



**FEDERAL AVIATION ADMINISTRATION
AIRWORTHINESS DIRECTIVES
LARGE AIRCRAFT**

BIWEEKLY 2010-14

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LARGE AIRCRAFT

AD No.	Information	Manufacturer	Applicability
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Info: E - Emergency; COR - Correction; S - Supersedes; R - Revision; FR - Final Rule of Emergency

Biweekly 2010-01

2008-04-11 R1		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 Model 720 and 720B
2008-09-12 R1		Bombardier	CL-600-2B19 (Regional Jet Series 100 & 440)
2008-10-09 R1		Boeing	737-100, -200, -200C, -300, -400, and -500
2008-11-01 R1		Boeing	767-200, -300, -300F, and -400ER
2009-20-11	Cor	Boeing	737-300, -400, and -500
2009-24-11		General Electric	See AD
2009-26-03		Boeing	See AD
2009-26-04		Boeing	737-600, -700, -700C, -800, and -900
2009-26-10		Airbus	A380-841, -842, and -861
2009-26-12		Engine Components, Inc. (ECi)	See AD
2009-26-14		CONSTRUCCIONES AERONAUTICAS, S.A. (CASA)	CN-235, CN-235-100, CN-235-200, and CN-235-300
2009-26-15		Embraer	ERJ 170-100 LR, -100 STD, -100 SE, -100 SU, -200 LR, -200 STD, and -200 SU airplanes, certificated in any category, serial numbers 17000156 through 17000169 inclusive; and Model ERJ 190-100 LR, -100 IGW, -100 STD, -200 STD, -200 LR, and -200 IGW
2009-26-16		McDonnell Douglas	MD-11 and MD-11F
2009-26-17		MCDonnell	Model 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 MD-10-10F and MD-10-30F

Biweekly 2010-02

2008-10-06 R1		Boeing	747-400, -400D, and -400F
2008-10-10 R1		Boeing	737-600, -700, -700C, -800, and -900
2009-26-06		Honeywell International Inc	Engine: ALF502L and ALF502R series, and LF507-1F and LF507-1H
2009-26-09	S 2007-05-16	General Electric Company	Engine: CF34-1A, -3A, -3A1, -3A2, -3B, and -3B1
2010-01-01	S 2006-05-02	Boeing	747-200F, 747-200C, 747-400, 747-400D, and 747-400F
2010-01-04	S 2009-24-11	General Electric Company	Engine: CF34-1A, CF34-3A, CF34-3A1, CF34-3A2, CF34-3B, and CF34-3B1
2010-01-03		Fire Fighting Enterprises Limited	See AD
2010-01-05		CFM International, S.A	Engine: See AD
2010-01-06		Bombardier, Inc.	DHC-8-400, DHC-8-401, and DHC-8-402
2010-01-07		Airbus	A340-211, -212, -213, -311, -312, -313, -541, and -642
2010-01-08		Boeing	737-600, -700, and -800
2010-01-09		Boeing	737-300, -400, and -500
2010-01-11		Fokker Services B.V.	F.28 Mark 0070 and Mark 0100
2010-01-12		Embraer	ERJ 170-100 LR, -100 STD, -100 SE, -100 SU, -200 LR, -200 STD, and -200 SU
2010-02-02		Dassault	Falcon 7X
2010-02-03		Airbus	A340-211, -212, -213, -311, -312, and -313
2010-02-04		Boeing	737-600, -700, -700C, -800, -900, and -900ER

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Biweekly 2010-03			
2009-21-10 R1		AVOX Systems and B/E Aerospace	Appliance: Oxygen cylinder assemblies
2009-26-13		Airbus	A330-201, -202, -203, -223, -243, -301, -302, -303, -321, -322, -323, -341, -342, and -343, 340-211, -212, -213, -311, -312, and -313
2010-01-02	S 2005-15-08	Boeing	747-100B SUD, -200B, -300, -400, and -400D
2010-01-10	S 2007-01-15	Boeing	747-100, 747-100B, 747-100B SUD, 747-200B, 747-200C, 747-200F, 747-300, 747SR, and 747SP
2010-02-06		Sicma Aero Seat	Appliance: 90xx and 92xx series passenger seats
2010-02-09		Airbus	A318
2010-02-10		Airbus	A330-201, -202, -203, -223, -243, -301, -302, -303, -321, -322, -323, -341, -342, and -343 series airplanes; Model A340-211, -212, -213, -311, -312, -313 series airplanes; and Model A340-541 and -642
2010-02-11		BAE Systems	BAe 146-100A, -200A, and -300A series airplanes; and BAE SYSTEMS (Operations) Limited Model Avro 146-RJ70A, 146-RJ85A, and 146-RJ100A
2010-02-12		Fokker Services B.V	F.28 Mark 0070 and 0100
Biweekly 2010-04			
2010-03-05		Boeing	747-200C and -200F
2010-03-07		Embraer	EMB-135BJ, EMB-135ER, -135KE, -135KL, -135LR, EMB-145, -145ER, -145MR, -145LR, -145XR, -145MP, and -145EP
2010-03-08	S 2003-03-02	Boeing	767-200, -300 and -300F
2010-04-01		Dassault Aviation	Falcon 900EX
2010-04-02		Airbus	A310-221, -222, -322, -324, and -325 airplanes, and Model A300 B4-620, B4-622, B4-622R, and F4-622R
2010-04-03		Airbus	A310-203, -204, -221, -222, -304, -322, -324, and -325
Biweekly 2010-05			
2009-06-05 R1		Bombardier, Inc	CL-600-1A11 (CL-600), CL-600-2A12 (CL-601), CL-600-2B16 (CL-601-3A & CL-601-3R), CL-600-2B16 (CL-604)
2010-04-04		Bombardier, Inc	CL-600-2C10 (Regional Jet Series 700, 701, & 702), CL-600-2D15 (Regional Jet Series 705)
2010-04-08		Embraer	ERJ 190-100 LR, -100 IGW, -100 STD, -200 STD, -200 LR, and -200 IGW
2010-04-09		Airbus	A330-201, -202, -203, -223, and -243, A340-211, -212, and -213 airplanes; and Model A340-311, -312, and -313
2010-04-10	S 2009-10-07	Airbus	A380-841, -842, and -861
2010-04-13		Airbus	A310-203, A310-221, and A310-222, A300 F4-605R and A300 F4-622R
2010-04-16		SICLI	Appliance: Portable fire extinguishers
2010-05-01		ATR-GIE Avions de Transport Régional	ATR42-200, -300, -320, and -500 airplanes; and Model ATR72-101, -201, -102, -202, -211, -212, and -212A
2010-05-04		McDonnell Douglas Corporation	MD-90-30
2010-05-05	S 2007-15-08	BAE Systems	ATP
2010-05-06		Airbus	A340-541 and -642
2010-05-07		Airbus	A340-211, -212, and -213 airplanes; and Model A340-311, -312, and -313

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Info: E - Emergency; COR - Correction; S - Supersedes; R - Revision; FR - Final Rule of Emergency			
Biweekly 2010-06			
2009-22-05	S 2008-23-16	Bombardier, Inc.	CL-600-2B19 (Regional Jet Series 100 & 440)
2010-04-09	COR	Airbus	A330-201, -202, -203, -223, and -243, A340-211, -212, and -213 airplanes; and Model A340-311, -312, and -313
2010-04-12		Bombardier, Inc.	DHC-8-101, DHC-8-102, DHC-8-103, DHC-8-106, DHC-8-201, DHC-8-202, DHC-8-301, DHC-8-311, and DHC-8-315
2010-05-03		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
2010-05-09		Dowty Propellers	Propeller: R354/4-123-F/13, R354/4-123-F/20, R375/4-123-F/21, R389/4-123-F/25, R389/4-123-F/26, and R390/4-123-F/27
2010-05-11		Boeing	747-100, 747-200B, 747-300, and 747SR
2010-05-12		Bombardier, Inc	DHC-8-102, DHC-8-103, DHC-8-106, DHC-8-201, and DHC-8-202
2010-05-13	S 2006-07-12	Boeing	737-100, -200, -200C, -300, -400, and -500
2010-05-14		Bombardier, Inc	CL-600-2B19 (Regional Jet Series 100 & 440)
2010-06-01		Airbus	A319-111, -112, -113, -114, -115, -131, -132, and -133 airplanes; Model A320-111, -211, -212, -214, -231, -232, and -233 airplanes; and Model A321-111, -112, -131, -211, -212, -213, -231, and -232
2010-06-04		Airbus	See AD
2010-06-05		Airbus	See AD
2010-06-51	E	Boeing	737-600, -700, -700C, -800, -900, and -900ER
Biweekly 2010-07			
97-17-04 R1	R	Pratt & Whitney	Engine: JT8D-209, -217, -217C, and -219
2010-05-13	COR, S 2006-07-12	Boeing	737-100, -200, -200C, -300, -400, and -500
2010-06-09		Boeing	777-200, -200LR, -300, -300ER, and 777F
2010-06-13		Learjet	45
2010-06-15		General Electric Company	Engine: CF6-45A, CF6-45A2, CF6-50A, CF6-50C, CF6-50CA, CF6-50C1, CF6-50C2, CF6-50C2B, CF6-50C2D, CF6-50C2F, CF6-50C2R, CF6-50E, CF6-50E1, and CF6-50E2, 767-200, -300, -300F, and -400ER
2010-06-16		Boeing	767-200, -300, -300F, and -400ER
2010-06-18		International Aero Engines	Engine: V2500-A1, V2522-A5, V2524-A5, V2525-D5, V2527-A5, V2527E-A5, V2527M-A5, V2528-D5, V2530-A5, and V2533-A5
2010-07-04		Embraer	ERJ 170-100 LR, -100 STD, -100 SE, and -100 SU airplanes; Model ERJ 170-200 LR, -200 SU, and -200 STD airplanes; Model ERJ 190-100 STD, -100 LR, -100 ECJ, and -100 IGW
Biweekly 2010-08			
2010-06-10		Boeing	767-200, -300, and -300F
2010-06-14		Rolls-Royce plc	Engine: RB211-Trent 875-17, Trent 877-17, Trent 884-17, Trent 884B-17, Trent 892-17, Trent 892B-17, and Trent 895-17
2010-06-17		Boeing	757-200, -200CB, -200PF, and -300
2010-06-51		Boeing	737-600, -700, -700C, -800, -900, and -900ER
2010-07-01	S 2009-24-05	Rolls-Royce plc	See AD
2010-07-02	S 2006-22-05	Honeywell, Inc.	Appliance: Honeywell Primus II RNZ-850()/-851()
2010-07-03	S 2006-08-02	Boeing	747-200C and -200F
2010-07-06		Bombardier, Inc.	BD-100-1A10 (Challenger 300)
2010-07-08		Kelly Aerospace Energy Systems, LLC	Appliance: Kelly Aerospace Energy Systems
2010-07-09	S 2007-02-05	Rolls-Royce plc	Engine: RB211-Trent 768-60, RB211-Trent 772-60, and RB211-Trent 772B-60
2010-07-10		Airbus	A300 B2-1C, B2K-3C, B2-203, B4-2C, B4-103, and B4-20

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Biweekly 2010-09			
2010-08-02		Embraer	ERJ 170-100 LR, -100 STD, -100 SE, -100 SU, -200 LR, -200 STD, -200 SU, ERJ 190-100 STD, -100 LR, -100 IGW, -100 ECJ, -200 STD, -200 LR, and -200 IGW
2010-08-03 2010-08-05	S 2009-04-11	Bombardier, Inc. Airbus	CL-600-2B19 (Regional Jet Series 100 & 440) A330-201, -202, -203, -223, -243, -301, -302, -303, -321, -322, -323, -341, -342, and -343, A340-311, -312, and -313
2010-08-06		Embraer	ERJ 170-100 LR, -100 STD, -100 SE, -100 SU, -200 LR, -200 STD, and -200 SU, ERJ 190-100 STD, -100 LR, -100 IGW, -200 STD, -200 LR, and -200 IGW
2010-08-07		Airbus	A340-541 and -642
2010-08-08		Airbus	A330-243, -341, -342, and -343
2010-09-08		General Electric Company	Engine: CJ610 series turbojet and CF700
Biweekly 2010-10			
2002-23-20	COR	Dassault Aviation	900EX, Mystere Falcon 900
2010-01-04	COR, S 2009-24-11	General Electric Company	Engine: CF34-1A, CF34-3A, CF34-3A1, CF34-3A2, CF34-3B, and CF34-3B1
2010-06-04	COR	Airbus	A300 B2-1C, A300 B2-203, A300 B2K-3C, A300 B4-103, A300 B4-203, and A300 B4-2C, A310-203, A310-204, A310-221, A310-222, A310-304, A310-322, A310-324, and A310-325, A300 B4-601, A300 B4-603, A300 B4-605R, A300 B4-620, A300 B4-622, and A300 B4-622R
2010-09-02		British Aerospace Regional Aircraft	Jetstream Series 3101 and Jetstream Model 3201
2010-09-03		Boeing	747-200B
2010-09-04		Honeywell International Inc.	Appliance: Primus EPIC and Primus APEX flight management systems (FMS)
2010-09-05	S 2010-06-51	Boeing	737-600, -700, -700C, -800, -900, and -900ER
2010-09-06		Bombardier, Inc.	CL-600-2C10 (Regional Jet Series 700, 701 & 702), CL-600-2D15 (Regional Jet Series 705) and Model CL-600-2D24 (Regional Jet Series 900)
2010-09-07		Bombardier, Inc.	DHC-8-400, -401, and -402
2010-09-10	S 2003-04-21 R!	Bombardier, Inc.	CL-600-2B19 (Regional Jet Series 100 & 440)
2010-09-11	S 93-01-11	BAE Systems (Operations) Limited	BAe 146-100A, -200A, and -300A series airplanes, and Model Avro 146-RJ70A, 146-RJ85A, and 146-RJ100A
2010-09-12		McDonnell Douglas Corporation	Model DC-10-10, DC-10-10F, DC-10-15, DC-10-30, DC-10-30F (KC-10A and KDC-10), DC-10-40, DC-10-40F, MD-10-10F, MD-10-30F, MD-11, and MD-11F
2010-09-14	S 2009-01-01	CFM International, S.A.	Engine: CFM56-5B1/P, -5B2/P, -5B3/P, -5B3/P1, -5B4/P, -5B5/P, -5B6/P, -5B7/P, -5B8/P, -5B9/P, -5B1/2P, -5B2/2P, -5B3/2P, -5B3/2P1, -5B4/2P, -5B4/P1, -5B6/2P, -5B4/2P1, and -5B9/2P
2010-10-04		Bombardier, Inc.	DHC-8-400, -401, and -402

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Biweekly 2010-11			
2009-26-09	COR	General Electric Company	Engine: CF34-1A, -3A, -3A1, -3A2, -3B, and -3B1
2010-10-05	S 94-12-04	Boeing	747-100, 747-100B, 747-100B SUD, 747-200B, 747-300, 747SR, and 747SP
2010-10-07		Empresa Brasileira de Aeronautica S.A.	ERJ 170-100 LR, -100 STD, -100 SE, -100 SU, -200 LR, -200 STD, and -200 SU, ERJ 190-100 ECJ, -100 LR, -100 IGW, -100 STD, -200 STD, -200 LR, and -200 IGW
2010-10-08		Airbus	A318-111, -112, -121, and -122 airplanes; Model A319-111, -112, -113, -114, -115, -131, -132, and -133 airplanes; Model A320-111, -211, -212, -214, -231, -232, and -233 airplanes; and Model A321-111, -112, -131, -211, -212, -213, -231, and -232
2010-10-11		Empresa Brasileira de Aeronautica S.A.	EMB-135BJ, -135ER, -135KE, -135KL, -135LR, -145, -145ER, -145MR, -145LR, -145XR, -145MP, and -145EP
2010-10-13		BAE Systems	BAe 146-100A, -200A, and -300A series airplanes; and Model Avro 146-RJ70A, 146-RJ85A, and 146-RJ100A
2010-10-18		Bombardier, Inc.	BD-100-1A10 (Challenger 300)
2010-10-19	S 2010-02-03	Airbus	A340-211, -212, -213, -311, -312, and -313
2010-10-20		McDonnell Douglas	DC-9-31, DC-9-32, DC-9-32 (VC-9C), DC-9-32F, DC-9-33F, DC-9-34, DC-9-34F, and DC-9-32F (C-9A, C-9B), DC-9-41, and DC-9-51
2010-10-21		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)
2010-10-22	S 2005-23-12	BAE Systems	BAe 146-100A, -200A, and -300A series airplanes; and Model Avro 146-RJ70A, 146-RJ85A, and 146-RJ100A
2010-10-23	S 70-16-02	Dowty Propellers	R175/4-30-4/13; R175/4-30-4/13e; R184/4-30-4/50; R193/4-30-4/50; R193/4-30-4/61; R193/4-30-4/64; R193/4-30-4/65; R193/4-30-4/66; R.209/4-40-4.5/2; R212/4-30-4/22; R.245/4-40-4.5/13; R257/4-30-4/60; and R.259/4-40-4.5/17
2010-10-24		Dassault Aviation	FALCON 2000 and FALCON 2000EX
2010-10-25		Airbus	A330-201, -202, -203, -223, -243, -301, -302, -303, -321, -322, -323, -341, -342, and -343 airplanes; and Airbus Model A340-311, -312, and -313
2010-10-26	S 2007-14-02	Bombardier, Inc.	CL-600-1A11 (CL-600), CL-600-2A12 (CL-601), CL-600-2B16 (CL-601-3A, CL-601-3R, and CL-604)
2010-11-02	S 2007-03-05	Gulfstream Aerospace LP	100 airplanes; and Model Astra SPX and 1125 Westwind
2010-11-03		Airbus	A300 B2-1A, B2-1C, B2K-3C, B2-203, B4-2C, B4-103, B4-203, B4-601, B4-603, B4-620, B4-622, B4-605R, B4-622R, F4-605R, F4-622R, and C4-605R Variant F airplanes; and Model A310-203, -204, -221, -222, -304, -322, -324, and -325

Biweekly 2010-12

2006-09-11	COR	Airbus	A319-111, -112, -113, -114, -115, -131, -132, and -133 airplanes; Model A320-211, -212, -214, -231, -232, and -233 airplanes; Model A321-111, -112, and -131 airplanes; and Model A321-211 and -231
2010-11-01		Embraer	EMB-135BJ, -135ER, -135KE, -135KL, -135LR, -145, -145ER, -145MR, -145LR, -145XR, -145MP, and -145EP airplanes, certificated in any category, all serial numbers, except Model EMB-145LR
2010-11-12	S 99-25-14	McDonnell Douglas	MD-11 and MD-11F
2010-11-13		Embraer	ERJ 170-100 LR, -100 STD, -100 SE, -100 SU, -200 LR, -200 STD, and -200 SU
2010-11-14		Embraer	ERJ 190-100 STD, -100 LR, -100 IGW, -200 STD, -200 LR, and -200 IGW

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Biweekly 2010-13			
2010-10-17	S 97-25-02, 2000-02-05, 2006-15-07, 2006-17-01	Mitsubishi Heavy Industries, Ltd.	See AD
2010-11-11		Learjet Inc	60
2010-12-03		CFM International	Engine: CFM56-3 and -3B
2010-12-05	S 2009-06-18	Bombardier	CL-600-2C10 (Regional Jet Series 700, 701, & 702)
2010-12-06		Bombardier, Inc	DHC-8-400, DHC-8-401, and DHC-8-402
2010-12-07		Embraer	EMB-135ER, -135KE, -135KL, and -135LR airplanes; and EMBRAER Model EMB-145, -145ER, -145MR, -145LR, - 145XR, -145MP, and -145EP
2010-12-08		Airbus	A300 B2-1A, B2-1C, B2K-3C, B2-203, B4-2C, B4-103, B4-203, B4-601, B4-603, B4-620, B4-622, B4-605R, B4-622R, F4-605R, and F4-622R airplanes; Model C4-605R Variant F airplanes; and Model A310-203, -204, -221, -222, -304, -322, -324, and -325
2010-12-09		Honeywell International	Appliance: APU
2010-12-10	S 2010-06-15	General Electric	Engine: CF6-45A, CF6-45A2, CF6-50A, CF6-50C, CF6-50CA, CF6-50C1, CF6-50C2, CF6-50C2B, CF6-50C2D, CF6-50C2-F, CF6-50C2-R, CF6-50E, CF6-50E1, and CF6-50E2
Biweekly 2010-14			
2008-01-01		The Boeing Company	737-200, -300, -400, -500, -600, -700, -800, and -900 series airplanes; 747-400 series airplanes; 757-200 and -300 series airplanes; 767-200, -300, and -400ER series airplanes; 777-200 series airplanes
2009-15-16		McDonnell Douglas Corporation	DC-9-11, DC-9-12, DC-9-13, DC-9-14, DC-9-15, and DC-9-15F, DC-9-31, DC-9-32, DC-9-32 (VC-9C), DC-9-32F, DC-9-33F, DC- 9-34, DC-9-34F, and DC-9-32F (C-9A, C-9B), DC-9-81 (MD-81), DC-9-82 (MD-82), DC-9-83 (MD-83), DC-9-87 (MD-87), MD-88, and MD-90-30 airplanes
2010-13-02		Fokker Services B.V.	F.27 Mark 500 and 600 airplanes
2010-13-03		The Boeing Company	777-200LR and -300ER series airplanes
2010-13-04		Bombardier, Inc.	DHC-8-400, DHC-8-401, and DHC-8-402 series airplanes
2010-13-05	COR	Bombardier, Inc.	CL-600-2C10 (Regional Jet Series 700 & 701); CL-600-2D15 (Regional Jet Series 705) and Model CL-600-2D24 (Regional Jet Series 900) airplanes
2010-13-06		McDonnell Douglas Corporation	DC-10-10, DC-10-10F, and MD-10-10F airplanes
2010-13-09		CFM International, S.A	CFM56-5, -5B, and -7B series turbofan engines
2010-13-11		Fokker Services B.V.	F.28 Mark 0070 and Mark 0100 airplanes
2010-13-12		The Boeing Company	747-100, 747-100B, 747-100B SUD, 747-200B, 747-200C, 747- 200F, 747-300, 747-400, 747-400D, 747-400F, 747SR, and 747SP series airplanes
2010-14-01		The Boeing Company	747-100, 747-100B, 747-100B SUD, 747-200B, 747-200C, 747- 200F, 747-300, 747-400, 747-400F, 747SR, and 747SP series airplanes
2010-14-02		Bombardier, Inc.	CL-600-2B16 (CL-604 Variant) airplanes
2010-14-03	S 2009-06-17	Bombardier, Inc.	CL-600-2B19 (Regional Jet Series 100 & 440) airplanes
2010-14-04		Airbus	A330-243, -341, -342, and -343 airplanes; and A340-541 and -642 airplanes
2010-14-05		Bombardier, Inc.	CL-600-1A11 (CL-600), CL-600-2A12 (CL-601), CL-600-2B16 (CL-601-3A, CL-601-3R, and CL-604) airplanes
2010-14-06	S 2008-06-24	The Boeing Company	737-200, -300, -400, and -500 series airplanes
2010-14-07	S 2006-05-06	The Boeing Company	747-100, 747-100B, 747-100B SUD, 747-200B, 747-200C, 747- 200F, 747-300, 747-400, 747-400D, 747-400F, 747SR, and 747SP series airplanes
2010-14-08		The Boeing Company	747-400, 747-400D, and 747-400F series airplanes
2010-14-09		The Boeing Company	747-100B, 747-200B, 747-200F, 747-300, 747-400, 747-400F, and 747SP series airplanes
2010-14-10	S 94-17-01	The Boeing Company	747-100, 747-200B, and 747-200F series airplanes



2008-01-01 The Boeing Company: Amendment 39-16346. Docket No. FAA-2010-0638; Directorate Identifier 2007-NM-333-AD.

Effective Date

(a) This AD becomes effective July 6, 2010, to all persons except those persons to whom it was made immediately effective by AD 2008-01-01, issued on December 26, 2007, which contained the requirements of this amendment.

Affected ADs

(b) None.

Applicability

(c) This AD applies to The Boeing Company airplanes identified in Table 1 of this AD, certificated in any category.

Table 1 – Applicability

Model –	Modified in accordance with Supplemental Type Certificate –	As identified in Jamco Service Bulletin –
(1) 737-200, -300, -400, -500, -600, -700, -800, and -900 series airplanes	ST01143SE	52-2295, Revision 1, dated October 10, 2007
(2) 747-400 series airplanes	ST01194SE	52-2303, Revision 1, dated October 10, 2007
(3) 757-200 and -300 series airplanes	ST01150SE	52-2304, Revision 2, dated November 1, 2007
(4) 767-200, -300, and -400ER series airplanes	ST01121SE	52-2302, Revision 1, dated October 10, 2007
(5) 777-200 series airplanes	ST01201SE	52-2305, Revision 1, dated October 10, 2007

Subject

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

Unsafe Condition

(e) This AD results from a report indicating that a feature of the flight deck door is defective. We are issuing this AD to prevent failure of this feature, which could jeopardize flight safety.

Compliance

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

Replacement

(g) Within 30 days after the effective date of this AD, replace a certain flight deck door feature and revise the modification record placard, in accordance with the Accomplishment Instructions of the applicable service bulletin identified in Table 1 of this AD.

(h) Actions done before the effective date of this AD in accordance with Jamco Service Bulletin 52-2304, Revision 1, dated October 10, 2007, are acceptable for compliance with the corresponding requirements of paragraph (g) of this AD.

Alternative Methods of Compliance (AMOCs)

(i)(1) The Manager, Seattle Aircraft Certification Office, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 FR 39.19. Send information to Attn: Patrick Gillespie, Aerospace Engineer, Cabin Safety and Environmental Systems Branch, ANM-150S, FAA, Seattle Aircraft Certification Office, 1601 Lind Avenue, SW., Renton, Washington 98057-3356; telephone (425) 917-6429; fax (425) 917-6590. Information may be e-mailed to: 9-ANM-Seattle-ACO-AMOC-Requests@faa.gov.

(2) To request a different method of compliance or a different compliance time for this AD, follow the procedures in 14 CFR 39.19. Before using any approved AMOC on any airplane to which the AMOC applies, notify your principal maintenance inspector (PMI) or principal avionics inspector (PAI), as appropriate, or lacking a principal inspector, your local Flight Standards District Office. The AMOC approval letter must specifically reference this AD.

Material Incorporated by Reference

(j) You must use the applicable service information contained in Table 2 of this AD to do the actions required by this AD, unless the AD specifies otherwise.

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

(2) For service information identified in this AD, contact Jamco America, Inc., 1018 80th Street SW., Everett, WA 98203; telephone 425-347-4735, ext: 1192 (David Crotty); fax 425-353-2343; e-mail David_Crotty@jamco-america.com; Internet <http://jamco-america.com>.

(3) 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.

(4) 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 NARA, call 202-741-6030, or go to: http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html.

Table 2 – Material incorporated by reference

Document	Revision	Date
Jamco Service Bulletin 52-2295	1	October 10, 2007
Jamco Service Bulletin 52-2302	1	October 10, 2007
Jamco Service Bulletin 52-2303	1	October 10, 2007

Jamco Service Bulletin 52-2304	2	November 1, 2007
Jamco Service Bulletin 52-2305	1	October 10, 2007

Issued in Renton, Washington, on June 18, 2010.

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



AD 2009-15-16 McDonnell Douglas Corporation: Amendment 39-16345. Docket No. FAA-2010-0637; Directorate Identifier 2009-NM-062-AD.

Effective Date

(a) This AD becomes effective July 6, 2010, to all persons except those persons to whom it was made immediately effective by AD 2009-15-16, issued on July 15, 2009, which contained the requirements of this amendment.

Affected ADs

(b) None.

Applicability

(c) This AD applies to all McDonnell Douglas Corporation Model DC-9-11, DC-9-12, DC-9-13, DC-9-14, DC-9-15, and DC-9-15F airplanes, Model DC-9-31, DC-9-32, DC-9-32 (VC-9C), DC-9-32F, DC-9-33F, DC-9-34, DC-9-34F, and DC-9-32F (C-9A, C-9B) airplanes, DC-9-81 (MD-81) airplanes, DC-9-82 (MD-82) airplanes, DC-9-83 (MD-83) airplanes, DC-9-87 (MD-87) airplanes, MD-88 airplanes, and MD-90-30 airplanes; certificated in any category.

Subject

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

Unsafe Condition

(e) This AD results from a report indicating that the current design of certain equipment of the flight deck door is defective. We are issuing this AD to prevent the failure of this equipment, which could jeopardize flight safety.

Compliance

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

Installation

(g) Within 30 days after the effective date of this AD, modify the flight deck door, in accordance with TIMCO Service Bulletin TSB-88-52-045, Revision E, dated November 6, 2008.

Alternative Methods of Compliance (AMOCs)

(h)(1) The Manager, Atlanta Aircraft Certification Office (ACO), FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. Send information to ATTN: Linda Haynes, Aerospace Engineer, COS–Certificate Management Branch,

ACE-102A, FAA, Atlanta Aircraft Certification Office, 1701 Columbia Avenue, College Park, GA 30337; telephone 404-474-5525; fax 404-474-5606.

(2) To request a different method of compliance or a different compliance time for this AD, follow the procedures in 14 CFR 39.19. Before using any approved AMOC on any airplane to which the AMOC applies, notify your principal maintenance inspector (PMI) or principal avionics inspector (PAI), as appropriate, or lacking a principal inspector, your local Flight Standards District Office. The AMOC approval letter must specifically refer to this AD.

Material Incorporated by Reference

(i) You must use TIMCO Service Bulletin TSB-88-52-045, Revision E, dated November 6, 2008, to do the actions required by this AD, unless the AD specifies otherwise. (The revision date of this document is identified only on the title page and page I of the document; no other page of the document contains this information.)

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

(2) For service information identified in this AD, contact TIMCO Aerosystems, 815 Radar Road, Greensboro, NC 27410-6221; telephone 336-668-4410, extension 3063; fax 336-662-8330; Internet: <http://www.timco.aero>.

(3) 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.

(4) 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 NARA, call 202-741-6030, or go to http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html.

Issued in Renton, Washington, on June 18, 2010.

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



2010-13-02 Fokker Services B.V.: Amendment 39-16333. Docket No. FAA-2010-0551; Directorate Identifier 2009-NM-202-AD.

Effective Date

- (a) This airworthiness directive (AD) becomes effective July 8, 2010.

Affected ADs

- (b) None.

Applicability

(c) This AD applies to Fokker Services B.V. Model F.27 Mark 500 and 600 airplanes; certified in any category; having serial numbers (S/Ns) 10452, 10525, 10530, 10531, 10550, 10557, 10559, 10566, 10569, 10589, 10603, 10605, 10606, 10613, 10615, 10623 through 10631 inclusive, 10633, 10637, 10639, 10641, 10642, 10669, and 10672.

Subject

- (d) Air Transport Association (ATA) of America Code 32: Landing Gear.

Reason

- (e) The mandatory continued airworthiness information (MCAI) states:

A Fokker 50 operator reported an overextended MLG [main landing gear] sliding member after landing. During subsequent investigation it was found that an end stop had unscrewed itself to a certain extent. This caused the MLG torque links to move into an overcentre position against the MLG sliding member. Investigation learned that there was no lockwiring present on the two lockbolts, which hold the end stop. This condition, if not corrected, could lead to structural damage of the main gear and loss of control of the aeroplanes during the landing roll.

Compliance

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

Actions

(g) Within 500 flight cycles after the effective date of this AD, measure the length of the extended portion of the sliding member of the main landing gear (MLG), in accordance with Part 1 of the Accomplishment Instructions of Fokker Service Bulletin F27/32-172, dated January 26, 2009. Repeat the measurement at intervals not to exceed 500 flight cycles until lockwiring is installed in

accordance with Fokker Service Bulletin F27/32-172, dated January 26, 2009, or the requirements of paragraph (h) of this AD have been completed.

(h) At the applicable time specified in paragraph (h)(1) or (h)(2) of this AD, perform a general visual inspection for the presence of lockwiring and damage to lockwiring on the two sliding member end stop lock bolts of the MLG, in accordance with Part 2 of the Accomplishment Instructions of Fokker Service Bulletin F27/32-172, dated January 26, 2009. If lockwiring is missing or damaged, install lockwiring before further flight, in accordance with Fokker Service Bulletin F27/32-172, dated January 26, 2009.

(1) If, during any measurement required by paragraph (g) of this AD, overextension is found, or the measurement has increased by 1.0 millimeter (mm) or more compared to the previous measurement, inspect before further flight.

(2) If during any measurement required by paragraph (g) of this AD, no overextension is found and the measurement has not increased by 1.0 mm or more compared to the previous measurement, inspect within 4,000 flight hours after the effective date of this AD.

Note 1: Fokker Service Bulletin F27/32-172, dated January 26, 2009, refers to Messier-Dowty Service Bulletin 32-91W, dated September 8, 2008, as an additional source of guidance.

(i) If, during any measurement required by paragraph (g) of this AD, overextension is found or the measurement has increased by 1.0 mm or more compared to the previous measurement; or if, during any inspection required by paragraph (h) of this AD, lockwiring is not present or is not installed correctly; submit a report to Fokker Services B.V., Technical Services Dept., P.O. Box 231, 2150 AE Nieuw-Venep, the Netherlands; telephone +31 (0)252-627-350; fax +31 (0)252-627-211; e-mail technicalservices.fokkerservices@stork.com; Internet <http://www.myfokkerfleet.com>; at the applicable time specified in paragraph (i)(1) or (i)(2) of this AD. The report must include any finding of overextension or incorrect or missing lockwiring.

(1) If the inspection or measurement was done on or after the effective date of this AD: Submit the report within 30 days after the inspection or measurement was accomplished, as applicable.

(2) If the inspection or measurement was accomplished prior to the effective date of this AD: Submit the report within 30 days after the effective date of this AD.

(j) If lockwiring is installed in accordance with paragraph (h) of this AD, or if no discrepancies are found during the inspection required by paragraph (h) of this AD, as applicable, the repetitive measurement required by paragraph (g) of this AD is no longer required by this AD.

(k) As of the effective date of this AD: No person may install a MLG on any airplane unless Part 2 of Fokker Service Bulletin F27/32-172, dated January 26, 2009, has been accomplished for that part.

FAA AD Differences

Note 2: This AD differs from the MCAI and/or service information as follows: No differences.

Other FAA AD Provisions

(l) 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. Send information to ATTN: Tom Rodriguez, Aerospace Engineer, International Branch, ANM-116, Transport Airplane Directorate, FAA, 1601 Lind Avenue, SW., Renton, Washington 98057-3356; telephone (425) 227-1137; fax (425) 227-1149. Before using any approved AMOC on any airplane to which the AMOC applies, notify your principal maintenance inspector (PMI) or principal avionics inspector (PAI), as appropriate, or lacking a

principal inspector, your local Flight Standards 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:** For any reporting requirement in this AD, under the provisions of the Paperwork Reduction Act (44 U.S.C. 3501 et seq.), the Office of Management and Budget (OMB) has approved the information collection requirements and has assigned OMB Control Number 2120-0056.

Related Information

(m) Refer to MCAI European Aviation Safety Agency Airworthiness Directive 2009-0145, dated July 31, 2009; and Fokker Service Bulletin F27/32-172, dated January 26, 2009; for related information.

Material Incorporated by Reference

(n) You must use Fokker Service Bulletin F27/32-172, dated January 26, 2009, to do the actions required by this AD, unless the AD specifies otherwise.

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

(2) For Fokker service information identified in this AD, contact Fokker Services B.V., Technical Services Dept., P.O. Box 231, 2150 AE Nieuw-Vennep, the Netherlands; telephone +31 (0)252-627-350; fax +31 (0)252-627-211; e-mail technicalservices.fokkerservices@stork.com; Internet <http://www.myfokkerfleet.com>. For Messier-Dowty service information identified in this AD, contact Messier-Dowty: Messier Services Americas, Customer Support Center, 45360 Severn Way, Sterling, Virginia 20166-8910; telephone 703-450-8233; fax 703-404-1621; Internet <https://techpubs.services/messier-dowty.com>.

(3) 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.

(4) 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 NARA, call 202-741-6030, or go to: http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html.

Issued in Renton, Washington, on June 10, 2010.

Jeffrey E. Duven,
Acting Manager, Transport Airplane Directorate,
Aircraft Certification Service.



2010-13-03 The Boeing Company: Amendment 39-16334. Docket No. FAA-2010-0280; Directorate Identifier 2009-NM-259-AD.

Effective Date

(a) This airworthiness directive (AD) is effective July 28, 2010.

Affected ADs

(b) None.

Applicability

(c) This AD applies to The Boeing Company Model 777-200LR and -300ER series airplanes, certificated in any category, as identified in Boeing Alert Service Bulletin 777-57A0069, dated November 5, 2009.

Subject

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

Unsafe Condition

(e) This AD results from reports of cracks emanating from the keyway of the fuel tank access door cutout of the lower wing skin between wing rib numbers 8 and 9. The Federal Aviation Administration is issuing this AD to prevent loss of the lower wing skin load path, which could cause catastrophic structural failure of the wing.

Compliance

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

Inspection

(g) At the applicable time specified in paragraphs (g)(1) and (g)(2) of this AD, do a high frequency eddy current (HFEC) inspection for cracking of the keyway of the fuel tank access door cutout on the left and right wings between wing rib numbers 8 (wing station 387) and 9 (wing station 414.5), and do all applicable corrective actions including applicable related investigative action (an HFEC inspection for cracking of machined areas), in accordance with the Accomplishment Instructions of Boeing Alert Service Bulletin 777-57A0069, dated November 5, 2009, except as required by paragraph (h) of this AD. Do all applicable related investigative and corrective actions before further flight.

(1) For Group 1, Configuration 1 airplanes, as identified in Boeing Alert Service Bulletin 777-57A0069, dated November 5, 2009: Before the accumulation of 3,500 total flight cycles, or within 500 flight cycles after the effective date of this AD, whichever occurs later.

(2) For Group 1, Configuration 2 airplanes and Group 2 airplanes, as identified in Boeing Alert Service Bulletin 777-57A0069, dated November 5, 2009, on which a crack was found in the cutout keyway when the cutout keyway was changed: Within 1,125 days after the effective date of this AD.

Note 1: For Group 1, Configuration 2 airplanes and Group 2 airplanes, as identified in Boeing Alert Service Bulletin 777-57A0069, dated November 5, 2009, on which no crack was found in the cutout keyway when the cutout keyway was changed: No further action is required by this AD.

Exceptions to Service Bulletin

(h) If any cracking is found during any inspection required by this AD, and Boeing Alert Service Bulletin 777-57A0069, dated November 5, 2009, specifies to contact Boeing for appropriate action: Before further flight, repair the crack using a method approved in accordance with the procedures specified in paragraph (i) of this AD.

Alternative Methods of Compliance (AMOCs)

(i)(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. Send information to ATTN: Duong Tran, Aerospace Engineer, Airframe Branch, ANM-120S, FAA, Seattle ACO, 1601 Lind Avenue SW., Renton, Washington 98057-3356; telephone (425) 917-6452; fax (425) 917-6590. Or, e-mail information to 9-ANM-Seattle-ACO-AMOC-Requests@faa.gov.

(2) To request a different method of compliance or a different compliance time for this AD, follow the procedures in 14 CFR 39.19. Before using any approved AMOC on any airplane to which the AMOC applies, notify your principal maintenance inspector (PMI) or principal avionics inspector (PAI), as appropriate, or lacking a principal inspector, your local Flight Standards District Office. The AMOC approval letter must specifically reference this AD.

(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.

Material Incorporated by Reference

(j) You must use Boeing Alert Service Bulletin 777-57A0069, dated November 5, 2009, to do the actions required by this AD, unless the AD specifies otherwise.

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

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

(3) 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.

(4) 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 NARA, call 202-741-6030, or go to: http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html.

Issued in Renton, Washington, on June 10, 2010.
Jeffrey E. Duven,
Acting Manager, Transport Airplane Directorate,
Aircraft Certification Service.



2010-13-04 Bombardier, Inc.: Amendment 39-16335. Docket No. FAA-2010-0273; Directorate Identifier 2009-NM-134-AD.

Effective Date

- (a) This airworthiness directive (AD) becomes effective July 28, 2010.

Affected ADs

- (b) None.

Applicability

(c) This AD applies to Bombardier, Inc. Model DHC-8-400, DHC-8-401, and DHC-8-402 series airplanes, certificated in any category; serial numbers 4001, 4003, 4004, 4006, and 4008 through 4238 inclusive.

Subject

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

Reason

- (e) The mandatory continuing airworthiness information (MCAI) states:

Two in-service incidents have been reported on DHC-8 Series 400 aircraft in which the nose landing gear (NLG) trailing arm pivot pin retention bolt (part number NAS6204-13D) was damaged. One incident involved the left hand NLG tire which ruptured on take-off. Investigation determined that the retention bolt failure was due to repeated contact of the castellated nut with the towing device including both the towbar and the towbarless rigs. The loss of the retention bolt allowed the pivot pin to migrate from its normal position and resulted in contact with and rupture of the tire. The loss of the pivot pin could compromise retention of the trailing arm and could result in a loss of directional control due to loss of nose wheel steering. The loss of an NLG tire or the loss of directional control could adversely affect the aircraft during take off or landing.

To prevent the potential failure of the pivot pin retention bolt, Bombardier Aerospace has developed a modification which includes a new retention bolt, a reverse orientation of the retention bolt and a rework of the weight on wheel (WOW) proximity sensor cover to provide clearance for the re-oriented retention bolt.

Actions and Compliance

- (f) Unless already done, do the following actions.

(1) Within 2,000 flight hours after the effective date of this AD: Modify the NLG trailing arm by incorporating Bombardier Modification Summary 4-113599, in accordance with the Accomplishment Instructions of Bombardier Service Bulletin 84-32-65, Revision A, dated March 2, 2009.

(2) Incorporating Bombardier Modification Summary 4-113599 in accordance with the Accomplishment Instructions of Bombardier Service Bulletin 84-32-65, dated December 17, 2008, is also acceptable for compliance with the requirements of paragraph (f)(1) of this AD if done before the effective date of this AD.

FAA AD Differences

Note 1: This AD differs from the MCAI and/or service information as follows: No differences.

Other FAA AD Provisions

(g) The following provisions also apply to this AD:

(1) Alternative Methods of Compliance (AMOCs): The Manager, New York Aircraft Certification Office, ANE-170, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. Send information to ATTN: Program Manager, Continuing Operational Safety, FAA, New York ACO, 1600 Stewart Avenue, Suite 410, Westbury, New York 11590; telephone 516-228-7300; fax 516-794-5531. Before using any approved AMOC on any airplane to which the AMOC applies, notify your principal maintenance inspector (PMI) or principal avionics inspector (PAI), as appropriate, or lacking a principal inspector, your local Flight Standards 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: For any reporting requirement in this AD, under the provisions of the Paperwork Reduction Act (44 U.S.C. 3501 et seq.), the Office of Management and Budget (OMB) has approved the information collection requirements and has assigned OMB Control Number 2120-0056.

Related Information

(h) Refer to MCAI Canadian Airworthiness Directive CF-2009-29, dated June 29, 2009; and Bombardier Service Bulletin 84-32-65, Revision A, dated March 2, 2009; for related information.

Material Incorporated by Reference

(i) You must use Bombardier Service Bulletin 84-32-65, Revision A, dated March 2, 2009, to do the actions required by this AD, unless the AD specifies otherwise.

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

(2) 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; e-mail thd.qseries@aero.bombardier.com; Internet <http://www.bombardier.com>.

(3) 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.

(4) 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 NARA, call 202-741-6030, or go to: http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html.

Issued in Renton, Washington, on June 10, 2010.
Jeffrey E. Duven,
Acting Manager, Transport Airplane Directorate,
Aircraft Certification Service.



CORRECTION: [*Federal Register: July 1, 2010 (Volume 75, Number 126)*]; Page 38019;
www.access.gpo.gov/su_docs/aces/aces140.html]

2010-13-05 Bombardier, Inc.: Amendment 39-16336. Docket No. FAA-2009-0995; Directorate Identifier 2009-NM-123-AD.

Effective Date

- (a) This airworthiness directive (AD) becomes effective July 28, 2010.

Affected ADs

- (b) None.

Applicability

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

(1) Bombardier, Inc. Model CL-600-2C10 (Regional Jet Series 700 & 701) airplanes, serial numbers 10003 through 10216 inclusive.

(2) Bombardier, Inc. Model CL-600-2D15 (Regional Jet Series 705) and Model CL-600-2D24 (Regional Jet Series 900) airplanes, serial numbers 15001 through 15039 inclusive.

Subject

- (d) Air Transport Association (ATA) of America Code 32: Landing Gear.

Reason

- (e) The mandatory continuing airworthiness information (MCAI) states:

Investigation into a landing gear retraction problem on a production test flight revealed that, during aircraft pressurization and depressurization cycles, the pressure floor in the main landing gear bay deflects to a small extent. This causes relative misalignment between the [alternate-extension system] AES bypass valve, the downlock assist valve and the summing lever which, in turn, can result in damage to and potential failure of the respective clevis attached to one or both of the valves. Such a clevis failure could remain dormant and, in the subsequent event that use of the AES was required, full landing gear extension may not be achievable.

This directive gives instructions to replace the clevis, with a new part, for both the bypass and the downlock assist valves. It also gives instructions to install new support brackets for both valves, in order to increase the stiffness of the installations and thus prevent future relative misalignment and potential clevis failure.

Actions and Compliance

(f) Unless already done, do the following actions.

(1) For any bypass valve having part number (P/N) 53342-3, at the applicable time in paragraph (f)(1)(i), (f)(1)(ii), or (f)(1)(iii) of this AD, replace the existing clevis with a new clevis having P/N 2323H037, in accordance with Part A of the Accomplishment Instructions of Bombardier Alert Service Bulletin A670BA-32-022, Revision A, dated May 1, 2009. The replacement is not required if paragraph (f)(3) of this AD has already been done.

(i) If the bypass valve has accumulated 9,400 total flight cycles or fewer as of the effective date of this AD, replace the clevis before the accumulation of 10,000 total flight cycles on the valve.

(ii) If the bypass valve has accumulated more than 9,400 total flight cycles as of the effective date of this AD, replace the clevis within 550 flight hours after the effective date of this AD.

(iii) If it is not possible to determine the total flight cycles accumulated on the bypass valve, replace the clevis within 550 flight hours after the effective date of this AD.

(2) For any downlock assist valve having P/N 53341-5, at the applicable time in paragraph (f)(2)(i), (f)(2)(ii), or (f)(2)(iii) of this AD, replace the existing clevis with a new clevis, having P/N 2323H037, in accordance with Part B of the Accomplishment Instructions of Bombardier Alert Service Bulletin A670BA-32-022, Revision A, dated May 1, 2009. The replacement is not required if paragraph (f)(3) of this AD has already been done.

(i) If the valve has accumulated 9,400 total flight cycles or fewer as of the effective date of this AD, replace the clevis before the valve has accumulated 10,000 total flight cycles on the valve.

(ii) If the valve has accumulated more than 9,400 total flight cycles as of the effective date of this AD, replace the clevis within 550 flight hours after the effective date of this AD.

(iii) If it is not possible to determine the total flight cycles accumulated by the downlock assist valve, replace the clevis within 550 flight hours after the effective date of this AD.

(3) At the earliest of the times in paragraphs (f)(3)(i), (f)(3)(ii), and (f)(3)(iii) of this AD, install new support brackets for the bypass valve and downlock assist valve, in accordance with Part C of the Accomplishment Instructions of Bombardier Alert Service Bulletin A670BA-32-022, Revision A, dated May 1, 2009. Installing the support brackets terminates the requirements of paragraphs (f)(1) and (f)(2) of this AD.

(i) Within 4,500 flight hours after the effective date of this AD.

(ii) Within 6,000 flight cycles after accomplishing the actions specified in paragraph (f)(1) of this AD, or 6,000 flight cycles after the effective date of this AD, whichever occurs later.

(iii) Within 6,000 flight cycles after accomplishing the actions specified in paragraph (f)(2) of this AD, or 6,000 flight cycles after the effective date of this AD, whichever occurs later.

(4) Replacing the clevises for the bypass valve and downlock assist valve before the effective date of this AD, in accordance with the Accomplishment Instructions of Bombardier Alert Service Bulletin A670BA-32-022, dated November 8, 2007, is considered acceptable for compliance with the corresponding actions specified in paragraphs (f)(1) and (f)(2) of this AD.

FAA AD Differences

Note 1: This AD differs from the MCAI and/or service information as follows: No differences.

Other FAA AD Provisions

(g) The following provisions also apply to this AD:

(1) Alternative Methods of Compliance (AMOCs): The Manager, New York Aircraft Certification Office (ACO), ANE-170, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. Send information to Attn: Program Manager, Continuing Operational Safety, FAA, New York ACO, 1600 Stewart Avenue, Suite 410, Westbury,

New York 11590; telephone 516-228-7300; fax 516-794-5531. Before using any approved AMOC on any airplane to which the AMOC applies, notify your principal maintenance inspector (PMI) or principal avionics inspector (PAI), as appropriate, or lacking a principal inspector, your local Flight Standards 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:** For any reporting requirement in this AD, under the provisions of the Paperwork Reduction Act (44 U.S.C. 3501 et seq.), the Office of Management and Budget (OMB) has approved the information collection requirements and has assigned OMB Control Number 2120-0056.

Related Information

(h) Refer to MCAI Canadian Airworthiness Directive CF-2009-22, dated May 14, 2009; and Bombardier Alert Service Bulletin A670BA-32-022, Revision A, dated May 1, 2009; for related information.

Material Incorporated by Reference

(i) You must use Bombardier Alert Service Bulletin A670BA-32-022, Revision A, including Appendix A, dated May 1, 2009, to do the actions required by this AD, unless the AD specifies otherwise. (The revision level is not specified on pages A1 and A2, Appendix A, of this document; those pages are Revision A, dated May 1, 2009.)

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

(2) 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; e-mail thd.crj@aero.bombardier.com; Internet <http://www.bombardier.com>.

(3) 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.

(4) 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 NARA, call 202-741-6030, or go to: http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html.

Issued in Renton, Washington, on June 10, 2010.

Jeffrey E. Duven,
Acting Manager, Transport Airplane Directorate,
Aircraft Certification Service.



2010-13-06 McDonnell Douglas Corporation: Amendment 39-16337. Docket No. FAA-2010-0043; Directorate Identifier 2009-NM-128-AD.

Effective Date

(a) This airworthiness directive (AD) is effective July 28, 2010.

Affected ADs

(b) None.

Applicability

(c) This AD applies to McDonnell Douglas Corporation Model DC-10-10, DC-10-10F, and MD-10-10F airplanes, certificated in any category, as specified in Boeing Alert Service Bulletin DC10-57A157, dated May 12, 2009.

Subject

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

Unsafe Condition

(e) This AD results from a report of three instances of Model DC-10-10F airplanes having fuel leaks in the wing rear spar lower cap at station Xors=345. The Federal Aviation Administration is issuing this AD to prevent cracking in the spar cap, which could lead to cracking of the lower wing skin, fuel leaks, and the inability of the structure to sustain limit load.

Compliance

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

Inspection

(g) Within 3,000 flight cycles after the effective date of this AD, do a one-time high frequency eddy current inspection for cracking of fastener holes at the left and right side wing rear spar lower cap at station Xors=345, in accordance with the Accomplishment Instructions of Boeing Alert Service Bulletin DC10-57A157, dated May 12, 2009.

(1) If no cracking is found, before further flight, cold work open holes and install new second oversize fasteners and nut assemblies in the left and right side wing rear spar lower cap, in accordance with the Accomplishment Instructions of Boeing Alert Service Bulletin DC10-57A157, dated May 12, 2009.

(2) If any cracking is found during any inspection required by this AD, before further flight, repair the left and right side wing rear spar lower cap using a method approved in accordance with the procedures specified in paragraph (h) of this AD.

Alternative Methods of Compliance (AMOCs)

(h)(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. Send information to ATTN: Nenita Odesa, Aerospace Engineer, Airframe Branch, ANM-120L, FAA, Los Angeles ACO, 3960 Paramount Boulevard, Lakewood, California 90712-4137; telephone (562) 627-5234; fax (562) 627-5210.

(2) To request a different method of compliance or a different compliance time for this AD, follow the procedures in 14 CFR 39.19. Before using any approved AMOC on any airplane to which the AMOC applies, notify your principal maintenance inspector (PMI) or principal avionics inspector (PAI), as appropriate, or lacking a principal inspector, your local Flight Standards District Office. The AMOC approval letter must specifically reference this AD.

(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.

Material Incorporated by Reference

(i) You must use Boeing Alert Service Bulletin DC10-57A157, dated May 12, 2009, to do the actions required by this AD, unless the AD specifies otherwise.

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

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

(3) 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.

(4) 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 NARA, call 202-741-6030, or go to: http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html.

Issued in Renton, Washington, on June 10, 2010.

Jeffrey E. Duven,
Acting Manager, Transport Airplane Directorate,
Aircraft Certification Service.



2010-13-09 CFM International, S.A.: Amendment 39-16340. Docket No. FAA-2010-0026; Directorate Identifier 2010-NE-03-AD.

Effective Date

- (a) This airworthiness directive (AD) becomes effective July 26, 2010.

Affected ADs

- (b) None.

Applicability

- (c) This AD applies to:

- (1) CFM International CFM56-5, -5B, and -7B series turbofan engines with stage 3 low-pressure turbine (LPT) disks part number (P/N) 336-002-006-0, installed with the following serial numbers (S/Ns), DE255844, DE256388, DE256622, DE256623, DE256625, DE256627, DE256628, DE256631, and DE256637.

- (2) CFM International, S.A. has stated that none of these affected disk S/Ns were originally installed on any CFM56-5 turbofan engine, however, that disk P/N is certified for use on CFM56-5 engines.

- (3) The -5 and -5B series engines are installed on, but not limited to, Airbus A318, A319, A320, and A321 airplanes, and the -7B series engines are installed on, but not limited to, Boeing 737 series airplanes.

Unsafe Condition

- (d) This AD results from the discovery of a material nonconformity requiring removal of the disk before the certified disk life of certain stage 3 LPT disks. We are issuing this AD to prevent uncontained failure of the stage 3 LPT disk and damage to the airplane.

Compliance

- (e) You are responsible for having the actions required by this AD performed within the compliance time specified unless the actions have already been done.

Removal of Affected Stage 3 LPT Disks From Service

- (f) Before accumulating 9,500 cycles-since-new, remove stage 3 LPT disks from service.

- (g) After the effective date of this AD, do not reinstall any stage 3 LPT disk removed from service per paragraph (f) of this AD into any engine.

Alternative Methods of Compliance

(h) The Manager, Engine Certification Office, has the authority to approve alternative methods of compliance for this AD if requested using the procedures found in 14 CFR 39.19.

Related Information

(i) Contact Antonio Cancelliere, Aerospace Engineer, Engine Certification Office, FAA, Engine & Propeller Directorate, 12 New England Executive Park, Burlington, MA 01803; e-mail: antonio.cancelliere@faa.gov; telephone (781) 238-7751; fax (781) 238-7199, for more information about this AD.

(j) European Aviation Safety Agency AD 2009-0270, dated December 17, 2009, also addresses the subject of this AD.

(k) CFM International, S.A. Service Bulletin (SB) No. CFM56-5B S/B 72-0733, dated October 26, 2009, and SB No. CFM56-7B S/B 72-0743, dated October 26, 2009, pertain to the subject of this AD. Contact CFM International, Technical Publications Department, 1 Neumann Way, Cincinnati, OH 45215; telephone (513) 552-2800; fax (513) 552-2816, for a copy of this service information.

Material Incorporated by Reference

(l) None.

Issued in Burlington, Massachusetts, on June 15, 2010.
Peter A. White,
Assistant Manager, Engine and Propeller Directorate,
Aircraft Certification Service.



2010-13-11 Fokker Services B.V.: Amendment 39-16342. Docket No. FAA-2010-0220; Directorate Identifier 2008-NM-166-AD.

Effective Date

- (a) This airworthiness directive (AD) becomes effective July 28, 2010.

Affected ADs

- (b) None.

Applicability

(c) This AD applies to Fokker Services B.V. Model F.28 Mark 0070 and Mark 0100 airplanes, certificated in any category, all serial numbers, if an actuator having part number (P/N) 9409122 or P/N 53-0013 is installed on one or both fuel crossfeed valves or one or both fuel fire shut-off valves.

Subject

(d) Air Transport Association (ATA) of America Code 28 and 76: Fuel and Engine Controls, respectively.

Reason

(e) The mandatory continuing airworthiness information (MCAI) consists of three EASA ADs: 2007-0122, dated May 3, 2007 (corrected May 7, 2007); 2009-0116, dated May 29, 2009; and MCAI 2009-0168, dated August 3, 2009. EASA AD 2007-0122 states:

In-service experience revealed that, due to their position on the aircraft, ice may form on actuators P/N 9409122 installed on fuel crossfeed valves and fuel fire shut-off valves. Tests revealed that the ice can prevent the actuator and thus the valve from operating in flight (frozen stuck). A new actuator is being developed by Fokker Services. However, an airworthiness assessment revealed that interim actions are required for actuators p/n 9409122 installed on fuel crossfeed valves and fuel fire shut-off valves until the new actuators are installed. Fokker Services have issued Service Bulletin (SB) SBF100-28-049 to introduce interim actions that will reduce the probability that fuel crossfeed and fuel fire shut-off valves equipped with actuators p/n 9409122 do not operate due to ice. The interim actions consist of an operational check of the actuators and the application of a grease layer on the actuators, followed by a weekly visual check of the applied grease layer and a 4-weekly operational check of the actuators.

For the reasons stated above, this Airworthiness Directive (AD) requires compliance with instructions contained in the referenced SB. This AD has been re-published to

correct typographical errors in the 'Remarks' section, where the word 'Proposed' should have been deleted.

EASA AD 2009-0116 states:

Due to their position on the aeroplane, fuel crossfeed valve actuators P/N 9409122 are susceptible to freezing, which has an adverse effect on the operation of the valve. This condition, if not corrected, may generate fuel asymmetry alerts when a valve remains in the open position after being selected closed. It may also prevent the flight crew from correcting a fuel asymmetry when a valve remains in the closed position after being selected open. One event was reported where, due to such problems, the flight crew shut down an engine in-flight and diverted the aircraft.

Aeroplanes with serial numbers 11244 through 11441 were delivered from the production line with actuators P/N 9401037 ("chimney type") installed. However, on some aeroplanes, these actuators have subsequently been replaced in service with actuators P/N 9409122 (using mounting blocks P/N 7923505) on one or both fuel crossfeed valves. As a result, those aeroplanes are also affected by this unsafe condition.

To address and correct this unsafe condition, EASA issued AD 2008-0126 that required the replacement of all P/N 9409122 fuel crossfeed valve actuators in accordance with Fokker Services SBF100-28-046 with new actuators developed by the manufacturer Eaton Aerospace, P/N 53-0013, which have improved reliability and are less susceptible to freezing.

Following the introduction of actuator P/N 53-0013 in service, Eaton Aerospace reported manufacturing and design errors on actuators with P/N 53-0013. As a result of these errors, the top-cap of the actuator may become loose, possibly leading to actuator failure. Eaton Aerospace has eliminated these problems by introducing a new actuator P/N 53-0027 and Fokker Services have published SBF100-28-061 to introduce these improved actuators on aeroplanes.

As the compliance time of EASA AD 2008-0126 has not yet expired, both P/N 9409122 and P/N 53-0013 fuel crossfeed valve actuators can currently be installed on aeroplanes affected by this AD.

For the reasons described above, this EASA AD retains the requirements of AD 2008-0126, which is superseded, and adds the requirement to install the new P/N 53-0027 actuators. This AD also allows direct installation of P/N 53-0027 on aeroplanes that are still in pre-SBF100-28-046 configuration, provided this is done within the compliance time as established for that SB in AD 2008-0126 and retained by this new AD.

EASA AD 2009-0168 states:

Due to their position on the aeroplane, fuel fire shut-off valve actuators P/N 9409122 are susceptible to freezing, which has an adverse effect on the operation of the valve. Also, due to various causes, the failure rate of actuator P/N 9409122 is higher than expected. Failure or freezing of the actuator may prevent the flight crew to close the fuel fire shut-off valve in case of an engine fire.

Aeroplanes serial numbers 11244 through 11441 were delivered from the production line with actuators P/N 9401037 ("chimney type") installed. However, on some aeroplanes, these actuators have subsequently been replaced in service with actuators P/N 9409122 (using mounting blocks P/N 7923505) on one or both fuel fire shut-off valves. As a result, those aeroplanes are also affected by this unsafe condition.

To address and correct this unsafe condition, EASA issued AD 2008-0193, requiring the replacement of all P/N 9409122 fuel fire shut-off valve actuators with new actuators developed by the manufacturer Eaton Aerospace, P/N 53-0013, which have improved reliability and are less susceptible to freezing.

Following the introduction of actuator P/N 53-0013 in service, Eaton Aerospace reported manufacturing and design errors on actuators with P/N 53-0013. As a result of these errors, the top-cap of the actuator may become loose, possibly leading to actuator failure. Eaton Aerospace has eliminated these problems by introducing a new actuator P/N 53-0027 and Fokker Services have published SBF100-76-020 to introduce these improved actuators on aeroplanes.

As a consequence of EASA AD 2008-0193, both P/N 9409122 and P/N 53-0013 fuel fire shut-off valve actuators are currently installed on aeroplanes affected by this AD.

For the reasons described above, this EASA AD supersedes AD 2008-0193 and requires the installation of new P/N 53-0027 actuators. This AD also prohibits the installation of P/N 53-0013 actuators in accordance with SBF100-76-018 (which has been cancelled), as previously required by EASA AD 2008-0193.

Compliance

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

Inspections and Tests for Fuel Crossfeed Valves and Fuel Fire Shut-Off Valves

(g) For airplanes with an actuator having P/N 9409122 on one or both fuel crossfeed valves or one or both fuel fire shut-off valves: Within 30 days after the effective date of this AD, perform an operational test of, and application of grease on, the left-hand (LH) and right-hand (RH) fuel crossfeed valve actuators and fuel fire shut off valve actuators, in accordance with Part 1 of the Accomplishment Instructions of Fokker Service Bulletin SBF100-28-049, dated April 3, 2007.

(h) For airplanes equipped with an actuator having P/N 9409122 on one or both fuel crossfeed valves or one or both fuel fire shut-off valves: Within 7 days after completion of the actions required by paragraph (g) of this AD, and thereafter at intervals not to exceed 7 days, perform a general visual inspection of the applied grease layer on the LH and RH fuel crossfeed valve actuators and fuel fire shut off valve actuators, in accordance with Part 2 of the Accomplishment Instructions of Fokker Service Bulletin SBF100-28-049, dated April 3, 2007. If the layer of grease on any valve actuator is found to be less than 2 to 3 millimeters, before further flight, reapply grease, in accordance with Part 1 of the Accomplishment Instructions of Fokker Service Bulletin SBF100-28-049, dated April 3, 2007.

(i) For airplanes equipped with an actuator having P/N 9409122 on one or both fuel crossfeed valves or one or both fuel fire shut-off valves: Within 28 days after completion of the actions required by paragraph (g) of this AD, and thereafter at intervals not to exceed 28 days, perform an operational test of the LH and RH fuel crossfeed valve actuators and fuel fire shut off valve actuators, in

accordance with Part 3 of the Accomplishment Instructions of Fokker Service Bulletin SBF100-28-049, dated April 3, 2007.

(j) During any of the tests required by paragraphs (g) and (i) of this AD, if a fuel fire shut-off valve actuator fails the operational test, before further flight, do the action specified in paragraph (j)(1) or (j)(2) of this AD.

(1) Do the replacement specified in paragraph (l) of this AD.

(2) Replace the valve actuator with a serviceable part having P/N 9409122, using a method approved by either the Manager, International Branch, ANM-116, Transport Airplane Directorate, FAA; or the European Aviation Safety Agency (or its delegated agent).

Note 1: Guidance on replacing the valve actuator with a serviceable part can be found in the Fokker 70/100 Aircraft Maintenance Manual.

(k) During any of the tests required by paragraphs (g) and (i) of this AD, if a fuel crossfeed valve actuator fails the operational test, before further flight, do the action specified in paragraph (k)(1) or (k)(2) of this AD.

(1) Do the replacement specified in paragraph (o) of this AD.

(2) Replace the valve actuator with a serviceable part having P/N 9409122, using a method approved by either the Manager, International Branch, ANM-116, Transport Airplane Directorate, FAA; or the EASA (or its delegated agent).

Note 2: Guidance on replacing the valve actuator with a serviceable part can be found in the Fokker 70/100 Aircraft Maintenance Manual.

Replacement of Fuel Fire Shut-Off Valves

(l) For airplanes equipped with an actuator having P/N 9409122 on one or both fuel fire shut-off valves: Except as required by paragraph (j) of this AD, within 15 months after the effective date of this AD, replace each fuel fire shut-off valve actuator having P/N 9409122 with a fuel fire shut-off valve actuator having P/N 53-0027 and accomplish the associated modifications, in accordance with Part 1A or 1B, as applicable, of the Accomplishment Instructions of Fokker Service Bulletin SBF100-76-020, dated April 20, 2009. After installation of fuel fire shut-off valve actuators having P/N 53-0027 on an airplane, the requirements of paragraphs (g), (h), and (i) of this AD no longer apply to the fuel fire shut-off valve actuators installed on that airplane.

(m) For airplanes equipped with an actuator having P/N 53-0013 on one or both fuel fire shut-off valves: Within 15 months after the effective date of this AD, replace each fuel fire shut-off valve actuator having P/N 53-0013 with a fuel fire shut-off valve actuator having P/N 53-0027, in accordance with Part 2 of the Accomplishment Instructions of Fokker Service Bulletin SBF100-76-020, dated April 20, 2009.

(n) As of the effective date of this AD, do not install a fuel fire shut-off valve actuator having P/N 53-0013 on any airplane.

Replacement of Fuel Crossfeed Valves

(o) For airplanes equipped with an actuator having P/N 9409122 on one or both fuel crossfeed valves: Do the actions specified in paragraph (o)(1) or (o)(2) of this AD.

(1) Except as specified in paragraph (k)(1) of this AD, within 12 months after the effective date of this AD, replace each fuel crossfeed valve actuator having P/N 9409122 with a fuel crossfeed valve actuator having P/N 53-0013, and before further flight, accomplish the associated modifications, in accordance with the Accomplishment Instructions of Fokker Service Bulletin SBF100-28-046, dated March 27, 2008; and do the replacement required by paragraph (p) of this AD

at the time specified in paragraph (p) of this AD. After installing fuel crossfeed valve actuators having P/N 53-0013 on an airplane, the requirements of paragraphs (g), (h), and (i) of this AD no longer apply to the fuel crossfeed valve actuators installed on that airplane.

(2) Within 12 months after the effective date of this AD, replace each fuel crossfeed valve actuator having P/N 9409122 with a fuel crossfeed valve actuator having P/N 53-0027, in accordance with Part 1A or 1B, as applicable, of the Accomplishment Instructions of Fokker Service Bulletin SBF100-28-061, dated April 20, 2009. After installing fuel crossfeed valve actuators having P/N 53-0027 on an airplane, the requirements of paragraphs (g), (h), and (i) of this AD no longer apply to the fuel crossfeed valve actuators installed on that airplane.

(p) For airplanes equipped with an actuator having P/N 53-0013 on one or both fuel crossfeed valves: Within 18 months after the effective date of this AD, replace each fuel crossfeed valve actuator having P/N 53-0013 with a fuel crossfeed valve actuator having P/N 53-0027, in accordance with Part 2 of the Accomplishment Instructions of Fokker Service Bulletin SBF100-28-061, dated April 20, 2009. After installing fuel crossfeed valve actuators having P/N 53-0027 on an airplane, the requirements of paragraphs (g), (h), and (i) of this AD no longer apply to the fuel crossfeed valve actuators installed on that airplane.

(q) After accomplishing the actions specified in paragraph (p) of this AD, do not install any fuel crossfeed valve actuator having P/N 53-0013 on any airplane.

FAA AD Differences

Note 3: This AD differs from the MCAI and/or service information as follows: Although paragraph (5) of EASA AD 2007-0122, dated May 3, 2007, allows operating the airplane in accordance with the Master Minimum Equipment List (MMEL) Item 28-23-1 of MMEL Fokker 70/MMEL Fokker 100, paragraph (l) of this AD requires replacing affected valves before further flight.

Other FAA AD Provisions

(r) 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. Send information to ATTN: Tom Rodriguez, Aerospace Engineer, International Branch, ANM-116, Transport Airplane Directorate, FAA, 1601 Lind Avenue, SW., Renton, Washington 98057-3356; telephone (425) 227-1137; fax (425) 227-1149. Before using any approved AMOC on any airplane to which the AMOC applies, notify your principal maintenance inspector (PMI) or principal avionics inspector (PAI), as appropriate, or lacking a principal inspector, your local Flight Standards District Office.

(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: For any reporting requirement in this AD, under the provisions of the Paperwork Reduction Act (44 U.S.C. 3501 et seq.), the Office of Management and Budget (OMB) has approved the information collection requirements and has assigned OMB Control Number 2120-0056.

Related Information

(s) Refer to MCAI European Aviation Safety Agency Airworthiness Directives 2009-0168, dated August 3, 2009, 2009-0116, dated May 29, 2009, and 2007-0122, dated May 3, 2007 (corrected May 7, 2007); and the Fokker service bulletins specified in Table 1 of this AD; for related information.

Table 1 – Related Service Information

Fokker Service Bulletin –	Dated –
SBF100-28-046	March 27, 2008
SBF100-28-049	April 3, 2007
SBF100-28-061	April 20, 2009
SBF100-76-020	April 20, 2009

Material Incorporated by Reference

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

Table 2 – Material incorporated by reference

Fokker Service Bulletin –	Dated –
SBF100-28-046, including the drawings identified in Table 3 of this AD	March 27, 2008
SBF100-28-049	April 3, 2007
SBF100-28-061, including the drawings identified in Table 4 of this AD	April 20, 2009
SBF100-76-020, including the drawings identified in Table 5 of this AD	April 20, 2009

Table 3 – Drawings included in Fokker Service Bulletin SBF100-28-046

Fokker Drawing –	Sheet –	Issue –	Dated –
W41194	007	D	March 27, 2008
W41194	008	D	March 27, 2008

Table 4 – Drawings included in Fokker Service Bulletin SBF100-28-061

Fokker Drawing –	Sheet –	Issue –	Dated –
W41194	007	D	April 20, 2009
W41194	008	D	April 20, 2009

Table 5 – Drawings included in Fokker Service Bulletin SBF100-76-020

Fokker Drawing –	Sheet –	Issue –	Dated –
W41460	002	Original	April 20, 2009
W41460	003	Original	April 20, 2009
W59170	12	AC	March 20, 2008

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

(2) For service information identified in this AD, contact Fokker Services B.V., Technical Services Dept., P.O. Box 231, 2150 AE Nieuw-Vennep, the Netherlands; telephone +31 (0)252-627-350; fax +31 (0)252-627-211; e-mail technicalservices.fokkerservices@stork.com; Internet <http://www.myfokkerfleet.com>.

(3) 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.

(4) 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 NARA, call 202-741-6030, or go to: http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html.

Issued in Renton, Washington on June 16, 2010.

Robert D. Breneman,
Acting Manager, Transport Airplane Directorate,
Aircraft Certification Service.



2010-13-12 The Boeing Company: Amendment 39-16343. Docket No. FAA-2009-0906; Directorate Identifier 2009-NM-075-AD.

Effective Date

(a) This airworthiness directive (AD) is effective August 5, 2010.

Affected ADs

(b) None.

Applicability

(c) This AD applies to The Boeing Company Model 747-100, 747-100B, 747-100B SUD, 747-200B, 747-200C, 747-200F, 747-300, 747-400, 747-400D, 747-400F, 747SR, and 747SP series airplanes, certificated in any category; as identified in Boeing Alert Service Bulletin 747-28A2261, dated February 19, 2009.

Note 1: This AD requires a revision to a certain operator maintenance document to include new inspections. Compliance with these inspections is required by 14 CFR 43.16 and 91.403(c). For airplanes that have been previously modified, altered, or repaired in the areas addressed by these limitations, the operator may not be able to accomplish the actions described in the revisions. In this situation, to comply with 14 CFR 43.16 and 91.403(c), the operator must request approval for an alternative method of compliance according to paragraph (k) of this AD. The request should include a description of changes to the required inspections that will ensure the continued operational safety of the airplane.

Subject

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

Unsafe Condition

(e) This AD results from fuel system reviews conducted by the manufacturer. The Federal Aviation Administration is issuing this AD to prevent damage to the fuel pumps caused by electrical arcing that could introduce an ignition source in the fuel tank which, in combination with flammable fuel vapors, could result in a fuel tank explosion and consequent loss of the airplane.

Compliance

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

Replacement

(g) Within 60 months after the effective date of this AD: Replace the power control relays for the main tank fuel boost pumps and jettison pumps, and the center tank scavenge pump, as applicable, with new relays having a ground fault interrupt feature, in accordance with the Accomplishment Instructions of Boeing Alert Service Bulletin 747-28A2261, dated February 19, 2009.

Maintenance Program Revision

(h) Concurrently with the actions required by paragraph (g) of this AD: Revise the maintenance program by incorporating the applicable information in paragraphs (h)(1) and (h)(2) of this AD. The inspection interval for airworthiness limitations (AWLs) 28-AWL-23, 28-AWL-28, and 28-AWL-29 starts on the date the replacement required by paragraph (g) of this AD is done.

(1) For Model 747-400, 747-400D, and 747-400F series airplanes: Incorporate new airworthiness limitations 28-AWL-28 and 28-AWL-29 of Subsection D, "AIRWORTHINESS LIMITATIONS–FUEL SYSTEMS," of Boeing 747-400 Maintenance Planning Data (MPD) Document, Document D621U400-9, Section 9, Revision December 2009. (These AWLs were first introduced in Revision October 2007 of the MPD document.) Incorporating AWLs 28-AWL-28 and 28-AWL-29 in accordance with paragraph (g)(3) of AD 2008-10-06, Amendment 39-15512; or AD 2008-10-06 R1, Amendment 39-16160; is acceptable for compliance with the corresponding requirements specified in this paragraph.

(2) For Model 747-100, 747-100B, 747-100B SUD, 747-200B, 747-200C, 747-200F, 747-300, 747SP, and 747SR series airplanes: Incorporate new AWL 28-AWL-23 of Subsection D, "AIRWORTHINESS LIMITATIONS–SYSTEMS," of Boeing 747-100/200/300/SP Airworthiness Limitations (AWLs) and Certification Maintenance Requirements (CMRs), Document D6-13747-CMR, Revision March 2008. (This AWL was first introduced in Revision September 2007 of the AWLs/CMRs document.) Incorporating AWL 28-AWL-23 in accordance with paragraph (g) of AD 2008-10-07, Amendment 39-15513; or AD 2008-10-07 R1, Amendment 39-16070; is acceptable for compliance with the corresponding requirements specified in this paragraph.

No Alternative Inspection or Inspection Intervals

(i) After accomplishing the actions required by paragraph (h) of this AD, no alternative inspections or inspection intervals may be used, unless the inspections or intervals are approved as an alternative method of compliance (AMOC) in accordance with the procedures specified in paragraph (k) of this AD.

Credit for Actions Done Using Previous Service Information

(j) Incorporating new AWLs 28-AWL-28 and 28-AWL-29 of Subsection D, "AIRWORTHINESS LIMITATIONS–FUEL SYSTEMS," of Boeing 747-400 Maintenance Planning Data (MPD) Document, Document D621U400-9, Section 9, Revision April 2008; or Revision March 2009; before the effective date of this AD is acceptable for compliance with the requirements of paragraph (h)(1) of this AD.

Alternative Methods of Compliance (AMOCs)

(k)(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. Send information to Attn: Georgios Roussos, Aerospace Engineer, Systems and Equipment Branch, ANM-130S, FAA, Seattle Aircraft Certification Office, 1601 Lind Avenue SW., Renton, Washington

98057-3356; telephone (425) 917-6482; fax (425) 917-6590. Information may be e-mailed to 9-ANM-Seattle-ACO-AMOC-Requests@faa.gov.

(2) To request a different method of compliance or a different compliance time for this AD, follow the procedures in 14 CFR 39.19. Before using any approved AMOC on any airplane to which the AMOC applies, notify your principal maintenance inspector (PMI) or principal avionics inspector (PAI), as appropriate, or lacking a principal inspector, your local Flight Standards District Office. The AMOC approval letter must specifically reference this AD.

Material Incorporated by Reference

(1) You must use the service information contained in Table 1 of this AD to do the actions required by this AD, as applicable, unless the AD specifies otherwise.

Table 1 – Material incorporated by reference

Document	Revision	Date
Boeing Alert Service Bulletin 747-28A2261	Original	February 19, 2009
Subsection D, “AIRWORTHINESS LIMITATIONS – SYSTEMS,” of Boeing 747-100/200/300/SP Airworthiness Limitations (AWLs) and Certification Maintenance Requirements (CMRs), Document D6-13747-CMR	March 2008	March 2008
Subsection D, “AIRWORTHINESS LIMITATIONS – FUEL SYSTEMS,” of Section 9 of the Boeing 747-400 Maintenance Planning Data (MPD) Document, Document D621U400-9	December 2009	December 2009

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

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

(3) 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.

(4) 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 NARA, call 202-741-6030, or go to: http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html.

Issued in Renton, Washington, on June 10, 2010.
 Jeffrey E. Duven,
 Acting Manager, Transport Airplane Directorate,
 Aircraft Certification Service.



2010-14-01 The Boeing Company: Amendment 39-16344. Docket No. FAA-2010-0275; Directorate Identifier 2009-NM-231-AD.

Effective Date

- (a) This airworthiness directive (AD) is effective August 5, 2010.

Affected ADs

- (b) None.

Applicability

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

(1) The Boeing Company Model 747-100, 747-100B, 747-100B SUD, 747-200B, 747-200C, 747-200F, 747-300, 747-400, 747SR, and 747SP series airplanes identified in Boeing Service Bulletin 747-21A2421, Revision 2, dated December 19, 2006.

(2) The Boeing Company Model 747-100, 747-100B, 747-200B, 747-200C, 747-200F, 747-300, 747-400F, 747SR, and 747SP series airplanes identified in Boeing Service Bulletin 747-21A2422, Revision 2, dated November 16, 2006.

Subject

- (d) Air Transport Association (ATA) of America Code 21: Air conditioning.

Unsafe Condition

(e) This AD results from reports of duct assemblies in the environmental control system (ECS) with burned Boeing Material Specification (BMS) 8-39 polyurethane foam insulation. This AD also results from a report from the airplane manufacturer that airplanes were assembled with duct assemblies in the ECS wrapped with BMS 8-39 polyurethane foam insulation, a material of which the fire retardant properties deteriorate with age. We are issuing this AD to prevent a potential electrical arc from igniting the BMS 8-39 polyurethane foam insulation on the duct assemblies of the ECS, which could propagate a small fire and lead to a larger fire that could spread throughout the airplane through the ECS.

Compliance

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

ECS Duct Assembly Rework or Replacement

(g) Within 72 months after the effective date of this AD, rework or replace the applicable duct assemblies in the ECS specified in and in accordance with the Accomplishment Instructions and Appendices A through F of Boeing Service Bulletin 747-21A2421, Revision 2, dated December 19, 2006 (for Model 747-100, 747-100B, 747-100B SUD, 747-200B, 747-200C, 747-200F, 747-300, 747-400, 747SR, and 747SP series airplanes); and the Accomplishment Instructions and Appendices A through C of Boeing Service Bulletin 747-21A2422, Revision 2, dated November 16, 2006 (for Model 747-100, 747-100B, 747-200B, 747-200C, 747-200F, 747-300, 747-400F, 747SR, and 747SP series airplanes).

Parts Installation

(h) As of the effective date of this AD, no person may install an ECS duct assembly with BMS 8-39 polyurethane foam insulation on any airplane.

Alternative Methods of Compliance (AMOCs)

(i)(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. Send information to ATTN: Sue McCormick, Aerospace Engineer, Cabin Safety and Environmental Systems Branch, ANM-150S, FAA, Seattle Aircraft Certification Office, 1601 Lind Avenue, SW., Renton, Washington 98057-3356; telephone (303) 342-1082; fax (425) 917-6590. Or, e-mail information to 9-ANM-Seattle-ACO-AMOC-Requests@faa.gov.

(2) To request a different method of compliance or a different compliance time for this AD, follow the procedures in 14 CFR 39.19. Before using any approved AMOC on any airplane to which the AMOC applies, notify your principal maintenance inspector (PMI) or principal avionics inspector (PAI), as appropriate, or lacking a principal inspector, your local Flight Standards District Office. The AMOC approval letter must specifically reference this AD.

Material Incorporated by Reference

(j) You must use Boeing Service Bulletin 747-21A2421, Revision 2, dated December 19, 2006; or Boeing Service Bulletin 747-21A2422, Revision 2, dated November 16, 2006; as applicable; to do the actions required by this AD, unless the AD specifies otherwise.

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

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

(3) 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.

(4) 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 NARA, call 202-741-6030, or go to: http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html.

Issued in Renton, Washington, on June 17, 2010.
Robert D. Breneman,
Acting Manager, Transport Airplane Directorate,
Aircraft Certification Service.



2010-14-02 Bombardier, Inc.: Amendment 39-16347. Docket No. FAA-2009-1227; Directorate Identifier 2009-NM-119-AD.

Effective Date

- (a) This airworthiness directive (AD) becomes effective August 5, 2010.

Affected ADs

- (b) None.

Applicability

(c) This AD applies to Bombardier, Inc. Model CL-600-2B16 (CL-604 Variant) airplanes; certificated in any category; serial numbers 5408 through 5665 inclusive.

Subject

- (d) Air Transport Association (ATA) of America Code 24: Electrical Power.

Reason

- (e) The mandatory continuing airworthiness information (MCAI) states:

Two cases of a crack on a "dry" ADG [air driven generator] (Hamilton Sundstrand part number in the 761339 series), in the aft area of the strut and generator housing assembly, have been reported on CL-600-2B19 aircraft. The same part number is also installed on CL-600-2B16 (CL-604) aircraft. Investigation determined that the crack was in an area of the strut where the wall thickness of the casting was below specification, due to a manufacturing anomaly in a specific batch of ADGs. Structural failure and departure of the ADG during deployment could possibly result in damage to the aircraft structure. If deployment were activated by a dual engine shutdown, ADG structural failure would also result in loss of hydraulics for the flight controls.

This directive gives instructions to check the part number of the installed ADG and, for ADGs with a part number in the 761339 series, the serial numbers of the ADG and the strut and generator housing assembly are also to be checked. If these serial numbers are within specified ranges * * *, initial and subsequent repeat fluorescent penetrant inspections of the ADG strut are required.

This directive also gives instructions to perform a fluorescent penetrant inspection after each unscheduled in-flight ADG deployment and a [general] visual inspection after each unscheduled on-ground ADG deployment. Instructions regarding re-identification (where applicable) and replacement parts are also included.

The unsafe condition is possible loss of control of the airplane.

Actions and Compliance

(f) Unless already done, do the following actions.

(1) Within 400 flight hours after the effective date of this AD, inspect to determine the part number of the installed ADG and accomplish the actions required by paragraph (f)(1)(i) or (f)(1)(ii) of this AD, as applicable. A review of airplane maintenance records is acceptable in lieu of this inspection if the part number of the ADG can be conclusively determined from that review.

(i) If the part number of the ADG is 604-90800-23 (Hamilton Sundstrand part number 1711405), the strut wall thickness is within specification and no further action is required by this paragraph.

(ii) If the part number of the ADG is 604-90800-1, -17 or -19 (Hamilton Sundstrand part number in the 761339 series), inspect to determine the ADG serial number and do the applicable action required by paragraph (f)(1)(ii)(A), (f)(1)(ii)(B), or (f)(1)(ii)(C) of this AD. A review of airplane maintenance records is acceptable in lieu of this inspection if the serial number of the ADG can be conclusively determined from that review.

(A) If the serial number of the ADG is 2000 or higher, the strut wall thickness is within specification and only re-identification is required. Do the actions required by paragraph (f)(8) of this AD.

(B) If the serial number of the ADG is in the range 0101 through 1999 inclusive, and the symbol 24-3 is marked in the serial number block of the identification plate, the strut wall thickness is within specification and only re-identification is required. Do the actions required by paragraph (f)(8) of this AD.

(C) If the serial number of the ADG is in the range 0101 through 1999 inclusive, and the symbol 24-3 is not marked in the serial number block of the identification plate, inspect to determine the serial number of the strut and generator housing assembly and do the applicable action required by paragraph (f)(1)(ii)(C)(1) or (f)(1)(ii)(C)(2) of this AD, as applicable.

Note 1: Guidance on serial number location can be found in Figure 1, Sheet 1, of Hamilton Sundstrand Service Bulletin ERPS10AG-24-3, Revision 3, dated March 12, 2009.

(1) If the serial number of the strut and generator housing assembly is in the range 0001 through 2503 inclusive, the fluorescent penetrant inspection specified in paragraph (f)(2) of this AD is required. For airplanes on which an unscheduled in-flight or on-ground ADG deployment has occurred after accomplishing the actions required by this paragraph, do the actions required by paragraph (f)(5), (f)(6), or (f)(7) of this AD, as applicable.

(2) If the serial number of the strut and generator housing assembly is 2504 or higher, the strut wall thickness is within specification and only re-identification is required. Do the actions required by paragraph (f)(8) of this AD.

(2) For airplanes having a strut and generator housing assembly identified in paragraph (f)(1)(ii)(C)(1) of this AD, except for airplanes with serial numbers 5611 through 5665 on which Bombardier conducted the initial fluorescent penetrant inspection prior to aircraft delivery and on which the ADG has not been replaced since aircraft delivery: Within 400 flight hours after the effective date of this AD, do a fluorescent penetrant inspection of the ADG strut, and replace the ADG, as applicable, in accordance with paragraphs 2.A., 2.C., and 2.D. of the Accomplishment Instructions in Bombardier Alert Service Bulletin A604-24-017, Revision 01, dated January 15, 2007. If the ADG is replaced by an ADG with part number 604-90800-23 (Hamilton Sundstrand part number 1711405), no further action is required by this paragraph. Accomplishing the requirements in paragraph (f)(4) of this AD is required for airplanes on which each ADG has been inspected in accordance with this paragraph.

(3) Accomplishment of the fluorescent penetrant inspection before the effective date of this AD in accordance with the applicable service information identified in Table 1 of this AD is acceptable for compliance with the requirements of paragraph (f)(2) of this AD.

Table 1 - Acceptable Service Information

Document	Revision	Date
Bombardier Alert Service Bulletin A604-24-017	Original	May 6, 2005
Hamilton Sundstrand Service Bulletin ERPS10AG-24-3	Original	April 14, 2005
Hamilton Sundstrand Service Bulletin ERPS10AG-24-3	Revision 1	April 19, 2005
Hamilton Sundstrand Service Bulletin ERPS10AG-24-3	Revision 2	November 14, 2006
Hamilton Sundstrand Service Bulletin ERPS10AG-24-3	Revision 3	March 12, 2009

Note 2: In Hamilton Sundstrand Service Bulletin ERPS10AG-24-3, the fluorescent penetrant inspection is referred to as a "penetrant check."

(4) As of the effective date of this AD, for airplanes on which the inspection required by paragraph (f)(2) of this AD has been done and on which a scheduled ADG operational test is performed: Before further flight after each test, do a fluorescent penetrant inspection of the ADG strut for cracks, and replace the ADG if any crack is found, in accordance with paragraphs 2.A., 2.C., and 2.D. of the Accomplishment Instructions in Bombardier Alert Service Bulletin A604-24-017, Revision 01, dated January 15, 2007. If the ADG is replaced by an ADG with part number 604-90800-23 (Hamilton Sundstrand part number 1711405), no further action is required by this paragraph.

(5) As of the effective date of this AD, for airplanes identified in paragraph (f)(1)(ii)(C)(1) of this AD on which an unscheduled in-flight ADG deployment occurs: Before further flight after each deployment, do a general visual inspection of the ADG strut for cracks, and replace the ADG if any crack is found, in accordance with paragraphs 2.A., 2.B., and 2.D. of the Accomplishment Instructions in Bombardier Alert Service Bulletin A604-24-017, Revision 01, dated January 15, 2007. [If the ADG is replaced by an ADG with part number 604-90800-23 (Hamilton Sundstrand part number 1711405), no further action is required by this paragraph.] The general visual inspection required by this paragraph is not required if the fluorescent penetrant inspection required by paragraph (f)(6) of this AD is performed before further flight.

(6) For airplanes identified in paragraph (f)(1)(ii)(C)(1) of this AD on which an unscheduled in-flight ADG deployment occurs: Within 3 days or 10 hours time-in-service, whichever comes first, after each deployment, perform a fluorescent penetrant inspection of the ADG strut, and replace the ADG, as applicable, in accordance with paragraphs 2.A., 2.C., and 2.D. of the Accomplishment Instructions in Bombardier Alert Service Bulletin A604-24-017, Revision 01, dated January 15, 2007. If the ADG is replaced by an ADG with part number 604-90800-23 (Hamilton Sundstrand part number 1711405), no further action is required by this paragraph.

(7) For airplanes identified in paragraph (f)(1)(ii)(C)(1) of this AD on which an unscheduled on-ground ADG deployment task is done: Before further flight after each deployment, do a general visual inspection of the ADG strut for cracks, and replace the ADG if any crack is found, in accordance with paragraphs 2.A., 2.B., and 2.D. of the Accomplishment Instructions in Bombardier Alert Service Bulletin A604-24-017, Revision 01, dated January 15, 2007. If the ADG is replaced by an ADG with part number 604-90800-23 (Hamilton Sundstrand part number 1711405), no further action is required by this paragraph.

(8) For airplanes identified in paragraphs (f)(1)(ii)(A), (f)(1)(ii)(B), and (f)(1)(ii)(C)(2) of this AD: Within 400 flight hours after the effective date of this AD, re-identify the ADG, in accordance

with the Accomplishment Instructions in Bombardier Service Bulletin 604-24-019, dated October 1, 2007. Following re-identification, no further action is required by this paragraph.

Note 3: Paragraph (f)(8) of this AD is applicable only if required by paragraph (f)(1)(ii)(A), (f)(1)(ii)(B), or (f)(1)(ii)(C)(2) of this AD. The strut wall thickness of the ADGs specified in these paragraphs is not below specification.

(9) As of the effective date of this AD, no person may install an ADG having part number 604-90800-1, -17, or -19 (Hamilton Sundstrand part number in the 761339 series) on any airplane if the serial number of the ADG is in the range 0101 through 1999 strut and the serial number of the generator housing assembly is in the range 0001 through 2503.

Note 4: The Bombardier CL-604 Illustrated Parts Catalog specifies that, for an ADG with a Hamilton Sundstrand part number in the 761339 series, future procurement is to be an ADG with Hamilton Sundstrand part number 1711405.

(10) Although Bombardier Alert Service Bulletin A604-24-017, Revision 01, dated January 15, 2007; and Service Bulletin 604-24-019, dated October 1, 2007; specify submitting certain information to the manufacturer, this AD does not require that submission.

FAA AD Differences

Note 5: This AD differs from the MCAI and/or service information as follows: Although the MCAI or service information tells you to submit information to the manufacturer, paragraph (f)(10) of this AD specifies that such submittal is not required.

Other FAA AD Provisions

(g) 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. Send information to ATTN: Program Manager, Continued 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 on any airplane to which the AMOC applies, notify your principal maintenance inspector (PMI) or principal avionics inspector (PAI), as appropriate, or lacking a principal inspector, your local Flight Standards 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.

Related Information

(h) Refer to MCAI Canadian Airworthiness Directive CF-2009-24, dated May 19, 2009; Bombardier Alert Service Bulletin A604-24-017, Revision 01, dated January 15, 2007; and Bombardier Service Bulletin 604-24-019, dated October 1, 2007; for related information.

Material Incorporated by Reference

(i) You must use Bombardier Alert Service Bulletin A604-24-017, Revision 01, dated January 15, 2007; and Bombardier Service Bulletin 604-24-019, dated October 1, 2007; as applicable; to do the actions required by this AD, unless the AD specifies otherwise.

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

(2) 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; e-mail thd.crj@aero.bombardier.com; Internet <http://www.bombardier.com>.

(3) 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.

(4) 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 NARA, call 202-741-6030, or go to: http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html.

Issued in Renton, Washington, on June 17, 2010.

Robert D. Breneman,
Acting Manager, Transport Airplane Directorate,
Aircraft Certification Service.



2010-14-03 Bombardier, Inc.: Amendment 39-16348. Docket No. FAA-2009-1029; Directorate Identifier 2009-NM-103-AD.

Effective Date

- (a) This airworthiness directive (AD) becomes effective August 4, 2010.

Affected ADs

- (b) This AD supersedes AD 2009-06-17, Amendment 39-15854.

Applicability

(c) This AD applies to Bombardier, Inc. Model CL-600-2B19 (Regional Jet Series 100 & 440) airplanes; certificated in any category; having serial numbers (S/Ns) 7305 through 7990, and 8000 and subsequent.

Subject

- (d) Air Transport Association (ATA) of America Code 24: Electrical power.

Reason

- (e) The mandatory continuing airworthiness information (MCAI) states:

Following in-flight test deployments, several Air-Driven generators (ADGs) failed to come on-line. Investigation revealed that, as a result of a wiring anomaly that had not been detected during ADG manufacture, a short circuit was possible between certain internal wires and their metallic over-braided shields, which could result in the ADG not providing power when deployed. This directive mandates checking of the ADG and modification of the ADG internal wiring, if required. It also prohibits future installation of unmodified ADGs.

The unsafe condition is failure of the ADG, which could lead to loss of several functions essential for safe flight.

Restatement of Requirements of AD 2009-06-17, With No Changes

Actions and Compliance

- (f) Unless already done, do the following actions.

(1) For airplanes having serial numbers (S/Ns) 7305 through 7990 and 8000 through 8083: Within 12 months after April 30, 2009 (the effective date of AD 2009-06-17), inspect the S/N of the installed ADG. A review of airplane maintenance records is acceptable in lieu of this inspection if the serial number of the ADG can be conclusively determined from that review.

(i) If the serial number is not listed in paragraph 1.A of Bombardier Service Bulletin 601R-24-113, Revision A, dated August 11, 2005, no further action is required by this paragraph.

(ii) If the serial number is listed in paragraph 1.A of Bombardier Service Bulletin 601R-24-113, Revision A, dated August 11, 2005, within 12 months after April 30, 2009, inspect the ADG identification plate and, as applicable, do the actions of paragraph (f)(1)(ii)(A) or (f)(1)(ii)(B) of this AD.

(A) If the identification plate is marked with the symbol "24-2," no further action is required by this paragraph.

(B) If the identification plate is not marked with the symbol "24-2," modify the ADG wiring in accordance with the Accomplishment Instructions of Bombardier Service Bulletin 601R-24-113, Revision A, dated August 11, 2005.

(2) For airplanes having S/Ns 7305 through 7990, and 8000 and subsequent: As of April 30, 2009, no ADG as described in Table 1 of this AD may be installed on any airplane, unless the identification plate of the ADG is identified with the symbol "24-2."

Note 1: Bombardier Service Bulletin 601R-24-113, Revision A, dated August 11, 2005, refers to Hamilton Sundstrand Service Bulletin ERPS10AG-24-2, dated February 19, 2004, for further guidance on identifying the symbol "24-2."

Table 1 – ADG Identification

ADG Part Number -	Having ADG Serial Number -
604-90800-1 (761339C), 604-90800-17 (761339D), or 604-90800-19 (761339E)	0101 through 0132, 0134 through 0167, 0169 through 0358, 0360 through 0438, 0440 through 0456, 0458 through 0467, 0469, 0471 through 0590, 0592 through 0597, 0599 through 0745, 0747 through 1005, or 1400 through 1439

(3) Actions done before April 30, 2009, according to Bombardier Service Bulletin 601R-24-113, dated April 22, 2004, are considered acceptable for compliance with the corresponding actions specified in paragraph (f)(1) of this AD, provided the ADG has not been replaced since those actions were done.

New Requirements of This AD

Actions and Compliance

(g) Unless already done, do the following actions.

(1) For airplanes having S/Ns 8084 through 8102: Within 12 months after the effective date of this AD, inspect the serial number of the installed ADG. A review of airplane maintenance records is acceptable in lieu of this inspection if the serial number of the ADG can be conclusively determined from that review.

(i) If the serial number is not listed in paragraph 1.A of Bombardier Service Bulletin 601R-24-113, Revision A, dated August 11, 2005, no further action is required by this paragraph.

(ii) If the serial number is listed in paragraph 1.A of Bombardier Service Bulletin 601R-24-113, Revision A, dated August 11, 2005, within 12 months after the effective date of this AD, inspect the ADG identification plate and, as applicable, do the actions specified in paragraph (g)(1)(ii)(A) or (g)(1)(ii)(B) of this AD.

(A) If the identification plate is marked with the symbol "24-2," no further action is required by this paragraph.

(B) If the identification plate is not marked with the symbol "24-2," modify the ADG wiring in accordance with the Accomplishment Instructions of Bombardier Service Bulletin 601R-24-113, Revision A, dated August 11, 2005.

(2) Actions done before the effective date of this AD according to Bombardier Service Bulletin 601R-24-113, dated April 22, 2004, are considered acceptable for compliance with the corresponding actions specified in paragraph (g)(1) of this AD, provided the ADG has not been replaced since those actions were done.

FAA AD Differences

Note 2: This AD differs from the MCAI and/or service information as follows: The MCAI specifies to inspect S/Ns 7305 through 7990 and 8000 through 8083. This AD also specifies to inspect S/Ns 8084 through 8102.

Other FAA AD Provisions

(h) The following provisions also apply to this AD:

(1) Alternative Methods of Compliance (AMOCs): The Manager, New York Aircraft Certification Office, ANE-170, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. Send information to ATTN: Program Manager, Continuing Operational Safety, FAA, New York ACO, 1600 Stewart Avenue, Suite 410, Westbury, New York 11590; telephone 516-228-7300; fax 516-794-5531. Before using any approved AMOC on any airplane to which the AMOC applies, notify your principal maintenance inspector (PMI) or principal avionics inspector (PAI), as appropriate, or lacking a principal inspector, your local Flight Standards 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: For any reporting requirement in this AD, under the provisions of the Paperwork Reduction Act (44 U.S.C. 3501 et seq.), the Office of Management and Budget (OMB) has approved the information collection requirements and has assigned OMB Control Number 2120-0056.

Related Information

(i) Refer to MCAI Canadian Airworthiness Directive CF-2008-09, dated February 5, 2008; and Bombardier Service Bulletin 601R-24-113, Revision A, dated August 11, 2005; for related information.

Material Incorporated by Reference

(j) You must use Bombardier Service Bulletin 601R-24-113, Revision A, dated August 11, 2005, to do the actions required by this AD, unless the AD specifies otherwise.

(1) The Director of the Federal Register previously approved the incorporation by reference of Bombardier Service Bulletin 601R-24-113, Revision A, dated August 11, 2005, on April 30, 2009 (74 FR 13086, March 26, 2009).

(2) 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; e-mail thd.crj@aero.bombardier.com; Internet <http://www.bombardier.com>.

(3) 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.

(4) 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 NARA, call 202-741-6030, or go to: http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html.

Issued in Renton, Washington, on June 17, 2010.

Robert D. Breneman,
Acting Manager, Transport Airplane Directorate,
Aircraft Certification Service.



2010-14-04 Airbus: Amendment 39-16349. Docket No. FAA-2010-0177; Directorate Identifier 2009-NM-222-AD.

Effective Date

- (a) This airworthiness directive (AD) becomes effective August 5, 2010.

Affected ADs

- (b) None.

Applicability

(c) This AD applies to Airbus Model A330-243, -341, -342, and -343 airplanes; and Model A340-541 and -642 airplanes; certificated in any category; equipped with Rolls-Royce Trent 500 and Trent 700 series engines.

Subject

- (d) Air Transport Association (ATA) of America Code 71: Powerplant.

Reason

- (e) The mandatory continuing airworthiness information (MCAI) states:

It has been evidenced by test that the tightening torque settings on the Rolls-Royce Trent 500 and Trent 700 forward (FWD) and aft (AFT) engine mount link pin retention bolts have always been higher than the design value. These bolts retain the washers that maintain the engine mount vertical load pins in position.

If bolts, as a consequence of the over-torque, fail and move away, it would lead to loss of the vertical load pins, which could result in loss of the primary and/or secondary load path of the forward and/or aft engine mount which could potentially lead to engine separation.

As a short term action, EASA AD 2008-0019 was issued to require a one-time visual inspection of the impacted FWD and AFT engine mount link pin retention bolts in order to detect any broken or missing bolts. This AD, which supersedes EASA AD 2008-0019, mandates a one-time [detailed] visual inspection of the FWD and AFT engine mount link pin retention bolts, in order to ensure that any over-torqued bolt is replaced.

Compliance

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

Actions

(g) Except as provided by paragraph (h) of this AD, at the applicable time specified in paragraph (g)(1) or (g)(2) of this AD, perform a one-time detailed visual inspection for the presence of an "X" marked on the heads of the link pin retention bolts of the forward and aft engine mount on all Rolls-Royce Trent 500 and Trent 700 series engines, in accordance with the Accomplishment Instructions of Airbus Mandatory Service Bulletin A330-71-3022 (for Models A330-243, -341, -342, and -343 airplanes) or A340-71-5004 (for Model A340-541 and -642 airplanes), both dated May 5, 2009. If the bolt head is not marked with an "X," before further flight, replace this bolt with a new bolt marked with an "X" on the bolt head in accordance with the Accomplishment Instructions of Airbus Mandatory Service Bulletin A330-71-3022 (for Models A330-243, -341, -342, and -343 airplanes) or A340-71-5004 (for Model A340-541 and -642 airplanes), both dated May 5, 2009.

(1) For Model A330-243, -341, -342, and -343 airplanes: Within 4,500 flight cycles after the effective date of this AD.

(2) For Model A340-541 and -642 airplanes: Within 2,500 flight cycles after the effective date of this AD.

(h) The actions specified in paragraph (g) of this AD are not required for any engine installed on the airplanes listed in paragraph (g)(1) of this AD, having serial number 964 and subsequent; and the airplanes listed in paragraph (g)(2) of this AD, having serial number 981 and subsequent; if data records conclusively prove that this engine has not been replaced or re-installed since the date of issuance of the original French airworthiness certificate or the date of issuance of the original French or EASA export certificate of airworthiness.

(i) After the effective date of this AD, no person may install a Rolls-Royce Trent 500 or Trent 700 series engine on any airplane, unless it is in compliance with the requirements of this AD.

(j) Although Airbus Mandatory Service Bulletins A330-71-3022 and A340-71-5004, both dated May 5, 2009, specify to submit certain information to the manufacturer, this AD does not include that requirement.

FAA AD Differences

Note 1: This AD differs from the MCAI and/or service information as follows:

(1) The MCAI lists certain Airbus Model A330-200 series and -300 series, and Model A340 series airplanes. Airbus Mandatory Service Bulletins A330-71-3022 and A340-71-5004, both dated May 5, 2009, clarify this effectivity by adding "with Rolls-Royce Trent 500 and Trent 700 series engines." Airplanes with engines other than Rolls-Royce Trent 500 and Trent 700 are not affected by this AD.

(2) Although the MCAI or service information tells you to submit information to the manufacturer, paragraph (j) of this AD specifies that such submittal is not required.

Other FAA AD Provisions

(k) 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. Send information 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. Before using any approved AMOC on any airplane to which the AMOC applies, notify your principal maintenance inspector (PMI) or principal avionics inspector (PAI), as appropriate, or lacking a principal inspector, your local Flight Standards 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.

Related Information

(1) Refer to MCAI EASA Airworthiness Directive 2009-0204, dated September 30, 2009; Airbus Mandatory Service Bulletin A330-71-3022, dated May 5, 2009; and Airbus Mandatory Service Bulletin A340-71-5004, dated May 5, 2009; for related information.

Material Incorporated by Reference

(m) You must use Airbus Mandatory Service Bulletin A330-71-3022, including Appendices 01 and 02 and excluding Appendix 03, dated May 5, 2009; and Airbus Mandatory Service Bulletin A340-71-5004, including Appendices 01 and 02 and excluding Appendix 03, dated May 5, 2009; to do the actions required by this AD, unless the AD specifies otherwise.

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

(2) 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; e-mail airworthiness.A330-A340@airbus.com; Internet <http://www.airbus.com>.

(3) 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.

(4) 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 NARA, call 202-741-6030, or go to: http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html.

Issued in Renton, Washington, on June 16, 2010.

Robert D. Breneman,
Acting Manager, Transport Airplane Directorate,
Aircraft Certification Service.



2010-14-05 Bombardier, Inc.: Amendment 39-16350. Docket No. FAA-2010-0039; Directorate Identifier 2009-NM-239-AD.

Effective Date

(a) This airworthiness directive (AD) becomes effective August 5, 2010.

Affected ADs

(b) None.

Applicability

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

(1) Bombardier, Inc. Model CL-600-1A11 (CL-600) airplanes, serial numbers 1004 through 1085 inclusive;

(2) Bombardier, Inc. CL-600-2A12 (CL-601) airplanes, serial numbers 3001 through 3066 inclusive; and

(3) Bombardier, Inc. CL-600-2B16 (CL-601-3A, CL-601-3R, and CL-604) airplanes, serial numbers 5001 through 5194 inclusive, 5301 through 5665 inclusive, and 5701 and subsequent.

Note 1: Some Model CL-600-2B16 (CL-604) airplanes might be referred to by the marketing designation CL-605 in the applicable service bulletins listed in Table 1 of this AD.

Subject

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

Reason

(e) The mandatory continuing airworthiness information (MCAI) states:

Seven cases of on-ground hydraulic accumulator screw cap or end cap failure have been experienced on CL-600-2B19 (CRJ) aircraft, resulting in loss of the associated hydraulic system and high-energy impact damage to adjacent systems and structure. *

* *

* * * * *

A detailed analysis of the systems and structure in the potential line of trajectory of a failed screw cap/end cap for each accumulator * * * has been conducted. It has been identified that the worst case scenario would be failure of one of the brake accumulator screw caps/end caps, resulting in impact damage causing loss of both hydraulic systems No. 2 and No. 3, with consequent loss of both braking and nose

wheel steering and the potential for a runway excursion [resulting in damage to the airplane and hazards to persons or property on the ground].

* * * * *

Compliance

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

Actions

(g) Do the following actions as applicable.

(1) Within 50 flight hours after the effective date of this AD, inspect to determine the part numbers of the system accumulators numbers 1, 2, and 3 and brake accumulators numbers 2 and 3 that are installed on the airplane. A review of airplane maintenance records is acceptable in lieu of this inspection if the part number of the accumulator can be conclusively determined from that review. If all of the installed accumulators have P/N 2770571-102, 2770571-103, 2770571-104, or 2770571-105, no further action is required by this AD.

(2) At the applicable time in paragraph (g)(2)(i), (g)(2)(ii), or (g)(2)(iii) of this AD, replace the accumulator with a new, overhauled, or refurbished accumulator with the same part number, in accordance with the Accomplishment Instructions of the applicable service bulletin listed in Table 1 of this AD.

Table 1 - Service Bulletins

Airplane Model –	Bombardier Service Bulletin –	Revision –	Dated –
CL-600-1A11 (CL-600)	600-0742	02	May 10, 2010
CL-600-2A12 (CL-601) CL-600-2B16 (CL-601-3A, CL-601-3R variant)	601-0597	02	May 10, 2010
CL-600-2B16 (CL-604 variant)	604-29-008	02	May 10, 2010
CL-600-2B16 (CL-605)	605-29-001	02	May 10, 2010

(i) For each accumulator having P/Ns 08-60163-001 (601R75138-1), 08-60163-002 (601R75138-1), 08-60164-001 (601R75138-3), and 08-60164-002 (601R75138-3), as applicable, that has accumulated more than 3,650 total flight cycles as of the effective date of this AD: Replace the accumulator within 100 flight cycles after the effective date of this AD.

(ii) For each accumulator having P/N 08-60163-001 (601R75138-1), 08-60163-002 (601R75138-1), 08-60164-001 (601R75138-3), and 08-60164-002 (601R75138-3), as applicable, that has accumulated 3,650 total flight cycles or fewer as of the effective date of this AD: Replace the accumulator before the accumulation of 3,750 total flight cycles on the accumulator.

(iii) For each accumulator having P/N 08-60163-001 (601R75138-1), 08-60163-002 (601R75138-1), 08-60164-001 (601R75138-3), and 08-60164-002 (601R75138-3), as applicable, for which it is not possible to determine the number of flight cycles accumulated: Replace the accumulator within 100 flight cycles after the effective date of this AD.

(3) Thereafter, before the accumulation of 3,750 total flight cycles on any accumulator having P/Ns 08-60163-001 (601R75138-1), 08-60163-002 (601R75138-1), 08-60164-001 (601R75138-3), and 08-60164-002 (601R75138-3), as applicable, replace the accumulator with a new, overhauled, or

refurbished accumulator having the same part number, in accordance with the Accomplishment Instructions of the applicable service bulletin listed in Table 1 of this AD.

Note 2: The part numbers in parentheses in paragraphs (g)(2)(i), (g)(2)(ii), (g)(2)(iii), and (g)(3) of this AD, are equivalent specification part numbers, as specified in the applicable service bulletin listed in Table 1 of this AD.

(4) Replacement of an accumulator with a new accumulator having the same part number is also acceptable for compliance with the requirements of paragraph (g)(2) of this AD, if done before the effective date of this AD in accordance with the applicable service bulletin listed in Table 2 of this AD.

Table 2 – Previous Service Bulletins

Airplane Model –	Bombardier Service Bulletin –	Revision –	Dated –
CL-600-1A11 (CL-600)	600-0742	Original	November 10, 2008
CL-600-1A11 (CL-600)	600-0742	01	July 6, 2009
CL-600-2A12 (CL-601) CL-600-2B16 (CL-601-3A, CL-601-3R variant)	601-0597	Original	November 10, 2008
CL-600-2A12 (CL-601) CL-600-2B16 (CL-601-3A, CL-601-3R variant)	601-0597	01	July 6, 2009
CL-600-2B16 (CL-604 variant)	604-29-008	Original	November 10, 2008
CL-600-2B16 (CL-604 variant)	604-29-008	01	July 6, 2009
CL-600-2B16 (CL-605)	605-29-001	Original	November 10, 2008
CL-600-2B16 (CL-605)	605-29-001	01	July 6, 2009

FAA AD Differences

Note 3: This AD differs from the MCAI and/or service information as follows:

- (1) The MCAI specifies that certain airplanes do not need to be inspected for the part number; however, this AD requires that inspections be done on all airplanes to determine the part number.
- (2) The MCAI specifies to record the number of flight cycles accumulated on each affected part. This AD does not require that operators record the number of flight cycles.

Other FAA AD Provisions

(h) The following provisions also apply to this AD:

- (1) Alternative Methods of Compliance (AMOCs): The Manager, New York Aircraft Certification Office (ACO), ANE-170, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. Send information to ATTN: Program Manager, Continuing Operational Safety, FAA, New York ACO, 1600 Stewart Avenue, Suite 410, Westbury, New York, 11590; telephone 516-228-7300; fax 516-794-5531. Before using any approved AMOC on any airplane to which the AMOC applies, notify your principal maintenance

inspector (PMI) or principal avionics inspector (PAI), as appropriate, or lacking a principal inspector, your local Flight Standards 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:** For any reporting requirement in this AD, under the provisions of the Paperwork Reduction Act (44 U.S.C. 3501 et seq.), the Office of Management and Budget (OMB) has approved the information collection requirements and has assigned OMB Control Number 2120-0056.

Related Information

(i) Refer to MCAI Canadian Airworthiness Directive CF-2009-39, dated October 27, 2009, and the service bulletins listed in Table 1 of this AD, for related information.

Material Incorporated by Reference

(j) You must use the service information contained in Table 3 of this AD, as applicable, to do the actions required by this AD, unless the AD specifies otherwise.

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

(2) 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; e-mail thd.crj@aero.bombardier.com; Internet <http://www.bombardier.com>.

(3) 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.

(4) 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 NARA, call 202-741-6030, or go to: http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html.

Table 3 – Material incorporated by reference

Bombardier Service Bulletin –	Revision –	Dated –
600-0742	02	May 10, 2010
601-0597	02	May 10, 2010
604-29-008	02	May 10, 2010
605-29-001	02	May 10, 2010

Issued in Renton, Washington, on June 17, 2010.

Robert D. Breneman,
Acting Manager, Transport Airplane Directorate,
Aircraft Certification Service.



2010-14-06 The Boeing Company: Amendment 39-16351. Docket No. FAA-2009-1224; Directorate Identifier 2009-NM-118-AD.

Effective Date

- (a) This AD becomes effective August 5, 2010.

Affected ADs

- (b) This AD supersedes AD 2008-06-24, Amendment 39-15436.

Applicability

(c) This AD applies to The Boeing Company Model 737-200, -300, -400, and -500 series airplanes, certificated in any category; as identified in Boeing Special Attention Service Bulletin 737-35-1099, Revision 1, dated April 23, 2009.

Subject

- (d) Air Transport Association (ATA) of America Code 35: Oxygen.

Unsafe Condition

(e) This AD results from a determination indicating that additional airplanes may be subject to the identified unsafe condition. The Federal Aviation Administration is issuing this AD to prevent the in-line flow indicators of the passenger oxygen masks from fracturing and separating, which could inhibit oxygen flow to the masks and consequently result in exposure of the passengers and cabin attendants to hypoxia following a depressurization event.

Compliance

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

Restatement of Requirements of AD 2008-06-24, With New Service Information

Inspection and Related Investigative/Corrective Actions if Necessary

(g) For airplanes identified in Boeing Special Attention Service Bulletin 737-35-1099, dated April 9, 2007: Within 60 months after April 23, 2008 (the effective date of AD 2008-06-24), do a general visual inspection to determine the manufacturer and manufacture date of the oxygen masks in the passenger service unit and the lavatory and attendant box assemblies, and do the applicable corrective action and other specified action, by accomplishing all of the applicable actions specified in the Accomplishment Instructions of Boeing Special Attention Service Bulletin 737-35-1099, dated April 9, 2007; or Revision 1, dated April 23, 2009; except where these service bulletins specify

repairing the oxygen mask assembly, replace it with a new or modified oxygen mask assembly having an improved flow indicator. The corrective action and other specified action must be done before further flight. As of the effective date of this AD, use only Revision 1 of Boeing Special Attention Service Bulletin 737-35-1099.

New Requirements of This AD

Inspection and Related Investigative/Corrective Actions if Necessary

(h) For airplanes other than those identified in paragraph (g) of this AD: Within 60 months after the effective date of this AD, do a general visual inspection to determine the manufacturer and manufacture date of the oxygen masks in the passenger service unit and the lavatory and attendant box assemblies, and do the applicable corrective action and other specified action, by accomplishing all of the applicable actions specified in the Accomplishment Instructions of Boeing Special Attention Service Bulletin 737-35-1099, Revision 1, dated April 23, 2009; except where this service bulletin specifies repairing the oxygen mask assembly, replace it with a new or modified oxygen mask assembly having an improved flow indicator. The corrective action and other specified action must be done before further flight.

Note 1: Boeing Special Attention Service Bulletin 737-35-1099, dated April 9, 2007; and Revision 1, dated April 23, 2009; refer to B/E Aerospace Service Bulletin 174080-35-01, dated February 6, 2006; Revision 1, dated May 1, 2006; and Revision 2, dated May 28, 2008; as additional sources of guidance for modifying the oxygen mask assembly by replacing the flow indicator with an improved flow indicator.

Parts Installation

(i) As of the effective date of this AD, no person may install a B/E Aerospace oxygen mask assembly having a part number in the 174080 series or 174095 series with a manufacturing date after January 1, 2002, and before March 1, 2006, on any airplane, unless it has been modified in accordance with the requirements of paragraph (h) of this AD.

Credit for Actions Done in Accordance With Previous Issue of the Service Bulletin

(j) Actions done before the effective date of this AD, in accordance with Boeing Special Attention Service Bulletin 737-35-1099, dated April 9, 2007, are acceptable for compliance with the requirements of paragraphs (g) and (h) of this AD.

Alternative Methods of Compliance (AMOCs)

(k)(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. Send information to ATTN: Nicholas Wilson, Aerospace Engineer, Cabin Safety and Environmental Systems Branch, ANM-150S, FAA, Seattle Aircraft Certification Office, 1601 Lind Avenue SW., Renton, Washington 98057-3356; telephone (425) 917-6476; fax (425) 917-6590. Or, e-mail information to 9-ANM-Seattle-ACO-AMOC-Requests@faa.gov.

(2) To request a different method of compliance or a different compliance time for this AD, follow the procedures in 14 CFR 39.19. Before using any approved AMOC on any airplane to which the AMOC applies, notify your principal maintenance inspector (PMI) or principal avionics inspector (PAI), as appropriate, or lacking a principal inspector, your local Flight Standards District Office. The AMOC approval letter must specifically reference this AD.

(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.

Material Incorporated by Reference

(1) You must use Boeing Special Attention Service Bulletin 737-35-1099, dated April 9, 2007; or Boeing Special Attention Service Bulletin 737-35-1099, Revision 1, dated April 23, 2009; as applicable; to do the actions required by this AD, unless the AD specifies otherwise.

(1) The Director of the Federal Register approved the incorporation by reference of Boeing Special Attention Service Bulletin 737-35-1099, Revision 1, dated April 23, 2009, under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) The Director of the Federal Register previously approved the incorporation by reference of Boeing Special Attention Service Bulletin 737-35-1099, dated April 9, 2007, on April 23, 2008 (73 FR 14666, March 19, 2008).

(3) For service information identified in this AD, contact Boeing Commercial Airplanes, Attention: Data & Services Management, P. O. Box 3707, MC 2H-65, Seattle, Washington 98124-2207; telephone 206-544-5000, extension 1, fax 206-766-5680; e-mail me.boecom@boeing.com; Internet <https://www.myboeingfleet.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 NARA, call 202-741-6030, or go to: http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html.

Issued in Renton, Washington, on June 18, 2010.

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



2010-14-07 The Boeing Company: Amendment 39-16352. Docket No. FAA-2008-0981; Directorate Identifier 2008-NM-073-AD.

Effective Date

- (a) This AD becomes effective August 5, 2010.

Affected ADs

- (b) This AD supersedes AD 2006-05-06, Amendment 39-14503.

Applicability

(c) This AD applies to The Boeing Company Model 747-100, 747-100B, 747-100B SUD, 747-200B, 747-200C, 747-200F, 747-300, 747-400, 747-400D, 747-400F, 747SR, and 747SP series airplanes, certificated in any category, line numbers 1 through 1307 inclusive.

Subject

- (d) Air Transport Association (ATA) of America Code 53: Fuselage.

Unsafe Condition

(e) This AD results from reports of cracked aft inner chords on airplanes after certain requirements of the existing AD were done. We are issuing this AD to prevent fatigue cracking of the body station (BS) 2598 bulkhead structure, which could result in inability of the structure to carry horizontal stabilizer flight loads, and loss of controllability of the airplane.

Compliance

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

Restatement of Requirements of AD 2006-05-06

Repetitive High Frequency Eddy Current (HFEC) Inspections of the Bulkhead Frame Supports

(g) Before the accumulation of 10,000 total flight cycles, or within 1,000 flight cycles after August 16, 2001 (the effective date of AD 2001-14-07, Amendment 39-12318, which was superseded by AD 2006-05-06), whichever occurs later: Do an open-hole HFEC inspection to find cracking of the bulkhead frame support under the hinge support fittings of the horizontal stabilizer on the left and right sides at BS 2598, in accordance with Figure 2 of the Accomplishment Instructions of Boeing Service Bulletin 747-53A2449, Revision 1, dated May 24, 2001; or Revision 2, dated March 14, 2002. Repeat the inspection after that at intervals not to exceed 3,000 flight cycles. Inspections

accomplished before August 16, 2001, per Boeing Alert Service Bulletin 747-53A2449, dated June 8, 2000, are considered acceptable for compliance with the applicable inspection specified in this paragraph.

Repair of Any Cracked Bulkhead Frame Support

(h) If any cracking is found during any inspection required by paragraph (g) of this AD, before further flight, repair using a method approved in accordance with the procedures specified in paragraph (x) of this AD.

Repetitive Inspections of Inner Chords, Frame Support Fitting, and Splice Fitting

(i) Do a surface HFEC inspection of the forward and aft inner chords, the frame support, and the splice fitting of the forward inner chord of the upper corners of the station 2598 bulkhead to find cracking, in accordance with the Accomplishment Instructions of Boeing Alert Service Bulletin 747-53A2427, Revision 2, dated October 5, 2000; Revision 3, dated September 27, 2001; or Boeing Service Bulletin 747-53A2427, Revision 5, dated October 1, 2009; at the latest of the times specified in paragraphs (i)(1) and (i)(2) of this AD, as applicable. Repeat the inspection after that at intervals not to exceed 1,500 flight cycles. After the effective date of this AD, Boeing Service Bulletin 747-53A2427, Revision 5, dated October 1, 2009, must be used.

(1) For airplanes having line numbers 1 through 1241 inclusive:

(i) Before the accumulation of 6,000 total flight cycles.

(ii) Within 500 flight cycles after August 28, 2001 (the effective date of AD 2001-15-03, Amendment 39-12337, which was superseded by AD 2006-05-06).

(iii) For airplanes inspected before August 28, 2001, in accordance with Boeing Alert Service Bulletin 747-53A2427, dated December 17, 1998 (including inspections of the splice fitting); or Revision 1, dated October 28, 1999: Within 1,500 flight cycles after accomplishment of the last inspection done in accordance with the original service bulletin or Revision 1, as applicable.

(2) For airplanes having line numbers 1242 through 1307 inclusive:

(i) Before the accumulation of 16,000 total flight cycles.

(ii) Within 500 flight cycles after August 28, 2001.

(iii) For airplanes inspected before August 28, 2001, in accordance with Boeing Alert Service Bulletin 747-53A2427, dated December 17, 1998 (including inspections of the splice fitting), or Revision 1, dated October 28, 1999: Within 1,500 flight cycles after accomplishment of the last inspection done in accordance with Boeing Alert Service Bulletin 747-53A2427, dated December 17, 1998; or Revision 1, dated October 28, 1999; as applicable.

Repair of Any Cracked Inner Chord, Frame Support, or Splice Fitting

(j) If any cracking is found during the inspections required by paragraph (i) of this AD, before further flight, repair in accordance with the Accomplishment Instructions of Boeing Alert Service Bulletin 747-53A2427, Revision 2, dated October 5, 2000; Revision 3, dated September 27, 2001; or Boeing Service Bulletin 747-53A2427, Revision 5, dated October 1, 2009. After the effective date of this AD, Boeing Service Bulletin 747-53A2427, Revision 5, dated October 1, 2009, must be used. Where Boeing Alert Service Bulletin 747-53A2427, Revision 2, dated October 5, 2000; Revision 3, dated September 27, 2001; or Boeing Service Bulletin 747-53A2427, Revision 5, dated October 1, 2009; specifies that the manufacturer may be contacted for disposition of certain repair conditions, before further flight, repair using a method approved in accordance with the procedures specified in paragraph (x) of this AD.

Repetitive Detailed Inspections of BS 2598 Bulkhead

(k) Before the accumulation of 10,000 total flight cycles, or within 1,000 flight cycles after October 27, 2003 (the effective date of AD 2003-19-08, Amendment 39-13311, which was superseded by AD 2006-05-06), whichever is later: Do a detailed inspection of the BS 2598 bulkhead for discrepancies (cracking, elongated fastener holes) of the areas specified in paragraphs (k)(1) and (k)(2) of this AD, in accordance with the Accomplishment Instructions of Boeing Alert Service Bulletin 747-53A2467, dated July 26, 2001; or Boeing Service Bulletin 747-53A2467, Revision 1, dated April 28, 2005. Repeat the inspections after that at intervals not to exceed 3,000 flight cycles, except as required by paragraph (m) of this AD. Doing the modification specified in paragraph (m) or (q) of this AD terminates the inspection of the area specified in paragraph (k)(1) of this AD.

(1) The lower aft inner chords.

(2) The upper aft outer chords, and the diagonal brace attachment fittings, flanges, and rods.

Note 1: For the purposes of this AD, a detailed inspection is "an intensive examination of a specific item, installation, or assembly to detect damage, failure, or irregularity. Available lighting is normally supplemented with a direct source of good lighting at an intensity deemed appropriate. Inspection aids such as mirrors magnifying lenses, etc. may be necessary. Surface cleaning and elaborate procedures may be required."

Repair of Any Cracked BS 2598 Bulkhead

(l) If any discrepancy is found during any inspection required by paragraph (k) of this AD: Before further flight, repair in accordance with the Accomplishment Instructions of Boeing Alert Service Bulletin 747-53A2467, dated July 26, 2001; or Boeing Service Bulletin 747-53A2467, Revision 1, dated April 28, 2005. If Boeing Alert Service Bulletin 747-53A2467, dated July 26, 2001; or Boeing Service Bulletin 747-53A2467, Revision 1, dated April 28, 2005; specifies to contact Boeing for appropriate action: Before further flight, repair using a method approved in accordance with the procedures specified in paragraph (x) of this AD.

Terminating Modification With New Compliance Time for Certain Airplanes for the Inspection Specified in Paragraph (k)(2) of This AD

(m) Except as provided by paragraph (q) of this AD: Before the accumulation of 20,000 total flight cycles, or within 48 months after April 13, 2006 (the effective date of AD 2006-05-06), whichever occurs later, modify the bulkhead by doing all applicable actions including surface and open-hole HFEC inspections for cracking of the upper forward inner chords, aft inner chords, upper splice fittings, and frame support fittings, as specified in the Accomplishment Instructions of Boeing Service Bulletin 747-53-2473, dated March 24, 2005; Revision 1, dated February 20, 2007; or Boeing Alert Service Bulletin 747-53A2473, Revision 2, dated August 28, 2009. Repair any cracks before further flight, in accordance with Boeing Service Bulletin 747-53-2473, dated March 24, 2005; Revision 1, dated February 20, 2007; or Boeing Alert Service Bulletin 747-53A2473, Revision 2, dated August 28, 2009. Where Boeing Service Bulletin 747-53-2473, dated March 24, 2005; Revision 1, dated February 20, 2007; or Boeing Alert Service Bulletin 747-53A2473, Revision 2, dated August 28, 2009; specifies that the manufacturer may be contacted for disposition of certain repair conditions: Before further flight, repair the cracks using a method approved in accordance with the procedures specified in paragraph (x) of this AD. Accomplishment of the modification terminates the requirements of paragraphs (g), (i), and (k)(1) of this AD. After the effective date of this AD, Boeing Alert Service Bulletin 747-53A2473, Revision 2, dated August 28, 2009, must be used for the actions specified in this paragraph. For airplanes that are converted to the Model 747-400 Large

Cargo Freighter (LCF) configuration, repeat the inspection specified in paragraph (k)(2) of this AD thereafter at intervals not to exceed 1,800 flight cycles.

Post-Modification Inspection and Repair

(n) Except as provided by paragraphs (q) and (r) of this AD: Within 20,000 flight cycles after doing the modification required by paragraph (m) of this AD, inspect the BS 2598 bulkhead for cracks, and repair any cracks before further flight, in accordance with a method approved by the Manager, Seattle Aircraft Certification Office (ACO).

New Requirements of This AD

Terminating Repair for Repetitive Surface HFEC Inspections

(o) As of the effective date of this AD, accomplishing the aft inner chord repair required by paragraph (j) of this AD in accordance with the Accomplishment Instructions of Boeing Service Bulletin 747-53A2427, Revision 5, dated October 1, 2009, ends the repetitive surface HFEC inspections required by paragraph (i) of this AD for that side of the bulkhead only.

Replacement of Previously Repaired Aft Inner Chord and Reinstallation of Terminating Modification

(p) For airplanes on which the terminating modification required by paragraph (m) of this AD has been done in accordance with Boeing Service Bulletin 747-53-2473, dated March 24, 2005: Within 1,500 flight cycles after doing the modification, or within 1,000 flight cycles after the effective date of this AD, whichever occurs later, do a one-time general visual inspection for repairs installed previously on the left and right side aft inner chords. For airplanes with previously installed repairs, before further flight, do rework (i.e., replace any previously repaired aft inner chord with a new aft inner chord and reinstall the terminating modification), using a method approved in accordance with the procedures specified in paragraph (x) of this AD.

Revised Terminating Modification

(q) Doing the applicable modification required by paragraph (q)(1) or (q)(2) of this AD at the applicable time terminates the requirements of paragraph (m) of this AD and the repetitive inspections required by paragraphs (g), (i), and (k)(1) of this AD. For airplanes that are converted to the Model 747-400 LCF configuration, the inspection specified in paragraph (k)(2) of this AD must be repeated thereafter at intervals not to exceed 1,800 flight cycles.

(1) For airplanes on which the terminating modification required by paragraph (m) of this AD has not been done as of the effective date of this AD: Before the accumulation of 20,000 total flight cycles, or within 18 months after the effective date of this AD, whichever occurs later, modify the bulkhead, in accordance with the Accomplishment Instructions of Boeing Alert Service Bulletin 747-53A2473, Revision 2, dated August 28, 2009; except that where Boeing Alert Service Bulletin 747-53A2473, Revision 2, dated August 28, 2009, specifies to contact Boeing for modification data, the modification data must be approved in accordance with the procedures specified in paragraph (x) of this AD, and the modification must be done within the times specified in this paragraph.

(2) For airplanes on which the terminating modification required by paragraph (m) of this AD has been done in accordance with Boeing Service Bulletin 747-53-2473, dated March 24, 2005; or Revision 1, dated February 20, 2007; as of the effective date of this AD: Within 1,000 flight cycles after the effective date of this AD, or within 1,500 flight cycles after doing the modification, whichever occurs later, do a general visual inspection of the applicable areas specified in paragraph

(q)(2)(i) and (q)(2)(ii) of this AD to determine if certain fasteners are installed, and, before further flight, do all applicable related investigative and corrective actions, in accordance with the Accomplishment Instructions of Boeing Alert Service Bulletin 747-53A2473, Revision 2, dated August 28, 2009; except where Boeing Alert Service Bulletin 747-53A2473, Revision 2, dated August 28, 2009, specifies to contact Boeing for repair or rework data, the data must be approved in accordance with the procedures specified in paragraph (x) of this AD and the repair or rework must be done before further flight.

(i) For airplanes modified in accordance with Boeing Service Bulletin 747-53-2473, dated March 24, 2005: Inspect the upper forward inner chord, frame support fitting, and splice fitting, in accordance with paragraph 3.B.7.d. of the Accomplishment Instructions of Boeing Alert Service Bulletin 747-53A2473, Revision 2, dated August 28, 2009.

(ii) For airplanes modified in accordance with Boeing Service Bulletin 747-53-2473, Revision 1, dated February 20, 2007: Inspect the frame web and upper shear deck aft side, and the upper forward inner chord, frame support fitting, and splice fitting, in accordance with paragraphs 3.B.7.c and 3.B.7.d of the Accomplishment Instructions of Boeing Alert Service Bulletin 747-53A2473, Revision 2, dated August 28, 2009.

Post-Modification Inspection and Repair

(r) For airplanes on which the terminating modification has been done in accordance with paragraph (m) or (q) of this AD: Perform post-modification inspections of the BS 2598 bulkhead for cracking, in accordance with Parts 1, 2, and 3 of the Accomplishment Instructions of Boeing Alert Service Bulletin 747-53A2473, Revision 2, dated August 28, 2009. Do the inspections at the applicable times specified in Tables 6 through 9 of paragraph 1.E., "Compliance," of Boeing Alert Service Bulletin 747-53A2473, Revision 2, dated August 28, 2009; except where Boeing Alert Service Bulletin 747-53A2473, Revision 2, dated August 28, 2009, specifies a compliance time after the date of that service bulletin, this AD requires compliance within the specified compliance time after the effective date of this AD. 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 (x) of this AD. Repeat the inspections thereafter at the applicable times specified in Tables 6 through 9 of paragraph 1.E., "Compliance," of Boeing Alert Service Bulletin 747-53A2473, Revision 2, dated August 28, 2009. Accomplishing the applicable inspections required by this paragraph terminates the requirements of paragraph (n) of this AD.

Open-Hole HFEC Inspection(s) and Terminating Repair

(s) For airplanes on which the terminating modification required by paragraph (m) or (q) of this AD has not been done: Do an initial open-hole HFEC inspection to detect cracks in the bulkhead splice fitting, frame support fitting, and forward and aft inner chords on the left and right sides of the BS 2598 bulkhead, in accordance with the Accomplishment Instructions of Boeing Service Bulletin 747-53A2427, Revision 5, dated October 1, 2009. Do the initial inspection at the applicable time specified in Table 1 or 3 of paragraph 1.E., "Compliance," of Boeing Service Bulletin 747-53A2427, Revision 5, dated October 1, 2009; except where Boeing Service Bulletin 747-53A2427, Revision 5, dated October 1, 2009, specifies a compliance time after the date on that service bulletin, this AD requires compliance within the specified compliance time after the effective date of this AD.

(1) If no crack is detected, repeat the open-hole HFEC inspection thereafter at intervals not to exceed 1,500 flight cycles.

(2) If any crack is detected, before further flight, repair it in accordance with the Accomplishment Instructions of Boeing Service Bulletin 747-53A2427, Revision 5, dated October 1, 2009; except where Boeing Service Bulletin 747-53A2427, Revision 5, dated October 1, 2009, specifies to contact Boeing for appropriate action, before further flight, repair the crack using a

method approved in accordance with the procedures specified in paragraph (x) of this AD. Accomplishing the aft inner chord repair in accordance with the Accomplishment Instructions of Boeing Service Bulletin 747-53A2427, Revision 5, dated October 1, 2009, ends the repetitive surface and open-hole HFEC inspections required by paragraphs (i) and (s)(1), respectively, of this AD for that side of the bulkhead only.

Interim Modification

(t) For Group 1 airplanes, as identified in Boeing Service Bulletin 747-53A2427, Revision 5, dated October 1, 2009, on which the repair required by paragraph (j) or (s)(2) of this AD has not been done; and on which the terminating modification required by paragraph (m) or (q) of this AD has not been done: Before the accumulation of 12,000 total flight cycles, or within 1,500 flight cycles after the effective date of this AD, whichever occurs later, install the interim modification for the aft inner chords, in accordance with the Accomplishment Instructions of Boeing Service Bulletin 747-53A2427, Revision 5, dated October 1, 2009. Accomplishing the interim modification ends the repetitive surface and open-hole HFEC inspections required by paragraphs (i) and (s)(1), respectively, of this AD.

Post-Interim Modification/Repair Repetitive Surface and Open-Hole HFEC Inspections

(u) For airplanes on which the interim modification required by paragraph (t) of this AD has been done or the repair required by paragraph (j) or (s)(2) of this AD has been done; and on which the terminating modification required by paragraph (m) or (q) of this AD has not been done: At the applicable times specified in Table 1, 2, or 3 of paragraph 1.E., "Compliance," of Boeing Service Bulletin 747-53A2427, Revision 5, dated October 1, 2009, do a surface HFEC inspection to detect cracks on the forward side (unmodified area) of the bulkhead, and open-hole and surface HFEC inspections to detect cracks in the modified or repaired area, in accordance with the Accomplishment Instructions of Boeing Service Bulletin 747-53A2427, Revision 5, dated October 1, 2009. Repeat the open-hole and surface HFEC inspections thereafter at intervals not to exceed 1,500 flight cycles, until the modification required by paragraph (q) of this AD is done, as applicable; except that for airplanes on which the repair of any cracked aft inner chord has been done on only one side of the bulkhead in accordance with the applicable requirements specified in paragraph (j) or (s)(2) of this AD, the repetitive surface and open-hole HFEC inspections required by paragraphs (i) and (s)(1), respectively, of this AD must continue to be done for the other side of the bulkhead.

Repair of Any Cracked Inner Chord, Splice Fitting, or Frame Support Fitting

(v) If any crack is detected during any surface or open-hole HFEC inspection required by paragraph (u) of this AD, before further flight, repair any cracked inner chord, splice fitting, or frame support fitting, in accordance with the Accomplishment Instructions of Boeing Service Bulletin 747-53A2427, Revision 5, dated October 1, 2009; except where Boeing Service Bulletin 747-53A2427, Revision 5, dated October 1, 2009, specifies to contact Boeing for appropriate action, before further flight, repair the crack using a method approved in accordance with the procedures specified in paragraph (x) of this AD.

Actions Accomplished According to Previous Issue of Service Bulletin

(w) Inspections, interim modification, and repairs accomplished before the effective date of this AD in accordance with Boeing Alert Service Bulletin 747-53A2427, Revision 4, dated March 6, 2008, are considered acceptable for compliance with the corresponding action specified paragraphs (i), (j), (s), (t), (u), and (v) of this AD.

Alternative Methods of Compliance (AMOCs)

(x)(1) The Manager, Seattle ACO, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. Send information to ATTN: Ivan Li, Aerospace Engineer, Airframe Branch, ANM-120S, FAA, Seattle ACO, 1601 Lind Avenue SW., Renton, Washington 98057-3356; telephone (425) 917-6437; fax (425) 917-6590. Information may be e-mailed to: 9-ANM-Seattle-ACO-AMOC-Requests@faa.gov.

(2) To request a different method of compliance or a different compliance time for this AD, follow the procedures in 14 CFR 39.19. Before using any approved AMOC on any airplane to which the AMOC applies, notify your principal maintenance inspector (PMI) or principal avionics inspector (PAI), as appropriate, or lacking a principal inspector, your local Flight Standards District Office. The AMOC approval letter must specifically reference this AD.

(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 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 2006-05-06 are approved as AMOCs for the corresponding provisions of this AD.

Material Incorporated by Reference

(y) You must use the service information contained in Table 1 of this AD, as applicable, to do the actions required by this AD, unless the AD specifies otherwise.

Table 1 – All material incorporated by reference

Document	Revision	Date
Boeing Alert Service Bulletin 747-53A2467	Original	July 26, 2001
Boeing Alert Service Bulletin 747-53A2473	2	August 28, 2009
Boeing Service Bulletin 747-53A2427	5	October 1, 2009
Boeing Service Bulletin 747-53A2449	1	May 24, 2001
Boeing Service Bulletin 747-53A2449	2	March 14, 2002
Boeing Service Bulletin 747-53A2467	1	April 28, 2005

(1) The Director of the Federal Register approved the incorporation by reference of the service information contained in Table 2 of this AD under 5 U.S.C. 552(a) and 1 CFR part 51.

Table 2 – New material incorporated by reference

Document	Revision	Date
Boeing Alert Service Bulletin 747-53A2473	2	August 28, 2009
Boeing Service Bulletin 747-53A2427	5	October 1, 2009

(2) On April 13, 2006 (71 FR 12125, March 9, 2006), the Director of the Federal Register approved the incorporation by reference of Boeing Service Bulletin 747-53A2449, Revision 2, dated March 14, 2002; and Boeing Service Bulletin 747-53A2467, Revision 1, dated April 28, 2005.

(3) On October 27, 2003 (68 FR 54990, September 22, 2003), the Director of the Federal Register approved the incorporation by reference of Boeing Alert Service Bulletin 747-53A2467, dated July 26, 2001.

(4) On August 16, 2001 (66 FR 36443, July 12, 2001), the Director of the Federal Register approved the incorporation by reference of Boeing Service Bulletin 747-53A2449, Revision 1, dated May 24, 2001.

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

(6) 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.

(7) 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 NARA, call 202-741-6030, or go to: http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html.

Issued in Renton, Washington, on June 17, 2010.

Robert D. Breneman,
Acting Manager, Transport Airplane Directorate,
Aircraft Certification Service.



2010-14-08 The Boeing Company: Amendment 39-16353. Docket No. FAA-2009-0454; Directorate Identifier 2008-NM-156-AD.

Effective Date

(a) This airworthiness directive (AD) is effective August 6, 2010.

Affected ADs

(b) None.

Applicability

(c) This AD applies to The Boeing Company Model 747-400, 747-400D, and 747-400F series airplanes, certificated in any category; as identified in Boeing Service Bulletins 747-28A2280, Revision 1, dated November 25, 2009, and 747-28A2281, Revision 1, dated November 25, 2009.

Note 1: This AD requires revisions to certain operator maintenance documents to include a new inspection. Compliance with this inspection is required by 14 CFR 91.403(c). For airplanes that have been previously modified, altered, or repaired in the areas addressed by this inspection, the operator may not be able to accomplish the inspections described in the revisions. In this situation, to comply with 14 CFR 91.403(c), the operator must request approval for an alternative method of compliance (AMOC) according to paragraph (p)(1) of this AD. The request should include a description of changes to the required inspection that will ensure the continued operational safety of the airplane.

Subject

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

Unsafe Condition

(e) This AD results from fuel system reviews conducted by the manufacturer. We are issuing this AD to prevent uncommanded operation of certain override/jettison pumps which could cause overheating, electrical arcs, or frictional sparks, and could lead to an ignition source inside a fuel tank. This condition, in combination with flammable fuel vapors, could result in a fuel tank explosion and consequent loss of the airplane.

Compliance

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

Installations and Wiring Changes

(g) Within 60 months after the effective date of this AD, do the actions in paragraphs (g)(1) and (g)(2) of this AD, as applicable.

(1) For Model 747-400, 747-400D, and 747-400F series airplanes: Install new pump control and time delay relays and do related investigative and all applicable corrective actions, and change the wiring for the center and main fuel tanks override/jettison fuel pumps, in accordance with the Accomplishment Instructions of Boeing Service Bulletin 747-28A2280, Revision 1, dated November 25, 2009. Do all related investigative and applicable corrective actions before further flight.

(2) For Model 747-400 series airplanes: Install new relays and wiring for the horizontal stabilizer override/jettison fuel pumps in accordance with the Accomplishment Instructions of Boeing Service Bulletin 747-28A2281, Revision 1, dated November 25, 2009.

Prior/Concurrent Requirements

(h) Prior to or concurrently with the actions required by paragraph (g) of this AD, do the applicable actions in paragraphs (h)(1) and (h)(2) of this AD.

(1) For Model 747-400, 747-400D, and 747-400F series airplanes identified in paragraphs (h)(1)(i), (h)(1)(ii), and (h)(1)(iii) of this AD: Install new integrated display system (IDS) software in accordance with the Accomplishment Instructions of the applicable service bulletin listed in paragraph (h)(1)(i), (h)(1)(ii), or (h)(1)(iii) of this AD.

(i) For Model 747-400, 747-400D, and 747-400F series airplanes that have General Electric engines, except airplanes having variable numbers (V/Ns) RL429, RL430, RL473, RL511, and RL521: Boeing Service Bulletin 747-31-2376, dated September 5, 2006.

(ii) For Model 747-400 and 747-400F series airplanes that have Pratt & Whitney engines except airplanes having V/Ns RL456, RL492, and RL502: Boeing Service Bulletin 747-31-2377, dated September 5, 2006.

(iii) For Model 747-400 and 747-400F series airplanes that have Rolls Royce engines: Boeing Service Bulletin 747-31-2378, dated September 5, 2006.

(2) For Model 747-400 series airplanes except V/Ns RM403, RM441 through RM443 inclusive, and RM445: Install a new automatic shutoff system for the horizontal stabilizer tank (HST) fuel pumps in accordance with the Accomplishment Instructions of Boeing Service Bulletin 747-28A2262, Revision 2, dated August 13, 2009.

Credit for Actions Done According to Previous Issues of Service Bulletins

(i) Actions done before the effective date of this AD in accordance with the applicable service information contained in Table 1 of this AD are acceptable for compliance with the corresponding actions required by paragraphs (g) and (h) of this AD.

Table 1 – Credit Service Information

Document	Revision	Date
Boeing Alert Service Bulletin 747-28A2280	Original	August 7, 2008
Boeing Alert Service Bulletin 747-28A2281	Original	December 13, 2007
Boeing Service Bulletin 747-28A2262	Original	March 15, 2007
Boeing Service Bulletin 747-28A2262	1	May 8, 2008

Maintenance Program Revision

(j) Concurrently with accomplishing the actions required by paragraph (g) of this AD, revise the maintenance program by incorporating Airworthiness Limitation (AWL) No. 28-AWL-24 and No. 28-AWL-26 of Section 9, "Airworthiness Limitations (AWLs) and Certification Maintenance Requirements (CMRs)," of the Boeing 747-400 Maintenance Planning Data (MPD) Document

D621U400-9, Revision April 2008. The inspection interval for AWL No. 28-AWL-24 and AWL No. 28-AWL-26 starts on the date the modification is incorporated.

No Alternative Inspections or Inspection Intervals

(k) After accomplishing the action specified in paragraph (j) of this AD, no alternative actions or intervals may be used unless the inspections or inspection intervals are approved as an AMOC in accordance with the procedures specified in paragraph (p)(1) of this AD.

Acceptable Action for Certain ADs

(l) For Model 747-400, -400D, and -400F series airplanes: Installing new IDS software in accordance with paragraph (h)(1) of this AD is an acceptable method of compliance for the action in the applicable AD paragraph listed in Table 2 of this AD.

Table 2 – Actions for which paragraph (h)(1) of this AD is an acceptable method of compliance (no certificate limitations)

The action in –	Of –
(1) Paragraph E.	AD 90-09-06, amendment 39-6581
(2) Paragraph (b)	AD 91-13-10 R1, amendment 39-8158
(3) Paragraph (d)(1)	AD 96-07-09, amendment 39-9558
(4) Paragraph (a)(3)(iii)	AD 2000-02-22, amendment 39-11540
(5) Paragraph (a)(2)(ii)	AD 2000-12-21, amendment 39-11799
(6) Paragraph (d)(2)(iv)	AD 2003-16-16, amendment 39-13269
(7) Paragraph (d)(1)	AD 2004-10-05, amendment 39-13635

(m) For Model 747-400 series airplanes with a horizontal stabilizer fuel tank and with horizontal stabilizer tank fuel pump auto-shutoff installed: Installing new IDS software in accordance with paragraph (h)(1) of this AD is an acceptable method of compliance for the action in the applicable AD paragraph listed in Table 3 of this AD, provided the certificate limitations included in the following statement are incorporated into the Limitations Section of the applicable airplane flight manual (AFM) in place of the certificate limitation required by the AFM revision specified in the applicable AD listed in Table 3 of this AD. This may be done by inserting a copy of this AD in the AFM.

CERTIFICATE LIMITATIONS

Center Wing Tank:

The center wing tank (CWT) fuel quantity indication system must be operative to dispatch with CWT mission fuel.

If the FUEL LOW CTR L or R message is displayed, both CWT override/jettison pump(s) must be selected OFF.

If the FUEL PRESS CTR L or R message is displayed, the corresponding CWT override/jettison pump must be selected OFF.

Horizontal Stabilizer Tank:

The following additional limitations must be followed if the horizontal stabilizer tank (HST) is fueled and used:

The HST fuel quantity indication system must be operative to dispatch with HST mission fuel.

If either the FUEL PMP STB L or R message is displayed while on the ground, both HST pumps must be selected OFF.

If either the FUEL PRES STB L or R message is displayed, both HST pumps must be selected OFF.

Defueling:

Prior to defueling any fuel tanks, perform a lamp test of the respective Fuel Pump Low Pressure indication lights. When defueling, the Fuel Pump Low Pressure indication lights must be monitored and the fuel pumps positioned to OFF at the first indication of fuel pump low pressure. When defueling with passengers on board, fuel pump switches must be selected OFF at or above approximately 7,000 pounds (3,200 kilograms) for the CWT, 3,000 pounds (1,400 kilograms) for main tanks, and 2,100 pounds (1,000 kilograms) for the HST. (These requirements apply for defueling or transferring between tanks.)

Warnings and Notes Applicable to All Fuel Operations

Warning

Do not reset a tripped fuel pump circuit breaker.

Warning

Do not cycle CWT and HST pump switches from ON to OFF to ON with any continuous low pressure indication present.

Note

In a low fuel situation, both CWT override/jettison pumps may be selected ON and all CWT fuel may be used.

Note

In a low fuel situation, both HST transfer pumps may be selected ON and all HST fuel may be used.

Note

The limitations contained in these certificate limitations supersede any conflicting basic airplane flight manual limitations.'

Note 2: When a statement identical to that in paragraph (m) of this AD has been included in the general revisions of the AFM, the general revisions may be inserted into the AFM, and the copy of this AD may be removed from the AFM.

Note 3: The certificate limitations in paragraph (m) of this AD are also included as an enclosure to FAA Letter 140S-09-191, dated June 23, 2009.

Table 3 – Actions for which paragraph (h)(1) of this AD is an acceptable method of compliance (with certificate limitations)

The action in –	Of –
(1) Paragraph (a)	AD 2001-12-21, amendment 39-12277
(2) Paragraph (a)	AD 2001-21-07, amendment 39-12478
(3) Paragraph (c)(2)	AD 2002-19-52, amendment 39-12900
(4) Paragraph (a)	AD 2002-24-52, amendment 39-12993

Optional Terminating Action for Paragraphs (g)(2), (h)(2), and (m) of this AD: Deactivation of the HST

(n) Deactivation of the HST, in accordance with the applicable Boeing service information in Table 4 of this AD, terminates the requirements of paragraphs (g)(2), (h)(2), and (m) of this AD, except as provided by paragraph (o) of this AD. Deactivation of the HST before the effective date of this AD in accordance with the applicable service information in Table 5 of this AD also terminates the requirements of paragraphs (g)(2), (h)(2), and (m) of this AD, except as provided by paragraph (o) of this AD.

Table 4 – Deactivation Service Information

Boeing Service Information	Revision	Date
Service Bulletin 747-28-2247	Original	November 26, 2002
Service Bulletin 747-28-2265	Original	February 22, 2006
Service Bulletin 747-28-2272	Original	February 21, 2006
Service Bulletin 747-28-2274	1	May 21, 2008
Service Bulletin 747-28-2275	4	February 2, 2009
Service Bulletin 747-28-2279	2	October 16, 2007
Service Bulletin 747-28-2285	3	August 30, 2007
Service Bulletin 747-28-2293	2	March 4, 2008
Service Bulletin 747-28-2295	2	January 19, 2009
Service Bulletin 747-28-2296	Original	July 13, 2007
Service Bulletin 747-28-2300	1	June 2, 2008
Service Bulletin 747-28-2310	Original	December 18, 2008
Service Bulletin 747-28-2314	Original	December 9, 2008

Table 5 – Deactivation Credit Service Information

Boeing Service Information	Revision	Date
Service Bulletin 747-28-2274	Original	March 13, 2006

Service Bulletin 747-28-2275	Original	June 12, 2006
Service Bulletin 747-28-2275	1	March 16, 2007
Service Bulletin 747-28-2275	2	July 2, 2007
Service Bulletin 747-28-2275	3	March 11, 2008
Service Bulletin 747-28-2279	Original	June 12, 2006
Service Bulletin 747-28-2279	1	May 25, 2007
Service Bulletin 747-28-2285	Original	January 23, 2007
Service Bulletin 747-28-2285	1	May 9, 2007
Service Bulletin 747-28-2285	2	August 3, 2007
Service Bulletin 747-28-2293	Original	May 9, 2007
Service Bulletin 747-28-2293	1	August 29, 2007
Service Bulletin 747-28-2295	Original	November 17, 2006
Service Bulletin 747-28-2295	1	March 20, 2008
Service Bulletin 747-28-2300	Original	January 16, 2008

Reactivation of the HST

(o) For any airplane on which the HST is reactivated, the HST must be reactivated in accordance with a method approved by the Manager, Seattle Aircraft Certification Office (ACO), FAA. For any airplane on which the HST is reactivated, the requirements of paragraphs (g)(2), (h)(2), and (m) of this AD must be done before further flight following the reactivation, or within 60 months after the effective date of this AD, whichever occurs later. For a reactivation method to be approved, the reactivation method must meet the certification basis of the airplane, and the approval must specifically reference this AD.

Alternative Methods of Compliance (AMOCs)

(p)(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. Send information to Attn: Douglas Bryant, Aerospace Engineer, Propulsion Branch, ANM-140S, FAA, Seattle Aircraft Certification Office, 1601 Lind Avenue, SW., Renton, Washington 98057-3356; telephone (425) 917-6505; fax (425) 917-6590. Or, e-mail information to 9-ANM-Seattle-ACO-AMOC-Requests@faa.gov.

(2) To request a different method of compliance or a different compliance time for this AD, follow the procedures in 14 CFR 39.19. Before using any approved AMOC on any airplane to which the AMOC applies, notify your principal maintenance inspector (PMI) or principal avionics inspector (PAI), as appropriate, or lacking a principal inspector, your local Flight Standards District Office. The AMOC approval letter must specifically reference this AD.

Material Incorporated by Reference

(q) You must use the service information contained in Table 6 of this AD, as applicable, to do the actions required by this AD, unless the AD specifies otherwise.

Table 6 – Required Material Incorporated by Reference

Boeing Service Information	Revision	Date
Service Bulletin 747-28A2280	1	November 25, 2009
Service Bulletin 747-28A2281	1	November 25, 2009
Section 9, “Airworthiness Limitations (AWLs) and Certification Maintenance Requirements (CMRs),” of the 747-400 Maintenance Planning Data (MPD) Document D621U400-9	April 2008	April 2008
Service Bulletin 747-28A2262	2	August 13, 2009
Service Bulletin 747-31-2376	Original	September 5, 2006
Service Bulletin 747-31-2377	Original	September 5, 2006
Service Bulletin 747-31-2378	Original	September 5, 2006

If you accomplish the optional actions specified in this AD, you must use the service information specified in Table 7 of this AD, as applicable, to perform those actions unless the AD specifies otherwise.

Table 7 – Optional Material Incorporated by Reference

Boeing Service Information	Revision	Date
Service Bulletin 747-28-2247	Original	November 26, 2002
Service Bulletin 747-28-2265	Original	February 22, 2006
Service Bulletin 747-28-2272	Original	February 21, 2006
Service Bulletin 747-28-2274	1	May 21, 2008
Service Bulletin 747-28-2275	4	February 2, 2009
Service Bulletin 747-28-2279	2	October 16, 2007
Service Bulletin 747-28-2285	3	August 30, 2007
Service Bulletin 747-28-2293	2	March 4, 2008
Service Bulletin 747-28-2295	2	January 19, 2009
Service Bulletin 747-28-2296	Original	July 13, 2007
Service Bulletin 747-28-2300	1	June 2, 2008
Service Bulletin 747-28-2310	Original	December 18, 2008
Service Bulletin 747-28-2314	Original	December 9, 2008

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

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

(3) 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.

(4) 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 NARA, call 202-741-6030, or go to: http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html.

Issued in Renton, Washington, on June 17, 2010.

Robert D. Breneman,
Acting Manager, Transport Airplane Directorate,
Aircraft Certification Service.



2010-14-09 The Boeing Company: Amendment 39-16354. Docket No. FAA-2010-0641; Directorate Identifier 2010-NM-130-AD.

Effective Date

(a) This airworthiness directive (AD) is effective July 19, 2010.

Affected ADs

(b) None.

Applicability

(c) This AD applies to The Boeing Company Model 747-100B, 747-200B, 747-200F, 747-300, 747-400, 747-400F, and 747SP series airplanes; certificated in any category; equipped with Rolls-Royce RB211-524 series engines; as identified in Boeing Alert Service Bulletin 747-54A2224, Revision 3, dated May 20, 2010.

Subject

(d) Air Transport Association (ATA) of America Code 54: Nacelles/Pylons.

Unsafe Condition

(e) This AD results from reports of cracks and fractures in the nacelle strut front spar chord assembly. The Federal Aviation Administration is issuing this AD to detect and correct cracks and fractures of the nacelle strut front spar chord assembly. Fracture of the front spar chord assembly could lead to loss of the strut upper link load path and consequent fracture of the diagonal brace, which could result in in-flight separation of the strut and engine from the airplane.

Compliance

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

Inspections of the Forward and Aft Sides of the Strut Front Spar Chord Assemblies

(g) Before the accumulation of 8,000 total flight cycles, or within 90 days after the effective date of this AD, whichever occurs later: Perform a detailed inspection and a high frequency eddy current (HFEC) inspection for cracking or fracturing in the forward and aft sides of the strut front spar chord, in accordance with Parts 1 and 2 of the Accomplishment Instructions of Boeing Alert Service Bulletin 747-54A2224, Revision 3, dated May 20, 2010. If no cracking or fracturing is found, repeat the inspections thereafter at intervals not to exceed 1,500 flight cycles.

Corrective Actions

(h) If any crack or fracture is found during any inspection required by this AD: Before further flight, repair the crack or fracture using a method approved in accordance with the procedures specified in paragraph (i) of this AD.

Alternative Methods of Compliance (AMOCs)

(i)(1) The Manager, Seattle ACO, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. Send information to ATTN: Ken Paoletti, Aerospace Engineer, Airframe Branch, ANM-120S, FAA, Seattle Aircraft Certification Office, 1601 Lind Avenue, SW., Renton, Washington 98057-3356; telephone (425) 917-6434; fax (425) 917-6590. Information may be e-mailed to: 9-ANM-Seattle-ACO-AMOC-Requests@faa.gov.

(2) To request a different method of compliance or a different compliance time for this AD, follow the procedures in 14 CFR 39.19. Before using any approved AMOC on any airplane to which the AMOC applies, notify your principal maintenance inspector (PMI) or principal avionics inspector (PAI), as appropriate, or lacking a principal inspector, your local Flight Standards District Office. The AMOC approval letter must specifically reference this AD.

(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.

Material Incorporated by Reference

(j) You must use Boeing Alert Service Bulletin 747-54A2224, Revision 3, dated May 20, 2010, to do the actions required by this AD, unless the AD specifies otherwise.

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

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

(3) 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.

(4) 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 NARA, call 202-741-6030, or go to: http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html.

Issued in Renton, Washington, on June 21, 2010.

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



2010-14-10 The Boeing Company: Amendment 39-16355. Docket No. FAA-2010-0132; Directorate Identifier 2009-NM-096-AD.

Effective Date

- (a) This airworthiness directive (AD) is effective August 6, 2010.

Affected ADs

- (b) This AD supersedes AD 94-17-01, Amendment 39-8996.

Applicability

(c) This AD applies to The Boeing Company Model 747-100, 747-200B, and 747-200F series airplanes, certificated in any category, as identified in Boeing Alert Service Bulletin 747-53A2267, Revision 4, dated March 26, 2009.

Subject

- (d) Air Transport Association (ATA) of America Code 53: Fuselage.

Unsafe Condition

(e) This AD results from reports of fatigue cracking. The Federal Aviation Administration is issuing this AD to detect and correct fatigue cracking in the fuselage lower lobe longitudinal lap joints, which could lead to the rapid decompression of the airplane and the inability of the structure to carry fail-safe loads.

Compliance

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

Restatement of Requirements of AD 94-17-01, With Revised Compliance Times for Post-Modification Inspection and Revised Service Information

Initial External High Frequency Eddy Current Inspection

(g) Perform an external high frequency eddy current inspection to detect cracks in the upper row of fasteners in the modified lap joints in accordance with Boeing Service Bulletin 747-53A2267, Revision 3, dated March 26, 1992; or Boeing Alert Service Bulletin 747-53A2267, Revision 4, dated March 26, 2009; at the time specified in paragraph (g)(1) or (g)(2) or (g)(3) of this AD, as applicable. As of the effective date of this AD, only Revision 4 may be used.

(1) For locations on airplanes on which the full modification required by AD 90-06-06, Amendment 39-6490, has been accomplished in accordance with Revision 2 of Boeing Service Bulletin 747-53A2267, dated March 29, 1990; or Revision 3, dated March 26, 1992; or Boeing Alert Service Bulletin 747-53A2267, Revision 4, dated March 26, 2009: Prior to the accumulation of 10,000 flight cycles after accomplishment of the full modification.

(2) For locations on airplanes on which the full modification required by AD 90-06-06 has been accomplished in accordance with Boeing Service Bulletin 747-53A2267, dated March 28, 1986; or Revision 1, dated September 25, 1986: Prior to the accumulation of 7,000 flight cycles after accomplishment of the full modification.

(3) For locations on airplanes on which the optional modification has been accomplished in accordance with Boeing Service Bulletin 747-53A2267, Revision 2, dated March 29, 1990, or Revision 3, dated March 26, 1992; or Boeing Alert Service Bulletin 747-53A2267, Revision 4, dated March 26, 2009: Prior to the accumulation of 7,000 flight cycles after accomplishment of the optional modification.

Repetitive External High Frequency Eddy Current Inspections

(h) If no cracking is detected during the inspection required by paragraph (g) of this AD, repeat the inspection required by paragraph (g) of this AD at the earlier of the times specified in paragraphs (h)(1) and (h)(2) of this AD, and thereafter at intervals not to exceed 1,000 flight cycles.

(1) Within 3,000 flight cycles after the last inspection required by paragraph (g) of this AD.

(2) Within 1,000 flight cycles after the last inspection required by paragraph (g) of this AD or 500 flight cycles after the effective date of this AD, whichever occurs later.

Repair

(i) If any cracking is detected during any inspection required by paragraph (g) of this AD, prior to further flight, repair in accordance with Section 53-30-03 of the Boeing 747 Structural Repair Manual (SRM); or Boeing Alert Service Bulletin 747-53A2267, Revision 4, dated March 26, 2009; except as required by paragraph (j) of this AD; and repeat the inspection required by paragraph (g) of this AD at the times specified in paragraph (i)(1) of this AD. As of the effective date of this AD, use only Boeing Alert Service Bulletin 747-53A2267, Revision 4, dated March 26, 2009.

(1) As of the effective date of this AD: If the repair specified in the Boeing 747 SRM does not include removing the lap joint and the upper row of countersunk fasteners, repeat the inspection required by paragraph (g) of this AD at the earlier of the times specified in paragraphs (i)(1)(i) and (i)(1)(ii) of this AD, and thereafter at intervals not to exceed 1,000 flight cycles.

(i) Within 3,000 flight cycles after the last inspection required by paragraph (g) of this AD.

(ii) Within 1,000 flight cycles after the last inspection required by paragraph (g) of this AD, or within 500 flight cycles after the effective date of this AD, whichever occurs later.

(2) If the repair specified in the Boeing 747 SRM includes removing the lap joint and the upper row of countersunk fasteners, such repair constitutes terminating action for the inspection requirements of this AD. To "remove" means to trim out all three fastener rows of the overlapping skin common to the lap joint.

Exception to the Service Bulletin

(j) If any cracking is found during any inspection required by this AD, and Boeing Alert Service Bulletin 747-53A2267, Revision 4, dated March 26, 2009, specifies contacting Boeing for appropriate action: Before further flight, repair the cracking using a method approved in accordance with the procedures specified in paragraph (k) of this AD. For a repair method to be approved by the

Manager, Seattle ACO, as required by this paragraph, the Manager's approval letter must specifically refer to this AD.

Alternative Methods of Compliance (AMOCs)

(k)(1) The Manager, Seattle Aircraft Certification Office, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. Send information to ATTN: Ivan Li, Aerospace Engineer, Airframe Branch, ANM-120S, FAA, Seattle Aircraft Certification Office, 1601 Lind Avenue, SW., Renton, Washington 98057-3356; telephone (425) 917-6437; fax (425) 917-6590. Or, e-mail information to 9-ANM-Seattle-ACO-AMOC-Requests-faa.gov.

(2) To request a different method of compliance or a different compliance time for this AD, follow the procedures in 14 CFR 39.19. Before using any approved AMOC on any airplane to which the AMOC applies, notify your principal maintenance inspector (PMI) or principal avionics inspector (PAI), as appropriate, or lacking a principal inspector, your local Flight Standards District Office. The AMOC approval letter must specifically reference this AD.

(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 94-17-01 are approved as AMOCs for the corresponding provisions of this AD, with the exception of paragraphs (h) and (i)(1) of this AD.

Material Incorporated by Reference

(1) You must use Boeing Alert Service Bulletin 747-53A2267, Revision 4, dated March 26, 2009, to do the actions required by this AD, unless the AD specifies otherwise.

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

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

(3) 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.

(4) 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 NARA, call 202-741-6030, or go to: http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html.

Issued in Renton, Washington, on June 23, 2010.

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