



**FEDERAL AVIATION ADMINISTRATION
AIRWORTHINESS DIRECTIVES
LARGE AIRCRAFT**

BIWEEKLY 2010-19

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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

LARGE AIRCRAFT

AD No.	Information	Manufacturer	Applicability
Info: E - Emergency; COR - Correction; S - Supersedes; R - Revision; FR - Final Rule of Emergency			
Biweekly 2010-15			
2010-10-06	S 2007-18-04	Airbus	A330-201, -202, -203, -223, -243, -301, -302, -303, -321, -322, -323, -341, -342, and -343
2010-14-11		Bombardier, Inc	DHC-8-400, -401, and -402
2010-14-13		Boeing	777-200, -200LR, -300, and -300ER
2010-14-16	S 2008-17-06	Bombardier, Inc	DHC-8-400, -401, and -402
2010-14-17		Boeing	747-100, 747-100B, 747-100B SUD, 747-200B, 747-200C, 747-200F, 747-300, 747-400, 747SR, and 747SP
2010-14-19		Airbus	A330-201, -202, -203, -223, -243, -301, -302, -303, -321, -322, -323, -341, -342 and -343, A340-211, -212, -213, -311, -312, -313, -541, and -642
2010-14-20		McCauley Propeller Systems	Propeller: 4HFR34C653/L106FA
2010-15-01		Boeing	757-200, -200CB, -200PF, 757-300, 767-200, -300, -300F, 767-400ER, 777-200 and -300
Biweekly 2010-16			
2010-14-14	S 2007-16-09	Embraer	Model ERJ 170-100 LR, -100 STD, -100 SE, and -100 SU airplanes; and Model ERJ 170-200 LR, -200 STD, and -200 SU, ERJ 190-100 ECJ, -100 LR, -100 IGW, -100 STD airplanes; and Model ERJ 190-200 STD, -200 LR, and -200 IGW
2010-14-18	S 2005-19-23	Boeing	767-200, -300, and -300F
2010-15-02		Airbus	A330-201, -202, -203, -223, -243, -301, -302, -303, -321, -322, -323, -341, -342, and -343 series airplanes, A340-211, -212, -213, -311, -312, and -313 series airplanes, and A340-541 and -642
2010-15-08	S 2003-24-08	Boeing	737-100, -200, -200C, -300, -400, and -500
Biweekly 2010-17			
2009-15-16 R1	R	McDonnell Douglas	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, Model DC-9-81 (MD-81) airplanes, Model DC-9-82 (MD-82) airplanes, Model DC-9-83 (MD-83) airplanes, Model DC-9-87 (MD-87) airplanes, Model MD-88 airplanes, and Model MD-90-30
2010-14-19	COR	Airbus	A330-201, -202, -203, -223, -243, -301, -302, -303, -321, -322, -323, -341, -342 and -343, A340-211, -212, -213, -311, -312, -313, -541, and -642, A340-311, -312, -313, -541, and -642
2010-16-01	S 2008-13-14	Embraer	EMB-135ER, -135KE, -135KL, and -135LR airplanes, and Model EMB-145, -145ER, -145MR, -145LR, -145XR, -145MP, and -145EP
2010-16-02		Embraer	EMB-135BJ, -135ER, -135KE, -135KL, and -135LR airplanes; and Model EMB-145, -145ER, -145MR, -145LR, -145XR, -145MP, and -145EP
2010-16-03		McDonnell Douglas	MD-11 and MD-11F
2010-16-04		Boeing	767-200, -300 and -300F
2010-16-05		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
2010-16-06		Boeing	737-300, -400, and -500, 737-600, -700, and -800
2010-16-07		Rolls-Royce plc	Engine: RB211-Trent 970-84, 970B-84, 972-84, 972B-84, 977-84, 977B-84, and 980-84
2010-16-09		BAE Systems	BAe 146-100A and -200A
2010-16-10		BAE Systems	BAe 146-100A, -200A, and -300A airplanes, and Avro 146-RJ70A, 146-RJ85A, and 146-RJ100A
2010-16-12		Boeing	777-200LR and -300ER
2010-16-13		Airbus	A300 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

LARGE AIRCRAFT

AD No.	Information	Manufacturer	Applicability
Info: E - Emergency; COR - Correction; S - Supersedes; R - Revision; FR - Final Rule of Emergency			
Biweekly 2010-18			
2010-16-11		McDonnell Douglas Corporation	MD-90-30
2010-17-01		Pratt & Whitney Canada Corp	Engine: PW617F-E
2010-17-02		Airbus	A330-201, -202, -203, -223, -243, -301, -302, -303, -321, -322, -323, -341, -342, and -343 A340-211, -212, -213, -311, -312, -313, A340-541 and -642
2010-17-03		Boeing	767-300
2010-17-04		Airbus	A380-841, -842, and -861
2010-17-05		Boeing	737-600, -700, -700C, -800, and -900
2010-17-07		Airbus	A330-223, -321, -322, and -323
2010-17-10		Rolls-Royce plc	Engine: RB211-22B series and RB211-524B4-D-02, RB211-524D4-19, RB211-524D4-39, RB211-524D4-B-19, RB211-524D4-B-39, RB211-524D4X-19, and RB211-524D4X-B-19
2010-17-11		Dowty Propellers	Propeller: R408/6-123-F/17
2010-17-12	S 2009-22-01	Rolls-Royce Deutschland Ltd & Co KG	Engine: Tay 650-15, Tay 651-54
2010-17-13		Rolls-Royce plc	Engine: RB211-524C2-19 and RB211-524C2-B-19
2010-17-17		Bombardier, Inc	CL-600-2B19 (Regional Jet Series 100 & 440)
2010-17-19	S 2010-09-05	Boeing	737-600, -700, -700C, -800, -900, and -900ER
2010-18-01		Embraer	ERJ 170-100 LR, -100 STD, -100 SE, and -100 SU, ERJ 170-200 LR, -200 SU, and -200 STD, ERJ 190-100 STD, -100 LR, -100 ECJ, and -100 IGW, ERJ 190-200 STD, -200 LR, and -200 IGW
2010-18-03		Dassault	Falcon 7X
2010-18-04		Embraer	ERJ 170-100 LR, -100 STD, -100 SE, -100 SU, -200 LR, -200 STD, and -200 SU, ERJ 190-100 LR, -100 IGW, -100 STD, -200 STD, -200 LR, and -200 IGW
2010-18-07		Airbus	A318-111, -112, -121, and -122, A319-111, -112, -113, -114, -115, -131, -132, and -133, A320-111, -211, -212, -214, -231, -232, and -233, A321-111, -112, -131, -211, -212, -213, -231, and -232
2010-18-09		Pratt & Whitney Canada	PW530A, PW545A, and PW545B
Biweekly 2010-19			
2010-17-14		Boeing	737-100 and -200
2010-18-08	S 2009-10-10	Bombardier, Inc.	CL-600-2C10 (Regional Jet Series 700, 701, & 702)
2010-18-10		BAE Systems	BAe 146-100A, -200A, and -300A series airplanes and Model Avro 146-RJ70A, 146-RJ85A, and 146-RJ100A
2010-18-11		Bombardier, Inc.	CL-600-2C10 (Regional Jet Series 700, 701, & 702); Model CL-600-2D15 (Regional Jet Series 705); and Model CL-600-2D24 (Regional Jet Series 900)



2010-17-14 The Boeing Company: Amendment 39-16406. Docket No. FAA-2010-0481; Directorate Identifier 2009-NM-192-AD.

Effective Date

(a) This airworthiness directive (AD) is effective October 7, 2010.

Affected ADs

(b) None.

Applicability

(c) This AD applies to The Boeing Company Model 737-100 and -200 series airplanes, certificated in any category; line numbers 1 through 848 inclusive.

Subject

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

Unsafe Condition

(e) This AD results from reports of fatigue cracks at certain frame sections, in addition to stub beam cracking, caused by high flight cycle stresses from both pressurization and maneuver load. The Federal Aviation Administration is issuing this AD to detect and correct fatigue cracking of certain fuselage frames and stub beams, and possible severed frames, which could result in reduced structural integrity of the frames. This reduced structural integrity can increase loading in the fuselage skin, which will accelerate skin crack growth and result in rapid decompression of the fuselage.

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

(g) For airplanes on which a repair (Part III of the Accomplishment Instructions of Boeing Service Bulletin 737-53-1061) or preventive modification (Part II of the Accomplishment Instructions of Boeing Service Bulletin 737-53-1061) has not been done in accordance with Boeing Service Bulletin 737-53-1061 as of the effective date of this AD: Before the accumulation of 15,000 total flight cycles or within 3,000 flight cycles after the effective date of this AD, whichever occurs later, do the inspections required by paragraphs (g)(1) and (g)(2) of this AD, in accordance with the Accomplishment Instructions of Boeing Service Bulletin 737-53-1061, Revision 4, dated July 16,

1992. Repeat the inspection at the time specified, until the terminating action required by paragraph (l) of this AD is done.

(1) Do a detailed inspection (Part I of the Accomplishment Instructions of Boeing Service Bulletin 737-53-1061, Revision 4, dated July 16, 1992) for cracks and damaged fasteners of the fuselage frames and stub beams. If no crack or damaged fastener is found, repeat the inspection thereafter at intervals not to exceed 4,500 flight cycles.

(2) Do an eddy current inspection (Part IV of the Accomplishment Instructions of Boeing Service Bulletin 737-53-1061, Revision 4, dated July 16, 1992) for cracking of the inboard chord fastener hole of the frame at body station 639, stringer S-16. If no crack is found, repeat the inspection thereafter at intervals not to exceed 15,000 flight cycles.

Note 1: Access and restoration instructions, as detailed in the Accomplishment Instructions of Boeing Service Bulletin 737-53-1061, Revision 4, dated July 16, 1992, are not required by this AD. Operators may do those actions in accordance with their maintenance practices.

(h) For airplanes on which the body station 597 frame was changed as of the effective date of this AD, in accordance with the Accomplishment Instructions of Boeing Service Bulletin 737-53-1061, dated May 28, 1982; Revision 1, dated December 16, 1983; Revision 2, dated April 18, 1986; or Revision 3, dated June 15, 1989: Within 3,000 flight cycles after the effective date of this AD, do a detailed inspection for cracking of the frame, in accordance with the Accomplishment Instructions of Boeing Service Bulletin 737-53-1061, Revision 4, dated July 16, 1992. Repeat the detailed inspection thereafter at intervals not to exceed 4,500 flight cycles. Installation of new radius fillers in accordance with the Accomplishment Instructions of Boeing Service Bulletin 737-53-1061, Revision 4, dated July 16, 1992, terminates the inspections required by this paragraph.

(i) For airplanes on which a stub beam lower chord with 1/4-inch diameter fasteners at body station 597 is installed as of the effective date of this AD, in accordance with the Accomplishment Instructions of Boeing Service Bulletin 737-53-1061, Revision 1, dated December 16, 1983; Revision 2, dated April 18, 1986; or Revision 3, dated June 15, 1989: Within 3,000 flight cycles after the effective date of this AD, do a detailed inspection for short edge margins. If the short edge margin is determined to be less than 1.5D (diameter), before further flight, do a detailed inspection for cracking of the stub beam lower chords, in accordance with Boeing Service Bulletin 737-53-1061, Revision 4, dated July 16, 1992. Repeat the detailed inspection thereafter at intervals not to exceed 4,500 flight cycles, if the edge margin is less than 1.5D. If the edge margin is greater than or equal to 1.5D, no further action is required by this paragraph. Replacing the lower chord in accordance with Boeing Service Bulletin 737-53-1061, Revision 4, dated July 16, 1992, terminates the repetitive inspections specified in this paragraph.

Corrective Actions

(j) Except as required by paragraph (k) of this AD, if any crack or damaged fastener is found during any inspection required by this AD, before further flight, repair if cracking and damaged fasteners are within the specified limits, or do a preventive modification if cracking or damaged fasteners are outside the specified limits, in accordance with the Accomplishment Instructions of Boeing Service Bulletin 737-53-1061, Revision 4, dated July 16, 1992.

Exception to Service Information

(k) Where Boeing Service Bulletin 737-53-1061, Revision 4, dated July 16, 1992, specifies to contact Boeing for repair instructions: Before further flight, repair using a method approved in accordance with the procedures specified in paragraph (n) of this AD.

Terminating Action (Preventive Modification) for Certain Inspections

(l) Before the accumulation of 75,000 total flight cycles: Do the preventive modification in accordance with Part II, or repair in accordance with Part III, of the Accomplishment Instructions of Boeing Service Bulletin 737-53-1061, Revision 4, dated July 16, 1992. The modification or repair terminates the repetitive inspection requirements of this AD for the repaired or modified frame only, except as required by paragraph (m) of this AD.

Post-Modification or Repair Inspections

(m) For airplanes on which a repair or modification at body station 616 or 639 is done: Within 24,000 flight cycles after doing the repair or modification, or within 3,000 flight cycles after the effective date of this AD, whichever occurs later, do a detailed inspection for cracking of the body station 616 and 639 frame webs, inner chord, and outer chord near stringer S-16, in accordance with Boeing Service Bulletin 737-53-1061, Revision 4, dated July 16, 1992.

(1) If no cracking is found, repeat the inspection thereafter at intervals not to exceed 4,500 flight cycles.

(2) If any cracking is found, before further flight, repair the cracking using a method approved in accordance with the procedures specified in paragraph (n) of this AD.

Alternative Methods of Compliance (AMOCs)

(n)(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: Wayne Lockett, Aerospace Engineer, Airframe Branch, ANM-120S, FAA, Seattle Aircraft Certification Office, 1601 Lind Avenue, SW., Renton, Washington 98057-3356; telephone (425) 917-6447; 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 Delegation 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.

Material Incorporated by Reference

(o) You must use Boeing Service Bulletin 737-53-1061, Revision 4, including Addendum, dated July 16, 1992; 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 August 11, 2010.

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



2010-18-08 Bombardier, Inc: Amendment 39-16421. Docket No. FAA-2009-1110; Directorate Identifier 2009-NM-116-AD.

Effective Date

- (a) This airworthiness directive (AD) becomes effective October 7, 2010.

Affected ADs

- (b) This AD supersedes AD 2009-10-10, Amendment 39-15906.

Applicability

(c) This AD applies to Bombardier, Inc. Model CL-600-2C10 (Regional Jet Series 700, 701, & 702) airplanes, certificated in any category, serial numbers 10003 through 10260 inclusive; and Model CL-600-2D15 (Regional Jet Series 705) and CL-600-2D24 (Regional Jet Series 900) airplanes, certificated in any category, serial numbers 15001 through 15095 inclusive.

Subject

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

Reason

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

During testing, it was discovered that when the outflow valve (OFV) manual mode connector is not connected, the manual mode motor and altitude limitation are not properly tested. Consequently, a disconnect of the OFV manual mode and/or a related wiring failure could potentially result in a dormant loss of several CPC [cabin pressure control] backup/safety functions, including OFV manual control, altitude limitation, emergency depressurization and smoke clearance. This deficiency is applicable to CPC units, Part Number (P/N) GG670-98002-3 and -5, and CPCP [cabin pressure control panel], Part Number GG670-98001-5, -7 and -9.

This [Canadian] directive mandates an interim repetitive check of the OFV manual mode motor and altitude limitation functions, followed by modification (software update) of the CPC units and the CPCP.

The corrective action for findings of improper OFV manual mode motor and altitude limitation functions is replacing the valve with a new or serviceable valve.

Restatement of Requirements of AD 2009-10-10

Actions and Compliance

(f) Unless already done, do the following actions. Within 450 flight hours after May 29, 2009 (the effective date of AD 2009-10-10), inspect the OFV for proper operation of the manual mode motor and altitude limitation functions, in accordance with Part A of the Accomplishment Instructions of Bombardier Alert Service Bulletin A670BA-21-022, dated August 3, 2006 ("the service bulletin"). If the OFV manual mode motor or altitude limitation functions do not operate properly, before further flight, do the actions specified in paragraphs (f)(1) and (f)(2) of this AD. Repeat the inspection thereafter at intervals not to exceed 450 flight hours. Accomplishing the actions specified in paragraph (g) of this AD terminates the requirements of this paragraph.

(1) Make sure that the electrical connectors, MPE23P1 and MPE23P2, are connected to the OFV.

(2) Repeat the inspection of the OFV for proper operation of the manual mode motor and altitude limitation functions, in accordance with Part A of the service bulletin. If the OFV manual mode motor or altitude limitation functions do not operate properly, before further flight, replace the OFV with a new or serviceable valve in accordance with Tasks 21-32-01-000-801 and 21-32-01-400-801 of the Bombardier CRJ Regional Jet Series Aircraft Maintenance Manual, CSP B-001, Part 2, Volume 1, Revision 28, dated January 20, 2009, and do the inspection of the OFV specified in paragraph (f) of this AD.

New Requirements of This AD

Actions and Compliance

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

(1) Prior to accomplishing the actions specified in paragraph (g)(2) of this AD: Install modified or new CPC units, P/N GG670-98002-7, in accordance with Part B of the Accomplishment Instructions of Bombardier Alert Service Bulletin A670BA-21-022, dated August 3, 2006.

(2) Within 4,500 flight hours after the effective date of this AD: Install modified or new CPCPs, P/N GG670-98001-11, in accordance with Part C of the Accomplishment Instructions of Bombardier Alert Service Bulletin A670BA-21-022, dated August 3, 2006. Doing the actions required by paragraph (g)(2) of this AD terminates the requirements of paragraph (f) of this AD.

(h) Installing CPC units, P/N GG670-98002-9, in accordance with Bombardier Service Bulletin 670BA-21-030, dated December 22, 2009, is acceptable for compliance with the corresponding requirements of paragraph (g)(1) of this AD.

(i) Actions done before May 29, 2009, in accordance with a Liebherr service bulletin identified in Table 1 of this AD, are acceptable for compliance with the corresponding requirements of paragraph (g)(1) or (g)(2) of this AD.

Table 1- Liebherr Service Bulletins

Liebherr Service Bulletin -	Revision -	Dated -
GG670-98001-21-03	Original	March 21, 2006
GG670-98001-21-03	1	November 15, 2007
GG670-98002-21-02	Original	April 21, 2006
GG670-98002-21-02	1	November 15, 2007

FAA AD Differences

Note 1: This AD differs from the MCAI and/or service information as follows: The MCAI and Bombardier Alert Service Bulletin A670BA-21-022, dated August 3, 2006, do not describe corrective actions for findings of improper OFV manual mode motor and altitude limitation functions. This AD requires the actions in paragraphs (f)(1) and (f)(2) of this AD, which include replacing the valve if the OFV manual mode motor or altitude limitation functions do not operate properly.

Other FAA AD Provisions

(j) 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. AMOCs approved previously in accordance with AD 2009-10-10 are approved as AMOCs for the corresponding provisions of 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

(k) Refer to MCAI Canadian Airworthiness Directive CF-2009-08R1, dated April 13, 2010; and the service information identified in Table 2 of this AD; for related information.

Table 2 – Related service information

Bombardier Service Information	Revision Level	Date
Bombardier Alert Service Bulletin A670BA-21-022	Original	August 3, 2006
Bombardier Service Bulletin 670BA-21-030	Original	December 22, 2009
Task 21-32-01-000-801 of the Bombardier CRJ Regional Jet Series Aircraft Maintenance Manual, CSP B-001, Part 2, Volume 1	28	January 20, 2009
Task 21-32-01-400-801, of the Bombardier CRJ Regional Jet Series Aircraft Maintenance Manual, CSP B-001, Part 2, Volume 1	28	January 20, 2009

Material Incorporated by Reference

(1) You must use the applicable service information identified in Table 3 of this AD, to do the actions required by this AD, unless the AD specifies otherwise. If accomplished, you must use Bombardier Service Bulletin 670BA-21-030, dated December 22, 2009, to do the optional actions specified by this AD, unless the AD specifies otherwise.

Table 3 – Required material incorporated by reference

Bombardier Service Information	Revision Level	Date
Bombardier Alert Service Bulletin A670BA-21-022	Original	August 3, 2006
Task 21-32-01-000-801 of the Bombardier CRJ Regional Jet Series Aircraft Maintenance Manual, CSP B-001, Part 2, Volume 1	28	January 20, 2009
Task 21-32-01-400-801, of the Bombardier CRJ Regional Jet Series Aircraft Maintenance Manual, CSP B-001, Part 2, Volume 1	28	January 20, 2009

(1) The Director of the Federal Register approved the incorporation by reference of Bombardier Service Bulletin 670BA-21-030, dated December 22, 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 the service information contained in Table 4 of this AD on May 29, 2009 (74 FR 22646, May 14, 2009).

Table 4 – Material previously incorporated by reference

Bombardier Service Information	Revision Level	Date
Bombardier Alert Service Bulletin A670BA-21-022	Original	August 3, 2006
Task 21-32-01-000-801 of the Bombardier CRJ Regional Jet Series Aircraft Maintenance Manual, CSP B-001, Part 2, Volume 1	28	January 20, 2009
Task 21-32-01-400-801, of the Bombardier CRJ Regional Jet Series Aircraft Maintenance Manual, CSP B-001, Part 2, Volume 1	28	January 20, 2009

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

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

(5) You may also review copies of the service information that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the availability of this material at 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 August 13, 2010.

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



2010-18-10 BAE Systems (Operations) Limited: Amendment 39-16423. Docket No. FAA-2010-0477; Directorate Identifier 2009-NM-226-AD.

Effective Date

(a) This airworthiness directive (AD) becomes effective October 7, 2010.

Affected ADs

(b) None.

Applicability

(c) This AD applies to BAE Systems (OPERATIONS) LIMITED Model BAe 146-100A, -200A, and -300A series airplanes and Model Avro 146-RJ70A, 146-RJ85A, and 146-RJ100A airplanes, certificated in any category; all serial numbers, except those airplanes modified to freighter configuration in accordance with BAE SYSTEMS Modification HCM50200B.

Subject

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

Reason

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

Three events have been reported where insulation material was found to be fouling pulleys in the aileron interconnect circuit in the cabin roof area. * * *

Interference between the cable and the insulation bag causes the material to be drawn into the gap between the pulley and the pulley guard. This condition, if not detected and corrected, could lead to restricted aileron movement and consequently, reduced control of the aeroplane.

* * * * *

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 6 months after the effective date of this AD, install new aileron interconnect cable pulley guards, in accordance with paragraph 2.C. "Modification" of the Accomplishment Instructions of BAE Systems (OPERATIONS) LIMITED Modification Service Bulletin SB.27-183-36246A, dated December 9, 2008.

FAA AD Differences

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

Other FAA AD Provisions

(h) 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: Todd Thompson, Aerospace Engineer, International Branch, ANM-116, Transport Airplane Directorate, FAA, 1601 Lind Avenue, SW., Renton, Washington 98057-3356; telephone (425) 227-1175; 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

(i) Refer to MCAI European Aviation Safety Agency Airworthiness Directive 2009-0205, Revision 1, dated January 12, 2010; and BAE Systems (OPERATIONS) LIMITED Modification Service Bulletin SB.27-183-36246A, dated December 9, 2008; for related information.

Material Incorporated by Reference

(j) You must use BAE Systems (OPERATIONS) LIMITED Modification Service Bulletin SB.27-183-36246A, dated December 9, 2008, 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 BAE Systems (Operations) Limited, Customer Information Department, Prestwick International Airport, Ayrshire, KA9 2RW, Scotland, United Kingdom; telephone +44 1292 675207; fax +44 1292 675704; e-mail RApublications@baesystems.com; Internet <http://www.baesystems.com/Businesses/RegionalAircraft/index.htm>.

(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 August 20, 2010.

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



2010-18-11 Bombardier, Inc.: Amendment 39-16424. Docket No. FAA-2010-0851; Directorate Identifier 2010-NM-171-AD.

Effective Date

(a) This airworthiness directive (AD) becomes effective September 17, 2010.

Affected ADs

(b) None.

Applicability

(c) This AD applies to Bombardier, Inc. Model CL-600-2C10 (Regional Jet Series 700, 701, & 702); Model CL-600-2D15 (Regional Jet Series 705); and Model CL-600-2D24 (Regional Jet Series 900) airplanes; certificated in any category; having horizontal stabilizer trim actuators (HSTAs) with part number (P/N) 8489-7 or 8489-7R.

Subject

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

Reason

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

During maintenance at the vendor's facility, some HSTAs were assembled with the incorrect load bearing balls. The material of these discrepant balls has lower wear characteristics and as such, has a shorter expected life. If not corrected, this condition can result in the HSTA jam leading to difficulties in controlling the aircraft.

* * * * *

The unsafe condition is possible 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.

Actions

(g) Within 500 flight cycles after the effective date of this AD: Inspect HSTAs having P/Ns 8489-7 and 8489-7R to determine if the serial numbers (S/Ns) identified in paragraph 1.A., "Effectivity," of Bombardier Service Bulletin 670BA-27-057, dated June 14, 2010, are installed. A review of airplane maintenance records is acceptable in lieu of this inspection if the serial number of the HSTA can be conclusively determined from that review.

(1) For any HSTA with a serial number that is not identified in paragraph 1.A., "Effectivity," of Bombardier Service Bulletin 670BA-27-057, dated June 14, 2010: No further action is required by paragraph (g) of this AD.

(2) For any HSTA with a serial number that is identified in paragraph 1.A., "Effectivity," of Bombardier Service Bulletin 670BA-27-057, dated June 14, 2010: Replace the HSTA with a serviceable HSTA, in accordance with the Accomplishment Instructions of Bombardier Service Bulletin 670BA-27-057, dated June 14, 2010, at the applicable time specified by paragraph (g)(2)(i), (g)(2)(ii), (g)(2)(iii), or (g)(2)(iv) of this AD.

Note 1: Bombardier Service Bulletin 670BA-27-057, dated June 14, 2010, references Sagem SA Service Bulletin 8489-27-006, dated December 8, 2009, as an additional source of guidance for modifying the HSTA. Sagem SA Service Bulletin 8489-27-006, dated December 8, 2009, references Ratier-Figeac Service Bulletin RF-DSC-075-07, Version 03, dated November 10, 2009, as an additional source of guidance for modifying the HSTA. The suffix "A" after the serial number indicates serviceable HSTAs that have been modified.

(i) For any HSTA that has accumulated less than or equal to 8,000 flight cycles as of the effective date of this AD: Before the HSTA accumulates 10,000 flight cycles.

(ii) For any HSTA that has accumulated more than 8,000 flight cycles but less than or equal to 10,000 flight cycles as of the effective date of this AD: Before the HSTA accumulates an additional 2,000 flight cycles, but no later than 11,000 flight cycles on the HSTA.

(iii) For any HSTA that has accumulated more than 10,000 flight cycles but less than or equal to 12,000 flight cycles as of the effective date of this AD: Before the HSTA accumulates an additional 1,000 flight cycles, but no later than 12,500 flight cycles on the HSTA.

(iv) For any HSTAs that has accumulated more than 12,000 flight cycles as of the effective date of this AD: Before the HSTA accumulates an additional 500 flight cycles.

(h) As of the effective date of this AD, no person may install an HSTA, having P/N 8489-7 or 8489-7R, with a serial number identified in paragraph 1.A., "Effectivity," of Bombardier Service Bulletin 670BA-27-057, dated June 14, 2010, on any airplane.

FAA AD Differences

Note 2: This AD differs from the MCAI and/or service information as follows: Canadian Airworthiness Directive CF-2010-20, dated July 19, 2010, refers to an incorrect date of April 28, 2010, for Bombardier Service Bulletin 670BA-27-057. The correct date for Bombardier Service Bulletin 670BA-27-057 is June 14, 2010.

Other FAA AD Provisions

(i) 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 ensure 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

(j) Refer to MCAI Canadian Airworthiness Directive CF-2010-20, dated July 19, 2010; and Bombardier Service Bulletin 670BA-27-057, dated June 14, 2010; for related information.

Material Incorporated by Reference

(k) You must use Bombardier Service Bulletin 670BA-27-057, dated June 14, 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 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 August 20, 2010.

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