



**FEDERAL AVIATION ADMINISTRATION
AIRWORTHINESS DIRECTIVES
LARGE AIRCRAFT**

BIWEEKLY 2010-26

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LARGE AIRCRAFT

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

Biweekly 2010-01

2008-04-11 R1		Boeing	707-100 long body, -200, -100B long body, and -100B short body series airplanes; Model 707-300, -300B, -300C, and -400 series airplanes; and Model 720 and 720B
2008-09-12 R1		Bombardier	CL-600-2B19 (Regional Jet Series 100 & 440)
2008-10-09 R1		Boeing	737-100, -200, -200C, -300, -400, and -500
2008-11-01 R1		Boeing	767-200, -300, -300F, and -400ER
2009-20-11	Cor	Boeing	737-300, -400, and -500
2009-24-11		General Electric	See AD
2009-26-03		Boeing	See AD
2009-26-04		Boeing	737-600, -700, -700C, -800, and -900
2009-26-10		Airbus	A380-841, -842, and -861
2009-26-12		Engine Components, Inc. (ECi)	See AD
2009-26-14		CONSTRUCCIONES AERONAUTICAS, S.A. (CASA)	CN-235, CN-235-100, CN-235-200, and CN-235-300
2009-26-15		Embraer	ERJ 170-100 LR, -100 STD, -100 SE, -100 SU, -200 LR, -200 STD, and -200 SU airplanes, certificated in any category, serial numbers 17000156 through 17000169 inclusive; and Model ERJ 190-100 LR, -100 IGW, -100 STD, -200 STD, -200 LR, and -200 IGW
2009-26-16		McDonnell Douglas	MD-11 and MD-11F
2009-26-17		MCDonnell	Model DC-10-10, DC-10-10F, DC-10-15, DC-10-30, DC-10-30F (KC-10A and KDC-10), DC-10-40, and DC-10-40F airplanes, and MD-10-10F and MD-10-30F

Biweekly 2010-02

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

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Biweekly 2010-03

2009-21-10 R1		AVOX Systems and B/E Aerospace	Appliance: Oxygen cylinder assemblies
2009-26-13		Airbus	A330-201, -202, -203, -223, -243, -301, -302, -303, -321, -322, -323, -341, -342, and -343, 340-211, -212, -213, -311, -312, and -313
2010-01-02	S 2005-15-08	Boeing	747-100B SUD, -200B, -300, -400, and -400D
2010-01-10	S 2007-01-15	Boeing	747-100, 747-100B, 747-100B SUD, 747-200B, 747-200C, 747-200F, 747-300, 747SR, and 747SP
2010-02-06		Sicma Aero Seat	Appliance: 90xx and 92xx series passenger seats
2010-02-09		Airbus	A318
2010-02-10		Airbus	A330-201, -202, -203, -223, -243, -301, -302, -303, -321, -322, -323, -341, -342, and -343 series airplanes; Model A340-211, -212, -213, -311, -312, -313 series airplanes; and Model A340-541 and -642
2010-02-11		BAE Systems	BAe 146-100A, -200A, and -300A series airplanes; and BAE SYSTEMS (Operations) Limited Model Avro 146-RJ70A, 146-RJ85A, and 146-RJ100A
2010-02-12		Fokker Services B.V	F.28 Mark 0070 and 0100

Biweekly 2010-04

2010-03-05		Boeing	747-200C and -200F
2010-03-07		Embraer	EMB-135BJ, EMB-135ER, -135KE, -135KL, -135LR, EMB-145, -145ER, -145MR, -145LR, -145XR, -145MP, and -145EP
2010-03-08	S 2003-03-02	Boeing	767-200, -300 and -300F
2010-04-01		Dassault Aviation	Falcon 900EX
2010-04-02		Airbus	A310-221, -222, -322, -324, and -325 airplanes, and Model A300 B4-620, B4-622, B4-622R, and F4-622R
2010-04-03		Airbus	A310-203, -204, -221, -222, -304, -322, -324, and -325

Biweekly 2010-05

2009-06-05 R1		Bombardier, Inc	CL-600-1A11 (CL-600), CL-600-2A12 (CL-601), CL-600-2B16 (CL-601-3A & CL-601-3R), CL-600-2B16 (CL-604)
2010-04-04		Bombardier, Inc	CL-600-2C10 (Regional Jet Series 700, 701, & 702), CL-600-2D15 (Regional Jet Series 705)
2010-04-08		Embraer	ERJ 190-100 LR, -100 IGW, -100 STD, -200 STD, -200 LR, and -200 IGW
2010-04-09		Airbus	A330-201, -202, -203, -223, and -243, A340-211, -212, and -213 airplanes; and Model A340-311, -312, and -313
2010-04-10	S 2009-10-07	Airbus	A380-841, -842, and -861
2010-04-13		Airbus	A310-203, A310-221, and A310-222, A300 F4-605R and A300 F4-622R
2010-04-16		SICLI	Appliance: Portable fire extinguishers
2010-05-01		ATR-GIE Avions de Transport Régional	ATR42-200, -300, -320, and -500 airplanes; and Model ATR72-101, -201, -102, -202, -211, -212, and -212A
2010-05-04		McDonnell Douglas Corporation	MD-90-30
2010-05-05	S 2007-15-08	BAE Systems	ATP
2010-05-06		Airbus	A340-541 and -642
2010-05-07		Airbus	A340-211, -212, and -213 airplanes; and Model A340-311, -312, and -313

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

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

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AD No.	Information	Manufacturer	Applicability
Info: E - Emergency; COR - Correction; S - Supersedes; R - Revision; FR - Final Rule of Emergency			
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		McDonnell Douglas	MD-11 and MD-11F
2010-16-04		Boeing	767-200, -300 and -300F
2010-16-05		Boeing	747-100, 747-100B, 747-100B SUD, 747-200B, 747-200C, 747-200F, 747-300, 747-400, 747-400D, 747-400F, 747SR, and 747SP
2010-16-06		Boeing	737-300, -400, and -500, 737-600, -700, and -800
2010-16-07		Rolls-Royce plc	Engine: RB211-Trent 970-84, 970B-84, 972-84, 972B-84, 977-84, 977B-84, and 980-84
2010-16-09		BAE Systems	BAe 146-100A and -200A
2010-16-10		BAE Systems	BAe 146-100A, -200A, and -300A airplanes, and Avro 146-RJ70A, 146-RJ85A, and 146-RJ100A
2010-16-12		Boeing	777-200LR and -300ER
2010-16-13		Airbus	A300 B4-601, B4-603, B4-620, B4-622, B4-605R, B4-622R, F4-605R, F4-622R, and C4-605R Variant F airplanes; and Model A310-203, -204, -221, -222, -304, -322, -324, and -325

LARGE AIRCRAFT

AD No.	Information	Manufacturer	Applicability
Info: E - Emergency; COR - Correction; S - Supersedes; R - Revision; FR - Final Rule of Emergency			
Biweekly 2010-18			
2010-16-11		McDonnell Douglas Corporation	MD-90-30
2010-17-01		Pratt & Whitney Canada Corp	Engine: PW617F-E
2010-17-02		Airbus	A330-201, -202, -203, -223, -243, -301, -302, -303, -321, -322, -323, -341, -342, and -343 A340-211, -212, -213, -311, -312, -313, A340-541 and -642
2010-17-03		Boeing	767-300
2010-17-04		Airbus	A380-841, -842, and -861
2010-17-05		Boeing	737-600, -700, -700C, -800, and -900
2010-17-07		Airbus	A330-223, -321, -322, and -323
2010-17-10		Rolls-Royce plc	Engine: RB211-22B series and RB211-524B4-D-02, RB211-524D4-19, RB211-524D4-39, RB211-524D4-B-19, RB211-524D4-B-39, RB211-524D4X-19, and RB211-524D4X-B-19
2010-17-11		Dowty Propellers	Propeller: R408/6-123-F/17
2010-17-12	S 2009-22-01	Rolls-Royce Deutschland Ltd & Co KG	Engine: Tay 650-15, Tay 651-54
2010-17-13		Rolls-Royce plc	Engine: RB211-524C2-19 and RB211-524C2-B-19
2010-17-17		Bombardier, Inc	CL-600-2B19 (Regional Jet Series 100 & 440)
2010-17-19	S 2010-09-05	Boeing	737-600, -700, -700C, -800, -900, and -900ER
2010-18-01		Embraer	ERJ 170-100 LR, -100 STD, -100 SE, and -100 SU, ERJ 170-200 LR, -200 SU, and -200 STD, ERJ 190-100 STD, -100 LR, -100 ECJ, and -100 IGW, ERJ 190-200 STD, -200 LR, and -200 IGW
2010-18-03		Dassault	Falcon 7X
2010-18-04		Embraer	ERJ 170-100 LR, -100 STD, -100 SE, -100 SU, -200 LR, -200 STD, and -200 SU, ERJ 190-100 LR, -100 IGW, -100 STD, -200 STD, -200 LR, and -200 IGW
2010-18-07		Airbus	A318-111, -112, -121, and -122, A319-111, -112, -113, -114, -115, -131, -132, and -133, A320-111, -211, -212, -214, -231, -232, and -233, A321-111, -112, -131, -211, -212, -213, -231, and -232
2010-18-09		Pratt & Whitney Canada	PW530A, PW545A, and PW545B
Biweekly 2010-19			
2010-17-14		Boeing	737-100 and -200
2010-18-08	S 2009-10-10	Bombardier, Inc.	CL-600-2C10 (Regional Jet Series 700, 701, & 702)
2010-18-10		BAE Systems	BAe 146-100A, -200A, and -300A series airplanes and Model Avro 146-RJ70A, 146-RJ85A, and 146-RJ100A
2010-18-11		Bombardier, Inc.	CL-600-2C10 (Regional Jet Series 700, 701, & 702); Model CL-600-2D15 (Regional Jet Series 705); and Model CL-600-2D24 (Regional Jet Series 900)
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	Boeing	747-100, 747-200B, and 747-200F series
	S 94-12-09		
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

LARGE AIRCRAFT

AD No.	Information	Manufacturer	Applicability
Info: E - Emergency; COR - Correction; S - Supersedes; R - Revision; FR - Final Rule of Emergency			
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
Biweekly 2010-25			
2010-23-26	S 2006-12-13	Airbus	A300 B2-1C, B2K-3C, B2-203, B4-2C, B4-103, B4-2, B4-601, B4-603, B4-620, B4-622, B4-605R, B4-622R, and F4-605R
2010-23-27		Airbus	A340-541 and A340-642
2010-24-01		Boeing	737-900ER series
2010-24-02		Dassault Aviation	FALCON 7X
2010-24-05		Pratt & Whitney Canada	Engine: PW305A and PW305B
2010-24-08		Dassault Aviation	MYSTERE-FALCON 50
2010-24-09		Pratt & Whitney	Engine: PW4050, PW4052, PW4056, PW4060, PW4060A, PW4060C, PW4062, PW4062A, PW4152, PW4156, PW4156A, PW4158, PW4160, PW4460, PW4462, PW4650, PW4164, PW4168, PW4168A, PW4164C, PW4164C/B, PW4170, PW4168A-1D, PW4168-1D, PW4164-1D, PW4164C-1D, PW4164C/B-1D, PW4074, PW4074D, PW4077, PW4077D, PW4084, PW4084D, PW4090, PW4090-3, PW4090D, and PW4098
2010-24-11		Boeing	737-600, -700, -700C, -800, and -900 series

LARGE AIRCRAFT

AD No.	Information	Manufacturer	Applicability
Info: E - Emergency; COR - Correction; S - Supersedes; R - Revision; FR - Final Rule of Emergency			
Biweekly 2010-26			
2010-23-07	COR	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
2010-24-07		Airbus	A318-111, A318-112, A319-111, A319-112, A319-113, A319-114, A319-115, A319-131, A319-132, A319-133, A320-111, A320-211, A320-212, A320-214, A320-231, A320-232, A320-233, A321-111, A321-112, A321-131, A321-211, A321-212, A321-213, A321-231, and A321-232
2010-24-12		Boeing	777-200, -300, and -300ER
2010-24-13		Boeing	747-100, 747-100B, 747-100B SUD, 747-200B, 747-200C, 747-200F, 747-300, 747SR, and 747SP series
2010-24-14		Pratt & Whitney	Engine: PW4050, PW4052, PW4056, PW4060, PW4060A, PW4060C, PW4062, PW4062A, PW4152, PW4156, PW4156A, PW4158, PW4160, PW4460, PW4462, PW4650, PW4168A-1D, PW4170, PW4164-1D, and PW4168-1D
2010-25-03		Airbus	A300 B2-1A, B2-1C, B4-2C, B2K-3C, B4-103, B2-203, and B4-203
2010-25-04		McDonnell Douglas	DC-9-31, DC-9-32, DC-9-32 (VC-9C), DC-9-32F, DC-9-32F (C-9A, C-9B), DC-9-33F, DC-9-34, DC-9-34F, DC-9-41, DC-9-51, DC-9-81 (MD-81), DC-9-82 (MD-82), DC-9-83 (MD-83), and DC-9-87 (MD-87), MD-88, and MD-90-30
2010-25-05		Rolls-Royce Deutschland	Engine: BR700-710A1-10, BR700-710A2-20, and BR700-710C4-11
2010-26-01		Boeing	777-200 series



CORRECTION: [*Federal Register: December 17, 2010 (Volume 75, Number 242)*]; Page 78883;
www.access.gpo.gov/su_docs/aces/aces140.html]

2010-23-07 Airbus: Amendment 39-16496. Docket No. FAA-2010-0279; Directorate Identifier 2009-NM-148-AD.

Effective Date

(a) This airworthiness directive (AD) becomes effective December 10, 2010.

Affected ADs

(b) None.

Applicability

(c) This AD applies to Airbus Model 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 airplanes; certificated in any category, all manufacturer serial numbers (S/Ns), if equipped with carbon fiber reinforced plastic rudders having part numbers (P/Ns) and S/Ns as listed in Table 1 of this AD.

Table 1—Rudder Part Number and Affected Rudder Serial Number

Rudder P/N	Affected rudder S/N
D554 71000 010 00	TS-1069
D554 71000 010 00	TS-1090
D554 71000 012 00	TS-1227
D554 71000 014 00	TS-1350
D554 71000 014 00	TS-1366
D554 71000 014 00	TS-1371
D554 71000 014 00	TS-1383
D554 71000 014 00	TS-1387
D554 71000 016 00	TS-1412
D554 71000 018 00	TS-1443
D554 71000 018 00	TS-1444
D554 71000 018 00	TS-1468
D554 71000 020 00	TS-1480
D554 71000 020 00	TS-1491
D554 71000 020 00	TS-1495
D554 71000 020 00	TS-1498
D554 71000 020 00	TS-1499
D554 71000 020 00	TS-1500
D554 71000 020 00	TS-1505
D554 71000 020 00	TS-1506
D554 71000 020 00	TS-1507
D554 71000 020 00	TS-1509
D554 71000 020 00	TS-1515
D554 71000 020 00	TS-1528
D554 71000 020 00	TS-1530
D554 71000 020 00	TS-1532
D554 71000 020 00	TS-1535
D554 71000 020 00	TS-1536
D554 71000 020 00	TS-1538
D554 71001 000 00	TS-1537
D554 71001 00 000	TS-1540
D554 71001 000 00	TS-1541
D554 71001 000 00	TS-1543
D554 71001 000 00	TS-1548
D554 71001 000 00	TS-1549
D554 71001 000 00	TS-1551

D554 71001 000 00	TS-1554
D554 71001 000 00	TS-1555
D554 71001 000 00	TS-1556
D554 71001 000 00	TS-1557
D554 71001 000 00	TS-1559
D554 71001 000 00	TS-1562
D554 71001 000 00	TS-1563
D554 71001 000 00	TS-1564
D554 71001 000 00	TS-1565
D554 71001 000 00	TS-1566
D554 71001 000 00	TS-1567
D554 71001 000 00	TS-1568
D554 71001 000 00	TS-1569
D554 71001 000 00	TS-1570
D554 71001 000 00	TS-1573
D554 71001 000 00	TS-1575
D554 71001 000 00	TS-1578
D554 71001 000 00	TS-1579
D554 71001 000 00	TS-1580
D554 71001 000 00	TS-1581
D554 71001 000 00	TS-1582
D554 71001 000 00	TS-1584
D554 71001 000 00	TS-1593
D554 71001 000 00	TS-1594
D554 71001 000 00	TS-1596
D554 71001 000 00	TS-1599
D554 71001 000 00	TS-1603
D554 71001 000 00	TS-1609
D554 71001 000 00	TS-1621
D554 71001 000 00	TS-1626
D554 71001 000 00	TS-1627
D554 71001 000 00	TS-1635
D554 71001 000 00	TS-1637
D554 71002 000 00	TS-2306
D554 71002 000 00 0001	TS-2003
D554 71002 000 00 0001	TS-2005
D554 71002 000 00 0001	TS-2013
D554 71002 000 00 0001	TS-2016
D554 71002 000 00 0001	TS-2019
D554 71002 000 00 0001	TS-2020
D554 71002 000 00 0001	TS-2022
D554 71002 000 00 0001	TS-2024
D554 71002 000 00 0001	TS-2026
D554 71002 000 00 0001	TS-2031
D554 71002 000 00 0001	TS-2033
D554 71002 000 00 0001	TS-2043
D554 71002 000 00 0001	TS-2047
D554 71002 000 00 0001	TS-2048

D554 71002 000 00 0001	TS-2054
D554 71002 000 00 0001	TS-2058
D554 71002 000 00 0001	TS-2059
D554 71002 000 00 0001	TS-2064
D554 71002 000 00 0001	TS-2072
D554 71002 000 00 0001	TS-2075
D554 71002 000 00 0001	TS-2076
D554 71002 000 00 0001	TS-2079
D554 71002 000 00 0001	TS-2083
D554 71002 000 00 0001	TS-2089
D554 71002 000 00 0002	TS-2090
D554 71002 000 00 0002	TS-2095
D554 71002 000 00 0002	TS-2103
D554 71002 000 00 0002	TS-2116
D554 71002 000 00 0002	TS-2122
D554 71002 000 00 0002	TS-2133
D554 71002 000 00 0002	TS-2142
D554 71002 000 00 0002	TS-2147
D554 71002 000 00 0002	TS-2157
D554 71002 000 00 0002	TS-2158
D554 71002 000 00 0002	TS-2162
D554 71002 000 00 0002	TS-2167
D554 71002 000 00 0002	TS-2174
D554 71002 000 00 0002	TS-2176
D554 71002 000 00 0002	TS-2181
D554 71002 000 00 0002	TS-2189
D554 71002 000 00 0002	TS-2191
D554 71002 000 00 0002	TS-2203
D554 71002 000 00 0002	TS-2205
D554 71002 000 00 0002	TS-2207
D554 71002 000 00 0002	TS-2224
D554 71002 000 00 0002	TS-2229
D554 71002 000 00 0002	TS-2233
D554 71002 000 00 0002	TS-2241
D554 71002 000 00 0002	TS-2246
D554 71002 000 00 0002	TS-2249
D554 71002 000 00 0002	TS-2270
D554 71002 000 00 0002	TS-2275
D554 71002 000 00 0002	TS-2289
D554 71002 000 00 0002	TS-2290
D554 71002 000 00 0002	TS-2294
D554 71002 000 00 0002	TS-2309
D554 71002 000 00 0002	TS-2347
D554 71002 000 00 0002	TS-2348
D554 71002 000 00 0002	TS-2349
D554 71002 000 00 0002	TS-2357
D554 71002 000 00 0002	TS-2361
D554 71002 000 00 0002	TS-2380

D554 71002 000 00 0002	TS-2383	D554 71002 000 00 0002	TS-2546
D554 71002 000 00 0002	TS-2390	D554 71002 000 00 0002	TS-2619
D554 71002 000 00 0002	TS-2394	D554 71002 000 00 0002	TS-2684
D554 71002 000 00 0002	TS-2396	D554 71002 000 00 0003	TS-2752
D554 71002 000 00 0002	TS-2401	D554 71002 000 00 0003	TS-2869
D554 71002 000 00 0002	TS-2406	D554 71002 000 00 0003	TS-2876
D554 71002 000 00 0002	TS-2461	D554 71002 000 00 0003	TS-2970
D554 71002 000 00 0002	TS-2468	D554 71002 000 00 0003	TS-2971
D554 71002 000 00 0002	TS-2516	D554 71002 000 00 0003	TS-2987
D554 71002 000 00 0002	TS-2537	D554 71004 000 00 0000	TS-3083
D554 71002 000 00 0002	TS-2543	D554 71004 000 00 0000	TS-3197

Note 1: Only rudder P/N D554 71000 010 00 having affected rudder S/N TS-1069 and TS-1090 and rudder P/N D554 71000 012 00 having affected rudder S/N TS-1227, have a core density of 24 kilogram (kg)/meters cubed (m³).

Subject

(d) Air Transport Association (ATA) of America Code 55: Stabilizers.

Reason

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

Surface defects were visually detected on the rudder of one A319 and one A321 in-service aeroplane.

Investigation has determined that the defects reported on both rudders corresponded to areas that had been reworked in production. The investigation confirmed that the defects were a result of de-bonding between the skin and honeycomb core.

An extended de-bonding, if not detected and corrected, may degrade the structural integrity of the rudder. The loss of the rudder leads to degradation of the handling qualities and reduces the controllability of the aeroplane.

This AD requires inspections of specific areas and, when necessary, the application of corrective actions for those rudders where production reworks have been identified.

Inspections include vacuum loss inspections for de-bonding of the rudders in reinforced areas and other areas (splice/lower rib/upper edge/leading edge/other specified locations), and elasticity laminate checks for de-bonding of the rudders in the trailing edge area and other areas (splice/lower rib/upper edge/leading edge/other specified locations). Corrective actions include contacting Airbus for further instruction and doing the repair.

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) For rudders with a honeycomb core density of 24 kg/m^3 (rudder P/N D554 71000 010 00 having affected rudder S/Ns TS-1069 and TS-1090 and rudder P/N D554 71000 012 00 having affected rudder S/N TS-1227), do the actions specified in paragraphs (g)(1), (g)(2), (g)(3), and (g)(4) of this AD, in accordance with Airbus All Operators Telex (AOT) A320-55A1038, Revision 01, dated June 10, 2009; or Airbus AOT A320-55A1038, Revision 02, dated September 28, 2009; for the locations defined in the AOT.

(1) Within 200 days after the effective date of this AD, perform a vacuum loss inspection on the rudder reinforced area.

(2) Within 20 months after the effective date of this AD, perform an elasticity laminate checker inspection on the rudder trailing edge area. Repeat the inspection two times, at intervals not to exceed 4,500 flight cycles but not sooner than 4,000 flight cycles after the last inspection.

(3) Within 200 days after the effective date of this AD, perform an elasticity laminate checker inspection of the other areas (splice/lower rib/upper edge/leading edge/other specified locations). Repeat the inspection at intervals not to exceed 1,500 flight cycles or 200 days, whichever comes first.

(4) Within 20 months after the effective date of this AD, perform a vacuum loss inspection of the other areas (splice/lower rib/upper edge/leading edge/other specified locations). Accomplishment of the action specified in paragraph (g)(4) of this AD terminates the requirements of paragraph (g)(3) of this AD.

(h) For rudders that do not have a honeycomb core density of 24 kg/m^3 (all rudders identified in Table 1 of this AD, except: Rudder P/N D554 71000 010 00 having affected rudder S/Ns TS-1069 and TS-1090 and rudder P/N D554 71000 012 00 having affected rudder S/N TS-1227), do the actions specified in paragraphs (h)(1), (h)(2), (h)(3), and (h)(4) of this AD, in accordance with Airbus AOT A320-55A1038, Revision 01, dated June 10, 2009; or Airbus AOT A320-55A1038, Revision 02, dated September 28, 2009; for the locations defined in the AOT. For this AD, "reference date" is defined as the effective date of this AD or the date when the rudder will accumulate 20,000 total flight cycles from its first installation on an airplane, whichever occurs later.

(1) Within 200 days after the reference date, perform a vacuum loss inspection on the rudder reinforced area.

(2) Within 20 months after the reference date, perform an elasticity laminate checker inspection on the rudder trailing edge area. Repeat the inspection two times at intervals not to exceed 4,500 flight cycles but not sooner than 4,000 flight cycles after the last inspection.

(3) Within 200 days after the reference date, perform an elasticity laminate checker inspection of the other areas (splice/lower rib/upper edge/leading edge/other specified locations). Repeat the inspection at intervals not to exceed 1,500 flight cycles or 200 days, whichever comes first.

(4) Within 20 months after the reference date, perform a vacuum loss inspection of the other areas (splice/lower rib/upper edge/leading edge/other specified locations). Accomplishment of the actions specified in this paragraph terminates the requirements of paragraph (h)(3) of this AD.

(i) In case of de-bonding found during any inspection required by paragraph (g) or (h) of this AD, before further flight, contact Airbus for further instructions and apply the associated instructions and corrective actions in accordance with the approved data provided.

(j) At the applicable time specified in paragraph (j)(1) or (j)(2) of this AD, submit a report of the findings (both positive and negative), of each inspection required by paragraphs (g) and (h) of this AD. The report must include the inspection results, as specified in Airbus Technical Disposition TD/K4/S2/27086/2009, Issue E, dated September 17, 2009. For positive findings, submit the report to

either the Manager, Seer1/Seer2/Seer3 Customer Services; fax +33 (0)5 61 93 28 73; e-mail region1.structurerepairsupport@airbus.com, region2.structurerepairsupport@airbus.com, or region3.structurerepairsupport@airbus.com, or AIRTAC (Airbus Technical AOG Center) Customer Services; telephone +33 (0)5 61 93 34 00; fax +33 (0)5 61 93 35 00; e-mail airtac@airbus.com. For negative findings, submit the report to Nicolas Seynaeve, Sees1, Customer Services; telephone +33 (0)5 61 93 34 38; fax +33 (0)5 61 93 36 14; e-mail nicolas.seynaeve@airbus.com.

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

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

(k) All rudders that have passed the inspection specified in paragraphs (g)(1), (g)(2), (g)(3), (g)(4), (h)(1), (h)(2), (h)(3), and (h)(4) of this AD before the effective date of this AD, in accordance with Airbus AOT A320-55A1038, dated April 22, 2009; or Airbus Technical Disposition TD/K4/S2/27051/2009, Issue B, dated February 25, 2009; are compliant with this AD only for the areas inspected. Additional areas defined in Section 0, "Reason for Revision," of Airbus AOT A320-55A1038, Revision 01, dated June 10, 2009, must be inspected as specified in paragraph (g) or (h) of this AD. For all areas, the repetitive inspections required by paragraph (g) or (h) of this AD remain applicable.

(l) After the effective date of this AD, no rudder listed in Table 1 of this AD may be installed on any airplane, unless the rudder is inspected in accordance with paragraph (g) or (h) of this AD, as applicable, and all applicable actions specified in paragraph (i) of this AD are done.

FAA AD Differences

Note 2: 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, 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: Tim Dulin, Aerospace Engineer, International Branch, ANM-116, Transport Airplane Directorate, FAA, 1601 Lind Avenue SW., Renton, Washington 98057-3356; telephone (425) 227-2141; 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

(n) Refer to MCAI European Aviation Safety Agency Airworthiness Directive 2009-0141, dated July 2, 2009, and the service information identified in Table 2 of this AD, for related information.

Table 2 – Airbus Service Information

Document	Revision/Issue	Date
Airbus All Operators Telex A320-55A1038	Revision 01	June 10, 2009
Airbus All Operators Telex A320-55A1038	Revision 02	September 28, 2009
Airbus Technical Disposition TD/K4/S2/27086/2009	Issue E	September 17, 2009

Material Incorporated by Reference

(o) 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

Document	Revision/Issue	Date
Airbus All Operators Telex A320-55A1038*	Revision 01	June 10, 2009
Airbus All Operators Telex A320-55A1038*	Revision 02	September 28, 2009
Airbus Technical Disposition TD/K4/S2/27086/2009	Issue E	September 17, 2009

(* The first page of these documents contain the document number, revision level, and date; no other pages contain 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 Airbus, Airworthiness Office–EAS, 1 Rond Point Maurice Bellonte, 31707 Blagnac Cedex, France; telephone +33 5 61 93 36 96; fax +33 5 61 93 44 51; e-mail: account.airworth-eas@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.



2010-24-07 Airbus: Amendment 39-16526. Docket No. FAA-2008-0670; Directorate Identifier 2007-NM-339-AD.

Effective Date

(a) This airworthiness directive (AD) becomes effective January 11, 2011.

Affected ADs

(b) None.

Applicability

(c) This AD applies to Airbus Model A318-111, A318-112, A319-111, A319-112, A319-113, A319-114, A319-115, A319-131, A319-132, A319-133, A320-111, A320-211, A320-212, A320-214, A320-231, A320-232, A320-233, A321-111, A321-112, A321-131, A321-211, A321-212, A321-213, A321-231, and A321-232 airplanes, certificated in any category, all manufacturer serial numbers, except airplanes on which Airbus Modification 34804 has been embodied in production or on which Airbus Service Bulletins A320-25-1557 and A320-53-1215 have been done in service.

Subject

(d) Air Transport Association (ATA) of America Code 25: Equipment/Furnishings, and Code 53: Fuselage.

Reason

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

Damage to the lower lateral fittings of the 80VU rack, typically elongated holes, migrated bushes [bushings], and/or missing bolts have been reported in-service. In addition damage to the lower central support fitting (including cracking) has been reported.

In the worst case scenario a complete failure of the 80VU fittings in combination with a high load factor or strong vibration could lead to failure of the rack structure and/or computers or rupture/disconnection of the cable harnesses to one or more computers located in the 80VU. This rack contains computers for Flight Controls, Communication and Radio-navigation. These functions are duplicated across other racks but during critical phases of flight the multiple system failures/re-configuration may constitute an unsafe condition.

* * * * *

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 of the 80V Rack Lower Lateral Fittings

(g) Prior to the accumulation of 24,000 total flight cycles, or within 500 flight cycles after the effective date of this AD, whichever occurs later: Do a special detailed inspection of the 80VU rack lower lateral fittings for damage (e.g., broken fitting, missing bolts, migrated bushings, material burr, or rack in contact with the fitting) of the 80VU rack lower lateral fittings, in accordance with the Accomplishment Instructions of Airbus Mandatory Service Bulletin A320-25A1555, Revision 02, dated November 5, 2008. Repeat the inspection thereafter at the interval specified in paragraph (g)(1) or (g)(2) of this AD, as applicable. Modifying the 80VU lower lateral fittings, in accordance with the Accomplishment Instructions of Airbus Service Bulletin A320-25-1557, Revision 02, dated November 5, 2008, terminates the inspection requirements of this paragraph.

(1) For airplanes on which the 80VU rack lower lateral fittings have not been replaced in accordance with the Airbus Mandatory Service Bulletin A320-25A1555: Repeat the inspection thereafter at intervals not to exceed 4,500 flight cycles.

(2) For airplanes on which the 80VU rack lower lateral fittings have been replaced in accordance with Airbus Mandatory Service Bulletin A320-25A1555: Do the next inspection within 24,000 flight cycles after doing the replacement and repeat the inspection thereafter at intervals not to exceed 4,500 flight cycles.

(h) If any damage is found during any inspection required by paragraph (g) of this AD, do all applicable corrective actions (inspection and/or repair) in accordance with the Accomplishment Instructions and timeframes given in Airbus Mandatory Service Bulletin A320-25A1555, Revision 02, dated November 5, 2008.

Repetitive Inspections of the 80V Rack Lower Central Support

(i) Prior to the accumulation of 24,000 total flight cycles, or within 500 flight cycles after the effective date of this AD, whichever occurs later: Do a special detailed inspection of the 80VU rack lower central support for cracking, in accordance with the Accomplishment Instructions of Airbus Mandatory Service Bulletin A320-25A1555, Revision 02, dated November 5, 2008. Repeat the inspection thereafter at the interval specified in paragraph (i)(1) or (i)(2) of this AD, as applicable. Replacing the pyramid fitting on the 80VU rack with a new, reinforced fitting, in accordance with the Accomplishment Instructions of Airbus Service Bulletin A320-53-1215, dated November 5, 2008, terminates the inspection requirements of this paragraph.

(1) For airplanes on which the 80VU rack lower central support has not been repaired or replaced in accordance with Airbus Mandatory Service Bulletin A320-25A1555 or Airbus Service Bulletin A320-25-1557: Repeat the inspection thereafter at the interval specified in paragraph (i)(1)(i) or (i)(1)(ii) of this AD, as applicable.

(i) For airplanes on which the lower central support has accumulated 30,000 total flight cycles or more: At intervals not to exceed 500 flight cycles.

(ii) For airplanes on which the lower central support has accumulated less than 30,000 total flight cycles: At intervals not to exceed 4,500 flight cycles, without exceeding 30,750 total flight cycles on the support for the first repetitive inspection.

(2) For airplanes on which the 80VU rack lower central support has been repaired or replaced in accordance with Airbus Mandatory Service Bulletin A320-25A1555 or Airbus Service Bulletin A320-25-1557: Do the next inspection within 24,000 flight cycles after the repair or replacement and thereafter repeat the inspection at the interval specified in paragraph (i)(1)(i) or (i)(1)(ii) of this AD, as applicable.

(j) If any crack is found during any inspection required by paragraph (i) of this AD, before further flight, replace the pyramid fitting on the 80VU rack with a new, reinforced fitting, in accordance with the Accomplishment Instructions of Airbus Service Bulletin A320-53-1215, dated November 5, 2008. Doing this replacement terminates the inspection requirements of paragraph (i) of this AD.

Optional Terminating Action

(k) Doing the actions specified in paragraphs (k)(1) and (k)(2) of this AD terminates the requirements of paragraphs (g) and (i) of this AD.

(1) Replacing the pyramid fitting on the 80VU rack with a new, reinforced fitting, in accordance with the Accomplishment Instructions of Airbus Service Bulletin A320-53-1215, dated November 5, 2008.

(2) Modifying the 80VU lower lateral fittings, in accordance with Airbus Service Bulletin A320-25-1557, Revision 02, dated November 5, 2008.

Credit for Actions Accomplished in Accordance With Previous Service Information

(l) Actions done before the effective date of this AD in accordance with the service information identified in Table 1 of this AD are acceptable for compliance with the corresponding requirements of this AD.

Table 1—Previous Revisions of Service Information

Service information	Revision level	Date
Airbus Mandatory Service Bulletin A320–25A1555	01	February 18, 2008.
Airbus Service Bulletin A320–25A1555	Original	June 14, 2007.
Airbus Service Bulletin A320–25–1557	Original	June 14, 2007.
Airbus Service Bulletin A320–25–1557	01	February 7, 2008.

FAA AD Differences

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

(1) Although the MCAI or service information allows further flight after cracks are found during compliance with the required action, paragraph (j) of this AD requires that you do a corrective action before further flight.

(2) Although the MCAI specifies doing a repair or replacement and repetitive inspections after the repair or replacement is done if cracking is found in the 80VU rack lower central support, paragraph (j) of this AD requires that you perform a replacement, which eliminates the need for further repetitive inspections of the part.

Other FAA AD Provisions

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

(1) Alternative Methods of Compliance (AMOCs): The Manager, ANM-116, International Branch, Transport Airplane Directorate, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. Send information to ATTN: Tim Dulin, Aerospace Engineer, International Branch, ANM-116, Transport Airplane Directorate, FAA, 1601 Lind Avenue, SW., Renton, Washington 98057-3356; telephone (425) 227-2141; 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: A Federal agency may not conduct or sponsor, and a person is not required to respond to, nor shall a person be subject to a penalty for failure to comply with a collection of information subject to the requirements of the Paperwork Reduction Act unless that collection of information displays a current valid OMB Control Number. The OMB Control Number for this information collection is 2120-0056. Public reporting for this collection of information is estimated to be approximately 5 minutes per response, including the time for reviewing instructions, completing and reviewing the collection of information. All responses to this collection of information are mandatory. Comments concerning the accuracy of this burden and suggestions for reducing the burden should be directed to the FAA at: 800 Independence Ave., SW., Washington, DC 20591, Attn: Information Collection Clearance Officer, AES-200.

Related Information

(n) Refer to MCAI EASA Airworthiness Directive 2007-0276R1, dated March 18, 2010, (corrected April 12, 2010), and the service information identified in Table 2 of this AD, for related information.

Table 2—Related Service Information

Service information	Revision level	Date
Airbus Mandatory Service Bulletin A320–25A1555	02	November 5, 2008.
Airbus Service Bulletin A320–25–1557	02	November 5, 2008.
Airbus Service Bulletin A320–53–1215	Original	November 5, 2008.

Material Incorporated by Reference

(o) You must use the service information specified in paragraphs (o)(1) and (o)(2) of this AD, as applicable, unless the AD specifies otherwise.

(1) For the actions required by this AD: Airbus Mandatory Service Bulletin A320-25A1555, excluding Appendix 1, Revision 02, dated November 5, 2008; and Airbus Service Bulletin A320-53-1215, dated November 5, 2008.

(2) For the optional actions specified by this AD: Airbus Service Bulletin A320-25-1557, Revision 02, dated November 5, 2008; and Airbus Service Bulletin A320-53-1215, dated November 5, 2008.

(3) 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.

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

(5) 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.

(6) 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 15, 2010.

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



2010-24-12 The Boeing Company: Amendment 39-16531. Docket No. FAA-2007-27042; Directorate Identifier 2006-NM-225-AD.

Effective Date

(a) This airworthiness directive (AD) is effective January 20, 2011.

Affected ADs

(b) None.

Applicability

(c) This AD applies to The Boeing Company airplanes, certificated in any category, as identified in the applicable service information specified in Table 1 of this AD.

Table 1 – Service Information

For Model –	Boeing –
777-200, -300, and -300ER airplanes	Service Bulletin 777-57A0050, Revision 2, dated May 14, 2009
777-200 and -300 airplanes	Alert Service Bulletin 777-57A0051, dated May 15, 2006
777-200, -300, and -300ER airplanes	Alert Service Bulletin 777-57A0057, Revision 1, dated August 2, 2007
777-200, -300, and -300ER airplanes	Alert Service Bulletin 777-57A0059, dated October 30, 2008

Note 1: Although Boeing Service Bulletin 777-57A0050, Revision 2, dated May 14, 2009, refers to "Model 777-200ER" airplanes, this is a European designation that does not apply to airplanes of U.S. registry. Therefore, the applicability of this AD will not specify Model 777-200ER airplanes. However, U.S. operators should consider any reference to Model 777-200ER airplanes in Boeing Service Bulletin 777-57A0050, Revision 2, as applicable to Model 777-200 airplanes as designated by the type certificate data sheet.

Subject

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

Unsafe Condition

(e) This AD results from fuel system reviews conducted by the manufacturer. The Federal Aviation Administration is issuing this AD to prevent electrical arcing on the fuel tank boundary structure or inside the main and center fuel tanks, which could result in a fire or explosion.

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.

Corrective Actions (Installing Teflon Sleeving, Cap Sealing, One-Time Inspection)

(g) Within 60 months after the effective date of this AD, do the applicable actions specified in paragraph (g)(1), (g)(2), (g)(3), or (g)(4) of this AD.

(1) For airplanes identified in Boeing Service Bulletin 777-57A0050, Revision 2, dated May 14, 2009: Install Teflon sleeving under the clamps of certain wire bundles routed along the fuel tank boundary structure and cap seal certain penetrating fasteners of the fuel tanks, in accordance with the Accomplishment Instructions of Boeing Service Bulletin 777-57A0050, Revision 2, dated May 14, 2009.

(2) For airplanes identified in Boeing Alert Service Bulletin 777-57A0051, dated May 15, 2006: Cap seal certain penetrating fasteners of the fuel tanks, in accordance with the Accomplishment Instructions of Boeing Alert Service Bulletin 777-57A0051, dated May 15, 2006.

(3) For airplanes identified in Boeing Alert Service Bulletin 777-57A0057, Revision 1, dated August 2, 2007: Do a general visual inspection to determine if certain fasteners are cap sealed and do all applicable corrective actions, in accordance with the Accomplishment Instructions of Boeing Alert Service Bulletin 777-57A0057, Revision 1, dated August 2, 2007. Do all applicable corrective actions before further flight.

(4) For airplanes identified in Boeing Alert Service Bulletin 777-57A0059, dated October 30, 2008: Cap seal the fasteners in the center fuel tanks that were not sealed during production, in accordance with the Accomplishment Instructions of Boeing Alert Service Bulletin 777-57A0059, dated October 30, 2008.

Credit for Actions Done Using Previous Issues of the Service Bulletins

(h) Actions done before the effective date of this AD in accordance with the Accomplishment Instructions of Boeing Alert Service Bulletin 777-57A0050, dated January 26, 2006; or Revision 1, dated August 2, 2007; are acceptable for compliance with the corresponding actions required by paragraph (g)(1) of this AD, provided that the applicable additional work specified in Boeing Service Bulletin 777-57A0050, Revision 2, dated May 14, 2009, is done within the compliance time specified in paragraph (g) of this AD. The additional work must be done in accordance with Boeing Service Bulletin 777-57A0050, Revision 2, dated May 14, 2009.

(i) Actions done before the effective date of this AD in accordance with the Accomplishment Instructions of Boeing Alert Service Bulletin 777-57A0057, dated August 7, 2006, are acceptable for compliance with the actions required by paragraph (g)(3) of this AD.

Alternative Methods of Compliance (AMOCs)

(j)(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: Margaret Langsted, Aerospace Engineer, Propulsion Branch, ANM-140S, FAA, Seattle ACO, 1601 Lind Avenue, SW., Renton, Washington 98057-3356; telephone (425) 917-6500; fax (425) 917-6590. Or, e-mail information to 9-ANM-Seattle-ACO-AMOC-Requests@faa.gov.

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

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

Material Incorporated by Reference

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

Table 2 – Material incorporated by reference

Document –	Revision –	Date –
Boeing Alert Service Bulletin 777-57A0051	Original	May 15, 2006
Boeing Alert Service Bulletin 777-57A0057	1	August 2, 2007
Boeing Alert Service Bulletin 777-57A0059	Original	October 30, 2008
Boeing Service Bulletin 777-57A0050	2	May 14, 2009

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

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

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

(4) You may also review copies of the service information that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to: http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html.

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Issued in Renton, Washington, on November 18, 2010.
Ali Bahrami,
Manager, Transport Airplane Directorate,
Aircraft Certification Service.



2010-24-13 The Boeing Company: Amendment 39-16532; Docket No. FAA-2008-1098; Directorate Identifier 2008-NM-108-AD.

Effective Date

(a) This AD is effective January 20, 2011.

Affected ADs

(b) None.

Applicability

(c) This AD applies to The Boeing Company Model 747-100, 747-100B, 747-100B SUD, 747-200B, 747-200C, 747-200F, 747-300, 747SR, and 747SP series airplanes, certificated in any category; as identified in Boeing Service Bulletin 747-28A2288, Revision 1, dated January 21, 2010.

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

Subject

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

Unsafe Condition

(e) This AD results from fuel system reviews conducted by the manufacturer. The Federal Aviation Administration is issuing this AD to prevent uncommanded operation of the override/jettison pumps of the center wing tanks, and failure to manually shut off the override/jettison pumps at the correct time, either of which could lead to an ignition source inside the center wing tank. This condition, in combination with flammable fuel vapors, could result in a center fuel tank explosion and consequent loss of the airplane.

Compliance

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

Installation of Indicator Lights and Replacement of Switches

(g) Within 36 months after the effective date of this AD: For airplanes with a P10 panel installed, add two new indicator lights on the P10 panel to inform the captain and first officer of a low pressure condition in the left and right override/jettison pumps of the center wing tanks, and, for airplanes that do not have the warning panel (P10 panel) installed, add a mounting bracket and two new indicator lights to the Autopilot Flight Director panel; and replace the left and right override/jettison switches on the M154 fuel control module on the P4 panel with improved switches; and do the associated wiring changes. Accomplish these actions by doing all of the applicable actions specified in the Accomplishment Instructions of Boeing Service Bulletin 747-28A2288, Revision 1, dated January 21, 2010, except where that service bulletin states "20-60-00," the correct sub-section number is "28-60-06," and except as described in Table 1 of this AD.

Table 1- Part number correction

Part name	Part number specified in Figures 22 through 32 of Boeing Service Bulletin 747-28A2288, Revision 1, dated January 21, 2010	Part name of correct part	Correct part number
Nut	BACN10JC06CD	Nut	BACN10NW1
Bolt	BACS12HN06-10	Screw	BACS12HN04-6
Washer	NAS1149D0632J	Washer	NAS1149DN416J

Note 2: For airplanes equipped with certain M154 fuel control modules, paragraph 2.C.2 of Boeing Service Bulletin 747-28A2288, Revision 1, dated January 21, 2010, refers to the BAE Systems service bulletins identified in Table 2 of this AD, as applicable, as additional sources of guidance for replacing the switches.

Table 2 – Additional Sources of Guidance

Service Bulletin	Date
BAE Systems Service Bulletin 65B46124-28-01	February 16, 2006
BAE Systems Service Bulletin 65B46124-28-02	March 28, 2007
BAE Systems Service Bulletin 65B46124-28-03	March 28, 2007
BAE Systems Service Bulletin 65B46214-28-01	February 16, 2006
BAE Systems Service Bulletin 65B46214-28-02	March 28, 2007
BAE Systems Service Bulletin 65B46214-28-03	March 28, 2007

Maintenance Program Revision

(h) Concurrently with accomplishing the actions required by paragraph (g) of this AD, revise the maintenance program by incorporating Airworthiness Limitation (AWL) No. 28-AWL-22 of Section D of the Boeing 747-100/200/300/SP Airworthiness Limitations (AWLs) and Certification Maintenance Requirements (CMRs), D6-13747-CMR, Revision March 2008. Where the AWL states "28-31-00," the correct section number is "28-42-00."

Airplane Flight Manual (AFM) Revision

(i) Concurrently with accomplishing the actions required by paragraph (g) of this AD, revise Section 1, "Certificate Limitations," of the applicable Boeing 747 AFM to include the following statement. This may be done by inserting a copy of this AD into the AFM.

"When the center tank override jettison pumps are selected off, the amber pump low pressure lights on the Flight Engineer's panel should illuminate and remain on. If a pump low pressure light on the Flight Engineer's panel does not illuminate, open the associated pump circuit breaker."

Note 3: When a statement identical to that in paragraph (i) of this AD has been included in the general revisions of the AFM, the general revisions may be inserted into the AFM, and the copy of this AD may be removed from the AFM.

No Alternative Inspections or Inspection Intervals

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

Terminating Action for Maintenance Program Revision

(k) Incorporating AWL No. 28-AWL-22 into the maintenance program in accordance with paragraph (g) of AD 2008-10-07, Amendment 39-15513, or AD 2008-10-07 R1, Amendment 39-16070, terminates the action required by paragraph (h) of this AD.

Alternative Methods of Compliance (AMOCs)

(l)(1) The Manager, Seattle Aircraft Certification Office (ACO), FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. Send information to Attn: Douglas Bryant, Aerospace Engineer, Propulsion Branch, ANM-140S, FAA, Seattle ACO, 1601 Lind Avenue SW., Renton, Washington 98057-3356; telephone (425) 917-6505; 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.

Related Information

(m) For more information about this AD, contact Douglas Bryant, Aerospace Engineer, Propulsion Branch, ANM-140S, FAA, Seattle Aircraft Certification Office, 1601 Lind Avenue SW., Renton, Washington 98057-3356; telephone (425) 917-6505; fax (425) 917-6590; e-mail: douglas.n.bryant@faa.gov.

Material Incorporated by Reference

(n) You must use Boeing Service Bulletin 747-28A2288, Revision 1, dated January 21, 2010; and Boeing 747-100/200/300/SP Airworthiness Limitations (AWLs) and Certification Maintenance Requirements (CMRs), D6-13747-CMR, Revision March 2008; 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 Boeing Service Bulletin 747-28A2288, Revision 1, dated January 21, 2010, under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) The Director of the Federal Register previously approved the incorporation by reference of Boeing 747-100/200/300/SP Airworthiness Limitations (AWLs) and Certification Maintenance Requirements (CMRs), D6-13747-CMR, Revision March 2008, on June 12, 2008 (73 FR 25977, May 8, 2008).

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

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

(5) You may also review copies of the service information that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the availability of this material at 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 November 18, 2010.

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



2010-24-14 Pratt & Whitney: Amendment 39-16533. Docket No. FAA-2010-0596; Directorate Identifier 2010-NE-22-AD.

Effective Date

- (a) This airworthiness directive (AD) becomes effective January 21, 2011.

Affected ADs

- (b) None.

Applicability

(c) This AD applies to the following Pratt & Whitney turbofan engines with a ring case configuration rear high-pressure compressor (HPC) installed, that includes a 9th stage compressor stator segment assembly with 24 slots. These engines are installed on, but not limited to, Boeing 747-400/-400F, 767-200/-300, and MD-11 airplanes, and Airbus A300-600, A310-300, A330-300, and A330-200 airplanes.

PW4000-94" Engines

(1) PW4000-94" series engine models PW4050, PW4052, PW4056, PW4060, PW4060A, PW4060C, PW4062, PW4062A, PW4152, PW4156, PW4156A, PW4158, PW4160, PW4460, PW4462, and PW4650, including all models with a dash number suffix.

PW4000-100" Engines

(2) PW4000-100" series engine models PW4168A-1D and PW4170 with serial numbers P735001 through P735039; and

(3) All engines converted to PW4164-1D, PW4168-1D, PW4168A-1D, or PW4170 model engines.

Unsafe Condition

(d) This AD results from 47 reports received since 2007 of HPC 10th stage disks found cracked in the anti-vortex tube (AVT) shelf slots during shop visit inspections. We are issuing this AD to prevent failure of the HPC 10th stage disk, uncontained engine failure, and damage to the airplane.

Compliance

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

Initial Inspection of the AVT Shelf Slots

(f) For engines listed in paragraphs (c)(1) and (c)(3) of this AD, do the following:

- (1) Remove the low-pressure turbine (LPT) shaft and borescope-inspect (BSI) for cracks in the AVT shelf slots on the 10th stage disk of the HPC drum rotor disk assembly; or
- (2) Remove the HPC drum rotor disk assembly and fluorescent-penetrant inspect (FPI) for cracks in the AVT shelf slots on the 10th stage disk of the HPC drum rotor disk assembly.
- (3) Perform the inspection:
 - (i) Within 7,200 cycles-in-service (CIS) since incorporation of any of the following Pratt & Whitney Service Bulletins: (SB) No. PW4ENG 72-755, SB No. PW4ENG 72-756, SB No. PW4ENG 72-757, SB No. PW4ENG 72-759, or SB No. PW4G-100-72-220; or
 - (ii) Within 1,000 CIS after the effective date of this AD, whichever occurs later.
- (4) If a crack is found, remove the HPC drum rotor disk assembly from service.

(g) For engines listed in paragraph (c)(2) of this AD, do the following:

- (1) Remove the LPT shaft and BSI for cracks in the AVT shelf slots on the 10th stage disk of the HPC drum rotor disk assembly; or
- (2) Remove the HPC drum rotor disk assembly and FPI for cracks in the AVT shelf slots on the 10th stage disk of the HPC drum rotor disk assembly.
- (3) Perform the inspection:
 - (i) Within 7,200 cycles-since-new; or
 - (ii) Within 1,000 CIS after the effective date of this AD, whichever occurs later.
- (4) If a crack is found, remove the HPC drum rotor disk assembly from service.

Repetitive Inspections of the AVT Shelf Slots

(h) Thereafter, perform a BSI or FPI for cracks in the AVT shelf slots on the 10th stage HPC disk of the HPC drum rotor disk assembly within every 7,200 cycles-since-last-inspection.

- (i) If a crack is found, remove the HPC drum rotor disk assembly from service.

Relevant Service Bulletins

(j) Use paragraphs 3.A through 3.H of the Accomplishment Instructions of Pratt & Whitney SB No. PW4ENG 72-799, Revision 1, dated October 14, 2010, to perform the BSIs for engines listed in paragraph(c)(1) of this AD.

(k) Use paragraphs 3.A through 3.H of the Accomplishment Instructions of Pratt & Whitney SB No. PW4G-100-72-226, dated April 22, 2010, to perform the BSIs for engines listed in paragraphs(c)(2) and (c)(3) of this AD.

Optional Terminating Action

(l) As optional terminating action to the repetitive inspection requirements of this AD, install new 9th stage compressor stator segments, part number (P/N) 50S479-01, P/N 50S479-02, P/N 50S479-03, and P/N 50S479-04, and perform one of the following:

- (1) At the time the new 9th stage compressor stator segments are installed, replace the HPC drum rotor disk assembly with a new, 0 cycle, HPC drum rotor disk assembly; or
- (2) At the time the new 9th stage compressor stator segments are installed, replace the 10th stage HPC disk with a new, 0 cycle, 10th stage HPC disk; or

(3) Perform a one-time BSI or FPI for cracks in the AVT shelf slots on the 10th stage HPC disk of the HPC drum rotor disk assembly between 4,000 and 7,200 cycles-in-service since installation of the new 9th stage compressor stator segments.

(i) If a crack is found, remove the HPC drum rotor disk assembly from service.

(ii) If no crack is found, then no further inspections are required.

(4) Guidance on installation of the new 9th stage compressor stator segments can be found in Pratt & Whitney SB No. PW4ENG 72-801, Revision 1, dated September 8, 2010, for engines listed in paragraph(c)(1) of this AD and in Pratt & Whitney SB No. PW4G-100-72-225 dated April 20, 2010, for engines listed in paragraphs(c)(2) and (c)(3) of this AD.

Alternative Methods of Compliance (AMOCs)

(m) The Manager, Engine Certification Office, has the authority to approve AMOCs for this AD if requested using the procedures found in 14 CFR 39.19.

Related Information

(n) Contact James Gray, Aerospace Engineer, Engine Certification Office, FAA, Engine and Propeller Directorate, 12 New England Executive Park, Burlington, MA 01803; e-mail: james.e.gray@faa.gov; telephone (781) 238-7742; fax (781) 238-7199, for more information about this AD.

Material Incorporated by Reference

(o) You must use Pratt & Whitney Service Bulletin (SB) No. PW4G-100-72-226, dated April 22, 2010, and Pratt & Whitney SB No. PW4ENG 72-799, Revision 1, dated October 14, 2010, to perform the borescope inspections required by this AD. The Director of the Federal Register approved the incorporation by reference of these documents in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Contact Pratt & Whitney, 400 Main St., East Hartford, CT 06108; telephone (860) 565-8770; fax (860) 565-4503, for a copy of this service information. You may review copies at the FAA, New England Region, 12 New England Executive Park, Burlington, MA; or at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to: <http://www.archives.gov/federal-register/cfr/ibr-locations.html>.

Issued in Burlington, Massachusetts, on November 17, 2010.

Peter A. White,
Assistant Manager, Engine and Propeller Directorate,
Aircraft Certification Service.



2010-25-03 Airbus: Amendment 39-16536. Docket No. FAA-2010-0850; Directorate Identifier 2010-NM-076-AD.

Effective Date

(a) This airworthiness directive (AD) becomes effective January 11, 2011.

Affected ADs

(b) None.

Applicability

(c) This AD applies to Airbus Model A300 B2-1A, B2-1C, B4-2C, B2K-3C, B4-103, B2-203, and B4-203 airplanes, certificated in any category, all serial numbers.

Subject

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

Reason

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

In accordance with design regulation, the THSA [trimmable horizontal stabilizer actuator] has a failsafe design. Its upper attachment to the aeroplane has two load paths, a Primary Load Path (PLP) and a Secondary Load Path (SLP), which is only engaged in case of PLP failure. Following the design intent, engagement of the SLP leads to jam the THSA, indicating the failure of the PLP.

Tests carried out under the loads-measured during representative flights have demonstrated that, when the SLP is engaged, it does not systematically jam the THSA. In addition, laboratory tests have confirmed that the SLP will only withstand the loads for a limited period of time.

This condition of PLP failure during an extended period of time, if not detected and corrected, would lead to the rupture of the THSA upper attachment and consequent THSA loss of command, resulting in reduced control of the aeroplane.

* * * * *

Compliance

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

Actions

(g) Within 2,500 flight hours after the effective date of this AD, do a detailed visual inspection for metallic particles, cracks, scratches, and missing materials of the THSA upper attachment and screw shaft, in accordance with the Accomplishment Instructions of Airbus Mandatory Service Bulletin A300-27-0203, dated June 8, 2009. Repeat the inspection thereafter at intervals not to exceed 2,500 flight hours.

(h) If during any inspection required by paragraph (g) of this AD, any metallic particle, crack, scratch, or missing material is found, before further flight, contact Airbus to obtain approved corrective action instructions, and accomplish those instructions accordingly.

(i) Doing the corrective actions specified in paragraph (h) of this AD is not a terminating action for the repetitive inspections required by paragraph (g) 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, 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: Dan Rodina, Aerospace Engineer, International Branch, ANM-116, Transport Airplane Directorate, FAA, 1601 Lind Avenue, SW., Renton, Washington 98057-3356; telephone (425) 227-2125; fax (425) 227-1149. 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 European Aviation Safety Agency Airworthiness Directive 2010-0019, dated February 5, 2010; and Airbus Mandatory Service Bulletin A300-27-0203, dated June 8, 2009; for related information.

Material Incorporated by Reference

(1) You must use Airbus Mandatory Service Bulletin A300-27-0203, excluding Appendix 01, dated June 8, 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-EAW (Airworthiness Office), 1 Rond Point Maurice Bellonte, 31707 Blagnac Cedex, France; telephone +33 5 61 93 36 96; fax +33 5 61 93 44 51; e-mail: account.airworth-eas@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 22, 2010.

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



2010-25-04 McDonnell Douglas Corporation: Amendment 39-16537. Docket No. FAA-2008-0934; Directorate Identifier 2008-NM-113-AD.

Effective Date

(a) This airworthiness directive (AD) is effective January 11, 2011.

Affected ADs

(b) None.

Applicability

(c) This AD applies to McDonnell Douglas Corporation Model DC-9-31, DC-9-32, DC-9-32 (VC-9C), DC-9-32F, DC-9-32F (C-9A, C-9B), DC-9-33F, DC-9-34, DC-9-34F, DC-9-41, DC-9-51, DC-9-81 (MD-81), DC-9-82 (MD-82), DC-9-83 (MD-83), and DC-9-87 (MD-87), MD-88, and MD-90-30 airplanes; certificated in any category; as identified in Boeing Service Bulletins DC9-28-212 and MD90-28-010, both Revision 1, both dated June 16, 2009.

Unsafe Condition

(d) This AD results from fuel system reviews conducted by the manufacturer. We are issuing this AD to prevent possible sources of ignition in a fuel tank caused by an electrical fault in the fuel boost pumps. An ignition source in the fuel tank could result in a fire or an explosion and consequent loss of the airplane.

Subject

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

Compliance

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

Modification

(g) Within 60 months after the effective date of this AD: Modify the fuel boost pumps for the center wing, and forward or aft auxiliary fuel tanks, as applicable, by doing all the applicable actions specified in the Accomplishment Instructions of Boeing Service Bulletins DC9-28-212 (for Model DC-9-30, DC-9-40, and DC-9-50 series airplanes); and Model DC-9-81 (MD-81), DC-9-82 (MD-82), DC-9-83 (MD-83), DC-9-87 (MD-87), and MD-88 airplanes) and MD90-28-010 (for Model MD-90-30 airplanes), both Revision 1, both dated June 16, 2009. For airplanes on which the auxiliary fuel tanks have been removed before the effective date of this AD, the actions for the auxiliary fuel tanks specified in this paragraph are not required.

Prior or Concurrent Action

(h) Prior to or concurrently with accomplishing the modification required by paragraph (g) of this AD: Do the modification specified in Argo-Tech Service Bulletin 398000-28-2, Revision 1, dated December 2, 2008.

Credit for Actions Done In Accordance With Previous Issue of the Service Information

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

Table 1 – Credit Service Information

Document	Date
Argo-Tech Service Bulletin 398000-28-2	November 8, 2007
Boeing Service Bulletin DC9-28-212	February 22, 2008
Boeing Service Bulletin MD90-28-010	February 22, 2008

Alternative Methods of Compliance (AMOCs)

(j)(1) The Manager, Los Angeles Aircraft Certification Office (ACO), FAA, ATTN: Serj Harutunian, Aerospace Engineer, Propulsion Branch, ANM-140L, FAA, Los Angeles Aircraft Certification Office, 3960 Paramount Boulevard, Lakewood, California 90712-4137; telephone (562) 627-5254; fax (562) 627-5210; has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19.

(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

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

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

Table 2 – Material incorporated by reference

Document	Revision	Date
Argo-Tech Service Bulletin 398000-28-2	1	December 2, 2008
Boeing Service Bulletin DC9-28-212	1	June 16, 2009
Boeing Service Bulletin MD90-28-010	1	June 16, 2009

(2) For Boeing service information identified in this AD, contact Boeing Commercial Airplanes, Attention: Data & Services Management, 3855 Lakewood Boulevard, MC D800-0019, Long Beach, California 90846-0001; telephone 206-544-5000, extension 2; fax 206-766-5683; e-mail dse.boecom@boeing.com; Internet <https://www.myboeingfleet.com>. For Argo-Tech service information identified in this AD, contact Argo-Tech Corporation, 23555 Euclid Avenue, Cleveland, Ohio 44117; telephone 216-692-6000.

(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 24, 2010.

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



2010-25-05 Rolls-Royce Deutschland Ltd & Co KG (formerly Rolls-Royce Deutschland GmbH, formerly BMW Rolls-Royce GmbH): Amendment 39-16538. Docket No. FAA-2010-0614; Directorate Identifier 2010-NE-24-AD.

Effective Date

(a) This airworthiness directive (AD) becomes effective January 13, 2011.

Affected ADs

(b) None.

Applicability

(c) This AD applies to Rolls-Royce Deutschland Ltd & Co KG models BR700-710A1-10, BR700-710A2-20, and BR700-710C4-11 turbofan engines with any of the high-pressure turbine (HPT) stage 1 and stage 2 discs installed as listed by part number (P/N) in Table 1 and Table 2 of this AD. These engines are installed on, but not limited to, Gulfstream model G-V and GV-SP airplanes, and Bombardier model BD-700-1A10 and BD-700-1A11 airplanes.

Table 1—Declared Safe Cyclic Life of Affected HPT Stage 1 Discs

HPT stage 1 disc P/N	Engine model	Declared safe cyclic life (flight cycles)
BRR21215	BR700-710A1-10	6,075
BRR21215	BR700-710A2-20	5,950
BRR22005	BR700-710A1-10	6,200
BRR22005	BR700-710A2-20	6,200
BRR22006	BR700-710A1-10	6,200
BRR22006	BR700-710A2-20	6,200
BRR22007	BR700-710A1-10	6,200
BRR22007	BR700-710A2-20	6,200
BRR22358	BR700-710A1-10	6,200
BRR22358	BR700-710A2-20	6,200
BRR23864	BR700-710A1-10	6,200
BRR23864	BR700-710A2-20	6,200

BRR23884	BR700-710A1-10	6,200
BRR23884	BR700-710A2-20	6,200
BRR23885	BR700-710A1-10	6,200
BRR23885	BR700-710A2-20	6,200
BRR23952	BR700-710A1-10	6,200
BRR23952	BR700-710A2-20	6,200
BRR23952	BR700-710C4-11 (Service Bulletin (SB) No. SB-BR700-72-101466 not incorporated).	6,200
BRR23952	BR700-710C4-11 (SB No. SB-BR700-72-101466 incorporated)	3,800
BRR23953	BR700-710A1-10	6,200
BRR23953	BR700-710A2-20	6,200
BRR23953	BR700-710C4-11 (SB No. SB-BR700-72-101466 not incorporated)	6,200
BRR23953	BR700-710C4-11 (SB No. SB-BR700-72-101466 incorporated)	3,800
BRR23954	BR700-710A1-10	6,200
BRR23954	BR700-710A2-20	6,200

Table 2–Declared Safe Cyclic Life of Affected HPT Stage 2 Discs

HPT stage 2 disc P/N	Engine model	Declared safe cyclic life (flight cycles)
BRR18291	BR700-710A1-10	9,300
BRR21214	BR700-710A1-10	9,600
BRR21214	BR700-710A2-20	9,600
BRR22008	BR700-710A1-10	10,500
BRR22008	BR700-710A2-20	10,500
BRR22008	BR700-710C4-11 (SB No. SB-BR700-72-101466 not incorporated)	10,500
BRR22008	BR700-710C4-11 (SB No. SB-BR700-72-101466 incorporated)	3,700
BRR22009	BR700-710A1-10	10,500
BRR22009	BR700-710A2-20	10,500
BRR22009	BR700-710C4-11 (SB No. SB-BR700-72-101466 not incorporated)	10,500

BRR22009	BR700-710C4-11 (SB No. SB-BR700-72-101466 incorporated)	3,700
BRR22010	BR700-710A1-10	10,500
BRR22010	BR700-710A2-20	10,500
BRR22359	BR700-710A1-10	10,500
BRR22359	BR700-710A2-20	10,500

Reason

(d) This AD results from mandatory continuing airworthiness information (MCAI) issued by an aviation authority of another country to identify and correct an unsafe condition on an aviation product. The MCAI states:

Due to manufacturing problems of BR700-710 HP stage 1 and 2 turbine discs it was necessary to re-calculate the Declared Safe Cyclic Life (DSCL) for all BR700-710 HP turbine discs. The analysis concluded that it is required to reduce the approved life limits for the HP turbine disc part numbers that are listed in Table 1 and Table 2 of this AD (MCAI). Exceeding the revised approved life limits could potentially result in non-contained disc failure.

We are issuing this AD to prevent failure of the HPT stage 1 and stage 2 discs, uncontained engine failure, and damage to the airplane.

Actions and Compliance

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

(1) Within 30 days after the effective date of this AD, or upon accumulating the declared safe cyclic life indicated in Table 1 or Table 2 of this AD as applicable, whichever occurs later, initially replace the HPT stage 1 or HPT stage 2 discs with serviceable discs.

(2) Thereafter, upon accumulating the declared safe cyclic life indicated in Table 1 or Table 2 of this AD, as applicable, repetitively replace the HPT stage 1 or HPT stage 2 discs with serviceable discs.

FAA AD Differences

(f) None.

Alternative Methods of Compliance (AMOCs)

(g) The Manager, Engine Certification Office, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19.

Related Information

(h) Refer to European Aviation Safety Agency AD 2010-0075, dated April 20, 2010, and AD 2010-0076, dated April 20, 2010, for related information.

(i) Refer to Rolls-Royce Deutschland Ltd & Co KG SB No. SB-BR700-72-A900492, dated February 12, 2010, and SB No. SB-BR700-72-A900497, dated February 12, 2010, for related information. Contact Rolls-Royce Deutschland Ltd & Co KG, Eschenweg 11, Dahlewitz, 15827 Blankenfelde-Mahlow, Germany, telephone: +49 (0) 33-7086-1883, fax: +49 (0) 33-7086-3276, for a copy of this service information.

(j) Contact Mark Riley, Aerospace Engineer, Engine Certification Office, FAA, Engine & Propeller Directorate, 12 New England Executive Park, Burlington, MA 01803; e-mail: mark.riley@faa.gov; telephone (781) 238-7758; fax (781) 238-7199, for more information about this AD.

Issued in Burlington, Massachusetts, on November 30, 2010.

Peter A. White,
Assistant Manager, Engine and Propeller Directorate,
Aircraft Certification Service.



2010-26-01 The Boeing Company: Amendment 39-16540. Docket No. FAA-2009-0430; Directorate Identifier 2008-NM-148-AD.

Effective Date

(a) This airworthiness directive (AD) is effective January 20, 2011.

Affected ADs

(b) None.

Applicability

(c) This AD applies to The Boeing Company Model 777-200 series airplanes, certificated in any category; as identified in Boeing Alert Service Bulletin 777-78A0066, Revision 2, dated April 8, 2010.

Unsafe Condition

(d) This AD results from an in-flight shutdown due to an engine fire indication; an under-cowl engine fire was extinguished after landing. The cause of the fire was uncontained failure of the starter in the engine core compartment; the fire progressed into the latch beam cavity and was fueled by oil from a damaged integrated drive generator oil line. We are issuing this AD to prevent a fire from entering the cowl or strut area, which could weaken thrust reverser (T/R) parts and result in reduced structural integrity of the T/R, possible separation of T/R parts during flight, and consequent damage to the airplane and injury to people or damage to property on the ground.

Subject

(e) Air Transport Association (ATA) of America Code 78: Exhaust.

Compliance

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

Installation of Insulation Blanket

(g) Within 60 months or 4,500 flight cycles after the effective date of this AD, whichever is first: Install a new insulation blanket on the latch beam firewall of each T/R half by doing all the applicable actions specified in the Accomplishment Instructions of Boeing Alert Service Bulletin 777-78A0066, Revision 2, dated April 8, 2010.

Credit for Actions Accomplished in Accordance With Previous Service Information

(h) Actions done before the effective date of this AD in accordance with Boeing Alert Service Bulletin 777-78A0066, dated June 5, 2008; or Boeing Service Bulletin 777-78A0066, Revision 1, dated March 12, 2009; are acceptable for compliance with the corresponding requirements of paragraph (g) of this AD.

Alternative Methods of Compliance (AMOCs)

(i)(1) The Manager, Seattle Aircraft Certification Office (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: Margaret Langsted, Aerospace Engineer, Propulsion Branch, ANM-140S, FAA, Seattle ACO, 1601 Lind Avenue SW., Renton, Washington 98057-3356; telephone (425) 917-6500; fax (425) 917-6590. Or, e-mail information to 9-ANM-Seattle-ACO-AMOC-Requests@faa.gov.

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

Material Incorporated by Reference

(j) You must use Boeing Alert Service Bulletin 777-78A0066, Revision 2, dated April 8, 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 December 3, 2010.

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