



**FEDERAL AVIATION ADMINISTRATION
AIRWORTHINESS DIRECTIVES
LARGE AIRCRAFT**

BIWEEKLY 2010-23

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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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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, DC-10-40F, 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



2010-17-12R1 Rolls-Royce Deutschland Ltd & Co KG (RRD) (formerly Rolls-Royce plc, Derby, England): Amendment 39-16489.; Docket No. FAA-2007-0037; Directorate Identifier 2007-NE-41-AD.

Effective Date

(a) This AD becomes effective November 18, 2010.

Affected ADs

(b) This AD revises AD 2010-17-12, Amendment 39-16404.

Applicability

(c) This AD applies to:

(1) RRD model Tay 650-15 turbofan engines that have a serial number listed in Table 1, Table 2, or Table 3 of this AD, with a low-pressure (LP) turbine module M05300AA installed; and

(2) All RRD model Tay 651-54 turbofan engines with an LP turbine module M05300AA installed.

(3) These engines are installed on, but not limited to, Fokker F.28 Mark 0070 and 0100 airplanes, and Boeing 727 airplanes modified in accordance with Supplemental Type Certificate No. SA8472SW.

**Table 1—Affected Tay 650-15 Engines by Serial Number
(Carried Forward From AD 2008-10-14 and AD 2009-22-01)**

Engine Serial Number	17327	17556	17686
	17332	17561	17699
17251	17365	17562	17701
17255	17393	17563	17702
17256	17437	17580	17736
17273	17443	17581	17737
17275	17470	17612	17738
17280	17520	17618	17739
17281	17521	17635	17741
17282	17523	17637	17742
17300	17539	17645	17808
17301	17542	17661	

**Table 2 – Affected Tay 650-15 Engines by Serial Number
(Carried Forward From AD 2009-22-01)**

Engine Serial Number			
	17438	17518	17553
	17445	17522	17585
17249	17446	17534	17613
17303	17460	17535	17723
17358	17474	17536	17724
17370	17478	17538	17740
17425	17490	17540	17759
17426	17491	17541	17760
17433	17517	17552	17807

**Table 3 – Affected Tay 650-15 Engines by Serial Number
(Added New in This AD)**

Engine Serial Number			
	17376	17698	17719
	17413	17707	17731
17344	17537	17716	17756
17360	17694	17718	17757

Reason

(d) This AD revision results from:

(1) The need to correct the applicability paragraph of AD 2010-17-12; and
 (2) 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:

(3) Strip results from some of the engines listed in the applicability section of this AD revealed excessively corroded low-pressure turbine disks stage 2 and stage 3. The corrosion is considered to be caused by the environment in which these engines are operated. Following a life assessment based on the strip findings it is concluded that inspections for corrosion attack are required. The action specified by this European Aviation Safety Agency (EASA) AD 2008-0122 was intended to avoid a failure of a low-pressure turbine disk stage 2 or stage 3 due to potential corrosion problems which could result in uncontained engine failure and damage to the airplane. It has been later realized that the same unsafe condition could potentially occur on more serial numbers for the Tay 650-15 engines and on the Tay 651-54 engines. This AD, superseding EASA AD 2008-0122, retaining its requirements, is therefore issued to expand the Applicability in adding further engine serial numbers for the Tay 650-15 engines and in adding the Tay 651-54 engines.

We are issuing this AD to detect corrosion that could cause the stage 2 or stage 3 disk of the LP turbine to fail, uncontained engine failure, and damage to the airplane.

Actions and Compliance

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

(1) Prior to accumulating 11,700 flight cycles (FC) since new of disk life, and thereafter at intervals not exceeding 11,700 FC of disk life, inspect the LP turbine disks stage 2 and stage 3 for corrosion using RRD Alert Service Bulletin (ASB) No. TAY-72-A1524, Revision 3, dated March 24, 2010.

(2) For engines with disk life that already exceed 11,700 FC on the effective date of this AD, perform the inspection within 90 days after the effective date of this AD.

(3) When, during any of the inspections as required by paragraphs (e)(1) and (e)(2) of this AD, corrosion is found, replace the affected parts. RRD TAY 650 Engine Manual–E-TAY-3RR, Tasks 72-52-23-200-000 and 72-52-24-200-000, and RRD TAY 651 Engine Manual–E-TAY-5RR, Tasks 72-52-23-200-000 and 72-52-24-200-000, contain guidance on performing the inspection for corrosion and rejection criteria.

Previous Credit

(f) Initial inspections done before the effective date of this AD on LP turbine disks stage 2 and stage 3 listed in Table 1 and Table 2 of this AD using RRD ASB No. TAY-72-A1524, Revision 1, dated September 1, 2006, or Revision 2, dated June 13, 2008, comply with the initial inspection requirements specified in this AD.

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 EASA AD 2010-060R1, dated April 14, 2010, for related information. Contact Rolls-Royce Deutschland Ltd & Co KG, Eschenweg 11, Dahlwitz, 15827 Blankenfelde-Mahlow, Germany; phone: 011 49 (0) 33-7086-1883; fax: 011 49 (0) 33-7086-3276, for a copy of the service information referenced in this AD.

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

Material Incorporated by Reference

(j) You must use Rolls-Royce Deutschland Ltd & Co KG Alert Service Bulletin No. TAY-72-A1524, Revision 3, dated March 24, 2010, to do the inspections required by this AD.

(1) The Director of the Federal Register previously approved the incorporation by reference of RRD Alert Service Bulletin No. TAY-72-A1524, Revision 3, dated March 24, 2010, listed in the AD as of September 27, 2010 (75 FR 51651, August 23, 2010).

(2) For service information identified in this AD, contact Rolls-Royce Deutschland Ltd & Co KG, Eschenweg 11, Dahlwitz, 15827 Blankenfelde-Mahlow, Germany; phone: 011 49 (0) 33-7086-1883; fax: 011 49 (0) 33-7086-3276.

(3) 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 October 22, 2010.

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



2010-22-03 Airbus: Amendment 39-16482. Docket No. FAA-2010-0680; Directorate Identifier 2008-NM-195-AD.

Effective Date

(a) This airworthiness directive (AD) becomes effective December 3, 2010.

Affected ADs

(b) This AD supersedes AD 2006-09-05, Amendment 39-14575. This AD also affects certain requirements of AD 98-26-01, Amendment 39-10942.

Applicability

(c) This AD applies to all Airbus Model A310-203, -204, -221, -222, -304, -322, -324, and -325 airplanes, certificated in any category.

Subject

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

Reason

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

Analysis performed in the frame of the Extended Service Goal has led Airbus to modify the inspection programme [modification of thresholds, intervals and associated configurations] which is currently required by DGAC (Direction Générale de l'Aviation Civile) France AD F-2005-001 [which corresponds to FAA AD 2006-09-05].

This modified inspection programme is necessary to detect and prevent damage associated with a structural fatigue phenomenon of the rear spar internal angle and the tee fitting located in the centre wing box. This condition, if not corrected, could affect the structural integrity of the centre wing box.

* * * * *

The unsafe condition is reduced structural integrity of the wings.

Compliance

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

Restatement of Certain Requirements of AD 2006-09-05

Modification

(g) For all airplanes except those that are modified by Airbus Modifications 06672S6812, 06673S6813, and 07387S7974 in production: Within 60 months after June 7, 2006 (the effective date of AD 2006-09-05), modify the holes in the internal angle and tee fitting and do all applicable related investigative and corrective actions by accomplishing all the actions specified in the Accomplishment Instructions of Airbus Service Bulletin A310-57-2035, Revision 08, dated September 19, 2005; or Airbus Mandatory Service Bulletin A310-57-2035, Revision 10, dated March 25, 2008; except as required by paragraph (h) of this AD. Do all applicable related investigative and corrective actions before further flight. As of the effective date of this AD, use only Airbus Mandatory Service Bulletin A310-57-2035, Revision 10, dated March 25, 2008.

Contact the FAA

(h) Where the service information specified in Table 1 of this AD specifies to contact the manufacturer if certain cracks are found, before further flight, repair those conditions according to a method approved by either the Manager, International Branch, ANM-116, Transport Airplane Directorate, FAA; or the Direction Générale de l'Aviation Civile (DGAC) (or its delegated agent); or EASA (or its delegated agent).

Table 1 – Service Information

Document	Revision	Date
Airbus Mandatory Service Bulletin A310-57-2035	10	March 25, 2008
Airbus Service Bulletin A310-57-2035	08	September 19, 2005

Actions Accomplished According to Previous Issues of Airbus Service Bulletin A310-57-2035

(i) Actions accomplished before June 7, 2006, in accordance with the service information specified in Table 2 of this AD, are considered acceptable for compliance with the corresponding actions specified in paragraph (g) of this AD.

Table 2 – Previous Issues of Service Bulletin A310-57-2035

Document	Revision	Date
Airbus Service Bulletin A310-57-2035	1	October 13, 1989
Airbus Service Bulletin A310-57-2035	2	February 26, 1990
Airbus Service Bulletin A310-57-2035	3	May 23, 1990
Airbus Service Bulletin A310-57-2035	4	April 15, 1992
Airbus Service Bulletin A310-57-2035	5	May 27, 1992
Airbus Service Bulletin A310-57-2035	6	March 8, 1994
Airbus Service Bulletin A310-57-2035	7	April 17, 1996

New Requirements of This AD—Revised Compliance Times for Inspections Required by AD 2006-09-05

Initial and Repetitive Inspections of the Rear Spar Internal Angle

(j) For airplanes on which an inspection of the rear spar internal angle has not been done in accordance with Airbus Service Bulletin A310-57-2047 as of the effective date of this AD: At the later of the times specified in paragraphs (j)(1) and (j)(2) of this AD, do a rotating probe inspection for any crack of the rear spar internal angle located in the center wing box and do all applicable related investigative and corrective actions, in accordance with the Accomplishment Instructions of Airbus Service Bulletin A310-57-2047, Revision 08, dated July 2, 2009; except as required by paragraphs (n) and (o) of this AD. Do all applicable related investigative and corrective actions before further flight. Repeat the inspection thereafter at the applicable time specified in Table 4 of this AD. Certain compliance times are applicable to short range use, average flight time (AFT) equal to or less than 4 hours, or long range use, AFT exceeding 4 hours.

Note 1: To establish the AFT, divide the accumulated flight time (counted from the take-off up to the landing) by the number of accumulated flight cycles. This gives the average flight time per flight cycle.

(1) Within the applicable time specified in Table 3 of this AD.

(2) Within the applicable time specified in paragraph (j)(2)(i), (j)(2)(ii), or (j)(2)(iii) of this AD:

(i) For A310-203, -204, -221, and -222 airplanes: Within 700 flight cycles or 1,500 flight hours after the effective date of this AD, whichever occurs first.

(ii) For A310-304, -322, -324, and -325 short range airplanes: Within 700 flight cycles or 1,900 flight hours after the effective date of this AD, whichever occurs first.

(iii) For A310-304, -322, -324, and -325 long range airplanes: Within 500 flight cycles or 2,500 flight hours after the effective date of this AD, whichever occurs first.

Table 3 – Initial Inspection Internal Angle

Model and Configuration	Compliance Time (whichever occurs first)	
A310-203, -204, -221, and -222 airplanes on which Mod 6672S6812 and Mod 7387S7974 are not done	Before the accumulation of 9,200 total flight cycles	Before the accumulation of 18,500 total flight hours
A310-203, -204, -221, and -222 airplanes on which Mod 6672S6812 and Mod 7387S7974 are done in production	Before the accumulation of 19,800 total flight cycles	Before the accumulation of 39,600 total flight hours
A310-203, -204, -221, and -222 airplanes on which Mod 6672S6812 and Mod 7387S7974 are done in accordance with Airbus Service Bulletin A310-57-2035 and before the accumulation of 6,200 total flight cycles and 12,500 total flight hours	Within 19,800 flight cycles after the effective date of this AD	Within 39,600 flight hours after the effective date of this AD

A310-203, -204, -221, and -222 airplanes on which Mod 6672S6812 and Mod 7387S7974 are done in accordance with Airbus Service Bulletin A310-57-2035 and are not done before the accumulation of 6,200 total flight cycles and 12,500 total flight hours	Within 8,200 flight cycles after the effective date of this AD	Within 16,400 flight hours after the effective date of this AD
A310-304, -322, -324, and -325 short range airplanes on which Mod 6672S6812 and Mod 7387S7974 are not done	Before the accumulation of 7,500 total flight cycles	Before the accumulation of 21,100 total flight hours
A310-304, -322, -324, and -325 long range airplanes on which Mod 6672S6812 and Mod 7387S7974 are not done	Before the accumulation of 5,300 total flight cycles	Before the accumulation of 26,900 total flight hours
A310-304, -322, -324, and -325 short range airplanes on which Mod 6672S6812 and Mod 7387S7974 are done	Before the accumulation of 15,900 total flight cycles	Before the accumulation of 44,700 total flight hours
A310-304, -322, -324, and -325 long range airplanes on which Mod 6672S6812 and Mod 7387S7974 are done in production	Before the accumulation of 11,300 total flight cycles	Before the accumulation of 56,900 total flight hours
A310-304, -322, -324, and -325 short range airplanes on which Mod 6672S6812 and Mod 7387S7974 are done in accordance with Airbus Service Bulletin A310-57-2035 and before the accumulation of 4,700 total flight cycles and 13,100 total flight hours	Within 15,900 flight cycles after the effective date of this AD	Within 44,700 flight hours after the effective date of this AD
A310-304, -322, -324, and -325 short range airplanes on which Mod 6672S6812 and Mod 7387S7974 are done in accordance with Airbus Service Bulletin A310-57-2035 and not done before the accumulation of 4,700 total flight cycles and 13,100 total flight hours	Within 8,500 flight cycles after the effective date of this AD	Within 23,800 flight hours after the effective date of this AD
A310-304, -322, -324, and -325 long range airplanes on which Mod 6672S6812 and Mod 7387S7974 are done in accordance with Airbus Service Bulletin A310-57-2035 before the accumulation of 3,300 total flight cycles and 16,700 total flight hours	Within 11,300 flight cycles after the effective date of this AD	Within 56,900 flight hours after the effective date of this AD
A310-304, -322, -324, and -325 long range airplanes on which Mod 6672S6812 and Mod 7387S7974 are done in accordance with Airbus Service Bulletin A310-57-2035 and not done before the accumulation of 3,300 total flight cycles and 16,700 total flight hours	Within 6,000 flight cycles after the effective date of this AD	Within 30,300 flight hours after the effective date of this AD

Table 4 – Repetitive Intervals

Model and Configuration	Interval (not to exceed)
A310-203, -204, -221, and -222 airplanes	Within 7,200 flight cycles or 14,400 flight hours, whichever occurs first
A310-304, -322, -324, and -325 short range airplanes	Within 6,800 flight cycles or 19,100 flight hours, whichever occurs first
A310-304, -322, -324, and -325 long range airplanes	Within 4,800 flight cycles or 24,300 flight hours, whichever occurs first

(k) For airplanes on which an inspection of the rear spar internal angle has been done in accordance with Airbus Service Bulletin A310-57-2047 as of the effective date of this AD: At the applicable time specified in paragraphs (k)(1), (k)(2), and (k)(3) of this AD, do a rotating probe inspection for any crack of the rear spar internal angle located in the center wing box and do all applicable related investigative and corrective actions, in accordance with the Accomplishment Instructions of Airbus Service Bulletin A310-57-2047, Revision 08, dated July 2, 2009; except as required by paragraphs (n) and (o) of this AD. Do all applicable related investigative and corrective actions before further flight. Repeat the inspection thereafter at the applicable time specified in Table 4 of this AD. Certain compliance times are applicable to short range use, AFT equal to or less than 4 hours, or long range use, AFT exceeding 4 hours.

(1) For A310-203, -204, -221, and -222 airplanes: At the earlier of the times specified in paragraphs (k)(1)(i) and (k)(1)(ii) of this AD.

(i) Within 7,940 flight cycles or 15,880 flight hours after the most recent inspection, whichever occurs first.

(ii) At the later of the times specified in paragraphs (k)(1)(ii)(A) and (k)(1)(ii)(B) of this AD.

(A) Within the applicable interval specified in Table 4 of this AD.

(B) Within 740 flight cycles or 1,480 flight hours after the effective date of this AD, whichever occurs first.

(2) For A310-304, -322, -324, and -325 short range airplanes: At the later of the times specified in paragraphs (k)(2)(i) and (k)(2)(ii) of this AD.

(i) Within the applicable interval specified in Table 4 of this AD.

(ii) Within 700 flight cycles or 1,900 flight hours after the effective date of this AD, whichever occurs first.

(3) For A310-304, -322, -324, and -325 long range airplanes: At the later of the times specified in paragraphs (k)(3)(i) and (k)(3)(ii) of this AD.

(i) Within the applicable interval specified in Table 4 of this AD.

(ii) Within 500 flight cycles or 2,500 flight hours after the effective date of this AD, whichever occurs first.

Initial and Repetitive Inspections of the Tee Fitting

(l) For airplanes on which an inspection of the left and right sides of the tee fitting has not been done in accordance with Airbus Service Bulletin A310-57-2047 as of the effective date of this AD: At the later of the times specified in paragraphs (l)(1) and (l)(2) of this AD, do a rotating probe inspection for any crack of the left and right sides of the tee fitting, and do all applicable related investigative and corrective actions, in accordance with the Accomplishment Instructions of Airbus Service Bulletin A310-57-2047, Revision 08, dated July 2, 2009; except as required by paragraphs (n) and (o) of this AD. Do all applicable related investigative and corrective actions before further flight. Repeat the inspection thereafter at the applicable time specified in Table 6 of this AD. Certain

compliance times are applicable to short range use, AFT equal to or less than 4 hours, or long range use, AFT exceeding 4 hours.

(1) Within the applicable time specified in Table 5 of this AD.

(2) Within the applicable time in paragraph (1)(2)(i), (1)(2)(ii), or (1)(2)(iii) of this AD.

(i) For A310-203, -204, -221, and -222 airplanes: Within 800 flight cycles or 1,600 flight hours, whichever occurs first.

(ii) For A310-304, -322, -324, and -325 short range airplanes: Within 800 flight cycles or 2,200 flight hours, whichever occurs first.

(iii) For A310-304, -322, -324, and -325 long range airplanes: Within 600 flight cycles or 3,100 flight hours, whichever occurs first.

Table 5 – Initial Inspection Tee Fitting

Model and Configuration	Compliance Time (whichever occurs first)	
A310-203, -204, -221, and -222 airplanes on which Mod 6673S6813 is not done	Before the accumulation of 14,300 flight cycles	Within 28,700 flight hours after the effective date of this AD
A310-203, -204, -221, and -222 airplanes on which Mod 6673S6813 is done in production	Before the accumulation of 17,500 total flight cycles	Before the accumulation of 35,000 total flight hours
A310-203, -204, -221, and -222 airplanes on which Mod 6673S6813 is done in accordance with Airbus Service Bulletin A310-57-2035 and before the accumulation of 8,100 total flight cycles and 16,200 total flight hours	Within 17,500 flight cycles after the effective date of this AD	Within 35,000 flight hours after the effective date of this AD
A310-203, -204, -221, and -222 airplanes on which Mod 6673S6813 is done in accordance with Airbus Service Bulletin A310-57-2035 and not before the accumulation of 8,100 total flight cycles and 16,200 total flight hours	Within 9,600 flight cycles after the effective date of this AD	Within 19,200 flight hours after the effective date of this AD
A310-304, -322, -324, and -325 short range airplanes on which Mod 6673S6813 is not done	Within 10,800 flight cycles after the effective date of this AD	Within 30,400 flight hours after the effective date of this AD
A310-304, -322, -324, and -325 long range airplanes on which Mod 6673S6813 is not done	Before the accumulation of 8,500 total flight cycles	Before the accumulation of 42,800 total flight hours
A310-304, -322, -324, and -325 short range airplanes on which Mod 6673S6813 is done in production	Before the accumulation of 13,100 total flight cycles	Before the accumulation of 36,700 total flight hours
A310-304, -322, -324, and -325 long range airplanes on which Mod 6673S6813 is done in production	Before the accumulation of 10,300 total flight cycles	Before the accumulation of 51,600 total flight hours

A310-304, -322, -324, and -325 short range airplanes on which Mod 6673S6813 is done in accordance with Airbus Service Bulletin A310-57-2035 and before the accumulation of 5,800 total flight cycles and 16,400 total flight hours	Within 13,100 flight cycles after the effective date of this AD	Within 36,700 flight hours after the effective date of this AD
A310-304, -322, -324, and -325 short range airplanes on which Mod 6673S6813 is done in accordance with Airbus Service Bulletin A310-57-2035 and not before the accumulation of 5,800 total flight cycles and 16,400 total flight hours	Within 7,400 flight cycles after the effective date of this AD	Within 20,900 flight hours after the effective date of this AD
A310-304, -322, -324, and -325 long range airplanes on which Mod 6673S6813 is done in accordance with Airbus Service Bulletin A310-57-2035 and before the accumulation of 4,600 total flight cycles and 23,100 total flight hours	Within 10,300 flight cycles after the effective date of this AD	Within 51,600 flight hours after the effective date of this AD
A310-304, -322, -324, and -325 long range airplanes on which Mod 6673S6813 is done in accordance with Airbus Service Bulletin A310-57-2035 and not before the accumulation of 4,600 total flight cycles and 23,100 total flight hours	Within 6,000 flight cycles after the effective date of this AD	Within 30,300 flight hours after the effective date of this AD

Table 6 – Repetitive Intervals

Model and Configuration	Interval (not to exceed)
A310-203, -204, -221, and -222 airplanes	9,100 flight cycles or 18,300 flight hours, whichever occurs first
A310-304, -322, -324, and -325 short range airplanes	7,300 flight cycles or 20,400 flight hours, whichever occurs first
A310-304, -322, -324, and -325 long range airplanes	5,900 flight cycles or 29,600 flight hours, whichever occurs first

(m) For airplanes on which an inspection of the rear left and right sides of the tee fitting has been done in accordance with Airbus Service Bulletin A310-57-2047 as of the effective date of this AD: At the applicable time specified in paragraphs (m)(1) or (m)(2) of this AD, do a rotating probe inspection for any crack of the left and right sides of the tee fitting, and do all applicable related investigative and corrective actions, in accordance with the Accomplishment Instructions of Airbus Service Bulletin A310-57-2047, Revision 08, dated July 2, 2009; except as required by paragraphs (n) and (o) of this AD. Do all applicable related investigative and corrective actions before further flight. Repeat the inspection thereafter at the applicable time specified in Table 6 of this AD. Certain compliance times are applicable to short range use, AFT equal to or less than 4 hours, or long range use, AFT exceeding 4 hours.

(1) For A310-203, -204, -221, and -222 airplanes: At the earlier of the times specified in paragraphs (m)(1)(i) and (m)(1)(ii) of this AD.

(i) Within 10,800 flight cycles or 17,400 flight hours after the most recent inspection, whichever occurs first.

(ii) At the later of the times specified in paragraphs (m)(1)(ii)(A) and (m)(1)(ii)(B) of this AD.

(A) Within the applicable interval specified in Table 6 of this AD.

(B) Within 700 flight cycles or 1,500 flight hours after the effective date of this AD, whichever occurs first.

(2) For A310-304, -322, -324, and -325 airplanes: At the later of the times specified in paragraphs (m)(2)(i) and (m)(2)(ii) of this AD.

(i) Within the applicable interval specified in Table 6 of this AD.

(ii) Within 700 flight cycles or 1,900 flight hours after the effective date of this AD, whichever occurs first.

Contact the FAA

(n) Where Airbus Service Bulletin A310-57-2047, Revision 08, dated July 2, 2009, specifies to contact the manufacturer if certain cracks are found, before further flight, repair those conditions according to a method approved by either the Manager, International Branch, ANM-116, Transport Airplane Directorate, FAA; or EASA (or its delegated agent).

No Reporting Required

(o) Although Airbus Service Bulletin A310-57-2047, Revision 08, dated July 2, 2009, specifies to submit certain information to the manufacturer, this AD does not include that requirement.

(p) Actions accomplished before the effective date of this AD in accordance with Airbus Mandatory Service Bulletin A310-57-2035, Revision 09, dated September 27, 2007, are considered acceptable for compliance with the corresponding actions specified in paragraph (g) of this AD.

(q) Actions accomplished before the effective date of this AD in accordance with the service information specified in Table 7 of this AD, are considered acceptable for compliance with the corresponding actions specified in paragraphs (j) through (m) of this AD.

Table 7 – Previous Issues of Airbus Service Bulletin A310-57-2047

Document	Revision	Date
Airbus Service Bulletin A310-57-2047	03	November 26, 1997
Airbus Service Bulletin A310-57-2047	04	March 5, 1999
Airbus Service Bulletin A310-57-2047	05	August 3, 2000
Airbus Service Bulletin A310-57-2047	06	July 13, 2004
Airbus Service Bulletin A310-57-2047	07	March 14, 2008

Related AD

(r) Accomplishing a rotating probe inspection of the rear spar internal angle and the tee fitting in accordance with Airbus Service Bulletin A310-57-2047, Revision 08, dated July 2, 2009, or a service bulletin listed in Table 7 of this AD, terminates the requirements specified in paragraph (o) of AD 98-26-01.

FAA AD Differences

Note 2: This AD differs from the MCAI and/or service information as follows:

Although the MCAI or service information tells you to contact the manufacturer for repair information, paragraph (n) of this AD requires that you contact the FAA or EASA (or its delegated agent) instead.

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

Other FAA AD Provisions

(s) 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, FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington 98055-4056; 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) AMOCs approved previously in accordance with AD 2006-09-05, Amendment 39-14575, are approved as AMOCs for the corresponding provisions of this AD.

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

Related Information

(t) Refer to MCAI EASA Airworthiness Directive 2008-0187, dated October 10, 2008; Airbus Service Bulletin A310-57-2047, Revision 08, dated July 2, 2009; and Airbus Mandatory Service Bulletin A310-57-2035, Revision 10, dated March 25, 2008; for related information.

Material Incorporated by Reference

(u) You must use Airbus Mandatory Service Bulletin A310-57-2035, Revision 10, dated March 25, 2008; and Airbus Service Bulletin A310-57-2047, Revision 08, dated July 2, 2009; as applicable; to do the actions required by this AD, unless the AD specifies otherwise. Airbus Service Bulletin A310-57-2047 contains the following effective pages:

Page No.	Revision level shown on page	Date shown on page
1-7a, 26, 86, 88	08	July 2, 2009.
7b-21, 26, 29-31, 33, 35, 38, 39, 44, 45, 95, 96	07	March 14, 2008.
22-25, 37	06	July 13, 2004.
27, 28, 36, 47-56, 61-74	Original	February 26, 1991.
32, 34, 40-43, 59-60, 81-85, 87, 89-94	04	March 5, 1999.
46, 75-80	05	August 3, 2000.
57, 58	2	January 22, 1997.

(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 13, 2010.

John Piccola,
Acting Manager, Transport Airplane Directorate,
Aircraft Certification Service.



2010-22-04 McDonnell Douglas Corporation: Amendment 39-16483; Docket No. FAA-2010-0645; Directorate Identifier 2009-NM-200-AD.

Effective Date

- (a) This airworthiness directive (AD) is effective December 3, 2010.

Affected ADs

- (b) This AD supersedes AD 2008-18-10, Amendment 39-15667.

Applicability

(c) This AD applies to McDonnell Douglas Corporation Model MD-90-30 airplanes, certificated in any category, as identified in Boeing Alert Service Bulletin MD90-54A003, Revision 2, dated February 12, 2010.

Subject

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

Unsafe Condition

(e) This AD results from reports of loose, cracked, or missing fasteners in the aft mount support fitting of the left and right engines. The Federal Aviation Administration is issuing this AD to prevent loose, cracked, or missing fasteners in the engine aft support mount fittings, which could lead to separation of the support fittings from the pylon, and could result in separation of the engine from the airplane.

Compliance

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

Replacement and Inspection

(g) Except as required by paragraph (i) of this AD, at the applicable time specified in paragraph 1.E., "Compliance," of Boeing Alert Service Bulletin MD90-54A003, Revision 2, dated February 12, 2010: Replace the upper row of fasteners (Row A) of the support fittings of the left and right engine aft mounts with new fasteners, in accordance with the Accomplishment Instructions of Boeing Alert Service Bulletin MD90-54A003, Revision 2, dated February 12, 2010. Repeat the replacement thereafter at intervals not to exceed 10,000 flight cycles.

(h) Concurrently with any replacement required by paragraph (g) of this AD: Perform a general visual inspection for defects of the lower row fasteners (Row B) of the support fittings of the left and right engine aft mounts, in accordance with the Accomplishment Instructions of Boeing Alert Service Bulletin MD90-54A003, Revision 2, dated February 12, 2010. Defects include missing, loose, and damaged fasteners.

(1) If no defect is found during any general visual inspection required by paragraph (h) of this AD, before further flight, insert a 0.0015-inch feeler gauge between the washer and the structure, or between the fastener head and structure, as applicable, to detect a gap condition, in accordance with the Accomplishment Instructions of Boeing Alert Service Bulletin MD90-54A003, Revision 2, dated February 12, 2010. A gap condition is a defect identified in any location where the feeler gauge can slip completely between a washer or a fastener head and the structure.

(i) If no defect is found during any gap check required by paragraph (h)(1) of this AD, before further flight, apply torque to the fasteners of the lower row (Row B) to determine if there is a defect, in accordance with the Accomplishment Instructions of Boeing Alert Service Bulletin MD90-54A003, Revision 2, dated February 12, 2010. A defect is any fastener that turns with the application of the specified torque. If any defect is found, before further flight, replace all clearance fit fasteners in the lower row (Row B), in accordance with the Accomplishment Instructions of Boeing Alert Service Bulletin MD90-54A003, Revision 2, dated February 12, 2010.

(ii) If any defect is found during any gap check required by paragraph (h)(1) of this AD, before further flight, replace all clearance fit fasteners in the lower row (Row B), in accordance with the Accomplishment Instructions of Boeing Alert Service Bulletin MD90-54A003, Revision 2, dated February 12, 2010.

(2) If any defect is found during any general visual inspection required by paragraph (h) of this AD, before further flight, replace all clearance fit fasteners in the lower row (Row B), in accordance with the Accomplishment Instructions of Boeing Alert Service Bulletin MD90-54A003, Revision 2, dated February 12, 2010.

Exception to Service Bulletin Compliance Times

(i) Where Boeing Alert Service Bulletin MD90-54A003, Revision 2, dated February 12, 2010, specifies a compliance time after the original issue date on the service bulletin, this AD requires compliance within the specified compliance time after the effective date of this AD.

Credit for Actions Accomplished in Accordance With Previous Service Information

(j) Replacements and inspections accomplished before the effective date of this AD in accordance with Boeing Alert Service Bulletin MD90-54A003, Revision 1, dated November 17, 2009, are considered acceptable for compliance with the corresponding actions required by this AD.

Alternative Methods of Compliance (AMOCs)

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

(2) Before using any approved AMOC, notify your Principal Maintenance Inspector or Principal Avionics Inspector, as appropriate, or lacking a principal inspector, your local Flight Standards District Office.

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

Related Information

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

Material Incorporated by Reference

(m) You must use Boeing Alert Service Bulletin MD90-54A003, Revision 2, dated February 12, 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, 3855 Lakewood Boulevard, MC D800 0019, Long Beach, California 90846-0001; telephone 206-544-5000, extension 2; fax 206-766-5683; e-mail dse.boecom@boeing.com; Internet <https://www.myboeingfleet.com>.

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

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

Issued in Renton, Washington, on October 13, 2010.

John Piccola,
Acting Manager, Transport Airplane Directorate,
Aircraft Certification Service.



2010-22-05 Fokker Services B.V.: Amendment 39-16484. Docket No. FAA-2010-0516; Directorate Identifier 2009-NM-251-AD.

Effective Date

(a) This airworthiness directive (AD) becomes effective December 3, 2010.

Affected ADs

(b) None.

Applicability

(c) This AD applies to Fokker Services B.V. Model F.28 Mark 0070 and 0100 airplanes, certificated in any category, all serial numbers.

Subject

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

Reason

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

When preparing for landing, the flight crew of a F28 Mark 0100 (Fokker 100) aeroplane observed a main landing gear (MLG) unsafe indication after landing gear down selection. * * * [T]he right (RH) MLG was partly extended and the left (LH) MLG door was open but without the MLG being extended. * * *

Subsequent investigation revealed that the cause of the MLG extension problem was the (partially) blocked hydraulic return line from the MLG selector valve by pieces of hard plastic. These were identified as parts of the poppet seat of PBSOV [parking brake shut-off valve] Part Number (P/N) 70379. * * *

This condition, if not detected and corrected, could lead to further events where the MLG fails to extend, possibly resulting in loss of control of the aeroplane during landing.

* * * * *

Compliance

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

Actions

(g) Do the following actions.

(1) Within 30 days after the effective date of this AD, do a detailed inspection of the hydraulic lines associated with the PBSOV for contamination in the system (the presence of pieces of material from the poppet seat of an unmodified PBSOV having P/N 70379). If any contamination is found, before further flight, remove the contamination, in accordance with Part 1 of the Accomplishment Instructions of Fokker Service Bulletin SBF100-32-159, dated October 6, 2009.

(2) Within 18 months after the effective date of this AD, re-inspect the hydraulic lines and do all applicable corrective actions as required by paragraph (g)(1) of this AD, and replace the unmodified PBSOV having P/N 70379, with a modified PBSOV having P/N 70379 having the suffix "A" behind the serial number on the identification plate, in accordance with Part 2 of the Accomplishment Instructions of Fokker Service Bulletin SBF100-32-159, dated October 6, 2009.

(3) After accomplishing paragraph (g)(2) of this AD, do not install any unmodified PBSOV having P/N 70379, unless the PBSOV having P/N 70379 has been modified, having the suffix "A" behind the serial number on the identification plate, in accordance with the Accomplishment Instructions of Eaton Service Bulletin 70379-32-01, dated September 15, 2001.

FAA AD Differences

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

Other FAA AD Provisions

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

(1) Alternative Methods of Compliance (AMOCs): The Manager, International Branch, ANM-116, Transport Airplane Directorate, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. Send information to ATTN: Tom Rodriguez, Aerospace Engineer, International Branch, ANM-116, Transport Airplane Directorate, FAA, 1601 Lind Avenue, SW., Renton, Washington 98057-3356; telephone (425) 227-1137; fax (425) 227-1149. Before using any approved AMOC on any airplane to which the AMOC applies, notify your principal maintenance inspector (PMI) or principal avionics inspector (PAI), as appropriate, or lacking a principal inspector, your local Flight Standards District Office. The AMOC approval letter must specifically reference this AD.

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

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

Related Information

(i) Refer to MCAI European Aviation Safety Agency Airworthiness Directive 2009-0220, dated October 14, 2009; Fokker Service Bulletin SBF100-32-159, dated October 6, 2009; and Eaton Service Bulletin 70379-32-01, dated September 15, 2001; for related information.

Material Incorporated by Reference

(j) You must use Fokker Service Bulletin SBF100-32-159, dated October 6, 2009; and Eaton Service Bulletin 70379-32-01, dated September 15, 2001; as applicable; to do the actions required by this AD, unless the AD specifies otherwise.

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

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

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

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

Issued in Renton, Washington, on October 13, 2010.

John Piccola,
Acting Manager, Transport Airplane Directorate,
Aircraft Certification Service.



2010-22-06 Airbus: Amendment 39-16485. Docket No. FAA-2010-0697; Directorate Identifier 2010-NM-102-AD.

Effective Date

(a) This airworthiness directive (AD) becomes effective December 3, 2010.

Affected ADs

(b) None.

Applicability

(c) This AD applies to Airbus Model A330-201, -202, -203, -223, -243, -301, -302, -303, -321, -322, -323, -341, -342, and -343 airplanes, certificated in any category, all manufacturer serial numbers, equipped with part number (P/N) HTE69000-1 wing tank pressure switches installed at Functional Item Number (FIN) locations 74QA1, 74QA2, 75QA1 or 75QA2.

Subject

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

Reason

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

An A330 experienced an uncommanded engine 1 in flight spool down, which occurred while applying fuel gravity feed procedure, in response to low pressure indications from all fuel boost pumps, in both left and right wings.

The investigations revealed that the wing tank pressure switches P/N HTE69000-1 had frozen due to water accumulated in their external part, causing spurious low pressure indications.

As per procedure, the main pumps are then switched off, increasing the level of unavailable fuel. This, in combination with very low fuel quantities or another independent trapped fuel failure scenarios, can lead to fuel starvation on the affected engine(s). * * *

* * * * *

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 5 years after the effective date of this AD, replace the wing tank main pump pressure switches having P/N HTE69000-1 in accordance with the Accomplishment Instructions of Airbus Mandatory Service Bulletin A330-28-3111, Revision 02, dated March 24, 2010.

(h) Actions accomplished before the effective date of this AD according to Airbus Mandatory Service Bulletin A330-28-3111, dated August 12, 2009; or Revision 01, dated December 4, 2009; are considered acceptable for compliance with the corresponding actions specified in this AD.

FAA AD Differences

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

.Other FAA AD Provisions

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

(1) Alternative Methods of Compliance (AMOCs): The Manager, International Branch, ANM-116, Transport Airplane Directorate, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. Send information to ATTN: Vladimir Ulyanov, Aerospace Engineer, International Branch, ANM-116, Transport Airplane Directorate, FAA, 1601 Lind Avenue, SW., Renton, Washington 98057-3356; telephone (425) 227-1138; fax (425) 227-1149. Before using any approved AMOC on any airplane to which the AMOC applies, notify your principal maintenance inspector (PMI) or principal avionics inspector (PAI), as appropriate, or lacking a principal inspector, your local Flight Standards District Office. The AMOC approval letter must specifically reference this AD.

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

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

Related Information

(j) Refer to MCAI European Aviation Safety Agency Airworthiness Directive 2010-0018, dated February 4, 2010; and Airbus Mandatory Service Bulletin A330-28-3111, Revision 02, dated March 24, 2010; for related information.

Material Incorporated by Reference

(k) You must use Airbus Mandatory Service Bulletin A330-28-3111, Revision 02, dated March 24, 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 Airbus SAS–Airworthiness Office–EAL, 1 Rond Point Maurice Bellonte, 31707 Blagnac Cedex, France; telephone +33 5 61 93 36 96; fax +33 5 61 93 45 80; e-mail airworthiness.A330-A340@airbus.com; Internet <http://www.airbus.com>.

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

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

Issued in Renton, Washington, on October 13, 2010.

John Piccola,
Acting Manager, Transport Airplane Directorate,
Aircraft Certification Service.



2010-23-03 The Boeing Company: Amendment 39-16492; Docket No. FAA-2010-1040; Directorate Identifier 2010-NM-207-AD.

Effective Date

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

Affected ADs

(b) None.

Applicability

(c) This AD applies to The Boeing Company Model 757-200, 200CB, -200PF, and -300 series airplanes, line numbers 1 through 1050 inclusive, and all Model 767-200, -300, -300F, and -400ER series airplanes; certificated in any category.

Subject

(d) Joint Aircraft System Component (JASC)/Air Transport Association (ATA) of America Code 28: Fuel.

Unsafe Condition

(e) This AD was prompted by a report that the EICAS failed to alert the flightcrew of an improper fuel system configuration during flight. Later in that flight the EICAS failed to alert the flightcrew that the fuel in the left- and right-hand main tanks was depleted below the minimum of 2,200 pounds. We are issuing this AD to detect and correct a single latent failure of the FUEL CONFIG discrete signal, which disables both the FUEL CONFIG and LOW FUEL messages. Such failure, combined with a flightcrew error in configuring the fuel system, could lead to depletion of the fuel in the main tanks and possible flame out of both engines. A dual engine flame out could result in inaccessibility of the remaining fuel in the center tank due to loss of electrical power to the pumps, consequent unrecoverable dual engine shutdown, and forced landing of the airplane.

Compliance

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

Repetitive Tests

(g) Within 100 flight hours after the effective date of this AD: Do a test for correct functioning of the EICAS to ensure that it receives both the LOW FUEL and FUEL CONFIG discrete signals from the fuel quantity processor unit, in accordance with the Accomplishment Instructions of Boeing Special Attention Service Bulletin 757-28-0121, dated August 18, 2010; or Boeing Special Attention

Service Bulletin 767-28-0106, dated August 25, 2010; as applicable. Repeat the test thereafter at intervals not to exceed 100 flight hours.

Corrective Actions If Necessary

(h) If any test required by paragraph (g) of this AD fails, before further flight, troubleshoot to find any wire faults, and damaged equipment (including bent connector pins), in accordance with the Accomplishment Instructions of Boeing Special Attention Service Bulletin 757-28-0121, dated August 18, 2010; or Boeing Special Attention Service Bulletin 767-28-0106, dated August 25, 2010; as applicable.

(i) If, during any troubleshooting required by paragraph (h) of this AD, any wire fault or damaged equipment (including bent connector pins) is found, before further flight, do the applicable actions specified in paragraph (i)(1) or (i)(2) of this AD.

(1) For airplanes identified in Boeing Special Attention Service Bulletin 757-28-0121, dated August 18, 2010: Repair or replace affected wires and equipment (including bent connector pins), in accordance with the Accomplishment Instructions of Boeing Special Attention Service Bulletin 757-28-0121, dated August 18, 2010.

(2) For airplanes identified in Boeing Special Attention Service Bulletin 767-28-0106, dated August 25, 2010: Do corrective actions using a method approved by the Manager, Seattle Aircraft Certification Office (ACO), FAA.

Note 1: Guidance on doing corrective actions can be found in Chapter 28, Subject 28-41-00, Section July, of the Boeing 767 Fault Isolation Manual (FIM).

Alternative Methods of Compliance (AMOCs)

(j)(1) The Manager, Seattle ACO, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the manager of the ACO, send it to the attention of the person identified in the Related Information section of this AD. Information may be e-mailed to: 9-ANM-Seattle-ACO-AMOC-Requests@faa.gov.

(2) Before using any approved AMOC, notify your Principal Maintenance Inspector or Principal Avionics Inspector, as appropriate, or lacking a principal inspector, your local Flight Standards District Office.

Related Information

(k) For more information about this AD, contact Tak Kobayashi, Aerospace Engineer, Propulsion Branch, ANM-140S, FAA, Seattle ACO, 1601 Lind Avenue, SW., Renton, Washington 98057-3356; telephone (425) 917-6499; fax (425) 917-6590; e-mail takahisa.kobayashi@faa.gov.

Material Incorporated by Reference

(l) You must use Boeing Special Attention Service Bulletin 757-28-0121, dated August 18, 2010; or Boeing Special Attention Service Bulletin 767-28-0106, dated August 25, 2010; as applicable; to do the actions required by this AD, unless the AD specifies otherwise.

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

(2) For service information identified in this AD, contact 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 an NARA facility, call 202-741-6030, or go to http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html.

Issued in Renton, Washington, on October 20, 2010.

Michael Kaszycki,
Acting Manager, Transport Airplane Directorate,
Aircraft Certification Service.



2010-23-04 Bombardier, Inc.: Amendment 39-16493. Docket No. FAA-2010-1041; Directorate Identifier 2010-NM-198-AD.

Effective Date

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

Affected ADs

- (b) None.

Applicability

(c) This AD applies to Bombardier, Inc. Model DHC-8-400, -401, and -402 airplanes, certificated in any category, serial numbers 4001 and subsequent.

Subject

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

Reason

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

Several reports have been received of cracked nacelle attachment fittings. The preliminary investigation determined the cause to be stress corrosion. Stress corrosion cracking could compromise the structural integrity of the nacelle attachment fitting and could adversely affect the safe landing of the aeroplane.

Failure of the fitting could result in collapse of the landing gear.

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

Inspection and Conductivity Inspection of the Nacelle Attachment Fitting Assembly, Part Number 85414663, for Certain Airplanes

(g) For airplanes having serial numbers 4001 through 4304 inclusive, 4314, and 4315: Within 100 flight hours after the effective date of this AD, do a detailed inspection for cracking, and a conductivity inspection on each of the 4 nacelle attachment fittings, in accordance with the

Accomplishment Instructions of Bombardier Service Bulletin 84-54-14, Revision J, dated September 17, 2010. Repeat the detailed inspection at intervals not to exceed 300 flight hours, except as provided by paragraph (j) of this AD.

(1) If any nacelle attachment fitting is found cracked, before further flight, replace the fitting with a new fitting in accordance with paragraph (3) of Part A of the Accomplishment Instructions of Bombardier Service Bulletin 84-54-14, Revision J, dated September 17, 2010.

(2) If the conductivity of any test points on any fitting is found to be greater than 45.0 percent International Annealed Copper Standard (IACS) or if the conductivity of any test points on any fitting is found to be less than 38.0 percent IACS, do the actions required by paragraphs (g)(2)(i) and (g)(2)(ii) of this AD.

(i) Within 24 hours after accomplishing the conductivity inspection specified in paragraph (g) of this AD, do a detailed inspection of the nacelle attachment fitting for cracking, in accordance with the Accomplishment Instructions of Bombardier Service Bulletin 84-54-14, Revision J, dated September 17, 2010, and repeat thereafter at intervals not to exceed 24 hours. If cracking is found, before further flight, replace the fitting with a new fitting in accordance with the requirements of paragraph (g)(2)(ii) of this AD. Replacement of the fitting terminates the daily detailed inspection requirements of this paragraph.

(ii) Except as required by paragraph (g)(2)(i) of this AD: Within 300 flight hours after accomplishing the conductivity inspection specified in paragraph (g) of this AD, replace the fitting with a new fitting in accordance with paragraph (3) of Part A of the Accomplishment Instructions of Bombardier Service Bulletin 84-54-14, Revision J, dated September 17, 2010.

Inspection Reports

(h) Submit a report of the findings (both positive and negative) of the conductivity inspection required by paragraph (g) of this AD to Bombardier, at the applicable time specified in paragraph (h)(1) or (h)(2) of this AD, in accordance with Bombardier Service Bulletin 84-54-14, Revision J, dated September 17, 2010. The report must include the inspection results, a description of any discrepancies found, the airplane serial number, and the number of flight cycles and flight hours on the airplane.

(1) If the inspection was done on or after the effective date of this AD: Submit the report within 14 days after the inspection.

(2) If the inspection was accomplished prior to the effective date of this AD: Submit the report within 14 days after the effective date of this AD.

Inspection of the Nacelle Attachment Fitting Assembly, Part Number 85414663, for Certain Other Airplanes

(i) For airplanes having serial numbers 4305 through 4313 inclusive, and 4316 and subsequent: Within 1,200 flight hours after the effective date of this AD, do a detailed inspection for cracking on each of the 4 nacelle attachment fittings, in accordance with the Accomplishment Instructions of Bombardier Service Bulletin 84-54-14, Revision J, dated September 17, 2010. If any nacelle attachment fitting is found cracked, before further flight, replace the fitting with a new fitting in accordance with paragraph (3) of Part A of the Accomplishment Instructions of Bombardier Service Bulletin 84-54-14, Revision J, dated September 17, 2010. Thereafter, repeat the detailed inspection at intervals not to exceed 300 flight hours, except as provided by paragraph (j) of this AD.

Initial Inspection Compliance Time for New Fittings

(j) For any fitting that is replaced in accordance with paragraph (3) of Part A of the Accomplishment Instructions of Bombardier Service Bulletin 84-54-14, Revision J, dated September 17, 2010, as specified in paragraph (g) or (i) of this AD: Within 1,200 flight hours after replacing the fitting, do a detailed inspection of that replaced fitting as specified in paragraph (g) or (i) of this AD, and repeat the detailed inspection thereafter at intervals not to exceed 300 flight hours.

Credit for Replacing the Fitting Using Previous Service Information

(k) Accomplishing the replacement of the nacelle fittings in accordance with any Bombardier service bulletin identified in Table 1 of this AD before the effective date of this AD is also acceptable for compliance with the fitting replacements specified in paragraphs (g) and (i) of this AD.

Table 1 - Acceptable service information

Bombardier Service Bulletin -	Revision -	Dated -
84-54-14	Original	April 16, 2010
84-54-14	A	April 22, 2010
84-54-14	B	June 11, 2010
84-54-14	C	June 30, 2010
84-54-14	D	July 5, 2010
84-54-14	E	August 19, 2010
84-54-14	F	August 20, 2010
84-54-14	G	September 9, 2010
84-54-14	H	September 10, 2010

Credit for Inspections Accomplished in Accordance With Previous Service Information

(l) Accomplishment of the inspections required by paragraphs (g) and (i) of this AD before the effective date of this AD in accordance with any Bombardier service bulletin identified in Table 1 of this AD is acceptable for compliance with the corresponding actions required by paragraphs (g) and (i) of this AD.

FAA AD Differences

Note 1: This AD differs from the MCAI and/or service information as follows: Although the MCAI does not state a requirement for submitting inspection reports, this AD requires inspection reports to be submitted to the manufacturer so the manufacturer can gather information on the extent of the problem and develop corrective actions. Based on the results of these reports, we might determine that further rulemaking is warranted. This difference has been coordinated with TCCA.

Other FAA AD Provisions

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

(1) Alternative Methods of Compliance (AMOCs): The Manager, ANE-170, New York Aircraft Certification Office (ACO), FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. Send information to Attn: Program Manager, Continuing Operational Safety, FAA, New York ACO, 1600 Stewart Avenue, Suite 410, Westbury, New York 11590; telephone 516-228-7300; fax 516-794-5531. Before using any approved AMOC on any airplane to which the AMOC applies, notify your principal maintenance inspector (PMI) or principal avionics inspector (PAI), as appropriate, or lacking a principal inspector, your local Flight Standards District Office. The AMOC approval letter must specifically reference this AD.

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

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

Related Information

(n) Refer to MCAI Canadian Airworthiness Directive CF-2010-30R1, dated September 21, 2010; and Bombardier Service Bulletin 84-54-14, Revision J, dated September 17, 2010; for related information.

Material Incorporated by Reference

(o) You must use Bombardier Service Bulletin 84-54-14, Revision J, dated September 17, 2010, to do the actions required by this AD, unless the AD specifies otherwise.

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

(2) For service information identified in this AD, contact Bombardier, Inc., Q-Series Technical Help Desk, 123 Garratt Boulevard, Toronto, Ontario M3K 1Y5, Canada; telephone 416-375-4000; fax 416-375-4539; e-mail thd.qseries@aero.bombardier.com; Internet <http://www.bombardier.com>.

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

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

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

Michael J. Kaszycki,
Acting Manager, Transport Airplane Directorate,
Aircraft Certification Service.



2010-23-05 EADS CASA (Type Certificate Previously Held by Construcciones Aeronauticas, S.A.): Amendment 39-16494. Docket No. FAA-2010-0640; Directorate Identifier 2009-NM-142-AD.

Effective Date

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

Affected ADs

- (b) This AD supersedes AD 2008-09-22, Amendment 39-15503.

Applicability

(c) This AD applies to EADS CASA (Type Certificate previously held by Construcciones Aeronauticas, S.A.) Model CN-235, CN-235-100, CN-235-200, and CN-235-300 airplanes, and Model C-295 airplanes, all serial numbers; certificated in any category.

Subject

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

Reason

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

Prompted by [an] accident * * *, the FAA published SFAR 88 (Special Federal Aviation Regulation 88). Subsequently, the Joint Aviation Authorities (JAA) recommended the application of a similar regulation to the National Aviation Authorities (NAA) of its member countries. Under this regulation, all holders of type certificates for passenger transport aeroplanes with either a passenger capacity of 30 or more, or a payload capacity of 3 402 kg (7 500 lbs) or more, which have received their certification since 01 January 1958, are required to conduct a design review against explosion risks.

In August 2005, EASA [European Aviation Safety Agency] published a policy statement on the process for developing instructions for maintenance and inspection of Fuel Tank System ignition source prevention (EASA D 2005/CPRO), that also included the EASA expectations with regard to compliance times of the corrective actions on the unsafe and the not unsafe part of the harmonised design review results.

Fuel Airworthiness Limitations arising from the required systems safety analysis are items that have been shown to have failure mode(s) associated with an 'unsafe condition' as defined in the FAA memo 2003-112-15 'SFAR 88—Mandatory Action

Decision Criteria'. These are identified in Failure Conditions for which an unacceptable probability of ignition risk could exist if specific tasks and/or practices are not performed in accordance with the corrective action(s) developed by the TC [type certificate] holder.

To address these potential unsafe conditions, EASA issued AD 2007-0007, mandating the Fuel System Airworthiness Limitations, comprising maintenance and inspection tasks and Critical Design Configuration Control Limitations (CDCCL) that were, at that moment, defined in issue C of EADS-CASA document DT-0-C00-05001. That document has now been revised and updated to issue D.

For the reasons described above, this EASA AD retains the requirements of AD 2007-0007, which is superseded [and corresponds to FAA AD 2008-09-22], and requires the implementation of the revised Fuel Airworthiness Limitations contained in issue D of EADS-CASA document DT-0-C00-05001 and accomplishment of related modifications.

The required actions are retaining the limitations for fuel tank systems, adding thermal insulation to the air condition compression system, applying double bonding connection on fuel tubes, and modifying the separation between the center wing electrical harness and fuel tubes. The application of double bonding connections on fuel tubes includes doing general visual inspections for damage of the inside of the fuel tanks, and corrective actions if necessary. The corrective actions include contacting EADS CASA for repair instructions and doing the repair. You may obtain further information by examining the MCAI in the AD docket.

Compliance

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

Restatement of Requirements of AD 2008-09-22, With Revised Paragraph Formatting

(g) Do the following actions.

(1) Within 6 months after June 5, 2008 (the effective date of AD 2008-09-22), do the revisions specified in (g)(1)(i) or (g)(1)(ii) of this AD.

(i) Revise the Airworthiness Limitations section of the Instructions for Continued Airworthiness to include the CDCCL data using a method approved in accordance with the procedures specified in paragraph (i)(1) of this AD.

(ii) Revise the Airworthiness Limitations section of the Instructions for Continued Airworthiness by incorporating the information in EADS CASA CN-235/C-295 Technical Document DT-0-C00-05001, Issue C, dated October 2006. Where this EADS CASA technical document refers to an EADS CASA component maintenance manual (CMM), use the applicable CMM specified in Table 1 of this AD.

Table 1 – Applicable CMMs

CDCCL Number	CDCCL Description	CMM	Revision	Date
8	Fuel pumps	Parker Hannifin CMM with Illustrated Parts List 28-22-12 (replaces CM 1C12-34)	5	January 10, 2008
8	Centrifugal fuel boost pump	Parker Hannifin CMM with Illustrated Parts List CM 1C7-20, -21 (replaces CMM RR54170)	B	November 20, 2006
9	Low level sensor	EADS CASA CMM with Illustrated Parts List 28-21-12	003	June 15, 2007
10	3/4" shutoff motorized valve	Eaton CMM with Illustrated Parts List 28-20-81	2	June 20, 2006
11	2" motorized spherical plug pressure relief valve	Eaton CMM with Illustrated Parts List 28-10-63	3	June 20, 2006
12	Signal conditioner	Gull CMM with Illustrated Parts List 28-40-61	3	June 28, 2007
13	Fuel control unit	Zodiac Intertechnique CMM with Illustrated Parts List 28-41-05	3	September 25, 2006

Note 1: Table 1 of this AD does not include CMMs 28-22-15, CE 400150-E01, and C 17MQ0020-005SE, which are listed in EADS CASA CN-235/C-295 Technical Document DT-0-C00-05001, Issue C, dated October 2006. These CMM document numbers no longer apply. In addition, CMM document number 28-21-81 in EADS CASA CN-235/C-295 Technical Document DT-0-C00-05001, Issue C, dated October 2006, should be CMM document number 28-20-81.

(2) After accomplishing the actions specified in paragraph (g)(1) of this AD, no alternative CDCCLs may be used unless the CDCCLs are approved as an alternative method of compliance (AMOC) in accordance with the procedures specified in paragraph (i)(1) of this AD.

New Requirements of This AD

(h) Do the following actions.

(1) Within 3 months after the effective date of this AD, revise the Airworthiness Limitations section of the Instructions for Continued Airworthiness by incorporating the information in EADS CASA CN-235/C-295 Technical Document DT-0-C00-05001, Issue D, dated October 2008. Where this EADS CASA technical document refers to an EADS CASA CMM, use the applicable CMM specified in Table 1 of this AD. Doing this revision terminates the requirements specified in paragraph (g) of this AD.

Note 2: Notwithstanding any other maintenance or operational requirements, components that have been identified as airworthy or installed on the affected airplanes before the revision of the fuel airworthiness limitations, as required by paragraphs (g) and (h) of this AD, do not need to be

reworked in accordance with the CDCCLs. However, once the fuel airworthiness limitations have been revised, future maintenance actions on these components must be done in accordance with the CDCCLs.

(2) After accomplishing the actions specified in paragraph (h)(1) of this AD, no alternative CDCCLs may be used unless the CDCCLs are approved as an AMOC in accordance with the procedures specified in paragraph (i)(1) of this AD.

(3) Within 6 months after the effective date of this AD, accomplish the modifications specified in paragraphs (h)(3)(i), (h)(3)(ii), and (h)(3)(iii) of this AD, as applicable.

(i) For Model CN-235, CN-235-200, and CN-235-300 airplanes having serial numbers identified in EADS CASA Service Bulletin SB-235-21-18, dated August 2, 2007: Add thermal insulation to the air condition compression system, in accordance with the Accomplishment Instructions of EADS CASA Service Bulletin SB-235-21-18, dated August 2, 2007.

(ii) For Model CN-235, CN-235-200, and CN-235-300 airplanes having serial numbers identified in EADS CASA Service Bulletin SB-235-28-18, dated August 2, 2007: Apply double bonding connections on fuel tubes and do general visual inspections for damage inside of the tank, in accordance with the Accomplishment Instructions of EADS CASA Service Bulletin SB-235-28-18, dated August 2, 2007. If any damage is found inside the tank, before further flight, contact EADS CASA for repair instructions and do the repair.

(iii) For Model CN-235, CN-235-200, and CN-235-300 airplanes having serial numbers identified in EADS CASA Service Bulletin SB-235-24-20, dated August 2, 2007: Modify the separation between the center wing electrical harnesses and fuel tubes, in accordance with the Accomplishment Instructions of EADS CASA Service Bulletin SB-235-24-20, dated August 2, 2007.

FAA AD Difference

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

(1) The European Aviation Safety Agency (EASA) AD 2009-0146, dated July 3, 2009, inadvertently refers to the incorrect service bulletins. For applying double bonding connections on fuel tubes and doing general visual inspections for damage inside the tank, we refer to EADS CASA Service Bulletin SB-235-28-18, dated August 2, 2007. For modifying the separation between the center wing electrical harnesses and fuel tubes, we refer to EADS CASA Service Bulletin SB-235-24-20, dated August 2, 2007.

(2) The EASA AD 2009-0146, dated July 3, 2009; and EADS CASA Service Bulletin SB-235-28-18, dated August 2, 2007; do not specify corrective actions if any damage is found inside the tank. If any damage is found inside the tank, this AD requires contacting EADS CASA for repair instructions and doing the repair.

Other FAA AD Provisions

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

(1) Alternative Methods of Compliance (AMOCs): The Manager, International Branch, ANM-116, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. Send information to Attn: Shahram Daneshmandi, Aerospace Engineer, International Branch, ANM-116, Transport Airplane Directorate, FAA, 1601 Lind Avenue, SW., Renton, Washington 98057-3356; telephone (425) 227-1112; 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

(j) Refer to MCAI EASA Airworthiness Directive 2009-0146, dated July 3, 2009, the CMMs identified in Table 1 of this AD, and the service information identified in Table 2 of this AD, for related information.

Table 2 – Service information

Document	Issue	Date
EADS CASA Service Bulletin SB-235-21-18	Original	August 2, 2007
EADS CASA Service Bulletin SB-235-24-20	Original	August 2, 2007
EADS CASA Service Bulletin SB-235-28-18	Original	August 2, 2007
EADS CASA CN-235/C-295 Technical Document DT-0-C00-05001	Issue C	October 2006
EADS CASA CN-235/C-295 Technical Document, DT-0-C00-05001	Issue D	October 2008

Material Incorporated by Reference

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

(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 EADS-CASA, Military Transport Aircraft Division (MTAD), Integrated Customer Services (ICS), Technical Services, Avenida de Aragón 404, 28022 Madrid, Spain; telephone +34 91 585 55 84; fax +34 91 585 55 05; e-mail MTA.TechnicalService@casa.eads.net; Internet <http://www.eads.net>.

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

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

Table 3 – Material incorporated by reference

Document	Revision/ Issue	Date
EADS CASA CMM with Illustrated Parts List 28-21-12	Revision 003	June 15, 2007
EADS CASA CN-235/C-295 Technical Document DT-0-C00-05001	Issue C	October 2006
EADS CASA CN-235/C-295 Technical Document DT-0-C00-05001	Issue D	October 2008
EADS CASA Service Bulletin SB-235-21-18	Original	August 2, 2007
EADS CASA Service Bulletin SB-235-24-20	Original	August 2, 2007
EADS CASA Service Bulletin SB-235-28-18	Original	August 2, 2007
Eaton CMM with Illustrated Parts List 28-10-63	Revision 3	June 20, 2006
Eaton CMM with Illustrated Parts List 28-20-81	Revision 2	June 20, 2006
Gull CMM with Illustrated Parts List 28-40-61	Revision 3	June 28, 2007
Parker Hannifin CMM with Illustrated Parts List 28-22-12	Revision 5	January 10, 2008
Parker Hannifin CMM with Illustrated Parts List CM 1C7-20, -21	Revision B	November 20, 2006
Zodiac Intertechnique CMM with Illustrated Parts List 28-41-05	Revision 3	September 25, 2006

(The title page of EADS CASA CMM with Illustrated Parts List 28-21-12 contains an incorrect revision level; the correct revision level is 003. The issue date of EADS CASA CN-235/C-295 Technical Document DT-0-C00-05001, Issue C; and EADS CASA CN-235/C-295 Technical Document DT-0-C00-05001, Issue D; can only be found on the title page and in the Revisions Record. Certain pages of EADS CASA Service Bulletin SB-235-28-18 have missing or incomplete document numbers and dates; the correct document number and dates for those pages can be found on the first page of that document. The date shown on the List of Effective Pages for Eaton CMM with Illustrated Parts List 28-10-63, and Eaton CMM with Illustrated Parts List 28-20-81, is incorrect; the correct date for that page of those documents is June 20, 2006. The revision level shown on page 7 of Parker Hannifin CMM with Illustrated Parts List CM 1C7-20, -21 (replaces CMM RR54170), is incorrect; the correct revision level for that page is B. The revision level of EADS CASA CN-235/C-295 Technical Document DT-0-C00-05001, Issue C; EADS CASA CN-235/C-295 Technical Document DT-0-C00-05001, Issue D; and Eaton CMM with Illustrated Parts List 28-20-81; is located only in the Record of Revisions for those documents.)

Issued in Renton, Washington, on October 20, 2010.
Michael Kaszycki,
Acting Manager, Transport Airplane Directorate,
Aircraft Certification Service.



2010-23-06 McCauley Propeller Systems: Amendment 39-16495; Docket No. FAA-2005-22690; Directorate Identifier 2005-NE-35-AD.

Effective Date

(a) This airworthiness directive (AD) is effective December 8, 2010.

Affected ADs

(b) This AD supersedes AD 2005-24-08, Amendment 39-14388.

Applicability

(c) This AD applies to McCauley Propeller Systems propeller assemblies, part numbers (P/Ns) B5JFR36C1101/114GCA-0, C5JFR36C1102/L114GCA-0, B5JFR36C1103/114HCA-0, and C5JFR36C1104/L114HCA-0. These propeller assemblies are installed on BAE Systems (Operations) Limited Jetstream Model 4100 series airplanes.

Unsafe Condition

(d) This AD results from a report of a cracked propeller hub. We are issuing this AD to prevent cracked propeller hubs, which could cause failure of the propeller hub, blade separation, and loss of control of 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.

Propeller Hub Reduced Life Limits

(f) For any propeller assembly, P/N B5JFR36C1101/114GCA-0, C5JFR36C1102/L114GCA-0, B5JFR36C1103/114HCA-0, or C5JFR36C1104/L114HCA-0, with a hub that exceeds 6,000 hours time-since-new (TSN) on the effective date of this AD, remove the propeller hub from service within 250 hours time-in-service after the effective date of this AD.

(g) For any propeller assembly, P/N B5JFR36C1101/114GCA-0, C5JFR36C1102/L114GCA-0, B5JFR36C1103/114HCA-0, or C5JFR36C1104/L114HCA-0, with a hub with fewer than 6,000 hours TSN, remove the propeller hub from service not later than 6,000 hours TSN.

Prohibition of Hubs Exceeding Life Limit

(h) After the effective date of this AD, don't install any hub removed from any propeller assembly that was removed by paragraphs (f) or (g) of this AD into any propeller assembly.

Alternative Methods of Compliance

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

Related Information

(j) Contact Jeff Janusz, Aerospace Engineer, Wichita Aircraft Certification Office, FAA, Small Airplane Directorate, 1801 Airport Road, Room 100, Wichita, KS 67209, telephone: (316) 946-4148; fax: (316) 946-4107, for more information about this AD.

Material Incorporated by Reference

(k) None.

Issued in Burlington, Massachusetts, on October 25, 2010.
Karen M. Grant,
Acting Assistant Manager, Engine & Propeller Directorate,
Aircraft Certification Service.



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 020 00	TS-1507
D554 71000 010 00	TS-1090	D554 71000 020 00	TS-1509
D554 71000 012 00	TS-1227	D554 71000 020 00	TS-1515
D554 71000 014 00	TS-1350	D554 71000 020 00	TS-1528
D554 71000 014 00	TS-1366	D554 71000 020 00	TS-1530
D554 71000 014 00	TS-1371	D554 71000 020 00	TS-1532
D554 71000 014 00	TS-1383	D554 71000 020 00	TS-1535
D554 71000 014 00	TS-1387	D554 71000 020 00	TS-1536
D554 71000 016 00	TS-1412	D554 71000 020 00	TS-1538
D554 71000 018 00	TS-1443	D554 71000 000 00	TS-1537
D554 71000 018 00	TS-1444	D554 71001 00 000	TS-1540
D554 71000 018 00	TS-1468	D554 71001 000 00	TS-1541
D554 71000 020 00	TS-1480	D554 71001 000 00	TS-1543
D554 71000 020 00	TS-1491	D554 71001 000 00	TS-1548
D554 71000 020 00	TS-1495	D554 71001 000 00	TS-1549
D554 71000 020 00	TS-1498	D554 71001 000 00	TS-1551
D554 71000 020 00	TS-1499	D554 71001 000 00	TS-1554
D554 71000 020 00	TS-1500	D554 71001 000 00	TS-1555
D554 71000 020 00	TS-1505	D554 71001 000 00	TS-1556
D554 71000 020 00	TS-1506	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-Z072
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
D55471002 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-2390
D554 71002 000 00 0002	TS-2394
D554 71002 000 00 0002	TS-2396
D554 71002 000 00 0002	TS-2401
D554 71002 000 00 0002	TS-2406

D554 71002 000 00 0002	TS-2461
D554 71002 000 00 0002	TS-2468
D554 71002 000 00 0002	TS-2516
D554 71002 000 00 0002	TS-2537
D554 71002 000 00 0002	TS-2543
D554 71002 000 00 0002	TS-2546
D554 71002 000 00 0002	TS-2619
D554 71002 000 00 0002	TS-2684

D554 71002 000 00 0003	TS-2752
D554 71002 000 00 0003	TS-2869
D554 71002 000 00 0003	TS-2876
D554 71002 000 00 0003	TS-2970
D554 11002 000 00 0003	TS-2971
D554 71002 000 00 0003	TS-2987
D554 11004 000 00 0000	TS-3083
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/m³ (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/m³ (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.