



**FEDERAL AVIATION ADMINISTRATION
AIRWORTHINESS DIRECTIVES
LARGE AIRCRAFT**

BIWEEKLY 2010-17

This electronic copy may be printed and used in lieu of the FAA biweekly paper copy.

U.S. Department of Transportation
Federal Aviation Administration
Regulatory Support Division
Delegation and Airworthiness Programs Branch, AIR-140
P. O. Box 26460
Oklahoma City, OK 73125-0460
FAX 405-954-4104

LARGE AIRCRAFT

AD No.	Information	Manufacturer	Applicability
--------	-------------	--------------	---------------

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

Biweekly 2010-01

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

Biweekly 2010-02

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

LARGE AIRCRAFT

AD No.	Information	Manufacturer	Applicability
--------	-------------	--------------	---------------

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

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

LARGE AIRCRAFT

AD No.	Information	Manufacturer	Applicability
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

LARGE AIRCRAFT

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

LARGE AIRCRAFT

AD No.	Information	Manufacturer	Applicability
Info: E - Emergency; COR - Correction; S - Supersedes; R - Revision; FR - Final Rule of Emergency			
Biweekly 2010-11			
2009-26-09	COR	General Electric Company	Engine: CF34-1A, -3A, -3A1, -3A2, -3B, and -3B1
2010-10-05	S 94-12-04	Boeing	747-100, 747-100B, 747-100B SUD, 747-200B, 747-300, 747SR, and 747SP
2010-10-07		Empresa Brasileira de Aeronautica S.A.	ERJ 170-100 LR, -100 STD, -100 SE, -100 SU, -200 LR, -200 STD, and -200 SU, ERJ 190-100 ECJ, -100 LR, -100 IGW, -100 STD, -200 STD, -200 LR, and -200 IGW
2010-10-08		Airbus	A318-111, -112, -121, and -122 airplanes; Model A319-111, -112, -113, -114, -115, -131, -132, and -133 airplanes; Model A320-111, -211, -212, -214, -231, -232, and -233 airplanes; and Model A321-111, -112, -131, -211, -212, -213, -231, and -232
2010-10-11		Empresa Brasileira de Aeronautica S.A.	EMB-135BJ, -135ER, -135KE, -135KL, -135LR, -145, -145ER, -145MR, -145LR, -145XR, -145MP, and -145EP
2010-10-13		BAE Systems	BAe 146-100A, -200A, and -300A series airplanes; and Model Avro 146-RJ70A, 146-RJ85A, and 146-RJ100A
2010-10-18		Bombardier, Inc.	BD-100-1A10 (Challenger 300)
2010-10-19	S 2010-02-03	Airbus	A340-211, -212, -213, -311, -312, and -313
2010-10-20		McDonnell Douglas	DC-9-31, DC-9-32, DC-9-32 (VC-9C), DC-9-32F, DC-9-33F, DC-9-34, DC-9-34F, and DC-9-32F (C-9A, C-9B), DC-9-41, and DC-9-51
2010-10-21		Bombardier, Inc.	CL-600-2C10 (Regional Jet Series 700, 701, & 702), CL-600-2D15 (Regional Jet Series 705) and CL-600-2D24 (Regional Jet Series 900)
2010-10-22	S 2005-23-12	BAE Systems	BAe 146-100A, -200A, and -300A series airplanes; and Model Avro 146-RJ70A, 146-RJ85A, and 146-RJ100A
2010-10-23	S 70-16-02	Dowty Propellers	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

LARGE AIRCRAFT

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



2009-15-16 R1 McDonnell Douglas Corporation: Amendment 39-16380. Docket No. FAA-2010-0702; Directorate Identifier 2010-NM-144-AD.

Effective Date

(a) This airworthiness directive (AD) is effective August 5, 2010, to all persons except those persons to whom it was made immediately effective by AD 2009-15-16, issued July 15, 2009, which contained the requirements of this amendment.

Affected ADs

(b) This AD revises AD 2009-15-16, Amendment 39-16345.

Applicability

(c) This AD applies to McDonnell Douglas Corporation Model DC-9-11, DC-9-12, DC-9-13, DC-9-14, DC-9-15, and DC-9-15F airplanes, Model DC-9-31, DC-9-32, DC-9-32 (VC-9C), DC-9-32F, DC-9-33F, DC-9-34, DC-9-34F, and DC-9-32F (C-9A, C-9B) airplanes, 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 airplanes; certificated in any category; equipped with flight deck doors installed in accordance with Supplemental Type Certificate ST02463AT.

Subject

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

Unsafe Condition

(e) This AD was prompted by a report indicating that the current design of certain equipment of the flight deck door is defective. The Federal Aviation Administration is issuing this AD to prevent the failure of this equipment, which could jeopardize flight safety.

Compliance

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

Installation

(g) Within 30 days after July 6, 2010 (the effective date of AD 2009-15-16), modify the flight deck door, in accordance with TIMCO Service Bulletin TSB-88-52-045, Revision E, dated November 6, 2008; or Revision G, dated December 8, 2009.

Actions Accomplished According to Previous Issue of Service Bulletin

(h) Modification of the flight deck door before the effective date of this AD in accordance with TIMCO Service Bulletin TSB-88-52-045, Revision F, dated November 2, 2009, is acceptable for compliance with the corresponding requirements of this AD.

Alternative Methods of Compliance (AMOCs)

(i)(1) The Manager, Atlanta Aircraft Certification Office (ACO), FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. Send information to ATTN: Linda Haynes, Aerospace Engineer, COS–Certificate Management Branch, ACE-102A, FAA, Atlanta Aircraft Certification Office, 1701 Columbia Avenue, College Park, GA 30337; telephone 404-474-5525; fax 404-474-5606.

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

(3) AMOCs previously in accordance with AD 2009-15-16, amendment 39-16345, are approved as AMOCs for the corresponding provisions of this AD.

Material Incorporated by Reference

(j) You must use TIMCO Service Bulletin TSB-88-52-045, Revision E, dated November 6, 2008; or TIMCO Service Bulletin TSB-88-52-045, Revision G, dated December 8, 2009; to do the actions required by this AD, unless the AD specifies otherwise.

(1) The Director of the Federal Register approved the incorporation by reference of TIMCO Service Bulletin TSB-88-52-045, Revision G, dated December 8, 2009, under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) The Director of the Federal Register previously approved the incorporation by reference of TIMCO Service Bulletin TSB-88-52-045, Revision E, dated November 6, 2008, on July 6, 2010 (75 FR 38017, July 1, 2010).

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

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

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

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

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



FAA
Aviation Safety

AIRWORTHINESS DIRECTIVE

www.faa.gov/aircraft/safety/alerts/
www.gpoaccess.gov/fr/advanced.html

CORRECTION: [*Federal Register: August 5, 2010 (Volume 75, Number 150)*]; Page 47207-47208; www.access.gpo.gov/su_docs/aces/aces140.html]

2010-14-19 Airbus: Amendment 39-16364. Docket No. FAA-2009-1215; Directorate Identifier 2009-NM-126-AD.

Effective Date

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

Affected ADs

(b) None.

Applicability

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

(1) Airbus Model A330-201, -202, -203, -223, -243, -301, -302, -303, -321, -322, -323, -341, -342 and -343 airplanes, all serial numbers, except those on which Airbus modification 55590 has been embodied in production.

(2) Airbus Model A340-211, -212, -213, -311, -312, -313, -541, and -642 airplanes, all serial numbers fitted with lower deck cargo compartment (LDCC), except those on which Airbus modification 55590 has been embodied in production.

(3) Airbus Model A340-311, -312, -313, -541, and -642 airplanes, all serial numbers fitted with bulk cargo rest compartment (BCRC), except those on which Airbus modification 56047 has been embodied in production.

Note 1: The BCRC is embodied in production on Model A340-300, A340-500, and A340-600 airplanes through the following Airbus modification (including but not limited to): 47198, 47884, 48895, 48710, 49136, 50107, 50900, 50901, or 51320.

Note 2: The fire extinguishing system for the BCRC is embodied in production on Model A340-500 and A340-600 airplanes through Mod 47197 (partial BCRC); on Model A340-500 and A340-600 airplanes through Mod 47883 (full BCRC); and on Model A340-300 airplanes through Mod 50108 (partial BCRC).

Subject

(d) Air Transport Association (ATA) of America Code 26: Fire protection.

Reason

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

During the qualification test campaign at the supplier site of the prototype Flow Metering Compact Unit (FMCU) Part Number (P/N) QA07907-03, partial blockage of the water absorbing filter element P/N QA06123 was observed several times. The blockage was created by carbon debris from the cartridge and from the burst disc of the Halon bottle.

This water absorbing filter element is part of Halon Dual-Filter Assembly installed also in the Flow Metering System (FMS) of the cargo compartment Fire Extinguishing System used in the A330 and A340 aeroplanes.

Blockage of the water absorbing filter element could lead to reduction of Halon outflow, leading to incapacity to maintain fire extinguishing agent concentration. Combined with fire, this could result in an uncontrolled fire in the affected compartment, which would constitute an unsafe condition.

To avoid water absorbing filter element blockage, this AD requires replacement [with improved dual-filter assemblies] or modification of the Halon dual-filter assemblies of the lower deck cargo compartment fire extinguishing system:

- In the forward cargo compartment for aeroplanes fitted with Lower Deck Cargo Compartment (LDCC) and
- In the bulk cargo compartment for aeroplanes fitted with Bulk Cargo Rest Compartment (BCRC) fire extinguishing system.

Actions and Compliance

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

(1) Replace or modify the Halon dual-filter assemblies of the flow metering fire extinguishing system in the forward and bulk cargo compartments, as applicable, in accordance with the Accomplishment Instructions of the applicable service bulletin identified in Table 1 of this AD, at the applicable time specified in paragraphs (f)(1)(i), (f)(1)(ii), and (f)(1)(iii) of this AD.

Table 1–Service Bulletins

Airbus mandatory model	Airbus	Service Bulletin–	Revision–	Dated–
A330-200 and -300 airplanes	A330-26-3040	03	November 9, 2009.	
A340-200 and -300 airplanes	A340-26-4038	03	November 9, 2009.	
A340-500 and -600 airplanes	A340-26-5019	04	December 11, 2009.	

(i) For airplanes fitted with Halon dual-filter assemblies part number (P/N) QA06753: Within 18 months after the effective date of this AD.

(ii) For Model A340-642 series airplanes, weight variant 101, 102, and 103 fitted with Halon dual-filter assembly P/N QA06753-01 or P/N QA06753-02: Within 18 months after the effective date of this AD.

(iii) For airplanes other than those identified in paragraph (f)(1)(ii) of this AD and fitted with Halon dual-filter assembly P/N QA06753-01 or P/N QA06753-02: Within 24 months after the effective date of this AD.

Note 3: The Halon dual-filter assembly P/N QA06753 is embodied in production through Airbus modification 40041. The Halon dual-filter assembly P/N QA06753-01 is only embodied in service through Airbus Service Bulletin A330-26-3030 or Airbus Service Bulletin A340-26-4030. The Halon dual-filter assembly P/N QA06753-02 is embodied in production through modification 47197 or 47883 or 50108 (BCRC) and 51065 or 51329 (LDCC) or in service through Airbus Service Bulletin A330-26-3030 or Airbus Service Bulletin A340-26-4030.

(2) Actions accomplished before the effective date of this AD according to the service bulletins listed in Table 2 of this AD are considered acceptable for compliance with the corresponding actions specified in this AD.

Table 2–Credit Service Bulletins

Airbus–	Revision–	Dated–
Mandatory Service Bulletin A330-26-3040	02	August 6, 2008.
Mandatory Service Bulletin A340-26-5019	02	August 6, 2008.
Mandatory Service Bulletin A340-26-5019	03	May 19, 2009.
Service Bulletin A330-26-3040	Original	March 29, 2007.
Service Bulletin A330-26-3040	01	December 19, 2007.
Service Bulletin A340-26-4038	Original	March 29, 2007.
Service Bulletin A340-26-4038	01	December 19, 2007.
Service Bulletin A340-26-4038	02	August 6, 2008.
Service Bulletin A340-26-5019	Original	July 27, 2007.
Service Bulletin A340-26-5019	01	January 23, 2008.

FAA AD Differences

Note 4: This AD differs from the MCAI and/or service information as follows:

(1) The second paragraph of the applicability of the MCAI specifies certain models except those on which Modification 55590 has been done. Paragraph (c)(2) of this AD specifies those models fitted with lower deck cargo compartment (LDCC), except those on which Modification 55590 has been done.

(2) Although the MCAI tells you to submit information to the manufacturer, this AD does not require such a submittal.

Other FAA AD Provisions

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

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

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

Related Information

(h) Refer to MCAI European Aviation Safety Agency Airworthiness Directive 2009-0064, dated March 12, 2009, and the service information identified in Table 3 of this AD, for related information.

Table 3—Related Service Information

Airbus mandatory service bulletin—	Revision—	Dated—
A330-26-3040	03	November 9, 2009.
A340-26-4038	03	November 9, 2009.
A340-26-5019	04	December 11, 2009.

Material Incorporated by Reference

(i) You must use the service information contained in Table 4 of this AD to do the actions required by this AD, unless the AD specifies otherwise.

Table 4—Material Incorporated by Reference

Airbus mandatory service bulletin—	Revision—	Dated—
A330-26-3040	03	November 9, 2009.
A340-26-4038	03	November 9, 2009.
A340-26-5019	04	December 11, 2009.

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

(2) For service information identified in this AD, contact Airbus SAS–Airworthiness Office–EAL, 1 Rond Point Maurice Bellonte, 31707 Blagnac Cedex, France; telephone +33 5 61 93 36 96; fax +33 5 61 93 45 80, e-mail airworthiness.A330-A340@airbus.com; Internet <http://www.airbus.com>.

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

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

Issued in Renton, Washington on June 29, 2010.

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



2010-16-01 Empresa Brasileira de Aeronautica S.A. (EMBRAER): Amendment 39-16377.
Docket No. FAA-2008-1079; Directorate Identifier 2008-NM-116-AD.

Effective Date

- (a) This airworthiness directive (AD) becomes effective September 9, 2010.

Affected ADs

- (b) This AD supersedes AD 2008-13-14, Amendment 39-15577.

Applicability

(c) This AD applies to Empresa Brasileira de Aeronautica S.A. (EMBRAER) Model EMB-135ER, -135KE, -135KL, and -135LR airplanes, and Model EMB-145, -145ER, -145MR, -145LR, -145XR, -145MP, and -145EP airplanes; certificated in any category; except for Model EMB-145LR airplanes modified according to Brazilian Supplemental Type Certificate 2002S06-09, 2002S06-10, or 2003S08-01.

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

Subject

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

Reason

(e) The mandatory continuing airworthiness information (MCAI), Brazilian Airworthiness Directive 2007-08-02, effective September 27, 2007, states:

Fuel system reassessment, performed according to RBHA-E88/SFAR-88 (Regulamento Brasileiro de Homologacao Aeronautica 88/Special Federal Aviation Regulation No. 88), requires the inclusion of new maintenance tasks in the Critical Design Configuration Control Limitations (CDCCL) and in the Fuel System Limitations (FSL), necessary to preclude ignition sources in the fuel system. * * *

The MCAI, Brazilian Airworthiness Directive 2009-08-03, effective August 20, 2009, states:

An airplane fuel tank systems review required by Special Federal Aviation Regulation Number 88 (SFAR 88) and "RBHA Especial Número 88" (RBHA E 88) has shown that additional maintenance and inspection instructions are necessary to maintain the design features required to preclude the existence or development of an ignition source within the fuel tanks of the airplane.

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

Restatement of Requirements of AD 2008-13-14

Actions and Compliance

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

(1) Before December 16, 2008, revise the ALS of the ICA to incorporate Section A2.5.2, Fuel System Limitation Items, of Appendix 2 of EMBRAER EMB135/ERJ140/EMB145 Maintenance Review Board Report MRB-145/1150, Revision 11, dated September 19, 2007, except as provided by paragraph (g) of this AD. Except as required by paragraph (g) of this AD, for all tasks identified in Section A2.5.2 of Appendix 2 of EMBRAER EMB135/ERJ140/EMB145 Maintenance Review Board Report MRB-145/1150, Revision 11, dated September 19, 2007, the initial compliance times start from the applicable times specified in Table 1 of this AD; and the repetitive inspections must be accomplished thereafter at the interval specified in Section A2.5.2 of Appendix 2 of EMBRAER EMB135/ERJ140/EMB145 Maintenance Review Board Report MRB-145/1150, Revision 11, dated September 19, 2007, except as provided by paragraphs (f)(3) and (h) of this AD.

Table 1 – Initial Inspections

Reference Number	Description	Compliance Time (whichever occurs later)	
		Threshold	Grace Period
28-11-00-720-001-A00	Functionally Check critical bonding integrity of selected conduits inside the wing tank, Fuel Pump and FQIS connectors at tank wall by conductivity measurements	Before the accumulation of 30,000 total flight hours	Within 90 days after December 16, 2008
28-17-01-720-001-A00	Functionally Check critical bonding integrity of Fuel Pump, VFQIS and Low Level SW connectors at tank wall by conductivity measurements	Before the accumulation of 30,000 total flight hours	Within 90 days after December 16, 2008

28-21-01-220-001-A00	Inspect Electric Fuel Pump Connector	Before the accumulation of 10,000 total flight hours	Within 90 days after December 16, 2008
28-23-03-220-001-A00	Inspect Pilot Valve harness inside the conduit	Before the accumulation of 20,000 total flight hours	Within 90 days after December 16, 2008
28-23-04-220-001-A00	Inspect Vent Valve harness inside the conduit	Before the accumulation of 20,000 total flight hours	Within 90 days after December 16, 2008
28-27-01-220-001-A00	Inspect Electric Fuel Transfer Pump Connector	Before the accumulation of 10,000 total flight hours	Within 90 days after December 16, 2008
28-41-03-220-001-A00	Inspect FQIS harness for clamp and wire jacket integrity	Before the accumulation of 20,000 total flight hours	Within 90 days after December 16, 2008
28-41-07-220-001-A00	Inspect VFQIS and Low Level SW Harness for clamp and wire jacket integrity	Before the accumulation of 20,000 total flight hours	Within 90 days after December 16, 2008

(2) Within 90 days after July 30, 2008 (the effective date of AD 2008-13-14), revise the ALS of the ICA to incorporate items 1, 2, and 3 of Section A2.4, Critical Design Configuration Control Limitation (CDCCL), of Appendix 2 of EMBRAER EMB135/ERJ140/EMB145 Maintenance Review Board Report MRB-145/1150, Revision 11, dated September 19, 2007.

(3) After accomplishing the actions specified in paragraphs (f)(1) and (f)(2) of this AD, no alternative inspections, inspection intervals, or CDCCLs may be used unless the inspections, intervals, or CDCCLs are approved as an alternative method of compliance (AMOC) in accordance with the procedures specified in paragraph (h) of this AD.

New Requirements of This AD

Actions and Compliance

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

(1) Within 30 days after the effective date of this AD, revise the ALS of the ICA to incorporate Tasks 28-41-01-720-001-A01 and 28-41-04-720-001-A01 identified in Table 2 of this AD into Section A2.5.2, Fuel System Limitation Items, of Appendix 2 of EMBRAER EMB135/ERJ140/EMB145 Maintenance Review Board Report MRB-145/1150. After incorporating Tasks 28-41-01-720-001-A01 and 28-41-04-720-001-A01 identified in Table 2 of this AD, Tasks 28-41-01-720-001-A00 and 28-41-04-720-001-A00 identified in Section A2.5.2 of Appendix 2 of EMBRAER EMB135/ERJ140/EMB145 Maintenance Review Board Report MRB-145/1150, Revision 11, dated September 19, 2007, are no longer required. For the fuel limitation tasks identified

in Table 2 of this AD, do the initial task at the later of the applicable "Threshold" and "Grace Period" times specified in Table 2 of this AD. FCUs on which Parker has performed the initial tasks required by this paragraph before the effective date of this AD, and which are marked with "Service Bulletin 367-934-28-110, Revision A" and the date of accomplishment, are in compliance with the corresponding task required by this paragraph.

Table 2 – Inspections

Task Number	Description	Part Number	Compliance Time (whichever occurs later)		Repetitive Interval (not to exceed)
			Threshold	Grace Period	
28-41-01-720-001-A01	Perform an initial functional check as shown in Testing and Fault Isolation sections 1, 2, and 3; an external visual inspection as shown in the Check section 2; an internal visual inspection as shown in the Repair section 1; a functional check of the safe-life features as shown in Testing and Fault Isolation section 4; and a final functional check as shown in Testing and Fault Isolation sections 1, 2, and 3; of the fuel conditioning unit (FCU), in accordance with Parker Component Maintenance Manual (CMM) 28-41-36, Revision 4, dated March 13, 2009	367-934-001	Before the accumulation of 10,000 total flight hours on the FCU	Within 90 days after the effective date of this AD	10,000 flight hours on the FCU since the most recent functional check

28-41-01-720-001-A01	Perform an initial functional check as shown in Testing and Fault Isolation sections 1, 2, and 3; an external visual inspection as shown in Check section 2; an internal visual inspection as shown in Repair section 1; a functional check of the safe-life features as shown in Testing and Fault Isolation section 4; and a final functional check as shown in Testing and Fault Isolation sections 1, 2, and 3; of the FCU, in accordance with Parker CMM 28-41-69, Revision 2, dated March 13, 2009	367-934-002	Before the accumulation of 10,000 total flight hours on the FCU	Within 90 days after the effective date of this AD	10,000 flight hours on the FCU since the most recent functional check
28-41-04-720-001-A01	Perform an initial functional check as shown in Testing and Fault Isolation sections 1, 2, and 3; an external visual inspection as shown in Check section 2; an internal visual inspection as shown in Repair section 1; a functional check of the safe-life features as shown in Testing and Fault Isolation section 4; and a final functional check as shown in Testing and Fault Isolation sections 1, 2, and 3; of the ventral FCU (VFCU), in accordance with Parker CMM 28-41-80, dated April 3, 2009	367-934-005	Before the accumulation of 10,000 total flight hours on the VFCU	Within 90 days after the effective date of this AD	10,000 flight hours on the VFCU since the most recent functional check

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

Explanation of CDCCL Requirements

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 ALS of the ICA, as required by paragraph (f)(3) of this AD, do not need to be reworked in accordance with the CDCCLs. However, once the ALS of the ICA has been revised, future maintenance actions on these components must be done in accordance with the CDCCLs.

FAA AD Differences

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

(1) The applicability of Brazilian AD 2009-08-03, effective August 20, 2009, includes Model EMB-135BJ airplanes. This AD does not include that model because that model is included in the applicability of FAA AD 2008-13-15, Amendment 39-15578. We are considering further rulemaking to revise AD 2008-13-15.

(2) Although Brazilian Airworthiness Directive 2009-08-03, effective August 20, 2009, specifies both revising the airworthiness limitations and repetitively inspecting, this AD only requires the revision. Requiring a revision of the airworthiness limitations, rather than requiring individual repetitive inspections, requires operators to record AD compliance status only at the time they make the revision, rather than after every inspection. Repetitive inspections specified in the airworthiness limitations must be complied with in accordance with 14 CFR 91.403(c).

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, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. Send information to ATTN: Todd Thompson, Aerospace Engineer, International Branch, ANM-116, Transport Airplane Directorate, FAA, 1601 Lind Avenue, SW., Renton, Washington 98057-3356; telephone 425-227-1175; fax (425) 227-1149. Before using any approved AMOC on any airplane to which the AMOC applies, notify your principal maintenance inspector (PMI) or principal avionics inspector (PAI), as appropriate, or lacking a principal inspector, your local Flight Standards District Office. The AMOC approval letter must specifically reference this AD.

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

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

Related Information

(i) Refer to MCAI Brazilian Airworthiness Directives 2007-08-02, effective September 27, 2007, and 2009-08-03, effective August 20, 2009; Sections A2.5.2, Fuel System Limitation Items, and A2.4, Critical Design Configuration Control Limitation (CDCCL), of Appendix 2 of EMBRAER EMB135/ERJ140/EMB145 Maintenance Review Board Report MRB-145/1150, Revision 11, dated September 19, 2007; and the Parker CMMs listed in Table 2 of this AD; for related information.

Material Incorporated by Reference

(j) You must use the applicable service information contained in Table 3 of this AD to do the actions required by this AD, unless the AD specifies otherwise. (Parker Component Maintenance Manual 28-41-36, Revision 4, dated March 13, 2009, contains an incorrect date on page 105; the correct date is March 13, 2009.) (Parker Component Maintenance Manual 28-41-69, Revision 2,

dated March 13, 2009, contains the following errors: Page 105 contains an incorrect date; the correct date is March 13, 2009; and there are 3 pages identified with the same page number (i.e., LEP-2); the first page identified as LEP-2 (i.e., Sheet 1 of 2) should be identified as LEP-1 and the third page identified as LEP-2 (i.e., the blank page) should be identified as LEP-3.)

Table 3 – All material incorporated by reference

Document	Revision	Date
Sections A2.5.2, Fuel System Limitation Items, and A2.4, Critical Design Configuration Control Limitation (CDCCL), of Appendix 2 of EMBRAER EMB135/ERJ140/EMB145 Maintenance Review Board Report MRB-145/1150	11	September 19, 2007
Parker Component Maintenance Manual 28-41-36	4	March 13, 2009
Parker Component Maintenance Manual 28-41-69	2	March 13, 2009
Parker Component Maintenance Manual 28-41-80	Original	April 3, 2009

(1) The Director of the Federal Register approved the incorporation by reference of the service information contained in Table 4 of this AD under 5 U.S.C. 552(a) and 1 CFR part 51.

Table 4 – New material incorporated by reference

Document	Revision	Date
Parker Component Maintenance Manual 28-41-36	4	March 13, 2009
Parker Component Maintenance Manual 28-41-69	2	March 13, 2009
Parker Component Maintenance Manual 28-41-80	Original	April 3, 2009

(2) The Director of the Federal Register previously approved the incorporation by reference of Sections A2.5.2, Fuel System Limitation Items, and A2.4, Critical Design Configuration Control Limitation (CDCCL), of Appendix 2 of EMBRAER EMB135/ERJ140/EMB145 Maintenance Review Board Report MRB-145/1150, Revision 11, dated September 19, 2007, on July 30, 2008 (73 FR 35904, June 25, 2008).

(3) For EMBRAER service information identified in this AD, contact Empresa Brasileira de Aeronautica S.A. (EMBRAER), Technical Publications Section (PC 060), Av. Brigadeiro Faria Lima, 2170-Putim-12227-901 São Jose dos Campos-SP-BRASIL; telephone +55 12 3927-5852 or +55 12 3309-0732; fax +55 12 3927-7546; e-mail distrib@embraer.com.br; Internet: <http://www.flyembraer.com>. For Parker service information identified in this AD, contact Parker Hannifin Corporation, Aerospace Group, Electronic Systems Division, 300 Marcus Boulevard, Smithtown, New York 11787; telephone 631-231-3737; e-mail csoengineering@parker.com; Internet: <http://www.parker.com>.

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

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

Issued in Renton, Washington on July 16, 2010.
Ali Bahrami,
Manager, Transport Airplane Directorate,
Aircraft Certification Service.



**FAA
Aviation Safety**

AIRWORTHINESS DIRECTIVE

www.faa.gov/aircraft/safety/alerts/
www.gpoaccess.gov/fr/advanced.html

2010-16-02 Empresa Brasileira de Aeronautica S.A. (EMBRAER): Amendment 39-16378.
Docket No. FAA-2009-0716; Directorate Identifier 2008-NM-212-AD.

Effective Date

(a) This airworthiness directive (AD) becomes effective September 9, 2010.

Affected ADs

(b) None.

Applicability

(c) This AD applies to Empresa Brasileira de Aeronautica S.A. (EMBRAER) Model EMB-135BJ, -135ER, -135KE, -135KL, and -135LR airplanes; and Model EMB-145, -145ER, -145MR, -145LR, -145XR, -145MP, and -145EP airplanes; certified in any category; as identified EMBRAER Service Bulletin 145-49-0034, Revision 01, dated September 8, 2008; and EMBRAER Service Bulletin 145LEG-49-0008, Revision 02, dated September 8, 2008.

Subject

(d) Air Transport Association (ATA) of America Code 49: Airborne Auxiliary Power.

Reason

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

It has been found the occurrence of corrosion on the Auxiliary Power Unit (APU) mounting rods that could cause the APU rod to break, affecting the APU support structure integrity.

APU support structure failure could result in loss of power of the APU and possible loss of control of the airplane. The required action is doing an external detailed inspection for corrosion of the APU auxiliary and center mounting rods and rod ends, and corrective actions if necessary. Corrective actions include removing corrosion, applying anticorrosive treatment, and replacing mounting rods.

Actions and Compliance

(f) Unless already done do the following actions:

(1) Within 1,500 flight hours or 180 days after the effective date of this AD, whichever occurs first, do an external detailed inspection for corrosion of the APU, auxiliary and center mounting rods, and rod ends. If any corrosion is found during any inspection, before further flight, do the actions

required by paragraphs (f)(1)(i), (f)(1)(ii), and (f)(1)(iii) of this AD, as applicable. Do all actions required by this paragraph in accordance with the Accomplishment Instructions of EMBRAER Service Bulletin 145-49-0034, Revision 01, dated September 8, 2008; or EMBRAER Service Bulletin 145LEG-49-0008, Revision 02, dated September 8, 2008; as applicable.

(i) If light corrosion (characterized by discoloration or pitting) is found on a mounting rod, remove the corrosion and apply an anticorrosive treatment.

(ii) If moderate corrosion (characterized by surface blistering or evidence of scaling and flaking), or heavy corrosion (characterized by severe blistering exfoliation, scaling and flaking) is found, replace the affected mounting rod with a new mounting rod having the same part number.

(iii) If any corrosion is detected on the rod ends, remove the corrosion and apply an anticorrosive treatment.

(2) Accomplishing the inspection and corrective actions required by paragraph (f)(1) of this AD before the effective date of this AD in accordance with EMBRAER Service Bulletin 145-49-0034, dated April 18, 2008; EMBRAER Service Bulletin 145LEG-49-0008, dated April 18, 2008; or EMBRAER Service Bulletin 145LEG-49-0008, Revision 01, dated May 26, 2008; is acceptable for compliance with the corresponding requirements of paragraph (f)(1) of this AD.

(3) For mounting rods with moderate or heavy corrosion, submit a report of the positive findings (including level of corrosion such as Moderate or Heavy; guidance is provided in EMBRAER Corrosion Prevention Manual (CPM) 51-11-01) on the external surface of the rods as well as the rod ends) of the inspection required by paragraph (f)(1) of this AD to the ATTN: Mr. Antonio Claret– Customer Support Group, EMBRAER Aircraft Holding, Inc., 276 SW. 34th Street, Fort Lauderdale, Florida 33315; telephone (954) 359-3826; e-mail structure@embraer.com.br; at the applicable time specified in paragraph (f)(3)(i) or (f)(3)(ii) of this AD. The report must include the inspection results, a description of any discrepancies found, the airplane serial number, and the number of landings and flight hours on the airplane.

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

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

FAA AD Differences

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

(1) Although Brazilian Airworthiness Directive 2008-10-02, effective October 21, 2008, does not include a reporting requirement, the service bulletins identified in paragraph (f)(1) of this AD do specify reporting findings to EMBRAER. This AD requires that operators report the results of the inspections to EMBRAER because the required inspection report will help determine the extent of the corrosion in the affected fleet, from which we will determine if further corrective action is warranted. This difference has been coordinated with Agência Nacional de Aviação Civil (ANAC).

(2) Brazilian Airworthiness Directive 2008-10-02, effective October 21, 2008, allows replacement of the affected APU mounting rods by "new ones bearing a new P/N [part number] approved by ANAC." However, paragraph (f)(1)(ii) of this AD requires replacing the affected mounting rod only with a new mounting rod having the same part number. Operators may request approval of an alternative method of compliance in order to install a new part number in accordance with the procedures specified in paragraph (g)(1) of this AD. This difference has been coordinated with ANAC.

Other FAA AD Provisions

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

(1) Alternative Methods of Compliance (AMOCs): The Manager, International Branch, ANM-116, Transport Airplane Directorate, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. Send information to ATTN: Todd Thompson, Aerospace Engineer, International Branch, ANM-116, Transport Airplane Directorate, FAA, 1601 Lind Avenue SW., Renton, Washington 98057-3356; telephone (425) 227-1175; fax (425) 227-1149. Before using any approved AMOC on any airplane to which the AMOC applies, notify your principal maintenance inspector (PMI) or principal avionics inspector (PAI), as appropriate, or lacking a principal inspector, your local Flight Standards District Office. The AMOC approval letter must specifically reference this AD.

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

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

(4) Special Flight Permits: Special flight permits may be issued in accordance with sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the airplane to a location where the airplane can be modified (if the operator elects to do so), except if two or more center mounting rods or rod ends are heavily corroded or broken, a special flight permit is not permitted.

Related Information

(h) Refer to MCAI Brazilian Airworthiness Directive 2008-10-02, effective October 21, 2008; EMBRAER Service Bulletin 145-49-0034, Revision 01, dated September 8, 2008; and EMBRAER Service Bulletin 145LEG-49-0008, Revision 02, dated September 8, 2008; for related information.

Material Incorporated by Reference

(i) You must use EMBRAER Service Bulletin 145-49-0034, Revision 01, dated September 8, 2008; or EMBRAER Service Bulletin 145LEG-49-0008, Revision 02, dated September 8, 2008; as applicable; to do the actions required by this AD, unless the AD specifies otherwise.

(1) The Director of the Federal Register approved the incorporation by reference 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 Empresa Brasileira de Aeronautica S.A. (EMBRAER), Technical Publications Section (PC 060), Av. Brigadeiro Faria Lima, 2170-Putim-12227-901 São Jose dos Campos-SP-BRASIL; telephone: +55 12 3927-5852 or +55 12 3309-0732; fax: +55 12 3927-7546; e-mail: distrib@embraer.com.br; Internet: <http://www.flyembraer.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.

2010-16-02 4

Issued in Renton, Washington, on July 16, 2010.
Ali Bahrami,
Manager, Transport Airplane Directorate,
Aircraft Certification Service.



2010-16-03 McDonnell Douglas Corporation: Amendment 39-16379. Docket No. FAA-2008-0403; Directorate Identifier 2007-NM-166-AD.

Effective Date

(a) This airworthiness directive (AD) is effective September 9, 2010.

Affected ADs

(b) None.

Applicability

(c) This AD applies to McDonnell Douglas Corporation Model MD-11 and MD-11F airplanes, certified in any category, equipped with General Electric CF6-80C2 series engines.

Subject

(d) Air Transport Association (ATA) of America Code 30: Ice and rain protection.

Unsafe Condition

(e) This AD results from reports of several in-flight engine flameouts, including multiple dual engine flameout events, in ice-crystal icing conditions. We are issuing this AD to ensure that the flightcrew has the proper procedures to follow in certain icing conditions. These certain icing conditions could cause a multiple engine flameout during flight with the potential inability to restart the engines, and consequent forced landing of the airplane.

Compliance

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

Airplane Flight Manual (AFM) Revision

(g) Within 14 days after the effective date of this AD, revise the Limitations Section of the McDonnell Douglas MD-11/MD-11F AFM to include the following statement. This may be done by inserting a copy of this AD into the AFM.

"Prior to reducing thrust for descent when icing conditions (defined by visible moisture in the air and TAT is 6 °C or below) are present, the ENG IGN OVRD switch and the ENG, WING, and TAIL ANTI-ICE switches must be placed in the ON position. When icing conditions are no longer present or anticipated, place the ENG

IGN OVRD switch and the ENG, WING, and TAIL ANTI-ICE switches in the OFF position."

Note 1: When a statement identical to that in paragraph (g) of this AD has been included in the general revisions of the AFM, the general revisions may be inserted into the AFM, and the copy of this AD may be removed from the AFM.

Alternative Methods of Compliance (AMOCs)

(h)(1) The Manager, Los Angeles Aircraft Certification Office (ACO), FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. Send information to ATTN: Samuel Lee, Aerospace Engineer, Propulsion Branch, ANM-140L, FAA, Los Angeles Aircraft Certification Office, 3960 Paramount Boulevard, Lakewood, California 90712-4137; telephone (562) 627-5262; fax (562) 627-5210.

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

Material Incorporated by Reference

(i) None.

Issued in Renton, Washington on July 16, 2010.
Ali Bahrami,
Manager, Transport Airplane Directorate,
Aircraft Certification Service.



2010-16-04 The Boeing Company: Amendment 39-16381. Docket No. FAA-2010-0044; Directorate Identifier 2009-NM-084-AD.

Effective Date

(a) This airworthiness directive (AD) is effective September 9, 2010.

Affected ADs

(b) None.

Applicability

(c) This AD applies to The Boeing Company Model 767-200, -300, and -300F series airplanes, certificated in any category; line numbers 1 through 763 inclusive, except line number 758, which was accomplished in production.

Subject

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

Unsafe Condition

(e) This AD results from a report of a low-pressure flex-hose of the flightcrew oxygen system that burned through due to inadvertent electrical current from a short circuit in an adjacent audio select panel. We are issuing this AD to prevent inadvertent electrical current, which can cause the low-pressure flex-hoses used in the flightcrew and supernumerary oxygen systems to melt or burn, resulting in oxygen system leakage and smoke or fire.

Compliance

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

Inspection

(g) Within 36 months after the effective date of this AD, do an inspection to determine whether any low-pressure flex-hose of the flightcrew and supernumerary oxygen systems installed under the oxygen mask stowage location has a part number identified in Table 1 of this AD. A review of airplane maintenance records is acceptable in lieu of this inspection if the part number of the low-pressure flex-hoses of the flightcrew and supernumerary oxygen systems can be conclusively determined from that review.

(1) For any hose having a part number identified in Table 1 of this AD, before further flight, replace the hose with a new or serviceable part, in accordance with the Accomplishment Instructions of Boeing Service Bulletin 767-35A0034, Revision 1, dated June 22, 2000.

(2) For any hose not having a part number identified in Table 1 of this AD, no further action is required by this paragraph.

Table 1 – Applicable Part Numbers

Boeing Specification Part Number	Equivalent Boeing Supplier Part Numbers			
	Sierra Engineering	Spencer Fluid	Puritan Bennett	Hydraflow
60B50059-70	835-01-70	9513-20S5-18.0	ZH784-20	38001-70
60B50059-81	Not applicable	Not applicable	Not applicable	38001-81
60B50059-94	Not applicable	Not applicable	Not applicable	38001-94
60B50059-101	Not applicable	Not applicable	Not applicable	38001-101
60B50059-130	Not applicable	Not applicable	Not applicable	38001-130

Parts Installation

(h) As of the effective date of this AD, no person may install a flightcrew or supernumerary oxygen hose with a part number identified in Table 1 of this AD on any airplane.

Actions Accomplished According to Previous Issue of Service Bulletin

(i) Actions accomplished before the effective date of this AD in accordance with Boeing Alert Service Bulletin 767-35A0034, dated September 2, 1999, are considered acceptable for compliance with the corresponding actions specified in this AD.

Alternative Methods of Compliance (AMOCs)

(j)(1) The Manager, Seattle Aircraft Certification Office (ACO), FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. Send information to Attn: Susan L. Monroe, Aerospace Engineer, Cabin Safety and Environmental Systems Branch, ANM-150S, FAA, Seattle Aircraft Certification Office, 1601 Lind Avenue, SW., Renton, Washington 98057-3356; telephone (425) 917-6457; fax (425) 917-6590. Or, e-mail information to 9-ANM-Seattle-ACO-AMOC-Requests@faa.gov.

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

Material Incorporated by Reference

(k) You must use Boeing Service Bulletin 767-35A0034, Revision 1, dated June 22, 2000, to do the actions required by this AD, unless the AD specifies otherwise.

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

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

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

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

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

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



2010-16-05 The Boeing Company: Amendment 39-16382. Docket No. FAA-2010-0045; Directorate Identifier 2009-NM-085-AD.

Effective Date

(a) This airworthiness directive (AD) is effective September 9, 2010.

Affected ADs

(b) None.

Applicability

(c) This AD applies to The Boeing Company Model 747-100, 747-100B, 747-100B SUD, 747-200B, 747-200C, 747-200F, 747-300, 747-400, 747-400D, 747-400F, 747SR, and 747SP series airplanes, certificated in any category; line numbers 1 through 1229 inclusive.

Subject

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

Unsafe Condition

(e) This AD results from reports of low-pressure flex-hoses of the crew oxygen system that burned through due to inadvertent electrical current from a short circuit in the audio select panel. The Federal Aviation Administration is issuing this AD to prevent inadvertent electrical current, which can cause the low-pressure flex-hoses of the crew oxygen system to melt or burn, resulting in oxygen system leakage and smoke or fire.

Compliance

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

Inspection

(g) Within 36 months after the effective date of this AD, do an inspection to determine whether any low-pressure flex-hose of the crew oxygen system installed under the oxygen mask stowage box in the flight deck has a part number identified in Table 1 of this AD. A review of airplane

maintenance records is acceptable in lieu of this inspection if the part number of the low-pressure flex-hoses of the crew oxygen system can be conclusively determined from that review.

(1) For any hose having a part number identified in Table 1 of this AD, before further flight, replace the hose with a new or serviceable part, in accordance with the Accomplishment Instructions of Boeing Service Bulletin 747-35A2101, Revision 1, dated May 15, 2003.

(2) For any hose not having a part number identified in Table 1 of this AD, no further action is required by this paragraph.

Table 1 – Applicable Part Numbers

Boeing Specification Part Number	Equivalent Hydraflow Part Number
60B50059-19	38001-19
60B50059-20	38001-20
60B50059-60	38001-60
60B50059-62	38001-62
60B50059-69	38001-69
60B50059-70	38001-70
60B50059-81	38001-81
60B50059-94	38001-94
60B50059-95	38001-95
60B50059-101	38001-101
60B50059-129	38001-129

Parts Installation

(h) As of the effective date of this AD, no person may install on any airplane a crew oxygen hose with a part number identified in Table 1 of this AD.

Alternative Methods of Compliance (AMOCs)

(i)(1) The Manager, Seattle Aircraft Certification Office (ACO), FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. Send information to Attn: Susan L. Monroe, Aerospace Engineer, Cabin Safety and Environmental Systems Branch, ANM-150S, FAA, Seattle Aircraft Certification Office, 1601 Lind Avenue SW., Renton, Washington 98057-3356; telephone (425) 917-6457; fax (425) 917-6590. Or, e-mail information to 9-ANM-Seattle-ACO-AMOC-Requests@faa.gov.

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

Material Incorporated by Reference

(j) You must use Boeing Service Bulletin 747-35A2101, Revision 1, dated May 15, 2003 to do the actions required by this AD, unless the AD specifies otherwise.

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

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

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

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

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

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



2010-16-06 The Boeing Company: Amendment 39-16383. Docket No. FAA-2010-0046; Directorate Identifier 2009-NM-086-AD.

Effective Date

(a) This airworthiness directive (AD) is effective September 9, 2010.

Affected ADs

(b) None.

Applicability

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

(1) The Boeing Company Model 737-300, -400, and -500 series airplanes, as identified in Boeing Service Bulletin 737-35A1053, Revision 1, dated June 1, 2000.

(2) The Boeing Company Model 737-600, -700, and -800 series airplanes, as identified in Boeing Service Bulletin 737-35A1058, Revision 1, dated June 1, 2000.

Subject

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

Unsafe Condition

(e) This AD results from reports of low-pressure flex-hoses of the crew oxygen system that burned through due to inadvertent electrical current from a short circuit in the audio select panel. The Federal Aviation Administration is issuing this AD to prevent inadvertent electrical current, which can cause the low-pressure flex-hoses of the crew oxygen system to melt or burn, resulting in oxygen system leakage and smoke or fire.

Compliance

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

Inspection and Replacement

(g) Within 36 months after the effective date of this AD, do an inspection to determine whether any low-pressure flex-hose of the crew oxygen system installed under the oxygen mask stowage box in the flight deck has a part number identified in Table 1 or Table 2 of this AD, as applicable. A review of airplane maintenance records is acceptable in lieu of this inspection if the part number of

the low-pressure flex-hoses of the crew oxygen system can be conclusively determined from that review.

(1) For any hose having a part number identified in Table 1 or Table 2 of this AD, as applicable, before further flight, replace the hose with a new or serviceable part, in accordance with the Accomplishment Instructions of Boeing Service Bulletin 737-35A1053, Revision 1, dated June 1, 2000; or Boeing Service Bulletin 737-35A1058, Revision 1, dated June 1, 2000; as applicable.

(2) For any hose not having a part number identified in Table 1 or Table 2 of this AD no further action is required by this paragraph.

Table 1 – Applicable part numbers for Model 737-300, -400, and -500 series airplanes

Boeing Specification Part Number	Equivalent Boeing Supplier Part Numbers	
	Puritan Bennett	Hydraflow
10-60174-31	173470-31	37001-31
10-60174-35	173470-35	37001-35
10-60174-46	Not Applicable	37001-46
60B50059-99	Not Applicable	38001-99

Table 2 – Applicable part numbers for Model 737-600, -700, and -800 series airplanes

Boeing Specification Part Number	Equivalent Boeing Supplier Part Numbers	
	Puritan Bennett	Hydraflow
10-60174-31	173470-31	37001-31
10-60174-35	173470-35	37001-35
60B50059-124	Not Applicable	38001-124

Parts Installation

(h) As of the effective date of this AD, no person may install a crew oxygen hose with a part number identified in Table 1 or Table 2 of this AD, as applicable, on any airplane.

Actions Accomplished According to Previous Issue of Service Bulletins

(i) Actions accomplished before the effective date of this AD in accordance with Boeing Alert Service Bulletin 737-35A1053, dated September 2, 1999; or Boeing Alert Service Bulletin 737-35A1058, dated September 2, 1999; as applicable; are considered acceptable for compliance with the corresponding actions specified in this AD.

Alternative Methods of Compliance (AMOCs)

(j)(1) The Manager, Seattle Aircraft Certification Office (ACO), FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. Send information to Attn: Susan L. Monroe, Aerospace Engineer, Cabin Safety and Environmental

Systems Branch, ANM-150S, FAA, Seattle Aircraft Certification Office, 1601 Lind Avenue SW., Renton, Washington 98057-3356; telephone (425) 917-6457; fax (425) 917-6590. Or, e-mail information to 9-ANM-Seattle-ACO-AMOC-Requests@faa.gov.

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

Material Incorporated by Reference

(k) You must use Boeing Service Bulletin 737-35A1053, Revision 1, dated June 1, 2000; or Boeing Service Bulletin 737-35A1058, Revision 1, dated June 1, 2000; as applicable; to do the actions required by this AD, unless the AD specifies otherwise.

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

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

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

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

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

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



2010-16-07 Rolls-Royce plc (RR): Amendment 39-16384.; Docket No. FAA-2010-0748;
Directorate Identifier 2010-NE-13-AD.

Effective Date

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

Affected ADs

(b) None.

Applicability

(c) This AD applies to RR model RB211-Trent 970-84, 970B-84, 972-84, 972B-84, 977-84, 977B-84, and 980-84 turbofan engines. These engines are installed on, but not limited to, Airbus A380 series airplanes.

Reason

(d) European Aviation Safety Agency (EASA) AD No. 2010-0008, dated January 15, 2010, states:

Wear, beyond Engine Manual limits, has been identified on the abutment faces of the splines on the Trent 900 Intermediate Pressure (IP) shaft rigid coupling on several engines during strip. The shaft to coupling spline interface provides the means of controlling the turbine axial setting and wear through of the splines would permit the IP turbine to move rearwards.

Rearward movement of the IP turbine would enable contact with static turbine components and would result in loss of engine performance with potential for in-flight shut down, oil migration and oil fire below the LP turbine discs prior to sufficient indication resulting in loss of LP turbine disc integrity.

We are issuing this AD to detect rearward movement of the IP turbine, which could result in loss of disc integrity, an uncontained failure of the engine, and damage to the airplane.

Actions and Compliance

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

On-Wing Borescope Inspection

(1) Inspect the IP shaft coupling splines using section 3.A of RR RB211 Trent 900 Series Propulsion Systems Alert Non-Modification Service Bulletin (NMSB) RB.211-72-AG329, Revision 1, dated January 13, 2010, before accumulating 400 cycles-since-new or within 150 cycles-in-service (CIS) after the effective date of this AD, whichever occurs later.

(2) If the coupling, P/N FW33264, was replaced with a new coupling, P/N FW33264, during any shop visit, then you may use the life since that shop visit in place of engine time since new to establish the inspection threshold.

(3) Use the inspection results and actions compliance times or specified in Table 1 of this AD to disposition the engine or to determine the interval for the repetitive inspections.

Table 1. On-wing Borescope Inspection – Further Action and Repetitive Inspection Intervals

Condition Measured spline crest in accordance with section 3.A of Rolls-Royce NMSB RB.211-72-AG329, Revision 1, dated January 13, 2010, is:	Action	Compliance Time / Repetitive Interval (not to exceed) flight cycles since last inspection
(i) Less than 0.5 mm with no material remaining	Remove the engine	Before next flight
(ii) Less than 0.5 mm with some material remaining	Remove the engine	Within 10 flight cycles
(iii) Equal to or more than 0.5 mm but less than 1 mm	Repeat inspection	Within 50 flight cycles
(iv) Equal to or more than 1 mm but less than 1.5 mm	Repeat inspection	Within 100 flight cycles
(v) Equal to or more than 1.5 mm but less than 2 mm	Repeat inspection	Within 200 flight cycles
(vi) Equal to or more than 2 mm but less than 2.4 mm	Repeat inspection	Within 300 flight cycles
(vii) Equal to or more than 2.4 mm	Repeat inspection	Within 400 flight cycles

Note 1: The nominal unworn dimension of the spline crest is 2.65 mm.

In-Shop Replacement and Inspection

(4) At the next shop visit after the effective date of this AD perform the following:

(i) Replace any IP shaft coupling that was previously borescope inspected in accordance with paragraph (e)(1) of this AD and put on a reduced re-inspection interval in accordance with paragraphs (e)(3)(i) through (e)(3)(vii) of this AD.

(ii) Inspect all other IP shaft coupling splines using paragraphs 3.B.(2) or 3.B.(3) of RR RB211 Trent 900 Series Propulsion Systems Alert NMSB RB.211-72-AG329, Revision 1, dated January 13, 2010.

Definitions

(5) For the purposes of this AD, a shop visit is the induction of an engine into the shop for maintenance involving the separation of pairs of major mating engine flanges, except that the separation of engine flanges solely for the purposes of transportation without subsequent engine maintenance does not constitute an engine shop visit.

FAA AD Differences

(f) None.

Other FAA AD Provisions

(g) Alternative Methods of Compliance (AMOCs): 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 MCAI EASA Airworthiness Directive 2010-0008, dated January 15, 2010, for related information.

(i) Contact Ian Dargin, Aerospace Engineer, Engine Certification Office, FAA, Engine and Propeller Directorate, 12 New England Executive Park, Burlington, MA 01803; e-mail: ian.dargin@faa.gov; telephone (781) 238-7178; fax (781) 238-7199, for more information about this AD.

Material Incorporated by Reference

(j) You must use Rolls-Royce RB211 Trent 900 Series Propulsion Systems Alert Non-Modification Service Bulletin RB.211-72-AG329 Revision 1, dated January 13, 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 Rolls-Royce plc, P.O. Box 31, Derby, DE24 8BJ, United Kingdom; telephone 044 1332 242424; fax 044 1332 249936.

(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 July 26, 2010.

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



2010-16-09 BAE Systems (Operations) Limited: Amendment 39-16386. Docket No. FAA-2010-0434; Directorate Identifier 2009-NM-221-AD.

Effective Date

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

Affected ADs

- (b) None.

Applicability

(c) This AD applies to BAE Systems (Operations) Limited Model BAe 146-100A and -200A airplanes, certificated in any category, serial numbers as listed in British Aerospace 146 Modification Service Bulletin 27-73-00889A&B, Revision 4, dated June 15, 1990.

Subject

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

Reason

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

The operation of the airbrake lever in the "airbrakes out" to "lift spoiler" range has been the subject of two occurrence reports. The lift spoilers on the BAe 146 and Avro 146-RJ aeroplanes have been designed to deploy on landing to provide aerodynamic braking and to dump lift to ensure that the wheel brakes can provide the necessary speed reduction.

A review of the changing operational profile of the aeroplane type concluded that its proven short field performance has increasingly been exploited in recent years by a number of operators worldwide. Frequently, these short field operations are conducted from airports that are located in mountainous terrain or in close proximity to bodies of water, leaving fewer margins for error, e.g. landing long or at (too) high speed.

The effects of deceleration and landing inertia loads can cause uncommanded movement of the airbrake selector lever from the "lift spoiler" position to the "airbrakes out" position, causing the lift spoilers to retract during the landing roll. This condition, if not corrected, would increase the landing distance, possibly resulting in a runway overrun and consequent injury to aeroplane occupants.

On certain BAe 146 aeroplanes, without modifications HCM00889A and B or modifications HCM00889A and C incorporated, negligible force is required to move the airbrake lever back to the "airbrakes out" position. From 1988 onwards, modifications were introduced on the production line to incorporate a modified friction baulking device such that a force of 12 lbs must be applied to move the airbrake lever from the "lift spoiler" position to the "airbrakes out" position. These modifications were also made available as an optional in-service retrofit.

For the reasons described above, this AD requires the modification of the airbrake lever detent mechanism.

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 12 months after the effective date of this AD, modify the airbrake lever detent mechanism, in accordance with the Accomplishment Instructions of British Aerospace 146 Modification Service Bulletin 27-73-00889A&B, Revision 4, dated June 15, 1990.

(2) Modifying the airbrake lever detent mechanism is also acceptable for compliance with paragraph (g)(1) of this AD, if done before the effective date of this AD, in accordance with the Accomplishment Instructions of British Aerospace 146 Modification Service Bulletin 27-73-00889A&B, Revision 3, dated August 1, 1989.

FAA AD Differences

Note 1: This AD differs from the MCAI and/or service information as follows: While European Aviation Safety Agency (EASA) AD 2009-0206, dated September 30, 2009, considers Revision 0, 1, or 2 of British Aerospace 146 Modification Service Bulletin 27-73-00889A&B as an acceptable method of compliance, this AD does not. However, operators may request approval of an alternative method of compliance in accordance with the procedures specified in paragraph (h)(1) of this AD.

Other FAA AD Provisions

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

(1) Alternative Methods of Compliance (AMOCs): The Manager, International Branch, ANM-116, Transport Airplane Directorate, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. Send information to Attn: Todd Thompson, Aerospace Engineer, International Branch, ANM-116, Transport Airplane Directorate, FAA, 1601 Lind Avenue, SW., Renton, Washington 98057-3356; telephone (425) 227-1175; fax (425) 227-1149. Before using any approved AMOC on any airplane to which the AMOC applies, notify your principal maintenance inspector (PMI) or principal avionics inspector (PAI), as appropriate, or lacking a principal inspector, your local Flight Standards District Office. The AMOC approval letter must specifically reference this AD.

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

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

Related Information

(i) Refer to MCAI EASA Airworthiness Directive 2009-0206, dated September 30, 2009; and British Aerospace 146 Modification Service Bulletin 27-73-00889A&B, Revision 4, dated June 15, 1990; for related information.

Material Incorporated by Reference

(j) You must use British Aerospace 146 Modification Service Bulletin 27-73-00889A&B, Revision 4, dated June 15, 1990, to do the actions required by this AD, unless the AD specifies otherwise. British Aerospace 146 Modification Service Bulletin 27-73-00889A&B, Revision 4, contains the following effective pages:

Page No.	Revision level shown on page	Date shown on page
1, 3–4, 7, 15–16, 19	4	June 15, 1990.
2	3	August 1, 1989.
5, 8–12, 17–18, 20	1	August 10, 1988.
6, 13–14	2	June 27, 1989.

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

(2) For service information identified in this AD, contact BAE Systems (Operations) Limited, Customer Information Department, Prestwick International Airport, Ayrshire, KA9 2RW, Scotland, United Kingdom; telephone +44 1292 675207; fax +44 1292 675704; e-mail RApublications@baesystems.com; Internet <http://www.baesystems.com/Businesses/RegionalAircraft/index.htm>.

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

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

Issued in Renton, Washington, on July 28, 2010.

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



2010-16-10 BAE Systems (Operations) Limited: Amendment 39-16387. Docket No. FAA-2010-0222; Directorate Identifier 2008-NM-012-AD.

Effective Date

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

Affected ADs

- (b) None.

Applicability

(c) This AD applies to BAE Systems (Operations) Limited Model BAe 146-100A, -200A, and -300A airplanes, and Avro 146-RJ70A, 146-RJ85A, and 146-RJ100A airplanes; all serial numbers; certificated in any category; as identified in paragraph 1.A.(1) of BAE Systems (Operations) Limited Inspection Service Bulletin ISB.53-175, Revision 1, dated April 2, 2007.

Subject

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

Reason

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

A potential fleet wide problem has been identified regarding the interchanging of wing links on all BAe 146 & AVRO 146-RJ aircraft during scheduled maintenance. Some operators erroneously believed that these parts were interchangeable. The effects of changing wing links has resulted in either a shorter or longer wing link being fitted, which introduces local stresses in the wing top and bottom surfaces local to rib 2, wing links and wing link fitting attachment and the fuselage local to Frames 26 and 29. This condition, if not corrected, could result in a reduction of structural integrity of the fuselage/wing attachment with possible catastrophic consequences.

For the reasons described above, the present Airworthiness Directive (AD) requires the accomplishment of inspections and rectification actions, as necessary.

The unsafe condition could result in loss of a wing or controllability of the airplane. The inspections include inspecting wing links for incorrect part numbers (i.e., parts that are not original), inspecting to

determine wing geometry measurements, and inspecting the wing link, bores, bolts, and nuts for corrosion. Corrective actions include installing wing-to-fuselage fairings and repairing.

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) For airplanes subject to maintenance review board report (MRBR) requirements: Within 30 days after the effective date of this AD, revise the supplemental structural inspection (SSI) portion of the airplane inspection schedule, in accordance with paragraph 1.D.(2) of BAE Systems (Operations) Limited Inspection Service Bulletin ISB.53-175, Revision 1, dated April 2, 2007. Do the initial inspection at the applicable time, and repeat at the applicable intervals, as specified in Appendix 3 of BAE Systems (Operations) Limited Inspection Service Bulletin ISB.53-175, Revision 1, dated April 2, 2007. Where Appendix 3 of BAE Systems (Operations) Limited Inspection Service Bulletin ISB.53-175, Revision 1, dated April 2, 2007, does not specify a compliance time in either flight cycles or in flight hours, use flight cycles.

(2) For airplanes subject to MRBR requirements: Accomplishing the inspections and all applicable corrective actions specified in paragraph 1.D.(3) of BAE Systems (Operations) Limited Inspection Service Bulletin ISB.53-175, Revision 1, dated April 2, 2007, terminates the revisions to the SSI portion of the airplane inspection schedule incorporated in accordance with paragraph (g)(1) of this AD, provided that if any corrosion is found during any inspection specified in "Part C" or "Part D" of paragraph 2.C. of BAE Systems (Operations) Limited Inspection Service Bulletin ISB.53-175, Revision 1, dated April 2, 2007, repair is accomplished before further flight using a method approved by the Manager, International Branch, ANM 116, Transport Airplane Directorate, FAA, or EASA (or its delegated agent).

(3) For operational airplanes subject to MRBR-to-supplemental-structural-inspection-document (SSID) transition requirements or to SSID requirements: Within 5,000 flight cycles after the effective date of this AD, do the inspections and all applicable corrective actions, in accordance with paragraph 2.C. of the Accomplishment Instructions of BAE Systems (Operations) Limited Inspection Service Bulletin ISB.53-175, Revision 1, dated April 2, 2007, except if any corrosion is found during any inspection specified in "Part C" or "Part D" of paragraph 2.C. of BAE Systems (Operations) Limited Inspection Service Bulletin ISB.53-175, Revision 1, dated April 2, 2007, repair must be accomplished using a method approved by the Manager, International Branch, ANM 116, Transport Airplane Directorate, FAA, or EASA (or its delegated agent). Do all applicable corrective actions before further flight, except that replacements of all the wing links that are not within the specified tolerance must be done before the airplane reaches its MRBR airframe life limit.

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

(4) For any inspection done in accordance with paragraph (g)(2) or (g)(3) of this AD: Send reports to BAE Systems, Customer Liaison, Customer Support (Building 37), BAE Systems (Operations) Limited, Prestwick International Airport, Ayrshire, KA9 2RW, Scotland; fax +44 (0)

1292 675432; e-mail raengliason@baesystems.com; at the applicable time specified in paragraph (g)(4)(i) or (g)(4)(ii) of this AD. The report must include the inspection results, a description of any discrepancies found, the airplane serial number, and the number of landings and flight hours on the airplane.

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

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

(5) For airplanes that are non-operational as of the effective date of this AD and that are subject to MRBR-to-SSID transition requirements or to SSID requirements: Before returning any airplane to service, do the inspections and all applicable corrective actions, in accordance with paragraph 2.C. of the Accomplishment Instructions of BAE Systems (Operations) Limited Inspection Service Bulletin ISB.53-175, Revision 1, dated April 2, 2007, except if any corrosion is found during any inspection specified in "Part C" or "Part D" of paragraph 2.C. of BAE Systems (Operations) Limited Inspection Service Bulletin ISB.53-175, Revision 1, dated April 2, 2007, repair must be accomplished using a method approved by the Manager, International Branch, ANM-116, Transport Airplane Directorate, FAA, or EASA (or its delegated agent).

(6) Actions accomplished before the effective date of this AD in accordance with BAE Systems (Operations) Limited Inspection Service Bulletin ISB.53-175, dated December 21, 2006, are considered acceptable for compliance with the corresponding action specified in this AD.

FAA AD Differences

Note 2: This AD differs from the MCAI and/or service information as follows: The MCAI does not specify a corrective action if corrosion is found during accomplishment of the actions specified in "Part C" and "Part D" of paragraph 2.C. of BAE Systems (Operations) Limited Inspection Service Bulletin ISB.53-175, Revision 1, dated April 2, 2007. This AD requires that if any corrosion is found, a repair must be done in accordance with a method approved by the FAA or EASA (or its delegated agent).

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, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. Send information to ATTN: Todd Thompson, Aerospace Engineer, International Branch, ANM-116, Transport Airplane Directorate, FAA, 1601 Lind Avenue, SW., Renton, Washington 98057-3356; telephone (425) 227-1175; fax (425) 227-1149. Before using any approved AMOC on any airplane to which the AMOC applies, notify your principal maintenance inspector (PMI) or principal avionics inspector (PAI), as appropriate, or lacking a principal inspector, your local Flight Standards District Office. The AMOC approval letter must specifically reference this AD.

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

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

Related Information

(i) Refer to MCAI EASA Airworthiness Directive 2008-0003, dated January 8, 2008; and BAE Systems (Operations) Limited Inspection Service Bulletin ISB.53-175, Revision 1, dated April 2, 2007; for related information.

Material Incorporated by Reference

(j) You must use BAE Systems (Operations) Limited Inspection Service Bulletin ISB.53-175, Revision 1, dated April 2, 2007, as applicable, to do the actions required by this AD, unless the AD specifies otherwise.

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

(2) For service information identified in this AD, contact BAE Systems (Operations) Limited, Customer Information Department, Prestwick International Airport, Ayrshire, KA9 2RW, Scotland, United Kingdom; telephone +44 1292 675207; fax +44 1292 675704; e-mail RApublications@baesystems.com; Internet <http://www.baesystems.com/Businesses/RegionalAircraft/index.htm>.

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

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

Issued in Renton, Washington, on July 28, 2010.

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



2010-16-12 The Boeing Company: Amendment 39-16389. Docket No. FAA-2010-0704; Directorate Identifier 2010-NM-037-AD.

Effective Date

(a) This airworthiness directive (AD) is effective August 30, 2010.

Affected ADs

(b) None.

Applicability

(c) This AD applies to The Boeing Company Model 777-200LR and -300ER series airplanes, certificated in any category; as identified in Boeing Alert Service Bulletin 777-78A0070, dated November 20, 2008.

Subject

(d) Air Transport Association (ATA) of America Code 78: Engine exhaust.

Unsafe Condition

(e) This AD results from a determination of insufficient clearance and subsequent interference between the oil scavenge tube on the turbine rear frame of the engine and the bolt on the aft cowl insulation blanket of the thrust reverser. The Federal Aviation Administration is issuing this AD to prevent damage and possible puncture of the oil scavenge tube and consequent oil loss, which could result in an in-flight shutdown of the engine.

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.

Fastener Replacement

(g) Within 180 days or 300 flight cycles after the effective date of this AD, whichever is later: Replace the insulation blanket fasteners of the lower aft cowl of the thrust reverser, in accordance with the Accomplishment Instructions of Boeing Alert Service Bulletin 777-78A0070, dated November 20, 2008.

Inspect and Replace

(h) Before or concurrently with accomplishing the requirements in paragraph (g) of this AD: Do a detailed inspection of the oil scavenge tube on the turbine rear frame of the engine for damage, in accordance with the Accomplishment Instructions of General Electric GE90-100 Service Bulletin 79-0017, dated March 3, 2008. If any damage is found, before further flight, replace the tube, in accordance with the Accomplishment Instructions of General Electric GE90-100 Service Bulletin 79-0017, dated March 3, 2008.

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

Alternative Methods of Compliance (AMOCs)

(i)(1) The Manager, Seattle Aircraft Certification Office, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. Send information to ATTN: Margaret Langsted, Aerospace Engineer, Propulsion Branch, ANM-140S, FAA, Seattle Aircraft Certification Office, 1601 Lind Avenue, SW., Renton, Washington 98057-3356; telephone (425) 917-6500; fax (425) 917-6590. Information may be e-mailed to: 9-ANM-Seattle-ACO-AMOC-Requests@faa.gov.

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

Material Incorporated by Reference

(j) You must use Boeing Alert Service Bulletin 777-78A0070, dated November 20, 2008; and General Electric GE90-100 Service Bulletin 79-0017, dated March 3, 2008; as applicable; to do the actions required by this AD, unless the AD specifies otherwise.

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

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

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

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

Issued in Renton, Washington, on July 27, 2010.

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



2010-16-13 Airbus: Amendment 39-16390. Docket No. FAA-2010-0281; Directorate Identifier 2009-NM-184-AD.

Effective Date

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

Affected ADs

(b) None.

Applicability

(c) This AD applies to Airbus Model 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 airplanes; certificated in any category; equipped with carbon fiber reinforced plastic rudders having part numbers and serial numbers listed in Table 1 of this AD.

Table 1 – Rudder Information

Rudder Part Number	Affected Rudder Serial Number	Core density 24kg/m³
A554-71500-016-91	HF-1017	Yes
A554-71500-016-91	HF-1020	No
A554-71500-016-91	HF-1059	No
A554-71500-016-91	HF-1061	No
A554-71500-016-91	HF-1064	No
A554-71500-014-00	HF-1087	Yes
A554-71500-014-00	HF-1119	Yes
A554-71500-016-00	HF-1189	Yes
A554-71500-016-00	HF-1203	Yes
A554-71500-016-00	HF-1266	Yes
A554-71500-026-00	TS-1405	No
A554-71710-000-00	TS-2001	No

A554-71710-000-00	TS-2004	No
A554-71710-000-00	TS-2007	No
A554-71710-000-00	TS-2009	No
A554-71710-000-00	TS-2011	No
A554-71710-000-00	TS-2012	No
A554-71710-000-00	TS-2013	No
A554-71710-000-00	TS-2014	No
A554-71710-000-00	TS-2016	No
A554-71710-000-00	TS-2017	No
A554-71710-000-00	TS-2018	No
A554-71710-000-00	TS-2020	No
A554-71710-000-00	TS-2021	No
A554-71710-000-00	TS-2022	No
A554-71710-000-00	TS-2024	No
A554-71710-000-00	TS-2025	No
A554-71710-000-00	TS-2026	No
A554-71710-000-00	TS-2028	No
A554-71710-000-00	TS-2029	No
A554-71710-002-00	TS-2031	No
A554-71710-002-00	TS-2032	No
A554-71710-002-00	TS-2035	No
A554-71710-002-00	TS-2040	No
A554-71710-002-00	TS-2041	No
A554-71710-002-00	TS-2044	No
A554-71710-002-00	TS-2046	No
A554-71710-004-00	TS-2050	No
A554-71710-004-00	TS-2056	No
A554-71710-004-00	TS-2058	No
A554-71710-004-00	TS-2060	No
A554-71710-004-00	TS-2062	No
A554-71710-004-00	TS-2065	No
A554-71710-004-00	TS-2066	No
A554-71710-004-00	TS-2074	No
A554-71710-004-00	TS-2075	No

A554-71710-004-00	TS-2076	No
A554-71710-004-00	TS-2079	No

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 an [Airbus] A319 and an 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 the result of de-bonding between the skin and honeycomb core. Such reworks were also performed on some rudders fitted on A310 and A300-600 aeroplanes.

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.

To address this unsafe condition [this EASA AD] requires inspections of specific areas and, depending on findings, the application of corrective actions for those rudders where production reworks have been identified. This * * * [EASA] AD * * * [also] requires for the vacuum loss hole restoration:

- A local ultrasonic inspection for reinforced area instead of the local thermographic inspection, which is maintained for non-reinforced areas, and
- Additional work performance for rudders on which this thermographic inspection has been performed in the reinforced area.

The inspections include vacuum loss inspections and elasticity laminate checker inspections for defects including de-bonding between the skin and honeycomb core of the rudder, and ultrasonic inspections for rudders on which temporary restoration with resin or permanent vacuum loss hole restoration has been performed. The corrective action is contacting the manufacturer for repair instructions and doing the repair. We are considering similar rulemaking action on Model A319 and A321 airplanes.

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 and Compliance

(g) For rudders with a honeycomb core density of 24 kg/m^3 , as identified in Table 1 of this AD, do the actions required in paragraphs (g)(1) through (g)(10) of this AD, in accordance with Airbus All Operators Telex (AOT) A310-55A2048 or A300-55A6047, both Revision 02, both dated October 12, 2009, as applicable.

Note 1: Verification of the airplane serial numbers is not required.

(1) In the reinforced location: Within 8 months or 840 flight hours after the effective date of this AD, whichever occurs later, do a vacuum loss inspection to detect defects including de-bonding.

(2) In the trailing edge location: Within 24 months or 840 flight hours after the effective date of this AD, whichever occurs later, do an elasticity laminate checker inspection to detect defects including de-bonding.

(3) Repeat the inspection required by paragraph (g)(2) of this AD two times at intervals not to exceed 4,500 flight cycles, but not fewer than 4,000 flight cycles from the last inspection.

(4) In other locations (lower rib/upper edge/leading edge/other locations): Within 8 months or 840 flight hours after the effective date of this AD, whichever occurs later, do an elasticity laminate checker inspection to detect defects including de-bonding.

(5) Repeat the inspection required by paragraph (g)(4) of this AD at intervals not to exceed 8 months from the last inspection.

(6) Within 24 months or 840 flight hours after the effective date of this AD, whichever occurs later, do a vacuum loss inspection on the other locations (lower rib/upper edge/leading edge/other locations) to detect defects including de-bonding.

(7) Accomplishment of the inspection required by paragraph (g)(6) of this AD terminates the initial and repetitive inspections required by paragraphs (g)(4) and (g)(5) of this AD.

(8) If any defect is found during any inspection required by paragraph (g)(1), (g)(2), (g)(4), or (g)(6) of this AD, before further flight, contact Airbus for repair instructions and do the repair.

(9) If no defects are found during any inspection required by paragraphs (g)(1) and (g)(6) of this AD, before further flight, restore the vacuum loss holes with temporary restoration with self-adhesive patches, temporary restoration with resin, or permanent restoration with resin and surface protection, and repeat the inspection required by paragraph (g)(3) of this AD at intervals not to exceed 4,500 flight cycles until permanent restoration is completed.

(10) If any defect is found during any inspection required by paragraphs (g)(1), (g)(2), (g)(4), and (g)(6) of this AD, at the applicable time specified in paragraph (g)(10)(i) or (g)(10)(ii) of this AD: Report the inspection results to Airbus SAS, SEER1/SEER2/SEER3, Customer Services, 1 Rond Point Maurice Bellonte, 31707 Blagnac Cedex, France; fax +33 (0) 5 61 93 28 73; or e-mail to

region1.StructureRepairSupport@airbus.com,
region2.StructureRepairSupport@airbus.com, or
region3.StructureRepairSupport@airbus.com.

(i) Inspections done before the effective date of this AD: Within 30 days after the effective date of this AD.

(ii) Inspections done on or after the effective date of this AD: Within 30 days after accomplishment of the inspection.

(h) For rudders not having a honeycomb core density of 24 kg/m^3 , as identified in Table 1 of this AD, do the actions required in paragraphs (h)(1) through (h)(10) of this AD, in accordance with

Airbus AOT A310-55A2048 or AOT A300-55A6047, both Revision 02, both dated October 12, 2009, as applicable.

Note 2: Verification of the airplane serial numbers is not required.

(1) In the reinforced location: Within 8 months after the rudder has accumulated 13,000 flight cycles since first installation, or within 8 months after the effective date of this AD, or within 840 flight hours after the effective date of this AD; whichever occurs latest, do a vacuum loss inspection to detect defects including de-bonding.

(2) In the trailing edge location: Within 24 months after the rudder has accumulated 13,000 flight cycles since first installation, or within 24 months after the effective date of this AD, or within 840 flight hours after the effective date of this AD, whichever occurs latest, do an elasticity laminate checker inspection to detect defects including de-bonding.

(3) Repeat the inspection required by paragraph (h)(2) of this AD two times at intervals not to exceed 4,500 flight cycles, but not fewer than 4,000 flight cycles from the last inspection.

(4) In other locations (lower rib/upper edge/leading edge/other locations): Within 8 months after the rudder has accumulated 13,000 flight cycles since first installation, or within 8 months after the effective date of this AD, or within 840 flight hours after the effective date of this AD, whichever occurs latest; do an elasticity laminate checker inspection to detect defects including de-bonding.

(5) Repeat the inspection required by paragraph (h)(4) of this AD at intervals not to exceed 8 months from the last inspection.

(6) Within 24 months after the rudder has accumulated 13,000 flight cycles since first installation, or within 24 months after the effective date of this AD, or within 840 flight hours after the effective date of this AD, whichever occurs latest, do a vacuum loss inspection on the other locations (lower rib/upper edge/leading edge/other location) to detect defects including de-bonding.

(7) Accomplishment of the inspection required by paragraph (h)(6) of this AD terminates the initial and repetitive inspections required by paragraphs (h)(4) and (h)(5) of this AD.

(8) If any defect is found during any inspection required by paragraph (h)(1), (h)(2), (h)(4), or (h)(6) of this AD, before further flight, contact Airbus for repair instructions and do the repair.

(9) If no defects are found during the inspections required by paragraphs (h)(1) and (h)(6) of this AD, before further flight, restore the vacuum loss holes with the temporary restoration with self adhesive patches, temporary restoration with resin, or permanent restoration with resin and surface protection, and repeat the inspection required by paragraph (h)(3) of this AD at intervals not to exceed 4,500 flight cycles until permanent restoration is completed.

(10) If any defect is found during any inspection required by paragraphs (h)(1), (h)(2), (h)(4), and (h)(6) of this AD, at the applicable time specified in paragraph (h)(10)(i) or (h)(10)(ii) of this AD: Report the inspection results to Airbus SAS, SEER1/SEER2/SEER3, Customer Services, 1 Rond Point Maurice Bellonte, 31707 Blagnac Cedex, France; fax +33 (0) 5 61 93 28 73; or e-mail to

region1.StructureRepairSupport@airbus.com,
region2.StructureRepairSupport@airbus.com, or
region3.StructureRepairSupport@airbus.com.

(i) Inspections done before the effective date of this AD: Within 30 days after the effective date of this AD.

(ii) Inspections done on or after the effective date of this AD: Within 30 days after accomplishment of the inspection.

(i) Actions done before the effective date of this AD, in accordance with the service information listed in Table 2 of this AD, are acceptable for compliance with the requirements of paragraphs (g) and (h) of this AD for the areas inspected, for any rudder listed in Table 1 of this AD.

(j) Additional areas requiring inspection for all airplanes are defined in Airbus AOT A310-55A2048 or AOT A300-55A6047, both Revision 02, both dated October 12, 2009, as applicable. For these additional areas, do the actions required in paragraphs (g) and (h) of this AD, as applicable, at the times specified in those paragraphs. For all areas, do the repetitive inspections required by paragraphs (g) and (h) of this AD as applicable at the times specified in those paragraphs.

Table 2 – Credit Service Information

Airbus AOT –	Revision –	Dated –
A300-55A6047	Original	May 11, 2009
A300-55A6047	01	July 8, 2009
A310-55A2048	Original	May 11, 2009
A310-55A2048	01	July 8, 2009

(k) For rudders on which temporary restoration with resin or permanent vacuum loss hole restoration has been done in accordance with the applicable service bulletin specified in Table 2 of this AD, as required in paragraph (g)(9) or (h)(9) of this AD, before the effective date of this AD: Within 4,500 flight cycles from the restoration date, do an ultrasonic inspection for defects, including debonding of the reinforced area, in accordance with Airbus AOT A310-55A2048 or AOT A300-55A6047, both Revision 02, both dated October 12, 2009, as applicable. If any defect is found, before further flight, contact Airbus for repair instructions and do the repair.

(l) After the effective date of this AD, no person may install any rudder listed in Table 1 of this AD on any airplane, unless the rudder has been inspected and all applicable corrective actions have been done in accordance with paragraph (g) or (h) of this AD.

FAA AD Differences

Note 3: 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, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. Send information to ATTN: Dan Rodina, Aerospace Engineer, International Branch, ANM-116, Transport Airplane Directorate, FAA, 1601 Lind Avenue, SW., Renton, Washington 98057-3356; telephone (425) 227-2125; fax (425) 227-1149. Before using any approved AMOC on any airplane to which the AMOC applies, notify your principal maintenance inspector (PMI) or principal avionics inspector (PAI), as appropriate, or lacking a principal inspector, your local Flight Standards District Office. The AMOC approval letter must specifically reference this AD.

(2) Airworthy Product: For any requirement in this AD to obtain corrective actions from a manufacturer or other source, use these actions if they are FAA-approved. Corrective actions are

considered FAA-approved if they are approved by the State of Design Authority (or their delegated agent). You are required to assure the product is airworthy before it is returned to service.

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

Related Information

(n) Refer to MCAI European Aviation Safety Agency (EASA) Airworthiness Directive 2010-0002, dated January 5, 2010; Airbus AOT A310-55A2048, Revision 02, dated October 12, 2009; and Airbus AOT A300-55A6047, Revision 02, dated October 12, 2009; for related information.

Material Incorporated by Reference

(o) You must use Airbus All Operators Telex A300-55A6047, Revision 02, dated October 12, 2009; or Airbus All Operators Telex A310-55A2048, Revision 02, dated October 12, 2009; as applicable; to do the actions required by this AD, unless the AD specifies otherwise. (The document number, revision level, and date appear only on page 1 of the AOTs; no other page of these documents contains this information)

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

(2) For service information identified in this AD, contact 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 July 28, 2010.

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