FEDERAL AVIATION ADMINISTRATION
AIRWORTHINESS DIRECTIVES

LARGE AIRCRAFT

BIWEEKLY 2012-22

10/22/2012 - 11/4/2012

Federal Aviation Administration
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LARGE AIRCRAFT

AD No.	Information	Manufacturer	Applicability
Information Key: E - Emergency; COR - Correction; S - Supersedes			
Biweekly 2012-01			
2011-18-21	S 2004-26-05	Rolls-Royce plc	Engine: RB211-524B-02, -524B3-02, RB211-524B2, -524B4, -524C2, -524D4, RB211-524G and -524H series
2011-27-03		Boeing	737
2011-27-05	S 2004-12-03	Saab AB, Saab Aerosystems	340A (SAAB/SF340A) and SAAB 340B
2011-27-06		Dassault Aviation	Falcon 7X
Biweekly 2012-02			
2011-25-05		Boeing	767-200, -300, -300F, and -400ER series
2012-01-06		Boeing	767-200 and 767-300 series
2012-01-08		328 Support Services GmbH	328-100 and 328-300
2012-01-09		Boeing	757-200, -200CB, and -300 series
2012-01-10		General Electric	Engine: CF34-10E series
Biweekly 2012-03			
2011-24-04	COR	Boeing	DC-10-10, DC-10-10F, and MD-10-10F
2012-01-04		EADS CASA	CN-235-100, CN-235-200, and CN-235-300
2012-02-03		CFM International S.A.	Engine: CFM56-5B1/3, CFM56-5B2/3, CFM56-5B3/3, CFM56-5B4/3, CFM56-5B5/3, CFM56-5B6/3, CFM56-5B7/3, CFM56-5B8/3, CFM56-5B9/3, CFM56-5B3/3B1, and CFM56-5B4/3B1
2012-02-04		Rolls-Royce plc	Engine: RB211-Trent 553-61, RB211-Trent 553A2-61, RB211-Trent 556-61, RB211-Trent 556A2-61, RB211-Trent 556B-61, RB211-Trent 556B2-61, RB211-Trent 560-61, and RB211-Trent 560A2-61 turbofan
2012-02-07	S 2011-02-07 S 2011-18-01	General Electric	Engine: CF6-45A, CF6-45A2, CF6-50A, CF6-50C, CF6-50CA, CF6-50C1, CF6-50C2, CF6-50C2B, CF6-50C2D, CF6-50E, CF6-50E1, CF6-50E2, and CF6-50E2B turbofan
2012-02-08		Aviation Communication & Surveillance Systems LLC	Appliance: See AD
2012-02-09		Boeing	737-100, -200, -200C, and -300 series
2012-02-11	S 2011-11-08	Rolls-Royce plc	Engine: RB211-535E4-37, -535E4-B-37, -535E4-B-75, and -535E4-C-37 turbofan
2012-02-12		Bombardier Inc	DHC-8-400, -401, and -402
2012-03-51	E	Lockheed	P2V
Biweekly 2012-04			
74-08-09 R3	R	Transport Category Airplanes	See AD
2009-11-02	COR	CFM International S.A.	Engine: CFM56-2, CFM56-3, CFM56-5A, CFM56-5B, CFM56-5C, and CFM56-7B series
2012-02-14		Boeing	737-600, -700, -700C, -800, -900, and -900ER series
2012-03-02		Boeing	767-200 and -300 series
2012-03-05		Bombardier, Inc.	BD-700-1A10 and BD-700-1A11
2012-03-09		Boeing	747SP series
2012-03-10		Airbus	A340-642
2012-03-51		Lockheed	P2V
2012-04-01	S 2003-16-18	Rolls-Royce plc	Engine: RB211-Trent 895-17, 892-17, 892B-17, 884-17, 884B-17, 877-17, and 875-17 turbofan
2012-04-05	S 2007-12-07	General Electric Company	Engine: CF6-80C2B1F, CF6-80C2B1F1, CF6-80C2B1F2, CF6-80C2B2F, CF6-80C2B3F, CF6-80C2B4F, CF6-80C2B5F, CF6-80C2B6F, CF6-80C2B6FA, CF6-80C2B7F, and CF6-80C2B8F turbofan
Biweekly 2012-05			
2012-02-15	S 2007-03-01	Boeing	757-200, -200PF, -200CB, and -300 series
2012-02-17		Boeing	757-200, -200PF, -200CB, and -300 series
2012-02-18		Dassault	MYSTERE-FALCON 50
2012-03-03		Fokker	F.27 Mark 050, F.28 Mark 0070 and 0100
2012-03-08	S 2006-14-05	Bombardier	CL-600-2C10 (Regional Jet Series 700, 701, & 702), CL-600-2D15 (Regional Jet Series 705), and CL-600-2D24 (Regional Jet Series 900)
2012-03-12		GE	Engine: CF6-80C2 turbofan

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2012-04-02		Bombardier	CL-600-2C10 (Regional Jet Series 700, 701, & 702); CL-600-2D15 (Regional Jet Series 705); and CL-600-2D24 (Regional Jet Series 900)
2012-04-04		Pratt & Whitney Division	Engine: PW4050, PW4052, PW4056, PW4060, PW4060A, PW4060C, PW4062, PW4062A, PW4152, PW4156, PW4156A, PW4158, PW4160, PW4460, PW4462, and PW4650 turbofan
2012-04-06		328 Support Services GmbH	328-100
2012-04-07		Airbus	A330-201, -202, -203, -223, -243, -301, -302, -303, -321, -322, -323, -341, -342, -343; A340-211, -212, -213, -311, -312, and -313
2012-04-08		Bombardier	DHC-8-102, -103, -106, -201, -202, -301, -311, -315; DHC-8-400, -401, and -402
2012-04-09		Boeing	747-100, 747-100B, 747-100B SUD, 747-200B, 747-200C, 747-200F, 747-300, 747-400, 747-400D, 747-400F, 747SP, and 747SR series
2012-04-12		Bombardier	CL-600-2B16 (CL -604 Variant)
2012-04-13	S 2011-09-07	Rolls-Royce plc	Engine: RB211-524G2-T-19, -524G3-T-19, -524H-T-36, -524H2-T-19; RB211-Trent 553-61, 553A2-61, 556-61, 556A2-61, 556B-61 556B2-61, 560-61, 560A2-61; RB211-Trent 768-60, 772-60, 772B-60; RB211-Trent 875-17, 877-17, 884-17, 884B-17, 892-17, 892B-17, and 895-17 turbofan
2012-04-14		Rolls-Royce plc	Engine: RB211-Trent 800 turbofan
Biweekly 2012-06			
2012-02-01		Pratt & Whitney	Engine: PW2037, PW2037(M), and PW2040 turbofan
2012-04-11	S 97-22-13	Airbus	A318-111, -112, -121, -122; A319-111, -112, -113, -114, -115, -131, -132, -133; A320-111, -211, -212, -214, -231, -232, -233; A321-111, -112, -131, -211, -212, -213, -231, and -232
2012-04-15	S 2007-05-17	Pratt & Whitney	Engine: JT9D-3A, -7, -7A, -7H, -7AH, -7F, -7J, -20J, -59A, -70A, -7Q, -7Q3, -7R4D, -7R4D1, -7R4E, -7R4E1, -7R4E4, -7R4G2, and -7R4H1 series turbofan
2012-05-03		Boeing	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
2012-05-04		Boeing	767-200, -300, -300F, and -400ER series
2012-05-05		Bombardier	CL-215-1A10, CL-215-6B11 (CL-215T Variant), and CL-215-6B11 (CL-415 Variant)
2012-05-07		Bombardier	DHC-8-102, -103, and -106
2012-05-08		Embraer	ERJ 170-100 LR, -100 STD, -100 SE., -100 SU; ERJ 170-200 LR, -200 SU, and -200 STD
2012-06-01		Cessna	560XL
2012-06-02		Airbus	A300 B4-601, B4-603, B4-620, B4-622, B4-605R, B4-622R, F4-605R, F4-622R, C4-605R Variant F; A310-203, -204, -221, -222, -304, -322, -324, and -325
2012-06-04		Bombardier	DHC-8-400, -401, and -402
2012-06-05		Bombardier	DHC-8-400, -401, and -402
2012-06-07	S 2010-17-02	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, A340-541 and -642
2012-06-08		Airbus	A340-211, -212, -311, and -312
2012-06-14		Pratt & Whitney	Engine: JT9D-7R4G2 and -7R4H1 turbofan
2012-06-17		Rolls-Royce Deutschland Ltd	Engine: TAY 611-8 engines, and TAY 611-8C
2012-06-18		Pratt & Whitney	Engine: PW4050, PW4052, PW4056, PW4060, PW4060A, PW4060C, PW4062, PW4062A, PW4152, PW4156, PW4156A, PW4158, PW4160, PW4460, PW4462, and PW4650 turbofan

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Biweekly 2012-07			
2012-04-11	COR S 97-22-13 S 2002-10-06	Airbus	A318-111, -112, -121, -122; A319-111, -112, -113, -114, -115, -131, -132, -133; A320-111, -211, -212, -214, -231, -232, -233, A321-111, -112, -131, -211, -212, -213, -231, and -232
2012-05-02		Boeing	737-600, -700, -700C, -800, and -900 series
2012-05-06	S 95-20-04 R1	Lockheed Martin	L-1011-385-1, L-1011-385-1-14, L-1011-385-1-15, and L-1011-385-3
2012-06-03		Bombardier	BD-100-1A10 (Challenger 300)
2012-06-06		Boeing	757-200, -200PF, -200CB, and -300 series
2012-06-10	COR	Airbus	A330-201, -202, -203, -223, -243, -301, -302,-303, -321, -322, -323, -341, -342, -343, A340-541 and -642
2012-06-11		Airbus	A321-131, -211, -212, and -231
2012-06-12		Airbus	A340-642
2012-06-21		Dassault Aviation	Mystere-Falcon 900
2012-06-22		Airbus	A340-541 and -642
2012-06-23	S 2011-08-07	Rolls-Royce plc	Engine: RB211-Trent 875-17, RB211-Trent 877-17, RB211-Trent 884-17, RB211-Trent 884B-17, RB211-Trent 892-17, RB211-Trent 892B-17, and RB211-Trent 895-17 turbofan
2012-06-25	S 2007-23-01	Goodrich	Appliance: See Ad
2012-07-02		Airbus	A340-541 and -642
2012-07-03	S 2009-21-06	328 Support Services GmbH	328-100 and -300
Biweekly 2012-08			
2012-02-16	S 2007-15-10	Boeing	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
2012-03-04	S 2008-01-05	Airbus	A310-203, -204, -221, -222, -304, -322, -324, and -325
2012-04-14	COR	Rolls-Royce plc	RB211-Trent 800 turbofan engines
2012-06-09		Lockheed Martin Corporation	382, 382B, 382E, 382F, and 382G
2012-06-19		Airbus	A330-201, -202, -203, -223, -243, -301, -302, -303, -321, -322, -323, -341, -342, -343, A340-211, -212, -213, -311, -312, and -313
2012-06-20		Fokker Services B.V.	F.28 Mark 0070 and 0100
2012-07-04		Cessna	680
2012-07-05		Fokker Services B.V.	F.27 Mark 050
2012-07-06		Boeing	777-200, -200LR, -300, -300ER, and 777F series
2012-07-07		Boeing	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
Biweekly 2012-09			
2012-06-02	COR	Airbus	A300 B4-601, B4-603, B4-620, B4-622, B4-605R, B4-622R, F4-605R, F4-622R, and C4-605R Variant F; and A310-203, -204, -221, -222, -304, -322, -324, and -325
2012-07-08	S 2010-11-13	Embraer	ERJ 170-100 LR, -100 STD, -100 SE., and -100 SU; and ERJ 170-200 LR, -200 SU, and -200 STD
2012-08-02		Airbus	A330-201, -202, -203, -223, -223F, -243, -243F, -301, -302, -303, -321, -322, -323, -341, -342, and -343; and A340-211, -212, -213, -311, -312, -313, -541, and -642
2012-08-03		Airbus	A300 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; and A300 C4-605R Variant F; A310-203, -204, -221, -222, -304, -322, -324, and -325
2012-08-04		Bombardier	CL-600-2B19 (Regional Jet Series 100 & 440)
2012-08-05		Bombardier	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)
2012-08-07	S 2011-23-06	Sicma Aero Seat	Passenger seat assemblies
2012-08-08		Learjet	45
2012-08-09		Boeing	777-200, -200LR, -300, -300ER, and 777F series
2012-08-10		Bombardier	CL-600-2B16 (CL-604 Variant)
2012-08-11		Bombardier	DHC-8-400, -401, and -402

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2012-08-12		Airbus	A310-203, -204, -221, -222, -304, -322, -324, and -325
2012-08-13		Boeing	777-200 and -300
2012-08-14		Boeing	767-200, -300, -300F, and -400ER series
2012-08-15		Bombardier	CL-600-2B16 (CL-604 Variant)
2012-08-16		Learjet	60
2012-08-17		Boeing	737-100, -200, -200C, -300, -400, and -500 series
2012-09-01		Cessna	560XL
2012-09-02		Airbus	A300 B2-1C, B2K-3C, B2-203, B4-2C, B4-103, and B4-203
2012-09-03		Saab	SAAB 2000
Biweekly 2012-10			
2012-01-05	S 2010-23-26	Airbus	A300 B2-1C, B2K-3C, B2-203, B4-2C, B4-103, B4-203, A300 B4-601, B4-603, B4-620, B4-622, B4-605R, B4-622R, and F4-605R
2012-09-04	S 2004-19-06 R1	Boeing	767-200, -300, -300F, and -400ER series
2012-09-05		Fokker Services B.V.	F.28 Mark 0100
2012-09-06		Boeing	737-700 series
2012-09-07		Airbus	A319-111, -112, -132, A320-111, -211, -212, -214, -232, A321-111, -211, -212, and -231
2012-09-08		Boeing	767-200 and -300 series
2012-09-10		Pratt & Whitney Canada	PT6A-38, -41, -42, -42A, -61, -64, -66, -66B, -110, -112, -114, -114A, -121, -135, and -135A series turboprop engines
2012-09-12	S 2005-23-02	Airbus	A319-111, -112, -113, -114, -115, -131, -132, -133, A320-211, -212, -214, -231, -232, -233, A321-111, -112, -131, -211, -212, -213, -231, and -232
2012-09-13		Airbus	A330-223F, -243F, -201, -202, -203, -223, -243, -301, -302, -303, -321, -322, -323, -341, -342, -343, A340-211, -212, -213, -311, -312, and -313
2012-09-14		Boeing	777-200, -200LR, -300, -300ER, and 777F series
Biweekly 2012-11			
2012-09-09	S 2010-20-07	International Aero Engines AG	V2500-A1, V2525-D5, V2528-D5, V2522-A5, V2524-A5, V2527-A5, V2527E-A5, V2527M-A5, V2530-A5, and V2533-A5 turbofan engines
2012-10-03	S 90-21-17	The Boeing Company	747-100, 747-100B, 747-200B, 747-200C, 747-200F, 747-300, 747SR, and 747SP series
2012-10-05		Fokker Srvices B.V.	F.28 Mark 0070 and 0100
2012-10-06		Saab AB, Saab Aerosystems	SAAB 2000
2012-10-07		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)
2012-10-08	S 2011-08-04	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)
2012-10-10		The Boeing Company	Model 777-200, -200LR, -300, -300ER, and 777F series
2012-10-12	S 2008-18-08	Rolls-Royce plc	RB211-Trent 553-61, 553A2-61, 556-61, 556A2-61, 556B-61, 556B2-61, 560-61, 560A2-61, 768-60, 772-60, 772B-60, 875-17, 877-17, 884-17, 884B-17, 892-17, 892B-17, and 895-17 turbofan engines
2012-11-01		Rolls-Royce plc	RB211-Trent 875-17, 877-17, 884-17, 884B-17, 892-17, 892B-17, and 895-17 turbofan engines
2012-11-06		Gulfstream Aerospace Corporation	G-1159, G-1159A, and G-1159B
2012-11-07		Honeywell International Inc	ALF502L-2C; ALF502R-3; ALF502R-3A; ALF502R-5; LF507-1F; and LF507-1H turbofan engines
Biweekly 2012-12			
2012-11-03		Boeing	777-200, -200LR, -300, -300ER, and 777F series
2012-11-04	S 2005-18-05	Bombardier Inc	CL-215-1A10 (Water Bomber), CL-215-6B11 (CL-215T Variant)
2012-11-11	S 2009-04-12	Boeing	767-200, -300, and -400ER series

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Biweekly 2012-13			
2012-11-09	S 2011-04-09	Transport category airplanes	See AD
2012-11-15		BAE	4101
2012-12-01	S 2009-02-04	Airbus	A300 B4-601, B4-603, B4-620, B4-622, B4-605R, B4-622R, F4-605R, F4-622R, and C4-605R Variant F, and A310-203, -204, -221, -222, -304, -322, -324, and -325
2012-12-02		Bombardier	CL-600-2C10 (Regional Jet Series 700, 701, & 702), CL-600-2D15 (Regional Jet Series 705) and CL-600-2D24 (Regional Jet Series 900)
2012-12-04	S 2008-19-03	Boeing	737-300, -400, and -500 series
2012-12-05	S 2004-09-09 S 2009-16-14	Boeing	737-100, -200, -200C, -300, -400, and -500 series
2012-12-06		Fokker	F.28 Mark 0070 and 0100
2012-12-07		Fokker	F.28 Mark 0070 and 0100
2012-12-08		Boeing	777-200 and -300 series
2012-12-09		Boeing	717-200
2012-12-12		Airbus	A330-201, -202, -203, -223, -223F, -243, -243F, -301, -302, -303, -321, -322, -323, -341, -342, and -343 airplanes; and A340-211, -212, -213, -311, -312, and -313 airplanes
2012-12-13		BAE	BAe 146-100A, -200A, and -300A; and Avro 146-RJ70A, 146-RJ85A, and 146-RJ100A
2012-12-14		Boeing	767-200 and -300 series
2012-12-16		Bombardier	DHC-8-400, -401, and -402
2012-12-17		Bombardier	BD-100-1A10 (Challenger 300)
2012-12-18	S 2010-18-03	Dassault	FALCON 7X
2012-12-19		Boeing	777-200, -200LR, and -300ER series
2012-12-22		BAE	BAe 146-100A, -200A, and -300A; and Avro 146-RJ70A, 146-RJ85A, and 146-RJ100A
2012-13-01		Saab	340A (SAAB/SF340A) and SAAB 340B
2012-13-03		Bombardier	CL-600-2B19 (Regional Jet Series 100 & 440)
2012-13-51		Gulfstream Aerospace LP	G150
Biweekly 2012-14			
2009-07-01 R1		Rolls-Royce Deutschland Ltd & Co KG	BR700-715A1-30, BR700-715B1-30, and BR700-715C1-30 turbofan engines
2012-11-14		Pratt & Whitney Canada	PW118, PW118A, PW118B, PW119B, PW119C, PW120, PW120A, PW121, PW121A, PW123, PW123B, PW123C, PW123D, PW123E, PW123AF, PW124B, PW125B, PW126A, PW127, PW127E, PW127F, PW127G, and PW127M turboprop engines
2012-12-03	S 2010-16-07	Rolls-Royce plc	RB211-Trent 970-84, 970B-84, 972-84, 972B-84, 977-84, 977B-84, and 980-84 turbofan engines
2012-13-05		Boeing	777-200, -200LR, -300, -300ER, and 777F series
2012-13-06		Airbus	A300 B2-1A, B2-1C, B2K-3C, B2-203, B4-2C, B4-103, and B4-203, A300 B4-601, B4-603, B4-620, B4-622, B4-605R, B4-622R, F4-605R, and F4-622, A300 C4-605R Variant F
2012-13-07		Boeing	737-100, -200, -200C, -300, -400, and -500 series
2012-13-08	S 2006-01-07	Boeing	747-100, 747-100B, 747-200B, 747-200C, 747-200F, 747-400F, 747SR, and 747SP series
2012-13-09		Boeing	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

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Biweekly 2012-15			
2012-12-08	COR	Boeing	777-200 and -300 series
2012-12-15	S 2008-10-11	Boeing	757-200, -200PF, -200CB, and -300 series
2012-13-02	S 2011-14-07	Pratt & Whitney Division	PW4074 and PW4077 turbofan engines
2012-13-12		Gulfstream Aerospace Corp	G-IV, GIV-X, GV, and GV-SP
2012-13-51		Gulfstream Aerospace LP	G150
2012-14-02	S 2002-19-11	Boeing	767-200 and -300 series
2012-14-03		Boeing	777-200 and -300 series
2012-14-04		Bombardier Inc	DHC-8-101, -102, -103, -106, -201, -202, -301, -311, and -315
2012-14-05		Airbus	A318-111, -112, -121, -122; A319-111, -112, -113, -114, -115, -131, -132, -133; A320-111, -211, -212, -214, -231, -232, and -233
2012-14-13		Airbus	A318-112 -121; A319-111, -112, -115, -132, -133; A320-214, -232, -233; A321-211, -212, -213, and -231
Biweekly 2012-16			
2011-19-01 R1	R 2011-19-01	Airbus	A318-111, A318-112, A318-121, A318-122, A319-111, A319-112, A319-113, A319-114, A319-115, A319-131, A319-132, A319-133, A320-111, A320-211, A320-212, A320-214, A320-231, A320-232, A320-233, A321-111, A321-112, A321-131, A321-211, A321-212, A321-213, A321-231, and A321-232
2012-15-03		Embraer S.A.	ERJ 190-100 STD, -100 LR, -100 ECJ, and -100 IGW airplanes; and Model ERJ 190-200 STD, -200 LR, and -200 IGW
2012-15-06		Gulfstream Aerospace LP	Astra SPX, 1125 Westwind Astra, and Gulfstream 100
2012-15-09		Airbus	A310-203, -221, and -222
2012-15-10		Boeing	747-400 and 747-400D series
2012-15-11		Dassault Aviation	FALCON 7X
2012-15-12		Boeing	767-200, -300, -300F, and -400ER series
2012-15-13	S 2007-23-18	Boeing	747-100B SUD, 747-300, 747-400, 747-400D series, and 747-200B series
2012-15-14		Airbus	A300 B4-2C, B4-103, B4-203; B4-601, B4-603, B4-620, B4-622, B4-605R, B4-622R, F4-605R, F4-622R; and A300 C4-605R Variant F
2012-15-16		Bombardier	DHC-8-102, -103, -106, -201, -202, -301, -311, -315, DHC-8-400, -401, and -402
2012-15-17		Airbus	A300 B4-603, B4-605R, B4-622R; A300 C4-605R Variant F; A300 F4-605R and F4-622R
Biweekly 2012-17			
2012-16-01		Pratt & Whitney Division	See AD
2012-16-05		Airbus	A330-201, -202, -203, -223, and -243; A330-223F and -243F; A340-211, -212, -213, -311, -312, -313, -541, and -642
2012-16-06		Airbus	A300 B4-601, B4-603, B4-620, and B4-622, and A310-203, -204, -221, and -222
2012-16-07		Boeing	737-500 series
2012-16-08		BAE Systems (Operations) Limited	BAe 146-100A, -200A, and -300A, and Avro 146-RJ70A, 146-RJ85A, and 146-RJ100A
2012-16-09	S 2010-07-04 S 2010-18-01	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 ECJ, and -100 IGW; and ERJ 190-200 STD, -200 LR, and -200 IGW
2012-16-10		Bombardier, Inc.	DHC-8-400, -401, and -402
2012-16-11		Airbus	A318-112 and -121; A319-111, -112, -115, -132, and -133; A320-214, -232, and -233; and A321-211, -212, -213, and -231
2012-16-12		The Boeing Company	707-100 long body, -200, -100B long body, and -100B short body series; 707-300, -300B, -300C, and -400 series; and 720 and 720B series
2012-16-15		Bombardier, Inc.	CL-600-2B19 (Regional Jet Series 100 & 440)
2012-16-16		The Boeing Company	757-200, -200PF, -200CB, and -300 series

LARGE AIRCRAFT

AD No.	Information	Manufacturer	Applicability
Information Key: E - Emergency; COR - Correction; S - Supersedes			
Biweekly 2012-18			
2012-15-15	S 2004-09-32	Boeing	757-200, -200CB, and -300 series
2012-16-04		Boeing	777-200 and -300 series
2012-16-14		Honeywell International Inc.	TFE731-20R, -20AR, -20BR, -40, -40AR, -40R, -50R, and -60 turbofan engines
2012-17-01		Goodyear Aviation Tires	Appliance: See AD
2012-17-05		Honeywell International Inc.	TFE731-5 series, TFE731-5AR and -5BR, TFE731-4, -4R, -5AR, -5BR, and -5R series turbofan engines
2012-17-11		BAE SYSTEMS (Operations) Limited	4101
2012-17-12		Boeing	747-400 series
2012-18-03		Pratt & Whitney Division	PW4050, PW4052, PW4056, PW4152, PW4156, PW4650, PW4060, PW4060A, PW4060C, PW4062, PW4062A, PW4156A, PW4158, PW4160, PW4460, and PW4462, , PW4164C, PW4164C/B, PW4168, and PW4168A engines
2012-18-05		Boeing	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), and DC-9-87 (MD-87), MD-88, MD-90-30
Biweekly 2012-19			
2012-04-07	COR	Airbus	A330-201, -202, -203, -223, -243, -301, -302, -303, -321, -322, -323, -341, -342, and -343 airplanes; and A340-211, -212, -213, -311, -312, and -313 airplanes
2012-14-01		Rolls-Royce Deutschland	BR700-715A1-30, BR700-715B1-30, and BR700-715C1-30 turbofan engines
2012-17-04		Rolls-Royce plc	RB211-Trent 875-17, 877-17, 884-17, 884B-17, 892-17, 892B-17, and 895-17 turbofan engines
2012-17-13		Boeing	707-100 long body, -200, -100B long body, and -100B short body series airplanes; Model 707-300, -300B, -300C, and -400 series airplanes; and 720 and 720B series airplanes
2012-18-11		Bombardier	CL-600-2C10 (Regional Jet Series 700, 701, & 702) airplanes; CL-600-2D15 (Regional Jet Series 705) and CL-600-2D24 (Regional Jet Series 900) airplanes
2012-18-12		Airbus	A318-111, -112, -121, and -122 airplanes; A319-111, -112, -113, -114, -115, -131, -132, and -133 airplanes; and A320-111, -211, -212, -214, -231, -232, and -233 airplanes
2012-18-13	S 99-08-23	Boeing	737-100, -200, -200C, -300, -400, and -500 series airplanes
2012-18-14		Pratt & Whitney Canada	PW901A auxiliary power units
2012-18-15		Bombardier	DHC-8-400, -401, and -402 airplanes
2012-18-16		Cessna	750 airplanes
2012-18-17	S 2010-18-13	Pratt & Whitney Division	See AD
2012-19-02	S 2005-25-21	Airbus	A330-243, -243F, -341, -342 and -343 airplanes
2012-19-08		General Electric Company	See AD
Biweekly 2012-20			
2012-14-09		Pratt & Whitney Division	PW4050, PW4052, PW4056, PW4152, PW4156, PW4650, PW4060, PW4060A, PW4060C, PW4062, PW4062A, PW4156A, PW4158, PW4160, PW4460, PW4462, PW4164, PW4164C, PW4164C/B, PW4168, PW4168A, PW4164-1D, PW4164C-1D, PW4164C/B-1D, PW4168-1D, PW4168A-1D, and PW4170
2012-18-07		Rolls-Royce plc	RB211-Trent 875-17, RB211-Trent 877-17, RB211-Trent 884-17, RB211-Trent 884B-17, RB211-Trent 892-17, RB211-Trent 892B-17, and RB211-Trent 895-17 turbofan engines
2012-19-03	S 2009-26-17	Boeing	DC-10-10, DC-10-10F, DC-10-15, DC-10-30, DC-10-30F (KC-10A and KDC-10), DC-10-40, and DC-10-40F airplanes, and Model MD-10-10F and MD-10-30F
2012-19-04	S 94-14-05 S 96-07-06	Fokker Services B.V.	F.28 Mark 0100
2012-19-05		Fokker Services B.V.	F.28 Mark 0070 and 0100
2012-19-06		EMBRAER	EMB-145, -145ER, -145MR, -145LR, -145MP, and -145EP

AD No.	Information	Manufacturer	Applicability
Information Key: E - Emergency; COR - Correction; S - Supersedes			
			airplanes; and Model EMB-135BJ, -135ER, -135KE, -135KL, and -135LR
2012-19-07		Airbus	A340-541 and -642
2012-19-10		Boeing	777-200, -200LR, -300, -300ER, and 777F series
2012-19-11		Boeing	737-100, -200, -200C, -300,-400, -500, 737-600, -700, -700C, -800,-900, and -900ER series
2012-20-01		Boeing	737-100, -200, and -200C series
2012-20-03	S 89-15-07	Boeing	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
Biweekly 2012-21			
2012-20-04		Bombardier, Inc.	DHC-8-400, -401, and -402
2012-20-06		Boeing	737-200 and -200C series
2012-20-07	S 2007-15-06 R1	Airbus	A318-111, -112, -121, -122, A319-111, -112, -113, -114, -115, -131, -132, -133, A320-111, -211, -212, -214, -231, -232, -233, A321-111, -112, -131, -211, -212, -213, -231, and -232
2012-20-08		Bombardier, Inc.	DHC-8-400, -401, and -402
2012-20-09	S 2011-17-04	Bombardier, Inc.	DHC-8-400, -401, and -402
Biweekly 2012-22			
2012-21-02		Boeing	767-200, -300, -300F, and -400ER series
2012-21-03		Boeing	747-100, 747-100B, 747-100B SUD, 747-200B, 747-200C, 747-200F, 747-300, 747SR, and 747SP series
2012-21-04		Airbus	A300 B2-1A, B2-1C, B2K-3C, B2-203, B4-2C, B4-103, B4-203, A310-203, -204, -221, -222, -304, -322, -324, -325, A300 B4-601, B4-603, B4-620, B4-622, A300 B4-605R, B4-622R, A300 F4-605R, F4-622R and A300 C4-605R Variant F
2012-21-08	S 2005-07-20	Boeing	737-600, -700, -700C, -800, and -900 series
2012-21-10		Boeing	777-200LR and -300ER series
2012-21-11		Bombardier, Inc.	CL-600-2B16 (CL-601-3A, CL-601-3R, and CL-604 Variants)
2012-21-12		Bombardier, Inc.	DHC-8-400, -401, and -402
2012-21-13		Boeing	DC-9-81 (MD-81), DC-9-82 (MD-82), DC-9-83 (MD-83), DC-9-87 (MD-87), and MD-88
2012-21-14	S 2004-22-23	Bombardier, Inc.	CL-600-2B19 (Regional Jet Series 100 & 440)
2012-21-16		BAE Systems (Operations) Limited	BAe 146-100A, -200A, -300A, Avro 146-RJ70A, 146-RJ85A, and 146-RJ100A
2012-21-17		Airbus	A320-214 and -232
2012-21-18		Boeing	MD-90-30
2012-21-19		Airbus	A330-201, -202, -203, -223, -243, -223F, -243F, -301, -302, -303, -321, -322, -323, -341, -342, -343, A340-211, -212, -213, -311, -312, and -313
2012-21-20		Airbus	A330-201, -202, -203, -223, -243, -223F -243F, -301, -302, -303, -321, -322, -323, -341, -342, -343, A340-211, -212, -213, -311, -312, -313, -541, and -642
2012-22-04		Boeing	MD-90-30

2012-21-02 The Boeing Company: Amendment 39-17218; Docket No. FAA-2011-0567; Directorate Identifier 2010-NM-272-AD.

(a) Effective Date

This AD is effective November 27, 2012.

(b) Affected ADs

None.

(c) Applicability

This AD applies to The Boeing Company Model 767-200, -300, -300F, and -400ER series airplanes, certificated in any category, as identified in Boeing Special Attention Service Bulletin 767-57-0121, Revision 1, dated July 27, 2011.

(d) Subject

Joint Aircraft System Component (JASC)/Air Transport Association (ATA) of America Code 57, Wings.

(e) Unsafe Condition

This AD was prompted by a design review following a ground fire incident and reports of flammable fluid leaks from the wing leading edge area onto the engine exhaust area. We are issuing this AD to prevent flammable fluid from leaking onto the engine exhaust nozzle, which could result in a fire.

(f) Compliance

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

(g) Drain Path Modification

Within 60 months after the effective date of this AD, modify the fluid drain path in the leading edge area of the wing, in accordance with the Accomplishment Instructions of Boeing Special Attention Service Bulletin 767-57-0121, Revision 1, dated July 27, 2011, as revised by Boeing Special Attention Service Bulletin 767-57-0121, Revision 2, dated January 10, 2012.

(h) Credit for Previous Actions

This paragraph provides credit for the modification required by paragraph (g) of this AD, if that modification was performed before the effective date of this AD using Boeing Special Attention

Service Bulletin 767-57-0121, dated October 7, 2010, which is not incorporated by reference in 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 the Related Information section of this AD. Information may be emailed to: 9-ANM-Seattle-ACO-AMOC-Requests@faa.gov.

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

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

(j) Related Information

(1) For more information about this AD, contact Tung Tran, Aerospace Engineer, Propulsion Branch, ANM-140S, Seattle Aircraft Certification Office (ACO), FAA, 1601 Lind Avenue SW., Renton, WA 98057-3356; phone: 425-917-6505; fax: 425-917-6590; email: Tung.Tran@faa.gov.

(2) 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; phone: 206-544-5000, extension 1; fax: 206-766-5680; Internet: https://www.myboeingfleet.com.

(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 Special Attention Service Bulletin 767-57-0121, Revision 1, dated July 27, 2011.

(ii) Boeing Special Attention Service Bulletin 767-57-0121, Revision 2, dated January 10, 2012.

(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; phone: 206-544-5000, extension 1; fax: 206-766-5680; Internet: https://www.myboeingfleet.com.

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

(5) You may also review copies of the service information that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the availability of this material at an NARA facility, call 202-741-6030, or go to http://www.archives.gov/federal-register/cfr/ibr-locations.html.

Issued in Renton, Washington, on October 9, 2012.

Ali Bahrami,

Manager, Transport Airplane Directorate,

Aircraft Certification Service.

2012-21-03 The Boeing Company: Amendment 39-17219; Docket No. FAA-2008-0619; Directorate Identifier 2007-NM-356-AD.

(a) Effective Date

This AD is effective November 27, 2012.

(b) Affected ADs

None.

(c) Applicability

This AD applies to all The Boeing Company Model 747-100, 747-100B, 747-100B SUD, 747-200B, 747-200C, 747-200F, 747-300, 747SR, and 747SP series airplanes, certificated in any category.

(d) Subject

Joint Aircraft System Component (JASC)/Air Transport Association (ATA) of America Code 2800, Aircraft Fuel System.

(e) Unsafe Condition

This AD was prompted by reports of two in-service occurrences on Model 737-400 airplanes of total loss of boost pump pressure of the fuel feed system, followed by loss of fuel system suction feed capability on one engine, and in-flight shutdown of the engine. We are issuing this AD to detect and correct loss of the engine fuel suction feed capability of the fuel system, which, in the event of total loss of the fuel boost pumps, could result in dual engine flameout, inability to restart the engines, and consequent forced landing of the airplane.

(f) Compliance

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

(g) Operational Test and Corrective Actions

Within 30,000 flight hours after the effective date of this AD: Perform an operational test of the engine fuel suction feed of the fuel system, and all applicable corrective actions, in accordance with the Accomplishment Instructions of Boeing Alert Service Bulletin 747-28A2331, dated April 2, 2012. Do all applicable corrective actions before further flight. Repeat the operational test thereafter at intervals not to exceed 30,000 flight hours. Thereafter, except as provided in paragraph (h) of this AD, no alternative procedure or repetitive test intervals will be allowed.

(h) 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 the Related Information section 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.

(i) Related Information

For more information about this AD, contact Sue Lucier, Aerospace Engineer, Propulsion Branch, ANM-140S, 1601 Lind Avenue SW., Renton, Washington 98057-3356; phone: 425-917-6438; fax: 425-917-6590; email: suzanne.lucier@faa.gov.

(j) Material Incorporated by Reference

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

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

(i) Boeing Alert Service Bulletin 747-28A2331, dated April 2, 2012.

(ii) Reserved.

(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 review copies of the referenced service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, Washington. For information on the availability of this material at the FAA, call 425-227-1221.

(5) You may view this service information that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to: http://www.archives.gov/federal-register/cfr/ibr-locations.html.

Issued in Renton, Washington, on October 5, 2012.

Ali Bahrami,
Manager, Transport Airplane Directorate,
Aircraft Certification Service.

2012-21-04 Airbus: Amendment 39-17220. Docket No. FAA-2012-0144; Directorate Identifier 2011-NM-152-AD.

(a) Effective Date

This airworthiness directive (AD) becomes effective November 27, 2012.

(b) Affected ADs

None.

(c) Applicability

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

(1) Airbus Model A300 B2-1A, B2-1C, B2K-3C, B2-203, B4-2C, B4-103, and B4-203 airplanes.

(2) Airbus Model A310-203, -204, -221, -222, -304, -322, -324, and -325 airplanes.

(3) Airbus Model A300 B4-601, B4-603, B4-620, and B4-622 airplanes, Model A300 B4-605R and B4-622R airplanes, Model A300 F4-605R and F4-622R airplanes, and Model A300 C4-605R Variant F airplanes.

(d) Subject

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

(e) Reason

This AD was prompted by reports of cracked fuel pump canister hoods located in fuel tanks. We are issuing this AD to prevent any detached canister hood fragments/debris from being ingested into the fuel feed system, and becoming a potential source of ignition with consequent fire or explosion.

(f) Compliance

You are responsible for having the actions required by this AD performed within the compliance times specified, unless the actions have already been done.

(g) Initial Inspection and Replacement

Within 30 months after the effective date of this AD, do a detailed inspection for cracking of the fuel pump canister hood halves installed on all fuel pump canisters having part numbers (P/N) 2052C11, 2052C12, and C93R51-601, in accordance with the Accomplishment Instructions of the service bulletin specified in paragraph (g)(1), (g)(2), or (g)(3) of this AD, as applicable. If any crack is found on any fuel pump canister hood half during any inspection, before further flight, replace the fuel pump canister hood half, in accordance with the Accomplishment Instructions of the service bulletin specified in paragraph (g)(1), (g)(2), or (g)(3) of this AD, as applicable.

(1) For Model A300 series airplanes: Airbus Mandatory Service Bulletin A300-28-0089, Revision 01, including Inspection Findings–
Reporting Sheet, dated April 15, 2011.

(2) For Model A300-600 series airplanes: Airbus Mandatory Service Bulletin A300-28-6106, Revision 01, including Inspection Findings–Reporting Sheet, dated April 15, 2011.

(3) For Model A310 series airplanes: Airbus Mandatory Service Bulletin A310-28-2173, Revision 01, including Inspection Findings–
Reporting Sheet, dated April 15, 2011.

(h) Repetitive Inspections

Within 30 months after accomplishing the actions specified in paragraph (g) of this AD, and thereafter at intervals not to exceed 30 months, repeat the detailed inspection specified in paragraph (g) of this AD.

(i) Credit for Previous Actions

This paragraph provides credit for the actions required by paragraph (g) of this AD, if those actions were performed before the effective date of this AD using the Airbus Mandatory Service Bulletins specified in paragraph (i)(1), (i)(2), or (i)(3) of this AD, which are not incorporated by reference in this AD.

(1) Airbus Mandatory Service Bulletin A300-28-0089, dated January 13, 2011.

(2) Airbus Mandatory Service Bulletin A300-28-6106, dated January 13, 2011.

(3) Airbus Mandatory Service Bulletin A310-28-2173, dated January 13, 2011.

(j) Reporting to Airbus

Submit reports of the findings (both positive and negative) of the inspections required by paragraphs (g) and (h) of this AD to Airbus at the applicable time specified in paragraph (j)(1) or (j)(2) of this AD, using the form "Inspection Findings–Reporting Sheet" provided in the service bulletin identified in paragraph (g)(1), (g)(2), or (g)(3) of this AD, as applicable. Submit information to Airbus, SDC32 Technical Data and Documentation Services, fax (+33) 5 61 93 28 06, email sb.reporting@airbus.com, or via the operator's Resident Customer Support Office.

(1) If the inspection was done on or after the effective date of this AD: Submit the report within 90 days after the inspection.

(2) If the inspection was done before the effective date of this AD: Submit the report within 90 days after the effective date of this AD.

(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: Dan Rodina, Aerospace Engineer, International Branch, ANM-116, Transport Airplane Directorate, FAA, 1601 Lind Avenue SW., Renton, Washington 98057-3356; telephone (425) 227-2125; 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) Airworthy Product: For any requirement in this AD to obtain corrective actions from a manufacturer or other source, use these actions if they are FAA-approved. Corrective actions are considered FAA-approved if they are approved by the State of Design Authority (or their delegated agent). You are required to assure the product is airworthy before it is returned to service.

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

(l) Related Information

Refer to MCAI European Aviation Safety Agency Airworthiness Directive 2011-0124, dated June 30, 2011; and the Airbus mandatory service bulletins identified in paragraphs (l)(1), (l)(2), and (l)(3) of this AD; for related information.

(1) Airbus Mandatory Service Bulletin A300-28-0089, Revision 01, including Inspection Findings–Reporting Sheet, dated April 15, 2011.

(2) Airbus Mandatory Service Bulletin A300-28-6106, Revision 01, including Inspection Findings–Reporting Sheet, dated April 15, 2011.

(3) Airbus Mandatory Service Bulletin A310-28-2173, Revision 01, including Inspection Findings–Reporting Sheet, dated April 15, 2011.

(m) Material Incorporated by Reference

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

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

(i) Airbus Mandatory Service Bulletin A300-28-0089, Revision 01, including Inspection Findings–Reporting Sheet, dated April 15, 2011.

(ii) Airbus Mandatory Service Bulletin A300-28-6106, Revision 01, including Inspection Findings–Reporting Sheet, dated April 15, 2011.

(iii) Airbus Mandatory Service Bulletin A310-28-2173, Revision 01, including Inspection Findings–Reporting Sheet, dated April 15, 2011.

(3) For Airbus service information identified in this AD, contact Airbus SAS–EAW (Airworthiness Office), 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; Internet http://www.airbus.com.

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

(5) You may also review copies of the service information that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the availability of this material at an NARA facility, call 202-741-6030, or go to http://www.archives.gov/federal-register/cfr/ibr-locations.html.

Issued in Renton, Washington, on October 5, 2012.
Ali Bahrami,
Manager, Transport Airplane Directorate,
Aircraft Certification Service.

2012-21-08 The Boeing Company: Amendment 39-17224; Docket No. FAA-2010-0856; Directorate Identifier 2010-NM-117-AD.

(a) Effective Date

This AD is effective November 27, 2012.

(b) Affected ADs

This AD supersedes AD 2005-07-20, Amendment 39-14045 (70 FR 17603, April 7, 2005).

(c) Applicability

This AD applies to The Boeing Company Model 737-600, -700, -700C, -800, and -900 series airplanes, certificated in any category; delivered with the Rockwell Collins Enhanced Digital Flight Control System (EDFCS), as identified in the variable number table in Section 1.A.1., Effectivity, of Boeing Alert Service Bulletin 737-22A1211, dated April 13, 2010. This AD is applicable to all airplanes listed in the variable number table, and is not defined by the "Group 1" description in Section 1.A. of Boeing Alert Service Bulletin 737-22A1211, dated April 13, 2010.

(d) Subject

Joint Aircraft System Component (JASC)/Air Transport Association (ATA) of America Code 22, Auto Flight.

(e) Unsafe Condition

This AD was prompted by reports of undetected erroneous output from a single radio altimeter channel, which resulted in premature autothrottle retard during approach. We are issuing this AD to detect and correct an unsafe condition associated with erroneous output from a radio altimeter channel, which could result in premature autothrottle landing flare retard and the loss of automatic speed control, and consequent loss of control of the airplane.

(f) Compliance

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

(g) Retained Software Installation and Test

This paragraph restates the requirements of paragraph (f) of AD 2005-07-20, Amendment 39-14045 (70 FR 17603, April 7, 2005). For airplanes identified in Boeing Alert Service Bulletin 737-22A1164, dated May 20, 2004: Within 12 months after May 12, 2005 (the effective date of AD 2005-07-20), install and test an updated version of the operational program software (OPS) of the EDFCS flight control computers (FCCs), in accordance with Boeing Alert Service Bulletin 737-22A1164, dated May 20, 2004. Installing software as required by paragraph (h)(1)(i) or (h)(1)(ii) of this AD, or

verifying that the software is installed as specified by paragraph (h)(2) of this AD, or doing the actions specified in paragraph (i) of this AD, terminates the requirements of this paragraph.

(h) New Requirements

Within 3 months after the effective date of this AD: Inspect to determine the part number of the OPS of the FCCs, in accordance with the Accomplishment Instructions of Boeing Alert Service Bulletin 737-22A1211, dated April 13, 2010. Installing software as required by paragraph (h)(1)(i) or (h)(1)(ii) of this AD, or verifying that the software is installed as specified by paragraph (h)(2) of this AD, terminates the requirements of paragraph (g) of this AD. Doing the actions specified in paragraph (i) of this AD, terminates the requirements of this paragraph.

(1) For any OPS having a part number identified in table 1 of the Accomplishment Instructions of Boeing Alert Service Bulletin 737-22A1211, dated April 13, 2010: Before further flight, do the actions specified in paragraph (h)(1)(i) or (h)(1)(ii), as applicable.

(i) Install software identified in table 2 of the Accomplishment Instructions of Boeing Alert Service Bulletin 737-22A1211, dated April 13, 2010, in accordance with the Accomplishment Instructions of Boeing Alert Service Bulletin 737-22A1211, dated April 13, 2010.

(ii) Install software identified in table 2 of the Accomplishment Instructions of Boeing Alert Service Bulletin 737-22A1224, dated May 18, 2012, in accordance with the Accomplishment Instructions of Boeing Alert Service Bulletin 737-22A1224, dated May 18, 2012.

(2) For any OPS having a part number identified in table 2 of the Accomplishment Instructions of Boeing Alert Service Bulletin 737-22A1211, dated April 13, 2010; or in table 2 of the Accomplishment Instructions of Boeing Alert Service Bulletin 737-22A1224, dated May 18, 2012: No further action is required by this paragraph.

(i) New Optional Software Installation

Installing a version of the FCC OPS approved after May 18, 2012 (the issue date of Boeing Alert Service Bulletin 737-22A1224) terminates the requirements of paragraphs (g) and (h) of this AD, provided that the conditions specified in paragraphs (i)(1) and (i)(2) of this AD are met.

(1) The version of the FCC OPS must be approved by the Manager, Seattle Aircraft Certification Office (ACO), FAA; the Manager, Boeing Aviation Safety Oversight Office (BASOO), FAA; or the Boeing Commercial Airplanes Organization Designation Authorization (ODA).

(2) The installation must be done in accordance with a method approved by the Manager, Seattle ACO, FAA; the Manager, BASOO, FAA; or the Boeing Commercial Airplanes ODA.

(j) 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 the Related Information section of this AD. Information may be emailed to: 9-ANM-Seattle-ACO-AMOC-Requests@faa.gov.

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

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

(4) AMOCs approved previously in accordance with AD 2005-07-20, Amendment 39-14045 (70 FR 17603, April 7, 2005), are approved as AMOCs for the corresponding provisions of this AD.

(k) Related Information

For more information about this AD, contact Gregg Nesemeier, Senior Aerospace Engineer, Systems and Equipment Branch, ANM-130S, FAA, Seattle Aircraft Certification Office (ACO), 1601 Lind Avenue SW., Renton, Washington 98057-3356; phone: (425) 917-6479; fax: (425) 917-6590; email: gregg.nesemeier@faa.gov.

(l) Material Incorporated by Reference

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

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

(3) The following service information was approved for IBR on November 27, 2012.

(i) Boeing Alert Service Bulletin 737-22A1211, dated April 13, 2010.

(ii) Boeing Alert Service Bulletin 737-22A1224, dated May 18, 2012.

(4) The following service information was approved for IBR on May 12, 2005 (70 FR 17603, April 7, 2005).

(i) Boeing Alert Service Bulletin 737-22A1164, dated May 20, 2004.

(ii) Reserved.

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

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

(7) You may view this service information that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to: http://www.archives.gov/federal-register/cfr/ibr-locations.html.

Issued in Renton, Washington, on October 5, 2012.

Ali Bahrami,

Manager, Transport Airplane Directorate,

Aircraft Certification Service.

2012-21-10 The Boeing Company: Amendment 39-17226; Docket No. FAA-2012-1104; Directorate Identifier 2012-NM-073-AD.

(a) Effective Date

This AD is effective November 14, 2012.

(b) Affected ADs

None.

(c) Applicability

This AD applies to The Boeing Company Model 777-200LR and -300ER series airplanes, certificated in any category, identified in Boeing Alert Service Bulletin 777-27A0109, dated December 1, 2011.

(d) Subject

Joint Aircraft System Component (JASC)/Air Transport Association (ATA) of America Code 27, Flight controls.

(e) Unsafe Condition

This AD was prompted by a report of an abnormal airframe vibration in the aft fuselage during flight. We are issuing this AD to prevent excessive freeplay in the rudder control surface, which could cause rudder vibration, and result in structural damage severe enough to prevent continued safe flight and landing.

(f) Compliance

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

(g) Review of the Maintenance Records

Within 48 months after the effective date of this AD, review the airplane's maintenance records for each rudder power control unit (PCU) to identify the condition of its related reaction link assembly, in accordance with the Accomplishment Instructions of Boeing Alert Service Bulletin 777-27A0109, dated December 1, 2011.

(h) Corrective Action

(1) For any reaction link assembly identified during the records review required by paragraph (g) of this AD as having Condition 4, as specified in the Accomplishment Instructions of Boeing Alert Service Bulletin 777-27A0109, dated December 1, 2011: Within 48 months after the effective date of

this AD, remove the affected rudder PCU and its related reaction link assembly, and install a serviceable rudder PCU and its related reaction link assembly, in accordance with the Accomplishment Instructions of Boeing Alert Service Bulletin 777-27A0109, dated December 1, 2011.

(2) The replacement PCU reaction link assembly must meet Condition 1, 2, or 3 of Part 1 of the Accomplishment Instructions of Boeing Alert Service Bulletin 777-27A0109, dated December 1, 2011. As an alternative, the bushings in the PCU reaction link assembly may be replaced in accordance with Part 3 of the Accomplishment Instructions of Boeing Alert Service Bulletin 777-27A0109, dated December 1, 2011.

(i) Parts Installation Limitations

As of the effective date of this AD, no person may install a rudder PCU and its related reaction link assembly identified in Boeing Alert Service Bulletin 777-27A0109, dated December 1, 2011, on any airplane, unless that rudder PCU and its related reaction link assembly meet Condition 1, 2, or 3, of Part 1 of the Accomplishment Instructions of Boeing Alert Service Bulletin 777-27A0109, dated December 1, 2011.

(j) 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 the Related Information section of this AD. Information may be emailed to: 9-ANM-Seattle-ACO-AMOC-Requests@faa.gov.

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

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

(k) Related Information

For more information about this AD, contact Kenneth Frey, Aerospace Engineer, Systems and Equipment Branch, ANM-130S, FAA, Seattle Aircraft Certification Office, 1601 Lind Avenue SW., Renton, WA 98057-3356; phone: (425) 917-6468; fax: (425) 917-6590; email: Kenneth.frey@faa.gov.

(l) Material Incorporated by Reference

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

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

(i) Boeing Alert Service Bulletin 777-27A0109, dated December 1, 2011.

(ii) Reserved.

(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 FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, Washington. For information on the availability of this material at the FAA, call 425-227-1221.

(5) You may view this service information that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to: http://www.archives.gov/federal-register/cfr/ibr-locations.html.

Issued in Renton, Washington, on October 11, 2012.

Ali Bahrami,

Manager, Transport Airplane Directorate,

Aircraft Certification Service.

2012-21-11 Bombardier, Inc.: Amendment 39-17227. Docket No. FAA-2012-0146; Directorate Identifier 2011-NM-115-AD.

(a) Effective Date

This airworthiness directive (AD) becomes effective December 4, 2012.

(b) Affected ADs

None.

(c) Applicability

This AD applies to Bombardier, Inc. Model CL-600-2B16 (CL-601-3A, CL-601-3R, and CL-604 Variants) airplanes, certificated in any category; serial numbers 5701 through 5802 inclusive, 5804 through 5808 inclusive, 5810 through 5816 inclusive, 5819, 5822, and 5823 and subsequent.

(d) Subject

Air Transport Association (ATA) of America Codes 24, Electrical power; and 35, Oxygen.

(e) Reason

This AD was prompted by reports of deformation at the neck of the pressure regulator body on the oxygen cylinder and regulator assemblies (CRAs), and an electrical wiring harness in the area of the oxygen cylinder with no protective conduit sleeving. We are issuing this AD to prevent rupture of the oxygen cylinder, which in the case of cabin depressurization, would lead to oxygen not being available when required; and to detect and correct unprotected wiring that could chafe against the oxygen system components or surrounding structure in the area, and lead to electrical arcing and an oxygen-fed fire.

(f) Compliance

You are responsible for having the actions required by this AD performed within the compliance times specified, unless the actions have already been done.

(g) Inspection and Replacement of Oxygen CRA, CL-604 Variant

For CL-604 Variant airplanes with serial numbers 5701 through 5802 inclusive, 5804 through 5808 inclusive, 5810 through 5816 inclusive, 5819, 5822, and 5823: Within 750 flight hours after the effective date of this AD, but no later than 6 months after the effective date of this AD, inspect the serial number of oxygen pressure regulators having part number (P/N) 806370-12, in accordance with the Accomplishment Instructions, paragraph 2.B.(3), of Bombardier Service Bulletin 605-35-001, Revision 01, dated February 28, 2011. A review of airplane maintenance records is acceptable in lieu

of this inspection if the part number of the oxygen pressure regulator can be conclusively determined from that review.

(1) If any serial number is found that is listed in table 2 of Section 2.B. of the Accomplishment Instructions of Bombardier Service Bulletin 605-35-001, Revision 01, dated February 28, 2011, before further flight, replace the affected oxygen CRA, in accordance with the Accomplishment Instructions of Bombardier Service Bulletin 605-35-001, Revision 01, dated February 28, 2011.

(2) If any serial number is found that is not listed in table 2 of Section 2.B. of the Accomplishment Instructions of Bombardier Service Bulletin 605-35-001, Revision 01, dated February 28, 2011, no further action is required by this paragraph.

(h) Inspection and Corrective Action of the Oxygen CRA Wiring Harness, CL-604 Variant

For CL-604 Variant airplanes with serial numbers 5701 through 5778 inclusive, 5780 through 5796 inclusive, 5798, 5800 through 5802 inclusive, 5804, 5805, 5808, 5811, and 5813: At the applicable compliance time specified in paragraph (h)(1) or (h)(2) of this AD, do a detailed inspection for damaged wiring (i.e., signs of damaged insulation, abrasion, or chafing) of the electrical wiring harness for the oxygen CRA, and protect the electrical wiring harness, in accordance with the Accomplishment Instructions of Bombardier Service Bulletin 605-24-005, dated January 31, 2011. If any damaged wiring is found, before further flight, repair or replace any damaged wiring, in accordance with a method approved by the Manager, New York Aircraft Certification Office (ACO), FAA; or Transport Canada Civil Aviation (TCCA) (or its delegated agent).

(1) For airplanes on which the oxygen CRA must be replaced, as required by paragraph (g)(1) of this AD: At the time the oxygen CRA is replaced.

(2) For airplanes other than those identified in paragraph (h)(1) of this AD: Within 800 flight hours after the effective date of this AD.

(i) Credit for Previous Actions

This paragraph provides credit for actions required by paragraph (g) of this AD, if those actions were performed before the effective date of this AD using Bombardier Service Bulletin 605-35-001, dated January 31, 2011.

(j) Parts Installation Limitation, All Airplanes

For all airplanes (CL-601-3A, CL-601-3R, and CL-604 Variants): As of the effective date of this AD, no person may install an oxygen pressure regulator (P/N 806370-12) having any serial number listed in table 2 of Section 2.B. of the Accomplishment Instructions of Bombardier Service Bulletin 605-35-001, Revision 01, dated February 28, 2011, on any airplane, unless a suffix "-A" is beside the serial number.

(k) Other FAA AD Provisions

The following provisions also apply to this AD:

(1) Alternative Methods of Compliance (AMOCs): The Manager, New York ACO, ANE-170, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the ACO, send it to ATTN: Program Manager, Continuing Operational Safety, FAA, New York ACO, 1600 Stewart Avenue, Suite 410, Westbury, New York 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) Airworthy Product: For any requirement in this AD to obtain corrective actions from a manufacturer or other source, use these actions if they are FAA-approved. Corrective actions are considered FAA-approved if they are approved by the State of Design Authority (or their delegated agent). You are required to assure the product is airworthy before it is returned to service.

(l) Related Information

Refer to MCAI Canadian Airworthiness Directive CF-2011-11, dated May 25, 2011, and the service bulletins identified in paragraphs (l)(1) and (l)(2) of this AD, for related information.

(1) Bombardier Service Bulletin 605-24-005, dated January 31, 2011.

(2) Bombardier Service Bulletin 605-35-001, Revision 01, dated February 28, 2011.

(m) Material Incorporated by Reference

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

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

(i) Bombardier Service Bulletin 605-24-005, dated January 31, 2011.

(ii) Bombardier Service Bulletin 605-35-001, Revision 01, dated February 28, 2011.

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

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

(5) You may also review copies of the service information that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the availability of this material at an NARA facility, call 202-741-6030, or go to http://www.archives.gov/federal-register/cfr/ibr-locations.html.

Issued in Renton, Washington, on October 11, 2012.

Ali Bahrami,

Manager, Transport Airplane Directorate,

Aircraft Certification Service.

2012-21-12 Bombardier, Inc.: Amendment 39-17228. Docket No. FAA-2012-0726; Directorate Identifier 2012-NM-023-AD.

(a) Effective Date

This airworthiness directive (AD) becomes effective December 4, 2012.

(b) Affected ADs

None.

(c) Applicability

This AD applies to Bombardier, Inc. Model DHC-8-400, -401, and -402 airplanes, certificated in any category, serial numbers 4001 through 4346 inclusive.

(d) Subject

Air Transport Association (ATA) of America Code 32: Landing gear.

(e) Reason

This AD was prompted by cases of on-ground hydraulic accumulator/screw cap/end cap failure, resulting in high-energy impact damage to adjacent systems and structure. We are issuing this AD to prevent failure of the screw caps and/or end caps of the hydraulic and parking brake accumulators, which could result in damage to the airplane's primary structures, with potential adverse effect on the airplane's controllability.

(f) Compliance

You are responsible for having the actions required by this AD performed within the compliance times specified, unless the actions have already been done.

(g) Inspection/Replacement of the Parking Brake Hydraulic Accumulator

For airplanes having serial numbers 4001 through 4337 inclusive: Within 1,200 flight hours or 6 months after the effective date of this AD, whichever comes first, inspect the parking brake hydraulic accumulator to determine the part number and serial number, in accordance with the Accomplishment Instructions of Bombardier Service Bulletin 84-32-88, dated February 16, 2011.

(1) If the part number of the parking brake hydraulic accumulator can be determined by the inspection required by paragraph (g) of this AD, and is not identified in paragraph 1., Effectivity, of Goodrich Service Bulletin 08 60197 001-32-70 R2, dated February 1, 2011: No further action is required by this paragraph.

(2) If the part number and serial number of the parking brake hydraulic accumulator cannot be determined by the inspection required by paragraph (g) of this AD, or is identified in paragraph 1.

Effectivity, of Goodrich Service Bulletin 08 60197 001-32-70 R2, dated February 1, 2011: Before further flight, replace the parking brake hydraulic accumulator, in accordance with the Accomplishment Instructions of Bombardier Service Bulletin 84-32-88, dated February 16, 2011.

(h) Relocation of the Parking Brake Hydraulic Accumulator

(1) For airplanes having serial numbers 4001 through 4068 inclusive, 4070 through 4214 inclusive, 4216, 4219 through 4261 inclusive, and 4263 through 4346 inclusive: Within 6,000 flight hours after the effective date of this AD, relocate the parking brake hydraulic accumulator, in accordance with the Accomplishment Instructions of Bombardier Service Bulletin 84-32-87, Revision B, dated November 22, 2011.

(2) Accomplishing the actions specified in paragraph (h)(1) of this AD in accordance with previous revisions of Bombardier Service Bulletin 84-32-87 does not meet the requirements of paragraph (h)(1) of this AD.

(i) Other FAA AD Provisions

The following provisions also apply to this AD:

(1) Alternative Methods of Compliance (AMOCs): The Manager, New York 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 ACO, send it to ATTN: Program Manager, Continuing Operational Safety, FAA, New York ACO, 1600 Stewart Avenue, Suite 410, Westbury, New York 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) Airworthy Product: For any requirement in this AD to obtain corrective actions from a manufacturer or other source, use these actions if they are FAA-approved. Corrective actions are considered FAA-approved if they are approved by the State of Design Authority (or their delegated agent). You are required to assure the product is airworthy before it is returned to service.

(j) Related Information

Refer to MCAI Canadian Airworthiness Directive CF-2012-04, dated January 13, 2012, and the service information identified in paragraphs (j)(1) through (j)(3) of this AD, for related information.

(1) Bombardier Service Bulletin 84-32-87, Revision B, dated November 22, 2011.

(2) Bombardier Service Bulletin 84-32-88, dated February 16, 2011.

(3) Goodrich Service Bulletin 08 60197 001-32-70 R2, dated February 1, 2011.

(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) Bombardier Service Bulletin 84-32-87, Revision B, dated November 22, 2011.

(ii) Bombardier Service Bulletin 84-32-88, dated February 16, 2011.

(iii) Goodrich Service Bulletin 08 60197 001-32-70 R2, dated February 1, 2011.

(3) For Bombardier, Inc., service information identified in this AD, contact Bombardier, Inc., Q-Series Technical Help Desk, 123 Garratt Boulevard, Toronto, Ontario M3K 1Y5, Canada; telephone

416-375-4000; fax 416-375-4539; email thd.qseries@aero.bombardier.com; Internet http://www.bombardier.com. For Goodrich service information identified in this AD, contact Goodrich Corporation, Landing Gear, 1400 South Service Road, West Oakville L6L 5Y7, Ontario, Canada; telephone 905-825-1568; email jean.breed@goodrich.com; Internet http://www.goodrich.com/TechPubs.

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

(5) You may view this service information that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to: http://www.archives.gov/federal-register/cfr/ibr-locations.html.

Issued in Renton, Washington, on October 11, 2012.

Ali Bahrami,

Manager, Transport Airplane Directorate,

Aircraft Certification Service.

2012-21-13 The Boeing Company: Amendment 39-17229; Docket No. FAA-2012-0727; Directorate Identifier 2012-NM-012-AD.

(a) Effective Date

This AD is effective December 4, 2012.

(b) Affected ADs

None.

(c) Applicability

This AD applies to The Boeing Company Model DC-9-81 (MD-81), DC-9-82 (MD-82), DC-9-83 (MD-83), DC-9-87 (MD-87), and MD-88 airplanes, certificated in any category, as identified in Boeing Alert Service Bulletin MD80-57A243, dated December 20, 2011.

(d) Subject

Joint Aircraft System Component (JASC)/Air Transport Association (ATA) of America Code 57, Wings.

(e) Unsafe Condition

This AD was prompted by reports of fatigue cracks found in Stringer 11 at the outboard flap, inboard drive hinge at Station Xrs=164.000. We are issuing this AD to detect and correct such cracking, which could result in the wing structure not supporting the limit load condition, which could lead to loss of structural integrity of the wing.

(f) Compliance

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

(g) Repetitive Inspections

Before the accumulation of 19,000 total flight cycles, or within 8,710 flight cycles after the effective date of this AD, whichever occurs later: Do an in-tank eddy current high frequency (ETHF) inspection for cracks in Stringer 11 at the outboard flap, inboard drive hinge at Station Xrs=164.000, in accordance with the Accomplishment Instructions of Boeing Alert Service Bulletin MD80-57A243, dated December 20, 2011. If no cracking is found, repeat the inspection thereafter at intervals not to exceed 29,000 flight cycles.

(h) Splice Repair

If any cracking is found during any inspection required by paragraph (g) of this AD: Before further flight, do a splice repair, in accordance with the Accomplishment Instructions of Boeing Alert Service Bulletin MD80-57A243, dated December 20, 2011.

(i) Post-Repair Inspection

Within 60,000 flight cycles after doing the splice repair specified in paragraph (h) of this AD: Do an ETHF inspection for cracks in Stringer 11 at the outboard flap, inboard drive hinge at Station Xrs=164.000, in accordance with the Accomplishment Instructions of Boeing Alert Service Bulletin MD80-57A243, dated December 20, 2011. Repeat the inspection thereafter at intervals not to exceed 29,000 flight cycles. If any crack is found: Before further flight, repair the crack using a method approved in accordance with the procedures specified in paragraph (j) of this AD.

(j) Alternative Methods of Compliance (AMOCs)

(1) The Manager, Los Angeles Aircraft Certification Office (ACO), FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the manager of the ACO, send it to the attention of the person identified in the Related Information section of this AD.

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

(3) An AMOC that provides an acceptable level of safety may be used for any repair required by this AD if it is approved by The Boeing Commercial Airplanes Organization Designation Authorization (ODA) that has been authorized by the Manager, Los Angeles ACO to make those findings. For a repair method to be approved, the repair must meet the certification basis of the airplane, and 14 CFR 25.571, Amendment 45, and the approval must specifically refer to this AD.

(k) Related Information

For more information about this AD, contact Roger Durbin, Airframe Branch, ANM-120L, FAA, Los Angeles Aircraft Certification Office (ACO), 3960 Paramount Boulevard, Lakewood, California 90712-4137; phone (562) 627-5233; fax (562) 627-5210; email: roger.durbin@faa.gov.

(l) Material Incorporated by Reference

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

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

(i) Boeing Alert Service Bulletin MD80-57A243, dated December 20, 2011.

(ii) Reserved.

(3) For The Boeing Company service information identified in this AD, contact Boeing Commercial Airplanes, Attention: Data & Services Management, 3855 Lakewood Boulevard, MC D800-0019, Long Beach, CA 90846-0001; telephone 206-544-5000, extension 2; fax 206-766-5683; Internet https://www.myboeingfleet.com.

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

(5) You may view this service information that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to: http://www.archives.gov/federal-register/cfr/ibr-locations.html.

Issued in Renton, Washington, on October 12, 2012.
Kalene C. Yanamura,
Acting Manager, Transport Airplane Directorate,
Aircraft Certification Service.

2012-21-14 Bombardier, Inc.: Amendment 39-17230. Docket No. FAA-2012-0592; Directorate Identifier 2011-NM-253-AD.

(a) Effective Date

This airworthiness directive (AD) becomes effective December 5, 2012.

(b) Affected ADs

This AD supersedes AD 2004-22-23, Amendment 39-13851 (69 FR 64856, November 9, 2004).

(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 7990 inclusive, and 8000 through 8999 inclusive.

(d) Subject

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

(e) Reason

This AD was prompted by reports of failure of the side-brace fitting shaft of the main landing gear (MLG) due to corrosion. We are issuing this AD to prevent fractures of the side-brace fitting shafts of the MLG, and possible collapse of the MLG.

(f) Compliance

You are responsible for having the actions required by this AD performed within the compliance times specified, unless the actions have already been done.

(g) Inspection of MLG Side-Brace Fitting Shaft and Replacement

(1) At the applicable times specified in paragraphs (g)(1)(i), (g)(1)(ii), (g)(1)(iii), and (g)(1)(iv) of this AD, do a detailed inspection for corrosion and damage of each side-brace fitting shaft of the MLG, in accordance with the Accomplishment Instructions of Bombardier Service Bulletin 601R-57-052, Revision A, dated October 28, 2011. Repeat the inspections at the applicable times specified in paragraphs (g)(1)(i), (g)(1)(ii), (g)(1)(iii), and (g)(1)(iv) of this AD.

(i) For airplanes that average greater than 900 flight hours per year and have side-brace shafts part number (P/N) 601R10237-1 installed in either the left- or right-hand MLG, or if the side-brace shaft part number cannot be identified without removal: Within 1,000 flight hours after the effective date of this AD, do the inspection. Repeat the inspections thereafter at intervals not to exceed 1,000 flight hours until the replacement specified in paragraph (g)(2) or (h) of this AD is done.

(ii) For airplanes that average 900 flight hours or less per year and have side-brace shafts P/N 601R10237-1 installed on either the left- or right-hand MLG, or if the side-brace shaft part number cannot be identified without removal: Within 18 months after the effective date of this AD, do the inspection. Repeat the inspections thereafter at intervals not to exceed 18 months until the replacement specified in paragraph (g)(2) or (h) of this AD is done.

(iii) For airplanes that average greater than 900 flight hours per year and have side-brace shafts P/N 601R10237-3 installed on either the left- or right-hand MLG: Within 36 months after the effective date of this AD, do the inspection. Repeat the inspections thereafter at intervals not to exceed 36 months until the replacement specified in paragraph (g)(2) or (h) of this AD is done.

(iv) For airplanes that average 900 flight hours or less per year and have side-brace shafts P/N 601R10237-3 installed on either the left- or right-hand MLG: Within 60 months after the effective date of this AD, do the inspection. Repeat the inspections thereafter at intervals not to exceed 60 months until the replacement specified in paragraph (g)(2) or (h) of this AD is done.

(2) If any corrosion or damage is found during any inspection required by paragraph (g) of this AD: Before further flight, replace the side-brace fitting shaft with a new shaft P/N 601R10247-3, in accordance with the Accomplishment Instructions of Bombardier Service Bulletin 601R-57-052, Revision A, dated October 28, 2011. Doing this replacement terminates the inspection requirements of paragraph (g) of this AD.

(h) Replacement

Do the replacement at the applicable time specified in paragraph (h)(1) or (h)(2) of this AD.

(1) For any airplanes that have side-brace shafts P/N 601R10237-1 installed, or if the side-brace shaft part number cannot be identified without removal: Within 27 months after the effective date of this AD, replace the side-brace fitting shaft of the MLG with a new shaft having P/N 601R10247-3, in accordance with the Accomplishment Instructions of Bombardier Service Bulletin 601R-57-052, Revision A, dated October 28, 2011. Doing this replacement terminates the inspection requirements of paragraph (g) of this AD.

(2) For airplanes that have side-brace shafts P/N 601R10237-3 installed: Within 117 months after the effective date of this AD, replace the side-brace fitting shaft of the MLG with a new shaft P/N 601R10247-3, in accordance with the Accomplishment Instructions of Bombardier Service Bulletin 601R-57-052, Revision A, dated October 28, 2011. Doing this replacement terminates the inspection requirements of paragraph (g) of this AD.

(i) Credit for Previous Actions

This paragraph provides credit for the actions specified in paragraphs (g) and (h) of this AD, if those actions were performed before the effective date of this AD using Bombardier Service Bulletin 601R-57-052, dated July 28, 2011 (which is not incorporated by reference in this AD).

(j) 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, New York 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) Airworthy Product: For any requirement in this AD to obtain corrective actions from a manufacturer or other source, use these actions if they are FAA-approved. Corrective actions are considered FAA-approved if they are approved by the State of Design Authority (or their delegated agent). You are required to assure the product is airworthy before it is returned to service.

(k) Related Information

Refer to MCAI Canadian Airworthiness Directive CF-2011-39, dated October 25, 2011; and Bombardier Service Bulletin 601R-57-052, dated July 28, 2011; for related information.

(l) Material Incorporated by Reference

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

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

(i) Bombardier Service Bulletin 601R-57-052, Revision A, dated October 28, 2011.

(ii) Reserved.

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

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

(5) You may view this service information that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to: http://www.archives.gov/federal-register/cfr/ibr-locations.html.

Issued in Renton, Washington, on October 14, 2012.

John P. Piccola,

Acting Manager, Transport Airplane Directorate,

Aircraft Certification Service.

2012-21-16 BAE Systems (Operations) Limited: Amendment 39-17232. Docket No. FAA-2012-0642; Directorate Identifier 2011-NM-262-AD.

(a) Effective Date

This airworthiness directive (AD) becomes effective December 5, 2012.

(b) Affected ADs

None.

(c) Applicability

This AD applies to BAE SYSTEMS (OPERATIONS) LIMITED Model BAe 146-100A, -200A, and -300A airplanes, and Model Avro 146-RJ70A, 146-RJ85A, and 146-RJ100A airplanes; certificated in any category; except for airplanes operating in a cargo or non-passenger configuration. The requirements of this AD become applicable at the time an airplane operating in a cargo or non-passenger configuration is converted to a passenger configuration.

(d) Subject

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

(e) Reason

This AD was prompted by hydraulic pipe ruptures in the center of the cabin resulting in passengers being contaminated with hydraulic fluid. We are issuing this AD to prevent harmful or hazardous concentrations of hydraulic fluid or hydraulic vapor from entering the passenger compartment, possibly resulting in injury to the passengers.

(f) Compliance

You are responsible for having the actions required by this AD performed within the compliance times specified, unless the actions have already been done.

(g) Actions

Within 4,000 flight hours or 24 months after the effective date of this AD, whichever occurs first, install the hydraulic fluid containment system, in accordance with the Accomplishment Instructions of BAE SYSTEMS (OPERATIONS) LIMITED Modification Service Bulletin SB.29-048-30676A, Revision 2, dated December 23, 2010.

(h) Credit for Previous Actions

This paragraph provides credit for the actions required by paragraph (g) of this AD, if those actions were performed before the effective date of this AD using the service bulletin specified in paragraph (h)(1) or (h)(2) of this AD.

(1) BAE SYSTEMS (OPERATIONS) LIMITED Modification Service Bulletin SB.29-048-30676A, dated October 18, 2010 (which is not incorporated by reference in this AD).

(2) BAE SYSTEMS (OPERATIONS) LIMITED Modification Service Bulletin SB.29-048-30676A, Revision 1, dated November 5, 2010 (which 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, 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: Todd Thompson, Aerospace Engineer, International Branch, ANM-116, Transport Airplane Directorate, FAA, 1601 Lind Avenue SW., Renton, WA 98057-3356; telephone (425) 227-1175; 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) Airworthy Product: For any requirement in this AD to obtain corrective actions from a manufacturer or other source, use these actions if they are FAA-approved. Corrective actions are considered FAA-approved if they are approved by the State of Design Authority (or their delegated agent). You are required to assure the product is airworthy before it is returned to service.

(j) Related Information

(1) Refer to MCAI European Aviation Safety Agency Airworthiness Directive 2011-0220, dated November 11, 2011; and BAE SYSTEMS (OPERATIONS) LIMITED Modification Service Bulletin SB.29-048-30676A, Revision 2, dated December 23, 2010; for related information.

(2) For service information identified in this AD, contact BAE SYSTEMS (OPERATIONS) LIMITED, Customer Information Department, Prestwick International Airport, Ayrshire, KA9 2RW, Scotland, United Kingdom; telephone +44 1292 675207; fax +44 1292 675704; email RApublications@baesystems.com; Internet http://www.baesystems.com/Businesses/RegionalAircraft/index.htm.

(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) BAE SYSTEMS (OPERATIONS) LIMITED Modification Service Bulletin SB.29-048-30676A, Revision 2, dated December 23, 2010.

(ii) Reserved.

(3) For service information identified in this AD, contact BAE SYSTEMS (OPERATIONS) LIMITED, Customer Information Department, Prestwick International Airport, Ayrshire, KA9 2RW, Scotland, United Kingdom; telephone +44 1292 675207; fax +44 1292 675704; email

RApublications@baesystems.com; Internet http://www.baesystems.com/Businesses/RegionalAircraft/index.htm.

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

(5) You may view this service information that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to: http://www.archives.gov/federal-register/cfr/ibr-locations.html.

Issued in Renton, Washington, on October 14, 2012.

John P. Piccola,

Acting Manager, Transport Airplane Directorate,

Aircraft Certification Service.

2012-21-17 Airbus: Amendment 39-17233. Docket No. FAA-2012-0427; Directorate Identifier 2011-NM-202-AD.

(a) Effective Date

This airworthiness directive (AD) becomes effective December 5, 2012.

(b) Affected ADs

None.

(c) Applicability

This AD applies to Airbus Model A320-214 and -232 airplanes; certificated in any category; manufacturer serial numbers 3456, 3503, 3516, 3529, 3591, 3597, 3611, 3631, 3696, 3698, 3714, 3719, 3775, 3777, 3780, 3782, 3786, 3797, 3805, 3812, 3870, 3907, 3909, 3913, 3922, 3929, 3946, 3953, 3975, 3979, 3991, 4010, 4012, 4014, 4027, 4034, 4043, 4046, 4064, 4065, 4084, 4093, 4094, and 4097.

(d) Subject

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

(e) Reason

This AD was prompted by reports that medium-head fasteners were installed in lieu of shear-head fasteners on a certain upper panel, which manufacturer fatigue and damage tolerance analyses demonstrated could have an effect on panel fatigue life. We are issuing this AD to detect and correct such cracking, which could result in the loss of structural integrity of the airplane.

(f) Compliance

You are responsible for having the actions required by this AD performed within the compliance times specified, unless the actions have already been done.

(g) Repetitive Inspection

Before the accumulation of 35,900 total flight cycles or 88,100 total flight hours, whichever occurs first: Do a high frequency eddy current inspection for cracking of the two rows of six fasteners at frame 35 between stringers 5 and 6 on the left and right sides, in accordance with the Accomplishment Instructions of Airbus Service Bulletin A320-53-1244, excluding Appendix 1, dated March 17, 2011. Repeat the inspection thereafter at intervals not to exceed 28,100 flight cycles or 56,300 flight hours, whichever occurs first.

(h) Corrective Action

If any crack is detected during any inspection required by paragraph (g) of this AD: Before further flight, repair the crack using a method approved by either the Manager, International Branch, ANM-116, Transport Airplane Directorate, FAA; or the European Aviation Safety Agency (EASA) or its delegated agent.

(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: 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) Airworthy Product: For any requirement in this AD to obtain corrective actions from a manufacturer or other source, use these actions if they are FAA-approved. Corrective actions are considered FAA-approved if they are approved by the State of Design Authority (or their delegated agent). You are required to assure the product is airworthy before it is returned to service.

(j) Related Information

Refer to MCAI EASA Airworthiness Directive 2011-0176, dated September 13, 2011; and Airbus Service Bulletin A320-53-1244, excluding Appendix 1, dated March 17, 2011; for related information.

(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) Airbus Service Bulletin A320-53-1244, excluding Appendix 1, dated March 17, 2011.

(ii) Reserved.

(3) For service information identified in this AD, contact Airbus SAS-EAW (Airworthiness Office), 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; Internet http://www.airbus.com.

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

(5) You may view this service information that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to: http://www.archives.gov/federal-register/cfr/ibr-locations.html.

Issued in Renton, Washington, on October 16, 2012.
John P. Piccola,
Acting Manager, Transport Airplane Directorate,
Aircraft Certification Service.

2012-21-18 The Boeing Company: Amendment 39-17234; Docket No. FAA-2012-0728; Directorate Identifier 2012-NM-050-AD.

(a) Effective Date

This AD is effective December 5, 2012.

(b) Affected ADs

None.

(c) Applicability

This AD applies to The Boeing Company Model MD-90-30 airplanes, certificated in any category, as identified in Boeing Alert Service Bulletin MD90-57A030, dated February 14, 2012.

(d) Subject

Joint Aircraft System Component (JASC)/Air Transport Association (ATA) of America Code 57, Wings.

(e) Unsafe Condition

This AD was prompted by reports of fatigue cracks found in Stringer 11 at the outboard flap, inboard drive hinge at Station Xrs=164.000. We are issuing this AD to detect and correct such cracking, which could result in the wing structure not supporting the limit load condition, which could lead to loss of the structural integrity of the wing.

(f) Compliance

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

(g) Repetitive Inspections

Before the accumulation of 14,000 total flight cycles, or within 9,470 flight cycles after the effective date of this AD: Whichever occurs later, do an in-tank eddy current high frequency (ETHF) inspection for cracks in Stringer 11 at the outboard flap, inboard drive hinge at Station Xrs=164.000 of the left and right wings, in accordance with the Accomplishment Instructions of Boeing Alert Service Bulletin MD90-57A030, dated February 14, 2012. If no cracking is found, repeat the inspection thereafter at intervals not to exceed 31,000 flight cycles.

(h) Splice Repair

If any cracking is found during any inspection required by paragraph (g) of this AD: Before further flight, do a splice repair, in accordance with the Accomplishment Instructions of Boeing Alert Service Bulletin MD90-57A030, dated February 14, 2012.

(i) Post-Repair Inspection

Within 42,000 flight cycles after doing the splice repair specified in paragraph (h) of this AD: Do an ETHF inspection for cracks in Stringer 11 at the outboard flap, inboard drive hinge at Station Xrs=164.000, in accordance with the Accomplishment Instructions of Boeing Alert Service Bulletin MD90-57A030, dated February 14, 2012. Repeat the inspection thereafter at intervals not to exceed 31,000 flight cycles. If any crack is found: Before further flight, repair the crack using a method approved in accordance with the procedures specified in paragraph (j) of this AD.

(j) Alternative Methods of Compliance (AMOCs)

(1) The Manager, Los Angeles Aircraft Certification Office (ACO), FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the manager of the ACO, send it to the attention of the person identified in the Related Information section of this AD.

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

(3) An AMOC that provides an acceptable level of safety may be used for any repair required by this AD if it is approved by The Boeing Commercial Airplanes Organization Designation Authorization (ODA) that has been authorized by the Manager, Los Angeles ACO to make those findings. For a repair method to be approved, the repair must meet the certification basis of the airplane, and 14 CFR 25.571, Amendment 54, and the approval must specifically refer to this AD.

(k) Related Information

For more information about this AD, contact Roger Durbin, Airframe Branch, ANM-120L, FAA, Los Angeles Aircraft Certification Office (ACO), 3960 Paramount Boulevard, Lakewood, California 90712-4137; phone: (562) 627-5233; fax: (562) 627-5210; email: roger.durbin@faa.gov.

(l) Material Incorporated by Reference

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

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

(i) Boeing Alert Service Bulletin MD90-57A030, dated February 14, 2012.

(ii) Reserved.

(3) For The Boeing Company Airplanes service information identified in this AD, contact Boeing Commercial Airplanes, Attention: Data & Services Management, 3855 Lakewood Boulevard, MC D800-0019, Long Beach, CA 90846-0001; telephone 206-544-5000, extension 2; fax 206-766-5683; Internet https://www.myboeingfleet.com.

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

(5) You may view this service information that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to: http://www.archives.gov/federal-register/cfr/ibr-locations.html.

Issued in Renton, Washington, on October 12, 2012.
Kalene C. Yanamura,
Acting Manager, Transport Airplane Directorate,
Aircraft Certification Service.

2012-21-19 Airbus: Amendment 39-17235. Docket No. FAA-2012-0719; Directorate Identifier 2011-NM-240-AD.

(a) Effective Date

This airworthiness directive (AD) becomes effective December 5, 2012.

(b) Affected ADs

None.

(c) Applicability

This AD applies to Airbus Model A330-201, -202, -203, -223, -243, -223F, -243F, -301, -302, -303, -321, -322, -323, -341, -342, and -343 airplanes; and Airbus Model A340-211, -212, -213, -311, -312, and -313 airplanes; certificated in any category; all manufacturer serial numbers.

(d) Subject

Air Transport Association (ATA) of America Code 29: Hydraulic Power.

(e) Reason

This AD was prompted by reports of ram air turbine (RAT) pump failure. We are issuing this AD to detect and correct malfunction of the RAT pump, which could lead to in-flight loss of the RAT-pump pressurization, possibly resulting in reduced control of the airplane.

(f) Compliance

You are responsible for having the actions required by this AD performed within the compliance times specified, unless the actions have already been done.

(g) Actions

(1) Within the applicable compliance time specified in table 1 to paragraph (g)(1) of this AD, as applicable, check the RAT pump anti-stall valve for correct setting, re-identify the RAT pump, and do a functional ground test of the RAT, except as provided by paragraph (g)(3) of this AD; in accordance with the Accomplishment Instructions of the applicable service bulletin specified in paragraph (g)(1)(i) or (g)(1)(ii) of this AD.

Table 1 to Paragraph (g)(1) of This AD–Compliance Times

Affected airplanes	Compliance time
For airplanes on which Airbus A330 certification maintenance requirements (CMR) Task 292000–00001–1–C, or Airbus A340–200/–300 CMR Task 292000–A0001–1–C, or Airbus A330/A340 maintenance review board report (MRBR) Task 29.20.00/06, as applicable to the airplane type, has not been accomplished as of the effective date of this AD.	Within 3,000 flight hours or 7 months, whichever occurs first after the effective date of this AD.
For airplanes on which the Airbus A330 CMR Task 292000–00001–1–C, or Airbus A340–200/–300 CMR Task 292000–A0001–1–C, or Airbus A330/A340 MRBR Task 29.20.00/06, as applicable to the airplane type, has already been accomplished as of the effective date of this AD.	Within 24 months after the last accomplishment of Airbus A330 CMR Task 292000–00001–1–C, or Airbus A340–200/–300 CMR Task 292000–A0001–1–C, or Airbus A330/A340 MRBR Task 29.20.00/06, applicable to the airplane type, or 30 days after the effective date of this AD, whichever occurs later.

(i) Airbus Mandatory Service Bulletin A330-29-3117, dated July 19, 2011 (for Model A330 series airplanes).

(ii) Airbus Mandatory Service Bulletin A340-29-4090, dated July 19, 2011 (for Model A340 series airplanes).

(2) If the functional ground test of the RAT, as required by paragraph (g)(1) of this AD, is not successful (as defined by the Accomplishment Instructions of the applicable service bulletin specified in paragraph (g)(1)(i) or (g)(1)(ii) of this AD): Before further flight, replace the RAT pump or the RAT assembly with a serviceable part, in accordance with the Accomplishment Instructions of the applicable service bulletin specified in paragraph (g)(1)(i) or (g)(1)(ii) of this AD.

(3) Any airplane equipped with a RAT hydraulic pump marked with an "X" or a date (month/year) in the amendment cell C of the identification plate, which has been successfully tested (as defined by the Accomplishment Instructions of the applicable service bulletin specified in paragraph (g)(1)(i) or (g)(1)(ii) of this AD) in accordance with the Accomplishment Instructions of the applicable service bulletin specified in paragraph (g)(1)(i) or (g)(1)(ii) of this AD prior to the effective date of this AD, is considered compliant with the requirements of paragraphs (g)(1) and (g)(2) of this AD.

(h) Parts Installation Limitations

As of the effective date of this AD, no person may install any RAT hydraulic pump or RAT assembly on any airplane unless it has been inspected, corrected, and successfully tested (as defined by the Accomplishment Instructions of the applicable service bulletin specified in paragraph (g)(1)(i) or (g)(1)(ii) of this AD) in accordance with the requirements of paragraph (g) of this AD, on any airplane.

(i) Definition

A serviceable part is a RAT hydraulic pump or RAT assembly that has been inspected, corrected, and successfully tested (as defined by the Accomplishment Instructions of the applicable service bulletin specified in paragraph (g)(1)(i) or (g)(1)(ii) of this AD), in accordance with the Accomplishment Instructions of the applicable service bulletin specified in paragraph (g)(1)(i) or (g)(1)(ii) 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: Vladimir Ulyanov, Aerospace Engineer, International Branch, ANM-116, Transport Airplane Directorate, FAA 1601 Lind Avenue SW., Renton, Washington 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) Airworthy Product: For any requirement in this AD to obtain corrective actions from a manufacturer or other source, use these actions if they are FAA-approved. Corrective actions are considered FAA-approved if they are approved by the State of Design Authority (or their delegated agent). You are required to assure the product is airworthy before it is returned to service.

(k) Related Information

Refer to MCAI European Aviation Safety Agency Airworthiness Directive 2011-0197, dated October 10, 2011, and the service bulletins specified in paragraphs (k)(1) and (k)(2) of this AD, for related information.

(1) Airbus Mandatory Service Bulletin A330-29-3117, dated July 19, 2011.

(2) Airbus Mandatory Service Bulletin A340-29-4090, dated July 19, 2011.

(l) Material Incorporated by Reference

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

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

(i) Airbus Mandatory Service Bulletin A330-29-3117, dated July 19, 2011.

(ii) Airbus Mandatory Service Bulletin A340-29-4090, dated July 19, 2011.

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

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

(5) You may view this service information that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to: http://www.archives.gov/federal-register/cfr/ibr-locations.html.

Issued in Renton, Washington, on October 12, 2012.

Kalene C. Yanamura,

Acting Manager, Transport Airplane Directorate,

Aircraft Certification Service.

2012-21-20 Airbus: Amendment 39-17236. Docket No. FAA-2012-0596; Directorate Identifier 2011-NM-245-AD.

(a) Effective Date

This airworthiness directive (AD) becomes effective December 5, 2012.

(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) Airbus Model A330-201, -202, -203, -223, -243, -223F -243F, -301, -302, -303, -321, -322, -323, -341, -342, and -343 airplanes, all manufacturer serial numbers (MSN); except those on which Airbus modification 201043 has been embodied in production.

(2) Airbus Model A340-211, -212, -213, -311, -312, -313, -541, and -642 airplanes, all MSN; except those on which Airbus modification 201043 or 201042 has been embodied in production.

(d) Subject

Air Transport Association (ATA) of America Code 29: Hydraulic Power.

(e) Reason

This AD was prompted by reports of the ram air turbine (RAT) not deploying when tested. We are issuing this AD to prevent non-deployment of the RAT, which if occurred following a total engine flame-out, or during a total loss of normal electrical power generation, could result in reduced control of the airplane.

(f) Compliance

You are responsible for having the actions required by this AD performed within the compliance times specified, unless the actions have already been done.

(g) Identification and Replacement for Certain Airbus Model A330, and A340-200 and -300 Airplanes

For Airbus Model A330-200 freighter series airplanes, Model A330-200 and -300 series airplanes, and Model A340-200 and -300 series airplanes: Within 15,000 flight hours or 36 months, whichever occurs first after the effective date of this AD, identify the supplier, part number (P/N), and serial number (S/N) of the installed RAT actuator, in accordance with the Accomplishment Instructions of Airbus Mandatory Service Bulletin A330-29-3114, dated May 18, 2011 (for Model

A330-200 freighter series airplanes, and Model A330-200 and -300 series airplanes); or Airbus Mandatory Service Bulletin A340-29-4089, dated May 18, 2011 (for Model A340-200 and -300 series airplanes).

(1) If the supplier identified is Arkwin, and the identified actuator part number and serial number are listed as already modified in Hamilton Sundstrand Service Bulletin ERPS06M-29-18, dated March 8, 2011, but not yet re-identified: Before further flight, re-identify the actuator and the RAT, in accordance with the Accomplishment Instructions of Airbus Mandatory Service Bulletin A330-29-3114, dated May 18, 2011 (for Model A330-200 freighter series airplanes, and Model A330-200 and -300 series airplanes); or Airbus Mandatory Service Bulletin A340-29-4089, dated May 18, 2011 (for Model A340-200 and -300 series airplanes).

(2) If the supplier identified is Arkwin Industries and the identified actuator part number and serial number are listed as not modified as specified in Hamilton Sundstrand Service Bulletin ERPS06M-29-18, dated March 8, 2011: Before further flight, replace the RAT actuator with a serviceable unit, and re-identify the RAT, in accordance with the Accomplishment Instructions of Airbus Mandatory Service Bulletin A330-29-3114, dated May 18, 2011 (for Model A330-200 freighter series airplanes, and Model A330-200 and -300 series airplanes); or Airbus Mandatory Service Bulletin A340-29-4089, dated May 18, 2011 (for Model A340-200 and -300 series airplanes).

(h) Identification and Replacement for Certain Airbus Model A340-500 and -600 Airplanes

For Model A340-500 and -600 airplanes: Within 15,000 flight hours or 36 months, whichever occurs first after the effective date of this AD, identify the part number and serial number of the installed RAT actuator, in accordance with the Accomplishment Instructions of Airbus Mandatory Service Bulletin A340-29-5018, dated May 18, 2011.

(1) If the identified actuator part number and serial number are listed as already modified as specified in Hamilton Sundstrand Service Bulletin ERPS33T-29-5, dated March 8, 2011, but not yet re-identified: Before further flight, re-identify the actuator and the RAT, in accordance with the Accomplishment Instructions of Airbus Mandatory Service Bulletin A340-29-5018, dated May 18, 2011.

(2) If the identified actuator part number and serial number are listed as not modified as specified in Hamilton Sundstrand Service Bulletin ERPS33T-29-5, dated March 8, 2011: Before further flight, replace the RAT actuator with a serviceable unit, and re-identify the RAT, in accordance with the Accomplishment Instructions of Airbus Mandatory Service Bulletin A340-29-5018, dated May 18, 2011.

(i) Parts Installation Limitations

(1) As of the effective date of this AD, no person may install any RAT actuator having P/N 5912958 or P/N 1211575-001, or any RAT having P/N 1702934A having a serial number listed as affected in Hamilton Sundstrand Service Bulletin ERPS06M-29-18, dated March 8, 2011, on any airplane, unless the RAT actuator has been replaced with a serviceable unit and the RAT has been re-identified, as applicable, in accordance with the Accomplishment Instructions of Airbus Mandatory Service Bulletin A330-29-3114, dated May 18, 2011 (for Model A330-200 freighter series airplanes, and Model A330-200 and -300 series airplanes); or Airbus Mandatory Service Bulletin A340-29-4089, dated May 18, 2011 (for Model A340-200 and -300 series airplanes).

(2) As of the effective date of this AD, no person may install any RAT actuator having P/N 5912536 or P/N 1211526-002, or any RAT having P/N 772722F having a serial number listed as affected in Hamilton Sundstrand Service Bulletin ERPS33T-29-5, dated March 8, 2011, on any airplane, unless the RAT actuator has been replaced with a serviceable unit and the RAT has been re-identified, as applicable, in accordance with the Accomplishment Instructions of Airbus Mandatory Service Bulletin A340-29-5018, dated May 18, 2011.

(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: Vladimir Ulyanov, Aerospace Engineer, International Branch, ANM-116, Transport Airplane Directorate, FAA, 1601 Lind Avenue SW., Renton, Washington 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) Airworthy Product: For any requirement in this AD to obtain corrective actions from a manufacturer or other source, use these actions if they are FAA-approved. Corrective actions are considered FAA-approved if they are approved by the State of Design Authority (or their delegated agent). You are required to assure the product is airworthy before it is returned to service.

(k) Related Information

Refer to MCAI European Aviation Safety Agency Airworthiness Directive 2011-0204, dated October 14, 2011, and the service information specified in paragraphs (k)(1), (k)(2), (k)(3), (k)(4), and (k)(5) of this AD, for related information.

(1) Airbus Mandatory Service Bulletin A330-29-3114, dated May 18, 2011.

(2) Airbus Mandatory Service Bulletin A340-29-4089, dated May 18, 2011.

(3) Airbus Mandatory Service Bulletin A340-29-5018, dated May 18, 2011.

(4) Hamilton Sundstrand Service Bulletin ERPS06M-29-18, dated March 8, 2011.

(5) Hamilton Sundstrand Service Bulletin ERPS33T-29-5, dated March 8, 2011.

(l) Material Incorporated by Reference

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

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

(i) Airbus Mandatory Service Bulletin A330-29-3114, dated May 18, 2011.

(ii) Airbus Mandatory Service Bulletin A340-29-4089, dated May 18, 2011.

(iii) Airbus Mandatory Service Bulletin A340-29-5018, dated May 18, 2011.

(iv) Hamilton Sundstrand Service Bulletin ERPS06M-29-18, dated March 8, 2011.

(v) Hamilton Sundstrand Service Bulletin ERPS33T-29-5, dated March 8, 2011.

(3) For Airbus service information identified in this AD, contact Airbus SAS–Airworthiness Office–EAL, 1 Rond Point Maurice Bellonte, 31707 Blagnac Cedex, France; telephone +33 5 61 93 36 96; fax +33 5 61 93 45 80; email airworthiness.A330-A340@airbus.com; Internet http://www.airbus.com. For Hamilton Sunstrand service information identified in this AD, contact Hamilton Sundstrand, Technical Publications, Mail Stop 302-9, 4747 Harrison Avenue, P.O. Box 7002, Rockford, Illinois 61125-7002; telephone 860-654-3575; fax 860-998-4564; email tech.solutions@hs.utc.com; Internet http://www.hamiltonsundstrand.com.

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

(5) You may view this service information that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to: http://www.archives.gov/federal-register/cfr/ibr-locations.html.

Issued in Renton, Washington, on October 12, 2012.
Kalene C. Yanamura,
Acting Manager, Transport Airplane Directorate,
Aircraft Certification Service.

2012-22-04 The Boeing Company: Amendment 39-17240; Docket No. FAA-2011-0652; Directorate Identifier 2010-NM-045-AD.

(a) Effective Date

This AD is effective December 5, 2012.

(b) Affected ADs

None.

(c) Applicability

This AD applies to all The Boeing Company Model MD-90-30 airplanes, certificated in any category.

(d) Subject

Joint Aircraft System Component (JASC)/Air Transport Association (ATA) of America Code 57, Wings.

(e) Unsafe Condition

This AD was prompted by reports of cracks of the wing rear spar lower cap at the outboard flap, inboard drive hinge at station Xrs=164.000. We are issuing this AD to detect and correct cracking of the left and right rear spar lower caps, which could result in fuel leaks and damage to the wing skin or other structure, and consequent loss of the structural integrity of the wing.

(f) Compliance

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

(g) Repetitive Inspections

Before the accumulation of 30,000 total flight cycles, or within 10,000 flight cycles after the effective date of this AD, whichever occurs later, do an eddy current high frequency (ETHF) inspection for cracking on the aft side of the left and right wing rear spar lower caps at station Xrs=164.000, in accordance with the Accomplishment Instructions of Boeing Alert Service Bulletin MD90-57A026, Revision 1, dated February 23, 2011. If no cracking is found on the left or right wing rear spar lower cap, repeat the inspection on the affected wing rear spar lower cap thereafter at intervals not to exceed 2,550 flight cycles. Doing a repair of the left or right wing rear spar lower cap required by this AD terminates the repetitive inspections required by this paragraph for that side only.

(h) Further Inspections if Cracking of Two Inches or Less Is Found and Is Not in the Rear Spar Lower Cap, Repair, and Repetitive Post-Repair Inspections

If, during any inspection required by paragraph (g) of this AD, any crack is found that is two inches or less and is not in the rear spar lower cap forward horizontal leg radius: Before further flight, do an ETHF inspection for cracking on the affected wing rear spar upper cap at station Xrs=164.000, in accordance with the Accomplishment Instructions of Boeing Alert Service Bulletin MD90-57A026, Revision 1, dated February 23, 2011.

(1) If no crack is found in the rear spar upper cap during the inspection required in paragraph (h) of this AD, do the actions specified in paragraph (h)(1)(i) or (h)(1)(ii) of this AD.

(i) Option 1: Before further flight, do a doubler repair of the rear spar lower cap, in accordance with the Accomplishment Instructions of Boeing Alert Service Bulletin MD90-57A026, Revision 1, dated February 23, 2011. Within 13,500 flight cycles after doing the doubler repair, do an ETHF inspection for any cracking in the repaired area of the rear spar lower cap, in accordance with the Accomplishment Instructions of Boeing Alert Service Bulletin MD90-57A026, Revision 1, dated February 23, 2011. Repeat the inspection thereafter at intervals not to exceed 8,500 flight cycles. If any cracking is found during any inspection required by this paragraph, before further flight, repair using a method approved in accordance with the procedures specified in paragraph (l) of this AD.

(ii) Option 2: Before further flight, do a splice repair of the rear spar lower cap, in accordance with the Accomplishment Instructions of Boeing Alert Service Bulletin MD90-57A026, Revision 1, dated February 23, 2011. Within 20,000 flight cycles after doing the splice repair, do an eddy current low frequency (ETLF) inspection and an ultrasonic (UT) inspection for cracking in the repaired area of the rear spar lower cap, in accordance with the Accomplishment Instructions of Boeing Alert Service Bulletin MD90-57A026, Revision 1, dated February 23, 2011. Repeat the inspections thereafter at intervals not to exceed 3,000 flight cycles. If any cracking is found during any inspection required by this paragraph, before further flight, repair using a method approved in accordance with the procedures specified in paragraph (l) of this AD.

(2) If any crack that is two inches or less is found in the rear spar upper cap during the inspection required by paragraph (h) of this AD, do the actions specified in paragraph (h)(2)(i) or (h)(2)(ii) of this AD.

(i) Option 1: Before further flight, do a doubler repair of the rear spar upper and lower caps, in accordance with the Accomplishment Instructions of Boeing Alert Service Bulletin MD90-57A026, Revision 1, dated February 23, 2011. Within 13,500 flight cycles after doing the doubler repair, do an ETHF inspection for any cracking in the repaired area of the rear spar upper and lower caps, in accordance with the Accomplishment Instructions of Boeing Alert Service Bulletin MD90-57A026, Revision 1, dated February 23, 2011. Repeat the inspection thereafter at intervals not to exceed 8,500 flight cycles. If any cracking is found during any inspection required by this paragraph, before further flight, repair using a method approved in accordance with the procedures specified in paragraph (l) of this AD.

(ii) Option 2: Before further flight, do a splice repair of the rear spar upper and lower caps, in accordance with the Accomplishment Instructions of Boeing Alert Service Bulletin MD90-57A026, Revision 1, dated February 23, 2011. Within 20,000 flight cycles after doing the splice repair, do an ETLF inspection and a UT inspection for any cracking in the repaired area of the rear spar lower cap, in accordance with the Accomplishment Instructions of Boeing Alert Service Bulletin MD90-57A026, Revision 1, dated February 23, 2011. Repeat the inspections thereafter at intervals not to exceed 3,000 flight cycles. If any cracking is found during any inspection required by this paragraph, before further flight, repair using a method approved in accordance with the procedures specified in paragraph (l) of this AD.

(3) If any crack that is greater than two inches is found in the rear spar upper cap during the inspection required by paragraph (h) of this AD, do the actions specified in paragraph (h)(3)(i) or (h)(3)(ii) of this AD.

(i) Option 1: Before further flight, do a splice repair of the rear spar upper cap and a doubler repair of the rear spar lower cap, in accordance with the Accomplishment Instructions of Boeing Alert Service Bulletin MD90-57A026, Revision 1, dated February 23, 2011. Within 13,500 flight cycles after doing the doubler repair, do an ETHF inspection for any cracking in the repaired area of the rear spar lower cap, in accordance with the Accomplishment Instructions of Boeing Alert Service Bulletin MD90-57A026, Revision 1, dated February 23, 2011. Repeat the inspection thereafter at intervals not to exceed 8,500 flight cycles. If any cracking is found during any inspection required by this paragraph, before further flight, repair using a method approved in accordance with the procedures specified in paragraph (l) of this AD.

(ii) Option 2: Before further flight, do a splice repair of the rear spar upper and lower caps, in accordance with the Accomplishment Instructions of Boeing Alert Service Bulletin MD90-57A026, Revision 1, dated February 23, 2011. Within 20,000 flight cycles after doing the splice repair, do an ETLF inspection and a UT inspection for any cracking in the repaired area of the rear spar lower cap, in accordance with the Accomplishment Instructions of Boeing Alert Service Bulletin MD90-57A026, Revision 1, dated February 23, 2011. Repeat the inspections thereafter at intervals not to exceed 3,000 flight cycles. If any cracking is found during any inspection required by this paragraph, before further flight, repair using a method approved in accordance with the procedures specified in paragraph (l) of this AD.

(i) Further Inspections If Cracking That Is Greater Than Two Inches Is Found or Is in the Rear Spar Lower Cap, Repair, and Repetitive Post-Repair Inspections

If, during any inspection required by paragraph (g) of this AD, any crack is found that is greater than two inches or is in the rear spar lower cap forward horizontal leg radius, before further flight, do an ETHF inspection for cracking on the affected wing rear spar upper cap at station Xrs=164.000, in accordance with the Accomplishment Instructions of Boeing Alert Service Bulletin MD90-57A026, Revision 1, dated February 23, 2011.

(1) If no crack is found in the rear spar upper cap, before further flight, do a splice repair of the rear spar lower cap, in accordance with the Accomplishment Instructions of Boeing Alert Service Bulletin MD90-57A026, Revision 1, dated February 23, 2011. Within 20,000 flight cycles after doing the splice repair, do an ETLF inspection and a UT inspection for any cracking of the repaired area of the lower rear spar cap, in accordance with the Accomplishment Instructions of Boeing Alert Service Bulletin MD90-57A026, Revision 1, dated February 23, 2011. Repeat the inspections thereafter at intervals not to exceed 3,000 flight cycles. If any cracking is found during any inspection required by this paragraph, before further flight, repair using a method approved in accordance with the procedures specified in paragraph (l) of this AD.

(2) If any crack that is two inches or less is found in the rear spar upper cap, do the actions specified in paragraph (i)(2)(i) or (i)(2)(ii) of this AD.

(i) Option 1: Do the actions specified in paragraphs (i)(2)(i)(A), (i)(2)(i)(B), and (i)(2)(i)(C) of this AD.

(A) Before further flight, do a doubler repair of the rear spar upper cap and a splice repair of the rear spar lower cap, in accordance with the Accomplishment Instructions of Boeing Alert Service Bulletin MD90-57A026, Revision 1, dated February 23, 2011.

(B) Within 13,500 flight cycles after doing the doubler repair required by paragraph (i)(2)(i)(A) of this AD, do an ETHF inspection for any cracking in the repaired area of the rear spar upper cap, in accordance with the Accomplishment Instructions of Boeing Alert Service Bulletin MD90-57A026, Revision 1, dated February 23, 2011. Repeat the inspection thereafter at intervals not to exceed 8,500 flight cycles. If any cracking is found during any inspection required by this paragraph, before further flight, repair using a method approved in accordance with the procedures specified in paragraph (l) of this AD.

(C) Within 20,000 flight cycles after doing the splice repair required by paragraph (i)(2)(i)(A) of this AD, do an ETLF inspection and a UT inspection for cracking in the repaired area of the rear spar

lower cap, in accordance with the Accomplishment Instructions of Boeing Alert Service Bulletin MD90-57A026, Revision 1, dated February 23, 2011. Repeat the inspections thereafter at intervals not to exceed 3,000 flight cycles. If any cracking is found during any inspection required by this paragraph, before further flight, repair using a method approved in accordance with the procedures specified in paragraph (l) of this AD.

(ii) Option 2: Before further flight, do a splice repair of the rear spar upper and lower caps, in accordance with the Accomplishment Instructions of Boeing Alert Service Bulletin MD90-57A026, Revision 1, dated February 23, 2011. Within 20,000 flight cycles after doing the splice repair, do an ETLF inspection and a UT inspection for cracking in the repaired area of the rear spar lower cap, in accordance with the Accomplishment Instructions of Boeing Alert Service Bulletin MD90-57A026, Revision 1, dated February 23, 2011. Repeat the inspections thereafter at intervals not to exceed 3,000 flight cycles. If any cracking is found during any inspection required by this paragraph, before further flight, repair using a method approved in accordance with the procedures specified in paragraph (l) of this AD.

(3) If any crack that is greater than two inches is found in the rear spar upper cap, before further flight, do a splice repair of the rear spar upper and lower caps, in accordance with the Accomplishment Instructions of Boeing Alert Service Bulletin MD90-57A026, Revision 1, dated February 23, 2011. Within 20,000 flight cycles after doing the splice repair, do an ETLF inspection and a UT inspection for cracking in the repaired area of the rear spar lower cap, in accordance with the Accomplishment Instructions of Boeing Alert Service Bulletin MD90-57A026, Revision 1, dated February 23, 2011. Repeat the inspections thereafter at intervals not to exceed 3,000 flight cycles. If any cracking is found during any inspection required by this paragraph, before further flight, repair using a method approved in accordance with the procedures specified in paragraph (l) of this AD.

(j) Repeat ETHF Inspection

For airplanes on which any splice repair was required by this AD: Within 30,000 flight cycles after the splice repair, repeat the inspection required by paragraph (g) of this AD for the repaired wing. If no cracking is found on the on the rear spar lower cap of the repaired wing, repeat the inspection on the affected wing rear spar lower cap thereafter at intervals not to exceed 2,550 flight cycles. If any cracking is found during any inspection required by this paragraph, before further flight, repair using a method approved in accordance with the procedures specified in paragraph (l) of this AD.

(k) Credit for Previous Actions

This paragraph provides credit for the actions required by paragraphs (g), (h), and (i) of this AD, if those actions were performed before the effective date of this AD using Boeing Alert Service Bulletin MD90-57A026, dated February 11, 2010, which is not incorporated by reference in this AD.

(l) Alternative Methods of Compliance (AMOCs)

(1) The Manager, Los Angeles Aircraft Certification Office (ACO), FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the manager of the ACO, send it to the attention of the person identified in the Related Information section of this AD.

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

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

Authorization (ODA) that has been authorized by the Manager, Los Angeles ACO, to make those findings. For a repair method to be approved, the repair must meet the certification basis of the airplane and 14 CFR 25.571, Amendment 45, and the approval must specifically refer to this AD.

(m) Related Information

(1) For more information about this AD, contact Roger Durbin, Airframe Branch, ANM-120L, FAA, Los Angeles ACO, 3960 Paramount Boulevard, Lakewood, California 90712-4137; phone: (562) 627-5233; fax: (562) 627-5210; email: roger.durbin@faa.gov.

(2) For Boeing service information identified in this AD, contact Boeing Commercial Airplanes, Attention: Data & Services Management, 3855 Lakewood Boulevard, MC D800-0019, Long Beach, CA 90846-0001; telephone 206-544-5000, extension 2; fax 206-766-5683; Internet https://www.myboeingfleet.com.

(n) Material Incorporated by Reference

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

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

(i) Boeing Alert Service Bulletin MD90-57A026, Revision 1, dated February 23, 2011.

(ii) Reserved.

(3) For Boeing service information identified in this AD, contact Boeing Commercial Airplanes, Attention: Data & Services Management, 3855 Lakewood Boulevard, MC D800-0019, Long Beach, CA 90846-0001; telephone 206-544-5000, extension 2; fax 206-766-5683; Internet https://www.myboeingfleet.com.

(4) You may view this service information at FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, Washington. 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.

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Kalene C. Yanamura,
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Aircraft Certification Service.