FEDERAL AVIATION ADMINISTRATION
AIRWORTHINESS DIRECTIVES
LARGE AIRCRAFT

BIWEEKLY 2010-24

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LARGE AIRCRAFT

AD No.	Information	Manufacturer	Applicability
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,
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	Ewngine: 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		Airubs	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	S 2009-04-11	Bombardier, Inc.	CL-600-2B19 (Regional Jet Series 100 & 440)
2010-08-05		Airbus	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	Propeller: 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		McDonell 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)
Biweekly 2010-20			
2010-18-13		Pratt & Whitney	PW4052, PW4056, PW4060, PW4062, PW4062A, PW4074, PW4077, PW4077D, PW4084D, PW4090, PW4090-3, PW4152, PW4156A, PW4158, PW4164, PW4168, PW4168A, PW4460, and PW4462
2010-19-01	S 2009-08-51	Rolls-Royce Corporation	Engine: AE 3007A
2010-19-02		Bombardier	DHC-8-201, -202, -301, -311, and -315
2010-19-03		Boeing	737-700(IGW)
2010-19-04		Embraer	EMB-120, -120ER, -120FC, -120QC, and -120RT
2010-20-04		Gulfstream Aerospace LP	Galaxy and Gulfstream 200
2010-20-11		Rolls-Royce plc	Engine: RB211 Trent 768-60, 772-60, 772B-60, 875-17, 877-17, 884-17, 884B-17, 892-17, 892B-17, and 895-17

LARGE AIRCRAFT

AD No.	Information	Manufacturer	Applicability

Info: E - Emergency; COR - Correction; S - Supersedes; R - Revision; FR - Final Rule of Emergency

Biweekly 2010-21

2009-19-06		Boeing	747-100, 747-100B, 747-100B SUD, 747-200B, 747-200F, 747-300, 747-400, 747-400D, 747SP, and 747SR series
2010-20-03		Bombardier	CL-600-2B16 (CL-604 Variant)
2010-20-07		International Aero Engines AG	Engine: AG (IAE) V2500-A1, IAE V2525-D5, V2528-D5, IAE V2522-A5, V2524-A5, V2527-A5, V2527E-A5, V2527M-A5, V2530-A5, and V2533-A5
2010-20-08	S 2001-16-02	Boeing	747-100, 747-100B, 747-100B SUD, 747-200B, 747-200C, 747-200F, 747-300, 747-400, 747-400D, 747-400F, and 747SR series
2010-20-09		Bombardier	CL-600-2B19 (Regional Jet Series 100 & 440); 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)
2010-20-10	S 2006-23-05	Cessna	750
2010-20-12		Boeing	747-400, 747-400D, and 747-400F series
2010-20-13		McDonnell Douglas	DC-10-30, DC-10-30F, DC-10-30F (KC-10A and KDC-10), DC-10-40, DC10-40F, and MD-10-30F
2010-20-14		McDonnell Douglas	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
2010-20-15		Bombardier	CL-600-2C10 (Regional Jet Series 700, 701, & 702), CL-600-2D15 (Regional Jet Series 705), and CL-600-2D24 (Regional Jet Series 900)
2010-20-16		Airbus	A300 B2-1A, B2-1C, B4-2C, B2K-3C, B4-103, B2-203, B4-203; A300 B4-601, B4-603, B4-620, B4-622, B4-605R, B4-622R, F4-605R, F4-622R, C4-605R Variant F; A310-203, -204, -221, -222, -304, -322, -324, and -325
2010-20-17	S 2004-22-08	Bombardier	CL-600-2B19 (Regional Jet Series 100 & 440)
2010-20-19		Bombardier	CL-600-2B19 (Regional Jet Series 100 & 440), CL-600-2C10 (Regional Jet Series 700, 701, & 702), CL-600-2D15 (Regional Jet Series 705), and CL-600-2D24 (Regional Jet Series 900)
2010-20-22		Rolls-Royce Deutschland	Tay 620-15, Tay 650-15, and Tay 651-54
2010-21-02		Bombardier	DHC-8-101, -102, -103, -106, -201, -202, -301, -311, -315, DHC-8-400, -401, -402
2010-21-03	S 2008-09-04	McDonnell Douglas	DC-8-31, DC-8-32, DC-8-33, DC-8-41, DC-8-42, DC-8-43; DC-8-51, DC-8-52, DC-8-53, DC-8-55; DC-8F-54, DC-8F-55; DC-8-61, DC-8-62, DC-8-63; DC-8-61F, DC-8-62F, DC-8-63F; DC-8-71, DC-8-72, DC-8-73; DC-8-71F, DC-8-72F, and DC-8-73F
2010-21-04	S 90-15-06 S 94-12-09	Boeing	747-100, 747-200B, and 747-200F series
2010-21-05	S 2008-13-02	BAE Systems	4101
2010-21-06		Airbus	A300 B4-601, B4-603, B4-620, B4-622, B4-605R, B4-622R; A300 C4-605R Variant F; A300 F4-605R and F4-622R
2010-21-17		Pratt & Whitney	JT8D-9, -9A, -11, -15, -17, and -17R

LARGE AIRCRAFT

AD No.	Information	Manufacturer	Applicability

Info: E - Emergency; COR - Correction; S - Supersedes; R - Revision; FR - Final Rule of Emergency

Biweekly 2010-22

2010-21-10		BAE Systems (Operations) Limited	BAe 146-100A, -200A, and -300A airplanes, and Avro 146-RJ70A, 146-RJ85A, and 146-RJ100A
2010-21-11		Bombardier, Inc.	CL-600-2B19 (Regional Jet Series 100 & 440)
2010-21-12		Fokker Services B.V.	F.28 Mark 0070 and 0100
2010-21-13		McDonnell Douglas Corporation	DC-10-10, DC-10-10F, DC-10-30, DC-10-30F (KDC-10), DC-10-40, and DC-10-40F
2010-21-15		Empresa Brasileira de Aeronautica S.A. (EMBRAER)	EMB-500
2010-21-16	S 2009-07-04	McDonnell Douglas Corporation	MD-90-30
2010-21-19		Learjet Inc	45
2010-22-01	S 2009-20-09	The Boeing Company	767-200, -300, and -300F series
2010-22-02		Bombardier, Inc.	CL-600-2B19 (Regional Jet Series 100 & 440)

Biweekly 2010-23

2010-17-12R1		Rolls-Royce Deutschland	Engine: Tay 650-15, Tay 651-54
2010-22-03	S 2006-09-05	Airbus	A310-203, -204, -221, -222, -304, -322, -324, and -325
2010-22-04	S 2008-18-10	McDonnell Douglas	MD-90-30
2010-22-05		Fokker Services	F.28 Mark 0070 and 0100
2010-22-06		Airbus	A330-201, -202, -203, -223, -243, -301, -302, -303, -321, -322, -323, -341, -342, and -343
2010-23-03		Boeing	757-200, 200CB, -200PF, -300 series, 767-200, -300, -300F, and -400ER series
2010-23-04		Bombardier	DHC-8-400, -401, and -402
2010-23-05	S 2008-09-22	EADS CASA	CN-235, CN-235-100, CN-235-200, CN-235-300, and C-295
2010-23-06	S 2005-24-08	McCauley Propeller	Propeller: B5JFR36C1101/114GCA-0, C5JFR36C1102/L114GCA-0, B5JFR36C1103/114HCA-0, and C5JFR36C1104/L114HCA-0
2010-23-07		Airbus	A318-111, -112, -121, -122; A319-111, -112, -113, -114, -115, -131, -132, -133; A320-111, -211, -212, -214, -231, -232, -233; A321-111, -112, -131, -211, -212, -213, -231, and -232

Biweekly 2010-24

2010-23-08		Bombardier	BD-700-1A10 and BD-700-1A11
2010-23-10	S 2004-23-11	McDonnell Douglas	DC-9-14, DC-9-15, DC-9-15F, DC-9-21, DC-9-31, DC-9-32, DC-9-32 (VC-9C), DC-9-32F, DC-9-33F, DC-9-34, DC-9-34F, DC-9-32F (C-9A, C-9B), DC-9-41, and DC-9-51
2010-23-11		Bombardier	CL-600-2C10 (Regional Jet Series 700, 701, & 702), CL-600-2D15 (Regional Jet Series 705), and CL-600-2D24 (Regional Jet Series 900)
2010-23-12		Airbus	A330-201, A330-202, A330-203, A330-223, A330-223F, A330-243, A330-243F, A330-301, A330-302, A330-303, A330-321, A330-322, A330-323, A330-341, A330-342 and A330-343, A340-211, A340-212, A340-213, A340-311, A340-312, A340-313, A340-541, and A340-642
2010-23-13		Boeing	757-200, -200PF, -200CB, and -300 series
2010-23-14		Bombardier	CL-600-2B19 (Regional Jet Series 100 & 440), CL-600-2C10 (Regional Jet Series 700, 701 & 702), CL-600-2D15 (Regional Jet Series 705) and CL-600-2D24 (Regional Jet Series 900)
2010-23-15		Boeing	777-200, -200LR, -300, and -300ER series
2010-23-18		Airbus	A380-841, -842, and -861
2010-23-19		Bombardier	CL-600-2C10 (Regional Jet Series 700, 701, & 702), CL-600-2D15 (Regional Jet Series 705) and CL-600-2D24 (Regional Jet Series 900)
2010-23-20		General Electric Company	Engine: GE CT7-9C and -9C3
2010-23-21		Viking Air Limited	DHC-7-1, DHC-7-100, DHC-7-101, DHC-7-102, and DHC-7-103

2010-23-08 Bombardier, Inc.: Amendment 39-16497. Docket No. FAA-2010-0548; Directorate Identifier 2010-NM-041-AD.

Effective Date

(a) This airworthiness directive (AD) becomes effective December 14, 2010.

Affected ADs

(b) None.

Applicability

(c) This AD applies to Bombardier, Inc. Model BD-700-1A10 and BD-700-1A11 airplanes, serial numbers 9002 and subsequent; certificated in any category.

Subject

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

Reason

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

> Following five reported cases of balance washer screw failure on similar RATs [ram air turbines]/air driven generators installed on other aircraft types, an investigation by Hamilton Sundstrand determined that a specific batch of the screws had a metallographic non-conformity that increased their susceptibility to brittle fracture. Subsequently, it was established that 187 RATs [Part Number (P/N) GL456-1101-7 and Hamilton Sundstrand P/Ns in the 762826 series] had non-conforming screws installed either during production or possibly during maintenance or repair at Hamilton Sundstrand repair stations.
>
> Failure of a balance washer screw can result in loss of the related balance washer, with consequent turbine imbalance. Such imbalance could potentially result in RAT structural failure (including blade failure), loss of RAT electrical power and structural damage to the aircraft and, if deployment was activated by a dual engine shutdown, could also result in loss of hydraulic power for the flight controls [and consequent reduced ability of the flightcrew to maintain the safe flight and landing of the airplane].
>
> This [Canadian] directive mandates checking of the RAT and replacing the balance washer screws, if required. It also prohibits future installation of unmodified RATs.

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) For airplanes having serial numbers 9002 through 9380 inclusive: At the earliest of the times identified in paragraphs (g)(1), (g)(2), (g)(3) and (g)(4) of this AD, inspect to determine the serial number of the installed ram air turbine (RAT), in accordance with the Accomplishment Instructions of the applicable service bulletin listed in Table 1 of this AD. This inspection may be conducted visually, which requires lowering the RAT. A review of airplane maintenance records is acceptable in lieu of this inspection if the serial number of the RAT can be conclusively determined from that review.

(1) Within 500 flight hours or 24 months after the effective date of this AD, whichever occurs first; or

(2) Prior to the next in-flight or on-ground functional test of the RAT, whichever occurs first after the effective date of this AD; or

(3) Prior to the next in-flight or on-ground operational test of the RAT, whichever occurs first after the effective date of this AD; or

(4) Prior to the next scheduled RAT in-flight deployment.

(h) If the RAT serial number, as determined in paragraph (g) of this AD, is not listed in paragraph 1.A of the applicable service bulletin listed in Table 1 of this AD, no further action is required by this AD, except as required by paragraph (j) of this AD.

Table 1 – Service Bulletins

Model –	Bombardier Service Bulletin –	Revision –	Dated –
BD-700-1A11	700-1A11-24-014	02	March 15, 2010
BD-700-1A10	700-24-075	02	March 15, 2010

(i) If the RAT serial number, determined in paragraph (g) of this AD, is listed in paragraph 1.A. of the applicable service bulletin listed in Table 1 of this AD, before further flight, inspect to determine if the symbol "24-7" is marked on the RAT identification plate, in accordance with the Accomplishment Instructions of the applicable service bulletin listed in Table 1 of this AD. A review of airplane maintenance records is acceptable in lieu of this inspection if the symbol "24-7" mark can be conclusively determined from that review.

(1) If the symbol "24-7" is marked on the RAT identification plate, the balance washer screws have already been replaced and no further action is required by this AD, except as required by paragraph (j) of this AD.

(2) If the symbol "24-7" is not marked on the RAT identification plate, before further flight, replace all balance washer screws with new balance washer screws, part number MS24667-14, and mark the RAT identification plate with the symbol "24-7," in accordance with the Accomplishment Instructions of the applicable service bulletin listed in Table 1 of this AD.

(j) For all airplanes: As of the effective date of this AD, no person may install on any airplane a replacement or spare RAT (P/N GL456-1101-7; Hamilton Sundstrand P/Ns in the 762826 series) having one of the S/Ns listed in paragraph 1.A. of the applicable service bulletin listed in Table 1 of this AD unless the balance washer screws have already been replaced and the symbol "24-7" is marked on the RAT identification plate.

Credit for Actions Accomplished in Accordance With Previous Service Information

(k) Actions accomplished before the effective date of this AD, in accordance with the applicable service bulletin listed in Table 2 of this AD, are considered acceptable for compliance with the corresponding action specified in this AD.

Table 2 – Credit Service Bulletins

Model –	Bombardier Service Bulletin –	Revision –	Dated –
BD-700-1A11	700-1A11-24-014	01	July 15, 2009
BD-700-1A10	700-24-075	01	July 15, 2009

FAA AD Differences

Note 1: This AD differs from the MCAI and/or service information as follows: Although Canadian Airworthiness Directive CF-2010-01, dated January 18, 2010, recommends accomplishing the visual inspection prior to the next scheduled in-flight operational test of the RAT, we have determined that interval would not address the identified unsafe condition soon enough to ensure an adequate level of safety for the affected fleet in light of the degree of urgency associated with the subject unsafe condition. This difference has been coordinated with Transport Canada Civil Aviation (TCCA).

Other FAA AD Provisions

(l) 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

(m) Refer to MCAI TCCA Airworthiness Directive CF-2010-01, dated January 18, 2010; and Bombardier Service Bulletins 700-24-075, Revision 02, dated March 15, 2010, and 700-1A11-24-014, Revision 02, dated March 15, 2010; for related information.

Material Incorporated by Reference

(n) You must use Bombardier Service Bulletins 700-24-075, Revision 02, dated March 15, 2010; or Bombardier Service Bulletin 700-1A11-24-014, Revision 02, dated March 15, 2010; 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 October 21, 2010.
Michael Kaszycki,
Acting Manager, Transport Airplane Directorate,
Aircraft Certification Service.

2010-23-10 McDonnell Douglas Corporation: Amendment 39-16499; Docket No. FAA-2010-0705; Directorate Identifier 2009-NM-206-AD.

Effective Date

(a) This airworthiness directive (AD) is effective December 14, 2010.

Affected ADs

(b) This AD supersedes AD 2004-23-11, Amendment 39-13866.

Applicability

(c) This AD applies to McDonnell Douglas Corporation Model DC-9-14, DC-9-15, DC-9-15F, DC-9-21, DC-9-31, DC-9-32, DC-9-32 (VC-9C), DC-9-32F, DC-9-33F, DC-9-34, DC-9-34F, DC-9-32F (C-9A, C-9B), DC-9-41, and DC-9-51 airplanes; certificated in any category; as identified in Boeing Service Bulletin DC9-57-223, Revision 1, dated August 13, 2009.

Subject

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

Unsafe Condition

(e) This AD results from reports of cracking in the vertical radius (also known as the "vertical leg") of the upper cap of the center wing rear spar, and the horizontal flange on the inboard side of the rear spar upper cap, which resulted from stress corrosion. The Federal Aviation Administration is issuing this AD to detect and correct cracking in the vertical leg or the horizontal flange of the upper cap of the left or right center wing rear spar, which could cause a possible fuel leak, damage to the wing skin, and structural failure of the upper cap, and result in reduced structural integrity 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 2004-23-11, With Revised Service Information

Inspection

(g) For all airplanes except Model DC-9-15F airplanes, at the later of the times specified in paragraphs (g)(1) and (g)(2) of this AD: Do a high frequency eddy current inspection to detect cracks in the vertical radius of the upper cap of the center wing rear spar, in accordance with the

Accomplishment Instructions of Boeing Service Bulletin DC9-57-223, dated July 21, 2003; or Revision 1, dated August 13, 2009. After the effective date of this AD, only Revision 1 may be used.

(1) Before the accumulation of 25,000 total flight cycles.

(2) Within 15,000 flight cycles or 5 years after December 20, 2004 (the effective date of AD 2004-23-11), whichever occurs first.

Corrective Action

(h)(1) If no crack is found during any inspection required by paragraph (g) of this AD, then repeat the inspection thereafter at intervals not to exceed 15,000 flight cycles or 5 years, whichever occurs first, until the initial inspection required by paragraph (i) of this AD is done.

(2) If any crack is found during the inspection required by paragraph (g) of this AD, before further flight, repair per a method approved by the Manager, Los Angeles Aircraft Certification Office (ACO), FAA. For a repair method to be approved by the Manager, Los Angeles ACO, as required by this paragraph, the Manager's approval letter must specifically refer to this AD.

New Requirements of This AD

Inspection

(i) At the later of the times specified in paragraphs (i)(1) and (i)(2) of this AD: Do a high frequency eddy current inspection to detect cracking in the vertical leg (also known as the "vertical radius") and horizontal flange of the left and right rear spar upper cap, inboard and outboard sides, at the bulkhead at wing station Xcw=58.500, in accordance with the Accomplishment Instructions of Boeing Service Bulletin DC9-57-223, Revision 1, dated August 13, 2009. If no cracking is found, repeat the inspection thereafter at intervals not to exceed 15,000 flight cycles or 5 years, whichever occurs first. Accomplishment of the initial inspection required by paragraph (i) of this AD terminates the requirements of paragraphs (g) and (h)(1) of this AD.

(1) Before the accumulation of 25,000 total flight cycles.

(2) Within 15,000 flight cycles or 5 years after accomplishing the most recent high frequency eddy current inspection required by paragraph (g) of this AD, whichever occurs first.

Corrective Action

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

Alternative Methods of Compliance (AMOCs)

(k)(1) The Manager, Los Angeles 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: Wahib Mina, Aerospace Engineer, Airframe Branch, ANM-120L, Los Angeles ACO, FAA, 3960 Paramount Boulevard, Lakewood, California 90712-4137; telephone (562) 627-5324; 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 refer to 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 the approval must specifically refer to this AD.

(4) AMOCs approved previously in accordance with AD 2004-23-11, Amendment 39-13866, are approved as AMOCs for the corresponding provisions of paragraph (h)(2) of this AD.

Material Incorporated by Reference

(l) You must use Boeing Service Bulletin DC9-57-223, Revision 1, dated August 13, 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, 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 an NARA facility, 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 October 21, 2010.
Michael Kaszycki,
Acting Manager, Transport Airplane Directorate,
Aircraft Certification Service.

2010-23-11 Bombardier, Inc.: Amendment 39-16500. Docket No. FAA-2010-0700; Directorate Identifier 2010-NM-123-AD.

Effective Date

(a) This airworthiness directive (AD) becomes effective December 14, 2010.

Affected ADs

(b) None.

Applicability

(c) This AD applies to Bombardier, Inc. Model CL-600-2C10 (Regional Jet Series 700, 701, & 702), CL-600-2D15 (Regional Jet Series 705), and CL-600-2D24 (Regional Jet Series 900) airplanes, certificated in any category, equipped with Thales angle of attack transducers having part number (P/N) C16258AA.

Subject

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

Reason

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

> The manufacturer has informed Transport Canada that a certain number of the resolver stators, which were installed in the angle of attack (AOA) transducers, were not cleaned correctly. This condition can degrade the AOA transducer performance at low temperatures resulting in freezing of the AOA transducer resolver, which may provide inaccurate AOA data to the Stall Protection System (SPS). If not corrected, this condition can result in early or late activation of the stick shaker and/or stick pusher.

These conditions could result in reduced ability of the flight crew to maintain a safe flight and landing 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.

Inspection

(g) Within 750 flight hours after the effective date of this AD, inspect the serial number of each AOA transducer having P/N C16258AA to determine if the serial number is identified in paragraph 1.A. of Bombardier Alert Service Bulletin A670BA-27-054, Revision A, dated January 18, 2010, in accordance with the Accomplishment Instructions of Bombardier Alert Service Bulletin A670BA-27-054, Revision A, dated January 18, 2010. A review of airplane maintenance records is acceptable in lieu of this inspection if the serial number of the AOA transducer can be conclusively determined from that review.

(1) If the serial number is not listed in paragraph 1.A. of Bombardier Alert Service Bulletin A670BA-27-054, Revision A, dated January 18, 2010, no further action is required by this AD other than compliance with paragraph (h) of this AD.

(2) If the serial number is listed in paragraph 1.A. of Bombardier Alert Service Bulletin A670BA-27-054, Revision A, dated January 18, 2010, and has the suffix "C", no further action is required by this AD other than compliance with paragraph (h) of this AD.

(3) If the serial number is listed paragraph 1.A. of Bombardier Alert Service Bulletin A670BA-27-054, Revision A, dated January 18, 2010, and does not have the suffix "C", before further flight, replace the AOA transducer with a new or serviceable transducer, in accordance with Part C of the Accomplishment Instructions of Bombardier Alert Service Bulletin A670BA-27-054, Revision A, dated January 18, 2010.

Note 1: To replace any AOA transducer, the replacement AOA transducer must either be outside of the affected serial numbers as identified in paragraph 1.A. of Bombardier Alert Service Bulletin A670BA-27-054, Revision A, dated January 18, 2010, or have the suffix "C".

(h) As of the effective date of this AD, no AOA transducer having both a serial number and P/N C16258AA as identified in paragraph 1.A. of Bombardier Alert Service Bulletin A670BA-27-054, Revision A, dated January 18, 2010, may be installed on any airplane unless the AOA transducer has been inspected by the manufacturer and identified with the suffix "C".

FAA AD Differences

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

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 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

(j) Refer to MCAI Canadian Airworthiness Directive CF-2010-13, dated May 6, 2010; and Bombardier Alert Service Bulletin A670BA-27-054, Revision A, dated January 18, 2010; for related information.

Material Incorporated by Reference

(k) You must use Bombardier Alert Service Bulletin A670BA-27-054, Revision A, dated January 18, 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 October 21, 2010.
Michael Kaszycki,
Acting Manager, Transport Airplane Directorate,
Aircraft Certification Service.

2010-23-12 Airbus: Amendment 39-16501. Docket No. FAA-2010-0675; Directorate Identifier 2010-NM-061-AD.

Effective Date

(a) This airworthiness directive (AD) becomes effective December 14, 2010.

Affected ADs

(b) None.

Applicability

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

(1) Airbus Model A330-201, A330-202, A330-203, A330-223, A330-223F, A330-243, A330-243F, A330-301, A330-302, A330-303, A330-321, A330-322, A330-323, A330-341, A330-342 and A330-343 airplanes, certificated in any category; all manufacturer serial numbers, equipped with Thales Avionics angle of attack (AoA) probes having part number (P/N) C16291AA.

(2) Airbus Model A340-211, A340-212, A340-213, A340-311, A340-312, A340-313, A340-541, and A340-642 airplanes, certificated in any category, all manufacturer serial numbers, equipped with Thales Avionics AoA probes having P/N C16291AA.

Subject

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

Reason

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

> During Airbus Final Assembly Line reception flight tests, AoA data from two different aeroplanes were found inaccurate. Inaccuracy was confirmed by flight data analysis.
>
> Investigation conducted by Thales on the removed probes revealed oil residue between the stator and the rotor parts of the AoA vane position resolvers. This oil residue was due to incorrect cleaning of the machining oil during the manufacturing process of the AoA resolvers. At low temperatures, this oil residue becomes viscous (typically in cruise) causing lag of AoA vane movement.
>
> Such condition could lead to discrepant AoA measurement. If not corrected, and if two or three AoA probes were simultaneously affected and provided wrong indications of the AoA to a similar extent, it could lead to a late activation of the angle of attack

protection, which in combination with flight at high angle of attack would constitute an unsafe condition.

Therefore, this [European Aviation Safety Agency (EASA)] AD requires a one time inspection of the Thales Avionics AoA probe P/N C16291AA in order to identify the suspect parts and to remove them from service.

This [EASA] AD revision is issued to specify that the identification of the affected AoA probes is also possible in accordance with aeroplane maintenance records data analysis.

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 of AoA Probes

(g) Within 3 months after the effective date of this AD, perform a detailed visual inspection of the Thales Avionics AoA probes having P/N C16291AA for a serial number identification, in accordance with the Accomplishment Instructions of the applicable service information identified in Table 1 of this AD. A review of airplane maintenance records is acceptable in lieu of this inspection if the serial number of the AoA probe can be conclusively determined from that review. If no AoA probe having P/N C16291AA and a serial number identified in Thales Service Bulletin C16291A-34-007, Revision 01, dated December 3, 2009, is identified during the inspection required by this paragraph of this AD, no further action is required by this AD, except for paragraph (i) of this AD.

Table 1 – Applicable service information

Model	Document	Date
Model A330-200 and A330-300 series airplanes	Airbus Mandatory Service Bulletin A330-34-3232	January 20, 2010
Model A340-200 and A340-300 series airplanes	Airbus Mandatory Service Bulletin A340-34-4239	January 20, 2010
Model A340-500, and A340-600 series airplanes	Airbus Mandatory Service Bulletin A340-34-5072	January 20, 2010

Replacement of Identified AoA Probes

(h) If the serial number of the AoA probe identified during the inspection required by paragraph (g) of this AD corresponds to a suspect AoA probe specified in Thales Service Bulletin C16291A-34-007, Revision 01, dated December 3, 2009: At the applicable time specified in paragraph (h)(1) or (h)(2) of this AD, replace the affected AoA probe with a serviceable AoA probe in accordance with one of the four options specified in and in accordance with the Accomplishment Instructions of the applicable service bulletin specified in Table 1 of this AD.

(1) For airplanes on which Airbus Modification 53368 (back-up speed scale) has been embodied in production or Airbus Service Bulletin A330-34-3213, Airbus Service Bulletin A340-34-4213, or Airbus Service Bulletin A340-34-5060, as applicable, has been embodied in service: Within 3 months after the effective date of this AD.

(2) For airplanes on which Airbus Modification 53368 (back-up speed scale) has not been embodied in production and Airbus Service Bulletin A330-34-3213, Airbus Service Bulletin A340-34-4213, or Airbus Service Bulletin A340-34-5060, as applicable, has not been embodied in service: Within 15 months after the effective date of this AD.

Parts Installation

(i) As of the effective date of this AD, no person may install, on any airplane, a Thales Avionics AoA probe having P/N C16291AA and a serial number identified in Thales Service Bulletin C16291A-34-007, Revision 01, dated December 3, 2009, unless the AoA is fitted with an inspection label stating that Thales Service Bulletin C16291A-34-007, Revision 01, dated December 3, 2009, has been accomplished.

FAA AD Differences

Note 1: This AD differs from the MCAI and/or service information as follows: EASA Airworthiness Directive 2010-0016R1, dated February 9, 2010, does not include Models A330-223F and A330-243F. We find that those models need to be included in this AD action, and have coordinated this difference with EASA and Airbus.

Other FAA AD Provisions

(j) 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.

(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 EASA Airworthiness Directive 2010-0016R1, dated February 9, 2010, and the service information identified in Table 2 of this AD, for related information.

Table 2 – Related service information

Document	Revision	Date
Airbus Mandatory Service Bulletin A330-34-3232	Original	January 20, 2010
Airbus Mandatory Service Bulletin A340-34-4239	Original	January 20, 2010
Airbus Mandatory Service Bulletin A340-34-5072	Original	January 20, 2010
Thales Service Bulletin C16291A-34-007	Revision 01	December 3, 2009

Material Incorporated by Reference

(l) You must use the service information contained in Table 3 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 Airbus service information identified in this AD, contact Airbus SAS-Airworthiness Office–EAL, 1 Rond Point Maurice Bellonte, 31707 Blagnac Cedex, France; telephone +33 5 61 93 36 96; fax +33 5 61 93 45 80; e-mail airworthiness.A330-A340@airbus.com; Internet http://www.airbus.com. For Thales Avionics service information identified in this AD, contact Thales–Aerospace Division, 105, avenue du General Eisenhower–BP 63647, 31036 Toulouse Cedex 1, France; telephone +33 (0)5 61 19 65 00; fax +33 (0)5 61 19 66 00; Internet http://www.thalesgroup.com/aerospace.

(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

Document	Revision	Date
Airbus Mandatory Service Bulletin A330-34-3232, excluding Appendix 01	Original	January 20, 2010
Airbus Mandatory Service Bulletin A340-34-4239, excluding Appendix 01	Original	January 20, 2010
Airbus Mandatory Service Bulletin A340-34-5072, excluding Appendix 01	Original	January 20, 2010
Thales Service Bulletin C16291A-34-007	Revision 01	December 3, 2009

Issued in Renton, Washington, on October 22, 2010.
Michael Kaszycki,
Acting Manager, Transport Airplane Directorate,
Aircraft Certification Service.

2010-23-13 The Boeing Company: Amendment 39-16502. Docket No. FAA-2010-0483; Directorate Identifier 2010-NM-065-AD.

Effective Date

(a) This AD is effective December 14, 2010.

Affected ADs

(b) None.

Applicability

(c) This AD applies to all The Boeing Company Model 757-200, -200PF, -200CB, and -300 series airplanes, certificated in any category.

Subject

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

Unsafe Condition

(e) This AD results from reports of Model 757 airplanes in service that have drain holes and unsealed panel assemblies in the fixed leading edge adjacent to the inboard end of slats 4 and 7 that are too close to the hot portion of the engines. The Federal Aviation Administration is issuing this AD to prevent fuel leaking onto an engine and a consequent fire.

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.

Action

(g) Within 60 months after the effective date of this AD, change the lower fixed leading edge panel assemblies immediately outboard of the nacelles at slats 4 and 7, in accordance with the Accomplishment Instructions of Boeing Special Attention Service Bulletin 757-57-0070, dated January 27, 2010; except, where the service bulletin specifies washer part number (P/N) NAS11490632J for the modification of the lower fixed leading edge panel assemblies, this AD requires installation of P/N NAS1149D0632J.

Alternative Methods of Compliance (AMOCs)

(h)(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: Tak Kobayashi, Aerospace Engineer, Propulsion Branch, ANM-140S, FAA, Seattle Aircraft Certification Office, 1601 Lind Avenue, SW., Renton, Washington 98057-3356; telephone (425) 917-6499; 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

(i) You must use Boeing Special Attention Service Bulletin 757-57-0070, dated January 27, 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 October 23, 2010.
Michael Kaszycki,
Acting Manager, Transport Airplane Directorate,
Aircraft Certification Service.

2010-23-14 Bombardier, Inc: Amendment 39-16503. Docket No. FAA-2010-0223; Directorate Identifier 2009-NM-105-AD.

Effective Date

(a) This airworthiness directive (AD) becomes effective December 22, 2010.

Affected ADs

(b) None.

Applicability

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

(1) Model CL-600-2B19 (Regional Jet Series 100 & 440) airplanes, serial numbers 7003 through 8089 inclusive;

(2) Model CL-600-2C10 (Regional Jet Series 700, 701 & 702) airplanes, serial numbers 10003 through 10265 inclusive; and

(3) Model CL-600-2D15 (Regional Jet Series 705) and CL-600-2D24 (Regional Jet Series 900) airplanes, serial numbers 15001 through 15173 inclusive.

Subject

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

Reason

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

> Several cases of corrosion in lower structural members of the passenger door have been reported. It was subsequently determined that a drainage ramp (constructed from resin) had deteriorated with time and was retaining moisture. The ramp, therefore, requires removal, both to prevent further corrosion and to allow full access to the door structure during future scheduled inspections. Corrosion left undetected could eventually affect the structural integrity of the door and surrounding structure.

The required actions include a general visual inspection for corrosion and damage of the lower inner section of the door, repair if necessary, and application of corrosion inhibitor compound.

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) Before the accumulation of 15,000 total flight hours, or within 5,000 flight hours after the effective date of this AD, whichever occurs later, do the actions specified in paragraphs (g)(1), (g)(2), and (g)(3) of this AD.

(1) Remove the lower passenger door ramp, in accordance with the applicable Bombardier modification summary package specified in Table 1 of this AD.

(2) Do a general visual inspection for any damage and corrosion behind the drainage ramp in the lower portion of the passenger door. If any damage or corrosion is found, before further flight repair in accordance with a method approved by the Manager, New York Aircraft Certification Office, FAA; or Transport Canada Civil Aviation (TCCA) (or its delegated agent).

(3) Apply corrosion inhibitor compound, in accordance with the applicable Bombardier modification summary package specified in Table 1 of this AD.

Table 1 – Service Information

Applicable Airplanes	Bombardier Service Information	Revision	Date
Model CL-600-2B19 airplanes	Bombardier Modification Summary Package IS601R52110030	B	May 28, 2010
Model CL-600-2C10, CL-600-2D15, and CL-600-2D24 airplanes	Bombardier Modification Summary Package IS67052110074	D	June 2, 2010

(4) Inspections and modifications accomplished before the effective date of this AD according to the applicable Bombardier modification summary package listed in Table 2 of this AD, are considered acceptable for compliance with the corresponding inspection or modification specified in this AD.

Table 2 – Credit Service Information

Applicable Airplanes	Bombardier Service Information	Revision	Date
Model CL-600-2B19 airplanes	Bombardier Modification Summary Package IS601R52110030	A	July 5, 2006
Model CL-600-2B19 airplanes	Bombardier Modification Summary Package IS601R52110030	A1	April 24, 2009
Model CL-600-2C10, CL-600-2D15, and CL-600-2D24 airplanes	Bombardier Modification Summary Package IS67052110074	A	July 5, 2006
Model CL-600-2C10, CL-600-2D15, and CL-600-2D24 airplanes	Bombardier Modification Summary Package IS67052110074	A1	April 24, 2009

FAA AD Differences

Note 1: This AD differs from the MCAI and/or service information as follows: The MCAI does not require an inspection or application of a corrosion inhibitor compound. This AD requires both actions.

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-2009-23, dated May 19, 2009, and the Bombardier modification summary packages listed in Table 1 of this AD, for related information.

Material Incorporated by Reference

(j) You must use Bombardier Modification Summary Package IS601R52110030, Revision B, dated May 28, 2010; and Bombardier Modification Summary Package IS67052110074, Revision D, dated June 2, 2010; as applicable; to do the actions required by this AD, unless the AD specifies otherwise. (The revision date of these modification summary packages is located only on sheet 2 of the documents; no other page of the documents 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 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 October 23, 2010.
Michael Kaszycki,
Acting Manager, Transport Airplane Directorate,
Aircraft Certification Service.

2010-23-15 The Boeing Company: Amendment 39-16504. Docket No. FAA-2010-0376; Directorate Identifier 2009-NM-267-AD.

Effective Date

(a) This airworthiness directive (AD) is effective December 22, 2010.

Affected ADs

(b) None.

Applicability

(c) This AD applies to The Boeing Company Model 777-200, -200LR, -300, and -300ER series airplanes, certificated in any category; as identified in Boeing Special Attention Service Bulletin 777-57-0063, Revision 1, dated May 14, 2009.

Subject

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

Unsafe Condition

(e) This AD results from reports of fuel leakage from the center tank. We are issuing this AD to detect and correct improperly applied sealant, which could result in the disbonding and displacing of sealant, and consequent fuel leaks. On the ground, uncontained fuel leakage could result in pooling, and pooling combined with an ignition source could result in a fire.

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.

Removal and Repair of Sealant

(g) Within 36 months or 6,000 flight cycles after the effective date of this AD, whichever occurs first: Remove and repair the sealant at the four lower corners of the wing center section and the four lower t-chord segment gaps on each side of the wing center section, in accordance with the Accomplishment Instructions of Boeing Special Attention Service Bulletin 777-57-0063, Revision 1, dated May 14, 2009.

Credit for Actions Accomplished According to Previous Issue of Service Bulletin

(h) Actions accomplished before the effective date of this AD in accordance with Boeing Special Attention Service Bulletin 777-57-0063, dated November 20, 2008, are considered acceptable for compliance with the corresponding action specified in 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: Kevin Nguyen, Aerospace Engineer, Propulsion Branch, ANM-140S, FAA, Seattle Aircraft Certification Office (ACO), 1601 Lind Avenue, SW., Renton, Washington 98057-3356; telephone (425) 917-6501; 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 Boeing Special Attention Service Bulletin 777-57-0063, Revision 1, dated May 14, 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 October 22, 2010.
Michael Kaszycki,
Acting Manager, Transport Airplane Directorate,
Aircraft Certification Service.

2010-23-18 Airbus: Amendment 39-16507. Docket No. FAA-2010-1102; Directorate Identifier 2010-NM-016-AD.

Effective Date

(a) This airworthiness directive (AD) becomes effective November 24, 2010.

Affected ADs

(b) None.

Applicability

(c) This AD applies to Airbus Model A380-841, -842, and -861 airplanes, certificated in any category, with serial numbers 15, 17, 19, 20, 21, and 22.

Subject

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

Reason

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

> During inspection in production and on in-service aircraft, a number of OverHeat Detection System (OHDS) installation non-conformities have been identified along the bleed air ducting.
>
> Some installation issues which may lead to a degraded leak detection capability have been reported. In case of hot air leakage, the potential degradation of the OHDS would not allow preventing damages to structure or components, and therefore could lead to an unsafe condition.
>
> * * * * *

Nonconforming installation or a failure of the OHDS could allow undetected leakage of bleed air from the hot engine/auxiliary power unit causing damage to the airplane structure and various airplane components and systems.

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 and Corrective Actions

(g) Within 3 months after the effective date of this AD: Do a one-time detailed visual inspection to ensure the correct installation of the OHDS sensing elements and insulation muffs, in accordance with the Accomplishment Instructions of Airbus Mandatory Service Bulletin A380-36-8009, including Service Bulletin Report Sheet, dated December 7, 2009.

(h) If, during any inspection required by paragraph (g) of this AD, any sensing element or insulation muff is found to have been installed incorrectly, before further flight, bring the installation into compliant configuration, in accordance with Airbus Mandatory Service Bulletin A380-36-8009, dated December 7, 2009.

(i) Submit a report of the findings (both positive and negative) of the inspection required by paragraph (g) of this AD to Airbus, Customer Services Directorate, 1 Rond Point Maurice Bellonte, 31707 Blagnac Cedex, France; telephone +33 5 61 93 33 33; fax +33 5 61 93 28 06; e-mail sb.reporting@airbus.com; Internet http://www.airbus.com, at the applicable time specified in paragraph (i)(1) or (i)(2) of this AD. The report must include the inspection results, a description of any discrepancies found, the airplane serial number, and the number of landings and flight hours on the airplane.

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

(2) If the inspection was done before the effective date of this AD: Submit the report within 30 days after 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

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

(1) Alternative Methods of Compliance (AMOCs): The Manager, International Branch, Transport Airplane Directorate, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. 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

(k) Refer to Mandatory Continuing Airworthiness Information (MCAI) European Aviation Safety Agency (EASA) Airworthiness Directive 2009-0265, dated December 16, 2009, and Airbus Mandatory Service Bulletin A380-36-8009, dated December 7, 2009, for related information.

Material Incorporated by Reference

(l) You must use Airbus Mandatory Service Bulletin A380-36-8009, including Service Bulletin Report Sheet, dated December 7, 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–EANA (Airworthiness Office); 1 Rond Point Maurice Bellonte, 31707 Blagnac Cedex, France; telephone +33 562 110 253; Fax +33 562 110 307; e-mail account.airworth-A380@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 October 26, 2010.
Ali Bahrami,
Manager, Transport Airplane Directorate,
Aircraft Certification Service.

2010-23-19 Bombardier, Inc.: Amendment 39-16508. Docket No. FAA-2010-1106; Directorate Identifier 2010-NM-237-AD.

Effective Date

(a) This airworthiness directive (AD) becomes effective November 24, 2010.

Affected ADs

(b) None.

Applicability

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

(1) Model CL-600-2C10 (Regional Jet Series 700, 701, & 702) airplanes, having serial numbers (S/Ns) 10003 and subsequent.

(2) Model CL-600-2D15 (Regional Jet Series 705) and CL-600-2D24 (Regional Jet Series 900) airplanes, having S/Ns 15001 and subsequent.

Subject

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

Reason

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

> Two cases of main landing gear (MLG) failure to fully extend have been reported. An MLG failing to extend may result in an unsafe asymmetric landing configuration.
>
> Preliminary investigation has shown that interference between the MLG door and the MLG fairing seal prevented the MLG door from opening.
>
> * * * * *

The unsafe condition is possible loss of controllability of the airplane during landing.

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.

Repetitive Inspections and Corrective Actions

(g) For airplanes having S/Ns 10003 to 10313 inclusive, 15001 to 15238 inclusive, and 15240 to 15255 inclusive: Within 50 flight cycles after the effective date of this AD, do the inspections specified in paragraphs (g)(1), (g)(2), (g)(3), and (g)(4) of this AD, in accordance with "PART A–Inspection of the MLG Inboard Doors, MLG Fairing and Adjacent Structure" of the Accomplishment Instructions of Bombardier Alert Service Bulletin A670BA-32-030, Revision A, dated October 22, 2010. Repeat the inspections thereafter at intervals not to exceed 600 flight hours.

(1) Do a detailed inspection for damage (including wear lines, cracks, fraying, tears, and evidence of chafing) of the rubber seal of the MLG fairing.

(2) Do a detailed inspection for damage (including missing and broken rollers, loose and missing fasteners, damaged and missing stops) of the MLG inboard doors, and damage along the edge of the MLG inboard door adjacent to the MLG fairing.

(3) Do a detailed inspection of the MLG fairing for damage (including missing forward and aft stops, loose and missing fasteners), and damage along the edge of the MLG fairing adjacent to the MLG door.

(4) Do a detailed inspection for damage (including missing stops, loose and missing fasteners, and missing wedges) of the stops and wedge on the forward and aft spars.

(h) For airplanes not identified in paragraph (g) of this AD: Within 600 flight hours after the effective date of this AD, do the inspections specified in paragraphs (h)(1), (h)(2), (h)(3), and (h)(4) of this AD, in accordance with "PART A–Inspection of the MLG Inboard Doors, MLG Fairing and Adjacent Structure" of the Accomplishment Instructions of Bombardier Alert Service Bulletin A670BA-32-030, Revision A, dated October 22, 2010. Repeat the inspections thereafter at intervals not to exceed 600 flight hours.

(1) Do a detailed inspection for damage (including wear lines, cracks, fraying, tears, and evidence of chafing) of the rubber seal of the MLG fairing.

(2) Do a detailed inspection for damage (including missing and broken rollers, loose and missing fasteners, damaged and missing stops) of the MLG inboard doors, and damage along the edge of the MLG inboard door adjacent to the MLG fairing.

(3) Do a detailed inspection of the MLG fairing for damage (including missing forward and aft stops, loose and missing fasteners), and damage along the edge of the MLG fairing adjacent to the MLG door.

(4) Do a detailed inspection for damage (including missing stops, loose and missing fasteners, and missing wedges) of the stops and wedge on the forward and aft spars.

(i) If damage to only the rubber seal on the MLG fairing is found during any inspection required by paragraph (g) or (h) of this AD: Before further flight, do either action in paragraph (i)(1) or (i)(2) of this AD.

(1) Replace the rubber seal on the MLG fairing with a new rubber seal, in accordance with "PART B–Replacement of the Forward Rubber Seal on the MLG Fairing" of the Accomplishment Instructions of Bombardier Alert Service Bulletin A670BA-32-030, Revision A, dated October 22, 2010.

(2) Remove the MLG inboard door, in accordance with "PART C–Removal of MLG Inboard Door" of the Accomplishment Instructions of Bombardier Alert Service Bulletin A670BA-32-030, Revision A, dated October 22, 2010. For airplanes on which the MLG inboard door is re-installed, do the installation of the MLG inboard door in accordance with "PART D–Installation of MLG Inboard Door" of the Accomplishment Instructions of Bombardier Alert Service Bulletin A670BA-32-030, Revision A, dated October 22, 2010.

(j) If damage other than the damage identified in paragraph (i) of this AD is found during any inspection required by paragraph (g) or (h) of this AD: Before further flight, contact the Bombardier Regional Aircraft Customer Response Center for repair instructions and do the repair.

(k) Submit a report of the positive findings of the initial inspection required by paragraph (g) or (h), as applicable, of this AD to Bombardier, at the applicable time specified in paragraph (k)(1) or (k)(2) of this AD. The report must include the information specified in Appendix A of Bombardier Alert Service Bulletin A670BA-32-030, Revision A, dated October 22, 2010.

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

(2) If the inspection was done before the effective date of this AD: Submit the report within 30 days after the effective date of this AD.

Credit for Actions Accomplished in Accordance With Previous Service Information

(l) Actions accomplished before the effective date of this AD according to Bombardier Alert Service Bulletin A670BA-32-030, dated October 18, 2010, are considered acceptable for compliance with the corresponding action specified in 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

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

(1) Alternative Methods of Compliance (AMOCs): The Manager, New York ACO, ANE-170, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. 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

(n) Refer to MCAI Canadian Airworthiness Directive CF-2010-36, dated October 18, 2010; and Bombardier Alert Service Bulletin A670BA-32-030, Revision A, dated October 22, 2010; for related information.

Material Incorporated by Reference

(o) You must use Bombardier Alert Service Bulletin A670BA-32-030, Revision A, including Appendix A, dated October 22, 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 November 1, 2010.
Jeffrey E. Duven,
Acting Manager, Transport Airplane Directorate,
Aircraft Certification Service.

2010-23-20 General Electric Company (GE): Amendment 39-16509; Docket No. FAA-2010-0732; Directorate Identifier 2010-NE-04-AD.

Effective Date

(a) This AD is effective December 22, 2010.

Affected ADs

(b) None.

Applicability

(c) This AD applies to GE CT7-9C and -9C3 turboprop engines with gas generator turbine (GGT) shafts, part number (P/N) 6068T44P02, that have a serial number (S/N) listed in Table 1 of this AD, installed. These engines are installed on, but not limited to, EADS CASA (formerly Construcciones Aeronauticas, S.A.) CN-235 series airplanes.

Table 1 – Affected GGT Shaft S/Ns

Affected Shaft S/Ns			
GATHHCPC	GATHHJR7	GATHHJR9	GATHHKG6
GATHHM9R	GATHHWM3	GATHJ4ED	GATHJ9FL
GATHJ19J	GATHJE8P	GATHJWWR	GATHK0KM
GATHK2N1	GATHK3M3	GATHK90K	GATHK96D
GATHKF9R	GATHKH36	GATHKMP7	GATHKRKN
NCE715DA			

Unsafe Condition

(d) This AD results from reports of a manufacturing quality problem. We are issuing this AD to detect nonconforming GGT shaft land balance-cuts, which could result in the shaft failing before its published life limit, and which could result in an uncontained engine failure and damage to the airplane.

Compliance

(e) You are responsible for having the actions required by this AD performed at the first shop visit after the effective date of this AD, or within 5,000 cycles-since-new, whichever occurs first, unless the actions have already been done.

Inspection for Nonconforming Land Balance-Cuts

(f) For CT7-9C and -9C3 engines with a GGT shaft, P/N 6068T44P02, that has a S/N listed in Table 1 of this AD, installed, inspect the shaft for nonconforming land balance-cuts. Use the Accomplishment Instructions 3.A.(1) through 3.A.(4) of GE CT7-TP Alert Service Bulletin 72-A0501, Revision 01, dated March 3, 2010, to perform the inspection.

(g) If you find any nonconforming land balance-cuts, remove the shaft from service.

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) For more information about this AD, contact Walter Meibaum, Aerospace Engineer, Engine Certification Office, FAA, Engine & Propeller Directorate, 12 New England Executive Park, Burlington, MA 01803; telephone (781) 238-7119; fax (781) 238-7199; e-mail: walter.meibaum@faa.gov.

Material Incorporated by Reference

(j) You must use GE CT7-TP Alert Service Bulletin 72-A0501, Revision 01, dated March 3, 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 GE CT7-TP Alert Service Bulletin 72-A0501, Revision 01, dated March 3, 2010, under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) For service information identified in this AD, contact General Electric Company, GE-Aviation, Room 285, 1 Neumann Way, Cincinnati, Ohio 45215; e-mail geae.aoc@ge.com; telephone (513) 552-3272; fax (513) 552-3329.

(3) You may review copies of the service information at the FAA, 12 New England Executive Park, Burlington, MA. For information on the availability of this material at the FAA, call (781) 238-7125.

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

Issued in Burlington, Massachusetts, on October 29, 2010.
Peter A. White,
Assistant Manager, Engine & Propeller Directorate,
Aircraft Certification Service.

2010-23-21 Viking Air Limited (Type Certificate Previously Held by Bombardier, Inc.): Amendment 39-16510. Docket No. FAA-2010-0699; Directorate Identifier 2009-NM-236-AD.

Effective Date

(a) This airworthiness directive (AD) becomes effective December 22, 2010.

Affected ADs

(b) None.

Applicability

(c) This AD applies to Viking Air Limited (Type Certificate previously held by Bombardier, Inc.) Model DHC-7-1, DHC-7-100, DHC-7-101, DHC-7-102, and DHC-7-103 airplanes; certificated in any category.

Subject

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

Reason

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

> Viking Air Limited has completed a system safety review of the aircraft fuel system against fuel tank safety standards introduced in Chapter 525 of the Airworthiness Manual through Notice of Proposed Amendment (NPA) 2002-043. The identified non-compliances were then assessed using Transport Canada Policy Letter No. 525-001, to determine if mandatory corrective action is required.
>
> The assessment showed that supplemental maintenance tasks would be required to prevent potential ignition sources within the fuel system, which could result in a fuel tank explosion. * * *

The corrective action is revising the Airworthiness Limitations Section of the Instructions for Continued Airworthiness to incorporate new limitations for fuel tank systems.

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 60 days after the effective date of this AD, incorporate all the fuel system limitation (FSL) tasks as specified in the temporary revisions (TR) listed in Chapter 5 of the Viking Dash 7 Series 1/100 Aircraft Maintenance Manual (AMM), PSM 1-7-2; and incorporate Section 5-10-13, as specified in Viking Air Limited TR 5-106, dated December 15, 2008, to Chapter 5 of the Viking Dash 7 Series 100 Maintenance Manual PSM 1-7-2.

Note 1: This may be done by inserting copies of the TRs identified in paragraph (g) of this AD in the AMM. When these TRs have been included in general revisions of the AMM, the general revisions may be inserted in the AMM, provided the relevant information in the general revision is identical to that in the TRs identified in paragraph (g) of this AD.

(h) At the applicable time specified in paragraphs (h)(1), (h)(2), (h)(3), and (h)(4) of this AD, do the initial inspections in accordance with the applicable TR identified in Table 1 of this AD.

(1) For Tasks FSL-01, FSL-02, FSL-03, FSL-04 and FSL-05: Inspect at the later of the times specified in paragraphs (h)(1)(i) and (h)(1)(ii) of this AD.

(i) Prior to the accumulation of 18,000 total flight hours.

(ii) Within 6,000 flight hours or within 36 months after the effective date of this AD, whichever occurs first.

(2) For Task FSL-06: Inspect at the later of the times specified in paragraphs (h)(2)(i) and (h)(2)(ii) of this AD.

(i) Prior to the accumulation of 40,000 total flight hours.

(ii) Within 6,000 flight hours or within 36 months after the effective date of this AD, whichever occurs first.

(3) For Task FSL-07: Within 1 month after the effective date of this AD.

(4) For Task FSL-08: Inspect at the later of the times specified in paragraphs (h)(4)(i) and (h)(4)(ii) of this AD.

(i) Prior to the accumulation of 4,000 total flight hours.

(ii) Within 2,000 flight hours or within 12 months after the effective date of this AD, whichever occurs first.

Table 1 – Temporary Revisions

Task -	Viking TR -	Date -
FSL-01	5-107	December 15, 2008
FSL-02	5-108	December 15, 2008
FSL-06	5-109	December 15, 2008
FSL-07	5-110	December 15, 2008
FSL-08	5-111	December 15, 2008
FSL-03	5-112	December 15, 2008
FSL-04 and FSL-05	5-113	December 15, 2008

FAA AD Differences

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

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 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

(j) Refer to MCAI Canadian Airworthiness Directive CF-2009-15, dated April 17, 2009, and the TRs identified in Table 2 of this AD, for related information.

Table 2 – Related Service Information

Viking TR -	Dated -	Chapter 5 of the -
5-106	December 15, 2008	Viking Dash 7 Series 1/100 AMM, PSM 1-7-2
5-107	December 15, 2008	Viking Dash 7 Series 100 Maintenance Manual, PSM 1-7-2
5-108	December 15, 2008	Viking Dash 7 Series 100 Maintenance Manual, PSM 1-7-2
5-109	December 15, 2008	Viking Dash 7 Series 100 Maintenance Manual, PSM 1-7-2
5-110	December 15, 2008	Viking Dash 7 Series 100 Maintenance Manual, PSM 1-7-2
5-111	December 15, 2008	Viking Dash 7 Series 100 Maintenance Manual, PSM 1-7-2
5-112	December 15, 2008	Viking Dash 7 Series 100 Maintenance Manual, PSM 1-7-2
5-113	December 15, 2008	Viking Dash 7 Series 100 Maintenance Manual, PSM 1-7-2

Material Incorporated by Reference

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

Table 3 – Material incorporated by reference

Viking TR -	Dated -	Chapter 5 of the -
5-106	December 15, 2008	Viking Dash 7 Series 1/100 Airplane Maintenance Manual, PSM 1-7-2
5-107	December 15, 2008	Viking Dash 7 Series 100 Maintenance Manual, PSM 1-7-2
5-108	December 15, 2008	Viking Dash 7 Series 100 Maintenance Manual, PSM 1-7-2
5-109	December 15, 2008	Viking Dash 7 Series 100 Maintenance Manual, PSM 1-7-2
5-110	December 15, 2008	Viking Dash 7 Series 100 Maintenance Manual, PSM 1-7-2
5-111	December 15, 2008	Viking Dash 7 Series 100 Maintenance Manual, PSM 1-7-2
5-112	December 15, 2008	Viking Dash 7 Series 100 Maintenance Manual, PSM 1-7-2
5-113	December 15, 2008	Viking Dash 7 Series 100 Maintenance Manual, PSM 1-7-2

(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 Viking Air Limited, 9574 Hampden Road, Sidney, British Columbia, V8L 8V5, Canada; telephone 250-656-7227; fax 250-656-0673; e-mail technical.publications@vikingair.com; Internet http://www.vikingair.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 November 2, 2010.
Dionne Palermo,
Acting Manager, Transport Airplane Directorate,
Aircraft Certification Service.