



**FEDERAL AVIATION ADMINISTRATION
AIRWORTHINESS DIRECTIVES
LARGE AIRCRAFT**

BIWEEKLY 2009-22

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LARGE AIRCRAFT

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

Biweekly 2009-01

2008-25-05	S 93-01-15	McDonnell Douglas	See AD
2008-26-04	S 2007-23-13	Cessna Aircraft Company	560
2008-26-06		Rolls-Royce Corporation	Engine: AE 3007A
2008-26-07		McDonnell Douglas	See AD
2008-26-08		Saab AB, Saab Aerosystems	340A (SAAB/SF340A) and SAAB 340B
2008-26-09		Bombardier, Inc	CL-600-2B19 (Regional Jet Series 100 & 440)
2009-01-01		CFM International, S. A	Engine: See AD

Biweekly 2009-02

No Large Aircraft ADs were issued during Biweekly 2009-02.

Biweekly 2009-03

2009-01-02		Boeing	737-600, -700, -700C, -800 and -900
2009-01-03		Bombardier, Inc.	DHC-8-400, DHC-8-401, and DHC-8-402
2009-01-04		Airbus	A318, A319, A320, and A321
2009-01-07		Bombardier, Inc	CL-600-2C10 (Regional Jet Series 700, 701, & 702), CL-600-2D24 (Regional Jet Series 900)
2009-01-10		Bombardier, Inc	CL-600-2C10 (Regional Jet Series 700, 701, & 702), CL-600-2D15 (Regional Jet Series 705), CL-600-2D24 (Regional Jet Series 900)
2009-02-03		Lycoming engines, See AD	See AD

Biweekly 2009-04

No Large Aircraft ADs were issued during Biweekly 2009-04.

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Biweekly 2009-05

2008-18-02	S 2004-14-07	BAE Systems	Jetstream 4101
2008-24-51		Boeing	737-600, -700, -700C, -800, and -900
2009-01-05		Embraer	EMB-145, -145ER, -145MR, -145LR, -145XR, -145MP, and -145EP
2009-01-06	S 2005-15-16	328 Support Services GmbH	328-300
2009-01-08	S 98-16-11	Airbus	A300, A310, A300-600
2009-01-09	S 2000-26-14	Airbus	A310
2009-02-01		Construcciones Aeronauticas, S.A.	C-212-DF
2009-02-04		Airbus	A300-600
2009-02-05		Boeing	777-200, -200LR, -300, and -300E
2009-02-07	S 98-17-12	BAE Systems	Jetstream 4101
2009-02-09		BAE Systems	BAe 146-100A, -200A, and -300A, Avro 146-RJ70A, 146-RJ85A, and 146-RJ100A
2009-02-10	S 2008-04-22	Fokker Services	F.28 Mark 0070 and 0100
2009-02-11		Bombardier Inc.	CL-600-2C10 (Regional Jet Series 700, 701, & 702), CL-600-2D24 (Regional Jet Series 900)
2009-03-01		Learjet	55, 55B, and 55C
2009-03-02	S 2004-05-20	McDonnell Douglas	DC-10-10, DC-10-10F, DC-10-15, DC-10-30, DC-10-30F (KC-10A and KDC-10), DC-10-40, DC-10-40F, MD-10-10F, MD-10-30F, MD-11, and MD-11F
2009-03-03		McDonnell Douglas	DC-9-14, DC-9-15, DC-9-15F, DC-9-21, DC-9-31, DC-9-32, DC-9-32 (VC-9C), DC-9-32F, DC-9-33F, DC-9-34, DC-9-34F, DC-9-32F (C-9A, C-9B), DC-9-41, and DC-9-51
2009-04-02		Pratt & Whitney	Engine: PW4090 and PW4090-3
2009-04-03		Rolls-Royce Corporation	Engine: AE 3007A1E and AE 1107C
2009-04-06	S 2004-16-09	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
2009-04-07		Airbus	A330-200 and -300; and A340-200, -300, -500, and -600, 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
2009-04-10	S 2002-07-12	General Electric Company	CF6-80A, CF6-80C2, and CF6-80E1
2009-04-11		Bombardier, Inc.	CL-600-2B19 (Regional Jet Series 100 & 440)
2009-04-12	S 2001-26-19	Boeing	767-200, -300, and -400ER
2009-04-13		Rolls-Royce Deutschland Ltd & Co KG	Engine: BR700-715A1-30, BR700-715B1-30, and BR700-715C1-30
2009-04-15	S 93-08-04	Boeing	737-100, -200, -200C, -300, -400, and -500
2009-04-16	S 2008-10-15	Boeing	747-100, 747-100B, 747-200B, 747-200C, 747-200F, 747-300, 747SR, and 747SP
2009-04-17		General Electric Company	Engine: CF6-45A, CF6-45A2, CF6-50A, CF6-50C, CF6-50CA, CF6-50C1, CF6-50C2, CF6-50C2B, CF6-50C2D, CF6-50E, CF6-50E1, CF6-50E2, and CF6-50E2B
2009-05-02		General Electric Company	Engine: See AD
2009-05-03		Boeing	727, 727C, 727-100, 727-100C, 727-200, and 727-200F
2009-05-04		Bombardier Inc	CL-215-6B11 (CL-215T variant), CL-215-6B11 (CL-415 variant)

Biweekly 2009-06

2009-02-06		Boeing	737-300, -400, and -500
2009-05-10		Airbus	A300, A340-200 and A340-300, A330
2009-05-11	S 2008-19-04	Boeing	777-200 and -300
2009-06-12	S 2008-01-04	Bombardier, Inc.	CL-600-2B19 (Regional Jet Series 100 & 440)

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

Biweekly 2009-07

2009-05-08		Trimble or Freeflight Systems	Appliance: Global positioning system
2009-06-02		Boeing	747-100, 747-100B, 747-100B SUD, 747-200B, 747-200C, 747-200F, 747-300, 747-400, 747SR, and 747SP
2009-06-03		Viking Air Limited	DHC-7-1, DHC-7-100, DHC-7-101, DHC-7-102, and DHC-7-103
2009-06-04		Bombardier, Inc.	CL-600-2B19 (Regional Jet Series 100 & 440)
2009-06-05		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)
2009-06-06	S 2006-10-11 and 2005-15-10	Airbus	A310 and A300-600
2009-06-08		Boeing	767-200, -300, -300F, and -400ER
2009-06-09		328 Support Services GMBH	328-100
2009-06-10		Boeing	727-100 and 727-200
2009-06-11		Embraer	ERJ 190-100 STD, -100 LR, -100 IGW, -100ECJ, -200 STD, -200 LR, and -200 IGW
2009-06-13		Airbus	A321-131
2009-06-14		Fokker Services B.V	F.27 Mark 050
2009-06-15		Fokker Services B.V	F.27 Mark 050
2009-06-16		Embraer	ERJ 170-100 LR, -100 SE, -100 STD, -100 SU, -200 LR, -200 STD, and -200 SU airplanes; and Model ERJ 190-100 IGW, -100 LR, -100 STD, -100 ECJ, -200 IGW, -200 LR, and -200 STD
2009-06-17		Bombardier	CL-600-2B19 (Regional Jet Series 100 & 440)
2009-06-18		Bombardier, Inc	CL-600-2C10 (Regional Jet Series 700, 701, & 702)
2009-06-19		Boeing	767-200 and 767-300
2009-06-20		Boeing	757-200, 757-200PF, and 757-300
2009-06-21		Bombardier	DHC-8-102, -103, -106, -201, -202, -301, -311, and -315, DHC-8-400, -401 and -402
2009-06-22		Airbus	A318-111, -112, -121, and -122; A319-111, -112, -113, -114, -115, -131, -132, and -133; A320-111, -211, -212, -214, -231, -232, -233; and A321-111, -112, -131, -211, -212, -213, -231, and -232
2009-07-01		Rolls-Royce Deutschland Ltd & Co KG	Engine: BR700-715A1-30, BR700-715B1-30, and BR700-715C1-30
2009-07-02	S 96-03-07	Hawker Beechcraft	400, 400A, MU-300-10, MU-300
2009-07-03		General Electric Company	Engine: CF6-80C2 and CF6-80E1

Biweekly 2009-08

2009-04-18		Pratt & Whitney	Engine: JT9D-7, -7A, -7AH, -7H, -7F, and -7J
2009-07-04		McDonnell Douglas	Rotorcraft: MD-90-30
2009-07-05		ATR-GIE Avions de Transport Régional	ATR72-101, -102, -201, -202, -211, -212, and -212A
2009-07-06		McDonnell Douglas	717-200
2009-07-07		General Electric Company	Engine: CF6-80A, CF6-80A1, CF6-80A2, and CF6-80A3
2009-07-10	S 2004-22-05	Boeing	737-300, -400, -500
2009-07-11		General Electric Company	Engine: CF34-1A, -3A, -3A1, -3A2, -3B, and -3B1
2009-07-12	S 2007-07-12	Honeywell, Inc	Navigation computer
2009-08-01		McDonnell Douglas	See AD
2009-08-04		Hawker Beechcraft Corp.	BH.125 series 600A airplanes and Model HS.125 series 700A
2009-08-51	E		

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Biweekly 2009-09

2009-08-06		General Electric Company	Engine: CF6-80A
2009-08-07		Honeywell International Inc	Engine: ALF502L-2 and ALF502L-2C
2009-09-01		Airbus	A318-111, A318-112, A318-121, A318-122, A319-111, A319-112, A319-113, A319-114, A319-115, A319-131, A319-132, A319-133, A320-111, A320-211, A320-212, A320-214, A320-231, A320-232, A320-233, A321-111, A321-112, A321-131, A321-211, A321-212, A321-213, A321-231, and A321-232
2009-09-02		Bombardier, Inc	DHC-8-400, DHC-8-401, and DHC-8-402

Biweekly 2009-10

2009-06-22	C	Airbus	A318-111, -112, -121, and -122; A319-111, -112, -113, -114, -115, -131, -132, and -133; A320-111, -211, -212, -214, -231, -232, -233; and A321-111, -112, -131, -211, -212, -213, -231, and -232
2009-09-05	S 2006-03-10	Airbus	A318-111 and 112; A319-111, -112, -113, -114, -115, -131, -132, and -133; A320-111, -211, -212, -214, -231, -232, and -233; and A321-111, -112, -131, -211, -212, -213, -231, and -232
2009-09-06		Boeing	737-100, -200, -200C, -300, -400, and -500
2009-09-07		Boeing	737-100, -200, -200C, -300, -400, and -500
2009-09-08		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
2009-10-01	S 2007-17-21	Pratt & Whitney	Engine: JT9D-7R4G2, -7R4E1, -7R4E4, and -7R4H1
2009-10-02	S 2005-19-15	BAE Systems	Jetstream 4101
2009-10-03		328 Support Services	328-100 and -300

Biweekly 2009-11

2009-04-06	S 2004-16-09	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
2009-08-51		Rolls-Royce Corporation	Engine: RRC AE 3007A
2009-10-01	S 2007-17-21	Pratt & Whitney	Engine: JT9D-7R4G2, -7R4E1, -7R4E4, and -7R4H1
2009-10-05		Bombardier, Inc	CL-600-2B19 (Regional Jet series 100 and 440)
2009-10-06		Boeing	747-400 and 747-400D
2009-10-07		Airbus	380-841, -842 and 861
2009-10-08		Pratt & Whitney	Engine: PW2037, PW2037(M), and PW2040
2009-10-10		Bombardier Inc.	CL-600-2C10 (Regional Jet Series 700, 701, & 702), Model CL-600-2D15 (Regional Jet Series 705), Model CL-600-2D24 (Regional Jet Series 900)
2009-10-11		Airbus	A330-300, A340-200, and A340-300
2009-10-12	S 2005-16-06	Boeing	747-100, -100B, -100B SUD, -200B, -200C, -200F, -300, -400F, -400, -400D, 747SP, and 747SR
2009-10-13		Saab AB, Saab Aerosystems	340A and 340B
2009-11-02		CFM International	Engine: CFM56-2, CFM56-3, CFM56-5A, CFM56-5B, CFM56-5C, and CFM56-7B
2009-11-03		Lockheed	382, 382B, 382E, 382F, and 382G

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Biweekly 2009-12

2009-11-07		BAE Systems	HS 748 series 2A and series 2B
2009-11-08		Airbus	A330-202, -223, -243, -301, -322 and -342
2009-11-09		Airbus	A310-203, A310-204, A310-221, A310-222, A310-304, A310-322, A310-324, and A310-325 airplanes; and Airbus Model A300 B4-601, A300 B4-603, A300 B4-605R, A300 B4-620, A300 B4-622, A300 B4-622R, A300 C4-605R Variant F, A300 F4-605R and A300 F4-622R
2009-11-11		McDonnell Douglas	MD-90-30
2009-11-13		Learjet	45

Biweekly 2009-13

2009-11-04		Rolls-Royce Corporation	Engine: AE 2100D2, AE 2100D2A, AE 2100D3, and AE 2100J
2009-12-02	S 2007-03-09	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
2009-12-03		Boeing	757-200, -200CB, and -300
2009-12-04		Construcciones Aeronauticas, S.A.	C-212-CB, C-212-CC, C-212-CD, C-212-CE, C-212-CF, and C-212-DE
2009-12-05		Boeing	737-300, -400, and -500
2009-12-06		Boeing	737-300, -400, and -500, 737-600, -700, -700C, -800, and -900
2009-12-08		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
2009-12-09		ATR-GIE Avions De Transport Régional	ATR42-200, ATR42-300, and ATR42-320, ATR42-500, ATR72-101, ATR72-201, ATR72-102, ATR72-202, ATR72-211, ATR72-212, and ATR72-212A
2009-12-10	S 2006-12-09	BAE Systems	BAe 146-100A, -200A, and -300A series airplanes; and Model Avro 146-RJ70A, 146-RJ85A, and 146-RJ100A
2009-12-11		Airbus	A340-541 and -642
2009-12-12		ATR	ATR42-500 and ATR72-212A
2009-12-13		Bombardier, Inc	DHC-8-400, DHC-8-401, and DHC-8-402
2009-13-07		Airbus	A330-201, -202, -203, -223, -243, -301, -302, -303, -321, -322, -323, -341, -342, and -343

Biweekly 2009-14

2009-04-18	COR	Pratt & Whitney	Engine: JT9D-7, -7A, -7AH, -7H, -7F, and -7J
2009-13-02	S 98-06-07	Fokker Services B.V	F.28 Mark 0100
2009-13-03		Boeing	747-400 and -400F
2009-13-08		McDonnell Douglas	MD-90-30
2009-13-09		Microturbo SA	Appliance: Auxiliary power units (APU)
2009-13-10		British Aerospace Regional Aircraft	HP.137 Jetstream Mk.1, Jetstream Series 200 and 3101, and Jetstream Model 3201
2009-14-02	S 2002-26-15	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
2009-14-08		General Electric Company	Engine: CF6-80C2B5F

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Biweekly 2009-15

2009-14-03		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)
2009-14-04		Boeing	737-100, -200, -200C, -300, -400, and -500
2009-14-05		Pratt & Whitney	Engine: PW2037, PW2037(M), and PW2040
2009-14-06	S 2007-17-12	Boeing	777
2009-14-07		Dassault Aviation	Mystere-Falcon 20-C5, 20-D5, 20-E5, and 20-F5
2009-14-09		Dassault Aviation	Falcon 2000EX
2009-14-12		Pratt & Whitney Canada Corp	Engine: PW305A and PW305B
2009-15-02		Airbus	A318, A319, A320, and A321
2009-15-03		Bombardier, Inc	BD-700-1A10 and BD-700-1A11
2009-15-04		Airbus	A330-201, -202, -203, -223, -243, -301, -302, -303, -321, -322, -323, -341, -342, and -343

Biweekly 2009-16

2008-26-03	COR	Bombardier, Inc	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
2009-11-12	S 2004-14-06	Airbus	A310
2009-15-06		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
2009-15-07		Airbus	A319-111, -112, -113, -114, -115, -131, -132, and -133; A320-111, -211, -212, -214, -231, -232, and -233; and A321-111, -112, -131, -211, -212, -213, -231, and -232
2009-15-08		BAE Systems	BAe 146-100A, -200A, and -300A series airplanes; and Model Avro 146-RJ70A, 146-RJ85A, and 146-RJ100A
2009-15-09		Airbus	A380-841, -842, and -861
2009-15-10		Airbus	A330-301, -321, -322, -341, and -342, A340-211, -212, -213, -311, -312, and -313
2009-15-11		Aerospatiale	SN-601 (Corvette)
2009-15-12		Boeing	747-400 and -400D
2009-15-17		Airbus	A330-200, A330-300, A340-200, and A340-300
2009-15-18		Embraer	EMB-120, -120ER, -120FC, -120QC, and -120RT
2009-15-19		BAE Systems	BAe 146-100A and 146-200A

Biweekly 2009-17

2008-16-09 R1	R 2008-16-09	Short Brothers PLC	SD-3-60
2009-16-01		BAE Systems	Jetstream 4101
2009-16-05		Fokker Services B.V	F.27 Mark 050
2009-16-06		Boeing	767-200, -300, -300F, and -400ER
2009-16-14	S 2005-20-03	Boeing	737-100, -200, -200C, -300, -400, and -500
2009-17-01		Gulfstream Aerospace Corporation	G-IV, GIV-X, GV, GV-SP

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Biweekly 2009-18			
2009-16-07	S 2006-10-17	Boeing	737-600, -700, -700C, -800, and -900
2009-17-02		Saab AB, Saab Aerosystems	SAAB 340A (SAAB/SF340A) and SAAB 340B
2009-17-03		BAE Systems	BAe 146 and Avro 146-RJ
2009-17-04		Airbus	A318-111, -112, -121, and -122; A319-111, -112, -113, -114, -115, -131, -132, and -133; A320-111, -211, -212, -214, -231, -232, -233; and A321-111, -112, -131, -211, -212, -213, -231, and -232
2009-17-05		Honeywell International Inc.	Engine: TPE331-10 and TPE331-11
2009-18-01		CFM International, S.A	Engine: CFM56-5B1/P; -5B2/P; -5B3/P; -5B3/P1; -5B4/P; -5B4/P1; -5B5/P; -5B6/P; -5B7/P; -5B8/P; -5B9/P
2009-18-02		Boeing	767-200, -300, -300F, and -400ER
2009-18-05		Fokker Services B.V	F.27 Mark 050 and F.28 Mark 0100
2009-18-06		Construcciones Aeronauticas, S.A.	CN-235, CN-235-100, CN-235-200, and CN-235-300
2009-18-07	S 2005-20-30	Boeing	747-100, 747-100B, 747-100B SUD, 747-200B, 747-300, 747SP, and 747SR
Biweekly 2009-19			
2009-02-06 R1	R 2009-02-06	Boeing	737-300, -400, and -500
2009-15-19		BAE Systems	BAe 146-100A and 146-200A
2009-18-08	S 2004-03-33	Airbus	See AD
2009-18-09	S 99-20-01	Fokker Services B.V	F.28 Mark 0100, F.28 Mark 0070
2009-18-10	S 2008-17-10	Boeing	707-100 long body, -200, -100B long body, -100B short body, 707-300, -300B, -300C, and -400 series airplanes; and Model 720 and 720B
2009-18-11		Fokker Services	F.28 Mark 0070 and 0100
2009-18-12		Bombardier, Inc	
2009-18-13		Rolls-Royce plc	Engine: RB211 Trent 970-84, 970B-84, 972-84, 972B-84, 977-84, 977B-84, and 980-84
2009-18-14	S 2004-09-16	328 Support Services GmbH	328-100 and 328-300
2009-18-16	S 2006-02-06	Airbus	A310-203, -204, -221, -222, -304, -322, -324 and -325
2009-18-18		ATR-GIE Avions De Transport Régional	ATR42-200, -300, -320, and -500 airplanes and Model ATR72-101, -201, -102, -202, -211, -212, and -212A
2009-18-19		Airbus	A330-201, -202, -203, -223, -243, -301, -302, -303, -321, -322, -323, -341, -342, and -343, A340-211, -212, -213, -311, -312, and -313
2009-18-20		Airbus	A330-300, A340-200, and A340-300, A330-301, -302, -303, -321, -322, -323, -341, -342, and -343, A340-211, -212, -213, -311, -312, and -313
2009-19-01		Airbus	A300 B2-1C, B2-203, B2K-3C, B4-103, B4-203, and B4-2C
2009-19-02		Boeing	737-600, -700, -700C, -800, -900 and -900ER
Biweekly 2009-20			
2009-18-15	S 87-16-06	Airbus	A300, A310, and A300-600
2009-19-03	S 2009-13-10	British Aerospace Regional Aircraft	HP.137 Jetstream Mk.1, Jetstream Series 200 and 3101, and Jetstream Model 3201
2009-19-04	S 2008-08-01	McCauley Propeller Systems	Propeller: B5JFR36C1101/114GCA-0, C5JFR36C1102/L114GCA-0, B5JFR36C1103/114HCA-0, and C5JFR36C1104/L114HCA-0
2009-19-05		Boeing	747, 747-100, 747-100B, 747-100B SUD, 747-200B, 747-200C, 747-200F, 747-300, 747SR, and 747SP, 747-400, 747-400D, and 747-400F
2009-20-01		Boeing	727-281

LARGE AIRCRAFT

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

Biweekly 2009-21

2009-20-02		Boeing	767-200 and -300
2009-20-03		Boeing	727, 727C, 727-100, 727-100C, 727-200, and 727-200F
2009-20-05		Airbus	A318, A319, A320, and A321
2009-20-06	S 88-06-03	Airbus	A310-203 and -222 airplanes, and Model A300 B4-620
2009-20-08		Boeing	727, 727C, 727-100, 727-100C, 727-200, and 727-200F
2009-20-09		Boeing	767-200, -300, and -300F
2009-20-11		Boeing	737-300, -400, and -500
2009-20-12		Boeing	747-100, -100B, -100B SUD, -200B, -200C, -200F, -300, -400, -400D, -400F, and 747SR

Biweekly 2009-22

2007-23-05 R1		Saab	SAAB 2000
2009-20-10		CASA	C-212-CB, C-212-CC, C-212-CD and C-212-CE
2009-20-14	S 86-07-01	Rolls-Royce plc	Engine: RB211-535E4-37, RB211-535E4-B-37, and RB211-535E4-B-75
2009-21-01		Boeing	737-300 series, 737-400 series
2009-21-03		Hamilton Sundstrand Power Systems	Appliance: T-62T-46C12 auxiliary power units
2009-21-05		Airbus	A340-211, -212, and -213 series; A340-311, -312, and -313 series
2009-21-06		328 Support Services GmbH	328-100 and -300
2009-21-09	S 2003-15-06	Rolls-Royce plc	Engine: RB211 Trent 875-17, Trent 877-17, Trent 884-17, Trent 892-17, Trent 892B-17, and Trent 895-17



2007-23-05 R1 Saab AB, Saab Aerosystems: Amendment 39-16045. Docket No. FAA-2009-0909; Directorate Identifier 2009-NM-172-AD.

Effective Date

- (a) This airworthiness directive (AD) becomes effective October 30, 2009.

Affected ADs

- (b) This AD revises AD 2007-23-05.

Applicability

- (c) This AD applies to all Saab AB, Saab Aerosystems Model SAAB 2000 airplanes, certificated in any category, all serial numbers.

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 (g) 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) states:

Subsequent to accidents involving Fuel Tank System explosions in flight * * * and on ground, the FAA published Special Federal Aviation Regulation 88 (SFAR 88) in June 2001. SFAR 88 required a safety review of the aircraft Fuel Tank System to determine that the design meets the requirements of FAR (Federal Aviation Regulation) § 25.901 and § 25.981(a) and (b).

A similar regulation has been recommended by the JAA (Joint Aviation Authorities) to the European National Aviation Authorities in JAA letter 04/00/02/07/03-L024 of 3 February 2003. The review was requested to be mandated by NAA's (National Aviation Authorities) using JAR (Joint Aviation Regulation) § 25.901(c), § 25.1309.

In August 2005 EASA (European Aviation Safety Agency) published a policy statement on the process for developing instructions for maintenance and inspection of Fuel Tank

System ignition source prevention (EASA D 2005/CPRO, www.easa.eu.int/home/cert_policy_statements_en.html) that also included the EASA expectations with regard to compliance times of the corrective actions on the unsafe and the not unsafe part of the harmonised design review results. On a global scale the TC (type certificate) holders committed themselves to the EASA published compliance dates (see EASA policy statement). The EASA policy statement has been revised in March 2006: the date of 31-12-2005 for the unsafe related actions has now been set at 01-07-2006.

Fuel Airworthiness Limitations are items arising from a systems safety analysis that have been shown to have failure mode(s) associated with an 'unsafe condition' as defined in FAA's memo 2003-112-15 'SFAR 88–Mandatory Action Decision Criteria'. These are identified in Failure Conditions for which an unacceptable probability of ignition risk could exist if specific tasks and/or practices are not performed in accordance with the manufacturers' requirements.

This EASA Airworthiness Directive mandates the Fuel System Airworthiness Limitations (comprising maintenance/inspection tasks and Critical Design Configuration Control Limitations (CDCCL)) for the type of aircraft, that resulted from the design reviews and the JAA recommendation and EASA policy statement mentioned above.

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

Restatement of AD 2007-23-05, With No Changes

Actions and Compliance

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

(1) Within 3 months after December 11, 2007 (the effective date of AD 2007-23-05), revise the ALS of the Instructions for Continued Airworthiness to incorporate the maintenance and inspection instructions in Part 1 of Saab Fuel Airworthiness Limitations 2000 LKS 009032, dated February 14, 2006. For all tasks identified in Part 1 of Saab Fuel Airworthiness Limitations 2000 LKS 009032, dated February 14, 2006, the initial compliance times start from December 11, 2007, and the repetitive inspections must be accomplished thereafter at the interval specified in Part 1 of Saab Fuel Airworthiness Limitations 2000 LKS 009032, dated February 14, 2006.

(2) Within 12 months after December 11, 2007, revise the ALS of the Instructions for Continued Airworthiness to incorporate the CDCCLs as defined in Part 2 of Saab Fuel Airworthiness Limitations 2000 LKS 009032, dated February 14, 2006.

(3) Except as provided by paragraph (g) of this AD: After accomplishing the actions specified in paragraphs (f)(1) and (f)(2) of this AD, no alternative inspection, inspection intervals, or CDCCLs may be used.

(4) Where Saab Fuel Airworthiness Limitations 2000 LKS 009032, dated February 14, 2006, allows for exceptional short-term extensions, an exception is acceptable to the FAA if it is approved by the appropriate principal inspector in the FAA Flight Standards Certificate Holding District Office.

New Information:**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 airworthiness limitations section (ALS), as required by paragraph (f) of this AD, do not need to be reworked in accordance with the CDCCLs. However, once the airworthiness limitations section 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: No differences.

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: Shahram Daneshmandi, Aerospace Engineer, International Branch, ANM-116, Transport Airplane Directorate, FAA, 1601 Lind Avenue, SW., Renton, Washington 98057-3356; telephone (425) 227-1112; fax (425) 227-1149. Before using any approved AMOC on any airplane to which the AMOC applies, notify your principal maintenance inspector (PMI) or principal avionics inspector (PAI), as appropriate, or lacking a principal inspector, your local Flight Standards District Office. The AMOC approval letter must specifically reference this AD.

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

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

Related Information

(h) Refer to MCAI European Aviation Safety Agency Airworthiness Directive 2006-0199, dated July 11, 2006; and Saab Fuel Airworthiness Limitations 2000 LKS 009032, dated February 14, 2006; for related information.

Material Incorporated by Reference

(i) You must use Saab Fuel Airworthiness Limitations 2000 LKS 009032, dated February 14, 2006, to do the actions required by this AD, unless the AD specifies otherwise.

(1) The Director of the Federal Register previously approved the incorporation by reference of this service information on December 11, 2007 (72 FR 62564, November 6, 2007).

(2) For service information identified in this AD, contact Saab Aircraft AB, SAAB Aerosystems, SE 581 88, Linköping, Sweden; telephone +46 13 18 5591; fax +46 13 18 4874; e-mail saab2000.techsupport@saabgroup.com; Internet <http://www.saabgroup.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 or 425-227-1152.

(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 September 18, 2009.

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



2009-20-10 Construcciones Aeronauticas, S.A. (CASA): Amendment 39-16033. Docket No. FAA-2009-0611; Directorate Identifier 2008-NM-165-AD.

Effective Date

- (a) This airworthiness directive (AD) becomes effective November 17, 2009.

Affected ADs

- (b) None.

Applicability

- (c) This AD applies to CASA Model C-212-CB, C-212-CC, C-212-CD and C-212-CE airplanes, all serial numbers; certificated in any category; on which autopilot servo-drive actuators (servo-motors) having part number (P/N) 4006719-904 or 4006719-913 are installed.

Subject

- (d) Air Transport Association (ATA) of America Code 22: Auto flight.

Reason

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

Honeywell International, the manufacturer of the SPZ200 autopilot system installed on the EADS-CASA C-212 series aircraft, has identified a series of servo-motors, P/N [part number] 4006719-904 and P/N 4006719-913, designed for use in the SPZ200 autopilot system, whose failure can lead to a potential unsafe flight condition. To address and correct this situation, Honeywell International has published Alert Service Bulletin (ASB) 4006719-22-A0016 (Revised) dated 1 November 2004, that identifies the affected servo-motors by serial number, recommending the removal of these units from the aircraft and including modification instructions to be accomplished prior to reinstallation.

EADS-CASA has determined that the flight safety of the C-212 aircraft is at risk. Consequently, Boletin de Servicio (Service Bulletin) SB-212-22-16 has been published to advise C-212 operators of this condition and to recommend that the affected servo-motors are modified or replaced with modified units.

For the reasons described above, this EASA AD requires the identification of the affected servo-motors and modification or replacement with modified units.

The unsafe condition is failure of the servo-motors, which could result in roll oscillations or possible hard-over failures when the autopilot is engaged.

Actions and Compliance

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

(1) Within 2 months after the effective date of this AD: Identify affected servo-motors having P/N 4006719-904 and P/N 4006719-913 and modify each unit or replace with a modified unit, in accordance with the instructions of EADS-CASA Service Bulletin SB-212-22-16, dated March 13, 2006.

(2) As of the effective date of this AD, no person may install, on any airplane, a servo-motor having P/N 4006719-904 or 4006719-913, and any affected serial number identified in Honeywell Alert Service Bulletin 4006719-22-A0016, Revision 001, dated November 1, 2004 (referenced in EADS-CASA Service Bulletin SB-212-22-16, dated March 13, 2006, as the source of service information for accomplishing the modification), unless it has been modified in accordance with paragraph (f)(1) of this AD.

Note 1: The 8 digit serial number specified in Honeywell Alert Service Bulletin 4006719-22-A0016, Revision 001, dated November 1, 2004, is a combination date code and serial number. The format is as follows: YYMMXXXX-YY is the year; MM is the month, and XXXX is a sequential manufacturing serial number (e.g., a unit with number 0111XXXX was manufactured in November 2001).

FAA AD Differences

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

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, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. Send information to ATTN: Shahram Daneshmandi, Aerospace Engineer, International Branch, ANM-116, Transport Airplane Directorate, FAA, 1601 Lind Avenue, SW., Renton, Washington 98057-3356; telephone (425) 227-1112; fax (425) 227-1149. Before using any approved AMOC on any airplane to which the AMOC applies, notify your principal maintenance inspector (PMI) or principal avionics inspector (PAI), as appropriate, or lacking a principal inspector, your local Flight Standards District Office.

(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, the Office of Management and Budget (OMB) has approved the information collection requirements and has assigned OMB Control Number 2120-0056.

Related Information

(h) Refer to MCAI European Aviation Safety Agency Airworthiness Directive 2008-0144, dated August 1, 2008; EADS-CASA Service Bulletin SB-212-22-16, dated March 13, 2006; and Honeywell Alert Service Bulletin 4006719-22-A0016, Revision 001, dated November 1, 2004; for related information.

Material Incorporated by Reference

(i) You must use EADS-CASA Service Bulletin SB-212-22-16, dated March 13, 2006; and Honeywell Alert Service Bulletin 4006719-22-A0016, Revision 001, dated November 1, 2004; as applicable; to do the actions required by this AD, unless the AD specifies otherwise. (The revision level of Honeywell Alert Service Bulletin 4006719-22-A0016, Revision 001, dated November 1, 2004, is indicated only on pages 1 and 2 of the document.)

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

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

(3) You may review copies of the service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington. For information on the availability of this material at the FAA, call 425-227-1221 or 425-227-1152.

(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 September 18, 2009.

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



2009-20-14 Rolls-Royce plc (RR) (Formerly Rolls-Royce Limited): Amendment 39-16037.
Docket No. FAA-2009-0057; Directorate Identifier 85-ANE-25-AD.

Effective Date

(a) This airworthiness directive (AD) becomes effective November 17, 2009.

Affected ADs

(b) This AD supersedes AD 86-07-01, Amendment 39-5273.

Applicability

(c) This AD applies to RR models RB211-535E4-37, RB211-535E4-B-37, and RB211-535E4-B-75 turbofan engines that don't incorporate RR Service Bulletin (SB) RB.211-72-8045. These engines are installed on, but not limited to, Boeing 757 and Tupolev Tu204 airplanes.

Unsafe Condition

(d) This AD results from the FAA approving Revision 3 to Mandatory Service Bulletin (MSB) RB.211-72-7775, which adds an alternative eddy current inspection (ECI) method. We are issuing this AD to prevent an uncontained outer combustion case burst, which could result in damage to the airplane.

Compliance

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

Initial Inspection

(f) Perform an initial inspection of the outer combustion casing. Use the Accomplishment Instructions paragraph 3.B. or paragraph 3.C. of RR MSB RB.211-72-7775, Revision 3, dated April 9, 1999, and the following compliance schedules:

- (1) For cases with 1,500 or fewer cycles-since-new (CSN) on the effective date of this AD, inspect before accumulating 1,500 CSN.
- (2) For cases with more than 1,500 CSN on the effective date of this AD, inspect within 50 cycles-in-service (CIS) after the effective date of this AD.
- (3) If you detect any cracks of 1.5 inches or more in length, replace the case before further flight.

Repetitive Inspections

(g) Thereafter, inspect cases at the following intervals. Use the Accomplishment Instructions paragraph 3.B. or paragraph 3.C. of RR MSB RB.211-72-7775, Revision 3, dated April 9, 1999.

(1) Inspect within 500 cycles-since-last inspection (CSLI) if you detected no cracks during the last inspection.

(2) Inspect within 100 CSLI if you detected cracks less than or equal to 0.5 inch in length during the last inspection.

(3) Inspect within 50 CSLI if you detected cracks greater than 0.5 inch but less than 1.5 inches in length.

Credit for Previous Inspections

(h) Cases inspected before the effective date of this AD using RB.211-72-7775, Revision 2, dated February 27, 1998, or earlier issue, meet the requirements of this AD for the initial or repetitive inspections specified in paragraphs (f) through (f)(3) and (g) through (g)(3) of this AD.

Alternative Methods of Compliance

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

Related Information

(j) Civil Aviation Authority airworthiness directive 008-07-85, dated June 19, 1985, also addresses the subject of this AD.

(k) Contact Ian Dargin, Aerospace Engineer, Engine Certification Office, FAA, Engine & 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

(l) You must use Rolls-Royce plc Mandatory Service Bulletin RB.211-72-7775, Revision 3, dated April 9, 1999 to perform the inspections required by this AD. The Director of the Federal Register approved the incorporation by reference of this service bulletin in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Contact Rolls-Royce plc, P.O. Box 31, Derby, DE24 8BJ, United Kingdom; telephone: 44 (0) 1332-242424; fax: 44 (0) 1332-249936, for a copy of this service information. You may review copies at the FAA, New England Region, 12 New England Executive Park, Burlington, MA; or at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to: <http://www.archives.gov/federal-register/cfr/ibr-locations.html>.

Issued in Burlington, Massachusetts, on September 22, 2009.
Peter A. White,
Assistant Manager, Engine and Propeller Directorate,
Aircraft Certification Service.



2009-21-01 Boeing: Amendment 39-16038. Docket No. FAA-2009-0429; Directorate Identifier 2007-NM-059-AD.

Effective Date

(a) This airworthiness directive (AD) is effective November 17, 2009.

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) Boeing Model 737-300 series airplanes as identified in Boeing Service Bulletin 737-53-1168, Revision 3, dated November 28, 2006.

(2) Boeing Model 737-400 series airplanes as identified in Boeing Service Bulletin 737-53-1187, Revision 2, dated May 9, 2007.

Subject

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

Unsafe Condition

(e) This AD results from reports of cracks in the aft fuselage skin on both sides of the airplane. We are issuing this AD to detect and correct cracking in the aft fuselage skin along the longitudinal edges of the bonded skin doubler, which could result in reduced structural integrity of the airplane.

Compliance

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

Inspections, Related Investigative and Corrective Actions

(g) At the applicable times specified in Tables 1 and 2 of paragraph 1.E., "Compliance," of Boeing Service Bulletin 737-53-1168, Revision 3, dated November 28, 2006 (for Model 737-300 series airplanes); or Table 1 of paragraph 1.E., of Boeing Service Bulletin 737-53-1187, Revision 2, dated May 9, 2007 (for Model 737-400 series airplanes); except as provided by paragraph (k) of this AD: Do the applicable inspections and related investigative actions to detect cracks in the aft fuselage skin panels, by accomplishing all of the applicable actions specified in the Accomplishment Instructions of Boeing Service Bulletin 737-53-1168, Revision 3, dated November 28, 2006; or Boeing Service Bulletin 737-53-1187, Revision 2, dated May 9, 2007; as applicable; including Note (f) of Table 1 of paragraph 1.E. And, do the applicable corrective actions specified in the

Accomplishment Instructions of Boeing Service Bulletin 737-53-1168, Revision 3, dated November 28, 2006; or Boeing Service Bulletin 737-53-1187, Revision 2, dated May 9, 2007; as applicable; except as provided by paragraphs (h), (i), and (l) of this AD. Repeat the applicable inspections and related investigative actions thereafter at the applicable intervals specified in Tables 1 and 2 of paragraph 1.E. of Boeing Service Bulletin 737-53-1168, Revision 3, dated November 28, 2006; or Table 1 of paragraph 1.E. of Boeing Service Bulletin 737-53-1187, Revision 2, dated May 9, 2007; as applicable.

(h) If any crack is found during any inspection or corrective action required by this AD, before further flight, repair in accordance with the Accomplishment Instructions of Boeing Service Bulletin 737-53-1168, Revision 3, dated November 28, 2006 (for Model 737-300 series airplanes); or Boeing Service Bulletin 737-53-1187, Revision 2, dated May 9, 2007 (for Model 737-400 series airplanes); except, where Boeing Service Bulletin 737-53-1168, Revision 3, dated November 28, 2006; or Boeing Service Bulletin 737-53-1187, Revision 2, dated May 9, 2007; as applicable; specifies to contact Boeing, before further flight, repair according to a method approved in accordance with the procedures specified in paragraph (m) of this AD.

(i) If any cracking of a repaired area is found during any inspection required by this AD, and Boeing Service Bulletin 737-53-1168, Revision 3, dated November 28, 2006 (for Model 737-300 series airplanes); or Boeing Service Bulletin 737-53-1187, Revision 2, dated May 9, 2007 (for Model 737-400 series airplanes); specifies contacting Boeing for appropriate action: Before further flight, repair the cracking using a method approved in accordance with the procedures specified in paragraph (m) of this AD.

Optional Terminating Action

(j) Doing the skin panel replacement before the effective date of this AD, in accordance with the service information specified in Table 1 of this AD, as applicable, terminates the inspection requirements of paragraph (g) of this AD for that skin panel only. As of the effective date of this AD, doing the skin panel replacement, in accordance with Boeing Service Bulletin 737-53-1168, Revision 3, dated November 28, 2006; or Boeing Service Bulletin 737-53-1187, Revision 2, dated May 9, 2007; as applicable; terminates the inspection requirements of paragraph (g) of this AD for that skin panel only.

Table 1—Acceptable Service Information for Optional Terminating Action

Model	Document
Model 737–300 series airplanes.	Part 3 of the Accomplishment Instructions of Boeing Service Bulletin 737–53–1168, dated March 16, 1995.
	Part 3 of the Accomplishment Instructions of Boeing Service Bulletin 737–53–1168, Revision 1, dated August 17, 1995.
	Part 3 of the Accomplishment Instructions of Boeing Service Bulletin 737–53–1168, Revision 2, dated November 27, 1996.
	Part 3 of the Accomplishment Instructions of Boeing Service Bulletin 737–53–1168, Revision 3, dated November 28, 2006.

Model 737-400 series airplanes.	Part III of the Accomplishment Instructions of Boeing Service Bulletin 737-53-1187, dated November 2, 1995.
	Part III of the Accomplishment Instructions of Boeing Service Bulletin 737-53-1187, Revision 1, dated January 16, 1997.
	Part III of the Accomplishment Instructions of Boeing Service Bulletin 737-53-1187, Revision 2, dated May 9, 2007.

Exception to Service Bulletins

(k) Where Boeing Service Bulletin 737-53-1168, Revision 3, dated November 28, 2006 (for Model 737-300 series airplanes); or Boeing Service Bulletin 737-53-1187, Revision 2, dated May 9, 2007 (for Model 737-400 series airplanes); specifies compliance times after the release date of those service bulletins, this AD requires that the specified actions be done within the specified compliance times after the effective date of this AD.

No Reporting Required

(l) Although Boeing Service Bulletin 737-53-1168, Revision 3, dated November 28, 2006 (for Model 737-300 series airplanes); and Boeing Service Bulletin 737-53-1187, Revision 2, dated May 9, 2007 (for Model 737-400 series airplanes); specify to submit information to the manufacturer, this AD does not include such a requirement.

Alternative Methods of Compliance (AMOCs)

(m)(1) The Manager, Seattle Aircraft Certification Office (ACO), FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. Send information to ATTN: Wayne Lockett, Aerospace Engineer, Airframe Branch, ANM-120S, 1601 Lind Avenue, SW., Renton, Washington 98057-3356; telephone (425) 917-6447; fax (425) 917-6590. Or, e-mail information to 9-ANM-Seattle-ACO-AMOC-Requests@faa.gov.

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

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

Material Incorporated by Reference

(n) You must use Boeing Service Bulletin 737-53-1168, Revision 3, dated November 28, 2006; or Boeing Service Bulletin 737-53-1187, Revision 2, dated May 9, 2007; as applicable; to do the actions required by this AD, unless the AD specifies otherwise. If you do the optional terminating action specified in this AD, you must use the service information specified in Table 2 of this AD, as applicable, to do the optional terminating action, unless the AD specifies otherwise.

Table 2—Service Information for Optional Terminating Action

Boeing Service Bulletin—	Revision—	Dated—
737–53–1168	Original	March 16, 1995.
737–53–1168	1	August 17, 1995.
737–53–1168	2	November 27, 1996.
737–53–1168	3	November 28, 2006.
737–53–1187	Original	November 2, 1995.
737–53–1187	1	January 16, 1997.
737–53–1187	2	May 9, 2007.

(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 or 425-227-1152.

(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 September 25, 2009.

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



2009-21-03 Hamilton Sundstrand Power Systems: Amendment 39-16040. Docket No. FAA-2009-0247; Directorate Identifier 2009-NE-07-AD.

Effective Date

- (a) This airworthiness directive (AD) becomes effective November 20, 2009.

Affected ADs

- (b) None.

Applicability

(c) This AD applies to Hamilton Sundstrand Power Systems T-62T-46C12 auxiliary power units (APUs). These APUs are installed on, but not limited to, Bombardier Inc. DHC-8-400 series airplanes.

Unsafe Condition

(d) This AD results from two reports of APU compartment explosions due to over-fueling of the APU at low revolutions-per-minute during the start sequence. We are issuing this AD to prevent over-fueling of the APU during the start sequence, which could lead to fuel explosion, injury, and damage to the APU and the airplane.

Compliance

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

Software Upgrade of the APU Full-Authority Digital Electronic Controller (FADEC)

(f) At the next FADEC removal, but no later than 18 months after the effective date of this AD, upgrade the software in the APU FADEC from software version 02.01.000 to version 03.00.000, and change the FADEC part number (P/N) from 4503069E to 4503069F.

(g) Use paragraphs 3.A through 3.F.(2) of the Accomplishment Instructions of Hamilton Sundstrand Power Systems Service Bulletin No. 4503067-49-12, Revision 2, dated March 9, 2009, to do the software upgrade and the FADEC P/N change.

Alternative Methods of Compliance

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

Related Information

(i) Contact Roger Pesuit, Aerospace Engineer, Los Angeles Aircraft Certification Office, FAA, Transport Airplane Directorate, 3960 Paramount Blvd., Lakewood, CA 90712; e-mail: roger.pesuit@faa.gov; telephone (562) 627-5251, fax (562) 627-5210, for more information about this AD.

Material Incorporated by Reference

(j) You must use Hamilton Sundstrand Power Systems Service Bulletin No. 4503067-49-12, Revision 2, dated March 9, 2009, to perform the actions required by this AD. The Director of the Federal Register approved the incorporation by reference of this service bulletin in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Contact Hamilton Sundstrand Technical Publications, One Hamilton Road, Mail Stop: 1A-3-Z63, Windsor Locks, CT 06096-1010; telephone (860) 654-3575, for a copy of this service information. You may review copies at the FAA, New England Region, 12 New England Executive Park, Burlington, MA; or at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to: <http://www.archives.gov/federal-register/cfr/ibr-locations.html>.

Issued in Burlington, Massachusetts, on September 30, 2009.

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



2009-21-05 Airbus: Amendment 39-16042. Docket No. FAA-2009-0907; Directorate Identifier 2009-NM-072-AD.

Effective Date

- (a) This airworthiness directive (AD) becomes effective November 2, 2009.

Affected ADs

- (b) None.

Applicability

(c) This AD applies to Airbus Model A340-211, -212, and -213 series airplanes; and Model A340-311, -312, and -313 series airplanes; certificated in any category; all manufacturer serial numbers.

Subject

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

Reason

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

An A340-300 aeroplane experienced the opening of the engine n°3 lower left thrust reverser pivoting door during climb.

This event was the result of a primary lock malfunction and non-engagement of the secondary lock.

Preliminary investigations have revealed two main findings:

- The primary lock lever arm of the affected door was contaminated with lubrication fluid, which is a known contributor to incorrect operation;
- The actuator of the deployed door was found with 3 shim sets installed whereas the system is designed for a maximum of one shim set. It is considered that installation of three shim sets has a detrimental effect on the secondary lock capacity to engage in case of primary lock failure. Deployment of one thrust reverser door in flight and during the take-off constitutes an unsafe condition.

In order to ensure that the fleet is clear from unauthorized actuator shimming configurations which may lead to non-engagement of the secondary lock, EASA AD 2008-0074 required a one-time visual inspection to check that no more than one shim set per pivoting door actuator was installed.

Another A340-300 experienced a similar event after the publication of AD 2008-0074.

Airbus and CFM are currently investigating the root cause.

As a consequence, Airbus has defined a one-time inspection programme [for defects] to decrease the thrust reverser sensitivity to primary lock release.

This AD requires the accomplishment of a one-time [detailed] inspection programme which consists in [the following actions]:

- Primary lock inspection [for improper locking],
- Pivoting door seal inspection [for defective seal],
- Pivoting door actuator gimbal gap inspection [for gaps exceeding limits],
- Pivoting door hydraulic actuators inspection to check that one shim set is installed (consequently [EASA] AD 2008-0074, which required to check the installation of one shim set only per pivoting door actuator, is superseded by this [EASA] AD [2009-0063]),
- Pivoting door adjustment [to ensure proper operation of pivoting door], and their associated corrective actions.

Further mandatory action is foreseen (introduction of Additional Return Line restrictor on external engines).

* * * * *

Deployment of one thrust reverser door in flight or during take-off could result in reduced controllability of the airplane. Corrective actions include replacing with new or serviceable parts the thrust reverser pivoting door primary lock, the thrust reverser pivoting door, and the thrust reverser pivoting door actuator; removing excess shims from the thrust reverser pivoting door actuator or adding a shim; and adjusting the thrust reverser pivoting door.

Actions and Compliance

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

(1) Within 1,800 flight hours after the effective date of this AD, do the detailed inspections for the discrepancies identified in paragraphs (f)(1)(i), (f)(1)(ii), (f)(1)(iii), (f)(1)(iv), and (f)(1)(v) of this AD, in accordance with the applicable paragraph of Airbus All Operators Telex A340-78A4040, dated February 18, 2009 ("the AOT").

(i) Improper locking of the thrust reverser pivoting door primary lock as specified in paragraph 4.2.1 of the AOT.

(ii) Defects of the thrust reverser pivoting door seal as specified in paragraph 4.2.2 of the AOT.

(iii) Gaps exceeding limits of the thrust reverser pivoting door actuator gimbal as specified in paragraph 4.2.3 of the AOT.

(iv) Incorrect number of shim sets is installed on the thrust reverser pivoting door hydraulic actuator as specified in paragraph 4.2.4 of the AOT.

(v) Incorrect adjustment of the thrust reverser pivoting door as specified in paragraph 4.2.5 of the AOT.

(2) If any discrepancy is found during the inspections required by paragraph (f)(1) of this AD, before further flight, do all applicable corrective actions required by paragraphs (f)(2)(i), (f)(2)(ii), (f)(2)(iii), (f)(2)(iv), and (f)(2)(v) of this AD, in accordance with the applicable paragraph of Airbus All Operators Telex A340-78A4040, dated February 18, 2009 ("the AOT"); except that if a

replacement actuator is not available, the airplane may be dispatched with the thrust reverser inhibited per Master Minimum Equipment List reference 2.10.

(i) Replace the thrust reverser pivoting door primary lock with a new or serviceable thrust reverser pivoting door primary lock in accordance with paragraph 4.2.1 of the AOT.

(ii) Replace the thrust reverser pivoting door with a new or serviceable thrust reverser pivoting door in accordance with paragraph 4.2.2 of the AOT.

(iii) Replace the thrust reverser pivoting door actuator with a new or serviceable thrust reverser pivoting door actuator in accordance with paragraph 4.2.3 of the AOT.

(iv) Remove excess shims from the thrust reverser pivoting door actuator or add a shim in accordance with paragraph 4.2.4 of the AOT.

(v) Adjust the thrust reverser pivoting door in accordance with paragraph 4.2.5 of the AOT.

FAA AD Differences

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

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.

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

Related Information

(h) Refer to Mandatory Continuing Airworthiness Information (MCAI) European Aviation Safety Agency (EASA) Airworthiness Directive 2009-0063, dated March 11, 2009, and corrected March 20, 2009; and Airbus All Operators Telex A340-78A4040, dated February 18, 2009; for related information.

Material Incorporated by Reference

(i) You must use Airbus All Operators Telex A340-78A4040, dated February 18, 2009, to do the actions required by this AD, unless the AD specifies otherwise. (The issue date of this document is specified only on the first page of the document.)

(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 or 425-227-1152.

(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 September 30, 2009.

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



2009-21-06 328 Support Services GmbH (Formerly, AvCraft Aerospace GmbH, formerly Fairchild Dornier GmbH, formerly Dornier Luftfahrt GmbH): Amendment 39-16043. Docket No. FAA-2009-0616; Directorate Identifier 2009-NM-070-AD.

Effective Date

- (a) This airworthiness directive (AD) becomes effective November 20, 2009.

Affected ADs

- (b) None.

Applicability

- (c) This AD applies to all 328 Support Services GmbH Dornier Model 328-100 and -300 airplanes, certificated in any category.

Subject

- (d) Air Transport Association (ATA) of America Code 25: Equipment/furnishings.

Reason

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

A recent incident has been reported with a Dornier 328-100 aeroplane, where the right-hand (RH) power lever jammed in flight-idle position during the landing roll-out. The aeroplane was stopped by excessive braking.

The investigation by the operator revealed that the cockpit door locking device Part Number 001A252A3914012 had fallen off the RH cockpit wall and blocked the RH power/condition lever pulley/cable cluster below the door. Although the affected aeroplane had been modified, the technical investigation showed that a loose Cockpit Door Locking device could also occur on 328-100 and 328-300 aeroplanes with a standard installation.

This condition, if not corrected, could cause interference with the engine- and/or flight control cables, possibly resulting in reduced control of the aeroplane.

For the reasons described above, this AD requires a one-time inspection of the cockpit door locking device and the surrounding area [for proper installation] and the reporting of all findings to the TC [type certificate] holder. This AD is considered to be an interim action and the retrofit of a new design may be implemented later.

The corrective action is re-torquing the attachment screws.

Actions and Compliance

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

(1) Within 3 months after the effective date of this AD, do a detailed visual inspection of the cockpit door locking device and the surrounding area for proper installation, in accordance with the Accomplishment Instructions of 328 Support Services Service Bulletin SB-328-25-485 or SB-328J-25-235, both dated January 28, 2009, as applicable.

(2) If any discrepancy is found during the inspection specified in paragraph (f)(1) of this AD, before further flight, do the corrective action in accordance with the Accomplishment Instructions of 328 Support Services Service Bulletin SB-328-25-485 or SB-328J-25-235, both dated January 28, 2009, as applicable.

(3) Submit a report of the findings (both positive and negative) of the inspection required by paragraph (f)(1) of this AD to the Manager, Attention Dept P1, 328 Support Services GmbH, Customer Services, P.O.B. 1252, D-82231 Wessling, Fed. Rep. of Germany; Fax +49 (0) 8153 88111-6565, 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: No differences.

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: Tom Groves, Aerospace Engineer, International Branch, ANM-116, Transport Airplane Directorate, FAA, 1601 Lind Avenue SW., Renton, Washington 98057-3356; telephone (425) 227-1503; 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

(h) Refer to MCAI European Aviation Safety Agency Airworthiness Directive 2009-0082, dated April 7, 2009; and 328 Support Services Service Bulletins SB-328-25-485 and SB-328J-25-235, both dated January 28, 2009; for related information.

Material Incorporated by Reference

(i) You must use 328 Support Services Service Bulletin SB-328-25-485, dated January 28, 2009; or 328 Support Services Service Bulletin SB-328J-25-235, dated January 28, 2009, as applicable; to do the actions required by this AD, unless the AD specifies otherwise. (Only the odd-numbered pages of these documents contain the issue dates of the documents.)

(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 Global Support Center, P.O. Box 1252, D-82231 Wessling, Federal Republic of Germany; telephone +49 8153 88111 6666; fax +49 8153 88111 6565; e-mail gsc.op@328support.de; Internet <http://www.328support.de>.

(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 or 425-227-1152.

(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 September 30, 2009.

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



2009-21-09 Rolls-Royce plc: Amendment 39-16048. Docket No. FAA-2009-1369; Directorate Identifier 2003-NE-03-AD.

Effective Date

- (a) This airworthiness directive (AD) becomes effective November 20, 2009.

Affected ADs

- (b) This AD supersedes AD 2003-15-06, Amendment 39-13249.

Applicability

(c) This AD applies to Rolls-Royce plc RB211 Trent 875-17, Trent 877-17, Trent 884-17, Trent 892-17, Trent 892B-17, and Trent 895-17 turbofan engines with high-pressure (HP) compressor rotor rear stage 5 and 6 discs and cone shafts, part numbers FK25230 and FK27899 installed. These engines are installed on, but not limited to, Boeing 777 series airplanes.

Unsafe Condition

(d) This AD results from Rolls-Royce plc reducing the lives of these parts and changing the life calculating method to use "Standard Duty Cycles" with "Multiple Flight Profile Monitoring", and "Flight Cycles" with "Heavy Flight Profile Monitoring". We are issuing this AD to prevent stage 5 and 6 disc crack initiation and propagation that might lead to uncontained disc failure and damage to the airplane.

Compliance

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

(f) For operators using "Multiple Flight Profile Monitoring" (Flight Profiles "A" through "F"), remove HP compressor rotor rear stage 5 and 6 discs and cone shafts from service at or before accumulating 5,000 "Standard Duty Cycles". Guidance on "Multiple Flight Profile Monitoring" can be found in the Aircraft Maintenance Manual, Chapter 70-01-10.

(g) For operators using "Heavy Flight Profile Monitoring", remove HP compressor rotor rear stage 5 and 6 discs and cone shafts from service at or before accumulating 5,000 "Flight Cycles". Guidance on "Heavy Flight Profile Monitoring" can be found in the Aircraft Maintenance Manual, Chapter 70-01-10.

Alternative Methods of Compliance

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

Related Information

(i) Contact James Lawrence, Aerospace Engineer, Engine Certification Office, FAA, Engine and Propeller Directorate, 12 New England Executive Park, Burlington, MA 01803, e-mail james.lawrence@faa.gov; telephone (781) 238-7176; fax (781) 238-7199, for more information about this AD.

(j) European Aviation Safety Agency AD 2007-0004, dated January 8, 2007, also addresses the subject of this AD.

(k) Rolls-Royce plc Alert Service Bulletin No. RB.211-72-AE082, Revision 7, dated June 18, 2008, pertains to the subject of this AD. Contact Rolls-Royce plc, P.O. Box 31, Derby, DE24 8BJ, UK, telephone 44 (0) 1332 242424; fax 44 (0) 1332 249936, for a copy of this service information.

(l) Contact Boeing Commercial Airplanes, P.O. Box 3707, Seattle, Washington 98124-2207, for a copy of the Aircraft Maintenance Manual referenced in this AD.

Material Incorporated by Reference

(m) None.

Issued in Burlington, Massachusetts, on October 8, 2009.
Diane S. Romanosky,
Acting Manager, Engine and Propeller Directorate,
Aircraft Certification Service.