



**FEDERAL AVIATION ADMINISTRATION  
AIRWORTHINESS DIRECTIVES  
LARGE AIRCRAFT**

**BIWEEKLY 2009-24**

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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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### 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: <b>CF6-80C2 and CF6-80E1</b>

### 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	<b>Bombardier, Inc</b>	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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<b>Biweekly 2009-18</b>			
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
<b>Biweekly 2009-19</b>			
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
<b>Biweekly 2009-20</b>			
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
Info: E - Emergency; COR - Correction; S - Supersedes; R - Revision; FR - Final Rule of Emergency			
<b>Biweekly 2009-21</b>			
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
<b>Biweekly 2009-22</b>			
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
<b>Biweekly 2009-23</b>			
2007-21-14 R1		Airbus	
2007-22-03 R1		Airbus	A300 B2-1A, B2-1C, B2K-3C, B2-203, B4-2C, B4-103, and B4-203, A300-600
2008-04-18 R1		Embraer	EMB-120, -120ER, -120FC, -120QC, and -120RT
2008-04-19 R1		ATR-GIE Avions de Transport Régional	ATR 42-200, -300, -320, and -500 airplanes; and all ATR Model ATR 72-101, -201, -102, -202, -211, -212, and -212A
2008-05-18 R1		Fokker Services B.V	F.27 Mark 050 airplanes, all serial numbers; and Fokker F.27 Mark 200, 300, 400, 500, 600, and 700
2008-09-06 R1		Saab AB, Saab Aerosystems	SAAB 340A (SAAB/SF340A) and SAAB 340B
2008-10-07 R1		Boeing	
2009-01-06 R1		328 Support Services GmbH	328-300
2009-21-02		Airbus	
2009-21-04		Rolls-Royce Deutschland Ltd & Co KG	Engine: BR700-715A1-30, BR700-715B1-30, and BR700-715C1-30
2009-21-07		General Electric Company	Engine: CF6-80C2
2009-21-12		Airbus	A300 B4-601, B4-603, B4-605R, B4-620, B4-622, B4-622R, F4-605R, F4-622R, C4-605R
2009-22-01	S 2008-10-14	Rolls-Royce Deutschland Ltd & Co KG	Engine: RRD Tay 650-15
2009-22-06		International Aero Engines AG	Engine: V2500-A1, V2527E-A5, V2530-A5, and V2528-D5
2009-22-07		Saab AB, Saab Aerosystems	SAAB 2000
2009-22-08		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, Boeing Model 757-200, -200PF, and -300
2009-22-09		Bombardier	CL-600-2C10 (Regional Jet Series 700, 701 & 702), CL-600-2D15 (Regional Jet Series 705) and CL-600-2D24 (Regional Jet Series 900)
2009-22-12		Bombardier	CL-600-2C10 (Regional Jet Series 700, 701 & 702) airplanes, Model CL-600-2D15 (Regional Jet Series 705) airplanes, and Model CL-600-2D24 (Regional Jet Series 900)
2009-22-13		Boeing	767-200, -300, -300F, and -400ER
2009-22-14		Boeing	747-200C and 747-200F

## 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 2009-24**

2009-23-02		Bombardier, Inc.	CL-600-2B19 (Regional Jet Series 100 & 440)
2009-23-03	S 2006-24-11	Hawker Beechcraft Corporation	1900, 1900C, 1900 (C-12J), and 1900D
2009-23-04		Boeing	767-200, -300, -300F, and -400ER
2009-23-05		Airbus	A318-111, A318-112, A319-111, A319-112, A319-113, A319-114, A319-115, A319-131, A319-132, A319-133, A320-111, A320-211, A320-212, A320-214, A320-231, A320-232, A320-233, A321-111, A321-112, A321-131, A321-211, A321-212, A321-213, A321-231, and A321-232
2009-23-07		Saab AB, Saab Aerosystems	SAAB 340A (SAAB/SF340A) and SAAB 340B
2009-23-09		Bombardier, Inc.	CL-600-1A11 (CL-600), CL-600-2A12 (CL-601), CL-600-2B16 (CL-601-3A)
2009-23-10	S 2008-15-05	Boeing	737-300, -400, and -500
2009-23-11		Empresa Brasileira de Aeronautica S.A.	EMB-500
2009-23-12		SOCATA	TBM 700



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**2009-23-02 Bombardier, Inc. (Formerly Canadair):** Amendment 39-16073. Docket No. FAA-2009-0310; Directorate Identifier 2009-NM-012-AD.

**Effective Date**

- (a) This airworthiness directive (AD) becomes effective December 14, 2009.

**Affected ADs**

- (b) None.

**Applicability**

- (c) This AD applies to Bombardier Model CL-600-2B19 (Regional Jet Series 100 & 440) airplanes, all serial numbers, certificated in any category.

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)(1) 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 27: Flight Controls.

**Reason**

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

During the Acceptance Test Procedure (ATP) of returned Inboard Flap Actuators [with Bombardier] Part Number (PN) 601R93101-19 [and Eaton PN 852D100-19], an excessive wear condition was identified regarding endplay between the flap actuator and ball screw. Excessive wear of the screw and ball nut could potentially lead to a flap system jam. A Temporary Revision (TR) has been made to the Bombardier CL-600-2B19 Maintenance Requirements Manual (MRM), Appendix A, "Certification Maintenance Requirements" (CMR) to ensure that unacceptable wear on the nut and ball screw is detected and corrected.

Revision 1 of this directive introduces a new phase-in schedule for performing a new CMR task C27-50-300-01.

The unsafe condition is a flap system jam, which could result in a skewed flap condition with consequent reduced controllability of the airplane.

### **Actions and Compliance**

(f) Unless already done, within 30 days after the effective date of this AD, revise the Airworthiness Requirements Section of the Bombardier CL-600-2B19 MRM to include the information in Bombardier TR 2A-41, dated November 7, 2007, to Appendix A of the Airworthiness Requirements, Part 2, of the Bombardier CL-600-2B19 MRM. The initial compliance with the new CMR task must be done within 500 flight hours after the effective date of this AD.

Note 2: The actions required by paragraph (f) of this AD may be done by inserting a copy of Bombardier TR 2A-41, dated November 7, 2007, to Appendix A of the Airworthiness Requirements, Part 2, of the Bombardier CL-600-2B19 MRM. When this TR has been included in general revisions of the MRM, the TR may be removed from the MRM, provided the relevant information in the general revision is identical to that in Bombardier TR 2A-41, dated November 7, 2007.

### **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, New York Aircraft Certification Office (ACO), FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. Send information to ATTN: Fabio Buttitta, Aerospace Engineer, Airframe and Mechanical Systems Branch, ANE-171, FAA, New York ACO, 1600 Stewart Avenue, Suite 410, Westbury, New York 11590; telephone (516) 228-7303; fax (516) 794-5531. Before using any approved AMOC on any airplane to which the AMOC applies, notify your principal maintenance inspector (PMI) or principal avionics inspector (PAI), as appropriate, or lacking a principal inspector, your local Flight Standards District Office.

(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 Canadian Airworthiness Directive CF-2008-33R1, dated January 9, 2009; and Bombardier TR 2A-41, dated November 7, 2007, to Appendix A of the Airworthiness Requirements, Part 2, of the Bombardier CL-600-2B19 MRM; for related information.

**Material Incorporated by Reference**

(i) You must use Bombardier Temporary Revision 2A-41, dated November 7, 2007, to Appendix A of the Airworthiness Requirements, Part 2, of the Bombardier CL-600-2B19 Maintenance Requirements Manual, to do the actions required by this AD, unless the AD specifies otherwise.

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

(2) For service information identified in this AD, contact Bombardier, Inc., 400 Côte-Vertu Road West, Dorval, Québec H4S 1Y9, Canada; telephone 514-855-5000; fax 514-855-7401; e-mail [thd.crj@aero.bombardier.com](mailto:thd.crj@aero.bombardier.com); Internet <http://www.bombardier.com>.

(3) You may review copies of the service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington. For information on the availability of this material at the FAA, call 425-227-1221 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](http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html).

Issued in Renton, Washington, on October 19, 2009.

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



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**2009-23-03 Hawker Beechcraft Corporation (Type Certificate previously held by Raytheon Aircraft Company):** Amendment 39-16075; Docket No. FAA-2009-0165; Directorate Identifier 2008-CE-055-AD.

**Effective Date**

(a) This AD becomes effective on December 14, 2009.

**Affected ADs**

(b) This AD supersedes AD 2006-24-11, Amendment 39-14840. AD 2006-18-51 relates to the subject of this AD.

**Applicability**

(c) This AD applies to the following airplane models and serial numbers that are certificated in any category:

<b>Serial Numbers</b>	
<b>Group 1 Model Airplanes</b>	
(1) 1900	UA-3
(2) 1900C	UB-1 through UB-74
<b>Group 2 Model Airplanes</b>	
(1) 1900C (C-12J)	UC-1 through UC-174, and UD-1 through UD-6
(2) 1900D	UE-1 through UE-439

**Unsafe Condition**

(d) This AD results from the manufacturer developing a modification kit to install on the wing rear spar lower caps that will terminate the 200-hour repetitive inspection required in AD 2006-24-11. We are issuing this AD to prevent fatigue cracks in the wing rear spar lower caps, which could result in fatigue failure of the wing rear spar lower caps. A rear spar failure could result in complete wing failure and the wing separating from the airplane.

**Compliance**

(e) To address this problem, you must do the following, unless already done:

<b>Actions</b>	<b>Compliance</b>	<b>Procedures</b>
(1) For Group 1 and Group 2 airplanes: Repetitively inspect both the left and right wing rear spar lower caps for cracks and other damage, such as loose or missing fasteners.	Repetitively inspect at intervals not to exceed 200 hours time-in-service (TIS) after the last inspection required by AD 2006-24-11.	Follow the procedures in Raytheon Mandatory Service Bulletin 57-3815, Issued: October 2006.
(2) For Group 1 and Group 2 airplanes: If cracks are found, repair all cracks by obtaining and incorporating an FAA-approved repair scheme from the manufacturer.	Before further flight after any inspection required by paragraph (e)(1) of this AD where cracks are found.	For the repair scheme, contact Hawker Beechcraft Corporation at P.O. Box 85, Wichita, Kansas 67201-0085; phone: (800) 429-5372; fax: (316) 676-8745; email: tom_peay@rac.ray.com.
(3) For Group 1 and Group 2 airplanes: Report the inspection results to Hawker Beechcraft Company (formerly Raytheon Aircraft Company) using the instructions and forms in the service bulletin. Complete all sections of the required forms. Reporting requirements have been approved by the Office of Management and Budget (OMB) and assigned OMB control number 2120-0056.	Report the repetitive inspection results within 30 days after the inspection.	Follow the procedures in Raytheon Mandatory Service Bulletin 57-3815, dated Issued: October 2006.
(4) For Group 1 airplanes: Install Modification Kit 114-4052-1 and Modification Kit 114-4067-0001.	Upon reaching 22,000 total hours TIS or within the next 3 years after December 14, 2009 (the effective date of this AD), whichever occurs later. Installing the modification kits terminates the repetitive inspections required by paragraph (e)(1) of this AD.	Follow the procedures in Hawker Beechcraft Mandatory Service Bulletin SB 57-3816, Issued: January 2008. For further assistance with procedures for shoring an airplane, you may contact the manufacturer at the address specified in paragraph (h)(3) of this AD.

(5) For Group 2 airplanes: Install Modification Kit 118-4012-1 or 118-4012-3 and Modification Kit 118-4014-0003.	Upon reaching 22,000 total hours TIS or within the next 3 years after December 14, 2009 (the effective date of this AD), whichever occurs later. Installing the modification kits terminates the repetitive inspections required by paragraph (e)(1) of this AD.	Follow the procedures in Hawker Beechcraft Mandatory Service Bulletin SB 57-3816, Issued: January 2008. For further assistance with procedures for shoring an airplane, you may contact the manufacturer at the address specified in paragraph (h)(3) of this AD.
(6) For all affected Group 1 and Group 2 airplanes: You may install the modification kits specified in paragraphs (e)(4) and (e)(5) of this AD at any time before the required compliance times specified in paragraphs (e)(4) and (e)(5) of this AD. Installing the modification kits terminates the repetitive inspections required by paragraph (e)(1) of this AD.	As of December 14, 2009 (the effective date of this AD).	Not applicable.

### Alternative Methods of Compliance (AMOCs)

(f) The Manager, Wichita 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: Steve Potter, Aerospace Engineer, ACE-118W, Wichita Aircraft Certification Office (ACO), 1801 Airport Road, Room 100, Wichita, Kansas 67209, phone: (316) 946-4124, fax: (316) 946-4107. Before using any approved AMOC on any airplane to which the AMOC applies, notify your appropriate principal inspector (PI) in the FAA Flight Standards District Office (FSDO), or lacking a PI, your local FSDO.

(g) AMOCs approved for AD 2006-24-11 are not approved for this AD.

### Material Incorporated by Reference

(h) You must use Raytheon Mandatory Service Bulletin 57-3815, Issued: October 2006, and Hawker Beechcraft Mandatory Service Bulletin 57-3816, Issued: January 2008, 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 Hawker Beechcraft Mandatory Service Bulletin SB 57-3816, Issued: January 2008, under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) On December 11, 2006 (71 FR 70297, December 4, 2006), the Director of the Federal Register approved the incorporation by reference of Raytheon Mandatory Service Bulletin 57-3815, Issued: October 2006.

(3) For service information identified in this AD, contact Hawker Beechcraft, Attn: Airline Technical Support, P.O. Box 85, Wichita, Kansas 67201; telephone: (800) 429-5372; fax: (316) 676-8745; Internet: <http://www.hawkerbeechcraft.com>.

(4) You may review copies of the service information incorporated by reference for this AD at the FAA, Central Region, Office of the Regional Counsel, 901 Locust, Kansas City, Missouri 64106. For information on the availability of this material at the Central Region, call (816) 329-3768.

(5) You may also review copies of the service information incorporated by reference for this AD 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](http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html).

Issued in Kansas City, Missouri, on October 27, 2009.

Kim Smith,  
Manager, Small Airplane Directorate,  
Aircraft Certification Service.



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**2009-23-04 Boeing:** Amendment 39-16076. Docket No. FAA-2007-28281; Directorate Identifier 2006-NM-238-AD.

**Effective Date**

(a) This airworthiness directive (AD) is effective December 14, 2009.

**Affected ADs**

(b) None.

**Applicability**

(c) This AD applies to all Boeing Model 767-200, -300, -300F, and -400ER series airplanes, certificated in any category.

**Unsafe Condition**

(d) This AD results from a report of cracking in the epoxy potting compound on the internal feed-through connector of the fuel boost pump in the area of the soldered wire connector lugs. We are issuing this AD to prevent a hazardous electrical path from the dry side to the wet side of the fuel boost pump through a cracked feed-through connector, or between pins or a pin and the shell on one side of the feed-through connector, which could create an ignition source on the wet side of the fuel boost pump or cause a fire in the fuel boost pump enclosure and lead to subsequent explosion of the fuel tank.

**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.

**Compliance Times for Initial Replacement**

(f) For each main tank fuel boost pump: At the latest of the times specified in paragraphs (f)(1), (f)(2), and (f)(3) of this AD, do the actions specified in paragraph (g) of this AD, in accordance with the Accomplishment Instructions of Boeing Alert Service Bulletin 767-28A0095 or 767-28A0096; both dated September 15, 2005; as applicable.

(1) Within 96 months since the date of the first installation of the fuel boost pump or before the accumulation of 40,000 flight hours on the fuel boost pump, whichever comes first.

(2) Within 96 months since the date of replacement of the feed-through connector, or before the accumulation of 40,000 flight hours on the fuel boost pump since the date of replacement of the feed-through connector, whichever comes first.

(3) Within 24 months after the effective date of this AD.

### **Replacement of Fuel Boost Pump Feed-Through Connector**

(g) At the compliance time specified in paragraph (f) of this AD: Replace the feed-through connector of each fuel boost pump as described in paragraph (g)(1) or (g)(2) of this AD.

(1) Replace the fuel boost pump with a new fuel boost pump.

(2) Replace the fuel boost pump with a modified and re-identified fuel boost pump having a new feed-through connector installed.

Note 1: Replacing the feed-through connector of each fuel boost pump, as required by paragraph (g) of this AD, may be done in different fuel boost pumps at different times provided the compliance times required by paragraph (f) of this AD are met for each pump.

Note 2: Boeing Alert Service Bulletins 767-28A0095 and 767-28A0096, both dated September 15, 2005, refer to Hamilton Sundstrand Alert Service Bulletin 5006003-28-A4, dated May 9, 2005, as a source of guidance for replacing the feed-through connector and re-identifying the fuel boost pump.

### **Repetitive Replacements**

(h) Repeat the replacement required by paragraph (g) of this AD thereafter at intervals not to exceed the applicable times specified in paragraphs (h)(1) and (h)(2) of this AD:

(1) For airplanes on which the replacement specified in paragraph (g)(1) of this AD is done: Within 96 months since the date of the first installation of the fuel boost pump or before the accumulation of 40,000 flight hours on the fuel boost pump, whichever comes first.

(2) For airplanes on which the replacement specified in paragraph (g)(2) of this AD is done: Within 96 months since the date of replacement of the feed-through connector or before the accumulation of 40,000 flight hours on the fuel boost pump since the date of replacement of the feed-through connector, whichever comes first.

### **Parts Installation**

(i) As of the effective date of this AD, no person may install a fuel boost pump on any airplane, unless that pump has a feed-through connector that meets the requirements of paragraphs (f) and (g) of this AD.

### **Alternative Methods of Compliance (AMOCs)**

(j)(1) The Manager, Seattle Aircraft Certification Office (ACO), FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. Send information to Judy Coyle, Aerospace Engineer, Propulsion Branch, ANM-140S, FAA, Seattle Aircraft Certification Office, 1601 Lind Avenue, SW., Renton, Washington 98057-3356; telephone (425) 917-6497; 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 Alert Service Bulletin 767-28A0095, dated September 15, 2005; or Boeing Alert Service Bulletin 767-28A0096, dated September 15, 2005; 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](mailto: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](http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html).

Issued in Renton, Washington, on October 26, 2009.  
Stephen P. Boyd,  
Acting Manager, Transport Airplane Directorate,  
Aircraft Certification Service.



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**2009-23-05 Airbus:** Amendment 39-16077. Docket No. FAA-2008-1215; Directorate Identifier 2008-NM-072-AD.

**Effective Date**

(a) This airworthiness directive (AD) becomes effective December 14, 2009.

**Affected ADs**

(b) None.

**Applicability**

(c) This AD applies to Airbus Model A318-111, A318-112, A319-111, A319-112, A319-113, A319-114, A319-115, A319-131, A319-132, A319-133, A320-111, A320-211, A320-212, A320-214, A320-231, A320-232, A320-233, A321-111, A321-112, A321-131, A321-211, A321-212, A321-213, A321-231, and A321-232 series airplanes, certificated in any category; equipped with EIS2 (electronic instrument system 2) standard S4.2 (DMC disk part number F1419418) installed by Airbus Modification 34571, or Airbus Service Bulletin A320-31A1220; except those airplanes on which Airbus Modification 35270 or Airbus Modification 36725 has been embodied in production.

**Subject**

(d) Air Transport Association (ATA) of America Code 31: Instruments.

**Reason**

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

Two incidents have occurred due to the lack of visibility on the Primary Flight Display (PFD) of the Traffic Alert and Collision Avoidance System (TCAS) indications.

EIS2 standard S7 introduces modifications to the vertical speed indication to improve the legibility in case of TCAS Resolution Advisory.

The modifications consist in changing the colour of the needle and increasing the width of the TCAS green band.

This AD supersedes AD 2006-0108 [dated May 3, 2006]. Also, as all aircraft in this AD applicability have been retrofitted to at least S4.2 standard, the operational limitations contained in the Compliance paragraph 2. of AD 2006-0108 have already been addressed.

This AD therefore mandates the installation of the improved EIS2 standard S7.

We are issuing this AD to prevent possible mid-air collisions due to lack of visibility of TCAS indications on the PFD.

### **Actions and Compliance**

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

(1) Within 12 months after the effective date of this AD, install EIS2 standard S7 (DMC disk part number F1461768), in accordance with the Accomplishment Instructions of Airbus Mandatory Service Bulletin A320-31-1276, Revision 01, dated March 5, 2008. Operators may stow software media in locations other than those described in the service bulletin.

(2) Installations done before the effective date of this AD in accordance with Airbus Service Bulletin A320-31-1263, Revision 01, dated July 20, 2007; Airbus Service Bulletin A320-31-1263, Revision 02, dated August 10, 2007; Airbus Service Bulletin A320-31-1263, Revision 03, dated November 23, 2007; or Airbus Service Bulletin A320-31-1276, dated April 18, 2007; are acceptable for compliance with the requirements of paragraph (f)(1) of this AD.

### **FAA AD Differences**

**Note 1:** This AD differs from the MCAI and/or service information as follows: This AD does not include the operational limitations specified in paragraph 1 of the MCAI. The MCAI carried these limitations forward from European Aviation Safety Agency (EASA) Airworthiness Directive 2006-0108, dated May 3, 2006. The FAA-approved Master Minimum Equipment List (MMEL) already contains these and more restrictive operational limitations, and we previously determined that no action was required on our part regarding this provision of EASA AD 2006-0108.

### **Other FAA AD Provisions**

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

(1) Alternative Methods of Compliance (AMOCs): The Manager, ANM-116, International Branch, Transport Airplane Directorate, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. Send information to ATTN: Tim Dulin, Aerospace Engineer, ANM-116, International Branch, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington 98057-3356; telephone (425) 227-2141; fax (425) 227-1149. Before using any approved AMOC on any airplane to which the AMOC applies, notify your appropriate principal inspector (PI) in the FAA Flight Standards District Office (FSDO), or lacking a PI, your local FSDO.

(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 EASA Airworthiness Directive 2008-0032, dated February 21, 2008; and Airbus Mandatory Service Bulletin A320-31-1276, Revision 01, dated March 5, 2008; for related information.

**Material Incorporated by Reference**

(i) You must use Airbus Mandatory Service Bulletin A320-31-1276, Revision 01, dated March 5, 2008, to do the actions required by this AD, unless the AD specifies otherwise.

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

(2) For service information identified in this AD, contact Airbus, Airworthiness Office–EAS, 1 Rond Point Maurice Bellonte, 31707 Blagnac Cedex, France; telephone +33 5 61 93 36 96; fax +33 5 61 93 44 51; e-mail: [account.airworth-eas@airbus.com](mailto: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 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](http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html).

Issued in Renton, Washington, on October 26, 2009.

Stephen P. Boyd,

Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.

[FR Doc. E9-26586 Filed 11-6-09; 8:45 am]



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**2009-23-07 Saab AB, Saab Aerosystems:** Amendment 39-16079. Docket No. FAA-2009-0134; Directorate Identifier 2008-NM-162-AD.

**Effective Date**

- (a) This airworthiness directive (AD) becomes effective December 14, 2009.

**Affected ADs**

- (b) None.

**Applicability**

(c) This AD applies to Saab AB, Saab Aerosystems Model SAAB 340A (SAAB/SF340A) and SAAB 340B airplanes, all serial numbers, certificated in any category; on which hydraulic accumulators with part number (P/N) 08 8423 001 1 or P/N 08 8423 030 1 are installed, except accumulators with serial numbers listed in paragraph 3.B. of Saab Service Bulletin 340-29-023, Revision 01, dated April 3, 2009.

**Subject**

- (d) Air Transport Association (ATA) of America Code 29: Hydraulic power.

**Reason**

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

During 2008, two cases of main hydraulic accumulator failure were reported, one of which was caused by corrosion. Investigation has shown that a severe failure can occur to any of the four hydraulic accumulators which are installed in the hydraulic compartment. Either one of the two end parts on the accumulator may depart from the pressure vessel due to corrosion. This condition, if not corrected, is likely to degrade the functionality of the hydraulic system, possibly resulting in degradation or total loss of control of the landing gear, flap actuation and brakes. A severe failure during flight may even result in debris penetrating and exiting the fuselage outer skin. When such a failure occurs while the aeroplane is on the ground, as in the two reported cases, this may cause severe damage to the fuselage and result in injuries to persons nearby.

Since AD 2008-0146 was issued, one more case of main hydraulic accumulator failure has been reported, which occurred in flight during final approach. The aeroplane was able to land safely and there were no injuries reported on the aeroplane or on the ground.

To address and correct this unsafe condition, a modified hydraulic accumulator has been developed, which is sealed between the barrel and the screw cap and between the screw cap and the end cap.

For the reasons described above, this EASA AD requires the replacement of the affected hydraulic accumulators P/N (part number) 08 8423 001 1 and P/N 08 8423 030 1, as identified in Saab SB (Service Bulletin) 340-29-023, with a modified hydraulic accumulator.

This AD is revised to indicate that the accomplishment of SAAB SB 340-29-024 is another acceptable method to correct the unsafe condition.

### **Actions and Compliance**

(f) Unless already done, replace the hydraulic accumulator at the applicable time specified in paragraph (f)(1) or (f)(2) of this AD in accordance with the instructions of Saab Service Bulletin 340-29-023 or 340-29-024, both Revision 01, both dated April 3, 2009, as applicable.

(1) For airplanes on which the manufacturing date of the hydraulic accumulator is June 2000 or earlier: Replace the accumulator with a new or modified accumulator within 12 months after the effective date of this AD.

(2) For airplanes on which the manufacturing date of the accumulator is July 2000 or later: Replace the accumulator with a new or modified accumulator within 10 years after the manufacturing date or within 12 months after the effective date of this AD, whichever occurs later.

(3) As of 12 months after the effective date of this AD, no person may install a hydraulic accumulator, P/N 08 8423 001 1 or P/N 08 8423 030 1 on any airplane, except accumulators with serial numbers listed in paragraph 3.B. of Saab Service Bulletin 340-29-023, Revision 01, dated April 3, 2009.

(4) Actions done before the effective date of this AD in accordance with Saab Service Bulletin 340-29-023, dated June 10, 2008, are acceptable for compliance with the corresponding requirements of this AD.

### **FAA AD Differences**

Note 1: This AD differs from the MCAI and/or service information as follows: Where the MCAI includes a compliance time of "24 months," we have determined that a compliance time of "within 12 months after the effective date of the AD" is appropriate. The manufacturer and EASA agree with this reduction in compliance time.

### **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 2008-0146R1, dated April 16, 2009; and Saab Service Bulletins 340-29-023 and 340-29-024, both Revision 01, both dated April 3, 2009; for related information.

### **Material Incorporated by Reference**

(i) You must use Saab Service Bulletin 340-29-023, Revision 01, dated April 3, 2009; or Saab Service Bulletin 340-29-024, Revision 01, dated April 3, 2009; 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 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](mailto: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](http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html).

Issued in Renton, Washington, on October 26, 2009.

Stephen P. Boyd,

Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.

[FR Doc. E9-26591 Filed 11-6-09; 8:45 am]



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**2009-23-09 Bombardier, Inc. (Formerly Canadair):** Amendment 39-16081. Docket No. FAA-2009-0689; Directorate Identifier 2009-NM-092-AD.

**Effective Date**

- (a) This airworthiness directive (AD) becomes effective December 14, 2009.

**Affected ADs**

- (b) None.

**Applicability**

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

(1) Bombardier Model CL-600-1A11 (CL-600) airplanes, serial numbers 1004 through 1085 inclusive.

(2) Bombardier Model CL-600-2A12 (CL-601) airplanes, serial numbers 3001 through 3066 inclusive.

(3) Bombardier Model CL-600-2B16 (CL-601-3A) airplanes, serial numbers 5001 through 5131 inclusive.

**Subject**

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

**Reason**

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

Two cases have been reported in which the ADG [air driven generator] has failed to power the essential bus following in-flight deployment as part of its periodic operational check. Subsequent inspection revealed that the ADG power feeder harness wire (\* \* \* [aromatic polyimide]) had chafed on the backshell of its own connector (P1XC), resulting in a short circuit, wire damage and disconnection of the wire from the ADG. Coupled with a dual generator failure, such a disconnection would result in the loss of emergency power to critical systems, with a consequent adverse effect on the controllability of the aircraft.

This directive mandates an inspection to determine the type of wire in the installed ADG power feeder harness. If the wires are a \* \* \* [aromatic polyimide] type, the ADG power feeder harness is to be replaced with one incorporating \* \* \* [non-aromatic polyimide] type wire.

## **Actions and Compliance**

(f) Unless already done, within 26 months after the effective date of this AD, inspect the ADG power feeder harness to determine the wire type, in accordance with the Accomplishment Instructions of Bombardier Service Bulletin 600-0737 or 601-0591, both dated July 23, 2007, as applicable. A review of airplane maintenance records is acceptable in lieu of this inspection if the wire type of the power feeder harness can be conclusively determined from that review. If the wire type is determined to be aromatic polyimide, replace the ADG power feeder harness, before further flight, in accordance with Part B of the Accomplishment Instructions of Bombardier Service Bulletin 600-0737 or 601-0591, both dated July 23, 2007, as applicable.

## **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, New York Aircraft Certification Office (ACO), FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. Send information to ATTN: Wing Chan, Aerospace Engineer, Avionics and Flight Test Branch, ANE-172, FAA, New York ACO, 1600 Stewart Avenue, Suite 410, Westbury, New York 11590; telephone (516) 228-7311; fax (516) 794-5531. Before using any approved AMOC on any airplane to which the AMOC applies, notify your principal maintenance inspector (PMI) or principal avionics inspector (PAI), as appropriate, or lacking a principal inspector, your local Flight Standards District Office. The AMOC approval letter must specifically reference this AD.

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

(3) Reporting Requirements: For any reporting requirement in this AD, under the provisions of the Paperwork Reduction Act, 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 Canadian Airworthiness Directive CF-2009-18, dated April 27, 2009; and Bombardier Service Bulletins 600-0737 and 601-0591, both dated July 23, 2007; for related information.

## **Material Incorporated by Reference**

(i) You must use Bombardier Service Bulletin 600-0737, dated July 23, 2007; or Bombardier Service Bulletin 601-0591, dated July 23, 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 Bombardier, Inc., 400 Côte-Vertu Road West, Dorval, Québec H4S 1Y9, Canada; telephone 514-855-5000; fax 514-855-7401; e-mail [thd.crj@aero.bombardier.com](mailto:thd.crj@aero.bombardier.com); Internet <http://www.bombardier.com>.

(3) You may review copies of the service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington. For information on the availability of this material at the FAA, call 425-227-1221 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](http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html).

Issued in Renton, Washington, on October 26, 2009.

Stephen P. Boyd,

Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.

[FR Doc. E9-26593 Filed 11-6-09; 8:45 am]



**FAA  
Aircraft Certification Service**

**AIRWORTHINESS DIRECTIVE**

[www.faa.gov/aircraft/safety/alerts/](http://www.faa.gov/aircraft/safety/alerts/)  
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**2009-23-10 Boeing:** Docket No. FAA-2009-1026; Directorate Identifier 2009-NM-197-AD; Amendment 39-16084.

**Effective Date**

(a) This AD becomes effective November 24, 2009.

**Affected ADs**

(b) This AD supersedes AD 2008-15-05, Amendment 39-15617.

**Applicability**

(c) This AD applies to all Boeing Model 737-300, -400, and -500 series airplanes, certificated in any category.

**Subject**

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

**Unsafe Condition**

(e) This AD results from the exclusion of certain carriage spindles from the requirements of the existing AD, and additional reports of corrosion found on carriage spindles that are located on the outboard trailing edge flaps. The Federal Aviation Administration is issuing this AD to detect and correct corrosion of the carriage spindle, which could result in fracture. Fracture of both the inboard and outboard carriage spindles, in the forward ends through the large diameters, on a flap, could adversely affect the airplane's continued safe flight and landing.

**Compliance**

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

**Restatement of Requirements of AD 2008-15-05, With New Service Information**

*Inspection To Determine Affected Carriage Spindle*

(g) For all airplanes: Within 30 days after August 5, 2008 (the effective date of AD 2008-15-05), inspect the carriage sub-assembly to determine whether an affected carriage spindle with a high velocity oxy-fuel (HVOF) thermal coating is installed, in accordance with the Accomplishment

Instructions of Boeing Alert Service Bulletin 737-57A1304, dated June 2, 2008. A review of airplane maintenance records is acceptable in lieu of this inspection if the part number and/or serial number of the carriage can be conclusively determined from that review. If no affected carriage spindle is installed, no further action is required by this paragraph.

*Repetitive Inspections, Related Investigative Actions, and Corrective Action*

(h) For airplanes on which any affected carriage spindle was determined to be installed in accordance with Boeing Alert Service Bulletin 737-57A1304, dated June 2, 2008, as of the effective date of this AD; and the spindle is identified in Table 2 of Boeing Service Bulletin 737-57A1304, Revision 1, dated August 11, 2009: At the later of the times specified in paragraphs (h)(1) and (h)(2) of this AD, do a detailed inspection (or, as an option for the forward end of the spindle only, a borescope inspection technique may be used) of the spindle for corrosion and potential indications of corrosion of the carriage spindle, and do all applicable related investigative and corrective actions, in accordance with the Accomplishment Instructions of Boeing Alert Service Bulletin 737-57A1304, dated June 2, 2008; or Boeing Service Bulletin 737-57A1304, Revision 1, dated August 11, 2009. Do all applicable related investigative and corrective actions before further flight. Repeat the detailed inspection (or, as an option for the forward end of the spindle only, the borescope inspection) and certain related investigative actions (i.e., the gap-check or optional non-destructive test (NDT) ultrasonic inspection) at the applicable compliance times specified in paragraph 1.E. of Boeing Alert Service Bulletin 737-57A1304, dated June 2, 2008; or Boeing Service Bulletin 737-57A1304, Revision 1, dated August 11, 2009.

(1) Within 30 days after August 5, 2008.

(2) Within 90 days after the installation of a new HVOF-coated spindle.

**Note 1:** Boeing Alert Service Bulletin 737-57A1304, dated June 2, 2008; and Boeing Service Bulletin 737-57A1304, Revision 1, dated August 11, 2009; reference Boeing Alert Service Bulletin 737-57A1277, Revision 1, dated November 25, 2003; for further guidance on accomplishing the related investigative actions.

**New Requirements of This AD**

*Repetitive Inspections, Related Investigative Actions, and Corrective Action for Certain Airplanes*

(i) For airplanes on which a carriage spindle having a serial number identified in Table 3 of Appendix A of Boeing Service Bulletin 737-57A1304, Revision 1, dated August 11, 2009, is installed: At the latest of the times specified in paragraphs (i)(1), (i)(2), and (i)(3) of this AD, as applicable, do a detailed inspection (or, as an option for the forward end of the spindle only, a borescope inspection technique may be used) of the spindle for corrosion and potential indications of corrosion of the carriage spindle, and do all applicable related investigative and corrective actions, in accordance with the Accomplishment Instructions of Boeing Service Bulletin 737-57A1304, Revision 1, dated August 11, 2009. Do all applicable related investigative and corrective actions before further flight. Repeat the detailed inspection (or, as an option for the forward end of the spindle only, the borescope inspection) and related investigative actions (i.e., the gap-check or optional NDT ultrasonic inspection) at the applicable compliance times specified in paragraph 1.E. of Boeing Service Bulletin 737-57A1304, Revision 1, dated August 11, 2009.

(1) Within 30 days after the effective date of this AD.

(2) Within 90 days after the installation of a new HVOF-coated spindle identified in Table 3 of Appendix A of Boeing Service Bulletin 737-57A1304, Revision 1, dated August 11, 2009.

(3) Within 90 days after doing an inspection in accordance with Boeing Alert Service Bulletin 737-57A1304, dated June 2, 2008.

*Optional Terminating Action*

(j) Replacement of an HVOF-coated carriage spindle with a non-HVOF coated carriage spindle, or with a serviceable HVOF-coated carriage spindle with an 'R' suffix on the serial number, in accordance with Boeing Alert Service Bulletin 737-57A1304, dated June 2, 2008; or Boeing Service Bulletin 737-57A1304, Revision 1, dated August 11, 2009; terminates the requirements of this AD for that carriage spindle only.

*Parts Installation*

(k) As of August 5, 2008, an HVOF-coated spindle without an 'R' suffix on the serial number may be installed on an airplane provided the actions required by paragraph (h) or (i) of this AD, as applicable, are done on that spindle.

*Alternative Methods of Compliance (AMOCs)*

(1)(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: Nancy Marsh, Aerospace Engineer, Airframe Branch, ANM-120S, FAA, Seattle ACO, 1601 Lind Avenue, SW., Renton, Washington 98057-3356; telephone (425) 917-6440; 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.

(4) AMOCs approved previously in accordance with AD 2008-15-05, are not approved as AMOCs for this AD.

*Material Incorporated by Reference*

(m) You must use Boeing Alert Service Bulletin 737-57A1304, dated June 2, 2008; and Boeing Service Bulletin 737-57A1304, Revision 1, dated August 11, 2009; 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 Boeing Service Bulletin 737-57A1304, Revision 1, dated August 11, 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 Boeing Alert Service Bulletin 737-57A1304, dated June 2, 2008, on August 5, 2008 (73 FR 42259, July 21, 2008).

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

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

(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](http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html).

Issued in Renton, Washington, on October 26, 2009.

Stephen P. Boyd,

Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.

[FR Doc. E9-26581 Filed 11-6-09; 8:45 am]



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**2009-23-11 Empresa Brasileira de Aeronautica S.A. (EMBRAER):** Amendment 39-16085;  
Docket No. FAA-2009-1039; Directorate Identifier 2009-CE-059-AD.

**Effective Date**

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

**Affected ADs**

- (b) None.

**Applicability**

- (c) This AD applies to Model EMB-500 airplanes, all serial numbers, certificated in any category.

**Subject**

- (d) Air Transport Association of America (ATA) Code 30: Ice and Rain Protection.

**Reason**

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

“It has been found the possibility of heating deactivation of Air Data System (ADS) sensors due to its inadequate automatic logic, when ADS/AOA knob is on AUTO position associated with the following messages:

- DC BUS 1 OFF displayed on Crew Alerting System–CAS in conjunction with STBY HTR FAIL (which means loss of power on DC BUS 1); or
- EMER BUS OFF displayed on CAS (which means loss of power on EMERGENCY BUS); or
- ELEC EMERGENCY displayed on CAS (which means Electrical Emergency).

The loss of airplane air data sensors heating may cause ice buildup on their surfaces, which in turn may cause wrong pressure acquisitions resulting in erroneous flight parameters indication to the flight crew. Since this condition may occur in other airplanes of the same type and affects flight safety, an immediate corrective action is required. Thus, sufficient reason exists to request compliance with this AD in the indicated time limit.”

This AD action requires inserting information into the Abnormal Procedures section of the FAA-approved airplane flight manual (AFM).

## **Actions and Compliance**

(f) Unless already done, before further flight, incorporate into the AFM the following procedures section revisions. You may insert a copy of this AD into the appropriate sections of the AFM to comply with the requirements of this AD.

(1) Revise the AFM by replacing the ELECTRICAL EMERGENCY procedures in AFM section 4-08, Abnormal Procedures, pages 3 and 4, with Figure 1:

## ELECTRICAL EMERGENCY

Reset both generators.

If message persists:

LAND AS SOON AS POSSIBLE.

ADS/AOA Knob..... ON

Exit and avoid icing conditions.

Confirm that IESI has reverted. If not, select ADSTBY on PFD.

PRESSURIZATION MODE Selector.... MAN

CABIN ALT Switch..... AS REQUIRED

Airspeed..... 250 KIAS  
MAXIMUM

Altitude..... 25000 ft  
MAXIMUM

**CAUTION:** BATTERIES DURATION IS 45 MINUTES MAXIMUM.

When landing maintain airspeed according to the following:

FLAPS POSITION	MINIMUM AIRSPEED
0	$V_{REF FULL} + 30$ KIAS
1	$V_{REF FULL} + 15$ KIAS
2	$V_{REF FULL} + 5$ KIAS
3 and FULL	$V_{REF FULL}$

**NOTE:** - If flaps stop between two positions, use the minimum airspeed associated to the next retracted position and the  $V_{FE}$  associated to the next extended position.

- Disregard green circle indication, as it may indicate slower speeds.

During landing run:

Emergency/Parking Brake..... APPLY

**CAUTION:** WHEN APPLYING EMERGENCY BRAKES, PULL THE HANDLE PROGRESSIVELY, MONITORING THE EMERGENCY/PARKING BRAKE LIGHT.

**NOTE:** The emergency/parking brake accumulator allows 6 actuations.

(Continues on the next page)

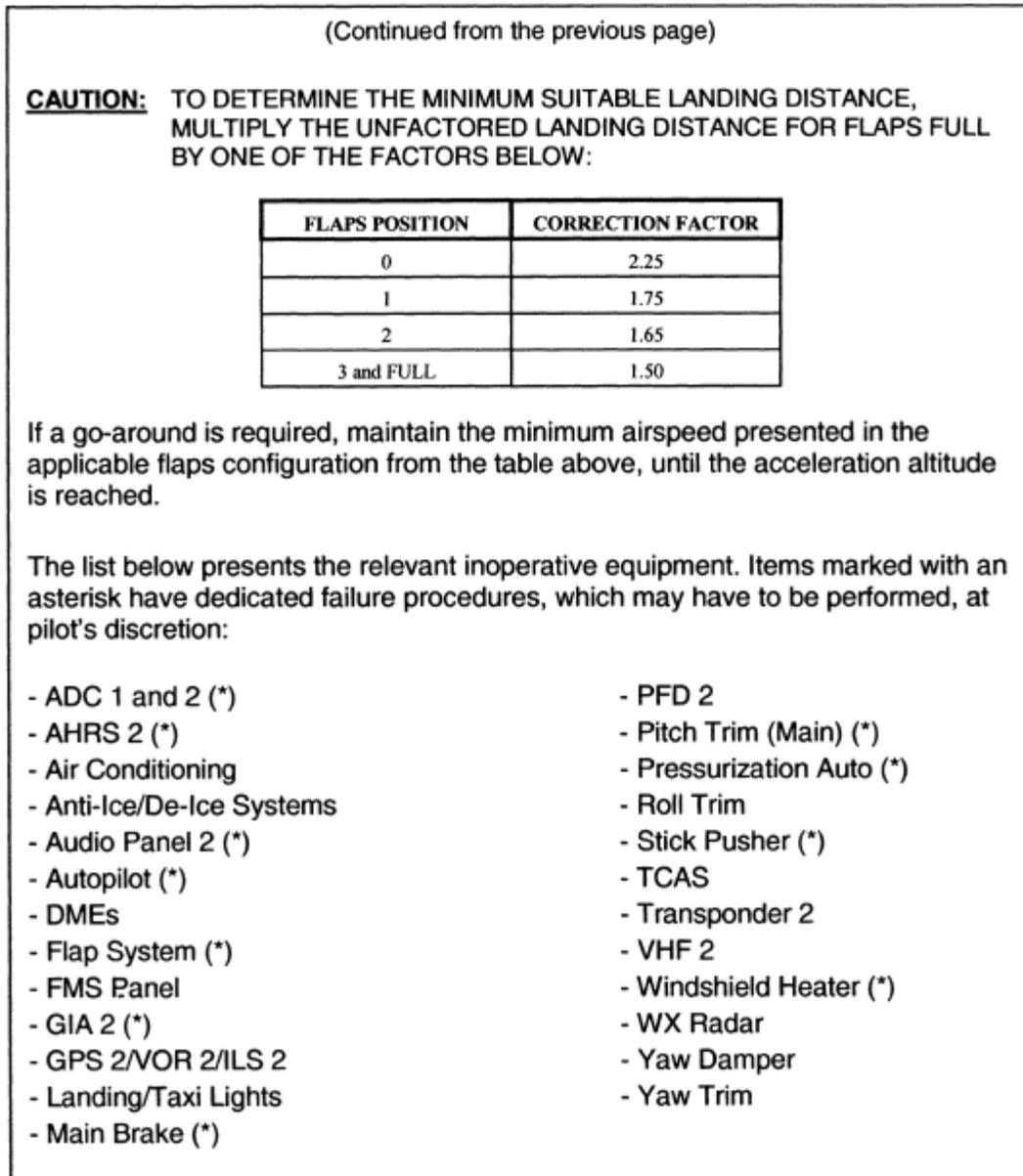


Figure 1 – AFM Section 4-08, pages 3 and 4, ELECTRICAL EMERGENCY

(2) Revise the AFM by replacing the DC BUS 1 OFF procedure in AFM section 4-08, Abnormal Procedures, pages 6 and 7, with Figure 2:

**DC BUS 1 OFF**

ADS/AOA Knob..... ON  
 Icing Conditions..... EXIT/AVOID

For landing procedures:

- Maintain airspeed according to the following:

FLAPS POSITION	MINIMUM AIRSPEED	
	NO ICING	IN ICING/WITH ICE
0	V <sub>REF FULL</sub> + 25 KIAS	V <sub>REF FULL</sub> + 40 KIAS
1	V <sub>REF FULL</sub> + 15 KIAS	V <sub>REF FULL</sub> + 35 KIAS
2	V <sub>REF FULL</sub> + 5 KIAS	V <sub>REF FULL</sub> + 30 KIAS
3 and FULL	V <sub>REF FULL</sub>	V <sub>REF FULL</sub> + 25 KIAS

**NOTE:** - If flaps stop between two positions, use the minimum airspeed associated to the next retracted position and V<sub>FE</sub> associated to the next extended position.  
 - Disregard green circle indication, as it may indicate slower speeds.

**CAUTION:** TO DETERMINE THE MINIMUM SUITABLE LANDING DISTANCE, MULTIPLY THE UNFACTORED LANDING DISTANCE FOR FLAPS FULL BY ONE OF THE FACTORS BELOW:

FLAPS POSITION	CORRECTION FACTOR	
	NO ICING	IN ICING/WITH ICE
0	1.40	1.70
1	1.20	1.60
2	1.10	2.00
3 and FULL	1.00	1.95

The list below presents the relevant inoperative equipment. Items marked with an asterisk have dedicated failure procedures, which may have to be performed, at pilot's discretion:

- ADC 1 (\*)
- Cockpit FCSOV
- De-Ice System (\*)
- DME 1
- Engine 1 Anti-Ice (\*)
- Engine 1 Flowmeter
- Flap System (\*)
- Left Landing/Taxi Light
- Roll Trim
- Stick Pusher (\*)
- VHF 2
- Windshield Heater 1 (\*)
- WX Radar
- Yaw Trim

Figure 2 – AFM Section 4-08, Pages 6 and 7, DC BUS 1 OFF

(3) Revise the AFM by replacing the EMERGENCY BUS OFF procedure in AFM section 4-08, Abnormal Procedures, page 9, with Figure 3:

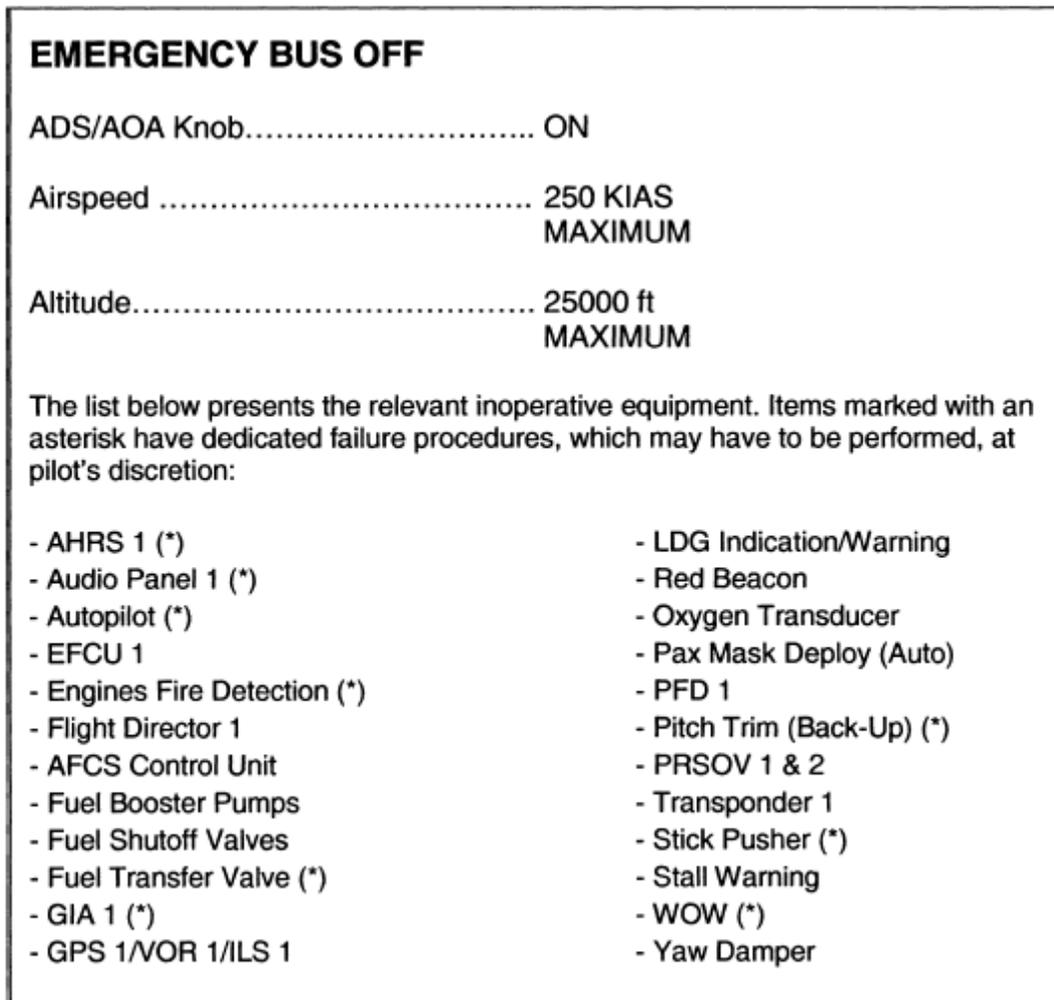


Figure 3 – AFM Section 4-08, Page 9, EMERGENCY BUS OFF

**FAA AD Differences**

Note: 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, Standards 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: Karl Schletzbaum, Aerospace Engineer, FAA, Small Airplane Directorate, 901 Locust, Room 301, Kansas City, Missouri 64106; telephone: (816) 329-4146; fax: (816) 329-4090. Before using any approved AMOC on any airplane to which the AMOC applies,

notify your appropriate principal inspector (PI) in the FAA Flight Standards District Office (FSDO), or lacking a PI, your local FSDO.

(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 ANAC, AD No.: 2009-10-01R1, dated October 16, 2009, for related information.

Issued in Kansas City, Missouri on November 2, 2009.

Kim Smith,  
Manager, Small Airplane Directorate, Aircraft Certification Service.  
[FR Doc. E9-26795 Filed 11-10-09; 8:45 am]

BILLING CODE 4910-13-C



**2009-23-12 SOCATA:** Amendment 39-16086; Docket No. FAA-2009-0557; Directorate Identifier 2009-CE-031-AD.

**Effective Date**

(a) This airworthiness directive (AD) becomes effective December 18, 2009.

**Affected ADs**

(b) This AD revises AD 2009-13-05, Amendment 39-15944.

**Applicability**

- (c) This AD applies to the following model and serial number airplanes that are:
  - (i) certificated in any category; and
  - (ii) equipped with a chemical oxygen generation system.

Model	Serial Nos.
TBM 700	1 through 204, 206 through 239, and 241 through 243.

**Subject**

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

**Reason**

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

During a SOCATA flight test, it has been noted some difficulties for the pilot to release oxygen.

After investigation it has been found that, due to the design of the oxygen generator release pin, one of the mask's lanyard linked to the pin can be jammed when it is pulled by a pilot or a passenger.

This condition, if not corrected, would lead, in case of an emergency procedure due to decompression, to a risk of generator fault with subsequent lack of oxygen on crew and/or passenger.

For the reason described above, SOCATA has released Pilot Operating Handbook (POH) Temporary Revision (TR) 03 which asks, in case of failure to release oxygen, to pull on the other mask lanyard in order to activate the oxygen generator.

This revision has been released to clarify the applicability.

A SOCATA modification enabling to solve this issue is under preparation. Once this modification has been released, this AD is expected to be revised to confirm the acceptability of that modification.

## **Actions and Compliance**

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

(1) Before further flight after July 9, 2009 (the effective date retained from AD 2009-13-05), insert Page 3.13.5 of Temporary Revision No. 3, dated March 2009, into the Emergency Procedures section and the Limitations section of SOCATA TBM 700 A & B Pilot Operating Handbook (POH).

(2) Under 14 CFR section 43.7 of the Federal Aviation Administration Regulations (14 CFR 43.7), the owner/operator holding at least a private pilot certificate is allowed to insert the temporary revision into the POH. Make an entry into the aircraft logbook showing compliance with this portion of the AD per compliance with section 43.9 of the Federal Aviation Regulations (14 CFR 43.9).

## **FAA AD Differences**

Note: 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, Standards 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: Albert Mercado, Aerospace Engineer, FAA, Small Airplane Directorate, 901 Locust, Room 301, Kansas City, Missouri 64106; telephone: (816) 329-4119; fax: (816) 329-4090. Before using any approved AMOC on any airplane to which the AMOC applies, notify your appropriate principal inspector (PI) in the FAA Flight Standards District Office (FSDO), or lacking a PI, your local FSDO.

(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.

## **Material Incorporated by Reference**

(h) You must use page 3.13.5 of Temporary Revision No. 3, dated March 2009, of SOCATA TBM 700 A & B Pilot Operating Handbook (POH), to do the actions required by this AD, unless the AD specifies otherwise.

(1) On July 9, 2009 (74 FR 29126, June 19, 2009), the Director of the Federal Register previously approved the incorporation by reference of page 3.13.5 of Temporary Revision No. 3, dated March 2009, of SOCATA TBM 700 A & B Pilot Operating Handbook (POH).

(2) For service information identified in this AD, contact SOCATA, 65921-TARBES Cedex 9, France; telephone: +33 6 07 32 62 24; or SOCATA, North Perry Airport, 7501 South Airport Rd., Pembroke Pines, FL 33023; telephone: (954) 893-1400; fax: (954) 964-4141; Internet: <http://mysocata.com>.

(3) You may review copies of the service information incorporated by reference for this AD at the FAA, Central Region, Office of the Regional Counsel, 901 Locust, Kansas City, Missouri 64106. For information on the availability of this material at the Central Region, call (816) 329-3768.

(4) You may also review copies of the service information incorporated by reference for this AD 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](http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html).

Issued in Kansas City, Missouri, on November 6, 2009.

Margaret Kline,

Acting Manager, Small Airplane Directorate, Aircraft Certification Service.

[FR Doc. E9-27321 Filed 11-12-09; 8:45 am]