boeing Alert Service Bulletin B787-81205-SB250042-00, Issue 001, dated October 28, 2013.
- (6) Boeing Alert Service Bulletin B787-81205-SB250043-00, Issue 001, dated November 4, 2013.
- (7) Boeing Alert Service Bulletin B787-81205-SB250044-00, Issue 001, dated November 8, 2013.
- (8) Boeing Alert Service Bulletin B787-81205-SB250045-00, Issue 001, dated November 15, 2013.

**(d) Subject**

Air Transport Association (ATA) of America Code 25, Equipment/Furnishings.

**(e) Unsafe Condition**

This AD was prompted by a report that certain center and outboard stowage bin modules were incorrectly installed. We are issuing this AD to detect and correct incorrectly installed center and outboard stowage bin modules that might not remain intact during an emergency landing, resulting in injuries to occupants and interference with airplane evacuation.

**(f) Compliance**

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

**(g) Inspection and Corrective Action**

Except as specified in paragraph (h) of this AD, at the applicable time specified in paragraph 5., "Compliance," of the applicable service information specified in paragraphs (g)(1) through (g)(8) of this AD: Do a general visual inspection of the installations of the center and outboard stowage bin modules to determine if any part is missing, if any part is installed at an incorrect location, or if any quick release pin is not fully engaged; and do all applicable corrective actions; in accordance with the Accomplishment Instructions of the applicable service information identified in paragraphs (g)(1) through (g)(8) of this AD. Do all applicable corrective actions before further flight.

(1) For airplanes having variable numbers (V/Ns) ZA177 through ZA183 inclusive: Use Boeing Alert Service Bulletin B787-81205-SB250036-00, Issue 001, dated September 10, 2013.

(2) For airplanes having V/Ns ZA100 through ZA105 inclusive, V/Ns ZA116 through ZA119 inclusive, V/N ZA135, and V/Ns ZA506 through ZA511 inclusive: Use Boeing Alert Service Bulletin B787-81205-SB250039-00, Issue 001, dated October 8, 2013.

(3) For airplanes having V/Ns ZA460 through ZA464 inclusive: Use Boeing Alert Service Bulletin B787-81205-SB250040-00, Issue 001, dated October 14, 2013.

(4) For airplanes having V/N ZA233 and V/Ns ZA236 through ZA240 inclusive: Use Boeing Alert Service Bulletin B787-81205-SB250041-00, Issue 001, dated October 18, 2013.

(5) For airplanes having V/Ns ZA285 through ZA290 inclusive: Use Boeing Alert Service Bulletin B787-81205-SB250042-00, Issue 001, dated October 28, 2013.

(6) For airplanes having V/Ns ZA270 through ZA271 inclusive: Use Boeing Alert Service Bulletin B787-81205-SB250043-00, Issue 001, dated November 4, 2013.

(7) For airplanes having V/Ns ZA261 through ZA264 inclusive: Use Boeing Alert Service Bulletin B787-81205-SB250044-00, Issue 001, dated November 8, 2013.

(8) For airplanes having V/Ns ZA536 through ZA538 inclusive: Use Boeing Alert Service Bulletin B787-81205-SB250045-00, Issue 001, dated November 15, 2013.

**(h) Exceptions to Service Information Specifications**

Where the service information identified in paragraphs (g)(1) through (g)(8) of this AD 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.

**(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.

**(j) Related Information**

For more information about this AD, contact Stanley Chen, Aerospace Engineer, Cabin Safety and Environmental Systems Branch, ANM-150S, FAA, Seattle ACO, 1601 Lind Avenue SW., Renton, WA 98057-3356; phone: 425-917-6585; fax: 425-917-6590; email: stanley.chen@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 B787-81205-SB250036-00, Issue 001, dated September 10, 2013.

(ii) Boeing Alert Service Bulletin B787-81205-SB250039-00, Issue 001, dated October 8, 2013.

(iii) Boeing Alert Service Bulletin B787-81205-SB250040-00, Issue 001, dated October 14, 2013.

(iv) Boeing Alert Service Bulletin B787-81205-SB250041-00, Issue 001, dated October 18, 2013.

(v) Boeing Alert Service Bulletin B787-81205-SB250042-00, Issue 001, dated October 28, 2013.

(vi) Boeing Alert Service Bulletin B787-81205-SB250043-00, Issue 001, dated November 4, 2013.

(vii) Boeing Alert Service Bulletin B787-81205-SB250044-00, Issue 001, dated November 8, 2013.

(viii) Boeing Alert Service Bulletin B787-81205-SB250045-00, Issue 001, dated November 15, 2013.

(3) For 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 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 June 3, 2016.

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



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**2016-12-12 Fokker Services B.V.:** Amendment 39-18561. Docket No. FAA-2015-8137; Directorate Identifier 2014-NM-104-AD.

**(a) Effective Date**

This AD becomes effective July 22, 2016.

**(b) Affected ADs**

This AD replaces AD 2008-05-18 R1, Amendment 39-16083 (74 FR 57402, November 6, 2009) ("AD 2008-05-18 R1").

**(c) Applicability**

This AD applies to Fokker Services B.V. Model F.27 Mark 050, 200, 300, 400, 500, 600, and 700 airplanes; certificated in any category; all serial numbers.

**(d) Subject**

Air Transport Association (ATA) of America Code 28, Fuel.

**(e) Reason**

This AD was prompted by the issuance of revised service information to update the Fuel Airworthiness Limitation Items (ALIs) and critical design configuration control limitations (CDCCLs) that address fuel tank system ignition sources. We are issuing this AD to prevent the potential of ignition sources inside fuel tanks, which, in combination with flammable fuel vapors, could result in fuel tank explosions and consequent loss of the airplane.

**(f) Compliance**

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

**(g) Retained Revision of the Airworthiness Limitations Section (ALS) of the Instructions for Continued Airworthiness To Incorporate Limits (Inspections, Thresholds, and Intervals), With Revised Table Reference**

This paragraph restates the actions required by paragraph (f)(1) of AD 2008-05-18 R1, with revised table reference. For Model F.27 Mark 050, 200, 300, 400, 500, 600, and 700 airplanes, serial numbers 10102 through 10692 inclusive: Within 3 months after April 16, 2008 (the effective date of AD 2008-05-18, Amendment 39-15412 (73 FR 13071, March 12, 2008)), revise the ALS of the Instructions for Continued Airworthiness to incorporate the limits (inspections, thresholds, and intervals) specified in Fokker 50/60 Fuel Airworthiness Limitation Items (ALI) and Critical Design Configuration Control Limitations (CDCCL) Report SE-671, Issue 2, dated December 1, 2006; or Fokker Service Bulletin SBF27-28-070, Revision 1, dated January 8, 2008; as applicable. For all

tasks identified in Fokker 50/60 Fuel Airworthiness Limitation Items (ALI) and Critical Design Configuration Control Limitations (CDCCL) Report SE-671, Issue 2, dated December 1, 2006; or Fokker Service Bulletin SBF27-28-070, Revision 1, dated January 8, 2008; the initial compliance times are as specified in Table 1 to paragraph (g) of this AD, as applicable. The repetitive inspections must be accomplished thereafter at the intervals specified in Fokker 50/60 Fuel Airworthiness Limitation Items (ALI) and Critical Design Configuration Control Limitations (CDCCL) Report SE-671, Issue 2, dated December 1, 2006; or Fokker Service Bulletin SBF27-28-070, Revision 1, dated January 8, 2008; as applicable, except as provided by paragraphs (i) and (n)(1) of this AD.

**Table 1 to Paragraph (g) of This AD—Initial Compliance Times for ALS Revision**

For—	The later of—
Model F.27 Mark 050 airplanes: Task 280000-01	102 months after April 16, 2008 (the effective date of AD 2008-05-18, Amendment 39-15412 ( <a href="#">73 FR 13071</a> , March 12, 2008)); or 102 months after the date of issuance of the original Dutch standard airworthiness certificate or the date of issuance of the original Dutch export certificate of airworthiness.
Model F.27 Mark 050 airplanes: Task 280000-02	30 months after April 16, 2008 (the effective date of AD 2008-05-18, Amendment 39-15412 ( <a href="#">73 FR 13071</a> , March 12, 2008)); or 30 months after the date of issuance of the original Dutch standard airworthiness certificate or the date of issuance of the original Dutch export certificate of airworthiness.
Model F.27 Mark 200, 300, 400, 500, 600, and 700 airplanes: Task 280000-01	78 months after April 16, 2008 (the effective date of AD 2008-05-18, Amendment 39-15412 ( <a href="#">73 FR 13071</a> , March 12, 2008)); or 78 months after the date of issuance of the original Dutch standard airworthiness certificate or the date of issuance of the original Dutch export certificate of airworthiness.
Model F.27 Mark 200, 300, 400, 500, 600, and 700 airplanes: Task 280000-02	18 months after April 16, 2008 (the effective date of AD 2008-05-18, Amendment 39-15412 ( <a href="#">73 FR 13071</a> , March 12, 2008)); or 18 months after the date of issuance of the original Dutch standard airworthiness certificate or the date of issuance of the original Dutch export certificate of airworthiness.

**(h) Retained Revision of the ALS of the Instructions for Continued Airworthiness To Incorporate CDCCLs, With No Changes**

This paragraph restates the actions required by paragraph (f)(2) of AD 2008-05-18 R1, with no changes. For Model F.27 Mark 050, 200, 300, 400, 500, 600, and 700 airplanes, serial numbers 10102 through 10692 inclusive: Within 3 months after April 16, 2008 (the effective date of AD 2008-05-18, Amendment 39-15412 ([73 FR 13071](#), March 12, 2008)), revise the ALS of the Instructions for Continued Airworthiness to incorporate the CDCCLs as defined in Fokker 50/60 Fuel Airworthiness Limitations Items (ALI) and Critical Design Configuration Control Limitations (CDCCL) Report SE-671, Issue 2, dated December 1, 2006; or Fokker Service Bulletin SBF27-28-070, Revision 1, dated January 8, 2008; as applicable.

**(i) Retained Exceptional Short-Term Extensions Provision, With No Changes**

This paragraph restates the exceptional short-term extensions provision specified in paragraph (f)(3) of AD 2008-05-18 R1, with no changes. Where Fokker 50/60 Fuel Airworthiness Limitation

Items (ALI) and Critical Design Configuration Control Limitations (CDCCL) Report SE-671, Issue 2, dated December 1, 2006; or Fokker Service Bulletin SBF27-28-070, Revision 1, dated January 8, 2008; as applicable; allow for exceptional short-term extensions, an exception is acceptable to the FAA if it is approved by the appropriate principal inspector in the FAA Flight Standards Certificate Holding District Office.

**(j) Retained No Alternative Actions, Intervals, and/or CDCCLs, With New Exception**

This paragraph restates the requirement specified in paragraph (f)(4) of AD 2008-05-18 R1, with a new exception. Except as required by paragraph (l) of this AD, after accomplishing the actions specified in paragraphs (g) and (h) of this AD, no alternative inspections, inspection intervals, or CDCCLs may be used, unless the inspections, inspection intervals, or CDCCLs are approved as an alternative method of compliance (AMOC) in accordance with the procedures specified in paragraph (n)(1) of this AD.

**(k) Retained Credit for Previous Actions, With No Changes**

This paragraph restates the credit provided in paragraph (f)(5) of AD 2008-05-18 R1, with no changes. Actions done before April 16, 2008 (the effective date of AD 2008-05-18, Amendment 39-15412 (73 FR 13071, March 12, 2008)), in accordance with Fokker 50/60 Fuel Airworthiness Limitation Items (ALI) and Critical Design Configuration Control Limitations (CDCCL) Report SE-671, Issue 1, dated January 31, 2006; and Fokker Service Bulletin SBF27/28-070, dated June 30, 2006; are acceptable for compliance with the corresponding requirements of this AD.

**(l) New Requirements of This AD: Revise the Maintenance or Inspection Program**

For Model F.27 Mark 200, 300, 400, 500, 600, and 700 airplanes: Within 3 months after the effective date of this AD, revise the maintenance or inspection program, as applicable, by incorporating the Fuel ALIs and CDCCLs identified in the Accomplishment Instructions of Fokker Service Bulletin SBF27-28-070, Revision 3, dated December 11, 2014. Accomplishing the actions required by this paragraph ends the requirements specified in paragraphs (g) and (h) of this AD for that airplane. The initial compliance time for the Fuel ALIs identified in Fokker Service Bulletin SBF27-28-070, Revision 3, dated December 11, 2014, is at the initial compliance time specified in Fokker Service Bulletin SBF27-28-070, Revision 3, dated December 11, 2014, or within 3 months after the effective date of this AD, whichever occurs later.

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

After accomplishing the revision required by paragraph (l) of this AD, no alternative actions (e.g., inspections), intervals, or CDCCLs may be used; unless the actions, intervals, or CDCCLs are approved as an AMOC in accordance with the procedures specified in paragraph (n)(1) of this AD.

**(n) 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: Tom Rodriguez, Aerospace Engineer, International Branch, ANM-116, Transport Airplane Directorate, FAA, 1601 Lind Avenue

SW., Renton, WA 98057-3356; telephone 425-227-1137; fax 425-227-1149. Information may be emailed to: 9-ANM-116-AMOC-REQUESTS@faa.gov. Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office.

(2) Contacting the Manufacturer: 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 Fokker B.V. Service's EASA Design Organization Approval (DOA). If approved by the DOA, the approval must include the DOA-authorized signature.

#### **(o) Related Information**

(1) Refer to Mandatory Continuing Airworthiness Information (MCAI) EASA Airworthiness Directive 2015-0029, dated February 24, 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-2015-8137.

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

#### **(p) Material Incorporated by Reference**

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

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

(3) The following service information was approved for IBR on July 22, 2016.

(i) Fokker Service Bulletin SBF27-28-070, Revision 3, dated December 11, 2014.

(ii) Reserved.

(4) The following service information was approved for IBR on September 16, 2011 (76 FR 50111, August 12, 2011).

(i) Fokker Service Bulletin SBF27-28-070, Revision 1, dated January 8, 2008.

(ii) Reserved.

(5) For service information identified in this AD, contact Fokker Services B.V., Technical Services Dept., P.O. Box 1357, 2130 EL Hoofddorp, the Netherlands; telephone +31 (0)88-6280-350; fax +31 (0)88-6280-111; email [technicalservices@fokker.com](mailto:technicalservices@fokker.com); Internet <http://www.myfokkerfleet.com>.

(6) 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.

(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 May 31, 2016.

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



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**2016-12-14 Embraer S.A.:** Amendment 39-18563. Docket No. FAA-2015-6542; Directorate Identifier 2015-NM-038-AD.

**(a) Effective Date**

This AD is effective July 27, 2016.

**(b) Affected ADs**

None.

**(c) Applicability**

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

(1) All Embraer S.A. Model ERJ 170-100 LR, -100 STD, -100 SE., and -100 SU airplanes; and Model ERJ 170-200 LR, -200 SU, and -200 STD airplanes.

(2) All Embraer S.A. Model ERJ 190-100 STD, -100 LR, -100 IGW, -200 STD, -200 LR, and -200 IGW airplanes.

**(d) Subject**

Air Transport Association (ATA) of America Code 36, Pneumatic.

**(e) Reason**

This AD was prompted by reports of cracks in certain engine low-stage bleed check valves. We are issuing this AD to prevent failure of the low-stage bleed check valve; simultaneous failures of both low-stage bleed check valves could result in a dual engine in-flight shutdown.

**(f) Compliance**

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

**(g) Modification**

For Embraer S.A. Model ERJ 190 airplanes identified in Embraer Service Bulletin 190-21-0041, Revision 02, dated July 30, 2013: Within 3 months after the effective date of this AD, replace the Hamilton Sundstrand air management system (AMS) controller operation program of the AMS controller processor boards, as specified in paragraph (g)(1) or (g)(2) of this AD.

(1) Replace with a new, improved program, in accordance with the Accomplishment Instructions of Embraer Service Bulletin 190-21-0041, Revision 02, dated July 30, 2013.

(2) Replace with a version of the Hamilton Sundstrand AMS controller operation program approved after August 31, 2012, using a method approved by the Manager, International Branch,

ANM-116, Transport Airplane Directorate, FAA; Agência Nacional de Aviação Civil (ANAC); or ANAC's authorized Designee.

### **(h) Valve Replacement**

For Embraer S.A. Model ERJ 190 airplanes identified in Embraer Service Bulletin 190-21-0041, Revision 02, dated July 30, 2013: Within 3 months after the effective date of this AD, and after accomplishment of the actions required by paragraph (g) of this AD, replace the check valve and associated seals of the left-hand and right-hand engine bleed system with a check valve identified in paragraph (i) of this AD, and new seals, in accordance with the Accomplishment Instructions of Embraer Service Bulletin 190-36-0023, Revision 03, dated September 24, 2014.

### **(i) Allowed Valves**

When complying with paragraph (h) of this AD, the low-stage bleed check valves having P/N 1001447-6, and associated seals, are replaced with new ones (zero-hour). Low-stage bleed check valves having P/N 1001447-6 that can be demonstrated with logged hours only on Model ERJ 170 airplanes and/or on Model ERJ 190 airplanes equipped with the AMS controller operational program version Black Label 13, or a later version, can be used instead of new ones (zero-hour).

### **(j) Parts Installation Limitation**

(1) For Model ERJ 170-100 STD, -100 LR, -100SU, -100SE, -200 STD, -200 LR, and -200 SU airplanes: No person may install on any airplane a low-stage bleed check valve having P/N 1001447-6 that was installed on any Model ERJ 190-100 STD, -100 LR, -100 IGW, -200 STD, -200 LR, or -200 IGW airplane, any serial number except 190-00587, 190-00589, and 190-00593 and subsequent, prior to accomplishment of the requirements of paragraph (g) of this AD.

(2) For Model ERJ 190-100 STD, -100 LR, -100IGW, -200 STD, -200 LR, and -200 IGW airplanes: No person may install on any airplane on which the actions of paragraph (g) of this AD have been done, a low-stage bleed check valve having P/N 1001447-6 that was previously installed on any Model ERJ 190-100 STD, -100 LR, -100 IGW, -200 STD, -200 LR, or -200 IGW airplane, any serial number except 190-00587, 190-00589, 190-00593 and subsequent, prior to accomplishment of the requirements of paragraph (g) of this AD.

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

(1) This paragraph provides credit for actions required by paragraph (g) of this AD, if those actions were performed before the effective date of this AD using the service information identified in paragraph (k)(1)(i) or (k)(1)(ii) of this AD. This service information is not incorporated by reference in this AD.

(i) Embraer Service Bulletin 190-21-0041, dated September 27, 2012.

(ii) Embraer Service Bulletin 190-21-0041, Revision 01, dated December 20, 2012.

(2) This paragraph provides credit for actions required by paragraph (h) of this AD, if those actions were performed before the effective date of this AD using the service information identified in paragraph (k)(2)(i), (k)(2)(ii), or (k)(2)(iii) of this AD. This service information is not incorporated by reference in this AD.

(i) Embraer Service Bulletin 190-36-0023, dated July 22, 2013.

(ii) Embraer Service Bulletin 190-36-0023, Revision 01, dated September 3, 2013.

(iii) Embraer Service Bulletin 190-36-0023, Revision 02, dated April 30, 2014.

**(l) 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: Ana Martinez Hueto, Aerospace Engineer, International Branch, ANM-116, Transport Airplane Directorate, FAA, 1601 Lind Avenue SW., Renton, WA 98057-3356; telephone 425-227-1622; fax 425-227-1149. Information may be emailed to: 9-ANM-116-AMOC-REQUESTS@faa.gov. Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office. The AMOC approval letter must specifically reference this AD.

(2) Contacting the Manufacturer: For any requirement in this AD to obtain corrective actions from a manufacturer, the action must be accomplished using a method approved by the Manager, International Branch, ANM-116, Transport Airplane Directorate, FAA; or ANAC; or ANAC's authorized Designee. If approved by the ANAC Designee, the approval must include the Designee's authorized signature.

**(m) Related Information**

(1) Refer to Mandatory Continuing Airworthiness Information (MCAI) Brazilian Airworthiness Directive 2015-02-02, effective March 6, 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-2015-6542.

(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) Embraer Service Bulletin 190-21-0041, Revision 02, dated July 30, 2013.

(ii) Embraer Service Bulletin 190-36-0023, Revision 03, dated September 24, 2014.

(3) For service information identified in this AD, contact Embraer S.A., Technical Publications Section (PC 060), Av. Brigadeiro Faria Lima, 2170–Putim–12227-901 São Jose dos Campos–SP–Brasil; telephone +55 12 3927-5852 or +55 12 3309-0732; fax +55 12 3927-7546; email [distrib@embraer.com.br](mailto:distrib@embraer.com.br); Internet <http://www.flyembraer.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 June 8, 2016.  
Michael Kaszycki,  
Acting Manager, Transport Airplane Directorate,  
Aircraft Certification Service.



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**2016-12-15 Airbus:** Amendment 39-18564. Docket No. FAA-2016-7263; Directorate Identifier 2016-NM-072-AD.

**(a) Effective Date**

This AD is effective July 6, 2016.

**(b) Affected ADs**

This AD replaces AD 2016-07-30, Amendment 39-18475 (81 FR 21722, April 13, 2016) ("AD 2016-07-30").

**(c) Applicability**

This AD applies to the airplanes, certificated in any category, identified in paragraphs (c)(1) and (c)(2) of this AD, all manufacturer serial numbers.

(1) Airbus Model A330-201, -202, -203, -223, -223F, -243, -243F, -301, -302, -303, -321, -322, -323, -341, -342, and -343 airplanes.

(2) Airbus Model A340-211, -212, -213, -311, -312, -313, -541, and -642 airplanes.

**(d) Subject**

Air Transport Association (ATA) of America Code 34, Navigation.

**(e) Reason**

This AD was prompted by a report of blockage of two Angle of Attack (AOA) probes during climb, leading to activation of the Alpha Protection (Alpha Prot) while the Mach number increased. This activation could cause a continuous nose-down pitch rate that cannot be stopped with backward sidestick input, even in the full backward position. We are issuing this AD to prevent erroneous AOA information and Alpha Prot activation due to blocked AOA probes, which could result in a continuous nose-down command and consequent loss of control of the airplane.

**(f) Compliance**

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

**(g) Retained Replacement of Certain UTC Aerospace (UTAS) AOA Sensors With No Changes**

This paragraph restates the requirements of paragraph (g) of AD 2016-07-30, with no changes. For airplanes on which any UTAS AOA sensor having part number (P/N) 0861ED or P/N 0861ED2 is installed: At the applicable time specified in paragraph (h) of this AD, replace all Captain and First Officer AOA sensors (probes) having P/N 0861ED or 0861ED2 with AOA sensors having Thales P/N C16291AB, in accordance with the Accomplishment Instructions of the applicable service information identified in paragraph (g)(1), (g)(2), or (g)(3) of this AD.

- (1) Airbus Service Bulletin A330-34-3315, dated March 26, 2015 (for Model A330 airplanes).
- (2) Airbus Service Bulletin A340-34-4294, dated March 26, 2015 (for Model A340-200 and -300 airplanes).
- (3) Airbus Service Bulletin A340-34-5105, dated March 26, 2015 (for Model A340-500 and -600 airplanes).

**(h) Retained Compliance Times for the Requirements of Paragraph (g) of This AD With No Changes**

This paragraph restates the requirements of paragraph (h) of AD 2016-07-30, with no changes. Do the actions required by paragraph (g) of this AD at the applicable time specified in paragraph (h)(1) or (h)(2) of this AD.

- (1) For airplanes with AOA sensors having P/N 0861ED: Within 22 months after May 18, 2016 (the effective date of AD 2016-07-30).
- (2) For airplanes with AOA sensors having P/N 0861ED2: Within 7 months after May 18, 2016 (the effective date of AD 2016-07-30).

**(i) Retained Replacement of Certain SEXTANT/THOMSON AOA Sensors With No Changes**

This paragraph restates the requirements of paragraph (i) of AD 2016-07-30, with no changes. For airplanes on which any SEXTANT/THOMSON AOA sensor having P/N 45150320 is installed: Within 22 months after May 18, 2016 (the effective date of AD 2016-07-30), replace all SEXTANT/THOMSON AOA sensors (probes) having P/N 45150320 with AOA sensors having Thales P/N C16291AB, in accordance with the Accomplishment Instructions of the applicable service information identified in paragraph (i)(1) or (i)(2) of this AD.

- (1) Airbus Service Bulletin A330-34-3228, dated October 7, 2009 (for Model A330 airplanes).
- (2) Airbus Service Bulletin A340-34-4234, dated October 7, 2009 (for Model A340-200 and -300 airplanes).

**(j) Retained Repetitive Inspections/Tests of Certain Thales AOA Sensors With No Changes**

This paragraph restates the requirements of paragraph (j) of AD 2016-07-30, with no changes. For airplanes on which one or more Thales AOA sensor having P/N C16291AA is installed: Before the accumulation of 17,000 total flight hours on the AOA sensor since first installation on an airplane, or within 6 months after May 18, 2016 (the effective date of AD 2016-07-30), whichever occurs later; and thereafter at intervals not to exceed 3,800 flight hours; do a detailed inspection of the three AOA sensors at FINs 3FP1, 3FP2, and 3FP3 for discrepancies (e.g., the vane of the sensor does not deice properly), and a functional heating test of each AOA sensor having P/N C16291AA, in accordance with the Accomplishment Instructions of the applicable service information identified in paragraph (j)(1), (j)(2), or (j)(3) of this AD.

- (1) Airbus Service Bulletin A330-34-3215, Revision 03, dated July 23, 2015 (for Model A330 airplanes).
- (2) Airbus Service Bulletin A340-34-4215, Revision 03, dated July 27, 2015 (for Model A340-200 and -300 airplanes).
- (3) Airbus Service Bulletin A340-34-5062, Revision 02, dated July 24, 2015 (for Model A340-500 and -600 airplanes).

**(k) Retained Corrective Actions With No Changes**

This paragraph restates the requirements of paragraph (k) of AD 2016-07-30, with no changes. If any discrepancy is found during any inspection required by paragraph (j) of this AD, or if any test is failed during the heating test required by paragraph (j) of this AD: Before further flight, replace all

affected AOA sensors with sensors identified in paragraph (k)(1) or (k)(2) of this AD, in accordance with the Accomplishment Instructions of the applicable service information identified in paragraph (j)(1), (j)(2), or (j)(3) of this AD.

(1) Replace with AOA sensors having Thales P/N C16291AA, on which the inspection and test required by paragraph (j) of this AD were passed.

(2) Replace with AOA sensors having Thales P/N C16291AB.

**(l) Retained Credit for Previous Actions With a Change to a Paragraph Reference**

This paragraph restates the credit provided in paragraph (l) of AD 2016-07-30, with a change to a paragraph reference. This paragraph provides credit for the actions required by paragraph (j) of this AD, if those actions were performed before May 18, 2016 (the effective date of AD 2016-07-30), using the applicable service information specified in paragraphs (l)(1), (l)(2), and (l)(3) of this AD, which are not incorporated by reference in this AD.

(1) Airbus Service Bulletin A330-34-3215, Revision 02, dated March 29, 2010. (2) Airbus Service Bulletin A340-34-4215, Revision 02, dated March 29, 2010.

(3) Airbus Service Bulletin A340-34-5062, Revision 01, dated March 29, 2010.

**(m) Retained Airplanes Excluded From Certain Requirements With No Changes**

This paragraph restates the exception specified in paragraph (m) of AD 2016-07-30, with no changes.

(1) The actions specified in paragraphs (g), (i), (j), and (k) of this AD are not required, provided that the conditions specified in paragraphs (m)(1)(i), (m)(1)(ii), and (m)(1)(iii) of this AD are met.

(i) Airbus Modification 58555 (installation of Thales P/N C16291AB AOA sensors) has been embodied in production.

(ii) Airbus Modification 46921 (installation of UTAS AOA sensors) has not been embodied in production.

(iii) No AOA sensor having SEXTANT/THOMSON P/N 45150320 or UTAS P/N 0861ED or P/N 0861ED2 has been installed on the airplane since date of issuance of the original airworthiness certificate or date of issuance of the original export certificate of airworthiness.

(2) The actions specified in paragraphs (g) and (i) of this AD are not required, provided that all conditions specified in paragraphs (m)(2)(i), (m)(2)(ii), and (m)(2)(iii) of this AD are met.

(i) Only AOA sensors with part numbers approved after the effective date of this AD have been installed.

(ii) The AOA sensor part number is approved by the Manager, International Branch, ANM-116, Transport Airplane Directorate, FAA; the European Aviation Safety Agency (EASA); or Airbus's EASA Design Organization Approval (DOA).

(iii) The installation is accomplished in accordance with airplane modification instructions approved by the Manager, International Branch, ANM-116, Transport Airplane Directorate, FAA; the EASA; or Airbus's EASA DOA.

**(n) Retained Optional Terminating Modification With No Changes**

This paragraph restates the optional action specified in paragraph (n) of AD 2016-07-30, with no changes. Replacement of all Thales AOA sensors having P/N C16291AA with Thales AOA sensors having P/N C16291AB, in accordance with the Accomplishment Instructions of the applicable service information identified in paragraph (n)(1), (n)(2), or (n)(3) of this AD, terminates the repetitive inspections and functional heating tests required by paragraph (j) of this AD.

(1) Airbus Service Bulletin A330-34-3228, dated October 7, 2009 (for Model A330 airplanes).

(2) Airbus Service Bulletin A340-34-4234, dated October 7, 2009 (for Model A340-200 and -300 airplanes).

(3) Airbus Service Bulletin A340-34-5070, dated October 9, 2009 (for Model A340-500 and -600 airplanes).

**(o) Retained Parts Installation Prohibitions With No Changes**

This paragraph restates the requirements of paragraph (o) of AD 2016-07-30, with no changes.

(1) For airplanes on which only Thales P/N C16291AB AOA sensors are installed as of May 18, 2016 (the effective date of AD 2016-07-30): No person may install, on any airplane, a Thales AOA sensor having P/N C16291AA as of May 18, 2016.

(2) For airplanes on which the modification specified in paragraph (n) of this AD has been done: No person may install, on any airplane, a Thales AOA sensor having P/N C16291AA after accomplishing the specified modification.

(3) For airplanes on which Thales P/N C16291AA or P/N C16291AB AOA sensors are installed as of May 18, 2016 (the effective date of AD 2016-07-30): No person may install, on any airplane, a UTAS AOA sensor having P/N 0861ED or P/N 0861ED2, or a SEXTANT/THOMSON AOA sensor having P/N 45150320, as of May 18, 2016.

(4) For airplanes on which the replacement required by paragraph (i) of this AD has been done: No person may install, on any airplane, a UTAS AOA sensor having P/N 0861ED or P/N 0861ED2, or a SEXTANT/THOMSON AOA sensor having P/N 45150320, after accomplishing the replacement.

(5) For airplanes on which the replacement required by paragraph (g) of this AD has been done: No person may install, on any airplane, a UTAS AOA sensor having P/N 0861ED or P/N 0861ED2, or a SEXTANT/THOMSON AOA sensor having P/N 45150320, after accomplishing the replacement, except that a UTAS AOA sensor having P/N 0861ED may be installed in the standby position of that airplane.

**(p) 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. 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: 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 EASA; or Airbus's EASA 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.

**(q) Related Information**

(1) Refer to Mandatory Continuing Airworthiness Information (MCAI) EASA Airworthiness Directive 2015-0134, dated July 8, 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-2016-7263.

(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 May 18, 2016 (81 FR 21722, April 13, 2016).

(i) Airbus Service Bulletin A330-34-3215, Revision 03, dated July 23, 2015.

(ii) Airbus Service Bulletin A330-34-3228, dated October 7, 2009.

(iii) Airbus Service Bulletin A330-34-3315, dated March 26, 2015.

(iv) Airbus Service Bulletin A340-34-4215, Revision 03, dated July 27, 2015.

(v) Airbus Service Bulletin A340-34-4234, dated October 7, 2009.

(vi) Airbus Service Bulletin A340-34-4294, dated March 26, 2015.

(vii) Airbus Service Bulletin A340-34-5062, Revision 02, dated July 24, 2015.

(viii) Airbus Service Bulletin A340-34-5070, dated October 9, 2009.

(ix) Airbus Service Bulletin A340-34-5105, dated March 26, 2015.

(4) 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](mailto:airworthiness.A330-A340@airbus.com); Internet <http://www.airbus.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 June 9, 2016.

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



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**2016-13-01 Bombardier, Inc.:** Amendment 39-18565. Docket No. FAA-2016-7265; Directorate Identifier 2016-NM-084-AD.

**(a) Effective Date**

This AD is effective July 7, 2016.

**(b) Affected ADs**

This AD replaces AD 2016-08-05, Amendment 39-18481 (81 FR 21709, April 13, 2016) ("AD 2016-08-05").

**(c) Applicability**

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

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

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

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

**(d) Subject**

Air Transport Association (ATA) of America Code 27, Flight Controls.

**(e) Reason**

This AD was prompted by the discovery of a number of incorrectly calibrated angle of attack (AOA) transducers installed in the stall protection system. We are issuing this AD to detect and replace incorrectly calibrated AOA transducers; incorrect calibration of the transducers could result in late activation of the stick pusher.

**(f) Compliance**

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

**(g) Retained Replacement of AOA Transducers With No Changes**

This paragraph restates the requirements paragraph (g) of AD 2016-08-05, with no changes. Within 2,500 flight hours or 12 months, whichever occurs first after May 18, 2016 (the effective date of AD 2016-08-05), replace the AOA transducers identified in paragraph 1.A., "Effectivity," of Bombardier Service Bulletin 670BA-27-069, dated March 30, 2015, with correctly calibrated AOA

transducers, in accordance with the Accomplishment Instructions of Bombardier Service Bulletin 670BA-27-069, dated March 30, 2015.

**(h) Retained Parts Installation Prohibition, With a Change to the Affected Parts Language**

This paragraph restates the parts installation prohibition specified in paragraph (h) of AD 2016-08-05, with a change to the affected parts language. As of May 18, 2016 (the effective date of AD 2016-08-05), no person may install, on any airplane, an AOA transducer having a part number and serial number listed in paragraph 1.A., "Effectivity," of Bombardier Service Bulletin 670BA-27-069, dated March 30, 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. 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, 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**

Refer to Mandatory Continuing Airworthiness Information (MCAI) Canadian AD CF-2015-18, dated July 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-2016-7265.

**(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.

(3) The following service information was approved for IBR on May 18, 2016, (81 FR 21709, April 13, 2016).

(i) Bombardier Service Bulletin 670BA-27-069, dated March 30, 2015.

(ii) Reserved.

(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](mailto: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 June 13, 2016.

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



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**2016-13-02 Bombardier, Inc.:** Amendment 39-18566. Docket No. FAA-2016-7266; Directorate Identifier 2016-NM-085-AD.

**(a) Effective Date**

This AD is effective July 7, 2016.

**(b) Affected ADs**

This AD replaces AD 2016-09-04, Amendment 39-18502 (81 FR 26102, May 2, 2016) ("AD 2016-09-04").

**(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 7067 inclusive, 7069 through 7990 inclusive, and 8000 through 8999 inclusive.

**(d) Subject**

Air Transport Association (ATA) of America Code 27, Flight Controls.

**(e) Reason**

This AD was prompted by the discovery of a number of incorrectly calibrated angle of attack (AOA) transducers installed in the stall protection system. We are issuing this AD to detect and replace incorrectly calibrated AOA transducers; incorrect calibration of the transducers could result in late activation of the stick pusher.

**(f) Compliance**

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

**(g) Retained Replacement of AOA Transducers With No Changes**

This paragraph restates the requirements of paragraph (g) of AD 2016-09-04, with no changes. For AOA transducers identified in paragraph 1.A., "Effectivity," of Bombardier Service Bulletin 601R-27-164, dated March 30, 2015: Within 2,500 flight hours or 12 months, whichever occurs first after June 6, 2016 (the effective date of AD 2016-09-04), replace the AOA transducers with correctly calibrated AOA transducers, in accordance with the Accomplishment Instructions of Bombardier Service Bulletin 601R-27-164, dated March 30, 2015.

**(h) Retained Parts Installation Prohibition, With a Change to the Affected Parts Language**

This paragraph restates the parts installation prohibition specified in paragraph (h) of AD 2016-09-04, with a change to the affected parts language. As of June 6, 2016 (the effective date of AD 2016-09-04), no person may install, on any airplane, an AOA transducer having a part number and serial number listed in paragraph 1.A., "Effectivity," of Bombardier Service Bulletin 601R-27-164, dated March 30, 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. 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, 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**

Refer to Mandatory Continuing Airworthiness Information (MCAI) Canadian AD CF-2015-17, dated July 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-2016-7266.

**(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.

(3) The following service information was approved for IBR on June 6, 2016, (81 FR 26102, May 2, 2016).

(i) Bombardier Service Bulletin 601R-27-164, dated March 30, 2015.

(ii) Reserved.

(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](mailto: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 June 13, 2016.  
Dionne Palermo,  
Acting Manager, Transport Airplane Directorate,  
Aircraft Certification Service.



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## AIRWORTHINESS DIRECTIVE

[www.faa.gov/aircraft/safety/alerts/](http://www.faa.gov/aircraft/safety/alerts/)  
[www.gpoaccess.gov/fr/advanced.html](http://www.gpoaccess.gov/fr/advanced.html)

**2016-13-05 General Electric Company:** Amendment 39-18569; Docket No. FAA-2015-7491; Directorate Identifier 2015-NE-39-AD.

**(a) Effective Date**

This AD is effective July 29, 2016.

**(b) Affected ADs**

None.

**(c) Applicability**

This AD applies to General Electric Company (GE) GE90-76B, GE90-77B, GE90-85B, GE90-90B, and GE90-94B turbofan engines with a high-pressure compressor (HPC) stage 8-10 spool, part numbers (P/Ns) 1694M80G04, 1844M90G01, or 1844M90G02, installed.

**(d) Unsafe Condition**

This AD was prompted by an uncontained failure of the HPC stage 8-10 spool. We are issuing this AD to prevent failure of the HPC stage 8-10 spool, uncontained rotor release, damage to the engine, and damage to the airplane.

**(e) Compliance**

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

(1) For HPC stage 8-10 spool, P/N 1694M80G04, all serial numbers (S/Ns), or HPC stage 8-10 spool, P/N 1844M90G01 or 1844M90G02, with a S/N listed in Figure 1 to paragraph (e) of this AD; perform an eddy current inspection (ECI) or ultrasonic inspection (USI) of the stage 8 aft web upper face, after reaching 8,000 cycles since new (CSN), but, before exceeding 9,000 CSN, or within 500 cycles in service after the effective date of this AD, whichever occurs later.

**Figure 1 to Paragraph (e)–HPC Stage 8-10 Spool S/Ns**

<b>Part Nos.</b>	<b>Serial Nos.</b>				
1844M90G01	GWN005MF	GWNBK753	GWNBS077	GWNBS497	GWNBS724
	GWN005MG	GWNBK754	GWNBS078	GWNBS499	GWNBS794
	GWN0087M	GWNBK841	GWNBS079	GWNBS500	GWNBS810
	GWN0087N	GWNBK842	GWNBS080	GWNBS501	GWNBS811
	GWN00DGK	GWNBK843	GWNBS081	GWNBS502	GWNBS812
	GWN00DGL	GWNBK844	GWNBS157	GWNBS609	GWNBS813

	GWNBJ992	GWNBK952	GWNBS158	GWNBS610	GWNBS814
	GWNBK667	GWNBK953	GWNBS159	GWNBS611	GWNBS910
	GWNBK674	GWNBK954	GWNBS160	GWNBS612	GWNBS911
	GWNBK675	GWNBK955	GWNBS266	GWNBS613	GWNBS912
	GWNBK743	GWNBK956	GWNBS267	GWNBS614	GWNBS914
	GWNBK744	GWNBK957	GWNBS268	GWNBS721	GWNBS915
	GWNBK751	GWNBK958	GWNBS269	GWNBS722	GWNBS982
	GWNBK752	GWNBK959	GWNBS270	GWNBS723	GWNBS983
1844M90G02	GWN00C2T	GWN01C5N	GWN02N8D	GWN03RTM	GWN04E21
	GWN00C2V	GWN01GE2	GWN02T3R	GWN03RTP	GWN04GHT
	GWN00G2N	GWN01GE3	GWN02WGM	GWN040RL	GWN04GHW
	GWN00G2P	GWN01GE4	GWN0311K	GWN040RM	GWN04GJ0
	GWN00PFP	GWN01GE6	GWN035PP	GWN040RN	GWN04JW6
	GWN00PFR	GWN01WH1	GWN038TD	GWN040RP	GWN04JW7
	GWN00T2N	GWN02688	GWN039TG	GWN04202	GWN04JW8
	GWN00YHV	GWN02689	GWN03G2R	GWN0435W	GWN04L7K
	GWN0125G	GWN0268A	GWN03G2W	GWN04360	GWN04L7L
	GWN0125H	GWN02DP2	GWN03G30	GWN04361	GWN04MT7
	GWN0166K	GWN02DP3	GWN03JPC	GWN04362	GWN04MT8
	GWN01C5K	GWN02F9F	GWN03JPD	GWN04ATG	GWNBS984
	GWN01C5L	GWN02F9G	GWN03N8P	GWN04ATH	
	GWN01C5M	GWN02L9T	GWN03N8R	GWN04E20	

(2) For all HPC stage 8-10 spools, P/N 1694M80G04, 1844M90G01, or 1844M90G02, perform an ECI of the stage 8 aft web upper face of the HPC stage 8-10 spool at each shop visit.

(3) Remove from service any HPC stage 8-10 spool that fails the inspection required by paragraphs (e)(1) or (e)(2) of this AD, and replace with a spool eligible for installation.

#### **(f) Installation Prohibition**

After the effective date of this AD, do not re-install into any engine, any HPC stage 8-10 spool, P/Ns 1694M80G04, 1844M90G01, or 1844M90G02, unless the spool has passed an ECI of the stage 8 aft web upper face as specified in paragraph (e)(1) or (e)(2) of this AD.

#### **(g) Definition**

For the purpose of this AD, an engine shop visit is the induction of an engine into the shop for maintenance during which the compressor discharge pressure seal face is exposed.

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

The Manager, Engine Certification Office, FAA, may approve AMOCs for this AD. Use the procedures found in 14 CFR 39.19 to make your request. You may email your request to: ANE-AD-AMOC@faa.gov.

**(i) Related Information**

For more information about this AD, contact John Frost, Aerospace Engineer, Engine Certification Office, FAA, 1200 District Avenue, Burlington, MA 01803; phone: 781-238-7756; fax: 781-238-7199; email: john.frost@faa.gov.

**(j) Material Incorporated by Reference**

None.

Issued in Burlington, Massachusetts, on June 15, 2016.  
Colleen M. D'Alessandro,  
Manager, Engine & Propeller Directorate,  
Aircraft Certification Service.